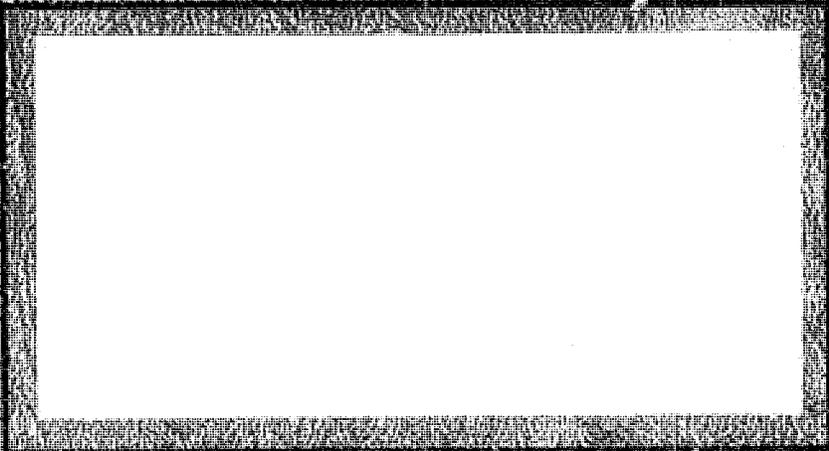


386-111-1111



AMERICAN PUBLIC HEALTH ASSOCIATION
International Health Programs
1015 Fifteenth Street, N.W.
Washington, D.C. 20004

A REPORT ON
A CONSULTATION TO THE USAID/INDIA
INTEGRATED RURAL HEALTH AND POPULATION PROJECT

A Report Prepared By
JOE D. WRAY, M.D.

During The Period:
FEBRUARY 3-14, 1980

Supported By The:
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
(ADSS) AID/DSPE-C-0053

AUTHORIZATION
Ltr. AID/DS/POP:
AID/DS/HEA: 1-8-81
Assgn. No. 582022/583010

C O N T E N T S

	<u>Page</u>
ABBREVIATIONS	ii
I. INTRODUCTION AND BACKGROUND	1
Purpose of Assignment and Scope of Work	1
Goals of the Health and Population Project	2
Community Health Workers	3
The USAID Integrated Rural Health and Population Project	
II. OBSERVATIONS AND FINDINGS	7
Magnitude of the Problem	7
The "Health Care Package"	8
The Problem of Fertility Reduction	9
III. RECOMMENDATIONS	11
APPENDIX	
List of Contacts	14
A NOTE TO READERS	15

ABBREVIATIONS

AID	Agency for International Development
ANM	Auxiliary Nurse-Midwife
APHA	American Public Health Association
CDSS	Country Development Strategy Statement
CHV	Community Health Volunteer
CHW	Community Health Worker
GOI	Government of India
HA	Health Assistant
H/POP	Health/Population
ICMR	Indian Council of Medical Research
IMR	Infant Mortality Rate
LHV	Lady Health Visitor
MCH	Maternal Child Health
MOH	Ministry of Health
MPW	Multipurpose Worker
PHC	Primary Health Care
PID	Project Identification Document

I. INTRODUCTION AND BACKGROUND

I. INTRODUCTION AND BACKGROUND

At the request of the Health and Population Office, USAID, the consultant visited New Delhi, India, to report on health and population activities in that country. He reported to the USAID mission, which is directed by Dr. Jack LeSar, on February 3, 1980. The consultancy lasted until February 14, 1980.

Purpose of Assignment and Scope of Work

The consultant was requested to:

1. Review in detail the action plans prepared by the state governments and the Government of India (GOI) for the districts proposed for USAID support to evaluate their technical soundness and administrative feasibility, particularly population components and the plans for integrating family planning with health and nutrition services.
2. Review various sections of the PP drafted by USAID/India on the basis of the consultant's extensive experience overseas with HPN programs and his familiarity with the HPN policies and priorities of AID.
3. Participate in discussions with the GOI on these action plans and technical sections of the PP draft.
4. Assist USAID/India with any required technical analyses.
5. Draft the required critical sections of the PP.

