MID-PROJECT EVALUATION

OF

USAID-ASSISTED INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS)

IN INDIA

prepared for:
Office of Health and Nutrition
USAID/India
Contract Number PDC-1406-I-00-4065-00

prepared by:

Pragma Corporation

September, 1986
New Delhi, India

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DATA SUMMARY SHEET AS OF SEPTEMBER 1986

INTEGRATED CHILD DEVELOPMENT SERVICES PROJECT (386-0476)
Office of Health and Nutrition

PURPOSE

To expand and improve ICDS to regularly reach at-risk pregnant/nursing women and malnourished children 6-36 months of age with Title II foods through CARE, nutrition and health education, and selected health services. To determine feasibility and cost of increasing birth weights of children.

ELEMENTS

(1) Functional anganwadis with managerial and technical staff
(2) Trained workers
(3) Nutrition and health education
(4) Innovative activities
(5) Low birth weight research
(6) Supplementary feeding (Title II) and food processing plants
(7) Monitoring and evaluation

SCHEDULE

Date of Original Agreement
15 Sept. 83
Original Project Assistance Completion Date
30 Sept. 89
Revised Project Assistance Completion Date
30 Sept. 90

COUNTERPART AGENCIES

GOI/Dept. of Women and Child Development, Ministry of Human Resource Development; Indian Council of Medical Research

U.S. CONTRACTORS

John Snow Inc. (JSI), Manoff International, Community Systems Foundation, Montefiore Hospital Medical Center (MHMC), Centers for Disease Control, National Institute of Allergy and Infectious Diseases.

BUDGET

Life of Project Funding ($ 000's)	Loan	Grant	Total
USAID Authorized	7,000	10,000	17,000
Cooperating Country			9,500
Other Donors			0
Total	7,000	10,000	26,500

PIPELINE

Obligations	7,000	10,000	17,000
Accrued Expenditures	2,289	1,107	3,396
Pipeline	4,711	8,893	13,604

ACKNOWLEDGEMENTS

This final report has been prepared on the basis of findings by the following consultants: Dr. Tina G. Sanghvi, Dr. Samir N. Chaudhury, and Dr. Nirmala Murthy. This mid project evaluation conducted in the USAID-assisted ICDS (Integrated Child Development Services) project districts of Panchmahals (Gujarat) and Chandrapur (Maharashtra) could not have been completed without the active support and participation of ICDS officials at the central, state, district and block levels. In particular, the team would like to thank USAID/India staff, Mary Ann Anderson, Samaresh Sengupta and Meera Chatterjee, and John Snow Inc.'s Judith Standley and field officers,
Dr. Aziz Popatiya and Dr. Narendra Gami for their invaluable contribution to the design, substance and implementation of the evaluation.

ABBREVIATIONS

AIIMS	-	All-India Institute of Medical Sciences
ANM	-	Auxiliary Nurse Midwife now called Female Health Worker (FHW)
AWC	-	Anganwadi Center
BDO	-	Block Development Officer
CARE	-	Cooperative for American Relief Everywhere
CDPO	-	Child Development Project Officer
CEO	-	Chief Executive Officer, District Level
CSM	-	Corn Soy Milk
DHO	-	District Health Officer
DPT	-	Diptheria, Pertussis and Tetanus Immunization
FHA	-	Female Health Assistant formerly called Lady Health Visitor (LHV)
FHW	-	Female Health Worker formerly called Auxiliary Nurse Midwife (ANM)
FO	-	Field Officer, CARE
GOI	-	Government of India
HPN	-	Health, Population, and Nutrition Office of USAID/India
ICCW	-	Indian Council of Child Welfare
ICMR	-	Indian Council of Medical Research
ICDS	-	Integrated Child Development Services
LBW	-	Low Birth Weight
LHV	-	Lady Health Visitor now called Female Health Assistant (FHA)
LOP	-	Life of Project
MCH	-	Maternal & Child Health
MIS	-	Management Information System
MO	-	Medical Officer, Primary Health Center, Block Level
MHRD	-	Ministry of Human Resources Development formerly called Ministry of Social Welfare
MS	-	Mukhya Sevika or Supervisor
NHED	-	Nutrition and Health Education
NIPCCD	-	National Institute for Public Cooperation and Child Development
ORT	-	Oral Rehydration Therapy
UIP	-	Universal Immunization Program

PHC	-	Primary Health Center
PL 480	-	Public Law 480 Title II Food Assistance
PP	-	Project Paper
RTE	-	Ready-to-eat Food
Rs.	-	Indian Rupees ($1.00 = 13.0)
SCCW	-	State Council of Child Welfare
TT	-	Tetanus Toxoid Immunization for Pregnant Women
UNICEF	-	United Nations Children's Fund
USAID	-	United States Agency for International Development or AID

- MID-PROJECT EVALUATION OF USAID ASSISTED ICDS: INDIA

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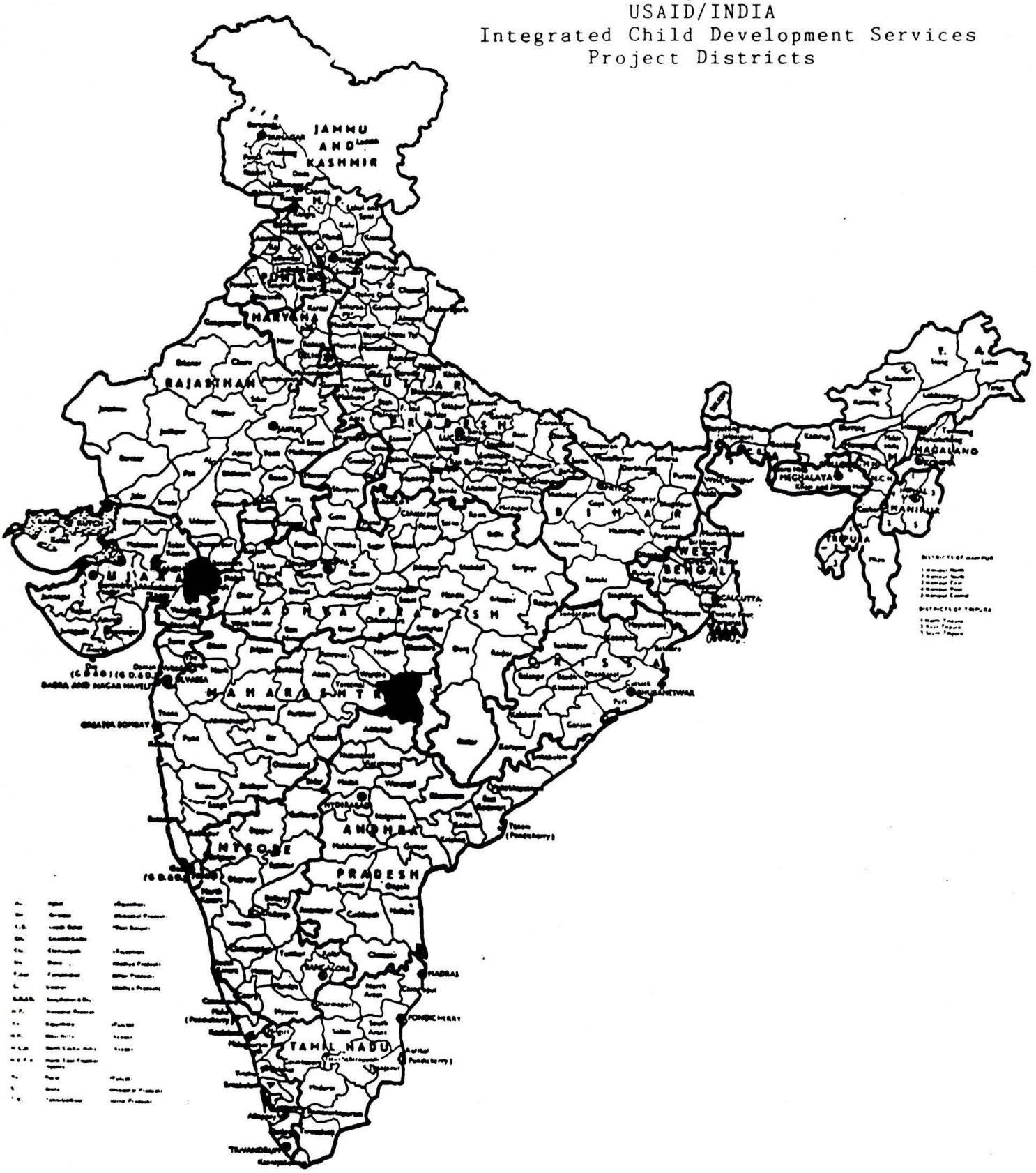


The boundaries shown do not imply any judgement on the part of the U.S. government on the legal status of any territory or any endorsement or acceptance of sub-boundaries.

Chapter 1: EXECUTIVE SUMMARY

The USAID-assisted ICDS project with the Government of India's (GOI) Ministry of Human Resource Development, Department of Women and Child Development, is being implemented in Panchmahals district (Gujarat) and Chandrapur district (Maharashtra) since 1983. This mid-project evaluation was conducted to document accomplishments and problems in project implementation so that the project can be modified if necessary, and made more effective during the remaining four years of its duration.

The project is currently reaching a rural population of 2.4 million through a network of 3,376 anganwadis. An anganwadi is a community center where preschool education and a food supplement are provided daily to children under 6 years of age and pregnant and nursing women. The USAID project proposes to test a comprehensive approach to alleviate young child malnutrition and mortality through interventions that form a part of the ICDS package of services implemented nationwide by GOI.

The evaluation team visited 11 (out of 19) blocks in both districts. Forty-seven anganwadis, 7 health centers, 7 training centers and the project funded food processing plant at Chandrapur were evaluated. Meetings were held at central, state and district levels.

To date, USAID has fully obligated $10.0 million in grant funds and $7.0 million in loan funds. Approximately 20% of the funds obligated account for accrued expenditures. Budget line items on low birth weight (LBW) research and innovative studies have not been utilized due to late GOI clearance for research and staff constraints at USAID. Additional staff has been recruited and negotiations are underway to begin implementation. Expenditures on in-service training and staff salaries have been behind schedule mainly due to delays at district, state and central levels. The participant training plan (though accounting for a small percentage of the budget) has been delayed due to staff not in position at state and central levels who were intended to receive training. Other components of USAID assistance are largely on schedule.

The project has gained a major impetus from the conscientious and technically sound monitoring and management by the USAID staff in Delhi. An unusual amount of rapport, credibility and support exists with the counterparts at all key levels in the project. This has helped achieve project targets in establishment of a large infrastructure of anganwadis and has set the stage for important qualitative improvements in the next three to four years.

