

REPORT OF MID-TERM EVALUATION
OF
INTEGRATED RURAL HEALTH AND POPULATION PROJECT
(#386-0468)
October 31 - November 25, 1983

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I. EXECUTIVE SUMMARY

A. Problem and Overview:

Over the past several decades India has made remarkable progress in industry, science and technology, and food production. Yet intense population pressure on resources and limited access to basic services by the population remain serious problems. Two of the major concerns of the Government of India's health and family welfare program are high fertility and high infant and child mortality. The crude birth rate is still about 36 per thousand, which implies about 26 million births per year and, when coupled with a crude death rate of 15 per thousand, results in a net annual population increase of about 15 million. Infant mortality (estimated at 122 per 1000 live births in 1983) varies considerably among regions, but is especially high among the rural poor; deaths among children under age five account for an estimated 55 percent of all deaths.*

The Integrated Rural Health and Population Project supports India's effort to reduce both fertility and infant/child mortality. It supports the Government of India's (GOI) Model Health Plan for rural health and family planning services, and is consistent with India's commitment to "Health care for all by the year 2000." It is complementary to AID's assistance in expanding food production, rural employment and availability of energy in an overall effort to improve the balance between food, energy and population.

B. U.S. Assistance:

The Integrated Rural Health and Population Project (Project No. 386-0468, hereafter referred to as IRHP) is a five-year, \$67 million undertaking, with USAID's contribution totalling \$40 million. The project officially began in August 1980 and is scheduled to end September 30, 1985. As noted above, the project assists the GOI in implementing its Model Health Plan. Thus, it is not operating in a vacuum. It is an acceleration and fine-tuning of a set of interventions that are part of the GOI's and states' rural health and family planning service system, which will eventually be implemented nationwide.

The project is implemented in 14 rural districts in five states (Maharashtra, Gujarat, Himachal Pradesh, Punjab and Haryana.) The districts were selected on the basis of economic and health-related

*Source: Population Reference Bureau, Inc.: 1983 World Population Data Sheet.

"backwardness" criteria. (The project paper originally specified 13 districts. However one district in Maharashtra, Osmanabad, was divided in two in 1982.) The IRHP is primarily managed by the state governments with coordination by the Ministry of Health and Family Welfare (MOHFW) of the GOI. The project goals are the achievement of a 15% decline in the infant mortality rate, a 20% decline in mortality among children in the 1-4 year age group, and a significant decline in the crude birth rate. Its purposes in pursuit of these goals are to improve access to health and family planning services that promote fertility and mortality reduction, and to improve and expand the services and support systems of the model plan.

C. Purpose of Evaluation:

The IRHP reached its midpoint in March 1983. Its first annual review, done in June 1982 reported that after a very slow start, substantial momentum had been achieved in the construction and training components of the project, while essential data collection had just begun (with completion of a Training Needs Assessment). The planned baseline survey, management and communications needs assessments, and the staffing of technical/managerial positions in the various technical cells had not yet been accomplished, so that expected expansion and improvement of service and support systems had hardly been implemented.

Substantial progress has reportedly taken place since the June 1982 annual review. Accordingly, the mid-term evaluation has been charged with reviewing, in depth, progress in all the project components, along with the variety of technical and managerial problems experienced in project implementation. In particular, the mid-term evaluation is expected to produce recommendations for changes in ongoing project operations and project outputs, and to provide guidance for USAID in beginning assessment of the feasibility of extending or expanding the IRHP project.

The evaluation was conducted between October 31 and November 25, 1983, by a multidisciplinary and bi-national team comprised of the following members:

1. Dr. Donald Minkler, Professor, University of California at San Francisco - Team Leader.
2. Ms. Anne Aarnes, Chief, Information and Training Division, Office of Population, AID/Washington-Information/Communication Consultant.
3. Dr. Mabelle Arole, Co Director, Jamkhed Comprehensive Rural Health Project, Jamkhed, Maharashtra-Training and MCH Consultant.

4. Mr. P.E. Balakrishnan, Columbia University (former USAID staff member) - Evaluation/Management Consultant.
5. Dr. Margaret Mangain, former Joint Director of Health Services, Maternal and Child Health and Family Planning, Haryana/MCH-FP Consultant.
6. Dr. Michael O'Byrne, USAID/India - Training Consultant.
7. Dr. James Palmore, East/West Population Institute - Research and Data Analysis Consultant.
8. Dr. Jerry Russell, Organization/Management Specialist, John Snow Public Health Group, Cairo - Management System Consultant.
9. Dr. Inderjit Walia, Post Graduate Institute of Medical Sciences, Chandigarh, Punjab - Nursing/Midwifery Training and MCH Consultant.

The evaluation methodology included a preliminary week of evaluation design, review of project history and documents, and briefing by the staffs of USAID/Delhi and the various GOI Ministry of Health and Family Welfare officers involved in the IRHP project. The Team then divided into three groups for field visits to all of the states and districts covered by the Project, as well as to the key institutions involved in the implementation of the various project components. Factual data for evaluation were provided by the Project staffs at the central, state, and district levels. In addition, during field visits the team gained further insights into project achievements and issues through direct observation, impressions and use of a short questionnaire they had prepared. During the final week of the evaluation the team met in Delhi to share field observations, analyze results and draft the report of the evaluation findings and recommendations. The team concluded its evaluation with summary presentations of findings to the GOI and the USAID Mission.

D. Findings:

The overall conclusion of the evaluation is that the IRHP, after a very slow start, has continued to make substantial progress at an accelerated pace since the first annual review. The basic premises on which the project is founded remain sound, and its implementation to date is consistent with the goals and objectives of the GOI's Model Health Plan.

It is the conclusion of this evaluation that some solid achievements have been made in strengthening health and family planning programs in the five project states. The uneven progress and shortfalls in implementation of the IRHP which are addressed in this report do not detract from the assumptions on which the project is based. We believe the original project goals remain valid, although a longer period of time may be necessary to achieve them. Further USAID

assistance to the GOI in implementation of the Model Plan, with emphasis on reduction of fertility, maternal and child morbidity and mortality, could contribute significantly to further improving health and family welfare status in the project areas. Continuation of USAID assistance beyond the time frame of this project would be especially useful if special attention were given to refining and strengthening some key components of the system (principally training, communications and management) and to assessing the impact of project activities on the original IRHP goals.

While some of the project inputs have achieved their targets by the end of the third project year, delays in completing others will mean that project operations will not attain a full implementation level before close to the end of the project period--two to three years later than anticipated. Thus, there will not be a "steady state" of project operations at the planned level for a long enough period to permit adequate assessment of the projects impact on project goals.

Remaining major gaps in project implementation which require priority attention include the following:

1. Completion of analysis and dissemination of results of the baseline survey and Communication Needs Assessment.
2. Execution, analysis and dissemination of results of the Management Needs Assessment.
3. Initiation of innovative projects and operations research provided for in the project agreement.
4. Development of systems and indices to permit monitoring and assessment of key indicators of impact of project inputs on its stated goals.

Financial disbursements under the project financial plan, in particular those related to construction of facilities, continue to be delayed. Although substantial progress has been made in construction, particularly of smaller facilities, it is unlikely that all construction targets will be met as planned in the project paper. Further, the flow of disbursements awaits the resolution of three key issues, on which discussions between the GOI and USAID officials are under way. These are:

1. Redefinition of criteria on which decisions about "completion" and "operational" status of completed construction are to be based.
2. Correction of earlier estimates of required numbers of buildings based on errors in original estimates, re-calculation according to 1985 population projections, and new requirements based on project experience.

3. Financial adjustment to compensate for escalation of construction costs and devaluation of the rupee since the project agreement was concluded.

The focus of the project to date has been on its quantitative aspects, including construction, filling of key positions, expansion of training, expansion of service facilities and preliminary data collection (baseline survey, TNA, CNA). As these project components are completed, the team urges that greater attention be focussed on improved quality of service and needed refinements in the training, management, and communications components.

While the project to date seems to be succeeding in acceleration of the implementation of the model plan, no fundamental changes in the approach to fertility and mortality reduction are yet forthcoming. Three particularly critical changes which have not yet been undertaken are increased participation by the community in the diffusion of health and family welfare measures in the rural population; decentralization of some planning and decision making from the center and state levels to lower level health and family welfare workers; and institutionalization of information systems which provide for accountability and local assessment of impact of program inputs. The team recommends strongly that steps be taken immediately to plan and carry out these changes. Innovative projects and operations research studies supported by the IRHP project can help to guide this process.

E. Project Design and Policy Implications:

While the overall reaction of the mid-term evaluation team is positive with respect to the conceptual framework of the project, our findings as well as those of the prior annual review indicate certain weaknesses in the project design and implementation that are worthy of mention.

The absence of adequate technical staff at state and district levels has undoubtedly contributed to the delays in project implementation. Creation of posts for technical staff at these levels is called for in the project design, and is essential to the improvement of the quality of health and family planning services. However, very few of these posts have yet been created. The main reasons for this are bureaucratic delays, lack of adequate attention to the technical needs of the project, and the necessity for the states to assume responsibility for continued maintenance of these posts after the project ends. The team concluded that anticipation of these problems, when the project was designed, might have helped the GOI, the states and USAID develop solutions much earlier in the project period.

Delays in following the implementation schedule set forth in the project paper seriously lessen the likelihood of achieving project goals within the time frame of the existing project. In particular, the delay in completing the baseline survey and needs assessments--on the basis of which detailed action plans were to be prepared by the end of the second project year--has prevented many improvements in training and service delivery from being undertaken. These improvements will, in turn, require further adjustments and refinements before the desired "steady state" of implementation is reached. Future projects may benefit from completion of preliminary data collection and analysis before project implementation begins.

The needs assessments in training, communication and management appear to have at least two major, and very different, objectives. One objective is to indicate problem areas in which project support is needed to improve and expand current activities. In order to fulfill this objective, the needs assessments were planned to be completed by the end of the first project year so that improvements could be undertaken as soon as possible. A second, but less explicit objective of the needs assessments appears to be to involve health and family welfare personnel at all levels--center, state, district and below--in the longer-term process of improving services and redirecting them toward key problems and population groups. To carry out this objective, the needs assessments have been carefully developed through a series of workshops. They have at some point involved virtually all health and family planning personnel. The evaluation team agreed that the process, though time-consuming, can have significant long-term benefits for the entire system, although we question the size and complexity of the current efforts.

The evaluation team noted the apparent conflict between these two objectives. Delays in achieving the first objective may have occurred in part because of the efforts to achieve the second objective. As noted above, these delays have serious implications for the achievement of project goals. Explicit clarification of all the objectives of the needs assessments might have made it possible to develop alternative ways of collecting baseline data and avoid the present situation.

Finally, the absence of a plan for a post-project survey to assess the impact of the project needs to be addressed. Plans for future AID activity in this field, including possible replication or expansion, hinge upon the findings of such an assessment regarding, for example, impact on project goals, impact on service delivery, and cost effectiveness. A major recommendation of this evaluation is therefore that provision be made immediately for undertaking a post-project survey.

F. MAJOR RECOMMENDATIONS:

NOTE : Recommendations pertaining to specific project components will be found throughout the text of this report. For a complete list of all recommendations, see Appendix IV.

The following are those recommendations felt at mid-term to be of major significance to the overall direction of the remainder of the project and the ultimate achievement of its goals.

1. Decentralization and increased community participation are vital to the success of the project, yet have received too little emphasis to date. The community and PHC-level staff should be actively involved in planning, implementing and monitoring health and family welfare activities in their areas. In particular, many IEC and research and monitoring functions need enhanced involvement of the PHC staff and their clientele.
2. Resolution of the key issues which are delaying financial disbursements for construction costs should be concluded as soon as possible in order to facilitate joint GOI-USAID planning to meet the remaining construction requirements in the project areas. (See Section II.)
3. Completion of the quantitative inputs (construction, staffing, equipment and supply, training) should be hastened in order to shift the focus of the project toward its qualitative aspects. In particular, the development of measures to monitor and evaluate performance of key services and their impact, and the use of innovative projects and operations research directed at improved quality of Training, Services and IEC activities should be stressed. (See Sections IV, V, VI.)
4. The baseline survey and the needs assessments have been long and complicated. Considerable delays have been encountered in all these efforts, leading to postponement of critical project components, such as improvements in training and communication programs. In addition, much of the analysis of these activities has been centralized, limiting immediate access to the results by local program personnel and impeding their ability to sustain monitoring activities on their own without outside assistance. (This has been particularly true for the baseline survey, and also applies to a lesser extent to the Communication Needs Assessment.) GOI, the AID Mission and project staff should concentrate on completing these activities as soon as possible. Every effort should be made to simplify and shorten the process. Further, these evaluation activities should be coordinated with those being undertaken in other area projects and other Indian institutions to facilitate better understanding of local situations and their training and communication implications. (See Section VII.)

5. A management information system (MIS) is urgently required in order to facilitate : (a) impact evaluation; (b) monitoring of performance in relationship to both services provided and to their impact on fertility and mortality; and (c) improvement of resource management, including personnel, materials, facilities and finances. For these reasons, it is recommended that the GOI immediately establish a task force or other working groups to be charged with analysing the existing or currently proposed MIS's, including the GOI's MLFS, the Gujarati MIS developed with assistance from the IIM-Ahmedabad, the currently operational Maharashtra MIS and others which might have applicability. After analysis, but no later than May 1, 1984, the task group should propose one or more practical systems for adoption by the Project States. The States should be directed to adopt an impact-based MIS no later than December, 1984. The task force should include representatives from management institutes, State and Central Government experts on MISs, USAID and epidemiologists. The developed MIS should provide a system for promptly and routinely providing the information required to make the daily management and planning decisions required to achieve the impact objectives of the Integrated Rural Health and Population Project. (See Section III.)
6. A post-project survey should be carried out. Funds should be allocated and planning initiated within the next year for this evaluation exercise. Care should be taken to ensure that the post-project survey covers all twelve key problems and to the extent possible makes up for deficiencies in the baseline survey. (See Section VII.)
7. The project design called for all project components to be operating at the planned levels for at least a year before the end of the project. There have been serious delays in project implementation so far, however. It is likely that in all states critical project components - training, improved IEC, fully operational facilities - will be in place for only a few months at best before the project's scheduled completion date. There is some question as to whether project activities can be completed and funds expended by that date. Most important, it would be impossible to assess the impact of the project on fertility and infant/child mortality reduction. Consideration should be given within the next 18 months, perhaps after the next Annual Review Meeting, to whether the final evaluation of the project should be delayed until a year after the end of the five-year project period. Certain changes in project design, such as time-phased implementation, state-wide implementation, and intensive block implementation should also be considered.

8. Although female health workers are essential to the success of the Model Plan, there are critical shortages of female health workers in many areas, especially at the PHC and subcenter levels. Critical shortages of trained birth attendants (dais) were also observed in some project districts. The project should seek ways to enhance their recruitment, training, recognition and support and to strengthen the linkages between and among female workers and the rest of the health team. (See Section VI.)
9. The use of performance targets is firmly rooted in India's development efforts in all sectors. The following refinements in their application to the IRHP are strongly recommended:
 - a) The current target system is dominated by sterilization targets. More balance is required. Other family planning methods should have targets that are stressed and valued in order to achieve the goal of reducing population growth rates. Equally important targets should be established for other problems among the twelve key ones emphasized in the project.
 - b) Health and family planning targets should be revised to take into account both numerators and denominators relevant to the problems being addressed. Most targets currently include only the number of cases targeted for action (e.g., tetanus toxoid shots given to pregnant women, immunizations for children under five, etc.) They do not include the denominators--the base group or risk group relevant to each problem (e.g., total number of pregnant women or total number of children under five in the area, etc.). Without this information about the total size of the base group, targets cannot be used to judge the extent to which the system is meeting basic health and family planning needs. (More such information is available for family planning than for health, since health and family welfare workers regularly identify all eligible couples in their area.) The GOI and others should work with the states to develop data on the "denominators" for each of the twelve key problems.
 - c) Presently, most targets are process targets, rather than outcome targets. The difference between the two is readily illustrated by health targets. Suppose the targets deal with malaria and measures are collected on cases diagnosed and treated. These are process targets. A suitable outcome target, by contrast, would be changes in mortality rates. If malaria is not a major cause of death in a particular area, success in reaching process targets might have little influence on reducing mortality rates (the outcome desired). Persons striving to meet the targets might

well be increasing mortality rates by failing to concentrate their work on more important health problems in that particular place. Outcome targets should be established and given even more importance than process targets.

- d) The methods for establishing targets which are now in use do not appear to be demographically or statistically sound, especially at the local level. A case in point is the target for numbers of new cases of a disease diagnosed. An active program could well diagnose all cases in a block the first year, subsequently be awarded even higher targets, and hence be evaluated as failing to meet the targets. Sterilization and other targets seem to penalize the successful areas. Careful reconsideration of the methods for setting targets is necessary. (See Section IV.)
10. While the importance of the twelve designated key problems is acknowledged, they are not all equally relevant to all project areas. There is some potential for all twelve to receive equal emphasis in each project district, and for other local health problems to be given much less attention. It is recommended that the twelve key problems not be stressed to the exclusion of locally recognized health problems. In keeping with the intent of the project to encourage decentralization of planning and decision making, local health personnel should be encouraged to consider locally serious health conditions along with the designated key problems in prioritizing services. It is also recommended that state and district project officers work with PHC staff and the local community to determine which of the twelve problems contribute most to high maternal and child fertility, morbidity and mortality rates in their particular area. Emphasis could then be given, in training and service delivery programs, to the most important problems in the local areas.
11. In view of the importance of increased training capability to full-scale implementation of the Model Plan and the demonstrated competence of the training institutions which have participated actively in the project to date, increased support and utilization of central, regional and state training institutions should be encouraged and supported for the remainder of the project. In order to facilitate this, the GOI should immediately call for a meeting of the heads of these institutions to determine their financial or other requirements for responding more fully to the needs of the Project, and formulate a plan and budget for extending the required assistance to them. This meeting and planning process should occur within the next three months, so that provision can be incorporated in the next fiscal year budget.

12. The evaluation team is concerned about the overall costs of implementing the Model Health Plan in all areas of India. It is, therefore, recommended that the GOI undertake, perhaps with assistance from appropriate management organizations, a comprehensive analysis of the costs of the plan, including the costs for health facility extension, training costs, equipment costs and recurring costs, and arrive at projections of the financial ability of the States, with assistance from the GOI, to fully implement the Plan. The analysis should identify alternative operational models for providing comparable impact on fertility and mortality (perhaps from the various area programs), and project the costs if these plans were implemented nationally. This information should be available by June 1984, in order to be used in the long term planning of the GOI and potential donors.
13. An important goal of all the area projects is to gain experience in implementing the Model Health Plan, so as to help guide the implementation of the plan nation-wide. Exchange of ideas and experience among project states and with other donor-supported area projects has been rare, however. State and district project staffs have had few chances to observe what is happening in other states and discuss problems. They are thus unable to benefit from the experience being gained in other areas. This situation is particularly serious not only because it makes improvements in the current AID-funded project less likely, but also because it appears that valuable information needed for planning future actions is being ignored. The GOI should encourage and support wider exchange of project ideas and experience among the five project states and with other donor-supported area projects. This exchange should include visits by state and district project staff to project areas in other states, as well as meetings at the state level and the center. It is recommended that the visits and other actions begin immediately. (See Section III.)

II. CONSTRUCTION

A. Findings:

Construction and upgrading of key service facilities to improve access to fertility and mortality reduction services is an important component of the IRHP Project. This element has received major attention during the last two years.

Considerable progress has been made by all the five states in meeting the physical targets for construction as envisaged in the Project Agreement. Tables 1-5 (see Appendix V) summarize the status of construction in each state as of September 30, 1983, based on information furnished to the Team by the respective State Governments.

Progress in construction has been particularly impressive in Himachal Pradesh, which has been able not only to exceed the planned targets for construction starts but also to complete a proportionately larger number of buildings as compared to the other states. According to State Project and PWD officials, construction of all buildings, except for two subdivisional hospitals and an upgraded PHC, will be completed and the buildings handed over to the State Health Department by March 31, 1984. This is a commendable achievement in view of the difficult terrain and other problems associated with the geographic location of the State.

Maharashtra and Gujarat have both made steady progress in construction, particularly since the Annual Review in June 1982. Maharashtra has generally met the targets for construction starts and the buildings are at various stages of completion. In Gujarat, construction of key facilities such as sub-centers, RFWCs, operating rooms at PHCs and upgraded PHCs are lagging behind Project targets. Similarly, construction starts are lagging behind Project schedules in Punjab and Haryana. This is particularly true of larger and more expensive buildings, especially in Haryana. Project and PWD officials in these states are, however, confident that most of the buildings will be completed by the end of 1984. The Team is impressed with the generally high standards and quality of construction in all the five states.

Several key issues have been identified during the Team's visits to the states with regard to construction, initial equipment and staffing of new and upgraded facilities which need to be addressed urgently. These issues are discussed below with appropriate recommendations for corrective action.

B. Issues and Recommendations:

Issue 1: Discrepancy between number of facilities proposed to be constructed in the Project Agreement and those planned by the States.

Discrepancies exist in the number of facilities planned by the States and those specified in the Project Agreement. These discrepancies do not seem to be related to the base-population (either mid-1982 or mid-1985) selected for the calculations. There is an urgent need to reconcile these figures to ensure that planned facilities are constructed and established in accordance with the norms of the GOI Model Plan.

RECOMMENDATION 1: It is recommended that USAID/Office of Health and Nutrition discuss the issue with GOI/MOHFW and the State Governments and reconcile the differences immediately. Any approval of new targets should be done through the issuance of Project Implementation Letter.

Issue 2: Escalation in construction costs.

During the Team's meetings with Central MOHFW officials and the visits to the states, it was pointed out that construction costs have risen from 50 to 100% in all states since signing of the Project Agreement and that it is no longer possible to complete the construction of all buildings within the amount allocated in the Project budget. Accordingly, it has been suggested that consideration be given to increasing the allocation for construction and sharing the additional costs between USAID and the GOI.

RECOMMENDATION 2: The Team recommends that USAID Office of Health and Nutrition discuss the issue with GOI and State Project and PWD officials and determine the extent of escalation in construction costs in the five states. The Agreement already provides 40% of original costs for escalations. With the increased value of the dollar in relation to the rupee, it is possible that some or all the increased costs in some states can be covered by the existing dollar budget. This should be studied carefully by USAID and GOI/MOHFW, giving due consideration to the alternative demands on the additional funds.

Issue 3: Low priority given to Project construction by States PWDs.

In some states, e.g. Punjab and Haryana, it was reported that low priority is being given to Project construction by the State PWDs. This has led to serious delays in construction starts and increased costs of construction.

In these states, no additional staff for construction has been sanctioned and the additional work is carried out by existing PWD staff, besides their normal work. In Haryana, the use of project-specific Letters of Credit to PWD (as other states have already done) has been suggested as a way to prevent commingling of Project funds with regular PWD budgets and to ensure that priority is given to Project construction in that state.

RECOMMENDATION 3: It is recommended that GOI/MOHFW immediately request the State Chief Secretaries to instruct the State PWDs to give top priority to Project construction because of the time-bound nature of the program. The construction arrangements should also be reviewed by the State Project Governing Boards and, wherever necessary, additional positions authorized to ensure that construction is completed in accordance with Project plans. Where the availability of cement and steel is a critical problem, consideration should be given to obtaining special allotment of these items as has been done successfully in Himachal Pradesh.