The accomplishment of these tasks in New Delhi was constrained by circumstances. For example, the action plans that were to have been prepared by agents of the state governments and the Government of India had not been submitted to USAID/India by the time the consultant arrived. Dr. LeSar, USAID's health program officer in New Delhi, was particularly interested in reviewing, in thorough detail, the "health care package" for newborns, young children, and mothers that he developed for this project. Most of the consultation was, therefore, devoted to the activities listed under numbers 2 and 3 above. Dr. LeSar was especially eager to take advantage of the consultant's presence and support to discuss particular details of the health care package with appropriate individuals in the Ministry of Health (MOH). He anticipated--correctly--that not all the ideas that were presented would be acceptable immediately and that serious efforts to persuade government officials to accept them would be required.

The consultant spent most of his time either at USAID offices in New Delhi or at the offices of relevant officials at the Ministry of Health. It was not necessary to travel outside New Delhi.

Goals of the Health and Population Project

The Government of India is committed to the long-term goal of reducing fertility and mortality. USAID/India is committed to assisting the GOI in achieving these goals. Its specific commitment is described in the Country Development Strategy Statement (CDSS) as follows:

Key elements of the USAID fertility reduction strategy are:

1. To delay the age of first pregnancy;
2. To minimize unintended births in the population;
3. To increase average interbirth intervals;
4. To encourage smaller completed family sizes;
5. To minimize uncertainty over child survival.

Key elements of the mortality reduction strategy for the 0-4-year child are:

1. To minimize the incidence of low birth weight;
2. To minimize the incidence of birth injuries;
3. To reduce non-infectious disease deaths in low birth weight babies;
4. To minimize the prevalence of severe and moderate malnutrition in children 6 months through 4 years;
5. To minimize deaths from infections in children 0-4 years of age.

Included in the CDSS are several tables and graphs that provide information on the structure of Indian society, particularly the economic conditions of the vast majority of Indians, who are extremely poor. One table shows some of the changes in various demographic indicators for India since 1950 (estimates are given to the year 2000). Data on the prevalence of malnutrition in Indian infants and children and data on infant mortality show that the rural infant mortality rate (IMR) declined from 146 to 139 between 1960 and 1979, and that the urban IMR declined from 96 to 80 in the same period.

Community Health Workers

The Integrated Rural Health and Population Project is intended to support the GOI in its efforts to reduce fertility and mortality by assisting in the development of the new Comprehensive Rural Health Program. This program is to be a joint effort of the central government and the state governments. Clearly, there will be considerable variation from state to state. USAID has agreed to help strengthen projects in five states: Gujarat, Maharashtra, Punjab, Haryana, and Himachal Pradesh. (The GOI scheme is spelled out in detail in the "Model Plan for Creation of Facilities and Provision of Services Under Area Program.")

USAID/India is especially concerned that the benefits of any assistance in health care be extended to the village level. Accordingly, the key elements in the GOI plan are the community health volunteer (CHV) and the mechanisms designed to support him. The Indian scheme has been implemented since late 1967 in 741 primary health centers. The program was expanded in 1978 to include 958 additional primary health centers.

Given the time required for health care schemes to have a measurable impact, under even the best of circumstances, it would be unrealistic to expect this large-scale project to have overcome by this time all difficulties and to have had a measurable, beneficial impact on the health of the populations it is intended to serve. Nevertheless, the Government of India has twice attempted to evaluate the community health volunteer scheme, once in 1978 and once in 1979. (See the report on the second attempt, entitled "Repeat Evaluation of Community Health Volunteers Scheme, 1979.") The second evaluation was directed by the National Institute of Health and Family Welfare, in New Delhi, and was supervised by a distinguished group of Indian medical and social scientists. The specific findings of that survey are worth reviewing in detail. Briefly, the evaluators found that the CHVs seem to be generally well appreciated by the villagers of the communities they serve, that they themselves believe they are doing a reasonably good job, and that the staff of the primary health center who are responsible for their supervision generally seem to think well of them. It is clear, however, that when CHVs were tested on the specific knowledge they were supposed

to have mastered during training, they performed unsatisfactorily, with scores below 30 percent on most of the items tested. Many community health workers (CHWs) do not have a copy of the community health training manual, and those who do have a copy are unable to use it. The kinds of support these workers need to perform effectively do not seem to be available.