Results of the evaluation show that major advances have been made in the development of a network of anganwadi centers (AWC) (approximately one per 700 population) most of which are staffed by trained workers. The number of AWCs increased in number from 1,211 (612 with trained workers) in November 1983 to 3,376 (3,160 with trained workers) in September 1986. While food supply disruptions continue in Chandrapur district, an average of 20 to 22 days of food distribution per month is maintained in most project areas compared to 25 days intended. Due to on-the-job training and orientation workshops provided through USAID assistance, regular enrollment of priority groups and growth monitoring of children has begun to occur on a large scale. There is a better understanding among service delivery staff of the need for strengthening nutrition and health services for pregnant women and children below 3 years of age. While nutrition and health education services (NHED) have not begun at the village level yet, a systematically designed social marketing/ communications package has been developed and tested for launching in early 1987. This activity has helped strengthen government-private sector linkages through use of commercial advertising and market research firms. Also, numerous monitoring and orientation activities conducted by USAID/Delhi and JSI staff have helped identify priority coordination and integration issues which can now be addressed more intensively.

Certain assumptions made in the project design were not valid and have led to delays in implementation especially in the qualitative or 'software' components of the project. Firstly, according to prevailing procedures, financial assistance by USAID to GOI for district projects requires finance departments of state governments to internalize these line items within their budgets. Then official directives are issued to district level functionaries before activities can be undertaken. Project activities that follow standard ICDS norms and have been a part of the national program for many years such as operationalizing AWC (or the hardware aspects) have been on schedule. Any

additional staff or innovative activities outside the usual ICDS pattern (needed for qualitative improvement), require lengthy consideration by the state finance departments before approval. In some instances, state governments have been reluctant to add staff with additional recurrent cost burdens beyond USAID assistance. Consensus building and a sense of ownership of the proposed additional inputs are required by substantive and financial departments of state governments. The entire process may take 2-3 years. Sometimes, the very staff who could have helped in sensitization and consensus building for the desired budget changes were to be USAID funded. Political disturbances in Gujarat leading to administrative stand-still for weeks at a time during 1984, 1985 and 1986 and vacant posts at state and district level in both states have also held up operationalization of USAID funded activities. For these reasons a number of qualitative improvements through additional staff, training, orientation and community participation did not occur.

Secondly, a key package of health inputs to be delivered through health departments of the state government did not materialize as expected.

Now that most of the infrastructure envisioned in the project is in place, greater stress will have to be placed on achieving the project's purpose of regularly reaching most at risk pregnant and nursing women and children under three years of age with supplementary feeding, nutrition and health education and selected health services.

The overall conclusion of the evaluation team is that the project design is still valid as written in the USAID Project Paper of 1983. However, accelerated implementation of a few key activities should be undertaken to bring about changes in the remaining project period. These activities are as follows:

- Develop specific coverage targets for districts, blocks and AWC. Design an annual plan of operations for each district for a more systematic and
  coordinated implementation of activities including enrollment surveys, training modules, health activities and NHED campaigns, geared to meeting these targets. USAID should be prepared to strengthen their district

monitoring teams oriented to developing a district-level model for monitoring and technical backstopping that can be transferred to other entities in the long term.

- Social marketing, communications and nutrition and health education can make a major impact on overall quality of services at this stage of the project and should be the major focus of USAID staff and TA. This component is acknowledged as being the weakest link in the program. If it includes specific skill building activities for key personnel, it can be replicated nationwide, it has capacity building spin-off benefits for GOI that can be used in other sectors and is an acknowledged sphere of AID expertise worldwide and among other donors.

- The continued lack of health services inputs can seriously undermine the achievement of the project's stated goals and subgoals. Rather than dependence on an external mechanism, the project should devote some of its own resources to assuring coverage of priority target groups with key health services. ICDS staff from AWW to central government levels need to monitor these services and make more sustained demands on the health system.

- Informal, in-service training and orientation activities aimed at job-related skills development and motivation of workers such as the district orientation workshop at Kadhana organized by NIPCCD and those planned under the NHED component should take precedence over institutional support for basic training which has failed to pay dividends so far. Since such institutional support can have longer term and a large multiplier effect it should continue at some minimal level.

- Given AID's global child survival mandate and the outstanding potential of this project (it can successfully reach mothers and infants with an integrated package of services and significant qualitative improvements are likely to occur in the project during the next few years), mechanisms for capturing the mortality effects of this project should be carefully reviewed and strengthened.

The broader role that this 2 district project can play is to provide vital insights into how the nationwide ICDS can be strengthened. Lessons learned here are applicable elsewhere and should begin to be applied on a larger scale. USAID can play an important role in this nationwide qualitative strengthening of ICDS. Such an expansion should begin with intensive exploratory work in one district of each new state to develop state specific models. The project in the states of Gujarat and Maharashtra should be ready to expand statewide in another 12 to 18 months, after a careful review of recurrent cost implications of the various activities.

Chapter 2: INTRODUCTION

The Integrated Child Development Services Project (No. 386-0476) is managed by the Nutrition Division of the Office of Health and Nutrition, USAID India and provides grant and loan assistance (DA funding) totalling $17.0 million to the Government of India.

USAID assistance to the ICDS program began in September 1983 in Panchmahals district of Gujarat and Chandrapur district of Maharashtra. The project is for a period of 7 years during which technical assistance, training, equipment, and financial assistance for other inputs are being provided.

The Project Paper states the goals and purposes as follows:

Goal

An average decline of 25% in the 0-12 months mortality rate and an average decline of 33% in the 13-36 months mortality rate in communities within six years after an anganwadi is established.

To accomplish this goal, the project will have the following subgoal:

Subgoal

An average reduction of 50% in the prevalence of severe malnutrition in children 0-36 months of age and of 35% in severe plus moderate malnutrition in communities within four years after an anganwadi is established.

To accomplish this subgoal, the project will have the following purposes:

Purposes

1. To expand and improve the ICDS program in 19 rural and tribal blocks by establishing approximately 4,000 anganwadis which regularly reach most at-risk pregnant and nursing women and moderately and severely malnourished children under 36 months of age with Title II foods through CARE, nutrition and health education, and selected health services.

2. To determine the technical feasibility and cost of improving the birth weights of children.

The main focus of this evaluation has been purpose number 1 above. Low birth weight research has only recently been started.

Project activities are summarized in Figure 2. In order to achieve qualitative improvements, the USAID assisted districts are expected to improve program management through better monitoring, supervision, training and staffing. Coverage rates for regular supplementary feeding of those at highest risk are expected to be around 85%. The quality of NHED is expected to be more effective and based on careful audience research; health services and food supplements at the AW levels are similar to national ICDS norms but expected to be more regular and with higher coverage rates.

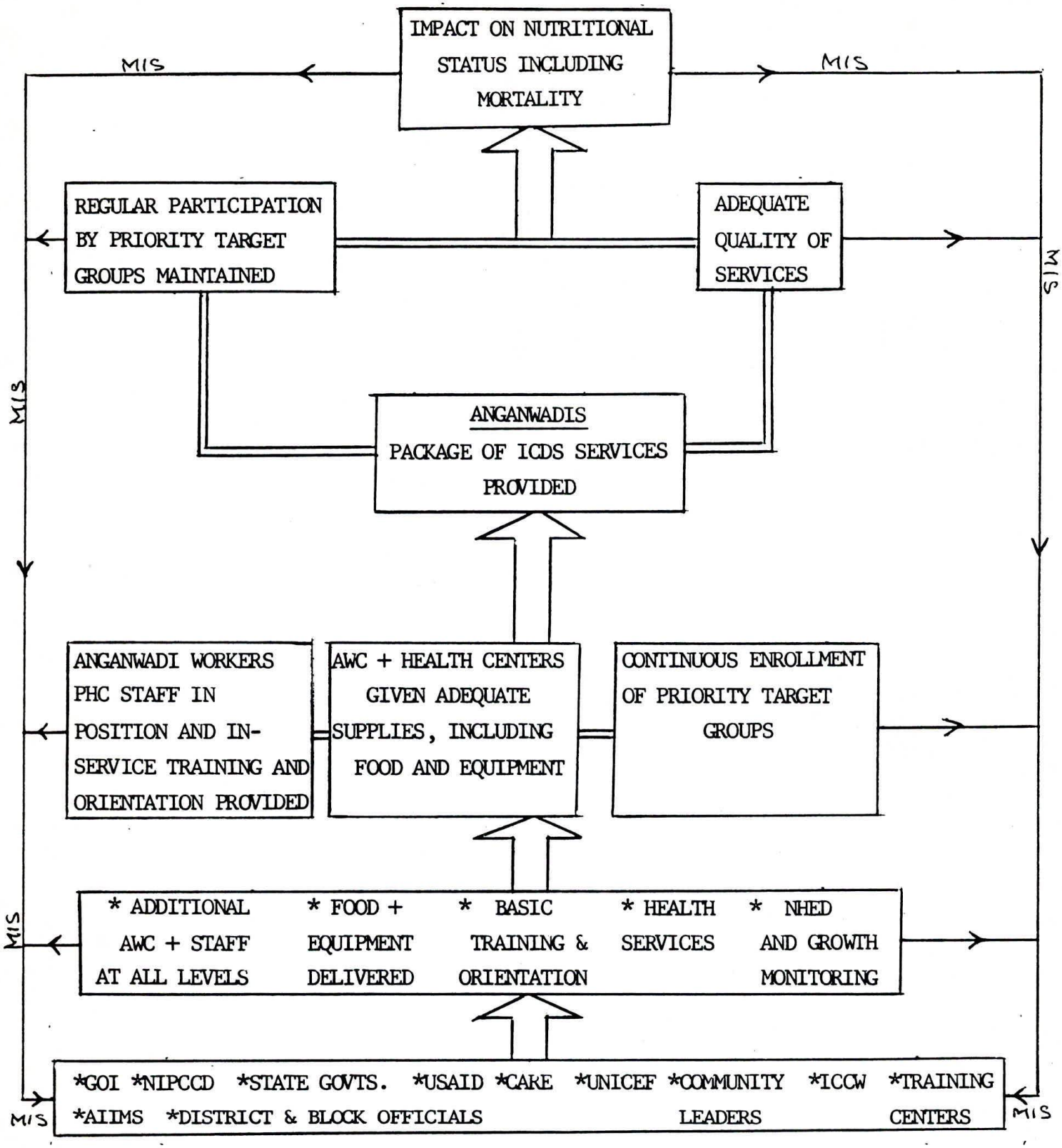


FIGURE 2. PROJECT ACTIVITIES AND KEY PARTICIPANTS

The project design in 1983 was based on the cumulative results of evaluations of supplementary feeding programs in India and abroad, including ICDS. The main focus of the project is improvement in the coverage of at-risk groups and better quality of services delivered, rather than any significant deviation in the standard ICDS program model. The project is concerned with making the present model of ICDS more cost-effective in reaching its goals rather than finding an alternative to the ICDS program.