Issue 4: Problem of Water and Electric Connections to New Buildings and Proper Disposal of Sewerage.

During the Team's visit to the States, it was observed that considerable delays are encountered in providing water and electric connections to new buildings, leading to prolonged delays in initiation of services and in some cases refusal by workers to move into these facilities. In Haryana, a serious design problem was observed in that external dry latrines (i.e., without water and septic tank) and bathrooms without roofing are provided to ANM and LHV quarters. This does not appear to be consistent with the standard pattern for construction of similar facilities (as for example, those built under the Minimum Needs Program).

RECOMMENDATION 4: The State and District Project Officers should ensure that early action is initiated to ensure that water and electric connections are provided as early as possible after completion of the buildings. The Haryana design for ANM and LHV quarters should be reviewed to ensure that they conform to standard patterns of construction.

Issue 5: Provision of Initial Equipment and Supplies to Completed Buildings.

Prolonged delays have been observed in providing initial equipment and supplies to new and upgraded service facilities long after completion of the buildings and assignment of workers. In some cases, initial equipment has been provided before construction has been completed, creating storage and other problems. In Himachal

Pradesh, for example, buildings for the two sub-divisional hospitals and the transport workshop are in advanced stages of construction, but no action seems to have been taken to order the necessary equipment for these facilities.

RECOMMENDATION 5: State and District Project Officers should review construction progress and take timely action to ensure that appropriate equipment and supplies are provided to the facilities as soon as the buildings are completed and the workers are in position.

Issue 6: Assignment of appropriate categories of workers to completed facilities.

During the Team's visit it was observed that appropriate categories of workers are not being provided at new and upgraded facilities in some locations. For example, in Himachal Pradesh and Haryana, male workers are assigned to subcenters because of shortage of ANMs. Similarly, at some locations in Himachal Pradesh, LHV quarters have been converted to sub-centers with ANMs, because of non-availability of LHVs.

RECOMMENDATION 6: USAID and GOI/MCHFW should review the staffing situation with State officials and ensure that appropriate categories of workers are assigned to the facilities as envisaged in the Project Plans. (The need for expanding training facilities for critical workers, particularly female workers and female supervisors, is discussed elsewhere in the report.)

Issue 7: Reluctance on the part of some female health workers and female supervisors to live in subcenters and quarters constructed for them.

During the Team's visit to the States, it was observed that ANMs and LHVs in some locations are reluctant to live in the quarters constructed for them for security reasons. In some of these cases, the centers have been constructed away from the main population. In some other cases, the ANMs and LHVs come from the same village and are content to live with their parents or relatives.

RECOMMENDATION 7: The State and District Officials should review the situation carefully and examine the possibility of assigning ANMs and LHVs to their own villages so that unnecessary construction costs can be avoided. Where feasible, renting of suitable quarters in central locations should be explored and appropriate modifications made to construction designs to eliminate quarters where they are not necessary.

Issue 8: Reimbursement by USAID for construction costs.

The issue regarding current USAID reimbursement procedures for construction costs was first raised by GOI/MOHFW officials during our meetings in New Delhi. The issue also figured repeatedly during our discussions with State officials.

Currently, reimbursement is made by USAID for construction at two stages: 75% of USAID's share of fixed unit costs is reimbursed when the building is complete, including available water and electric service and appropriate sanitary facilities, and provision of a PWD certificate confirming completion in all respects. The final 25% of USAID's share of reimbursement is made when the building is operational, that is, provided with standard equipment, staffed with appropriate health workers, and certified as operational by the District Medical Officer. Central and state officials have pointed out that this procedure is unnecessarily restrictive since services in fact can be and are provided at many locations before the electric and water connections are made available. This is because of the necessity to bring water and electric connections from far away places, in some cases 5-6 kilometers, involving cooperation of several Departments.

The original intent of the reimbursement clause in the Agreement appears to be to put some pressure on the States to ensure that all facilities are made fully operational as soon as possible. However, GOI/MOHFW officials point out that the USAID reimbursement procedures do not in any way affect the States since the total funds for construction are provided in advance by the GOI, without regard to any reimbursement from USAID. Thus, the present procedures only serve to delay disbursements under the Project and flow of funds to GOI.

GOI/MOHFW officials have suggested that the current reimbursement procedures be revised to permit reimbursement of 75% of USAID's portion of construction costs upon completion of buildings without external water and electric connections, with the remaining 25% to be withheld by USAID for release after the existing "operational" criteria have been met by the States.

RECOMMENDATION 8: The Team feels strongly that there is considerable merit in the GOI position for a revision of the existing reimbursement procedures for construction. It has been pointed by GOI officials that claims totalling more than \$8 million have been pending with USAID for several months. The Team recommends that USAID Office of Health and Nutrition discuss the issue immediately with GOI/MOHFW and adopt a revised and mutually agreed upon reimbursement formula which will permit more flexible disbursements and prompt flow of funds to GOI for Project activities, while ensuring that all facilities constructed under the Project are made operational as soon as possible after construction.

Issue 9: Need for continuous monitoring of construction activities by USAID and GOI.

Although State Project and PWD officials in all the five states appear confident that the construction of most of the buildings will be completed by the end of 1984, there is a need for close and continuous monitoring of construction activities to ensure that all buildings are completed on schedule as per the Project Agreement. The need for close monitoring is particularly important since in some States, e.g. Punjab, Haryana and to some extent Gujarat, construction of some of the larger buildings is yet to be initiated.

RECOMMENDATION 9: It is recommended that the USAID Engineering Consultant and Office of Health and Nutrition, and GOI/MOHFW monitor closely all construction activities to ensure that they are completed without delays and on schedule as per the Agreement.

III. MANAGEMENT

A. INTRODUCTION:

Management is the process by which an organization seeks to ensure that its resources are properly used to achieve its objectives. It is concerned with all resources, including personnel, time, information, money, equipment, supplies and facilities. Its components are planning, budgeting, directing, coordinating, reporting and evaluating.

The project Grant Agreement between the Government of India and the United States for the Integrated Rural Health and Population Project identifies "improved and expanded management support" as one of the critical activities required to achieve the purposes of the IRHP Project. This is consistent with the GOI's national Model Health Plan.

Specific activities anticipated in the project paper for improvement of management were:

- The assessment of management needs within the project;
- The development of management information systems;
- The improvement of management procedures at state and district levels;
- The conduct of practical research studies related to program management, program evaluation, management training and organization of services;
- Improved impact evaluation capability;
- The provision of management training.

The Project Paper only specified that these activities would occur, but did not specify how or by whom. It left such implementation issues to be resolved after the project was initiated.

In addition to the specific management improvement activities, the project paper specifies certain organizational, staffing and administrative arrangements which will be made for the coordination and management of the Project by the Central, State and District-level governments. These arrangements include the creation of governing or advisory committees at all three levels, the assignment of existing staff or appointment of additional staff for management and technical tasks and the provision of certain budgetary support for these activities.

B. FINDINGS:

All three levels of government have complied with the Grant Agreement in the establishment of Project Management and Coordination structures. There is considerable variation between states in the numbers of state-level positions which have been established. There is variation in the use of existing staff versus the appointment of additional personnel. There is also an inconsistency in the formula for the level of financial support available to the project states for project management which is a serious constraint for some states. Also, some states have established only one governing committee or board, while others have both a lower level steering committee and a higher governing committee.

Such variations are to be expected and encouraged to the extent that they respond to the local conditions in states and districts, and to the extent that they facilitate the progress of the project. Generally, this is the case, although some problems have been identified and are addressed in the following section.

Progress in "improved and expanded management support" has been very slow. For example, the management needs assessment, (MNA), which should have been completed in the first year of the project, has not yet been completed in any State. It is apparent that the Central and State Governments have given more priority to the expansion of the rural health system than to improving its management. This is unfortunate since an expanded service delivery system places unusual and heavy strain on its management support services. At a minimum, the expansion of the system and the improvement of management support should occur simultaneously.

C. Issues and Recommendations:

1. Central Project Management:

Issue 1:

There appears to be need of better coordination among the Area Project staff, the technical staff of the Director General of Health Services and the technical wings of the Department of Health and Family Welfare. This is important so that the lessons learned in the projects can be incorporated into the national programs and so that duplicate activities can be avoided.

RECOMMENDATION 1: The Central Area Project Coordinator should study the issue of coordination among the Area Project staffs, the technical staff of the Director General of Health Services and the

technical wings of the Department of Health and Family Welfare. If he determines it is a problem, a mechanism should be developed for improving such communication and coordination.

Issue 2:

Lessons learned in the different states within the USAID Project and in the other Model Health Plan projects are not being shared regularly and completely. Since they all are working within the same general framework, i.e. the Model Health Scheme, their various experiences, innovations and solutions to common problems would be useful to one another.

RECOMMENDATION 2: A budget should be made available for supporting the sharing of information between the states within the Project and between the various projects. Possible activities would be annual or more frequent meetings of State Project Directors; duplication and circulation of reports from consultants, research innovative activities and evaluations; exchange visits between the States of Project Directors and other appropriate Project Staff; special seminars and workshops on selected topics of general interest; and national training programs for the States' Project Directors and other key staff. A senior staff should be charged with planning and implementing these activities.

Issue 3:

The State Project Directors are frequently unsure of the exact procedures and guidelines which they are to follow on various management issues. The GOI has issued many directives through letters and other piecemeal means. Because they are issued on an irregular basis over the entire life of the Project, they may easily be forgotten, misplaced or be otherwise inaccessible or unclear. In particular, there is uncertainty over which directives are firm regulations and which are merely guidelines to be adopted and modified by the states.

RECOMMENDATION 3: The GOI should either issue a Project Manual on key policy and administrative issues or otherwise make available in one volume the various policy and administrative directives it has previously issued.

Issue 4:

The GOI technical staff would benefit from more frequent and current information about the State programs. GOI supervision and technical guidance would be enhanced if more frequent visits by GOI staff were made possible.

RECOMMENDATION 4: The GOI should appoint additional technical staff at appropriate levels to travel frequently to States, to deal with high ranking state officials and to represent the GOI in matters requiring immediate approval. Those responsible for supervision/liaison with particular states should probably have no more than two states, each.

Issue 5:

Some States, e.g., Punjab, have reached the budgetary limit on the number of Project Management staff which can be hired under the Project, yet they are in serious need of additional personnel. The guideline established by the GOI is that no more than seven percent of the non-construction budget can be spent on project management staff. Because of various factors this is not always adequate.

RECOMMENDATION 5: The GOI should examine this "seven percent" rule and modify it so that adequate State and District staff can be obtained.

Issue 6:

During the first year of the Project, a management needs assessment (MNA) was to have been completed. The MNA was to have formed the basis for subsequent management activities, such as management training, design of logistical procedures, development of the management information system and design of personnel management procedures. Unfortunately, the MNA still has not been completed, although the Project is in its third year. Certain activities have already been initiated which should have been based on the MNA. These include the management training courses and the management information system.

RECOMMENDATION 6: High priority should be given by the GOI and the states to completion of the management needs assessment. Every effort should be made to expedite it so that its findings can be available for incorporation into the activities of the current project.

Issue 7:

By the third year of the project, a Management Information System should have been developed and implemented. Although the GOI has circulated a proposed plan, some states have not yet responded to it. In addition, the proposed MIS appears to be more of a health information system than a management information system. It appears to have been designed with only planning and evaluation in mind; ignoring the regular management needs of the rural health system. A MIS should start from the decisions that personnel in the system must make and then provide the necessary information on a timely and regular basis. Such a "decision-based" MIS will be closely linked to the objectives of the Project and the tasks necessary to achieve them. The system should be designed so as to have fixed "decision points" which, when reached, will trigger appropriate responses by the persons concerned. For example, when the Health Supervisor receives information that in one sub-centre the percentage of tetanus-protected mothers delivering babies dropped below a fixed level, she will immediately make contact with the responsible MPW to see why this has occurred and seek to remedy it. Thus the objective (a percentage or rate) and the appropriate action will have been considered in determining the design of the information system.

RECOMMENDATION 7: The GOI should give high priority to the early design and implementation of a decision-based achievement oriented MIS. It should consider adapting one of the already well developed MIS's such as the one in use in Maharashtra or the one developed by the Indian Institute of Management, rather than starting completely anew. Management information specialists should be consulted in addition to biostatisticians.

2. State Project Management:

Issue 8:

The rationale for the establishment of State Governing Boards was that, properly constituted, they would include high ranking representatives from all Departments and Ministries relevant to the Project so that decisions reached in their Board meetings would take immediate effect and not have to go through the regular bureaucratic procedures. Unfortunately, this has not always worked in the manner intended. In some states there are two committees, a Steering and a Governing Committee.

After they each have considered all issues, the various Departments and Ministries once again consider them. In some cases, the Governing Boards' decisions have then been reversed and, in all cases, the decisions have been delayed. Another problem, in the case of Haryana, is that because of her very busy schedule, the Minister of Health, as Chairman of the Governing Board, has been able to convene the meetings infrequently; long delays in having important actions approved have resulted.

RECOMMENDATION 8.1: The GOI should make it clear that the purpose of these committees is to facilitate decisions and not to add another layer of bureaucracy to the States' decision making processes. Furthermore, the GOI should reiterate that the decisions of the Governing Boards should be final and not subject to further approval by either the GOI or other State Departments and Ministries.

RECOMMENDATION 8.2: Haryana should appoint a co-chairman of its Governing Board, with sufficient rank to convene its meetings and to facilitate its decisions. Consideration might be given to making the Chief Secretary the co-chairman along with the Minister of Health.

RECOMMENDATION 8.3: State Project Directors should prepare the Governing Board agendas and circulate them sufficiently in advance so that the Committee members may consider them and obtain, prior to the meeting of the Committee, the appropriate response or decision of their respective Departments and Ministries. In this way, there will be no need for further delay after the meetings. If the Project Directors attend to this matter carefully and in sufficient time, delays will be prevented.

Issue 9:

The Project Agreement and general plans of the Project anticipated need for various technical cells at the State and District levels. Many of these cells have not been sanctioned or have not been staffed. There is a critical need at the State and District levels for sufficient technical staff to plan and implement such activities as innovative studies, research and evaluation, IE&C and training. The States vary in how these cells are established, some within the regular structure of the Directorate of Health Services and some outside of the regular structure. Either system can work if the Director of Health Services gives the Project priority and personal attention.

However, many important activities of the Project have been severely delayed because of these vacancies at the State and District levels.

RECOMMENDATION 9: The GOI should immediately give attention to the lack of appropriate and sufficient technical staff in the states and should urge the States to sanction the positions and fill them. It should, at the same time, take action on revising the "seven percent" ceiling for Project Management Staff, which makes budget for such staffing highly inequitable among the project states. (See Recommendation 5, above.)

Issue 10:

The staff of the State Project offices report that they have inadequate budgets for frequent visits to the Project Districts. This is, in part, due to their adherence to GOI guidelines specifying Rs. 8,000 be allowed for each vehicle.

RECOMMENDATION 10: The GOI should clarify this guideline so that States understand it is an average allowance and may be varied according to the areas to be covered and the distances involved.

3. District Project Management:

Issue 11:

As mentioned under the State Project Management section, above, the District technical cells have not all been sanctioned or filled. This has impeded the implementation of activities in IE&C, inservice training, innovative activities and special studies, such as the Needs Assessments.

RECOMMENDATION 11: The States should move quickly to determine which of the non-sanctioned District positions should be established and move to fill them with qualified people. Without adequate staff at the District levels, the actual project services will suffer.

Issue 12:

Vacancies in many of the States are much higher than they should be at the end of the third year of implementation. This is particularly true of female positions in the ranks of Health Assistants and Multi-Purpose Workers.

RECOMMENDATION 12: The States must make every effort to recruit, promote and otherwise fill the vacancies. The establishment of MPW(F) training schools in the Project Districts will help resolve this problem, but consideration should be given to ways in which female residents from the Project Districts can be further encouraged to compete for the seats in the schools.

Issue 13:

There are severe shortages of supplies, particularly MCH-related medications, at all levels of the Project Districts. In some cases, the stocks are not being equitably distributed, being kept at higher levels rather than distributed to lower levels. In some cases, the budgets are inadequate for the needs. For example Rs. 2,000 per sub-centre for a population of 5,000 is almost certainly inadequate. In addition, there was evidence of expired and spoiled supplies being retained in the District storehouses and in the PHC's and Sub-centers.

RECOMMENDATION 13.1: The States should initiate or complete analyses of their logistics systems at the earliest time. This is an appropriate activity to contract with management institutes as has been done in Haryana and Punjab. The outcome should be an improved logistics system, including inventory system, procurement, storage and distribution plan. Where feasible, the recommendations should be applied statewide rather than only within the Project Districts.

RECOMMENDATION 13.2: Consideration should be given to decentralized procurement of medical supplies at least to the District levels and perhaps to the PHC levels. This could be an innovative study the States might try in one District each.

RECOMMENDATION 13.3: An analysis should be performed of the precise drug and contraceptive requirements at each level of the delivery system, using the twelve project health priorities as a basis and computing requirements based on populations and prevalence/incidence of the various conditions. The object will be to determine the requirements and to adjust the budgets appropriately.

Issue 14:

Job manuals were not available for all staff in the PHCs sub-centers and training schools. Staff and students should have available their own copies for reference and continued learning. In addition, the manuals should be available to the supervisors so that they can refer, as needed, to the job descriptions of those they supervise.

RECOMMENDATION 14: The GOI and the States should insure the early provision of manuals in the appropriate languages to all personnel working in the Project Districts. They should provide, where needed, financial support for translation and printing.

Issue 15:

It was found that, with few exceptions, the supervision provided from the District down to the Community Health Guides is not based on either performance targets or outcome targets. (The two exceptions were supervision relating to family planning and malaria work.) At every level of the system, health facilities and personnel should know exactly what their populations are, the size of the population-at-risk for each of the key 12 health priorities, the services-provided targets and most important, the impact of those services in reducing the problem.

This information would be provided by the management information system previously recommended and would form the core data to be used in supervision. Workers or facilities which fall below certain minimum performance and impact levels would be given attention by their supervisors. It should be noted here that giving major emphasis to targets in only two of the twelve health priority areas (malaria and family planning), results in other priorities being given secondary consideration. A major principle of supervision is that workers must know for what they will be held accountable, and most important, that they will be held accountable.

RECOMMENDATION 15: A supervisory system should be developed based largely on performance and outcome or impact data. As a corollary to this, the Management Information System should provide the workers and their supervisors with the data they need to determine achievement of performance and outcome targets. Also, in-service training should prepare the workers and their supervisors to use this system.

IV. TRAINING

A. FINDINGS:

1. Quantitative Achievements

There has been an increase in the number of trained personnel at the village and subcentre levels, i.e., CHG's, Dais and Health Workers. This increase in four states has been generally satisfactory. The exception is Himachal Pradesh. In Himachal Pradesh, all the vacant posts of female and male multipurpose workers will not be filled due to shortage of seats in the training schools. Also difficulties are encountered in recruiting CHG's and Dais for training. Training issues were observed in more detail in the Himachal Pradesh site visits than in the other states. Accordingly, they are reported separately in Appendix VI of this report. While some of the problems encountered are unique to that state, it is felt that they are worthy of reporting, since many of them apply to other states as well and will require attention in the remainder of the project and beyond.

The team finds that the process of filling the new posts created by the expansion of the facilities is likewise progressing satisfactorily with the exception again of Himachal where persistent difficulty with HW(F) posting continues.

The other cadres, i.e., BEE's, Health Assistants and Medical Officers are relatively smaller in numbers required and consequently present no major problem vis-a-vis the expansion of their size.

2. Quality of Performance as indicated by the Training and Communications Needs Assessments

The results of the TNA revealed major shortfalls in the knowledge and skills of the CHG's, Dais, HW's and HA's. The team members' own brief experiences with small samples of CHG's and HW(F)'s varied widely. Some felt that CHG's and HW(F)'s were well informed while other team members got virtually the opposite impression. These mixed impressions along with the TNA (and CNA) results serve to emphasize the value of better means for monitoring the competencies of the health team members. In addition to the competencies, the evaluation team also felt that more emphasis should be placed on regular monitoring of: 1) performance and; 2) the resulting impact of the health teams' efforts. An effective "quality control system" consists of regular analysis of all three components, competence, performance and impact. Some moves in this direction were evident, especially in Maharashtra. The consensus of the

evaluation team was that during the latter half of the project considerable emphasis should be placed upon developing and refining these monitoring, cum quality control, systems within the project districts. The information resulting from this type of monitoring could be fed back to the training programmes, both basic and in-service, and be used to assure continuous relevance of training to the effectiveness of the Primary Health Care System.

The results from three states of that portion of the CNA related to Block Extension Educator's (BEE's) knowledge and skills showed even more striking gaps in the expected competencies. In virtually all of the areas assessed the BEE's as a group, performed poorly. The findings were so surprising in fact, that in at least two states it is being suggested that the assessment procedures and questions require close scrutiny before the results can be accepted as valid. BEE's are responsible for health and family planning IEC programs at the Block level. All of the BEE's interviewed by the team had been promoted to their jobs after serving in non-IEC positions such as sanitary inspectors, malaria workers, etc. Some had received short-term training in communications, for example, a three-month course for a certificate in health education, or more rarely, a one-year course leading to a diploma in health education. Over the past 2 years the four leading Central Training Institutes have been developing a new set of "Training Modules" to be used in an expanded and improved training programme for BEE's.

The team endorses the introduction of "feed-back" mechanisms such as the TNA and CNA (as well as the planned MNA). However, in order to assure optimal benefit from these assessments, as well as from any future such studies, it is suggested that very close scrutiny be given to the procedures and the results, in particular the "turnaround" time for getting the information back to PHC's and Districts should be as short as possible.

The Medical Officers at the PHC level in general tend to retain their clinical orientation. Their understanding of the concepts inherent in Primary Health Care is rudimentary. There were, however, notable exceptions to this generalization. The team felt that this lack of understanding and appreciation of Primary Health Care represents one of the most formidable challenges for the latter part of this project. It is our feeling that because the MO PHC is the team leader much of the responsibility for success or failure of the team naturally lies with him or her. Until the MO is sufficiently trained and motivated in community-based health services little in the way of measurable impact can be reasonably expected.

3. Development of Training Modules

As mentioned above, the Training Needs Assessment (TNA) uncovered significant shortcomings in the competencies of the village, subcentre, and PHC personnel, i.e., Dais, CHG's, HW's and HA's. To remedy this position the concerned five Regional Health and Family Welfare Training Centers, one in each state, have been developing a series of in-service "Training Modules." The edited English versions of five modules have been completed and delivered to the RHFWTC's. Three more are near completion. Translations into regional languages are just beginning. It is anticipated that training will begin in early 1984. The modules are directed, ultimately, at CHG's and Dais. The procedure for disseminating this training however requires preliminary orientation and training of MO's, BEE's, HA's and subsequently HW's. The latter group will be directly responsible for training the CHG's and Dais. It is expected that in the process each level of "trainer" will have been trained regarding "competency based training" as well as the curriculum's technical content. The team felt that this process holds great promise but will require close monitoring.