The USAID Integrated Rural Health and Population Project

It is against the background of the "model program" of the GOI and in light of the performance of community health workers to date that the USAID Integrated Rural Health and Population Project was developed. This project grew out of a visit that several consultants made to India in September 1979. This writer was among the group of consultants who spent approximately two weeks in India visiting the five states that are expected to take part in the USAID project. With the information these consultants gathered, the program officers in New Delhi prepared a document entitled "Analysis and General Description of the Integrated Rural Health and Population Project." This document, too, is worth reviewing in its entirety because it contributes to a thorough understanding of the situation in India. The sections on social soundness analysis and on technical issues are particularly useful. In addition, the document contains fairly detailed information on each of the participating states. Among other things, the description of the Comprehensive Rural Health Program, summarized in Exhibit 1, page 5, is useful to anyone interested in understanding what the Indians are attempting to do.

At the time of the field studies, it was apparent that USAID intended to do as much as possible to improve health care at the village level. What the GOI wants is assistance in building more primary health centers, in upgrading some existing centers, and in building subcenters. The challenge, therefore, is to make sure that whatever is done at the central level (i.e., at the primary health center level) contributes to the improvement of health care at the most peripheral level.

This report reiterates the intentions of the GOI to reduce mortality and fertility, but it identifies also some specific purposes, the achievement of which will contribute to the reduction of mortality and fertility in India. These purposes are:

1. To improve access to basic health, population and nutrition services by assisting the GOI in the more rapid implementation of the scheme, particularly at the village and subcenter levels in the selected districts.
2. To expand the kinds of services offered under the model scheme after thorough analysis of the best approaches to reduce young child and maternal mortality and fertility within the context of the model scheme and of the socio-cultural environment of the areas selected.

Exhibit 1
MODEL SCHEME

<u>Level of Care</u>	<u>Providers</u>	<u>Population Served</u>
Village	CHV, Trained <u>Dai</u>	1,000 People
Several Villages (3-8) via Subcenter	Auxiliary Nurse-Mid- wife (ANM) and Male Multipurpose Worker (MPW)	5,000 People
Community Development Block via Primary Health Center	Doctors, Lady Health Visitors (LHVs), ANMs, Health Assistants (HAs)	100,000 People
Upgraded Primary Health Centers, Subdistrict Hospitals	Doctors, Nurses	Variable, approxi- mately 300,000- 400,000 People
District Hospitals	Doctors (Specialists), Nurses	1,000,000+ People

3. To improve the quality of existing services offered within the context of the model scheme, specifically, those of fertility and maternal and child mortality.
4. To improve the utilization of services by young children and women of childbearing age, with special attention to socially disadvantaged families.

The report elaborates the ways the project is intended to assist the GOI in achieving these purposes. For example, the network of sub-centers and other facilities will be expanded with direct financial assistance, and more services which directly affect fertility and mortality will be offered (see description of approaches that follows). The intent will be to improve the quality of services now offered in the model scheme. The provision of assistance to develop a better system for evaluating the effectiveness of health care and for evaluating the CHVs will be an important feature of the plan. In addition, the project is intended to strengthen the training of various levels of community health workers and to provide support for their continuing education.