The expected outcome of this project is the development and testing of district-wide operational ICDS activities in 2 districts of 2 states that could be replicated on a state-wide basis and potentially in other states as well. Assistance is therefore not limited solely to the 2 project districts but covers institutions and implementing units at national and state levels also.

Components identified for special USAID assistance are listed below:

- Establishment of functional anganwadis
- Supplementary feeding
- Communications or nutrition and health education
- Growth monitoring
- Management information system
- Staffing (managerial and technical)
- Training
- Innovative studies

(Health services, an important part of the ICDS package, were expected to be upgraded through USAID's IRHP project in Panchmahals.)

The nature and magnitude of USAID assistance provided for each component are given in Annex I

According to the scope of work provided to the team the "objective of this evaluation was to conduct a mid-project evaluation in order to assess the progress in achieving targets, outputs and purposes as specified in the ICDS Project Paper dated June 1983". It was not expected to be an evaluation of the project's impact on the target population, but rather a review of progress in completing various activities and an assessment of what is needed in the remaining project period to increase the likelihood of impact.

Other evaluation activities related to this project are regular programmatic feedback at AWC, block, district, state and central levels through the MIS component of the project and an independent evaluation of baseline, biannual and end-of-project impact ; it is the impact evaluation which will estimate changes in health and nutritional status, and knowledge, attitudes and practices of the target population.

The methodology used for this mid-project review is qualitative and process oriented; it is described in detail in the next chapter.

Chapter 3: EVALUATION METHODOLOGY

The scope of work for the evaluation can be seen in Annex V.

Qualitative techniques were the major methodology used for assessing qualitative aspects of the project. Statistics such as on enrollment of target groups and staff positions filled are also included.

Comparisons were made between baseline (1983) and now, USAID assisted and non-USAID assisted, and between good anganwadi (AWC) and poor AWC to determine what has been achieved and what remains to be done.

Work on the evaluation began in June 1986 with orientation of the team members, review of background documents and visits to U.S.-based consulting firms that provide the technical assistance to the program. Field visits were conducted during July, August and September.

Indicators

The process indicators given below were used as a guide to assess each major component.

- What is the potential coverage of the network of anganwadi centers? How many of the anganwadis are functioning (a fully equipped anganwadi having a trained worker in position and a regular supply of food commodities for 25 days of feeding per month)?

- Is there regular feeding of priority target groups? What proportion of severely malnourished children under 3 years and pregnant and nursing women receive a 600 calorie supplement at least 15 days per month?

- What proportion of mothers (pregnant, nursing or having children under 3 years) are reached with regular growth monitoring and NHED counselling delivered through home visits and group sessions?

- What proportion of functional anganwadi villages have the package of ICDS health services delivered on a regular basis for priority target groups (iron and folic acid for pregnant women, Vitamin A for children under 6 years, prenatal checkups and referral, immunizations for pregnant women and infants under 1, Oral Rehydration Therapy or ORT for diarrheal disease management)?

- To what extent are program management decisions based on accurate and regular information regarding relevant indicators?

- What proportion of blocks have adequate ICDS and health staff to implement and monitor program activities?

- What proportion of workers (AWW, supervisors, CDPOs, health staff) have adequate training and skills to implement specific project tasks assigned to them?

The indicators were based on the activities described in the USAID project paper.

The evaluation team consisted of an MIS expert, a pediatrician with expertise in community nutrition and training, and a public health nutritionist. All had extensive working experience in similar projects in India and overseas. They were accompanied by USAID staff and John Snow Inc. field officers throughout the study.

Site Selection

The total number of blocks and anganwadis in the project in each state and numbers selected for review are shown in Table 3.1 below:

3.1. SITES VISITED DURING EVALUATION

Units	Gujarat	Maharashtra	Total
DISTRICTS	PANCHMAHALS	CHANDRAPUR	2
BLOCKS			
TOTAL IN PROJECT	11	8	19
NO. VISITED	5	6	11
ANGANWADIS			
TOTAL WORKING AW	2278	1098	3376
NO. VISITED	26	21	47
NO. OF PRIMARY HEALTH CENTERS VISITED	4	3	7
TRAINING CENTERS			
AWTC(ANGANWADI WORKERS)	3	2	5
MLTC(SUPERVISORS)	1	1	2

Blocks visited in Panchmahals were Santrampur, Halol, Limkheda, Dahod and Godhra; in Chandrapur these were Warora, Mul, Gondpipri, Sindewahi, Chimur and Bhadravati.

In addition, team members also visited three control anganwadis for the purpose of comparison. These were located in Armori block in Garhchiroli district and Brahmapuri block in Chandrapur district and are not USAID assisted.

Criteria for site selection are given below:

Blocks were randomly selected after stratifying for rural and tribal.

To serve the purpose of estimating the level of project implementation, over half the AWC were randomly selected for surprise visits. To serve the purpose of recommending improvements in project implementation, some AWC were purposely selected for their good performance so that innovations made and experience gained at these AWC could be considered for replication.

Primary Health Centers (PHC) and Sub-Centers (SHC) were selected on the basis of their proximity to the AWC in the sample. Training sites included the centers which are providing supervisory and anganwadi level training to the two project districts.

Information gathering was done as follows:

Open-ended checklists were prepared for AWC visits and home visits. At AWC this included observation of activities in progress; food storage; verification of weighing, plotting and interpretation of charts; review of registers; interviews with AWW, helpers and supervisors. After completing each AWC visit, follow up home visits were made to 2-3 households. At the block level, interviews and group sessions were conducted with the CDPOs, ACDPOs, supervisors and PHC staff. Interviews were also conducted with district, state and central government staff.

Analysis:

Analysis of the information was done in the field by daily pooling of observations by team members followed by discussion and writing of conclusions. Statistical data were aggregated at the end of the field work.

Considerable discussion occurred in the field with CDPOs, supervisors, district and state level functionaries to obtain their input regarding the progress of the project and specifically to discuss our findings. The team felt that it was essential to obtain the viewpoints of individuals who are highly knowledgeable and experienced in this project, since the evaluation team had only a limited exposure to the project and its intricacies.

Analysis and conclusions regarding the current status of the project were based upon the following comparisons:

- Comparison of actual accomplishment with the estimated schedule of progress and targets given in the implementation plans developed at the start of the project in 1983. These are described in the USAID Project paper.

- Comparison of USAID assisted districts, blocks and AWC with non-USAID assisted areas.

- Comparison of the status of various components at the beginning of the project in the 2 districts as described in the USAID baseline report (Sengupta and Anderson, February 1984), with the present status.

- Differences between AWC that received more inputs compared with those that had not in the two project districts.

The recommendations were drafted to answer the following questions:

- Are the activities being implemented according to the original schedule and in the manner originally planned as given in the USAID Project Paper? If not, why? How can they be improved?

- Have we learned anything new either about operational difficulties in implementing certain activities or the nutrition, health and socio-economic conditions of the target populations that would alter the schedule or nature of project plans for the remaining duration of the project?

- In the remaining duration of the project what activities should receive priority emphasis?

Chapter 4: FINDINGS AND RECOMMENDATIONS

4.1 FUNCTIONAL ANGANWADIS

There is no more powerful mechanism in India today for reaching mothers and children at the household level than the network of ICDS anganwadi centers. The presence of an anganwadi with a trained worker in position and sufficient equipment and supplies for continuous enrollment, monitoring and food distribution is considered an important first step. Once this infrastructure is in place at the grass roots level, the channelling of other services and qualitative improvements become possible.

Coverage

In Chandrapur district of Maharashtra there are at present 1,096 AWC with trained workers in position, covering an estimated population of 811,422 (using an average AWC population of 739 per the project Baseline Survey). Compared with the 1981 census population of Chandrapur, estimated at 1,303,110, the network of AWC functioning in Chandrapur district cover approximately 62% of the total population. An additional 317 AWC have recently been sanctioned in this district for which the GOI has requested USAID assistance.

In Panchmahals district an estimated population of 1,551,318 or 67% out of a total district population of 2,321,689 is being covered by the network of 2,064 anganwadis having trained AWW in position.

The uncovered population is thought to be primarily urban in nature and therefore not within the purview of this project.

In all, the estimated current size of the population presently covered by the USAID-assisted ICDS project is 2.4 million.

Anganwadi centers are sanctioned on the basis of 1:1000 rural population and 1:700 tribal population. In this project, census data were used to requisition a sufficient number of AWC to meet these guidelines. By the end of the project, there are expected to be a total of 1,432 AWC in Chandrapur and 2,729 in Panchmahals to cover all the rural and tribal population of both districts. See Figure 3.

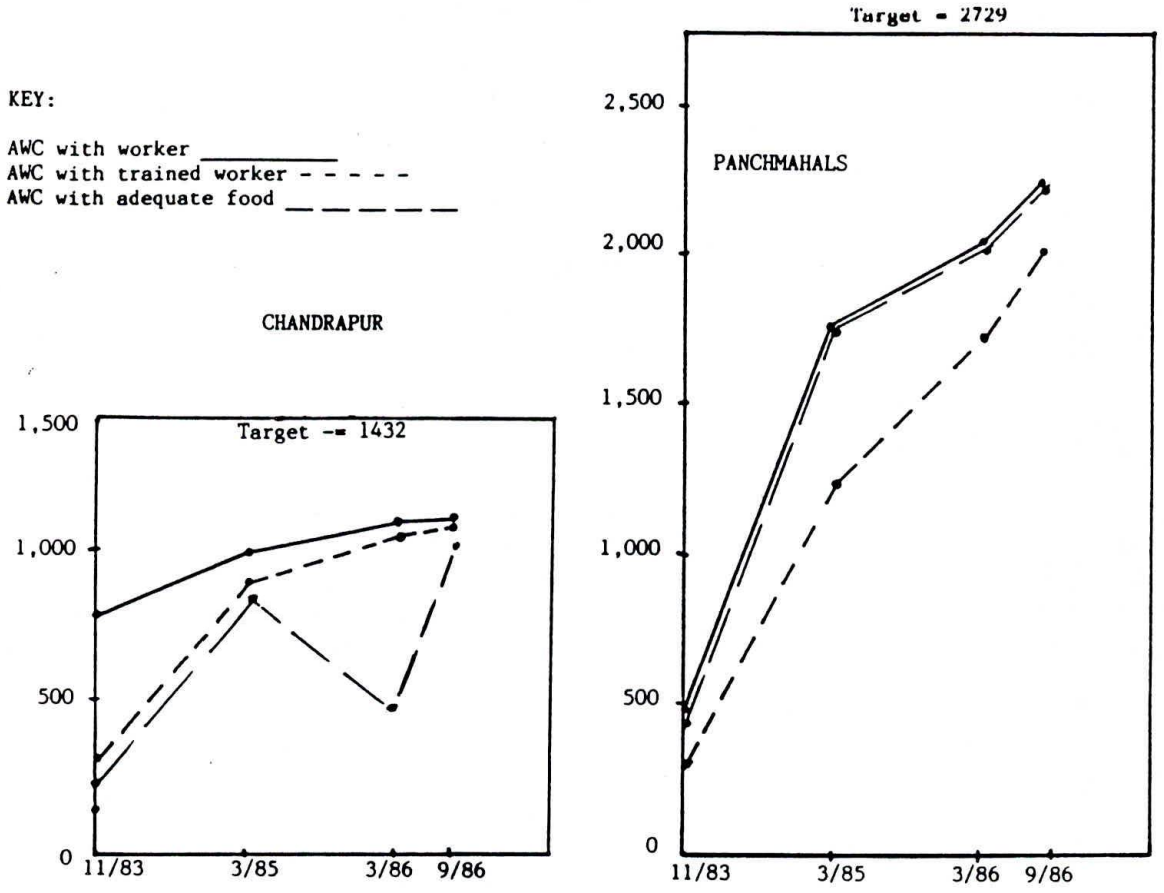


Figure 3. FUNCTIONAL AWC

2. Food Supplies

Uninterrupted food supplies sufficient for 25 days of feeding per month are a pre-requisite for considering an AWC "functional."