4. Training Facilities and Functions

The five RHFWTC's have played key roles in the implementation of the project to date. In addition to organizing, supervising and analyzing the TNA's and CNA's they have also developed the series of eight training modules for use in the in service training of CHG's and Dais by HW(F)'s as mentioned above. The team felt that, based upon this successful involvement, the roles of the RHFWTC's in the project might be usefully expanded. This would require expanding the number of posts as well as improving the facilities at RHFWTC's. (See Recommendation #11 in the Executive Summary.)

The team was not able to examine in depth the basic training programs for HW(F)'s and for HW(M)'s in all the states. The HW(F) schools that were briefly visited revealed well organized programs which were, however, operating under some major constraints. Generally the numbers of "Sister tutors" was inadequate (2-3 per 100 students in some places). In addition the equipment, curricula, library, hostel and transport accommodations were felt to be in need of attention if these programs were to produce optimally trained personnel.

Concerning in-service training the team felt strongly that this aspect of the project was vitally important. Inservice training is in fact being given considerable attention. However, during the evaluation it was generally felt that a number of

improvements are still needed. Adequate shelter for training and night time accommodations of HW(F)'s and CHG's and Dais is not available at most PHC's. Moreover subcentres do not have facilities for accommodating CHG's and Dais for short training courses. This could be easily remedied by the construction of temporary indigenous style shelters adjacent to PHC's and subcentres. In addition, more emphasis should be placed upon the idea of training being integrated into the process of supervision at all levels. The team had the impression that in general the existing approach to supervision still puts much emphasis upon "fault finding". Emphasizing the training and development style of supervision at all levels, including the community level, is the essence of the Primary Health Care approach and would influence favorably the functioning of the entire health care system.

5. Promotional Training

The MPW scheme was introduced in 1975. The CHG scheme was added in 1977. These two programs have had considerable impact upon the structure and functions of the states' health care programs. The availability of upward mobility has brought some increased vitality. Some states are considering or already experimenting with additional promotional training programs. Maharashtra is testing a "step-ladder" training program for HW(F)'s. In this program a fresh recruit is given a 12 month course leading to a "Midwife" certificate. These midwives will be posted against HW(F) positions. After three years they are eligible for further training leading to full HW(F) designation. The team was impressed with these schemes and the planning and implementation efforts that have gone into making them a success. It is suggested that several extensions of this concept of promotional training be considered.

6. Training as a Health Services Development Tool

In general the team felt that training was receiving considerable attention under the project. This has had the effect of improving the capacity and appreciation for training as a team development tool. Through the TNA and CNA the concept of "competency based training" (a system which links training directly to specific job requirements) is being more directly related to the training programs. The RHFWTC's have played major roles in implementing the CNA, TNA, follow-up training and other training aspects of the project. The evaluation team felt that the increased coordination between service and training that has resulted from the RHFWTC's involvement, should be further encouraged. With increased support, the RHFWTC's could do even more. They could become "Training and Development

Units". That is, they could take on increasing responsibility for management, cum "team development" training, as well as the more technical type training they are already conducting.

7. Medical Model vs. Primary Health Care Model Orientation

The Model Health Plan whose implementation the IRHP project is assisting calls for more than just the enlargement of the current staff and facilities infrastructure. It also calls for a re-orientation of the system toward the concepts of Primary Health Care.

Since most of the "Bricks and Mortar" and "Post-filling" issues have been or are currently being successfully addressed, the team feels that henceforth training should be given more emphasis in order to facilitate the re-orientation of the system.

As stated in the "National Health Policy Draft, 1979:

"Improvement in the health status of the population is achievable if there is a shift from the current emphasis on the hospital-based, disease-oriented approach, depending heavily on sophisticated technology, to an approach where the attitudes, skills and methods of the trained personnel are in tune with the needs and aspirations of the common man and where the facilities available are equitably accessible to the population in physical, social, cultural and financial terms. A community achieves the highest level of health when it reaches a stage of least dependence on professional intervention and maximum reliance on its own resources and action.

Clearly the implications of this re-orientation for the training side are enormous. First of all the most appropriate persons must be recruited, at all levels. This means that more than "academic qualifications" must be considered. Other qualifications which will insure community acceptance and collaboration must also be met. Then training programs must be finely tuned to job requirements. This in turn will require close collaboration among training personnel, service personnel and communities. Finally, both basic and in-service training programs will be required to broaden their scope beyond mere "technical" skills. Successful Primary Health Programs, ones that show significant gains in terms of improved health and fertility status, require healthy "adult-to-adult" levels of communication between health personnel and communities as well as among the members of the health team themselves. Identifying and institutionalizing the required adjustments in the system

to bring about these changes, represents perhaps the major challenge for the training sector during the latter half of this project and, undoubtedly, beyond. Major steps in this direction have been taken with the TNA's and CNA's. The evaluation team recommends that these valuable achievements be recognized and built upon. (See Recommendation #4 in the Executive Summary.)

B. ISSUES AND RECOMMENDATIONS

1. Basic Training

Although most of the current project support is for in-service training the evaluation team observed that basic training programs are also in need of refinement. The team suggests that these issues be considered in planning for future activities.

ISSUE 1: The HW(F) training must be made competency based, i.e., with a training curriculum tailored to the trainee's level of comprehension and aimed at acquisition of both knowledge and skills in performing the specific tasks called for in the worker's job description.

ANM schools continue to train students for hospital work. During training very little time is spent in the rural area and in domiciliary midwifery and pediatrics. The essentials of Primary Health Care orientation and practical experience in working with rural communities are lacking. The instructors themselves, most of whom are more clinically than community oriented, are not clear about the twelve health problems emphasized by IRHP. The "step-ladder" (referring to a progression from basic midwifery training to ultimate HW(F) training, with three years as a midwife interspersed) and "sandwich" (training alternating with field experience as new skills are progressively acquired) approaches now being tried in Maharashtra are examples of pragmatic approaches to these problems. They not only provide desirable upward mobility for health workers, but also accelerate the availability of health workers in the face of increasing demand.

RECOMMENDATION 1.1: The project should provide the training schools with descriptive information so that the instructors may be clear as to what is expected of the HW(F)s when they go to the field.

RECOMMENDATION 1.2: The students should follow up hospital practices into the field practice area. The students should discuss their findings with the obstetricians, pediatricians and doctors in charge of post partum programs so that the hospital may become community health oriented.

ISSUE 2: The training schools appear to be poorly equipped and do not have sufficient models, charts and books. Training manuals are not available and are not used in the training process. Sufficient teachers are not available. Transportation facilities to take students to the field are lacking.

RECOMMENDATIONS 2.1:

- The staffing positions in all training institutions should be filled in accordance with project needs. Where qualified personnel are not immediately available, consideration should be given to temporary assignments by experienced personnel who may not have completed the required academic qualifications.
- 2.2: The training manuals developed by the GOI should be used and every student should be required to have a copy for future reference.
- 2.3: Teaching aids such as flip charts, models and other aids should be made available in these schools. The students should be taught to use these communication methods. The schools should consider the use of VCR and TV as useful tools in teaching.
- 2.4: Funds should be provided from the project to improve the libraries of the training schools and HW(F) centers so that adequate journals and books may be made available at these centers.
- 2.5: Circulation among the training centers and IRHP staff and field personnel of useful educational information and IHRP news should be considered wherever feasible.
- 2.6: The GOI and the states should take steps to ensure that the training schools have adequate transportation to take students to the field wherever required.

ISSUE 3: The student is not sufficiently exposed to the hospital obstetric wards.

RECOMMENDATION 3: Standard criteria should be established and observed for the students' experience in conducting deliveries, observing abnormal deliveries, antenatal care, immunization and other primary health care functions.

ISSUE 4: The student spends a major part of his or her time in the field with the HW(F) and LHV who are busy with their routine work.

RECOMMENDATION 4: Students in the field should be provided access to experienced supervisors.

ISSUE 5: The HW(F) is the lowest professional worker in the health system. She is frequently a young woman who may be culturally or geographically new to the village in which she has been posted. Thus she may find it difficult to be in tune with poor women in rural areas.

Such difficulties may be overcome if a settled married woman from a sub-center village is selected and trained to become a HW(F). In addition to feeling safer, more secure, and accepted, these women, with the support of their relatives, may be able to mobilize their communities into greater participation in working toward self-reliance.

RECOMMENDATION 5: Alternative practices for recruiting, training and posting of HW(F)s should be tried on a pilot basis. For example, it is suggested that married women preferably with 10 years of schooling (but waivable to 7-10th class if such women are not available) might be considered for the step-ladder midwives' course. (Eligible Anganwadi workers and VHGs might also qualify for this course.) After basic midwifery training they should be posted in their own village, and after the prescribed period of service, should be given the opportunity to complete the HW course (if they meet the 10th class basic qualification). Subsequent evaluation of their performance, community acceptance and job satisfaction in comparison to regularly trained HW(F)s should be conducted.

ISSUE 6: The knowledge and skill of the VHGs with regard to medical problems and data collection such as keeping lists are generally satisfactory. However, their perception of their own role as change agents and health educators is found to be minimal. The VHG is also the vital link in communicating the community's aspirations regarding MCH services to the health system. This role needs to be emphasized.

The VHGs meet once a month at the PHC level. The class is too large for meaningful discussion and dialogue. Very often the discussions are limited to fulfillment of targets and perhaps a lecture on a single topic.

The VHGs are not adequately trained in use of audio-visual aids. An attempt is being made in Maharashtra to provide a set of flash cards to every VHG and to train them in their use.

RECOMMENDATIONS 6.1: VHG training should emphasize the role of the VHGs as change agents and health educators and they should be equipped with adequate communication skills for this purpose.

6.2: The VHGs should be given training regarding their role as representatives of the community and as a link between the health system and the community.

6.3: The VHG monthly meeting should be conducted at the LHV subcenter level so that MO/BEE/HA supervisors can attend these meetings and assist the LHVs to supervise, support and give in-service training. This will also help build up the team concept. When adequate facilities for this purpose are lacking, construction of low cost, locally designed sheds or huts comparable with the local rural environment should be considered for this purpose.

ISSUE 7: The Model Health Plan depends heavily on trained dais as an important link in the health system. Some of the trained dais encountered in the team's visit were not providing the full range of expected services and appeared to be inadequate

RECOMMENDATION 7.1: Alternative methods of in-service training for dais should be tested and compared. For example, the TBA could be given continuous in-service training in order to increase her skills, solve her problems and strengthen her position in the community. This in-service training could be carried out at the LHV subcenter once a month. At these training sessions the linkage between TBA, ANM and LHV should be strengthened. In order to encourage attendance at these training sessions the TBA could be paid for deliveries conducted and also travel costs. The Dais' training manual and other pictorial forms of training guides should be used for the training.

RECOMMENDATION 7.2: In some areas of Himachal Pradesh and Haryana the TBAs find it difficult to leave their villages for one month to attend the basic training course.

A stepwise training format should be tried in which the TBA is given a once a week graduated training at the subcenter/FHC. The training could thus be spread over a six month period and would not require a long period of absence from her village. Moreover, it would enable the illiterate TBA to not only understand, but internalize the knowledge she is acquiring. The HW(F) should supervise the conduct of deliveries by the TBA in the field during this training period. She should also train the TBA in accurate collection and reporting of vital events in her village. During her training her link with the HW(F) should be strengthened. Adequate support should be provided to cover her travel expenses and the necessary stipend during the training period.

2. Promotional Training

ISSUE 8: The introduction of promotional training has helped the MPW(F) to advance in her career to become a Health Assistant/LHV. The Health Assistants at present have very little chance for promotional training and career advancement.

RECOMMENDATION 8: There should be an increase in promotional training in order to meet the need for an increased number of supervisors in the districts. They should be drawn from the HA and other appropriate cadres and given special promotional training.

3. Team Training

ISSUE 9: In addition to the training needs disclosed in the TNA, there are shortcomings in the application of a team training concept with appropriate linkages between the various members of the health team.

RECOMMENDATION 9: More emphasis should be given to team building in in-service training, with strengthening of linkages between TBA, VHG, HW and LHV. The training process should include preparing all levels of workers in how to motivate communities to become involved in health programs, and in analyzing, discussing and using data collected by VHG's and TBA's for further implementing and improving their programs.

4. Block Extension Educators Training

Issue 10: Many of the BEE's interviewed by the team were energetic and well motivated. However, their preparation in important communication techniques and materials--interpersonal communication, use of audiovisual materials and identification of communication needs--appeared to be weak. Some had received no IEC or health education training at all. Even among those who had, the level of knowledge was not high. Preliminary results of the Communication Needs Assessment from several states support this finding. In Punjab, for example, the percentage of BEEs who could correctly answer 80 percent of questions on materials production, educational methods, media, techniques, monitoring, and evaluation was no higher than 28.67 for any project district on any item. Their scores on factual questions about family planning methods and health problems were considerably higher.

RECOMMENDATIONS 10.1: In-service training for all BEEs can strengthen their communications skills and performance. Continued efforts are needed to complete the in-service training materials soon and undertake this training for all BEEs.

10.2: Information from the Communication Needs Assessment on attitudes and communication channels used by the BEEs' target audience (married women under age 45, married men, community leaders, health service providers and development functionaries) should be incorporated in the in-service training materials being developed for BEEs. For example, this information could be helpful in determining the amount of emphasis to be placed on training in the use of different communication channels and techniques, as well as in the content of communications. Priority should be given to completing the survey and analysis of results so that the relevant information will be available before the materials are completed.

10.3: Since communication problems and opportunities vary, the IEC training materials developed should be flexible enough to enable emphasis to be placed on different approaches depending on the needs of a particular district.

(This issue is discussed further in Section V.)

5. Supervisor Training

ISSUE 11: Promotional training is being done in most of the project states in order to meet the increased need for supervisory personnel in the field. In some areas, however, the problem is more acute than in others. In Himachal Pradesh there is a dearth of both ANM's and supervisors (see Appendix VI.) In Haryana there will still be many vacant posts even after the increased number being trained have completed promotional training.

In addition to addressing quantitative needs, the quality of supervisory training also needs attention. Generally, the training of supervisors has been oriented to a hierarchical style of supervision consisting more of inspection than guidance and in-service training.

RECOMMENDATIONS 11.1 In those states experiencing serious delays in filling supervisory posts through the promotional training mechanism, experienced and capable ANM's should be considered for promotion provisionally to the post of LHV with the understanding that they will undergo promotional training as soon as it is available.

11.2: Training for supervision at the PHC and LHV Subcenter levels should be reoriented with greater stress on the guiding, assisting, training and team-building role of the supervisor.

6. Medical Officer Training

ISSUE 12: The Medical Officer, although considered the captain of the health team at the PHC level, too often lacks the training and orientation for this important role. Many of them are recent graduates from Medical College, oriented to curative medical care without significant clinical experience and lacking a proper orientation to the concept of primary health care. In an informal meeting with Professor Somnath Roy at the NIHFV the evaluation team was encouraged to learn that this problem is widely recognized and is under consideration by the working groups concerned with preparation of the seventh five-year plan. In the meantime the IRHP offers opportunities for a valuable contribution through innovative projects aimed at the need for improved leadership at the PHC level.

RECOMMENDATIONS:

12.1: Medical Officers should be given specific orientation prior to posting to the Primary Health Center. The orientation course should include the basic concepts of primary health care, referral linkages, management, team-building and epidemiology.

12.2: Medical officers should be trained and encouraged to enlist local community participation in the planning and implementation of community health care, and should foster this attitude throughout the PHC staff.

12.3 Medical Officers should be encouraged to initiate small operations research projects in the field.

12.4: A variety of innovative incentives to encourage Medical Officers to remain in PHC posts should be tried.

V. COMMUNICATIONS

A. FINDINGS:

After reviewing the Government of India's communication program for health and family welfare, the evaluation team had three overall observations. First, many officials in the central and state governments regard information, education and communication (IEC) as a weak link in health and family welfare efforts. Second, these officials appear to be strongly interested in improving the IEC program. Third, among the most important steps needed are introduction of innovative ways of delivering health and family planning messages, increased use of technical expertise in communications, and improved communications training and support for all health and family planning personnel, especially at the lower levels.

Communications activities funded under the IRHP project in the past three years include preparation and conduct of a Communication Needs Assessment in nearly all project states, and increased numbers of orientation training camps on health and family planning. Technical cells for IEC experts on state and district project staffs, which were called for under the project, have for the most part not yet been created. Innovative studies in IEC have not yet been developed either.

The evaluation team examined the status of the Communication Needs Assessment and the orientation training camps. The team also interviewed IEC staff at central, state, district and block levels and attempted to assess the overall contribution of the IEC program to the achievement of the Project's goals. Several comprehensive reports on the IEC program, prepared by the national Task Force on Communications for Health and Family Welfare, USAID-funded consultants and others, were also reviewed.*

The discussion that follows includes analyses of four topics: the Communication Needs Assessment, the national Task Force on Communications for Health and Family Welfare, communications staff, and current communications activities. Detailed recommendations are listed for each topic. However, the team's principal overall recommendations in communications are:

that the amount of IEC expertise available in the health and family welfare program be increased to a more adequate level by creating and filling positions for IEC experts on state and district project staffs, and by filling vacant IEC positions at the state, district and block levels;

* The reports on IEC activities that were consulted are listed in Appendix X.

- that communications training for IEC field workers and other health and family planning workers be conducted as soon as possible, and that it stress interpersonal communication and identification of local communication needs;
- that new ways be tried of designing and delivering health and family planning communications, both interpersonal and mass media; and
- that the Communication Needs Assessment be completed as quickly as possible, and that design of new communication strategies and training materials not await the final results of the assessment.

1. Communication Needs Assessment:

The Communication Needs Assessment (CNA) has been a major IEC activity over the past year. Although planning for the CNA began earlier, the first CNA workshop was not held until August 1982 and the final details of the questionnaires, sample design, and the like were not established until May 1983. Several consultant reports* summarize work up until that month. The current status of work on the CNA is as follows:

- (a) Data have been collected for District Education and Media Officers (DEMOs), Deputy DEMOs, and Block Extension Educators (BEEs) in all five project states and preliminary tabulations of the results have been prepared.
- (b) Data collection for the remaining groups of respondents (health service providers, community leaders and development functionaries, and currently married women and their husbands) has been completed only in Gujarat. In Maharashtra, Punjab and Haryana, completion of data collection is expected by the end of November 1983. Data collection in Himachal Pradesh is not expected to begin until March 1984. No tabulations of any of this data are expected until mid-December 1983 (Gujarat), and a realistic projection would suggest that usable hand tabulations for four of the five states will only be available in January 1984 at the earliest.
- (c) Final arrangements for computer analysis of the CNA data for the groups mentioned in (b) above had not been negotiated by November 1983.

* See Appendix X .

Overall, reactions to the CNA process were positive among those who had actually carried out the work, most feeling that much was being learned. Nevertheless, several issues and recommendations appeared relevant based on the current status of the CNA.

Issue 1:

Like the Training Needs Assessment, the CNA has taken longer than anticipated to start and to complete. Several reasons are evident. This was an activity new to the Indian agencies involved. Few of those involved in the CNA had experience with questionnaire construction, sample design and interviewing. Second, there were delays in translating the questionnaires and in obtaining the final printed copies in the appropriate local languages which, in turn, delayed the beginning of the field work into the time period usually reserved for campaigns to meet the family planning targets. Third, the questionnaires were quite lengthy and perhaps insufficiently pretested.

The delays in obtaining the CNA results have several important consequences. Two are most critical: (a) there has been a delay in designing project-stimulated innovative communication strategies; and (b) design of modules for in-service training for personnel involved in health and family planning communication--DEMOs, Deputy DEMOs, BEEs and others--has been undertaken as a separate activity of the National Institute of Health and Family Welfare, without benefit of the wealth of relevant information being gathered in the CNA.

RECOMMENDATION 1.1: Every effort should be made to ensure completion of the CNA at the earliest possible date and share results among the states.

RECOMMENDATION 1.2: Arrangements for computer analysis of the CNA must be completed as soon as possible.

RECOMMENDATION 1.3: Work on designing new communication strategies should not be delayed until the full results of the CNA are available. Hand tabulations for some states and selected districts should be used to begin planning as soon as they are available.

Issue 2:

Preliminary tabulations of data on the senior communications personnel at the district level (DEMOs, their deputies and BEEs) have indicated serious deficiencies in their communication knowledge and skills.

RECOMMENDATION 2: Retraining of communication personnel should begin as soon as possible and not be delayed to wait for the full results of the CNA.

Issue 3:

Original planning called for repeating the CNA at regular intervals, perhaps as often as once each year. The original round employed long questionnaires, many respondent groups, and elaborate sample requirements.

RECOMMENDATION 3: Substantial revisions and consideration of both the questionnaires used and the sample design are needed for second and later rounds of the CNA. Consideration should also be given to eliminating some respondent groups for subsequent rounds.

Issue 4:

The CNA was intended to reinforce the idea that planning of communication activities should be initiated at the local (PHC or, at most, district) level based on local monitoring of communication needs. To date, it appears that hand tabulations of results and assessment of the data are being done at the Regional Health and Family Welfare Centers or the state project offices, with limited involvement of the local level staff other than the computer.

RECOMMENDATION 4: More effort should be devoted to assessing the results of the CNA for each PHC. This should include sufficient attention to PHC-level analyses when centralized computer work is carried out. (See Recommendation 1.2.) Results of computer analysis should be shared with states, districts and centers. Copies of the tabulations for the PHCs should be given to each worker in the block.

2. Task Force on Communications:

While not directly part of this project, work of the national Task Force on Communications for Health and Family Welfare is clearly related to the IEC component of IRHP -- particularly the communications training of the BEEs in project districts. The Task Force, which was formed late in 1981, is intended to advise and assist the Ministry of Health and Family Welfare in planning and implementing a nationwide communication training program. Members of the Task Force have included representatives from the Ministry of Health and Family Welfare, Central Training Institutions (CTIs) and state level communications staff. One activity of the Task Force has been the development of a series of communications training modules for the BEEs initially designed by various CTIs.

Issue 5:

Coordination between the work of the Task Force and the work of the area projects has not always been extensive. Further, progress and funding for the Task Force and the area projects have been uneven. The Task Force began work before new IEC work in the area projects was initiated and made substantial progress in planning training materials for BEEs. Since then, however, the Task Force has been largely inactive because funding and technical assistance to carry out the long term plans have not been fully available. During this same period, project-funded activities such as the CNA and TNA are leading to the development of new training materials, some involving IEC components. The usefulness of these project-funded activities would be greater if they were developed in the context of a national communication plan for health and family welfare.

RECOMMENDATION 5.1: The GOI (especially the staff of the area projects) and USAID should support and participate as appropriate in the work of the Task Force that coincides with goals of the IRHP project. Additional effort should be devoted to coordinating activities of mutual interest between the new USAID-funded Family Planning Communications and Marketing project and the IRHP.

RECOMMENDATION 5.2: Results, as available, from the CNA should be incorporated into construction of the Task Force modules for training BEEs. This should not, however, be used to delay production of the modules.

3. Communications Staff for Health and Family Welfare

All five states included in the project have a State Education and Information Officer in the Department of Health Services, assisted by a small staff, who is responsible for planning, organizing and carrying out communication activities in health and family welfare. In the fourteen project districts, however, not all of the Mass Education and Information Officers are in position. Filling of the positions has been delayed while rules of promotion/eligibility of lower level workers are established for these positions. In the meantime, district responsibilities in IEC are being carried out by the district family welfare officers. At the block level, the staff of each PHC includes a position for a BEE. There are some vacancies in the project districts among BEE positions. The BEEs that are in position have in many cases received short-term health education training to equip them for their jobs; some have received no IEC training at all. (Training for BEEs is discussed in section IV.) As noted earlier, technical cells for IEC experts on the project staff at the state and district levels have for the most part not been created.