II. OBSERVATIONS AND FINDINGS

II. OBSERVATIONS AND FINDINGS

Dr. LeSar's priorities were to review the details of his "health care package" and to persuade the relevant officials in the Ministry of Health to adopt the package. Toward this end, the consultant addressed himself to four distinct activities. He first reviewed in detail the documentation and background papers for the program, and a variety of other documents containing relevant information on the status of health, nutrition, and population in India. He discussed the details of the program, problems likely to be encountered in attempting to implement it, and ways of addressing the problems with Dr. LeSar and a number of other mission staff, including Mr. Larry Flynn, who is in charge of Title II nutrition programs for the USAID mission in India. He spent many hours with appropriate officials in the Ministry of Health. Initial visits were held with the senior administrative officials at the Ministry who are responsible for the administration of the project. The consultant also reviewed carefully, item by item, the details of the health care package and discussed them with central-level technical officers in New Delhi. Among these government officials were Dr. Mukherjee, who is the senior obstetrician-gynecologist in the Ministry, Dr. Sebastian, a pediatrician responsible for the Ministry's maternal-child health (MCH) program, and Miss Karyatni, who is in charge of MOH programs for nurses and auxiliary nurse-midwives.

The Magnitude of the Problem

This effort to support the GOI in improving health services for the rural poor is almost staggering in its magnitude. The scope and extent of the undertaking are reflected in the Project Identification Document (PID). It is noted that:

The long-term commitment of the Government of India is to correct incrementally past rural-urban imbalances in health care. This commitment is manifested in the new Comprehensive Rural Health Program as part of the National Minimum Needs Program. The most evident progress in rural health has been the achievement of national coverage with 5,400 primary health centers, each serving the approximately 100,000 population of a community development block. They are, in general, staffed by two or three doctors and about 30-40 other workers. Currently, a major thrust is to increase the number of subcenters from about 39,000 to about 117,000, so that each will serve a population of approximately 5,000. The subcenters are to be staffed by two multi-purpose workers--one male and one female. These workers are being retrained in a large-scale program to prepare existing uni-purpose workers for their new roles in integrated services. The female multi-purpose workers are trained as auxiliary nurse-midwives (ANMs).

A major innovation, beginning in 1977, has been the training of community health workers (CHWs) at the village level. They are community members who work part-time and are responsible to the village. They are to promote community participation and self-reliance among village people in solving their own health problems. Each one serves in his or her own village of about 1,000 people and some 580,000 are to be selected and given three months training at the primary health center. About 85,000 are already in position.

The "Health Care Package"

Clearly, in trying to expand available facilities, recruit and train the necessary personnel, and give staff the support they need to carry out their ambitious tasks, the various state governments are facing a formidable challenge. Dr. LeSar's intent was to go beyond the mechanisms for expanding health services and to develop health care programs. It is Dr. LeSar's conviction (a conviction emphatically shared by the consultant) that infant mortality cannot be reduced to reasonable levels until there is:

- improved antenatal care, including improved coverage;
- improved maternal nutrition, during pregnancy and also during lactation, to increase birth weights and to enhance lactation performance;
- prompt, simple, easily accessible care for the treatment of diarrheal diseases and respiratory infections in infants; and
- perhaps most important, improved nutritional status of infants and young children by any possible means.

To bring the excessive population growth rates under control, an effort must be made to continue expanding existing programs. The emphasis must be not only on the continued provision of sterilization, but also on the improvement of facilities and educational programs to assist mothers in delaying and spacing pregnancies. This goal can be met only with effective contraceptive programs, and not sterilization.

One of Dr. LeSar's chief concerns during the consultant's visit was to design the health care package so that it addressed specifically the needs of infants and mothers. Dr. LeSar prepared a detailed list of the specific

problems of newborns and infants that could be anticipated in the Indian context and a list of the problems of women who require prenatal care or care during pregnancy. (See "Examples of Health Care Problems of Infants and Mothers.") He then prepared a list of the diagnostic or therapeutic skills required to treat these problems and a list of the supplies and equipment that the several levels in the system, including the village, the subcenter, the primary health center, and the "upgraded primary health center," would need. (See "Examples of Diagnostic and Therapeutic Skills and Supply and Equipment Requirements.")