According to the project design two different food delivery systems and products are used in the two project districts. See Figure 4 below.

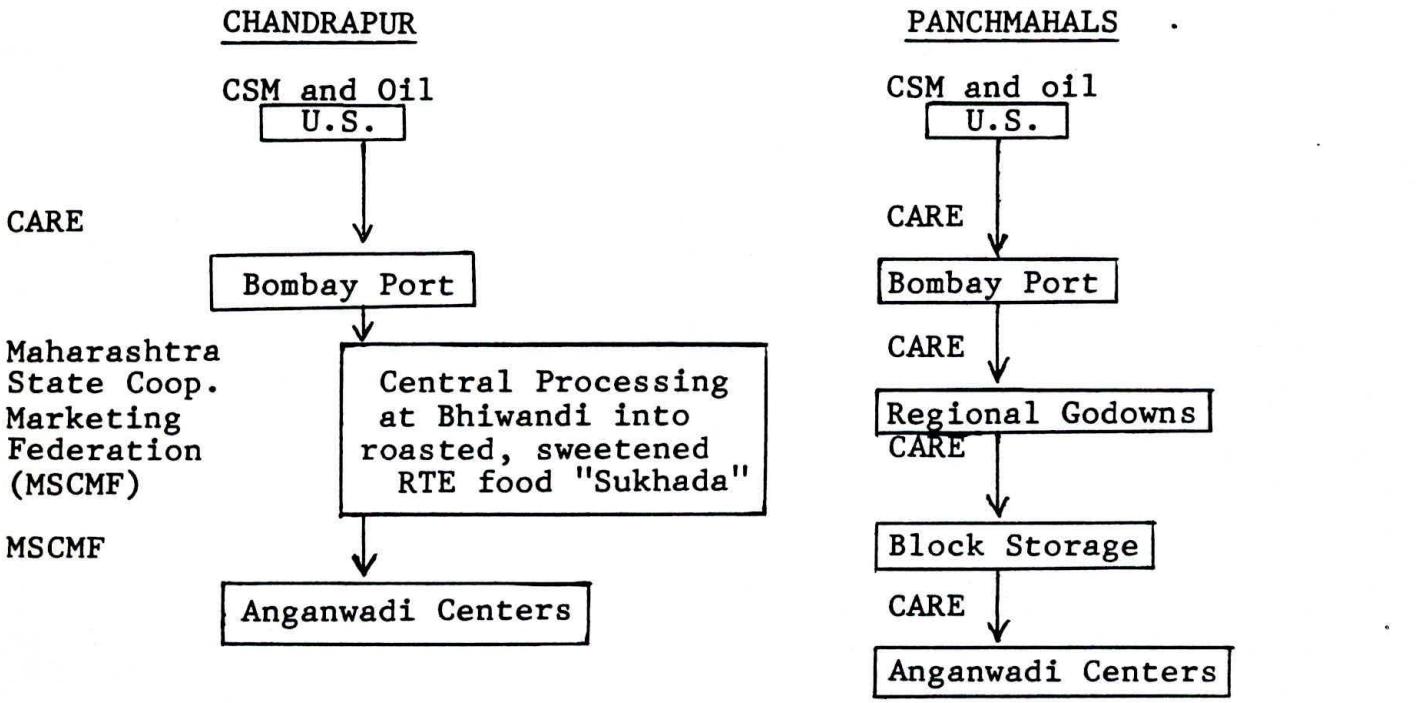


FIGURE 4: FOOD DISTRIBUTION CHANNELS

Recommendations

1. An AWC cannot become truly functional without a system of identification and enrollment of the priority target groups. In both districts, the number of households surveyed and resurveyed on a quarterly basis appeared to be well below projected levels. A systematic and focussed community census survey one or more times a year combined with provision for continuous enrollment of newly eligible individuals throughout the year needs to developed and disseminated through in-service training and supervision.

2. The definition of a functional AW should be upgraded to reflect qualitative aspects of the program now that a basic minimum infrastructure is in position. Perhaps another term, such as "operational AW," can be used to distinguish these characteristics from the current ones. The revised definition should include the following types of criteria:

- A continuous enrollment mechanism in place aimed at 100% enrollment of pregnant and nursing women and children under 3 years of age in the program at all times.

- Monthly NHED including growth monitoring conducted with at least 85% of the mothers of children under 3 years of age; NHED given to 85% of pregnant and nursing women.

- At least 85% of pregnant and nursing women and high risk children under 3 years of age receive 15 days of feeding per month.

- At least 85% of pregnant women and children under 3 years of age maintain full immunization coverage, full iron & folic acid coverage and twice annual Vitamin A coverage as given in the ICDS guidelines.

3. In order to operationalize the guidelines for the delivery of services annual plans of operation for AWC to follow in each of the districts should be developed. These plans can be geared to achieving coverage targets in the project such as the ones listed in point number 1 above.

As a first step, it is recommended that a standard approach and format for community enumeration surveys be instituted in both districts. Accurate estimates of number of women and children to be covered, food supplies required, and scheduling of health services will all depend on complete and rigorously updated enrollment of eligibles.

For planning and illustration purposes, targets for ICDS enrollment and coverage have been calculated in Tables 4-1 through 4-4. These are average figures per AWC based on estimates derived from the population distribution actually observed for the various beneficiary categories during the baseline survey conducted in Panchmahals and Chandrapur.

Each AWC should develop its own targets of enrollment and coverage based on community surveys. These should be updated continuously as beneficiaries enter and exit per eligibility criteria.

Table 4-1 ICDS Program Enrollment Targets
(Average per AWC)

Category	Panchmahals		Chandrapur	
Average Population per AWC	681	(% pop.)	739	(% pop.)
1. 0-3 years old	73	(11%)	61	(8%)
2. 3-6 years old	47	(7%)	45	(6%)
3a. Pregnant Women (3-9 months)	13	(2%)	12	(1.7%)
b. Nursing Women (0-6 months)	13	(2%)	12	(1.7%)
TOTAL	146	(22%)	130	(17.4%)

Table 4-2 Enrollment Targets for Daily Food Distribution
(Average per AWC)

Category	Panchmahals		Chandrapur	
1. 6-36 months total per AWC	60		49	
Severely Malnourished (% total)	9	(14%)	8	(16%)
Moderately Malnourished (% total)	19	(32%)	17	(35%)
2. 37-72 months	47		45	
3. Pregnant and Nursing Women	26		25	
TOTAL	101		95	

NOTE: If the remaining 6-36 month old children are also enrolled (because they are all estimated to be at high risk of malnutrition based on socioeconomic criteria), then the total enrollment for food distribution would be 133 in Panchmahals and 114 in Chandrapur.

TABLE 4.3 TARGETS FOR DAILY RATIONS DISTRIBUTED

(Daily attendance assumed to be 85% of enrollments shown in Table 4.3)

Category	Ration Size (Calories)	Average No. 300 Calories Rations per AWC	
		Panchmahals	Chandrapur
1. 6-36 months			
severely malnourished	600	15	14
moderately malnourished	300	16	14
2. 37 - 72 months	300	40	38
3. Pregnant and Nursing Women	600	44	41
TOTAL		115	107

If the remaining children 6-36 months of age, who are all at high risk of becoming malnourished are also enrolled then the number of rations targetted for daily distribution would be 143 for Panchmahals and 127 for Chandrapur.

TABLE 4.4 RECOMMENDED TARGETS FOR OTHER SERVICES

(AVERAGE PER AWC)

Category	Panchmahals	Chandrapur
1. Growth Monitoring with NHED		
Monthly (0-36 months)	73	61
Quarterly (36-72 months)	47	45
2. Immunizations		
DPT, Polio, BDG, measles (0-12 months)	26	24
TT (Pregnant Women)		
Vitamin A		
6 months - 72 months	107	94
Nursing women	13	12
4. Iron and Folic Acid		
Pregnant and Nursing Women	26	24
5. Preschool Education	47	45

To meet enrollment and coverage targets, annual working schedules of all ICDS activities should be developed for AWC, circles, blocks and districts. Activities such as community orientations, periodic monitoring and evaluation meetings with all key personnel, immunization and Vitamin A campaigns, ORT campaigns, should be scheduled for the year. Other activities need to be done on a regular (daily or weekly basis) and would be expected to continue. The order, frequency, and focus given to specific task-oriented, in service training and orientation modules as well as the content and intensity of communications efforts should be consistent with this overall annual plan of operations. District officials such as the CEO, DDO, DHO, DPO, and block officials, selected Mukhya Sevikas and USAID/JSI field officers should participate in this process. Much experience has accumulated among these district and block staff on operational issues including food and equipment delivery systems, coordination, integration and administrative and financial arrangements at the field level. ICDS sponsors including USAID and state governments will need to strengthen their district level ICDS teams presently in position to provide adequate technical and logistical support for such an approach to produce results. State government departments of finance and nodal (substantive) departments will need to provide adequate support.

This type of approach could help reduce the ad hoc nature of the current activities in the field. It should be appreciated that the ad hoc nature of current activities was necessitated due to implementation and staffing delays. The project managers made the correct decision to proceed with some key training and orientation activities in the interim. The relatively short period of time now remaining in the project (2 years before final impact evaluation is to begin) makes it urgent that field level operations be launched on a systematic and thorough scale.