Issue 6:

The large number of vacant IEC positions at the district and block levels leaves serious gaps in the capabilities of the communications program. The absence of IEC expertise on most state and district project staffs further lessens the likelihood that an innovative, effective IEC program can be developed in project districts.

RECOMMENDATION 6.1: Priority should be given to filling vacant IEC positions at state, district, and PHC levels as soon as possible.

RECOMMENDATION 6.2: Technical posts for IEC experts should be created immediately on project staffs in each of the five states and IEC personnel placed in all fourteen project districts.

4. Communication Activities:

The team reviewed communications activities currently underway in support of the government's health and family welfare program. These included, among others, orientation training camps, production and distribution of print materials, radio programs, film shows, group meetings, and person-to-person communication.

The principal IEC activity in the program appears to be the orientation training camps. These are organized by the BEEs to inform influential persons from the community about family planning and health, and to encourage them to use family planning and health services. The number of orientation training camps has increased substantially in the project districts, because of the additional funds provided by the project. The team attended an orientation training camp held at Sohari subcenter in Bhota block, Hamirpur district, in Himachal Pradesh.

Print materials -- pamphlets and posters -- are produced by IEC staff in the center and state governments. Few materials are produced at the district level or below. Radio programs and films on family planning and health are also produced by the central and state governments.

Group meetings and person-to-person communication were also mentioned as important activities of the BEEs. It was not clear, in the limited time available to the team, how much emphasis these activities receive and who the principal audiences are.

The team agreed with the view of some GOI and state officials that the IEC program is not fully effective. However, we concluded, overall, that there are many opportunities for the IEC program to increase its contribution to the goals of the Model Health Plan. The steps recommended by the team include both strengthening existing activities and testing more innovative approaches.

Issue 7:

Orientation training camps appear to be focused mainly on family planning, although health topics are mentioned. (In the camp observed in Himachal Pradesh, there was some discussion of immunizations, nutrition, and antenatal care programs.) Most of the camps are held during the intensive family planning campaign which takes place during the last four or five months of the fiscal year. It appears that the main methods of communication used in the camps are lectures on the general benefits of family planning and proper health care, and exhortations to use family planning and health services. Less attention appears to be given to addressing the specific questions and fears of participants in the camps. (However, the team did observe a useful audience discussion which was initiated at the end of the camp in Himachal Pradesh, by the state government official who accompanied the team.) Evaluations of the camps in project areas have been infrequent, although the National Institute for Health and Family Welfare is currently undertaking a study of such camps in some non-project areas.

RECOMMENDATION 7.1: The orientation training camps would be likely to contribute more to the achievement of health and family planning objectives if:

- (a) BEEs and others conducting the camps (LHVs, HW(F)s, MOs, etc.) were trained in interactive participation, so as to involve the audience in the discussions. The current methods of lectures and exhortations appear to be less than fully successful in changing attitudes and behavior.
- (b) The content of messages given at the camps were defined more precisely to deal with specific problems blocking acceptance of family planning and health services in that particular local area. As noted above, it appears that the messages given at the camps were too general and standardized.
- (c) The relative emphasis given to family planning vs. health information at the camps were explored to see whether the health content should be strengthened.

RECOMMENDATION 7.2: Innovative studies should be carried out to explore the most effective methods of selecting participants and conducting orientation training camps and to determine the impact of the camps on the use of health and family planning services.

Issue 8:

While posters describing family planning problems and programs were displayed in most PHCs and subcenters visited by the evaluation team, few or no copies of pamphlets and other handout materials were generally available. Most pamphlets had been produced by the central government and a few by the state. The central government apparently expects state governments to translate and reprint materials as necessary for distribution throughout the state. However, insufficient copies are produced at any level to enable field workers to use them as handouts to clients, to reinforce their messages and instructions about health and family planning. The principal use of the materials at present seems to be only as demonstration copies in orientation training camps. Further, it appeared that a number of lower level workers did not understand the materials that were available.

RECOMMENDATION 8.1: The GOI and the states should review procedures for translation, printing and distribution of all health and family planning IEC print materials. These procedures should be revised to provide for adequate numbers of copies and distribution to both facilities and field workers.

RECOMMENDATION 8.2: Consideration should be given to decentralizing the design, production and distribution of IEC print materials for the health and family welfare program so that the materials produced will be more directly relevant to local needs.

RECOMMENDATION 8.3: Health and family welfare workers, especially at the PHC and subcenters, should be trained to use print materials to assist in providing family planning/health education and instructions on proper health and family planning practices.

Issue 9:

Mass media production takes place mainly at either the state or central government level. The principal contacts of villagers with the program, however, are through interpersonal communication with health personnel and, of course, other villagers. The team observed that interpersonal communication skills of health and family planning workers are often weak

RECOMMENDATION 9.1: The GOI, state and district communications staff should coordinate mass media and interpersonal communication activities. Planning for mass media activities should focus on specific communication needs and should take into account how the mass media will complement interpersonal communication.

RECOMMENDATION 9.2: Interpersonal communication skills of field workers at all levels should be strengthened. This should receive special attention in the in-service training courses that are now being developed for field workers.

Issue 10:

The specific responsibilities of district and block level IEC staff in relation to health and family planning field workers are not clear. For example, BEEs do not have carefully identified responsibilities for teaching ANMs, TBAs and VHGs how to communicate with villagers. These important lower level workers therefore currently receive inadequate support for their communication activities.

RECOMMENDATION 10: The current status of communication training and support provided by BEEs should be carefully assessed, possibly in an operations research study. The result of this study should yield specific recommendations for strengthening the communications training and support by BEEs at the local level. Because of the critical role that person-to-person communication between field workers and clients is expected to play in the health and family planning program, this study should be undertaken immediately, in as many project districts as possible.

VI. SERVICES

To the extent that services in the model plan are supported by training, communications, and management systems, the quantity and quality of services delivered in the project areas are directly affected by the issues dealt with under those headings in this evaluation report. This section of the report focuses largely on service delivery issues encountered in the team's field visits with recommendations specific to service delivery although they also have obvious implications for training, communications and management.

The GOI Model Plan for integrated services in rural areas is considered part of a multisector National Minimum Needs Program. The purpose of the donor-assisted Area Programme is to accelerate the improvement and expansion in the availability of basic health services in selected backward and deprived districts within five years. In view of the delays in initiating and implementing the IRHP, it is not yet possible to apply a quantitative yardstick to the objectively verifiable indicators for improved and expanded services specified in the Project Paper. These are:

- a) 80% of service workers give 80% of important fertility and mortality reduction services at acceptable levels of quality.
- b) Selected new services are introduced after field testing and/or refresher training if a clear need is apparent and if the services can be safely rendered.

Lacking the necessary project-wide baseline and performance data for quantitative analysis, the evaluation team has relied heavily upon locally available data, discussions with project officials and with service providers at all levels of service delivery, and impressions from field observations in arriving at this analysis of project progress to date.

1. FINDINGS:

Without question, the IRHP is contributing significantly to increased quantity and availability of services in the project areas. The visible improvements, however, are unevenly distributed, as a number of sanctioned posts remain to be filled and there is considerable variation in project achievement from state to state. (See Appendix IX for a table showing staff currently in place as a percentage of project targets.)

The cumulative result of added facilities, additional workers trained and posted, and increased availability of drugs and equipment, however, reflect progress toward the quantitative objectives of the project rather than substantial changes in service content or quality. As the construction and infrastructure phase of the project nears completion, more energy and attention can and should be directed toward filling

the observed training and logistic gaps and strengthening the linkages between levels of care in order to improve the overall quality of services provided at each level. In particular, community participation in access to, and delivery of, services needs to be developed and encouraged.

2. ISSUES AND RECOMMENDATIONS:

ISSUE 1:

Logistics and Supply:

Equipment and supplies vary considerably among PHC's and subcenters and observed shortages not only inhibit service delivery but also affect the morale and effectiveness of the health workers. Site visits disclosed sporadic shortages of such items as growth charts and other health monitoring records, baby weighing scales and certain drugs. (See issue 13 in section on Management).

The scarcity of medicines at subcenters is a deterrent to utilization of services at that level. Indeed, CHG's frequently refer patients directly to a PHC because the subcenter is generally equipped to provide only first aid or help with minor ailments.

RECOMMENDATION 1: Maintenance of adequate equipment and supplies should go hand-in-hand with implementation of the project construction and staffing plan. In particular, shortages of drugs should be alleviated as rapidly as possible in order to prevent erosion of confidence in the availability of services at all levels of care.

ISSUE 2:

Intensive Areas:

The improved ratio of MPWs to population has clearly added quantitatively to services within the subcenter area. Nevertheless, there is no evidence as yet of refinements in application of the intensive area concept or in the logistics of service delivery in order to ensure that the population at greatest risk is served. At present the "intensive area" continues to be the area immediately adjacent to the subcenter served largely by the MPW(F) while the male MPW tends to work in the outer "twilight area". Moreover, the MPWs working hours for home visiting are often inappropriate to the extent that the neediest target population is involved in cultivation in the fields and not at home at the time that the home visit is made.

RECOMMENDATIONS:

- 2.1: The Intensive areas of both male and female MPWs should be shifted from the immediate environs of the subcenter to more peripheral areas in rotation in order to equalize coverage throughout the catchment area of the subcenter. Moreover, focus should be specifically placed on high risk groups, such as pregnant women, newborns, infants and pre-school children.
- 2.2: Working hours and or visiting sites should be adjusted in order to ensure that home visits occur at times when the target population is at home.

ISSUE 3:Referral System:

Not enough emphasis is given to team building and strengthening the support system among peripheral health workers in order to develop effective cooperation and an efficient referral chain between progressive levels of care. It is our observation that the referral system at present is not functioning adequately.

RECOMMENDATIONS:

- 3.1: The linkage between the dai and CHG should be strengthened. (To this end a recommendation elsewhere in this evaluation that MPW(F) candidates be drawn from the female CHGs will be helpful if implemented.)
- 3.2: Shortages of equipment, supplies and drugs at the subcenters should be corrected in order to enable it to become a stronger link in the referral chain.
- 3.3: Innovative activities under the project should include expansion of health assessment and treatment capability at the subcenter level, including resources for the management of locally determined health problems outside of the 12 key problem areas.

ISSUE 4:Fieldworker Performance:

While substantial progress, as noted earlier, has been made in increasing the quantity of access in services, there is little evidence as yet of fundamental changes in the quality of care. The knowledge level of MO's, HA's, male and female MPW's and CHG's in many instances was found to be high, but

not reflected in the actual services provided. The knowledge-service gap is particularly conspicuous in such key problems as breastfeeding practices, management of diarrheal disease and care of low birthweight babies. Evidence of inadequate monitoring and supervision of fieldworkers exists, as in one observed case in which a CHV was found treating two very young infants suffering from diarrhea with excessive doses (ten times the normal dose) of Piperazine, a drug normally used in treatment of worms rather than diarrhea.

Maternity services are provided to a large extent in the project areas by TBA's (trained and untrained). The site visits revealed that information regarding births, maternal and infant morbidity and mortality were not recorded by fieldworkers in spite of the large numbers of registers they maintain. Registration of births and deaths is viewed as the responsibility of the secretary to panchayats, and health workers do not feel accountable for it. TBA's do not regularly get incentive payments for reporting vital events.

"Dai kits" supplied to trained TBA's or at subcenters are often not used, and some of the workers do not have knowledge of some of the equipment supplied in the kits, such as spring balances for measuring birth weight or the suction bulb for resuscitation of the newborn.

The twelve conditions specified in the list of "Key problems" are properly emphasized because they do not always receive sufficient or appropriate attention. It is not intended that other locally perceived health problems be excluded from attention. Nevertheless, in a few instances health workers pointed out local problems (such as goitre or specific worm infestations) which they felt inadequately equipped to manage. Without detracting from the importance of the twelve key problems, such identification of locally perceived needs is in keeping with the "bottom up" philosophy of the project which encourages maximum community involvement and is accordingly to be encouraged.

RECOMMENDATIONS:

- 4.1: Attention to the quality of services should be stressed both in the basic and inservice training and in the supervision of village level workers.
- 4.2: Health workers should be encouraged to establish locally appropriate targets based on local needs assessment and worked out in cooperation with the workers supervisor as part of the performance monitoring and continuing education process.

ISSUES 5:Family Planning:

While the specific contribution of IRHP inputs to family planning performance cannot be measured quantitatively at this mid-term evaluation, there is ample evidence that overall family planning performance has improved in the project areas. In particular, to the extent that the project has increased access to services at the village level, it contributes to the desired increase in the percentage of acceptors who utilize non-permanent methods. Site visits confirmed reports of renewed emphasis on intrauterine contraception (with particular interest in the Copper-T), while oral contraceptive pills still have limited acceptance with many workers registering concern over possible side effects. Contraceptive pills appear to be in short supply at a number of PHC's and subcenters.

While both family planning and health services are target oriented, the family planning targets continue to overshadow the health targets. The concentration of family planning activity between the months of November and March detracts from the efforts aimed at mortality and morbidity reduction during a time of the year when risks to health, especially in young children are increased.

RECOMMENDATIONS:

- 5.1: The trend towards increased emphasis on spacing methods is encouraged and should be accompanied by a more equal balance between fertility and mortality reduction efforts throughout the year.
- 5.2: The use of outcome targets for the project inputs aimed at reduction of mortality and morbidity should be encouraged in order to improve the balance between these and Family Planning achievement targets. This is an appropriate area for the application of the "Innovative Projects" component of the IRHP.
- 5.3: In order to give greater emphasis to continuation rather than mere initial acceptance of the F.P. methods, the following changes in strategy are recommended:
 - (a) give greater emphasis in the training of ANMs and Health Guides and TBAs in counselling, follow up and support of users of spacing methods.
 - (b) change from the present policy of issuing a single cycle of pills to multiple cycles in order to reduce the number of visits required for re-supply.

- (c) provide supplies of Oral Pill and IUDs at subcenter level.
- (d) expand the categories among health workers authorized to insert IUDs and dispense oral pills.
- (e) increase the role of female physicians in the MCH/FP activity of the PHC.

ISSUE 6:Immunization:

Immunization services are generally provided in camps which are held at different villages in each month. This helps to maintain the cold chain system. Nevertheless, the limited availability of thermos flasks for vaccines and of vaccination syringes and needles still inhibits the availability of vaccination services. The observation in several studies that vaccination (Tetanus Immunization) in the mother is not a guarantee of protection against neonatal tetanus suggests the existence of flaws in maintenance of the cold chain in remote areas.

RECOMMENDATION 6: In view of the importance of the integrity of the cold chain to success of the EPI, special attention should be given to the adequacy and maintenance of supplies essential for the safe transport and administration of vaccines.

ISSUE 7:Oral Rehydration Therapy:

Oral rehydration appears to be inconsistently understood, especially at PHC, subcenter, and village volunteer levels, and is infrequently used. Some of the Civil Hospital pediatricians who are recent graduates understand ORT correctly, but most district, block, or PHC medical officers do not have correct information or practices for the management of diarrheal disease in infants and children. The same is generally true of LHV's, nurses, ANM's and CHV's.

The most frequently mentioned treatment is the use of sulfaguanidine and Kaolin mixture (often with antibiotics and/or intravenous infusions at PHC's). In the minds of most CHV's, the term "rehydration powder" (another name often used for CRS) refers to the Kaolin powder which, along with sulfaguanidine, is found in the standard MOHFW drug kits for CHV's, whereas ORS is not provided. Thus, ORS is not widely available, and where it is found it appears to be poorly packaged, with the contents absorbing moisture within one year of manufacture.

PHC's do not have "rehydration" units for moderate to severe dehydration, nor do they generally have the correct IV solution for its management. Moreover, they do not demonstrate the use of ORS or teach mothers to use it. The teaching of mothers elsewhere (by ANM's, CHV's, etc.) is very inconsistent, and there are no standard measures for sugar, salt, or water. No special attention is given to breastfeeding or other nutritional measures.

RECOMMENDATION 7: Specific attention should be given to the proper management of diarrheal disease (including ORS) in the training (both pre- and in-service) of physicians as well as all auxiliary health personnel involved in the IHP.

Properly pre-packaged CRS should be made more widely available, especially at the PHC and sub-center level, and should be incorporated into the standard CHV drug kits along with appropriate instruction in its use.

Demonstration and training techniques for the instruction of mothers in correct ORT should be reviewed, updated, and stressed in the training and supervision of fieldworkers.

VII. RESEARCH, MONITORING, AND EVALUATION

A. FINDINGS:

1. Evaluation of the Total Project:

a) Baseline Survey:

To date, the research, monitoring, and evaluation component of the IRHPP has involved three main activities :

- a) The Training Needs Assessment (TNA) and Communication Needs Assessment (CNA) discussed elsewhere;
- b) The annual reviews and mid-term evaluation; and
- c) the baseline survey.

Soon, the MNA and possibly MIS will be added. These two were discussed earlier in this report.

The current status of the baseline survey is that the data have all been collected and analysis is underway. Results from the baseline data are anticipated to be available approximately three months into 1984.

1. Issues and Recommendations:

Issue 1:

Results from the baseline survey have been delayed to the point that they will only become available in the third year of the project. The current bottleneck appears to be tabulation, with the difficulty being that computer programs are being written table by table, rather than using the many available packaged computer programs for survey data analysis (e.g., SPSS and SAS).

RECOMMENDATION 1: Efforts should be made to speed up the tabulation of the baseline survey data. The feasibility of using packaged computer programs should be explored at the earliest possible opportunity.

b) Post-Project Survey and Comparisons with Non-Project Areas:

A project can be properly evaluated in numerous ways. One is to simply compare a beginning list of anticipated outcomes with what has actually been accomplished at the end of the project period. This type of analysis might, for example, be appropriate for assessing the results of the construction program of the IRHP.

A second type of evaluation, however, involves comparing the progress of a project against a control group or reference area -- e.g., non-project areas.

1. Issues and Recommendations:

Issue 2:

Sufficient provision has been made for evaluating some aspects of the project, construction being a case in point. There are no provisions for a post-project survey or other measurement to assess some other project objectives. Further, some interesting features of the project have evolved during the project and were not covered sufficiently even in the baseline survey. Most notable among these new features is the focus on changing the process of health delivery in such a way that monitoring and continuous reassessment of community needs are standard practices.

RECOMMENDATION 2: A post-project survey should be conducted. Funds for this survey should be allocated and planning initiated immediately. The survey should include not only information collected in the baseline survey but also information to measure changes in the process of health services delivery. In addition, the survey should be designed to cover, in so far as possible, retrospective information to correct for omissions in the baseline survey. If it has high enough reliability and validity, the CNA data may supplement the baseline survey data and make up for some of the omissions.

Issue 3:

The degree to which the IRHP has succeeded in accelerating construction work may be readily compared to construction in non-project areas. The effects of other changes resulting from the project may be more difficult to compare with what has happened in non-project areas.

RECOMMENDATION 3: Careful consideration should be given to collecting data for non-project areas so that the relative progress of project and non-project areas can be evaluated. Such data should be collected with particular attention to the twelve key health problems and three principal goals identified at the project's outset. An evaluation of the "spill over" effects of project efforts to adjacent areas may also be considered.

c) Project Impact:

One of the more troublesome aspects of the IRHP is the length of the project in relationship to its three main goals, particularly in view of the fact that most project elements did not actually get under way immediately. Measuring the impact of the project, its effects on the twelve key health problems and three overall goals, will be difficult because it is unlikely that there will be major changes in the outcome measures by the end of the project period even if the changes do become apparent later. Elsewhere in this report, attention is given to the advisability of extending the period before the final evaluation is done.

1. Issues and Recommendations:Issue 4:

Even if the project is extended, will it be possible to measure the project's impact on the twelve key health problems and three goals? Currently, the answer is no. Baseline information for project districts is not available for all of the key health problems, birth rates, and mortality rates.

RECOMMENDATION 4.1: Steps should be taken to ensure that data are made available on the twelve key health problems and three goals, even at this time, so that a better final assessment can be made of the direct impact of the project. Use and supplementation of the sample registration scheme, for example, may be considered.

RECOMMENDATION 4.2: Indirect indices of project impact on the key health problems should also be explored. This may involve changes in the record keeping systems of the project districts, improvements in the quality of data collected by the primary health centers (PHCs), special tabulations of the baseline survey and/or the CNA data, and possibly special "innovative studies" related to specific aspects of the key health problems.

2. Innovative Studies:

The preceding remarks deal with evaluation on a project-wide basis. There are also evaluation functions at the state, district, and PHC level, with one of the main project budget allocations being the provision for innovative studies. Thirty innovative studies are scheduled for completion by the end of the project period.

To date, no innovative research study has been carried out.

Issue 5:

There has been a serious delay in the initiation of suitable operations research. Part of this delay is undoubtedly due to the fact that the research cells called for by the project are not operational in any of the five states. Most states, in fact, have a research officer at the state level but insufficient supporting staff. Another problem may be that the development of suitable research projects at the state or district level requires assistance from experienced persons outside the project areas who can assist in designing, implementing, and analyzing the studies.

RECOMMENDATION 5.1: The research cells in each state should be made operational as soon as possible.

RECOMMENDATION 5.2: Outside assistance should be offered to the states to help them design, implement, and analyze the data resulting from innovative operations research projects. One suggestion along these lines is provided in Appendix VII, and a second set of ideas has been presented in the recommendations of the Population Council report of January 1983 (Appendix VIII). Specific recommendations for appropriate innovative studies were also included in some of the state reports prepared for the mid-term evaluation, and elsewhere in this report.

APPENDIX I

List of Acronyms and Abbreviations used in the report.