These lists were reviewed, item by item, with Dr. Sebastian at the Ministry of Health. Dr. LeSar and the consultant were able to persuade Dr. Sebastian that each item was relevant, that the suggestions for each item were appropriate, and that treatment would have to be extended to the periphery, as far as possible, to ensure that the effort has a significant impact on mortality among the target population.

As might have been anticipated, there was considerable disagreement over one area. Dr. Sebastian, like most physicians in India and in many other parts of the world, was extremely resistant to the idea that peripheral health workers, namely, the ANMs, should be provided with antibiotics for treating certain selected infectious diseases, especially pneumonia. This is a controversial issue almost everywhere. It has been demonstrated, however, that infant and early childhood mortality can be affected significantly if the most peripheral workers in a health system are allowed to treat serious respiratory infections with antibiotics. It has been shown also that auxiliary health workers can be taught how to use antibiotics, responsibly and effectively, under selected conditions. Understandably, physicians find it difficult to accept this idea, and in a country such as India, where the medical establishment tends to be particularly conservative, it is not surprising that Dr. Sebastian resisted the suggestion. At this time, it is questionable whether Dr. Sebastian can be persuaded to accept it.

The Problem of Fertility Reduction

In conversations with GOI officials, both at the central level and at the state level, it was made clear that the GOI is committed to reducing fertility among the poorer segments of the population. It was also clear that in earlier programs the emphasis was almost solely on permanent methods (i.e., sterilization). Cash incentives, for family planning workers and for the individuals who submitted to sterilization, were widely used, were quite popular, and contributed to what seemed to be quite remarkably high rates in some parts of the country.

The new Integrated Rural Health and Population Project will attempt to support the present effort to provide and make easily accessible to the vast majority of people several alternatives to sterilization.

Fortunately, the Indian government has approved the use of the oral contraceptive pill after many years of refusing to allow its use. But a number of obstacles must be overcome to ensure that these alternative methods are, in fact, alternatives. The various levels of health workers must be trained, and trained well, to provide temporary contraceptives appropriate to the level at which they work. For example, CHVs could provide condoms. ANMs are allowed to provide contraceptive pills, and some are being taught to insert IUDs. In addition to the need for training, a reliable logistical support system is needed to ensure that workers at all levels have the contraceptive supplies they need to perform their tasks. Furthermore, in the fertility reduction and mortality reduction programs, there is an apparent need for a better evaluation system. Workers at all levels of the system must collect and report data that show them, and their superiors and supervisors, that they are performing well and achieving their goals.

III. RECOMMENDATIONS

III. RECOMMENDATIONS

The USAID Integrated Rural Health and Population Project is a huge and immensely complex project. While in the field (September 1979) and during the consultation in February, the consultant discussed numerous problems and possible alternative approaches or solutions. A number of particularly pertinent recommendations are appropriate for inclusion in this report. The major problem areas that are apparent to anyone familiar with the situation in India are the health care system; the health care methodology; the selection, recruitment, and training of personnel; and the use of management information systems and evaluations to improve health care.

Probably the single most crucial methodological issue in health care is the tasks of the most peripheral workers. Dr. LeSar and the consultant recommended to appropriate MOH officials that these workers be allowed to use one or two antibiotics under carefully specified circumstances. It has been demonstrated clearly and convincingly in other countries that this can be done, and done safely, and that such activities have a significant impact on mortality. It would be useful to enlist the support of prominent Indian physicians who accept this approach and to try to create settings in which they can educate their more resistant colleagues. It should be made clear that Indian physicians are by no means unique in hesitating to allow non-physicians to use antibiotics. This is a widespread problem which has, in fact, been overcome in only a few countries around the world. India, however, poses a special challenge, because a significant number of lives could be saved if the antibiotics used to treat respiratory infections were made available and used effectively at the village level.