Some of these interim activities such as training in weighing and plotting of growth charts and innovations in MIS can serve as excellent pilot tests for guiding the development of a more systematic plan of operations. For example, a modular format for training and a hands-on method of training AWW and MS (including intensive AWC level followup) used for growth monitoring has been effective. A similar approach can be used for other components such as how to conduct enrollment activities, how to effectively undertake NHED with mothers in groups at the time of weighing and in home visits, how to accomplish

community rapport building and participation, how to maintain and use information records (MIS).

4. In Chandrapur district, additional efforts need to be made to ensure a more regular supply of food. These may include the following:

- Intensify block and AWC monitoring of food deliveries by CDPOs and CARE field officers, so that corrective action can be taken immediately. In the present system, AW level receipts are submitted at the end of the month - too late for action to be taken. Establishment of block level buffer stocks may be necessary.

- Improve system of accountability by trucking contractors and secondary distributors. Use AWW signatures as evidence of receipt.

- Provide additional stocks for the rainy season along with better AW storage facilities.

- Add an inner lining to the present packaging of single layer, woven, high density polythene bags.

5. Equipment short falls should be remedied including food distribution measuring devices to standardize ration sizes in Panchmahals and child weighing scales in Chimur and Rajura blocks of Chandrapur. Philips screwdrivers and instructions for their use should be provided to all AWC for taring the bar scales.

4.2 SUPPLEMENTARY FEEDING

According to Title II guidelines on the selection and utilization of food commodities, there are two major functions that food inputs can perform:

- as wages or an economic incentive to increase participation in development activities including utilization of educational, health, infrastructure building programs, and

- as a source of supplementary nutrition to increase nutrient intakes above current levels so that malnutrition is prevented.

This project is designed to provide a regular supply of supplementary calories and nutrients to improve the nutritional status of at-risk pregnant and nursing women and children under 6 years through a daily food ration distributed at AWC. USAID assistance is specifically provided to achieve high coverage of pregnant and nursing women and malnourished 6-36 months old children with supplementary nutrition. In 1983, estimates were made for planning purposes as shown in Table 4.5. See revised estimates based on actual figures from the baseline survey in Tables 4.2 and 4.3 above.

Table 4.5: Estimated Number of Beneficiaries and Ration Energy and Protein Requirements for Average Rural and Tribal Anganwadis

(Table 6 of Annex 7 in the PP)

Beneficiary group	Kcal	Protein (g)	100% Coverage of Target Group		85% Coverage of Target Group	
			Rural	Tribal	Rural	Tribal
At-risk Pregnant Women(last 4 mos)	500-600	16-24	9	6	8	6
At-risk Nursing Women(first 6 mos)	500-600	16-24	11	8	10	7
Severely malnourished (36 months)	600	16-24	13	9	11	8
Moderately malnourished (36 months)	300	8-12	21	15	19	13
Preschool(32-72 mos)	300	8-12	40	28	34	24
Total Beneficiaries			94	66	82	58
Total Ration Units of 300 Kcal			127	89	111	79

Tribal AWC = 700 population
Rural AWC = 1000 population

The emphasis at the design phase of this project was on the supplementary nutrition functions of the food component. The team found that an equal or more important role being played by the food is its incentive effect. This incentive role needs to be strengthened and use made of the frequent (though not daily) presence of mothers and children through adding on NHED and health inputs at the AWC. Also see Annex I.

Increased Enrollment and Selection for Feeding.

A mechanism to continuously identify and maintain high enrollments of priority target groups for feeding is considered essential to bring about project impact. Quarterly community surveys were designed to accomplish this.

NOTE: Enrollment mechanisms are needed not only for information on the food component but for every other service to be delivered under ICDS. It has therefore been dealt with under the functional AWC and MIS components also. See sections 4.1 and 4.6.

In both districts, rather than conducting formal enrollment surveys every 3 months, some AWC add new eligible participants such as new-borns and newly identified pregnancies. Some AWC use the system of daily home visits to complete community surveys over a period of 3 months. There is little uniformity in methodology or recording formats, making the tasks of monitoring and quality control of this activity difficult.

There is some confusion regarding criteria for selection for feeding. In some AWC, all pregnant and nursing women are considered eligible, in others, some are excluded arbitrarily or because they opted not to participate. For children, selection criteria were reported to be weight for age grades II, III & IV or III & IV or red zone (arm circumference) or red & yellow zone (arm circumference), or physical disabilities or low income families.

In Panchmahals, AWW have been instructed to continuously add newborns and newly identified pregnancies. There was confusion regarding beneficiary selection for feeding due to the different types of criteria proposed. These are arm circumference and weight measurement superimposed on socio economic status criteria. Within the subject of weight measurement, the use of declining or flat curves are confused with grades of malnutrition.

Regular Attendance

The project calls for developing an effective system of monitoring the attendance of each individual beneficiary in the high risk category. The objective is to encourage attendance for at least 15 days feeding out of a possible 25 days per person monthly. The evaluation team found several malnourished children who did not receive the food regularly in both districts.

In Chandrapur, the daily attendance registers are generally complete but the accuracy of the information is questionable. In not even 1 AWC visited did the team observe the attendance register being tallied with the individuals given food at the time of food distribution. In Panchmahals in 2 out of 26 AWW visited the worker was identifying and correctly marking individual attendance at the time of feeding.

In general regular attendance particularly of pregnant women and children under 2 years appears to be far below expected levels. Reasons include: AWC not considered a place for women to convene but rather a children's center; women feel inhibited to consume food there. The urgency for supplementing diets during pregnancy and of younger children on a regular basis is not known. Logistics and time constraints of daily walking, carrying of children and spending time at AWC is considered a constraint .

In tribal villages where homesteads are scattered, this is particularly troublesome. Most workers appear to fill in the attendance at the end of the day after distribution is over and there are likely to be errors in their recall of exactly who was present that day. Special activities to encourage better attendance by priority groups such as use of incentives to dais, AWW and helpers have not yet started. Anganwadi workers (AWW) are aware of the need for home visits to increase participation but this is not done systematically as a satisfactory mechanism for tracking defaulters is not yet in place.

Given the constraints in daily on-site feeding experienced by priority target groups, innovative approaches to increasing their intake of the ration as well as home foods need to be explored. The newly designed NHED component, formulating a special mothers food and larger take home rations are some of the alternatives.

Recommendations

1. An effective NHED component can greatly increase the effectiveness of the food component by increasing motivation to attend regularly and by promoting use of home foods in conjunction with distributed foods to yield a higher cumulative level of nutrient intake, significant enough to make a measurable impact on nutritional status.

2. The team concluded that the incentive role of the food component may be a highly significant one for the achievement of project goals. However, the potential for frequent NHED sessions with mothers and the delivery and monitoring of health services at AWC, that would make the incentive worthwhile are yet to be realized. Project plans for launching NHED activities early should go forward as planned. More effective delivery of health inputs should be sought to make the investment in food worthwhile.

3. The NHED component should also emphasize increasing home food intakes (not only the distributed food). Since small children need frequent feedings, which is not possible at AWC, this combined (home plus AWC) approach may be more effective. However, a small amount of a food consumed by infants, young children and mothers could be an important supplement if it contains a high caloric and protein density, high protein quality and vitamins and minerals, to complement home diets that are typically bulky and of low nutrient density and quality. The role of Title II food can be even more effective as an incentive to draw women together for NHED and as a demonstration and endorsement that the food is important for these target groups and for maintaining child growth.

4. The potential for improving intakes during pregnancy through special mothers' food should be explored on a large scale as soon as possible.

5. With reference to the RTE plants, the packaging of Sukhada in Chandrapur, in the newly established plant should include a plastic liner inside the woven bags. The potential for marketing of a commercially viable line of weaning and mothers food products should be determined through test- marketing. This could be an important source of recovering recurrent costs and could help boost the image of the subsidized/free products.

   Provision should be made for varying end-products so that monotony and lower acceptability are avoided.

6. USAID and CARE should schedule a separate review of the role of indigenous food grain in India's supplementary feeding programs (including ICDS). There is a sustained track record of the country having achieved levels of foodgrains production in excess of effective demand; on the other hand a substantial proportion of the population continues to consume calories far below physiological needs. How can USAID and CARE with their decades of experience and management expertise in food delivery systems help mobilize this "excess" food supply to benefit those who cannot afford to buy or retain the food being produced?

4.3 NUTRITION AND HEALTH EDUCATION (NHED) AND COMMUNICATIONS

According to ICDS guidelines, the AWW and MS are key entry points in delivering face-to-face NHED to mothers as the primary target audience for improving nutrition and health behaviors. Other members of the household including older siblings, grandparents and dais constitute an important secondary audience.

USAID assistance was initially designed to establish better mechanisms for adapting and using existing NHED materials. See Annex 1 part B on specific activities scheduled under the USAID-assisted ICDS project.

Use of Social Marketing Techniques

The design of NHED was significantly strengthened in 1985 by the addition of a more detailed operational plan to improve NHED which is based on the use of "social marketing" techniques. This means that instead of the NHED intervention relying largely on existing materials with pretesting and adaptation, there would be a special effort to base the NHED activities on the needs and perceptions of the target audience. Other key aspects of social marketing particularly relevant to the objectives of this project include:

Use of multiple channels of communication to reinforce messages and reach a critical mass of target audiences.

Using a differentiated set of messages and media based on different needs and perceptions of segments within the target audience (rather than assuming that one approach will be effective for everyone).

In order to motivate mothers to change, create an awareness that children are not growing well in a visible way (through growth monitoring) and use of good growth and other culturally appreciated outcomes as a reward or reinforcement for good behavior.

Implementation Schedule

The NHED component in its original form (1983) has not been implemented mainly because of a lack of government counterparts and delayed arrival of the long-term advisor. A more detailed operational plan was developed by Griffiths and Lissance of Manoff International in 1985. This new plan has been implemented successfully and almost exactly on schedule under the direction of the JSI Training/NHED Advisor. Field level NHED services will be launched in the form of a campaign in early 1987. This timing is appropriate since it will mark the launching of the qualitative improvement phase of the project which has so far focussed on development of infrastructure. See Figure 5 for the activities and their implementation schedule.