ANM	Auxiliary Nurse Midwife
BEE	Block Extension Educator
CNA	Communication Needs Assessment
CHV	Community Health Volunteer
CTI	Central Training Institute
DEMO	District Education and Media Officer
Dy. DEMO	Deputy District Education and Media Officer
EPI	Expanded Program in Immunization
GOI	Government of India
HA(F)	Health Assistant (Female)
HA(M)	Health Assistant (Male)
HW(F)	Health Worker (Female)
HW(M)	Health Worker (Male)
IIA	Indian Institute of Administration
IUD	Intrauterine Device
IRHP	Integrated Rural Health Project
LHV	Lady Health Visitor
MEMO	Mass Education Media Officer
MIS	Management Information System
MNA	Management Needs Assessment
MO	Medical Officer
MOHFW	Ministry of Health and Family Welfare
MPW(F)	Multipurpose Worker (Female)
MPW(M)	Multipurpose Worker (Male)
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
NIHFW	National Institute of Health and Family Welfare
PHC	Primary Health Center
PWD	Public Works Department
RHFwTC	Regional Health and Family Welfare Training Center
SC	Subcenter
TBA	Traditional Birth Attendant
Tr. Dai	Trained Dai
USAID	United States Agency for International Development
VHG	Village Health Guide

APPENDIX II

MID-PROJECT EVALUATION
INTEGRATED RURAL HEALTH AND POPULATION PROJECT
SCHEDULE FOR WEEK OCTOBER 31 - NOVEMBER 5, 1983
(IN NEW DELHI)

October 31, Monday

0900-1000	Team meets with Dr. Rogers Beasley and IRHP Project Staff
1000-1100	Meeting with Mr. Owen Cylke, Mission Director
1100-1300	Team briefings with IRHP Project Staff - Evaluation Schedule, travels and other arrangements
1300-1400	Lunch
1430-1600	Team has Introductory Session with Ministry of Health and Family Welfare (MOHFW) officials (at MOHFW):- Project Implementation and Management Mr. H.W.T. Syiem, Director (Area Projects) Mr. J.S. Kang, Deputy Secretary Dr. D.K. Sen, Assistant Commissioner Dr. M.A. Cwaisy, Assistant Commissioner Dr. A. Majamdar, Assistant Commissioner Mr. N.R. Yadav, Deputy Assistant Commissioner
1600-1730	Return to USAID to continue project discussion / review of relevant documents
1900	Dinner for team members at home of Dr. W.B. Rogers Beasley, Chief, Health and Population

November 1, Tuesday

0830-1300	Team reviews project documents, hold discussions with IRHP Project staff, plans information gathering formats for field trip
1300-1400	Lunch
1430-1700	Session on Project Training Activities at MOHFW

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November 2, Wednesday

0900-1200) Meeting with other area Health Project donor groups
in USAID Library
) Overseas Development Agency (ODA) - UK (Orissa)
) Danish International Development Agency (DANIDA)
) (Tamil Nadu and Madhya Pradesh)
) UNFPA - Bihar and Rajasthan

1430-1630 Relevant Team members meet with Dr. Holla of Registrar
General's Office to discuss Project Baseline Surveys

Other Team members attend session on Project
Information, Education and Communications at the MOPH
(1430-1500)

1900 Reception for team members, GOI Officials and USAID
staff at home of Mr. Owen Cylke, Mission Director

November 3, Thursday

0830-1000 Team meetings at USAID

1010 Depart for MOHFW

1030 Meeting with Mr. R.P. Kapur, Additional Secretary and
Commissioner of Family Welfare

PM Team Meetings, planning for field information gathering

November 4, 1983, Friday

National holiday. Team meetings

November 5-6 Weekend Team meetings

November 6-7 Teams depart for field visits. (See individual field
visit schedules.)

MID-PROJECT EVALUATION
INTEGRATED RURAL HEALTH AND POPULATION PROJECT
SCHEDULE FOR FINAL WEEK - NOVEMBER 21 - 26, 1983
(IN NEW DELHI)

November 21-23 - Monday - Wednesday

Evaluation team members prepare report (GOI/USAID staff available as needed).

November 24, Thursday

Thanksgiving Holiday; Relevant team members meet informally with Dr. Somnath Roy, Director, NIHFV.

November 25, Friday

Complete Evaluation Report
Luncheon for team and USAID staff hosted by MOHFW
Final briefing to MOHFW (3.00)

November 26, Saturday - at Taj Mahal Hotel

0900-1730 Team members join informal colloquium concerned with "Priority Areas for Health, Population and Nutrition Service Research, and Training in India: Possible USAID directions for the Next Decade." Meeting will include key Indian and USAID participants.

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APPENDIX III

Site Visits: Gujarat and Maharashtra *

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
7 Nov. 1983	Ahmedabad	Minkler O'Byrne	Mrs. Reshmi Schroff, Additional Chief Secretary, Health & Family Welfare Mrs. Gauri Kumar, Deputy Secretary (USAID Project) Mr. L.M. Sood, Family Welfare Commissioner Dr. O. Gupta, Director of Health Services, Government of Gujarat Dr. R.D. Kacchia, State Project Director Dr. M.A. Contractor, Deputy Director of Health Services Dr. A.L. Shah, Deputy Director of Health Services Dr. Kamil Naik, Principal, HFWIC Mr. Vinod Patel, State MEMO
8 Nov.	11M, Ahmedabad	Same as above	Prof. Maru, Director Faculty: Prof's Satya, Pestunjee, Varma, Murti
	HFWIC, Ahmedabad	"	Dr. Kamil Naik, Principal Shrimati Vorha, Health Education Instructor
9 Nov.	Godra (Panchmahals District Headquarters)	"	Panchayat President Chairman, District Health Committee Dr. Kacchia, State Project Director Dr. Patel, Project Officer
	Devgarh Baria PHC	"	Dr. Atalye, M.O. ANM, CHV
10 Nov.	Kadana PHC	"	Dr. Mishra, M.O. Dr. Butt, M.O. LHV
	Subcenter	"	Mrs. S. Christian, ANM, LHV

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
	PHC		Dr. Ratore, M.O.
	Shehera PHC, ANM Training School		M.O., BEE
11 Nov.	Bharauch (District Headquarters)	Arole Minkler O'Byrne	D.D.O. District Collector Panchayat President Executive Engineer District Health Officer, Dr. Jabishah Project Officer Chairman, District Health Committee, Mr. Patel
11 Nov.	Hansot Taluka PHC	Same as above	M.O., Dr. Daudia B.E.E.
12 Nov.	Umalla PHC		M.O., Dr. Modi M.O., Dr. Joshi B.E.E.
	Umalla Anganwadi		Mr. Shath, Coordinator, Community H. Project T.B.A.
14 Nov.	Bombay	Minkler O'Byrne	Mr. V. Srinivasan, Secretary, Public Health, Govt. of Maharashtra Ms. C. Iyengar, Deputy Secretary in charge of USAID Project Dr. (Mrs.) M.R. Chandrakapure, Director Health Services Dr. G.A. Panse, Joint Director Health Services Dr. R.V. Aphle, State Project Director Dr. P.B. Khedekar, Project Planning Officer Dr. Sharma, Director Medical Education and Research

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
15 Nov.	Bombay Chembur, IIPS Bombay, CTI	"	Dr. K. Srinivasan, Director IIPS and Staff Dr. Indira Kapoor, Director, C.T.I. Dr. Bhatredikar
16 Nov.	Bombay	"	Mr. Y.K. Agarwal, Deputy Assistant Director General, Medical Stores
	Aurangabad, Medical College	"	Prof. A.M. Vare, Dean Prof. P.V. Sathe, Head, Dept. of Social and Preventive Medicine
	Aurangabad, HFWL	"	Dr. B.E. Raut, Principal Dr. (Mrs.) Gharपुरi
17 Nov.	Parbhani	Arole Minkler O'Byrne	Dr. Bharuka, Deputy Director, Health Services (USAID Project Coordinator, Parbhani and Osmanabad Districts) Dr. Deshmuk, District Health Officer Dr. Misal, Assistant District Health Officer Executive Engineer, USAID Unit
	Jintur Subcenter	Same as above	ANM/LHV, HA(F), MPW(M), CHV(M)
	Bori Rural Hospital	"	M.O., CHV's Monthly Meeting
	ANM Training School	"	
18 Nov.	Karpadi Subcenter	"	MPW(F)
	Chakur PHC (Latur District)	"	M.O., CHV
	Latur	"	Mr. S.S. Hussain, District Collector C.E.O. (F.P.)

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
19 Nov.	Osmanabad	"	Dr. Nagwar, Civil Surgeon Dr. Wagnare, District Health Officer
	Kangara Subcenter	"	MO, LHV, MPW(F) (IUD, Immunization Camp)
	Osmanabad Civil Hospital & MW Training School	"	Principal, faculty
	Bembli PHC		Dr. Ingale, M.O. Dr. Nulay, M.O. VHG's, (M), (F)
	Washi PHC (upgraded)	"	M.O.'s
20 Nov.	Jamkhed		Dr. R. Arole

* Mr. Madan Singh, USAID/New Delhi, accompanied the team throughout the Gujarat and Maharashtra trip. Dr. D.K. Sen, MOHFW and Mr. Michael Jordan USAID/New Delhi, accompanied the team during the Ahmedabad visits. Dr. Kacchia, Project Director (Gujarat) accompanied the team throughout the Gujarat Site visits.

Dr. M.A. Owaisy, MOHFW, Dr. Aphle, Project Director (Maharashtra) and Dr. Khedekar, Program Officer, accompanied the team throughout the Maharashtra visits.

APPENDIX III

SITE VISITS: PUNJAB, HARYANA

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
Nov. 8, 1983	Chandigarh	Mr. John Rogosch Dr. J. Palmore Dr. J. Russell Dr. Majumdar Mr. Yadav Dr. Margaret Mangain	Dr. Amarjeet Singh Ahluwalia Director Health Services & Project Director, Pubjab Mr. Kuttappan, Secretary Health, Haryana.
Nov. 9, 1983	Kharar, Pb. State Health & FW Training Centre.	Same as above	
	Mohali, Pb. Anganwadi Training Centre run by Child Welfare Council, Pubjab	Same as above	Mrs. M. Anand, Principal
Nov. 10, 1983	Chandigarh	Same as above	Distt. Project Officers of: Faridkot, Bhatinda & Sangrur. Dr. Vijay Kumar, Prof., Comm. Medicine, Post Graduate Institute of Medical and Research.
Nov. 11, 1983	Chandigarh	Same as above	Dr. S.K. Sharma, D.H.S., Haryana
Nov. 12, 1983	Chandigarh	Same as above	Dr. A.C. Jain, Project Director, Haryana Mr. J.P. Yadav, Dy. Director Demography, Haryana

APPENDIX III (CONTINUED)

SITE VISITS: PUNJAB, HARYANA

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
Nov. 13, 1983	Travel from Chandigarh to Sirsa		
Nov. 14, 1983	Sirsa	Mr. John Rogosch (USAID)	Mr. I.D. Swamy, Deputy Commis- sioner, Sirsa
		Mr. J. Russell (Consultant)	Dr. Kuldip Kumar, Chief Medical Officer, Sirsa
		Dr. Majumdar (MOHFW)	Dr. K.G. Gupta, Project Officer, Sirsa
		Mr. Yadav (MOHFW)	
		Dr. Margaret Mamgain (Consultant)	
	MPHW(F) Training School Orientation Training Camp, Ellenabad, Distt. Sirsa		Smt. Satnam Dhawan Principal
Nov. 15, 1983	P.H.C. Rania Distt. Sirsa	Same as above	Block Medical Officer and Staff
Nov. 16, 1983	Distt. Bhiwani	Dr. Margaret Mamgain (Consultant)	Dr. V.D. Bharadwaj
	P.H.C. Miran	Mr. J.P. Yadav, (Dy. Director Health Haryana)	Dr. Usha Rani Sharma
	Civil Hospital Tosham	Same as above	Dr. Lamba

APPENDIX III (CONTINUED)

SITE VISITS: PUNJAB, HARYANA

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
Nov. 17, 1983	Distt. Bhiwani	Mr. John Rogosch Dr. J. Russell Dr. Majumdar Mr. Yadav Dr. Margaret Mangain	Shri Dharam Vir, D.C., Bhiwani Dr. Shalhender Shah, C.M.O. Dr. Mrs. Seth, Project Officer Dr. Mrs. Narula D.F.P.O.
	M.P.H.W.(F) Training Centre Promoter Training Centre for MPHWF)	Same as above	
	Subcentre Kaunt (P.H.C. Kairm) Rural Dis- pensary cum subcentre manhern (P.H.C. Bond Kalan)	Dr. Majumdar Dr. Margaret Mangain	Medical Officer & Staff
Nov. 18, 1983	State Health & Training Centre, Rohtak	Mr. John Rogosch Dr. J. Russell Dr. Majumdar Mr. Yadav Dr. Margaret Mangain	Dr. Nirmal Batia, Principal Dr. M.L. Duggal, Chief Medical Officer, Rohtak.
	M.P.H.W. Training Centre, Rohtak	Dr. Majumdar Dr. Margaret Mangain	Principal and Staff
	Distt. Mohindergarn	Same as above	
	Subcentre Sisoti (PHC)		
	Subcentre, Beri P.H.C. Sirohi		

APPENDIX III (CONTINUED)

SITE VISITS: PUNJAB, HARYANA

<u>Date</u>	<u>Place Visited</u>	<u>Team Members</u>	<u>Persons Contacted</u>
Nov. 19, 1983	Narnaul, Distt. Monindergarh	Dr. J. Russell Dr. Majumdar Mr. Yadav Dr. Margaret Mangain	Shri N. Bala Bhaskaran, D.C., Narnaul Dr. Jagjit Singh, C.M.O. Project Officer Distt. F.W. Officer
	MPHW(F) Training Centre Narnaul Post Centre Narnaul P.H.C. Bawal Subcentre, Nai Chana Bawal	Dr. Majumdar Dr. Margaret Mangain	

APPENDIX III

SITE VISITS: HIMACHAL PRADESH

Team Members: Ms. Anne Aarnes
Mr. P.E. Balakrishnan
Dr. Inderjit Walia

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 9	<u>SIMLA</u>	Secretary of Health - Shri A. V. Vidhyarathi Deputy Secretary of Health and Family Welfare - Shri C. R. Negi Director of Health Services - Dr. J. C. Sharma Assistant Director of Health Services - Dr. S. S. Sooch (Acting Project Director for Area Project in Himachal Pradesh during November 1983 while Project Director was traveling in the U.S.) Assistant Director of Health Services - Dr. J. K. Kakar Technical Assistant - Shri S. N. Sharma Administrative Officer, Area Development Project - Mr. B. K. Jain State Education and Information Officer - Shri B. R. Bhandula Statistician - Shri R. K. Gupta
Nov.	<u>Regional Health and Family Welfare Training Center Parimahal</u>	Dr. Hardev Singh - Principal Dr. C. D. Sharma - Lecturer and demonstrator Shri D. S. Chauhan - Health Education Instructor Shri S. K. Joshi - Social Science Instructor Mrs. Kanta Bhargav - Public Health Nurse Instructor Shri B. S. Thakur - Health Education Extension Officer

SIRMUR DISTRICT

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 7	Nahan	Shri R. V. Bansal Deputy Commissioner Dr. O. P. Mailick Chief Medical Officer Dr. B. S. Sidhu District Project Officer Shri Dilbagh Singh Superintending Engineer Shri Balwant Rai Engineer (Nahan) Shri A. C. Verma Executive Engineer (Paonta Sahib) Shri P. I. Sharma Executive Engineer (Rajpura)
Nov. 7	Nahan	Principal and staff, ANM/MPW Training School
Nov. 7	<u>Paonta Block/PHC Rajpura</u>	Medical Officer in charge Block Extension Educator Female Health Supervisor MPW (M) Village Health Guide Representatives of the Village
Nov. 7	<u>Subcenter Puruwala (PHC Rajpura)</u>	MPW (M) - S. M. Joshi
Nov. 8	<u>Subcenter Chakli</u>	MPW (F) - Kusum Sharma MPW (M) - Ishawar Das
Nov. 8	<u>Subcenter Chatti</u>	MPW (F) - Ms. Nisha MPW (M) - Ronki Ran
Nov. 8	<u>Subcenter Banah-Ke-ser</u>	MPW (F)
Nov. 8	<u>Sarahan Block/PHC Sarahan</u>	Medical Officer Block Extension Educator Female Health Supervisor MPW (F) Pharamacist Trained Birth Attendants (2)

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HAMIRPUR DISTRICT

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 10	Hamirpur	Shri S. Banerjee Deputy Commissioner Dr. K. L. Kapoor Chief Medical Officer Dr. V. K. Singh District Project Officer
Nov. 10	Hamirpur	Principal and Staff, ANM/MPW Training School
	<u>Bijhari Block/PHC Bhota</u>	
Nov. 11		Dr. S. K. Nanda, Medical Officer in Charge Dr. Mrs. S. K. Nanda, Medical Officer Block Extension Educator, Mr. Jaipan MPW (F) MPW (M) Midwife
Nov. 11	<u>Subcenter Sohari (PHC Bhota)</u>	Female Health Supervisors (2) MPW (F) Traditional Birth Attendant (trained)
Nov. 11	<u>Orientation Training Camp (held at Subcenter Sohari)</u>	Traditional Birth Attendants - 2 trained, 1 untrained Village Health Guide Panchayet Members Village Opinion Leaders and other residents of the village
Nov. 12	<u>PHC Nadaun</u>	Block Extension Educator Block Medical Officer: Dr. D. N. Sharma PHC Doctor: Dr. B. S. Verma Medical Officer: Dr. S. K. Chautian

HAMIRPUR DISTRICT (cont.)

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 12	<u>Subcenter Bhumpal (PHC Nadaun)</u>	MPW (F) - Ms. Manju Bala MPW (M) - Babu Ram Midwife
Nov. 11	<u>Nakherer Munshian Village</u>	Village Health Guide - Bishan Singh
Nov. 12	<u>Subcenter Jhaniari (PHC Toni Devi)</u>	Female Health Supervisor MPW (F) - Ms. S. K. Gautam Traditional Birth Attendant (trained)
Nov. 12	<u>Jhaniari Village</u>	Community Health Guide Traditional Birth Attendant Four Families
Nov. 12	<u>PHC Barsar</u>	Dr. Chain Singh Dr. Mrs. Chain Singh

KANGRA DISTRICT (con't)

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 14	Dharmasala	Shri Dev Swaroop Deputy Commissioner Dr. R. L. Sharma Acting Chief Medical Officer Dr. T. D. Sharma Deputy Chief Medical Officer Dr. V. P. Gupta District Project Officer Shri P. C. Bhagoria Executive Engineer, Palampur Division Shri--Sharma Executive Engineer
Nov. 12	<u>PHC Jawalamukhi</u>	Block Medical Officer, Dr. G. N. Sharma Medical Officer, Dr. K. C. Sood Medical Officer Dr. Dilbagh Singh Female Health Supervisor Midwife Traditional Birth Attendant (trained) Village Health Guide, Capt. B. Sharma
Nov. 12	<u>Subcenter Dhanot (PHC Jawalamukhi)</u>	MPW (F) MPW (M) Traditional Birth Attendant (trained)
Nov. 12	<u>Subcenter Takipur</u>	Female Health Supervisor MPW (F) Traditional Birth Attendant (trained)
Nov. 14	<u>PHC Shahpur</u>	Block Extension Educator, Shri K. K. Sharma Block Medical Officer, Dr. Kartar Singh
Nov. 14	<u>Village Basnur</u>	Village Health Guide Traditional Birth Attendant (trained) (Mrs. Ishwari Devi) Family - postnatal care visit

KANGRA DISTRICT (con't)

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 14	<u>Subcenter Rehlu (non A.I.D.-funded subcenter)</u>	Female Health Supervisor MPW (F) Traditional Birth Attendant (trained)
Nov. 14	<u>Subcenter Gummar (PHC Haripur)</u>	Female Health Supervisor MPW (F) Traditional Birth Attendant (trained) Block Extension Educator (PHC Haripur) Medical Officer - Dr. S. K. Sharma (PHC Haripur)

KANGRA DISTRICT (cont.)

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 14	<u>Subcenter Reena</u>	Male Health Assistant - Lakpadh Rai MPW (F) - Mrs. Sushila Sharma MPW (M) - Ramesh Chandra
Nov. 14	<u>Village Chatri Ban'a</u>	Community Health Guide, Bhagwan Chand
Nov. 14	<u>Village Bhikhasah (PHC Bawarna)</u>	CHV- Mr. Santran Medical Officers - Dr. R. K. Bajaj, Dr. A. K. Sood, Dr. Mrs. N. Sharma
Nov. 14	<u>Village Sieun</u>	Traditional Birth Attendant (trained) Families (2)
Nov. 15	<u>PHC Gangath</u>	Medical Officers - Dr. P. C. Kaistha and Dr. V. P. Bhardwaj Female Health Assistants (2) MPW (F) BCG Vaccinator Male Health Assistant (mothers and children at MCH clinic)
Nov. 15	Ayurvedic dispensary, Raja-Ke-Karlav	Dr. Kuldip Gupta,
Nov. 15	<u>Subcenter Chattar</u>	MPW (F) Traditional Birth Attendants (trained) (2) Community Health Guide -- Mr. Om Prakash Sharma (school teachers and children)

KANGRA DISTRICT (cont.)

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 15	<u>FHC Tiara</u>	Medical Officer, Dr. Atul Mahajan Block Extension Educator, M.L. Verma Health Assistant (female) MPW (F) Traditional Birth Attendant (trained)
Nov. 16	<u>Palampur</u>	MEIO, R.R. Rouhan
Nov. 16	<u>Subcenter Balota</u>	MPW (F) Traditional Birth Attendants (2) (trained)

KANGRA DISTRICT (cont.)

<u>Date</u>	<u>Place Visited</u>	<u>Persons Contacted</u>
Nov. 16	<u>PHC Thural</u>	Medical Officer, Dr. R. K. Mahajan Health Assistants (Female) MPW (F) Traditional Birth Attendant (trained) CHGs (being trained at PHC)
Nov. 16	<u>Subcenter Bairghatta (PHC Thural)</u>	MPW (F) - Kamlash Kawuri TBA - Chanki Devi CHV - Teja Singh
Nov. 16	<u>PHC Gopalpur</u>	Medical Officer, Dr. Kuldip Sharma Health Assistants (Female) MPW (F) Block Extension Educator
Nov. 16	<u>MPW (F) Training School - Dharmsala</u>	Teachers MPWs (F) - under training Medical Officer in charge of training Nurse in charge (hospital)

APPENDIX IV

LIST OF RECOMMENDATIONS BY CATEGORY

1. Executive Summary: Major recommendations of the evaluation.
 1. Decentralization and increased community participation are vital to the success of the project, yet have received too little emphasis to date. The community and PHC-level staff should be actively involved in planning, implementing and monitoring health and family welfare activities in their areas. In particular, many IEC and research and monitoring functions need enhanced involvement of the PHC staff and their clientele.
 2. Resolution of the key issues which are delaying financial disbursements for construction costs should be concluded as soon as possible in order to facilitate joint GOI-USAID planning to meet the remaining construction requirements in the project areas. (See Section II.)
 3. Completion of the quantitative inputs (construction, staffing, equipment and supply, training) should be hastened in order to shift the focus of the project toward its qualitative aspects. In particular, the development of measures to monitor and evaluate performance of key services and their impact, and the use of innovative projects and operations research directed at improved quality of Training, Services and IE&C activities should be stressed. (See Sections IV, V, VI.)
 4. The baseline survey and the needs assessments have been long and complicated. Considerable delays have been encountered in all these efforts, leading to postponement of critical project components, such as improvements in training and communication programs. In addition, much of the analysis of these activities has been centralized, limiting immediate access to the results by local program personnel and impeding their ability to sustain monitoring activities on their own without outside assistance. (This has been particularly true for the baseline survey, and also applies to a lesser extent to the Communication Needs Assessment.) GOI, the AID Mission and project staff should concentrate on completing these activities as soon as possible. Every effort should be made to simplify and shorten the process. Further, these evaluation activities should be coordinated with those being undertaken in other area projects and other Indian institutions to facilitate better understanding of local situations and their training and communication implications. (See Section VII.)