The selection, recruitment, and training of CHVs are serious problems. The Indians recognize the importance of recruiting more women and of selecting older women for training. But the government must face this problem: CHVs are expected to be literate, and far fewer older women than younger, slightly post-adolescent men or women can read. In India and elsewhere in the world it has been shown that an intelligent middle-aged woman who has herself borne children and who is practicing family planning is probably the best worker available. Certainly, there are cultural differences in India, in the various states and among the different groups, but these differences should not be a problem. The recruitment of women should be encouraged. It would seem especially useful, as well, to recruit senior and distinguished Indian social scientists, such as those who worked on the community health worker evaluation scheme, to assist in this effort.

The numerous problems affecting the health care system must be resolved before the GOI can achieve its targets of reduced fertility and mortality. In fairness to the GOI, it must be said that the Indian system of health care has been improving steadily over the last 20 years. There is a primary

health center at the block level, and most centers are staffed by at least two, if not three, physicians. This fact needs to be stressed, because it must be recognized that the GOI is indeed making progress in building up its system. The skeleton is there, and the system is far more extensive and effective than that found in many countries with comparable income levels. Now, of course, the system must be made to work more effectively. Better management is needed. The Indian bureaucracy, whether public or private, is notorious for its tedious attention to detail and its slow and ponderous behavior. Nevertheless, there are Indians with management skills, with insights into their own problems, and it would be highly advantageous to enlist their help in improving the country's primary health care system. Economic constraints are a factor, but given the supplies and equipment they need, CHVs and other primary health care workers can carry out those activities that are crucial to the achievement of reduced mortality and fertility.

The report on the evaluation of community health workers is entitled "Repeat Evaluation of Community Health Volunteers Scheme, 1979." This report identifies clearly some of the problems in evaluating the Model Health Care Scheme and the performance of CHVs. Until performance objectives for the entire system and for the different workers are defined and spelled out in measurable terms, it is going to be difficult to evaluate effectiveness. After the objectives have been defined, it will be crucial to obtain baseline data and to build into the existing system a methodology for collecting the minimum essential information required for monitoring and evaluating the program. Outside advice should be sought. The intent is to keep the evaluation system and procedures for collecting information as simple as possible. It is always tempting and at times easy to try to overload the system by requesting the collection of detailed data which, in all probability, will not be used. Typically, this information is not used, because it cannot be collected adequately and is not usable. Alternatives are available. If we insist on the specification of simple health care objectives, and if we find ways to measure those objectives and little else, it will be possible to evaluate a program. Undoubtedly, given conditions in India, the task will be difficult.

This consultant suggests that the best possible approach is the development of demonstration centers. Demonstration centers where an optimum health care methodology is designed and demonstrated in concrete terms can serve as a vitally useful setting for on-site training for community health volunteers and others in the system. They can demonstrate a methodology for managing a program and providing proper logistical support and supervision. They also can demonstrate the utility of a simple method for collecting data for evaluation. This may seem to be an unrealistic recommendation, but there is ample evidence that a number of excellent health care programs that have been mounted carefully on a demonstration or pilot project have been carried out in India. The Indian government has recognized a number of these projects, and has published a report, Alternative Approaches to Health Care (from the Indian Council of Medical Research-ICMR),

that describes these programs. One approach to the problem would be to try to persuade relevant GOI officials to use these same projects as training sites and testing grounds for developing the kind of health care methodology that is needed to implement successfully the USAID Rural Health and Population Project.

Appendix
LIST OF CONTACTS

A NOTE TO READERS

The following documents are available upon request:

- ① Country Development Strategy Statement (Extracts)
- ① Model Plan for Creation of Facilities and Provision of Services under Area Program
- ① Repeat Evaluation of Community Health Volunteers Scheme, 1979
- ① Analysis and General Description of the Integrated Rural Health and Population Project
- ① Project Identification Document: Integrated Rural Health and Population Project
- ① Examples of Health Care Problems of Infants and Mothers
- ① Examples of Diagnostic and Therapeutic Skills and Supply and Equipment Requirements