Role of Private Sector

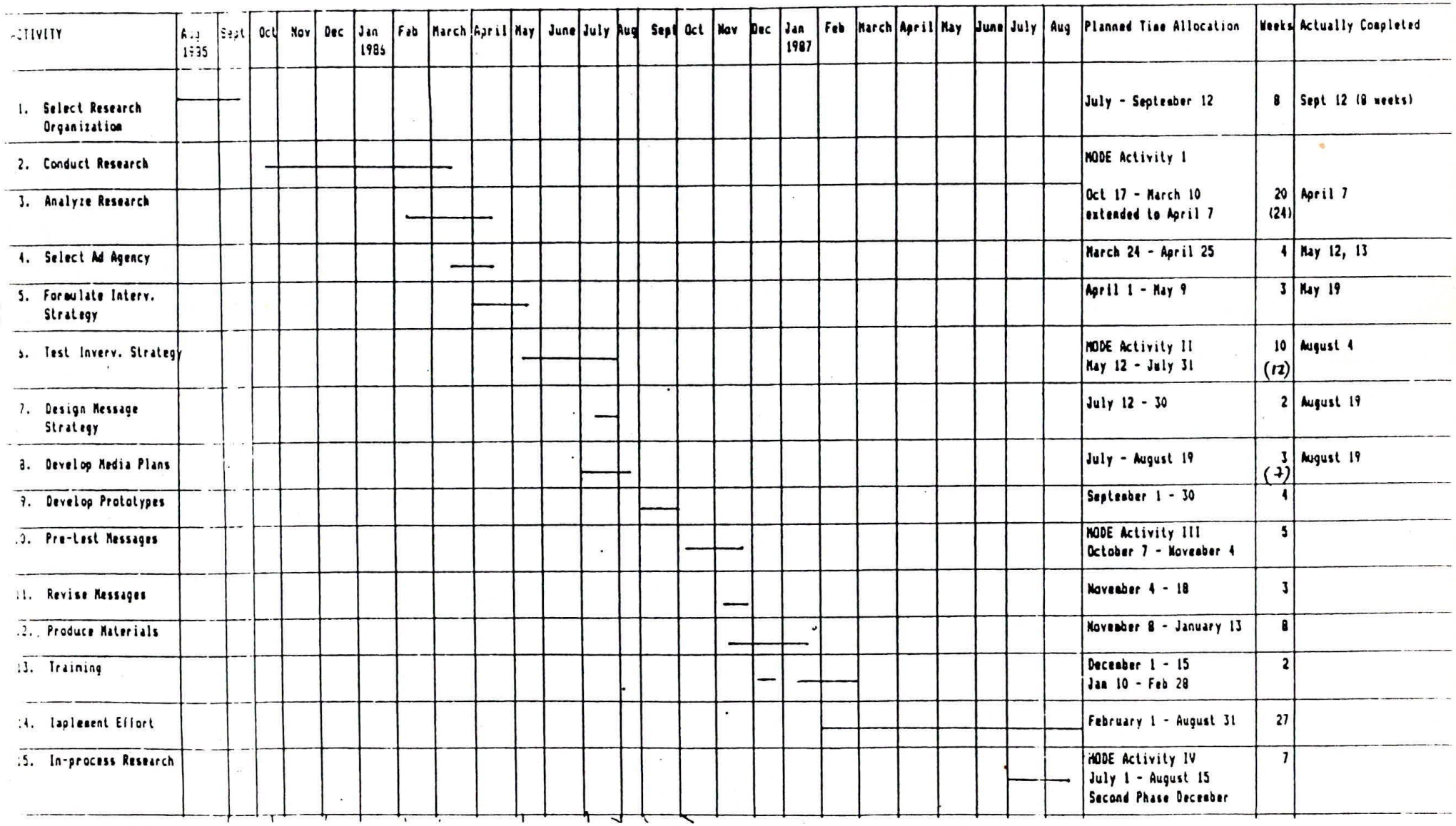
One of the unique strengths of this project has been the contracting of private sector market research (MODE) and advertising firms (ULKA) directly by the government. This is not only enabling the use of additional technical resources of high caliber but is also helping build confidence and mutual respect for longer-term public-private sector cooperation.

Selection of Themes or Subjects Areas

In the 1985 plan of operations for this component, the range of possible themes that could be treated was reduced to ones dealing most directly with feeding practices. ICDS encompasses a broad range of services and expected target audience behaviors. In general, the selection of themes has followed the focus of the USAID project which is increased food intake. Ideally, the criteria for selection should also include - the ability of a set of behaviors, subject area or theme to have the maximum impact in terms of stated project goals, mortality and growth. It is not clear for example, whether specific analysis of the major health and feeding behaviors linked to flattening and declining growth was done for this purpose. This process might have helped limit the large number of themes and possible messages that are still being considered. For example, has the use or rejection of colostrum been shown to be a critical behavior? In general growth curves of Indian children parallel international growth norms up to 4-6 months of age.

FIGURE 5: FLOW CHART OF NHED SOCIAL MARKETING COMPONENT FOR ICDS (USAID - ASSISTED)

(1985 - 1987)



The set of feeding and health behaviors at the weaning age should be given highest priority. This should include the frequent bouts of diarrheal disease experienced, the mothers usual response to diarrhea, reinforcement of ORT and feeding after diarrhea. The review team strongly endorses the current emphasis on increasing food intake during pregnancy.

Intervention Trials and Identification of Resistance Points

This step in the development of NHED has been a valuable one for the project overall. For example it has identified two potential entry points in one of the traditionally more difficult problems in ICDS, which is, the low participation of pregnant women. These points are:

- The development of a convenience food with an image of "mothers' food". If flavored with herbs and spices preferred in pregnancy, packed in daily ration sizes, made available at an appropriate time (e.g. before she goes to the fields for work) or given once weekly it appears likely to be eaten by women.

- Use of AWC to distribute iron and folic acid tablets considered "strength giving tablets" for pregnant women. This has been shown to enhance the image of AWC and AWW as providing services for women and also ensures a better coverage.

A spin off benefit of the focus group discusssions held for audience research in the project area was the discovery that participatory group discussions with nursing mothers, (preferably with infants under 6 months), is an excellent NHED forum for consensus building and motivation regarding topics such as age at introduction of semi solid foods, ORT, immunization and growth monitoring. However, AWW and MS need specific training as facilitators.

Use of Growth Monitoring to Integrate Services

The review team is optimistic about the role of growth monitoring as a tool for integrating health and nutrition services, for monitoring their coverage and for facilitating behavior change. The infrastructure is already in place for weighing, plotting, interpreting and counselling to occur on a large scale in project sites.The qualitative improvements possible with relatively low
cost training modules were demonstrated by the first attempts (made in March 1986) at systematically teaching AWW and MS to weigh, plot and interpret correctly.

One of the strengths of this project is its success so far in enrolling 2 to 3 month old infants in this activity. Firstly, this early access greatly enhances the potential use of growth monitoring as a tool to also monitor immunizations and ORT. Both are key services that must be in position before the child reaches 4-5 months when the cycle of diarrhea and malnutrition begins and when immunization coverage rates (e.g. for second and third doses of DPT and Polio) tend to drop. Secondly, errors in estimating ages are least during the first few months. Thirdly, the team also found repeated instances where, in the absence of a clear understanding of printed growth channels and grades of malnutrition, the AWW and mothers were using the early successful growth performance of young infants to detect a decline or flattening of the curve in the same infant. This was clearly perceived as a crisis and trigger for action by AWW and mothers.

Present plans to provide growth charts to mothers that can be kept at home are essential for maximizing cost effectiveness of this activity. Integration with other services can be achieved only if PHC and AW staff use the charts to record immunizations and track ORT use. Other projects have also used home based charts to track referrals and as referral cards. PHC staff should also be able to weigh, plot, and interpret charts.

Expanding the Role of Communications

The evaluation team found a visible difference in the clearer understanding of the nutrition and health objectives of the ICDS program in USAID assisted sites compared with non USAID sites. However, there is a lot more work that needs to be done in clarifying what services are available, who the priority target groups are and why, roles and responsibilities and expected outcomes. There is a need for communications techniques to be used for the purpose of standardizing and reinforcing messages about the program itself and its workers. These tools can also be useful in maintaining the motivation and knowledge of staff in between training activities. The use of printed material (e.g. monthly newsletters) has already been started in Gujarat. The better use of these existing channels and other avenues needs to be explored.

Coordinating Demand and Supply

A common problem in communication activities is the finely tuned coordination needed to ensure that when demand is created through successful communications, the services and supplies should be in position. This concern is particularly relevant in this project as the evaluation team has found inconsistencies and disruptions in AWC timings, availability of AWW and in supplies of food, iron and folic acid, Vitamin A. The NHED campaign is scheduled for launch in early 1987, therefore services and supplies will need urgent attention.

Recommendations

1. NHED activities should be eventually broadened to include the use of social marketing and communication techniques for informing, motivating and maintaining skills of ICDS program functionaries from the ministerial to the village level. The program, its village level functionaries and services need to be promoted along with good nutrition and health behavior.

2. There is an immediate need for the growth monitoring counselling component, as weighing and plotting are underway on a large scale. However the cost factor of the proposed modules and materials should be carefully reconsidered to assure replicability.

3. Given the important contributions of diarrhea and measles to mortality and growth failure in the 2 project areas, more communications activities related to these health problems are needed than are planned at present. Communication activities related to immunizations during the Universal Immunization Program (UIP) year in the 2 project districts but especially in subsequent years (as interest at the top moves on to other districts and immunization activity may slacken) should be coordinated with the work of PHCs. Important lessons can be learned from CARE's ORT campaign in Panchmahals. A continued and expanded role for CARE in both districts for the ORT component should be considered.

4. One of the keys to the success of social marketing approaches lies in their emphasis on early feedback and quick response to problems after a campaign is launched. Mechanisms need to be developed in this project for feedback and mid-course correction through rapid assessments early during implementation in view of the early launch date.

5. The absence of sufficient state and district level counterparts has led to little ownership or understanding of NHED design process so far. Special efforts and time should be devoted to filling this critical gap.

6. State clearinghouses need to be developed according to original plans to make sure that existing materials are not excluded. Important training texts developed at central levels or in other states need to be translated and adapted on a continuing basis.

4.4 HEALTH SERVICES

It is crucial for the success of ICDS, that a well staffed health care delivery system provide supportive services to reduce morbidity and mortality in children under 6 years of age and post natal care for women. The level of support available from the health sector in both the states shows a mixed picture. Before analyzing the health care support, one should take into consideration the remoteness of the districts, the lack of communication facilities and unwillingness of qualified staff to be posted in such remote areas.

The staff in place at the various health centers in both districts were stated to be adequate per required number during interviews conducted both at the district level as well as the block level. Tables 4.6 and 4.7 show the latest position regarding health staff at Chandrapur and Panchmahals districts.

An analysis of the health staff position in both districts indicates that only 54% of the medical officers were in position in Chandrapur and 67% in Panchmahals. However, 84% of the ANMs were in position in Chandrapur and 85% in Panchmahals, which come very close to the target of 90% filled ANM posts recommended in the USAID Project Paper which is crucial to assure delivery of the health services component of ICDS.

Recommendations

1. Additional resources, through the USAID ICDS project, should be set aside for health inputs. This will be more effective than relying on a different project (possibly also USAID) which may not be synchronized in its schedule or be able to coordinate well with the ICDS infrastructure in order to give the priority needed to strengthen health services in the two districts in the next three years.