5. A management information system (MIS) is urgently required in order to facilitate : (a) impact evaluation; (b) monitoring of performance in relationship to both services provided and to their impact on fertility and mortality; and (c) improvement of resource management, including personnel, materials, facilities and finances. For these reasons, it is recommended that the GOI immediately establish a task force or other working groups to be charged with analysing the existing or currently proposed MIS's, including the GOI's MIFS, the Gujarati MIS developed with assistance from the IIM-Ahmedabad, the currently operational Maharashtra MIS and others which might have applicability. After analysis, but no later than May 1, 1984, the task group should propose one or more practical systems for adoption by the Project States. The States should be directed to adopt an impact-based MIS no later than December, 1984. The task force should include representatives from management institutes, State and Central Government experts on MISs, USAID and epidemiologists. The developed MIS should provide a system for promptly and routinely providing the information required to make the daily management and planning decisions required to achieve the impact objectives of the Integrated Rural Health and Population Project. (See Section III.)
6. A post-project survey should be carried out. Funds should be allocated and planning initiated within the next year for this evaluation exercise. Care should be taken to ensure that the post-project survey covers all twelve key problems and to the extent possible makes up for deficiencies in the baseline survey. (See Section VII.)
7. The project design called for all project components to be operating at the planned levels for at least a year before the end of the project. There have been serious delays in project implementation so far, however. It is likely that in all states critical project components - training, improved IEC, fully operational facilities - will be in place for only a few months at best before the project's scheduled completion date. There is some question as to whether project activities can be completed and funds expended by that date. Most important, it would be impossible to assess the impact of the project on fertility and infant/child mortality reduction. Consideration should be given within the next 18 months, perhaps after the next Annual Review Meeting, to whether the final evaluation of the project should be delayed until a year after the end of the five-year project period. Certain changes in project design, such as time-phased implementation, state-wide implementation, and intensive block implementation should also be considered.

8.1

8. Although female health workers are essential to the success of the Model Plan, there are critical shortages of female health workers in many areas, especially at the PHC and subcenter levels. Critical shortages of trained birth attendants (dais) were also observed in some project districts. The project should seek ways to enhance their recruitment, training, recognition and support and to strengthen the linkages between and among female workers and the rest of the health team. (See Section VI.)
9. The use of performance targets is firmly rooted in India's development efforts in all sectors. The following refinements in their application to the IRHP are strongly recommended:
 - a) The current target system is dominated by sterilization targets. More balance is required. Other family planning methods should have targets that are stressed and valued in order to achieve the goal of reducing population growth rates. Equally important targets should be established for other problems among the twelve key ones emphasized in the project.
 - b) Health and family planning targets should be revised to take into account both numerators and denominators relevant to the problems being addressed. Most targets currently include only the number of cases targeted for action (e.g., tetanus toxoid shots given to pregnant women, immunizations for children under five, etc.) They do not include the denominators—the base group or risk group relevant to each problem (e.g., total number of pregnant women or total number of children under five in the area, etc.). Without this information about the total size of the base group, targets cannot be used to judge the extent to which the system is meeting basic health and family planning needs. (More such information is available for family planning than for health, since health and family welfare workers regularly identify all eligible couples in their area.) The GOI and others should work with the states to develop data on the "denominators" for each of the twelve key problems.
 - c) Presently, most targets are process targets, rather than outcome targets. The difference between the two is readily illustrated by health targets. Suppose the targets deal with malaria and measures are collected on cases diagnosed and treated. These are process targets. A suitable outcome target, by contrast, would be changes in mortality rates. If malaria is not a major cause of death in a particular area, success in reaching process targets might have little influence on reducing mortality rates (the outcome desired). Persons striving to meet the targets might

well be increasing mortality rates by failing to concentrate their work on more important health problems in that particular place. Outcome targets should be established and given even more importance than process targets.

- d) The methods for establishing targets which are now in use do not appear to be demographically or statistically sound, especially at the local level. A case in point is the target for numbers of new cases of a disease diagnosed. An active program could well diagnose all cases in a block the first year, subsequently be awarded even higher targets, and hence be evaluated as failing to meet the targets. Sterilization and other targets seem to penalize the successful areas. Careful reconsideration of the methods for setting targets is necessary. (See Section IV.)

10. While the importance of the twelve designated key problems is acknowledged, they are not all equally relevant to all project areas. There is some potential for all twelve to receive equal emphasis in each project district, and for other local health problems to be given much less attention. It is recommended that the twelve key problems not be stressed to the exclusion of locally recognized health problems. In keeping with the intent of the project to encourage decentralization of planning and decision making, local health personnel should be encouraged to consider locally serious health conditions along with the designated key problems in prioritizing services. It is also recommended that state and district project officers work with PHC staff and the local community to determine which of the twelve problems contribute most to high fertility, morbidity and mortality rates in their particular area. Emphasis could then be given, in training and service delivery programs, to the most important problems in the local areas.
11. In view of the importance of increased training capability to full-scale implementation of the Model Plan and the demonstrated competence of the training institutions which have participated actively in the project to date, increased support and utilization of central, regional and state training institutions should be encouraged and supported for the remainder of the project. In order to facilitate this, the GOI should immediately call for a meeting of the heads of these institutions to determine their financial or other requirements for responding more fully to the needs of the Project, and formulate a plan and budget for extending the required assistance to them. This meeting and planning process should occur within the next three months, so that provision can be incorporated in the next fiscal year budget.

12. The evaluation team is concerned about the overall costs of implementing the Model Health Plan in all areas of India. It is, therefore, recommended that the GOI undertake, perhaps with assistance from appropriate management organizations, a comprehensive analysis of the costs of the plan, including the costs for health facility extension, training costs, equipment costs and recurring costs, and arrive at projections of the financial ability of the States, with assistance from the GOI, to fully implement the Plan. The analysis should identify alternative operational models for providing comparable impact on fertility and mortality (perhaps from the various area programs), and project the costs if these plans were implemented nationally. This information should be available by June 1984, in order to be used in the long term planning of the GOI and potential donors.

13. An important goal of all the area projects is to gain experience in implementing the Model Health Plan, so as to help guide the implementation of the plan nation-wide. Exchange of ideas and experience among project states and with other donor-supported area projects has been rare, however. State and district project staffs have had few chances to observe what is happening in other states and discuss problems. They are thus unable to benefit from the experience being gained in other areas. This situation is particularly serious not only because it makes improvements in the current AID-funded project less likely, but also because it appears that valuable information needed for planning future actions is being ignored. The GOI should encourage and support wider exchange of project ideas and experience among the five project states and with other donor-supported area projects. This exchange should include visits by state and district project staff to project areas in other states, as well as meetings at the state level and the center. It is recommended that the visits and other actions begin immediately. (See Section III.)

2. Construction:

RECOMMENDATION 1: It is recommended that USAID/Office of Health and Nutrition discuss the issue with GOI/MOHFW and the State Governments and reconcile the differences immediately. Any approval of new targets should be done through the issuance of Project Implementation Letter.

RECOMMENDATION 2: The Team recommends that USAID Office of Health and Nutrition discuss the issue with GOI and State Project and PWD officials and determine the extent of escalation in construction costs in the five states. The Agreement already provides 40% of original costs for escalations. With the increased value of the dollar in relation to the rupee, it is possible that some or all the increased costs in some states can be covered by the existing dollar budget. This should be studied carefully by USAID and GOI/MOHFW, giving due consideration to the alternative demands on the additional funds.

RECOMMENDATION 3: It is recommended that GOI/MOHFW immediately request the State Chief Secretaries to instruct the State PWDs to give top priority to Project construction because of the time-bound nature of the program. The construction arrangements should also be reviewed by the State Project Governing Boards and, wherever necessary, additional positions authorized to ensure that construction is completed in accordance with Project plans. Where the availability of cement and steel is a critical problem, consideration should be given to obtaining special allotment of these items as has been done successfully in Himachal Pradesh.

RECOMMENDATION 4: The State and District Project Officers should ensure that early action is initiated to ensure that water and electric connections are provided as early as possible after completion of the buildings. The Haryana design for ARM and LHV quarters should be reviewed to ensure that they conform to standard patterns of construction.

RECOMMENDATION 5: State and District Project Officers should review construction progress and take timely action to ensure that appropriate equipment and supplies are provided to the facilities as soon as the buildings are completed and the workers are in position.

2. Construction: (con't)

RECOMMENDATION 6: USAID and GOI/MOHFW should review the staffing situation with State officials and ensure that appropriate categories of workers are assigned to the facilities as envisaged in the Project Plans. (The need for expanding training facilities for critical workers, particularly female workers and female supervisors, is discussed elsewhere in the report.)

RECOMMENDATION 7: The State and District Officials should review the situation carefully and examine the possibility of assigning ANMs and LHVs to their own villages so that unnecessary construction costs can be avoided. Where feasible, renting of suitable quarters in central locations should be explored and appropriate modifications made to construction designs to eliminate quarters where they are not necessary.

RECOMMENDATION 8: The Team feels strongly that there is considerable merit in the GOI position for a revision of the existing reimbursement procedures for construction. It has been pointed by GOI officials that claims totalling more than \$8 million have been pending with USAID for several months. The Team recommends that USAID Office of Health and Nutrition discuss the issue immediately with GOI/MOHFW and adopt a revised and mutually agreed upon reimbursement formula which will permit more flexible disbursements and prompt flow of funds to GOI for Project activities, while ensuring that all facilities constructed under the Project are made operational as soon as possible after construction.

RECOMMENDATION 9: It is recommended that the USAID Engineering Consultant and Office of Health and Nutrition, and GOI/MOHFW monitor closely all construction activities to ensure that they are completed without delays and on schedule as per the Agreement.



3. Management

RECOMMENDATION 1: The Central Area Project Coordinator should study the issue of coordination among the Area Project staffs, the technical staff of the Director General of Health Services and the technical wings of the Department of Health and Family Welfare. If he determines it is a problem, a mechanism should be developed for improving such communication and coordination.

RECOMMENDATION 2: A budget should be made available for supporting the sharing of information between the states within the Project and between the various projects. Possible activities would be annual or more frequent meetings of State Project Directors; duplication and circulation of reports from consultants, research innovative activities and evaluations; exchange visits between the States of Project Directors and other appropriate Project Staff; special seminars and workshops on selected topics of general interest; and national training programs for the States' Project Directors and other key staff. A senior staff should be charged with planning and implementing these activities.

RECOMMENDATION 3: The GOI should either issue a Project Manual on key policy and administrative issues or otherwise make available in one volume the various policy and administrative directives it has previously issued.

RECOMMENDATION 4: The GOI should appoint additional technical staff at appropriate levels to travel frequently to States, to deal with high ranking state officials and to represent the GOI in matters requiring immediate approval. Those responsible for supervision/liaison with particular states should probably have no more than two states, each.

RECOMMENDATION 5: The GOI should examine this "seven percent" rule and modify it so that adequate State and District staff can be obtained.

RECOMMENDATION 6: High priority should be given by the GOI and the states to completion of the management needs assessment. Every effort should be made to expedite it so that its findings can be available for incorporation into the activities of the current project.

RECOMMENDATION 7: The GOI should give high priority to the early design and implementation of a decision-based achievement oriented MIS. It should consider adapting one of the already well developed MIS's such as the one in use in Maharashtra or the one developed by the Indian Institute of Management, rather than starting completely anew. Management information specialists should be consulted in addition to biostatisticians.

3. Management: (con't)

RECOMMENDATION 8.1: The GOI should make it clear that the purpose of these committees is to facilitate decisions and not to add another layer of bureaucracy to the States' decision making processes. Furthermore, the GOI should reiterate that the decisions of the Governing Boards should be final and not subject to further approval by either the GOI or other State Departments and Ministries.

RECOMMENDATION 8.2: Haryana should appoint a co-chairman of its Governing Board, with sufficient rank to convene its meetings and to facilitate its decisions. Consideration might be given to making the Chief Secretary the co-chairman along with the Minister of Health.

RECOMMENDATION 8.3: State Project Directors should prepare the Governing Board agendas and circulate them sufficiently in advance so that the Committee members may consider them and obtain, prior to the meeting of the Committee, the appropriate response or decision of their respective Departments and Ministries. In this way, there will be no need for further delay after the meetings. If the Project Directors attend to this matter carefully and in sufficient time, delays will be prevented.

RECOMMENDATION 9: The GOI should immediately give attention to the lack of appropriate and sufficient technical staff in the states and should urge the States to sanction the positions and fill them. It should, at the same time, take action on revising the "seven percent" ceiling for Project Management Staff, which makes budget for such staffing highly inequitable among the project states. (See Recommendation 5, above.)

RECOMMENDATION 10: The GOI should clarify this guideline so that States understand it is an average allowance and may be varied according to the areas to be covered and the distances involved.

RECOMMENDATION 11: The States should move quickly to determine which of the non-sanctioned District positions should be established and move to fill them with qualified people. Without adequate staff at the District levels, the actual project services will suffer.

3. Management: (con't)

RECOMMENDATION 12: The States must make every effort to recruit, promote and otherwise fill the vacancies. The establishment of MPW(F) training schools in the Project Districts will help resolve this problem, but consideration should be given to ways in which female residents from the Project Districts can be further encouraged to compete for the seats in the schools.

RECOMMENDATION 13.1: The States should initiate or complete analyses of their logistics systems at the earliest time. This is an appropriate activity to contract with management institutes as has been done in Haryana and Punjab. The outcome should be an improved logistics system, including inventory system, procurement, storage and distribution plan. Where feasible, the recommendations should be applied statewide rather than only within the Project Districts.

RECOMMENDATION 13.2: Consideration should be given to decentralized procurement of medical supplies at least to the District levels and perhaps to the PHC levels. This could be an innovative study the States might try in one District each.

RECOMMENDATION 13.3: An analysis should be performed of the precise drug and contraceptive requirements at each level of the delivery system, using the twelve project health priorities as a basis and computing requirements based on populations and prevalence/incidence of the various conditions. The object will be to determine the requirements and to adjust the budgets appropriately.

RECOMMENDATION 14: The GOI and the States should insure the early provision of manuals in the appropriate languages to all personnel working in the Project Districts. They should provide, where needed, financial support for translation and printing.

RECOMMENDATION 15: A supervisory system should be developed based largely on performance and outcome or impact data. As a corollary to this, the Management Information System should provide the workers and their supervisors with the data they need to determine achievement of performance and outcome targets. Also, in-service training should prepare the workers and their supervisors to use this system.

4. Training

RECOMMENDATION 1.1: The project should provide the training schools with descriptive information project so that the instructors may be clear as to what is expected of the HW(F)s when they go to the field.

RECOMMENDATION 1.2: The students should follow up hospital practices into the field practice area. The students should discuss their findings with the obstetricians, pediatricians and doctors in charge of post partum programs so that the hospital may become community health oriented.

RECOMMENDATIONS 2.1: The staffing positions in all training institutions should be filled in accordance with project needs. Where qualified personnel are not immediately available, consideration should be given to temporary assignments by experienced personnel who may not have completed the required academic qualifications.

2.2: The training manuals developed by the GOI should be used and every student should be required to have a copy for future reference.

2.3: Teaching aids such as flip charts, models and other aids should be made available in these schools. The students should be taught to use these communication methods. The schools should consider the use of VCR and TV as useful tools in teaching.

2.4: Funds should be provided from the project to improve the libraries of the training schools and HW(F) centers so that adequate journals and books may be made available at these centers.

2.5: Circulation among the training centers and IRHP staff and field personnel of useful educational information and IHRP news should be considered wherever feasible.

2.6: The GOI and the states should take steps to ensure that the training schools have adequate transportation to take students to the field wherever required.

RECOMMENDATION 3: Standard criteria should be established and observed for the students' experience in conducting deliveries, observing abnormal deliveries, antenatal care, immunization and other primary health care functions.

RECOMMENDATION 4: Students in the field should be provided access to experienced supervisors.

RECOMMENDATION 5: Alternative practices for recruiting, training and posting of HW(F)s should be tried on a pilot basis. For example, it is suggested that married women preferably with 10 years of schooling (but waivable to 7-10th class if such women are not available) might be considered for the step-ladder midwives' course. (Eligible Anganwadi workers and VHGs might also qualify for this course.) After basic midwifery training they should be posted in their own village, and after the prescribed period of service, should be given the opportunity to complete the HW course (if they meet the 10th class basic qualification). Subsequent evaluation of their performance, community acceptance and job satisfaction in comparison to regularly trained HW(F)s should be conducted.

RECOMMENDATIONS 6.1: VHG training should emphasize the role of the VHGs as change agents and health educators and they should be equipped with adequate communication skills for this purpose.

6.2: The VHGs should be given training regarding their role as representatives of the community and as a link between the health system and the community.

6.3: The VHG monthly meeting should be conducted at the LHV subcenter level so that MO/BEE/HA supervisors can attend these meetings and assist the LHVs to supervise, support and give in-service training. This will also help build up the team concept. When adequate facilities for this purpose are lacking, construction of low cost, locally designed sheds or huts comparable with the local rural environment should be considered for this purpose.

RECOMMENDATION 7.1: Alternative methods of in-service training for dais should be tested and compared. For example, the TBA could be given continuous in-service training in order to increase her skills, solve her problems and strengthen her position in the community. This in-service training could be carried out at the LHV subcenter once a month. At these training sessions the linkage between TBA, AMM and LHV should be strengthened. In order to encourage attendance at these training sessions the TBA could be paid for deliveries conducted and also travel costs. The Dais' training manual and other pictorial forms of training guides should be used for the training.

RECOMMENDATION 7.2: In some areas of Himachal Pradesh and Haryana the TBAs find it difficult to leave their villages for one month to attend the basic training course.

A stepwise training format should be tried in which the TBA is given a once a week graduated training at the subcenter/PHC. The training could thus be spread over a six month period and would not require a long period of absence from her village. Moreover, it would enable the illiterate TBA to not only understand, but internalize the knowledge she is acquiring. The HW(F) should supervise the conduct of deliveries by the TBA in the field during this training period. She should also train the TBA in accurate collection and reporting of vital events in her village. During her training her link with the HW(F) should be strengthened. Adequate support should be provided to cover her travel expenses and the necessary stipend during the training period.

RECOMMENDATION 8: There should be an increase in promotional training in order to meet the need for an increased number of supervisors in the districts. They should be drawn from the HA and other appropriate cadres and given special promotional training.

RECOMMENDATION 9: More emphasis should be given to team building in in-service training, with strengthening of linkages between TBA, VHG, HW and LHV. The training process should include preparing all levels of workers in how to motivate communities to become involved in health programs, and in analyzing, discussing and using data collected by VHG's and TBA's for further implementing and improving their programs.

RECOMMENDATIONS 10.1: In-service training for all BEEs can strengthen their communications skills and performance. Continued efforts are needed to complete the in-service training materials soon and undertake this training for all BEEs.

10.2: Information from the Communication Needs Assessment on attitudes and communication channels used by the BEEs' target audience (married women under age 45, married men, community leaders, health service providers and development functionaries) should be incorporated in the in-service training materials being developed for BEEs. For example, this information could be helpful in determining the amount of emphasis to be placed on training in the use of different communication channels and techniques, as well as in the content of communications. Priority should be given to completing the survey and analysis of results so that the relevant information will be available before the materials are completed.

10.3: Since communication problems and opportunities vary, the IEC training materials developed should be flexible enough to enable emphasis to be placed on different approaches depending on the needs of a particular district.

RECOMMENDATIONS 11.1 In those states experiencing serious delays in filling supervisory posts through the promotional training mechanism, experienced and capable ANM's should be considered for promotion provisionally to the post of LHV with the understanding that they will undergo promotional training as soon as it is available.

11.2: Training for supervision at the PHC and LHV Subcenter levels should be reoriented with greater stress on the guiding, assisting, training and team-building role of the supervisor.

RECOMMENDATIONS: 12.1: Medical Officers should be given specific orientation prior to posting to the Primary Health Center. The orientation course should include the basic concepts of primary health care, referral linkages, management, team-building and epidemiology.

12.2: Medical officers should be trained and encouraged to enlist local community participation in the planning and implementation of community health care, and should foster this attitude throughout the PHC staff.

12.3 Medical Officers should be encouraged to initiate small operations research projects in the field.

12.4: A variety of innovative incentives to encourage Medical Officers to remain in PHC posts should be tried.

q/b

5. Communications

- that the amount of IEC expertise available in the health and family welfare program be increased to a more adequate level by creating and filling positions for IEC experts on state and district project staffs, and by filling vacant IEC positions at the state, district and block levels;
- that communications training for IEC field workers and other health and family planning workers be conducted as soon as possible, and that it stress interpersonal communication and identification of local communication needs;
- that new ways be tried of designing and delivering health and family planning communications, both interpersonal and mass media; and
- that the Communication Needs Assessment be completed as quickly as possible, and that design of new communication strategies and training materials not await the final results of the assessment.

RECOMMENDATION 1.1: Every effort should be made to ensure completion of the CNA at the earliest possible date and share results among the states.

RECOMMENDATION 1.2: Arrangements for computer analysis of the CNA must be completed as soon as possible.

RECOMMENDATION 1.3: Work on designing new communication strategies should not be delayed until the full results of the CNA are available. Hand tabulations for some states and selected districts should be used to begin planning as soon as they are available.

RECOMMENDATION 2: Retraining of communication personnel should begin as soon as possible and not be delayed to wait for the full results of the CNA.

RECOMMENDATION 3: Substantial revisions and consideration of both the questionnaires used and the sample design are needed for second and later rounds of the CNA. Consideration should also be given to eliminating some respondent groups for subsequent rounds.

RECOMMENDATION 4: More effort should be devoted to assessing the results of the CNA for each PHC. This should include sufficient attention to PHC-level analyses when centralized computer work is carried out. (See Recommendation 1.2.) Results of computer analysis should be shared with states, districts and centers. Copies of the tabulations for the PHCs should be given to each worker in the block.

RECOMMENDATION 5.1: The GOI (especially the staff of the area projects) and USAID should support and participate as appropriate in the work of the Task Force that coincides with goals of the IRHP project. Additional effort should be devoted to coordinating activities of mutual interest between the new USAID-funded Family Planning Communications and Marketing project and the IRHP.

RECOMMENDATION 5.2: Results, as available, from the CNA should be incorporated into construction of the Task Force modules for training BEEs. This should not, however, be used to delay production of the modules.

RECOMMENDATION 6.1: Priority should be given to filling vacant IEC positions at state, district, and PHC levels as soon as possible.

RECOMMENDATION 6.2: Technical posts for IEC experts should be created immediately on project staffs in each of the five states and IEC personnel placed in all fourteen project districts.

RECOMMENDATION 7.1: The orientation training camps would be likely to contribute more to the achievement of health and family planning objectives if:

- (a) BEEs and others conducting the camps (LHVs, HW(F)s, MOs, etc.) were trained in interactive participation, so as to involve the audience in the discussions. The current methods of lectures and exhortations appear to be less than fully successful in changing attitudes and behavior.
- (b) The content of messages given at the camps were defined more precisely to deal with specific problems blocking acceptance of family planning and health services in that particular local area. As noted above, it appears that the messages given at the camps were too general and standardized.
- (c) The relative emphasis given to family planning vs. health information at the camps were explored to see whether the health content should be strengthened.

RECOMMENDATION 7.2: Innovative studies should be carried out to explore the most effective methods of selecting participants and conducting orientation training camps and to determine the impact of the camps on the use of health and family planning services.

RECOMMENDATION 8.1: The GOI and the states should review procedures for translation, printing and distribution of all health and family planning IEC print materials. These procedures should be revised to provide for adequate numbers of copies and distribution to both facilities and field workers.

RECOMMENDATION 8.2: Consideration should be given to decentralizing the design, production and distribution of IEC print materials for the health and family welfare program so that the materials produced will be more directly relevant to local needs.

RECOMMENDATION 8.3: Health and family welfare workers, especially at the PHC and subcenters, should be trained to use print materials to assist in providing family planning/health education and instructions on proper health and family planning practices.

RECOMMENDATION 9.1: The GOI, state and district communications staff should coordinate mass media and interpersonal communication activities. Planning for mass media activities should focus on specific communication needs and should take into account how the mass media will complement interpersonal communication.

RECOMMENDATION 9.2: Interpersonal communication skills of field workers at all levels should be strengthened. This should receive special attention in the in-service training courses that are now being developed for field workers.

RECOMMENDATION 10: The current status of communication training and support provided by BEEs should be carefully assessed, possibly in an operations research study. The result of this study should yield specific recommendations for strengthening the communications training and support by BEEs at the local level. Because of the critical role that person-to-person communication between field workers and clients is expected to play in the health and family planning program, this study should be undertaken immediately, in as many project districts as possible.

6. Services

RECOMMENDATION 1: Maintenance of adequate equipment and supplies should go hand-in-hand with implementation of the project construction and staffing plan. In particular, shortages of drugs should be alleviated as rapidly as possible in order to prevent erosion of confidence in the availability of services at all levels of care.

RECOMMENDATIONS 2.1: The Intensive areas of both male and female MPWs should be shifted from the immediate environs of the subcenter to more peripheral areas in rotation in order to equalize coverage throughout the catchment area of the subcenter. Moreover, focus should be specifically placed on high risk groups, such as pregnant women, newborns, infants and pre-school children.

2.2: Working hours and or visiting sites should be adjusted in order to ensure that home visits occur at times when the target population is at home.

RECOMMENDATIONS 3.1: The linkage between the dai and CHG should be strengthened. (To this end a recommendation elsewhere in this evaluation that MPW(F) candidates be drawn from the female CHGs will be helpful if implemented.)

3.2: Shortages of equipment, supplies and drugs at the subcenters should be corrected in order to enable it to become a stronger link in the referral chain.

3.3: Innovative activities under the project should include expansion of health assessment and treatment capability at the subcenter level, including resources for the management of locally determined health problems outside of the 12 key problem areas.

RECOMMENDATIONS 4.1: Attention to the quality of services should be stressed both in the basic and inservice training and in the supervision of village level workers.

4.2: Health workers should be encouraged to establish locally appropriate targets based on local needs assessment and worked out in cooperation with the workers supervisor as part of the performance monitoring and continuing education process.

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RECOMMENDATIONS 5.1: The trend towards increased emphasis on spacing methods is encouraged and should be accompanied by a more equal balance between fertility and mortality reduction efforts throughout the year.

5.2: The use of outcome targets for the project inputs aimed at reduction of mortality and morbidity should be encouraged in order to improve the balance between these and Family Planning achievement targets. This is an appropriate area for the application of the "Innovative Projects" component of the IRHP.

5.3: In order to give greater emphasis to continuation rather than mere initial acceptance of the F.P. methods, the following changes in strategy are recommended:

- (a) give greater emphasis in the training of ANMs and Health Guides and TBAs in counselling, follow up and support of users of spacing methods.
- (b) change from the present policy of issuing a single cycle of pills to multiple cycles in order to reduce the number of visits required for re-supply.
- (c) provide supplies of Oral Pill and IUDs at subcenter level.
- (d) expand the categories among health workers authorized to insert IUDs and dispense oral pills.
- (e) increase the role of female physicians in the MCH/FP activity of the PHC.

RECOMMENDATION 6: In view of the importance of the integrity of the cold chain to success of the EPI, special attention should be given to the adequacy and maintenance of supplies essential for the safe transport and administration of vaccines.

RECOMMENDATION 7: Specific attention should be given to the proper management of diarrheal disease (including ORS) in the training (both pre- and in-service) of physicians as well as all auxiliary health personnel involved in the IRHP.

Properly pre-packaged ORS should be made more widely available, especially at the PHC and sub-center level, and should be incorporated into the standard CHV drug kits along with appropriate instruction in its use.

Demonstration and training techniques for the instruction of mothers in correct ORT should be reviewed, updated, and stressed in the training and supervision of fieldworkers.

7. Research, Monitoring and Evaluation

RECOMMENDATION 1: Efforts should be made to speed up the tabulation of the baseline survey data. The feasibility of using packaged computer programs should be explored at the earliest possible opportunity.

b) Post-Project Survey and Comparisons with Non-Project Areas:

A project can be properly evaluated in numerous ways. One is to simply compare a beginning list of anticipated outcomes with what has actually been accomplished at the end of the project period. This type of analysis might, for example, be appropriate for assessing the results of the construction program of the IRHP.

A second type of evaluation, however, involves comparing the progress of a project against a control group or reference area -- e.g., non-project areas.

RECOMMENDATION 2: A post-project survey should be conducted. Funds for this survey should be allocated and planning initiated immediately. The survey should include not only information collected in the baseline survey but also information to measure changes in the process of health services delivery. In addition, the survey should be designed to cover, in so far as possible, retrospective information to correct for omissions in the baseline survey. If it has high enough reliability and validity, the CNA data may supplement the baseline survey data and make up for some of the omissions.

RECOMMENDATION 3: Careful consideration should be given to collecting data for non-project areas so that the relative progress of project and non-project areas can be evaluated. Such data should be collected with particular attention to the twelve key health problems and three principal goals identified at the project's outset. An evaluation of the "spill over" effects of project efforts to adjacent areas may also be considered.

c) Project Impact:

One of the more troublesome aspects of the IRHP is the length of the project in relationship to its three main goals, particularly in view of the fact that most project elements did not actually get under way immediately. Measuring the impact of the project, its effects on the twelve key health problems and three overall goals, will be difficult because it is unlikely that there will be major changes in the outcome measures by the end of the project period even if the changes do become apparent later. Elsewhere in this report, attention is given to the advisability of extending the period before the final evaluation is done.

RECOMMENDATION 4.1: Steps should be taken to ensure that data are made available on the twelve key health problems and three goals, even at this time, so that a better final assessment can be made of the direct impact of the project. Use and supplementation of the sample registration scheme, for example, may be considered.

RECOMMENDATION 4.2: Indirect indices of project impact on the key health problems should also be explored. This may involve changes in the record keeping systems of the project districts, improvements in the quality of data collected by the primary health centers (PHCs), special tabulations of the baseline survey and/or the CNA data, and possibly special "innovative studies" related to specific aspects of the key health problems.

RECOMMENDATION 5.1: The research cells in each state should be made operational as soon as possible.

RECOMMENDATION 5.2: Outside assistance should be offered to the states to help them design, implement, and analyze the data resulting from innovative operations research projects. One suggestion along these lines is provided in Appendix VII, and a second set of ideas has been presented in the recommendations of the Population Council report of January 1983 (Appendix). Specific recommendations for appropriate innovative studies were also included in some of the state reports prepared for the mid-term evaluation, and elsewhere in this report.

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APPENDIX V

TABLE 1. INTEGRATED RURAL HEALTH AND POPULATION PROJECT
SUMMARY OF CONSTRUCTION STATUS AS OF SEPTEMBER 30, 1983

STATE: HIMACHAL PRADESH

Unit Description	Total No. of Units proposed to be constructed per Agreement		Construction Starts No.	As % of total	Building Complete	
					No.	As % of total
1. Subcenters	137		137	100.0	59	43.1
2. LHV Quarters	103		103	100.0	39	37.9
3. PHC (new)	5	(4)	4	80.0	0	0
4. PHC (Partial)	6	(8)	8	133.3	1	16.7
5. Upgraded PHCs	6		6	100.0	0	0
6. RFWC	22		22	100.0	3	13.6
7. Training/Community Halls	6		6	100.0	0	0
8. ANM (FHW) Training Annexes	3		3	100.0	1	33.3
9. Operating Theaters	7		7	100.0	1	14.3
10. Subdivisional Hospitals	2		2	100.0	0	0
11. MHW Training School	1		1	100.0	0	0
12. Transport Workshop	1		1	100.0	0	0
13. Regional Health & FW Training Centers	1		1	100.0	0	0

- Indicates none planned

() Indicates the number of units proposed to be constructed
per state documents which differ from numbers in the Project
Agreement.

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APPENDIX V

TABLE 2. INTEGRATED RURAL HEALTH AND POPULATION PROJECT
SUMMARY OF CONSTRUCTION STATUS AS OF SEPTEMBER 30, 1983

STATE: PUNJAB

Unit Description	Total No. of Units proposed to be constructed per Agreement		Construction Starts		Building Complete	
			No.	As % of total	No.	As % of total
1. Subcenters	297	(300)	203	68.4	102	34.3
2. LHV Quarters	142	(140)	101	71.1	56	39.4
3. PHC (new)	-		-	-	-	-
4. PHC (Partial)	14		3	21.4	0	0
5. Upgraded PHCs	3		2	25.0	0	0
6. RFWC	24	(8)	6	25.0	0	0
7. Training/Community Halls	8		4	50.0	0	0
8. ANM (FHW) Training Annexes	6		4	66.7	0	0
9. Operating Theaters	13		5	38.5	0	0
10. Subdivisional Hospitals	-		-	-	-	-
11. MHW Training School	-		-	-	-	-
12. Transport Workshop	-		-	-	-	-
13. Regional Health & FW Training Centers	-		-	-	-	-

- Indicates none planned.

() Indicates the number of units proposed to be constructed per state documents which differ from numbers in the Project Agreement.

APPENDIX V

TABLE 3. INTEGRATED RURAL HEALTH AND POPULATION PROJECT
SUMMARY OF CONSTRUCTION STATUS AS OF SEPTEMBER 30, 1983

STATE: HARYANA

Unit Description	Total No. of Units proposed to be constructed per Agreement	Construction Starts No.	As % of total	Building Complete No.	Complete As % of total
1. Subcenters	200	115	57.5	34	17.0
2. LHV Quarters	92 (98)	82	89.1	29	31.5
3. PHC (new)	3	0	0	0	0
4. PHC (Partial)	-	-	-	-	-
5. Upgraded PHCs	5	1	20.0	0	0
6. RFMC	12 (68)	1	8.3	0	0
7. Training/Community Halls	-	-	-	-	-
8. AWM (FHW) Training Annexes	2 (3)	0	0	0	0
9. Operating Theaters	10	3	30.0	0	0
10. Subdivisional Hospitals	-	-	-	-	-
11. MHW Training School	-	-	-	-	-
12. Transport Workshop	-	-	-	-	-
13. Regional Health & FW Training Centers	-	-	-	-	-

- Indicates none planned.

() Indicates the number of units proposed to be constructed per state documents which differ from numbers in the Project Agreement.

APPENDIX V

TABLE 4. INTEGRATED RURAL HEALTH AND POPULATION PROJECT
SUMMARY OF CONSTRUCTION STATUS AS OF SEPTEMBER 30, 1983

STATE: GUJARAT

Unit Description	Total No. of Units proposed to be constructed per Agreement	Construction Starts No.	As % of total	Building Complete No.	As % of total
1. Subcenters	334	196	58.7	39	11.7
2. LHV Quarters	150	138	92.0	21	14.0
3. PHC (new)	-	-	-	-	-
4. PHC (Partial)	-	-	-	-	-
5. Upgraded PHCs	8 (7)	5	62.5	0	0
6. RFHC	30 (17)	16	53.3	4	13.3
7. Training/Community Halls	8 (10)	10	125.0	2	25.0
8. AIM (FHW) Training Annexes	5 (9)	9	180.0	3	60.0
9. Operating Theaters	24 (12)	4	16.7	3	12.5
10. Subdivisional Hospitals	-	-	-	-	-
11. MHW Training School	-	-	-	-	-
12. Transport Workshop	-	-	-	-	-
13. Regional Health & FW Training Centers	-	-	-	-	-

- Indicates none planned.

() Indicates the number of units proposed to be constructed per state documents which differ from numbers in the Project Agreement.

APPENDIX V

TABLE 5. INTEGRATED RURAL HEALTH AND POPULATION PROJECT
SUMMARY OF CONSTRUCTION STATUS AS OF SEPTEMBER 30, 1983

STATE: MAHARASHTRA

Unit Description	Total No. of Units proposed to be constructed per Agreement	Construction Starts No.	As % of total	Building No.	Complete As % of total
1. Subcenters	421 (314)	314	74.6	12	2.9
2. LHV Quarters	163 (192)	192	117.8	0	0
3. PHC (new)	-	-	-	-	-
4. PHC (Partial)	17 (0)	0	0	0	0
5. Upgraded PHCs	7	7	100.0	0	0
6. RFWC (new & partial)	16* (11)**	11	68.8	0	0
7. Training/Community Halls	7	7	100	1	14.3
8. AIM (FHW) Training Annexes	-	-	-	-	-
9. Operating Theaters	13 (0)	0	0	0	0
10. Subdivisional Hospitals	-	-	-	-	-
11. MHW Training School	-	-	-	-	-
12. Transport Workshop	-	-	-	-	-
13. Regional Health & FW Training Centers	-	-	-	-	-

*13 New RFWCs and 3 Partial RFWCs.

**7 New RFWCs and 4 Partial RFWCs.

- Indicates none planned.

() Indicates the number of units proposed to be constructed per state documents which differ from numbers in the Project Agreement.

APPENDIX VI

AREA PROJECT TRAINING IN HIMACHAL PRADESH

Observer: Dr. Inderjit Walia

The area development project in Himachal Pradesh was introduced in three districts, Kangra, Hamirpur and Sirmur, beginning in April 1981. These three districts have 38% of the total population of the state. To achieve the objectives of the project, the activities related to training were planned for two stages as follows:

1. Preservice Training: Training of additional workers, i.e., CHGs, Dais, MPWs (both female and males) and their Supervisors.
2. Inservice Training: periodically for various workers at various levels.

It was also planned to improve upon the capacity of the training institutions.

I. PRESERVICE TRAINING

A. Findings

Appreciable efforts are made to train various categories of workers to fill in the vacant posts. Targets are set for all 22 blocks of three districts for training community health guides and traditional birth attendants. Targets are based on the capacity and need of the block. However, training of CHGs and TBAs is considerably behind the targets set for the current year, 1983-84 (Table II). CHGs are trained mainly by BEEs, male supervisors and medical officers at Primary Health Centers. Involvement of female supervisors and female multipurpose workers in training them for MCH work is negligible. TBAs are trained for 30 working days. Their training is done both at Primary Health Centers and at subcenters. The main teachers are female supervisors. Involvement of female multipurpose workers in training TBA's is negligible. Training is done with the help of models and atlas based on a syllabus provided at the Primary Health Center (80% of Primary Health Centers had the syllabus). Female supervisors who are not stationed at PHC but are involved in TBA training do not have any training materials. The dai kit which is given to each dai at the end of her training is not being used at subcenter or Primary Health Center or by the TBAs who have had training. Female multipurpose workers were found not knowing how to use equipment supplied in the kit.

There are 10 multipurpose worker (7 for females and 3 for males) training schools in 8 districts of Himachal Pradesh. These schools have the capacity to train 345 female MPWs (an increase from 140 in 1981) and 120 male MPWs every 18 months. Nevertheless, there is an acute shortage of MPW's for the state. Shortage in the project districts is about 52% female and 43% of male MPWs

(Table I). Even if the 40% graduates from the training schools (corresponding to the district population percentage) are employed to fill vacant posts in the district, the staffing requirements will not be met by end of the Project. Schools for training are overcrowded and have insufficient materials and old equipment. Only one of the three schools visited had one overhead projector. Lists of books required are already prepared, but few books are available in each of the three training schools. No periodical literature is provided to the schools. There are no transportation facilities for field work. Hostel buildings are under construction at health centers for the students to stay in during their training period.

There are only 79 female health supervisors in position against 134 numbers required by the year 1985-86. The shortage of 55 female health supervisors (41%) could be completed by giving promotional training of six months to the existing female multipurpose workers. Since the training schools are busy training multipurpose workers and also there is substantial shortage of female multipurpose workers which cannot be further increased by recruiting health supervisors from them, the training of female health supervisors is at standstill for the present.

There is a shortage of teachers in the training schools (2 nursing teachers for 132 students at Hamirpur, 2 nursing teachers at Kangra for 52 students and 4 nursing teachers for 31 students at Sirmur). This shortage is overcome by having medical and paramedical persons teach on an ad hoc payment basis. However the number of nursing teachers who are responsible for the overall training in the school and who take care of students in the hostel remain inadequate. There is no training facility in the state to train teachers for the training school. Hospital nursing personnel who want to take up teaching or advance their education spend their due leaves and own money to study in other states of India. No plan exists to train teachers for the training schools.

TABLE I: MANPOWER (MPWs) NEEDS AND AVAILABILITY
AT PROJECT DISTRICTS OF HIMACHAL PRADESH

<u>WORKERS</u>	<u>DISTRICTS</u>	<u>TOTAL NEED</u>	<u>AVAILABLE ON</u>	<u>SHORTFALL</u>
	<u>1985-1986</u>	<u>30.9.1983</u>	<u>30.9.1983</u>	
MPWs (F)	Kangra	328	164	164
	Hamirpur	106	54	52
	Sirmur	99	40	59
		533	258	275
MPWs (M)	Kangra	328	186	142
	Hamirpur	106	61	45
	Sirmur	99	56	43
		533	303	230

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TABLE II: TARGET SET AND ACHIEVEMENT IN TRAINING
OF CHGs AND TBAs IN THREE PROJECT DISTRICTS OF
HIMACHAL PRADESH
1981 - 1984

<u>YEAR</u>	<u>CHG</u>		<u>TBA</u>	
	<u>Targets</u>	<u>Achievements</u> <u>To Sept.83</u>	<u>Targets</u>	<u>Achievements</u> <u>To Sept.83</u>
1981-82	300	203	750	506
1982-83	300	206	750	615
1983-84	350	71 ¹	750	135 ²
TOTAL	950	540 ²	2250	1257 ²

¹ About 140 CHGs would be trained from district Kangra in the remaining months of the years 1983-84.

² More TBAs are under training since September 1983, which will add to the total number.

B. Issues

1. Not enough volunteers are found who are willing to undergo CHG training for three months and then spend daily about two hours doing health work with only Rs.50/month honorarium.
2. TBAs who are interested in being trained are frequently old, or live far from health centers and are not willing to take up 30 working days training at one time.
3. Manuals for training TBAs (pictorial manuals) have only recently been distributed to the trained TBAs, and they are given no explanation of the use of these books.
4. Because of the pressure to staff vacant posts, the number of seats in the MPW training schools are increased without any increase in the number of teachers or expansion of physical facilities for the schools and adjoining hostels.
5. The suspension of training of female health supervisors in Himachal Pradesh widens the gap between supervisors and workers and will inevitably affect monitoring of services.

RECOMMENDATIONS:

1. Consideration should be given to using a variety of means, including mass media, to attract volunteers for CHG training.
2. The training methodology for TBAs should be revised. Revisions should include consideration of staggered training over a longer period (for a total of 30 working days or more), and training near their working communities.
3. The practical utility of pictorial training manuals and "Dai Kit" should be evaluated, and suitable alternatives considered as needed.
4. Teaching aids, transportation of students for field training and increased number of teachers are needed immediately. Project funds should be utilized to strengthen the training institutions. (See Recommendation #11 in the Executive Summary.)
5. All the vacant posts of MPWs by 1984 for at least some of the blocks of the three districts should be filled in 1984 in order to facilitate evaluation of the services provided and their impact on the population at the end of the Project.

II. INSERVICE TRAINING

A. Findings

Teachers of training schools have recently had one 10 day course in community health programs and multipurpose training at a regional health training center.

Training modules for inservice training of TBAs, CHGs and multipurpose workers (females) are yet to be translated in Hindi. The principal of Regional Training Center at Parimahal believes that it will take about one year before these modules can be used for inservice training programs. (Note that training officials in other project states expect to be using them by April of 1984.)

Training needs assessment for other categories of workers i.e. supervisors and medical officers are yet to be undertaken.

However, 50% of the existing female multipurpose workers and their supervisors have received at least one refresher course on subjects like E.P.I or insertion of 'Copper T'.

There is a plan to give refresher courses to CHGs. The plan is yet to be finalized. There is no existing plan to give inservice training to the TBAs.

B. Issues

1. Regional Training Center at Parimahal is overburdened with its limited faculty to undertake needs assessments and then provide refresher courses to all categories of workers. It also faces problems of getting printed material to undertake needs assessments and then to tabulate the data that are collected, and translate materials produced into Hindi. The whole process is a valuable learning experience for the staff of the regional training center and the field workers but is time consuming.
2. No system of monitoring the inservice training program has been developed.
3. No system of evaluating the effect of inservice training is built into the service components.

RECOMMENDATIONS:

1. Further means of providing inservice training to various categories of field workers should be found. For example:

Monthly meetings of CHGs, multipurpose workers and multipurpose supervisors could be further utilized to provide inservice training to them.

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- Training components could be inbuilt in services expected from the workers and some measure of accountability be developed as motivation for the workers to learn what is taught.
 - Monthly meetings for TBAs could be held at L.H.V. headquarters and the meetings be utilized to provide them inservice training.
 - Newsletters, magazines etc., could be supplied to the field workers as further means of training.
2. Inservice training of ANM's should be utilized to improve their linkage with TBA's in the area. It should emphasize the proper use of dai kit, and enhance the ANM's ability to train and supervise the dai's and CHG's.

APPENDIX VII

Proposed Plan for accelerating the "Innovative Studies" Component of
IRHP - O.R.; MNA, MIS, and Management Training
to match with project completion time of 1985/86

I. INTRODUCTION

- A. Where we should be: According to the IRHP project paper 30 innovative operations research (health services research) projects are to be completed by the end of the project period - a minimum of 5 years in each of the 5 project states. The project paper like wise specifies that each of the 5 states should establish a research and evaluation cell at state level as well as similar cells for each of the project districts, staffed with appropriately qualified professionals.
- B. Where we are: At present none of the called for cells has been created, nor has any study been undertaken. This, being the half way point in the project schedule, means that we are considerably behind. In terms of the innovative studies component it is time to play what may be called "catch-up ball".
- C. How we might catch up: ("An innovative plan for innovative studies?") In recent months it has become evident that each of the states has considerable talent if and when it is tapped can contribute significantly to the attainment of the objectives of the project. This in particular refers to the RHWTC and Medical College SPM staffs. The former represents a pool of field implementation talent while the latter can provide expertise in research methodology. When the latter can provide expertise in research methodology? When these two groups were brought together recently in Maharashtra for the purpose of designing a health services research study, the outcome was quite good. (See attached proposal). These two groups, i.e. , along with the DHO's and PHC Medical Officers should be able to take utmost of this work quite successfully provided they are adequately motivated and guided.

II. ORGANIZATIONAL CONSTRAINTS AND POSSIBLE SOLUTIONS

The present constraints related to the pursuit of O.R. studies are entirely organizational. That is to say, the personnel and financial resources are there. What is required is an organized effort to mobilize them. This will require first and foremost the creation of a central coordinating body. In addition, function state units will also be required.

The central coordinating body consist of representatives of GOI, NIHFW and USAID. The State units might consist of representatives from selected departments of SPM, RHWTC's and State Health Departments.