TABLE 4.6

SELECTED HEALTH STAFF POSITION IN ELEVEN ICDS TALUKAS OF PANCHMAHALS - (JUNE 1986)

NAME OF BLOCK	NO. OF PHCs	MEDICAL OFFICER SANCTIONED	MEDICAL OFFICER FILLED	%	HEALTH ASST (F) (LHV + FHS) SANCTIONED	HEALTH ASST (F) (LHV + FHS) FILLED	%	HEALTH WORKER (F) (ANM + FHW) SANCTIONED	HEALTH WORKER (F) (ANM + FHW) FILLED	%	CHV SANCTIONED	CHV FILLED	%	DAIS SANCTIONED	DAIS FILLED	%
1. DAHOD	3	9	6	(67)	19	16	(95)	84	69	(82)	225	225	(100)	229		
2. JHALOD	3	9	5	(56)	17	15	(88)	72	59	(82)	194	196	(101)	230		
3. SANTRAMPUR	4	12	6	(50)	27	15	(56)	118	104	(88)	304	304	(100)	315		
4. DEVGARHBARIA	3	9	7	(78)	23	22	(96)	103	87	(84)	305	296	(97)	209		
5. LIMKHEDA	3	9	6	(67)	19	16	(75)	80	54	(68)	226	217	(96)	178		
6. SEHERA	1	3	2	(67)	8	6	(75)	34	31	(91)	140	140	(100)	113		
7. LUNAWADA	2	4	3	(75)	11	9	(82)	52	50	(96)	237	224	(95)	178		
8. JAMBUGHODA	1	3	2	(67)	3	2	(67)	8	6	(75)	25	39	(156)	64		
9. HALOL	1	3	3	(100)	7	6	(71)	34	26	(84)	135	135	(100)	196		
10. KALOL	1	3	3	(100)	7	6	(86)	34	31	(91)	137	147	(107)	118		
11. GODHRA	2	6	4	(67)	17	14	(82)	81	75	(93)	240	243	(101)	262		
TOTAL	24	70	47	(67)	158	130	(82)	697	592	(85)	2,168	2,166	(100)	2,092		

INFORMATION NOT AVAILABLE

TABLE 4.7

HEALTH STAFF POSITION AT CHANDRAPUR DISTRICT - SEPTEMBER 1986

NAME OF THE BLOCK	NO. OF PHC	MED. OFFICERS SANCTIONED	MED. OFFICERS FILLED	LHV SANCTIONED	LHV FILLED	ANM SANCTIONED	ANM FILLED	CHV SANCTIONED	CHV FILLED	DAI SANCTIONED	DAI FILLED
CHANDRAPUR	7	14	7	12	12	32	27	202	202	159	159
MUL	8	16	10	14	13	33	33	173	173	174	174
GONDPIPRI	4	8	3	9	9	26	24	154	154	150	150
CHIMUR	5	10	7	11	11	35	29	150	150	141	141
KALOL	4	8	4	8	7	33	22	141	141	165	165
BHADRAWATI	5	10	6	10	9	33	25	146	146	151	151
SINDEWAHI	6	12	7	11	9	30	27	162	162	165	165
NAGHBHID	5	10	5	10	10	30	24	119	119	163	163
BRAHMAPUR	6	12	5	9	7	32	26	141	141	157	157
RAJURA	8	16	9	18	18	52	44	196	196	241	241
TOTAL	58	116	63 (54%)	112	105 (93%)	336	281 (84%)	1,584	1,584	1,733	1,733

2. Specific training and responsibilities should be assigned to PHC staff and district health staff regarding their ICDS villages. These could include targets based on AWW household surveys with respect to immunizations, ORT training and referral, iron and folic acid distribution and Vitamin A distribution. The District Development Officer (DDO Gujarat) and Chief Executive Officer (CEO Maharashtra) could monitor these targets at quarterly or monthly reviews.

3. Village allocations made to PHC staff (LHV and ANM) should be made conterminous with those anganwadis assigned to the ICDS Mukhya Sevika. In other words their circles or sectors should be made one and the same. Joint tour programs should be developed for MO and CDPO as well as MS and LHVs or ANMs. In one PHC, the medical officer had set aside one day per week for ICDS activities in ICDS villages.

4. Home based growth charts for children with immunization, ORT use and Vitamin A recording to be done by AWWs should be introduced. Mothers' referral cards should be developed and used to record prenatal check-ups for risk assessment, intake of iron/folic acid, and tetanus toxoid immunization.

5. Special and immediate provisions for the cold chain, especially from PHC to village, should be made to assure effective immunizations. Both districts are UIP districts this year and the need is urgent.

6. The NHED activities should promote immunization in coordination with UIP activities. The project should be prepared to pick up some slack during the post UIP - initiation years as motivation and activity levels may slacken.

7. A scheduling and supply system for iron/folic acid and Vitamin A needs to be designed to see if unusual or additional procurement is needed, based on actual household survey data. If distribution is done by the AWW, then estimates should be based on high rather than low coverage. The NHED campaign should launch iron/folic acid promotion messages only after AWC are fully stocked.

8. There is a large lacuna in health inputs for ICDS regarding diarrheal disease management. Some valuable lessons from CARE's ORT campaign in Gujarat can be learned. Identification of grades of dehydration, referral and PHC/SHC management of dehydration needs strengthening. There is widespread confusion regarding use of measuring spoons and cups (in AWW's first aid kits), packets, and pinch and scoop method for teaching mothers to make ORS at home.

9. PHC staff and district training teams of the health department need to be trained in management of grade IV malnourished children. They will need a special set of NHED materials and training on nutritional/feeding aspects of ICDS, and nutrition rehabilitation techniques.

10. Community orientation to ICDS should also cover private practitioners and dais.

11. AWW training in use of first aid kits supplied for ICDS should be given by health department staff.

4.5 GROWTH MONITORING

Growth monitoring is expected to play an important role in the NHED and MIS components of the project. See sections 4.3 and 4.6 also.

In both states visited by the review team, growth monitoring was beginning to be conducted with reasonable accuracy by AWWs. The trained and supervised AWW were recording the weights appropriately on the growth charts in the registers. The arrival of bar-type weighing scales at AWC without instructions catalyzed the development and introduction of an effective training module on growth monitoring by the JSI Training Advisor. This has now been institutionalized in the form of training and guidelines for use nationwide by GOI. There is a lot more training and supervision needed before growth monitoring becomes effective.

There appear to be some problems in age assessment. In some instances it was observed that weights were first recorded on a separate register before entering them in the weight charts. This intervening step prevents the mothers from receiving immediate feedback about their child's weight gain and its implications, which the worker can only show after plotting the weight on the chart.

It was disappointing to note that in many instances the AWW failed to involve the mother in growth monitoring. Even when the mother was present, AWW missed pointing out to her the section of flat curves or inadequate weight gain over a period of time. Sometimes the AWW did not advise the mothers regarding corrective action such as extra feeding or other interventions such as diarrhea control with the use of ORS, management of common illnesses, etc. The opportunity to use weight gain or weight loss in health education, therefore, seemed to be lost on many occasions.

It is very heartening to know that in many instances the AWW started weighing children from two months of age onwards and thereby maintained records for a long period, starting in early infancy. Growth monitoring seems to have received a special impetus in the USAID assisted project due to the in-service training support given by USAID/JSI staff.

Early growth monitoring as noted in both these districts is bound to have far- reaching effects in terms of improving weaning behavior, immunization coverage, etc. AWWs should be trained to involve the mothers in growth monitoring and particularly to institute corrective measures when growth falters. The review team endorses the proposed emphasis in the NHED campaign on these critical gaps.

The weights are read correctly by the workers and in general are to be found correctly plotted on the card or register. However, some confusion still persists on plotting the weight correctly to the nearest 100g and not rounding off to the nearest 500g mark, due to some faulty training in which rounding off was recommended. Sometimes the weights recorded previously on a register have not been found to be transferred to charts. At some training centers workers were taught to read the grades incorrectly.

Interpretation of the plotting differs greatly between AWWs. Some are complacent with flat curves over months, particularly if such children are in normal or Grade I. Interpretation may be made even more difficult by the AWW having 3 systems for nutritional status assessment:

a) Mid arm circumference with tricolored tape.

b) Weight for age to arrive at Normal or grades I, II, III & IV.

c) Growth trajectories (relatively age independent) where the flat or falling curve is the trigger for action, (not the cross sectional position of the nutritional grade by weight for age).

In almost all cases the mothers are not a party to the interpretation process, nor is action advised even when weights are consistently in lower grades. In only a few instances, were the mothers aware that their children were being weighed regularly at the AWCs. Both the accurate recording and the interpretation of growth charts, particularly in Panchmahals, has been helped considerably due to the in service training provided by the USAID/JSI field officers who visit AWC regularly and help in training the workers.

Recommendations

1. The review team is optimistic about growth monitoring's potential for increasing ICDS impact on mortality and growth. Its value to ICDS is greater than simply a screening device for food distribution. It can catalyze the integration of health inputs and change a variety of feeding and health behaviors of mothers.

2. The NHED component is urgently needed to strengthen counselling component of growth monitoring, to provide charts to be kept at home by mothers and to increase participation in monthly growth monitoring starting at an early age.

3. Efforts should be made to simplify nutritional status monitoring. The value of arm circumference measurement in ICDS except in limited areas where weighing is not possible in the early months of project start-up, is questionable given that regular weighing and plotting of weight for age has been found feasible, more accurate and sensitive to early detection and prevention of growth failure.

4. Special efforts should be made to monitor immunizations, ORT and Vitamin A by recording receipt of these services on growth charts to be kept by the mothers at home as part of the NHED component. This data can be aggregated for AWC block, district monitoring, using a small statistical sample routine to more accurately assess coverage of children by these services.

4.6 MANAGEMENT INFORMATION SYSTEMS (MIS)

The Integrated Child Development Services (ICDS) from the beginning has paid considerable attention to the issues of monitoring and evaluation. It has developed a standardized set of reports and registers from the anganwadi level onwards up to the project level. Copies of the Integrated Management Information System (IMIS) manual written in 1985 are now available in both the project districts. This manual constitutes the official guidelines of the Ministry of Human Resources, Department of Women and Child Development.

The IMIS consists of:

i) The Health Input Monitoring System - Monthly Monitoring Reports (MMR) under the All India Institute of Medical Sciences (AIIMS)

ii) Supplementary Nutrition Monitoring (Form 4) under CARE

iii) Monthly Progress Report (MPR) system under Department of Women and Child Development

iv) Social Input and Training Monitoring under NIPCCD.

Though the IMIS Manual was finalized only recently, the first three reports and the supporting registers have been in use since the beginning of the program.

Following is a summary of observations and recommendations on the evaluation of the MIS component of the USAID assisted ICDS Project with respect to the two project districts at the AWC, Sector (Circle), Block, District, State and the Central levels.