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III. BENEFITS FROM DIVERSE REPRESENTATION

Not having created central and state level cells early in the project might be a "blessing in disguise". Creating alternative bodies at this point provided an opportunity to bring in representatives from other key groups i.e. NIHFV, medical colleges and HFWTC's. This in turn provides an opportunity to extend the influence of the project beyond the 14 districts. For example, if SPM department MD candidates are brought into the picture a valuable resource can be created in the form of well trained and IRHP oriented medical officers.

Likewise, more extensive involvement and development of RHFVTC's and the NIHFV will enhance the potential "replicability" of the project outcome through the broad influence enjoyed by these institutions. From the point of view of organization development these groups are well placed to take on important functions as semi-autonomous, semi-detached advisory groups.

IV. HOW TO PROCEED

A. Setting up the organizational structure

Establish a "Central O.R. Coordinating Committee" consisting of representatives from:

GOI - 2/3
 NIHFV - 1/2
 USAID - 2/3

Establish "States O.R. Committees" consisting of representative from:

Health Departments - 1/2
 Selected Departments of SPM - 1/2
 RHFVTC's - 1/2

B. Creating Studies

1. Identify available talent. Strengthen "linkages" between local institutions i.e. medical colleges, RHFVTC's and Health Depts. for the purpose of creating the most useful kinds of studies.
2. Stimulate the development of high quality proposals. Encourage through RHFVTC, SPM Dept. and State Health Dept. officials to work together on larger scale studies. Stimulate "small grant" proposals by creating a program at funding the best ideas from PHC medical officers. DHO's and etc.

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3. Assist in perfecting the study designs i.e. (a). formulation of the exact hypothesis to be addressed, (b) datagathering protocol and (c) data analysis through a series of Health Services Research Workshops. These should be practical working sessions wherein initial study ideas are developed into "Pukha" study proposals.
4. Monitor and provide assistance during data gathering process.
5. Provide any required assistance in analysis of data and write up of results.
6. Evaluate the process from the point of view (a) the learning process (b) the value of the study findings per se.

APPENDIX VIII

REPORT TO USAID/INDIA ON THE OPERATIONAL RESEARCH
COMPONENT OF THE INTEGRATED RURAL HEALTH AND POPULATION PROJECT

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IV. RECOMMENDED PROCESS FOR INNOVATIVE STUDIES COMPONENT

This section describes a process for promoting and implementing the innovative studies component of the IRHP Project. The process is described at three levels: Primary Health Center (PHC), state/district, and at the general project level. The steps for operations research at these three levels are outlined. Operations research has close linkages with two other project components, base line survey and Management Information Systems (MIS), and training, which are also discussed. The recommended actions to implement the innovative studies component are presented at the end. These actions consist of setting up an organizational structure at the state level, strengthening inhouse capability for research, strengthening capability of program personnel and researchers in operations research, establishing linkages with appropriate technical support institutions, promotion of activities and dissemination of the results.

As mentioned earlier in the brief review of past OR activities, India has a large network of institutions and a long history of research. Two important lessons can be drawn from the past experience. First, future operations research studies should specifically address the issues of quality of research and utilization of research by program managers which have been the major weaknesses in the research efforts to date. Second, future activities should build on existing knowledge and experience.

Improving quality of research requires careful planning, budgeting of adequate resources, augmenting technical capability of researchers, and using mechanisms for review and feedback. Several factors affect the utilization of research by program managers. The problems selected for research should be of relevance and interest to the program managers. Researchers should become more sensitive to the needs of the managers and factors affecting utilization of research, while the program managers should become oriented towards use of research. The communication between these two groups needs to be strengthened. The environmental conditions of research should allow replicability and yet should not be overly constrained by the existing environmental conditions, attitudes and biases. The findings of research should become available to program personnel at appropriate levels in an appropriate format. Finally, the research methodology used should be appropriate to the objectives of the study.

The program of OR should provide for the above mentioned elements: careful planning, selection of appropriate topics, adequate resources, augmentation of technical capability of researchers, involvement of managers, feedback and review, selection of appropriate setting and methodology and dissemination of the research findings. Suitable organizational mechanisms (involving managers, researchers within the program and outside institutions) and processes (planning and review, allocation of resources, development of staff skills, and communication) need to be developed for an effective OR effort.

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Specific actions need to be taken to ensure that the studies build upon existing knowledge and experience. A review paper should be prepared summarizing past experiments in India and their implications for future studies to be carried out in the IRHP Project. Some work has been done on a few of the areas identified during the state visits and it needs to be shared more widely. To illustrate, attempts were made to simplify the record keeping system at the field levels during India Population Project I. Subsequently the Ministry appointed a committee and a system was recommended for implementation. Maharashtra has implemented a monitoring system. Gujarat has done work on developing a MIS but it still needs to be tested and implemented. Use of data at the field levels, analysis and feedback, however, continue to remain weak almost everywhere. Thus sharing of information in this area will lead to progress and further development.

THREE LEVELS OF CONCERNS

The discussion of potential topics for innovative studies in section II suggests that -

- a) there is local variation on some issues and similarity on other issues; and
- b) the solutions to these problems lie at various levels - block, district, state or center.

The OR process therefore should provide for research at various levels depending upon the nature of the problem. The characteristics of the problems and necessary research at three levels, primary Health Center, state/district and general project level, are reviewed below.

PHC Level: The objectives of the studies at this level will be to help the PHC personnel in identifying ways to improve performance of the PHC, increase their skills in use of operations research to solve problems and to seek their involvement in the whole process.

An illustrative list of the problems* which are suitable for studies at this level are:

- a) identification of factors leading to high and low performance of personnel and in different geographical areas;
- b) factors affecting utilization of services;
- c) use of growth charts to monitor nutritional status of children;
- d) use-effectiveness studies;

*Some of these topics were identified during the state visits and others are based upon the consulting team's observations. The list is, however, only illustrative.

- e) use of non-monetary incentive systems to motivate workers; and
- f) improved systems of supervision of field workers.

The steps required in the OR process at this level are:

- a) initial workshops to be held at the district levels in the project areas for familiarization of the process, generation of proposals, and subsequently, review of the findings;
- b) a budget allocation to be set aside with the Project Director who can select proposals for funding (for example, 5 per state each year, costing an average of about Rs5000 each to cover data collection, additional transportation, stationery and miscellaneous costs);
- c) technical support to be provided at formulation and data interpretation stages; and
- d) forums for presentation of the results (including regular monthly meetings) and for wider dissemination of information.

District/State Level: The objectives of the studies at this level will be to help identify ways to strengthen the program and its management; to increase the skills of the personnel at this level in interpretation and use of data, use of operations research and in working with research/training institutions; and to seek their involvement in the whole process.

An illustrative list of the problems which are suitable for studies at this level are:

- a) innovative approaches to the recruitment and training of female VHGs;
- b) improved and simplified record keeping systems;
- c) improved logistics management;
- d) assessing impact of periodic inservice refresher training and feedback;
- e) ways of increasing involvement of community groups and other voluntary organizations;
- f) special attention villages which serve as demonstration areas; and
- g) assessing the impact of allowing paramedical staff to insert IUDs and dispense pills.

The steps required in the OR process at this level are:

- a) workshops to be held for familiarization of the process;
- b) proposals to be prepared for each state by the Project Director/Research Coordinator and to be approved by the research committee at the state level (about 2 per year per state, funding ranging from Rs.20,000 to Rs.50,000);
- c) detailed study proposals to be prepared with the help of Health and Family Welfare Training Centers (HFWTC) and technical support institutions;
- d) research to be carried out with assistance from the research and evaluation cell and HFWTC staff; and
- e) results to be presented with the help of technical support institutions.

General Project Level: The objectives of the studies at this level will be to assist in identifying directions in which the Project should evolve and to seek a higher level of involvement of both Project managers and technical institutions in the evolution of the Project.

An illustrative list of problems which are suitable for studies at this level are:

- a) how to increase use of spacing methods;
- b) how to use community incentives and their likely impact;
- c) how to operationalize the known linkages between population and development;
- d) how to increase involvement of NGOs and its likely impact;
- e) how to provide services to reduce infant/child mortality; and
- f) how to develop an innovative service delivery system.

The steps required in the OR process at this level are:

- a) workshop to be held for Project administrators and technical institutions;
- b) first phase investigations to be carried out to help evolve the design of interventions;
- c) the proposed interventions to be reviewed at a meeting of the external technical institutions and state and central government officials to finalize the research designs;

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- d) the interventions implemented with assistance from technical institutions;
- e) final evaluations to be carried out and reports to be prepared for presentation to concerned health and family welfare officials.

A comparison of CR at three levels, PHC, state/district, and at the general project level are compared below:

	<u>PHC</u>	<u>State/District</u>	<u>General Project</u>
Type of Problem	Constraints to performance of PHC	Constraints to program operations	Future Project development
Most likely remedies at	PHC level	State/district level	State/Center level
Amount in Rs.	2,000 to 10,000	20,000 to 50,000	more than 50,000
Duration	3 to 9 months	12 to 15 months	Multi-year
Role of HIWTC and R&E Cell	Assist in preparation of proposals	Assist in conducting the research	Assist in conducting research
Role of technical support institutions	Review & comment, help HFWTC if necessary	Help in formulation	Assist in conducting research
Sophistication of research methodology	Low	Medium	High

The above classification of OR does not imply any order of importance or chronological sequence. The classification deals with different types of problems at different levels and work can be started simultaneously on problems at all three levels.

Linkages With Other Project Activities

Linkages with Base Line Surveys and Management Information System

It is necessary to carry out surveys to augment the routine service statistics for assessing the overall performance of the Project. Base line surveys have, therefore, been planned in each of the states and their results are likely to be available in about a year. The base line surveys are expected to provide information on

1. levels of fertility, mortality and morbidity, and
2. access and utilization of health and family welfare services.

As similar indicators will be collected for all five states, it will permit comparison among the project areas within these states.

Each state is also expected to develop and implement a MIS which would include simplified record keeping and more reliable data collection at the field level, reporting on key indicators, analysis of data and feedback.

The OR activities should have close linkages with both these activities. MIS data can help identify problems to be researched at PHC and district levels and base line survey results could help in identifying the types of interventions necessary for future program development. As indicated earlier, one of the OR studies could be to help identify ways of simplifying record keeping and collecting more reliable data. The data generated by MIS could be utilized to assess the impact of some of the OR studies and longitudinal surveys can help assess impact of experiments. Finally the personnel and institutions involved in OR could also be utilized to carry out some of the analysis of MIS data.

Linkages with training:

Strengthening of both technical and managerial skills of various categories of program personnel is envisaged during the Project period. Training activities have many linkages with OR activities. The assessment of training needs and management needs can help identify areas where OR studies may be carried out. The training activities themselves could be areas of research. The results of OR studies could be utilized as training material. Finally some institutions could be used for some of the training and OR activities.

The institutional mechanisms and the process of OR should consciously utilize these synergistic linkages by sharing of findings and by ensuring commonality of some personnel in these activities.

Recommended Actions

Since the problems and their likely remedies differ at the three levels discussed above, the process of operational research will differ accordingly. However, the following actions will be necessary to promote and implement an effective innovative studies component in the IRHP Project.

1. Set up organizational structures at the State level

(a) The responsibilities for carrying out the program of studies have to be clearly defined in each state. These can either rest with the State Project director or a newly appointed research coordinator within the State Directorate. The research coordinator should play a liaison role in addition to his substantive role. He should represent the Project managers in designing research projects and in monitoring their progress, and should represent the research organizations in reporting their findings and the implications for managers.

(b) A research committee should be established at the State level, probably consisting of the Health Secretary; Director, Health and Family Welfare Services; the Project Director; and representatives of technical institutions, USAID, and other co-opted members. The basic tasks of the research committee are to identify problems requiring research at State and district levels and for future program development, to approve innovative studies, review their progress, and comment and utilize their findings.

2. Strengthen inhouse capacity for research.

The USAID Project provides support for research and evaluation cells at State and district levels. The participating states have filled their established research posts at different rates, and it is likely to be several months before all state level cells will be fully staffed. Meanwhile, trainers at the HFWTCs should be involved, to the extent possible, in providing research support in their areas of specialization.

3. Strengthen capability of Project personnel and researchers in operational research, primarily through training workshops.

The capabilities of three categories of personnel need to be strengthened with respect to OR -- project personnel at state and district level, staff of training and research institutions and PHC medical officers. The first OR training workshop for state personnel and representatives of potential technical support institutions should be conducted at a central location. This workshop should be followed by subsequent workshops for district-level personnel, staffs of HFWTCs and of support institutions at the state level. Shorter workshops for PHC medical officers may be held in each state. These research formulation workshops could be repeated once a year for personnel not covered. Follow-up workshops of 2 to 3 days for sharing of problems in research implementation, constraints in research, and sharing of findings should be held on a regular basis.

4. Establish linkages with appropriate technical support institutions.

(a) In addition to strengthening inhouse capability by appointing qualified staff to their research and evaluation cells and use of HFWTCs, the states should enter into contracts with suitable research/training institutions for technical support. The nature of technical support required would vary depending upon the nature of the study and inhouse capability of the states. In some studies their involvement could be limited to tasks of reviewing and providing comments. Their involvement may be higher for other studies, particularly for those directed towards identifying directions for future Project development.

(b) To ensure that the design of such interventions benefit from relevant experiences within the Asian region and elsewhere and that a high quality of research effort is maintained, it would be useful to seek assistance from external professional institutions/resources. These

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institutions could assist in identifying interventions which are more likely to succeed on the basis of international experiences and in selection of appropriate research methodologies.

5. Promote activities and disseminate results.

(a) The MOHFW, using IRHP project funds, should commission a review paper summarizing past experiments in India and their implications for the innovative studies component of the IRHP Project.

(b) To promote innovative studies and to serve as a catalyst, the MOHFW, under area project funding, should assign or hire a full-time operations research specialist to oversee the innovative studies components of the Project.

(c) If this is not feasible to assign or employ a full-time operations research specialist, the MOHFW, under the area project, should engage the part-time services of two appropriate consultants, on a retainer basis, for the following tasks:

i. promote proposal formulation and provide technical assistance for the preparation of innovative study proposals;

ii. serve on State research committees if appropriate;

iii. assist in reviewing the implementation of innovative studies, assist in data analysis, and assist in reviewing and disseminating final reports.

It is estimated that a total of about 90 person-days per year will be the minimum requirement for these tasks.

(d) The Ministry of Health and Family Welfare should prepare a periodic (quarterly) digest of research activities underway in various states, including but not limited to those participating in the IRHP Project. In particular, information should be included on experiments or innovative studies underway as apart of other area projects.

APPENDIX IX

STAFF CURRENTLY IN PLACE AS PERCENTAGE OF PROJECT TARGETS

	GUJARAT	MAHARASHTRA	HARYANA	HIMACHAL	PUNJAB
CHV (M)	91	94	87	68	37
DAI	79	81	82	76	55
MPW (M)	85	50	40	11	77
MPW (F)	65	55	58	19	29
HA (M)	100	(A)	(A)	(A)	(A)
HA (F)	22	19	18 (B)	38	36

Note: Data are latest available; dates for data vary among the states from 6/83 to 9/83. A number of these percentages have improved in the past three months.

- (A) None planned under project.
- (B) There has been a decrease in positions filled.

APPENDIX X

REPORTS CONSULTED ON INFORMATION, EDUCATION AND COMMUNICATION

Ministry of Health & Family Welfare. Report of the Task Force on Communication for Health & Family Welfare on its Visit to Thailand, Indonesia and Hawaii, January 10-26, 1982. New Delhi: Ministry of Health & Family Welfare, Government of India, 1982.

Palmore, James A., Jr. Communication Needs Assessment for the Integrated Rural Health Project in Five AID-Assisted States in India. Washington, D.C.: American Public Health Association, 1983.

Sweeney, William O. Preparing for a Needs Assessment: a Report on IEC Activities to Support the Health and Family Welfare Program of the Government of India. Washington, D.C.: American Public Health Association, 1981.

Worrall, Robert P. Description and Analysis of the IEC Delivery System, Government of India Family Welfare Program. Washington, D.C.: American Public Health Association, 1982.

USAID ADDENDUM TO MID PROJECT EVALUATION REPORT

Although the Mid-Project Evaluation Report prepared by the consultant team is quite extensive and covers most of the scope of the project, there are a few additional points which have not been included, and which USAID feels should be added for consideration in the total Mid Project Review. There are also several issues/recommendations made by the evaluation team which differ from USAID/India policy, or for which some decision has already been taken. These, we feel, should also be included in the addendum.

1. Many of the recommendations in the report suggest action by the GOI. Since the states are the implementers, most of these recommendations should instead refer to GOI/Project States.

2. Key Problem/Service Emphasis: In Recommendation 10, page 10, the Evaluation Team has recommended that less emphasis be given to the 12 key problems continually emphasized in project documents and implementation strategies, and that states should be able to adjust their priorities to other local problems. USAID disagrees with this recommendation, as it is the key problems related to high fertility and infant/child mortality which are the highest priority, and which are the heart of the Project's service improvement components. It is crucial to continue to focus all project-supported efforts of training, communications, management, service delivery and innovative studies on improving these key services which can lead to the projects goals: reduced fertility and infant and child mortality.

3. Project Technical/Managerial Staff: Considerable attention has been devoted to lack of appropriate and sufficient technical managerial staffing at the state, and especially the

district level, as an impediment to implementing the key service improvement aspects of the project, e.g., Recommendations on page 19-25. USAID is also concerned about the level of staffing available for field monitoring and technical managerial support within the Area Project cell in the MOHFW. Now that the project is shifting from its initial emphasis on construction and infrastructure building to one of technical/managerial improvements and innovative studies, etc, intensified stimulation and support by the MOHFW is vital. However, USAID is concerned that now only a single technical officer is responsible for all five project states (in addition to the Area Project Director) Despite herculean efforts by staff within the Area Project Cell, it does not seem possible that sufficient attention can be given by the very small staff available. Unfortunately, the communications specialist who had contributed much to the project communications component was transferred in 1983 and is not replaced. It is crucial to fill these and other technical support roles.

It has been extremely useful that members of the Training section of the Rural Health Division have recently increased their involvement in Project-related training activities. However the problem still remains: during a period when all efforts must be intensified just to complete all project components within the time frame set, additional technical/managerial staff will be required.

4. Completion/Operational Criteria for Buildings Constructed

Recommendation 8 on page 16 has proposed that electrical and water connections not be included in the criteria for building "completion" status. Instead, the team suggest that these two items be added to the criteria for "operational" status of buildings constructed. This issue has been reviewed in detail

by the USAID internal Project Committee, and was not accepted (this has been communicated to the MOHFW in a letter dated December 8, 1983).

5. Disbursements : The first USAID disbursements totalling over \$ 2 million, for both construction and non-construction expenditures by the states, have made to the Department of Economic Affairs. However, to date, USAID have received appropriate construction completion certificates from only two states, Himachal Pradesh and Haryana. USAID urges the states which have substantial numbers of complete and/or operational buildings to forward appropriate certificates with reimbursement requests to the GOI.

6. Construction Progress: USAID is very concerned that in some states, as much as 50% of the planned construction has not begun (see summary table). This is particularly true in Haryana and Punjab, and many of the buildings not yet started are the larger structures - PHC's and RFWC's which require an extended period to complete. It seems that if these states have not begun construction of remaining buildings by the December 1984, there is probably little likelihood that they would be completed by the end of the project. Therefore USAID suggests that any remaining buildings for which construction has not begun by December 31, 1984, should be deloted from the states project targets.

7. The attached table summarizes progress in the various project components to date. It shows that a concerted effort must be made if all project components are to be complete in the next 18 months.

Project Component	Punjab	Haryana	Maharashtra	Gujarat	H.P.
<u>1. Inservice Training</u>					
- Training Needs Assessment (TNA)	+	+	+	+	+
- Training Modules Translated	-	+	-	+	-
- Retraining started	-	-	-	+	-
<u>2. Communications</u>					
- Communications Needs Assessment (CNA)	*	+	+	+	-
- Hand tabulations of CNA complete	-	-	+	+	-
- Communications Training	-	-	-	-	-
<u>3. Management</u>					
- Management Needs Assessment (MNA) Done	*	*	+	*	-
- Management Training Begun	+	+	-	+	-
- Management Information System Improvements Done	-	-	-	-	-
<u>4. Baseline Surveys (not state responsibility)</u>					
- Data Collection Done	+	+	+	+	+
- Data Processing Done	-	-	-	-	-
- Report Reviewed	-	-	-	-	-
<u>5. Innovative Studies</u>					
- Proposals complete and approved	+	+	-	+	+
- Studies implemented	+	-	-	-	-
- Reports complete	-	-	-	-	-

+ = complete
 - = not complete
 * = partially done

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Project Component	Punjab	Haryana	Maharashtra	Gujarat	H.P.
<u>6. Project Staff in Place</u>					
- State level complete	-	-	-	-	-
- District level complete	-	-	-	-	-
<u>7. Basic Training (Workers currently in place of % of Project targets as of 30 Sept., 1983)</u>					
- CHV	37%	87%	94%	91%	68%
- Dai	55%	82%	81%	79%	76%
- MPW(M)	77%	40%	50%	85%	11%
- MPW(F)	29%	58%	55%	65%	19%
- HA(M)	**	**	**	**	**
- HA(F)	36%	18%	19%	22%	38%
<u>8. Construction (as of 30/9/83)</u>					
- % of large building <u>started</u>	28.8%	22.7%	45%	67.6%	100%
- % of small buildings	50.5%	59.3%	84.9%	83.7%	100%
- % of all buildings <u>completed</u>	30.9%	19.8%	2.0%	12.9%	80%

+ = received

- = not received

** = not planned under project

Note: Some of these figures have changed substantially since September 1983.

EVALUATION COST DATA

1. No. and Title of Project/Activity: 386-0468, Integrated Rural Health & Population
2. Purpose of Evaluation: Mid-Project Evaluation
3. Mission Staff Person Days involved in Evaluation (estimated):
- | | | |
|----------------------|-----------|-------------|
| - Professional Staff | <u>60</u> | Person Days |
| - Support Staff | <u>30</u> | Person Days |

4. AID/W Direct-Hire or IPA TDY support funded by Mission:

<u>Name</u>	<u>Period of TDY (Person-Days)</u>	<u>Dollar Cost (Travel, Per Diem etc.)</u>	<u>* Source of Funds</u>
a. Anne Aarnes	20 TA 4400046	\$ 4,580	OE
b.			
c.			
d.			

5. Contractor Support, if any:

<u>Name of Contractor[@]</u>	<u>Contract No.</u>	<u>Amount of Contract</u>	<u>* Source of Funds</u>
Dr. D. Michael O'Byrne, PSC	386-0249-S-00- 3037-00	\$ 28,100	PD&S Institutional Contract
Dr. Donald Minkler		Unknown	"
Dr. James Palmore		"	"
Dr. Jerry Russell		"	"
Dr. Margaret Mangain	386-0249-C-00- 3041-00	\$ 4,550	PD&S
Dr. Mabelle Arole	386-0249-S-00- 4003-00	\$ 3,642	PD&S
Dr. Inderjit Walia	TA IN-T-3-549	\$ 3,150	PD&S
Mr. P.E. Balakrishna		\$ 12,000	Institutional Contract Columbia U

* Whether PDS, Mission O.E., Project Budget or Central/Regional Bureau funds.

@ IQC, RSSA, PASA, PSC's, Institutional Contract, Cooperative Agreement, etc.