Evaluation at the AWC Level

Anganwadi Workers have the following three major responsibilities in relation to the information system:

i) Quarterly community survey

ii) Maintaining attendance and weight records

iii) Sending monthly progress reports (MPRs), monthly monitoring reports (health services) and monthly supplementary feeding reports (Form 4) to the CDPO.

Quarterly Community Survey

Anganwadi Workers have been asked to make quarterly surveys to up-date the number of children and women in their areas. There were many indications that these surveys were not being done regularly. Some AWWs told the team that they did not make the surveys but up-dated information as and when they learned about a vital event in their village. This system was effective when the AWWs were residents of the village and were working for two to three years in the Anganwadi. Otherwise, they missed many events.

In Chandrapur district the survey coverage was about 80-85 percent of the expected women and children. The ratio of children under 6 years to the total rural population ranged between 10 - 22 percent when it was expected to be 14-15 percent from the census and the USAID Baseline Survey. In Panchmahalsdistrict the survey coverage was much lower, between 25-60 percent. Accuracy of the survey data could not be ascertained thoroughly.

Registers and Formats at the Anganwadi

In all the Anganwadis visited all the necessary registers required to prepare the monthly progress reports were available and complete. The formats, though not identical with the formats suggested in the IMIS.

Manual, were essentially similar to those prescribed. Both in Chandrapur and Panchmahals the CDPOs and district level ICDS staff felt that these registers needed modification as they were not conveniently designed for:

i) follow-up of severely malnourished children;
ii) coordination of health input with ICDS.

In both the districts the health information registers were not filled.

Comprehension and Use of Information by the AWW

In both the districts the AWWs know how to maintain the registers. They could plot the weight and age on the weight chart and mostly determine the grade correctly, but they were not interpreting these weight charts for educating the mothers, or using this information to pay special attention to severely malnourished children.

In Chandrapur, a system of listing the grade III and IV children separately and following their progress has just begun.

The supervisors in both the districts knew the number of beneficiaries to be expected according to the population size and the importance of reaching the children under 3 years of age, but did not use that knowledge to monitor the accuracy of the survey data or coverage of under three children, respectively.

In general, the quality of registers, their completeness and accuracy depended on the training of AWWs and also the size of the population she

had to cover. For a population of less than 600 the records were excellent, for a population of more than 1,200 they were poor. Education of the AWW was a factor but not always a significant one. Educated AWWs were more likely to fabricate data than less educated ones. Their record keeping improved if their supervisors explained to them how to keep good records. In the two blocks in Panchmahals, evidently a lot of such training was being imparted.

Monthly Progress Reports of the Anganwadi Worker

In Maharashtra two formats for monthly progress reports are in use - one to be sent to Delhi, per the IMIS format and one for the State on older formats. The State MPR is more elaborate and includes data on weight and nutrition status using arm circumference data. The AWW's MPR is elaborate. About 80 percent of MPRs are received regularly by the CDPO.

In Chandrapur the AWW felt a need to report 100 percent work even if she had not done the work. Some instances we found when they had reported arm circumference color zones of children without possessing an arm circumference measurement tape. Nutrition status grades were reported in MPRs but not in the registers or on the weight cards for the corresponding months. The correspondence between what was recorded in the registers and what was reported in the MPRs was not of a satisfactory level.

Also there was no uniform understanding of the terms used in the MPR.

The three terms used in the State MPR namely 'number of beneficiaries eligible', 'number selected', and 'number actually received food' were understood differently at different levels.

In Panchmahals the AWWs were not required to send the MPRs on a proforma. They were bringing their reports on any piece of paper and that was copied on to a register kept by the Mukhya Sevika for her circle. AWW's reports were not filed.

Use of AWW MPR by AWW

Anganwadi Workers in both the districts did not know what use they could make of their MPRs. They did not know how to assess their work, nor were they told by their supervisors how they fared.

In Chandrapur, the Chief Executive Officer (CEO) with the assistance of the JSI MIS Advisor has initiated a system of monitoring which should help in this respect. They have developed a monitoring card which includes the major nutrition and health activities of the AWW with a predetermined standard for the levels of activities. When the number reported for any activity is below that standard that number is circled, and the total number for such circles is a feedback to the worker on her performance. This grading scheme is easy to understand. If the AWW is told what standards are applied to her work she can make a self assessment.

In Gujarat no such feedback exists at present, but it can be easily instituted because the necessary data is compiled at the circle level.

At two anganwadis, the key indicator chart was seen in use. This was introduced by USAID/JSI as an innovation in the Project. The key indicators shown in the Table 4.8 below focus on important health and nutrition aspect of ICDS. The purpose behind this chart is to give greater importance to improving coverage of children under 3 and pregnant and nursing women for health services, weighing and feeding. However, this important concept cannot be made operational at the anganwadi unless it is accepted at the higher level by the district and state officers. The choice of indicators should be consistent with the policy of emphasizing those target groups and services. Towards this end it is suggested that key indicator charts should be prepared for each block and district for putting up in the CDPO's and district health officer's offices.

To begin with a few anganwadis could be randomly selected for this purpose. Indicators based on their data could be taken as district estimates. The USAID/JSI field officers can play significant role in getting this innovation introduced.

Table 4.8 ANGANWADI KEY INDICATORS FORMAT

A. 1) Number of pregnant women
   2) Number of these women fed 15 days or more
   3) Number of these women with second dose of T.T.

B. 1) Number of nursing women with children under 6 months of age
   2) Number of these women fed 15 days or more

C. 1) Number of children under 6 months of age weighed
   2) Number of children 6-36 months of age weighed
   3) Number of children 0-36 months of age gaining weight

D. 1) Number of children 6-36 months of age in grades II, III, IV
   2) Number of these children fed 15 days or more

E. 1) Number of children under 12 months of age
   2) Number of these children with third dose of DPT

F. 1) Number of children 12-36 months of age
   2) Number of these children receiving Vitamin A during the last six months

G. TOTAL POPULATION = _____

6. Use of AWW MPR by MS

The Mukhya Sevikas were not found to be involved in the MIS.

In Chandrapur the compilation of monitoring cards and the feedback is done by the block level statistical assistant and a copy is given to the Mukhya Sevika for the records. She herself is not using the MPR for selective supervision or taking corrective action.

In Panchmahals also, Mukhya Sevikas did not take interest in monitoring of the program. The CDPOs seemed to lack confidence in these first level supervisors - in their ability to train the AWW in data reporting, or in taking corrective action. The Mukhya Sevika's knowledge and attitudes need to be improved.

Monthly Progress Reports of the CDPO

Monthly Progress Reports were generally prepared by the accountant or the statistical assistant at the block level. The CDPOs signed the reports without looking at their accuracy. Sometimes, MPRs are prepared based on the previous month's MPR rather than on the reported data for that month. This was obvious when some calculation errors made in one MPR were repeated in the next month's MPR. CDPOs reported having received almost 100 percent reports from the AWWs when in fact they received about 80-85 percent.

The survey figures in the MPR were not changed though the survey figures in the AWW's MPRs changed from month to month. Since the population figures usually reported were the same but the beneficiary numbers changed from month to month depending on the number of AWs reporting, an artificial coverage variation was observed at the project or block level. However, at present, project-wise monitoring has not been fully operationalized at the State level or the Central level and therefore these discrepancies are not getting corrected.

Data Use at the Block Level

In both the districts CDPOs were not using the anganwadi MPRs to give feedback or to assess the anganwadi's work.

Data Use at District Level

At the district level, the involvement in Chandrapur and Panchmahals is very different in magnitude and quality.

In Chandrapur, because of the CEO's personal involvement in MIS, considerable attention is being paid to not just monitoring performance of blocks, but also various components of ICDS. The health activities under ICDS are reviewed by the CEO with the district health officer and feedback is given to the PHCs also. The system is still new and would take about a year to become fully operational, but it has created sufficient awareness at the district level for monitoring and taking corrective action.

In Gujarat, the district involvement is minimal. Unlike in Maharashtra, Gujarat state has not introduced separate MPRs for the State but is using those officially prescribed per IMIS. District level officers play little role in the reporting and monitoring of ICDS. The District receives one copy of the MPR sent to Delhi. It also receives feedback from the State on the basis of the feedback report received from Delhi. District Health Officers have been appointed as district advisors to look after the ICDS program implementation in one or two blocks, but their involvement was found to be minimal. The district statistician neatly files away copies of the MPR and the feedback without taking any action.

State Level Monitoring

The State level monitoring by the ICDS cell is dependent on the feedback received from the centre. The written feedback from the ICDS cell to districts generally pertained to not sending certain data, or reports being delayed. In the quarterly meetings at the State level perhaps more

detailed feedback is given to the districts but the team did not get much information about this.

In Maharashtra, State level MPRs are in use. The Secretary RDD mentioned that he wanted the state ICDS monitoring cell to develop monitoring indicators by which he could monitor progress of his projects in terms of impact. The evaluation's MIS team member developed some indicators and further work in this direction is under way.

Use of Computers

The HCL Busybee micro computer was installed at the Rural Development Department (RDD) Bombay in April 1986 and RDD has made some progress in using this machine. After getting over the initial installation problems, mostly with the hardware, the MIS staff has acquired a working knowledge of Dbase III, mostly on their own with the help of the manual. Their problem is what to use the computer for. Since their backgrounds and previous technical experience are not related to health or nutrition the MIS staff is handicapped in developing a MIS.

In Gujarat the State level MIS Coordinator was recently appointed. His background as a statistician in health related fields is appropriate.
The State has placed an order for an HCL Busybee computer to be installed in Ahmedabad. It would take another two months for the machine to arrive. The State level officials were planning to use the computer for the following four applications:

a) Circle-wise monitoring of MPRs
b) Weight monitoring based on a small sample of Anganwadis
c) Monitoring of severely malnourished children, and
d) Monitoring of universal immunization programme.

The State government has decided to appoint a monitoring committee to develop monitoring indicators and feedback reports.

Monitoring at the central Level

ICDS from the beginning has paid considerable attention to the issues of monitoring and evaluation. It has developed a standardized set of reports and registers at all levels for nutrition, health and education components. The Integrated Management Information Systems (IMIS) Manual is now ready for implementation as a total system.

ICDS is also perhaps the only scheme in which block-wise monthly progress reports (MPRs) are available at the Central level and their return rate is over 95 percent. See Annex II.

At the Ministry level a 12 page report is produced highlighting achievements of the scheme in: (i) recruitment and training of personnel;
(ii) delivery of supplementary nutrition to mothers and children; and (iii) attendance at pre-school education. At present no attempt is made to include key health inputs. Since the data are being processed manually, the monitoring cell is able to produce only the statewise summaries from nearly 1,000 project MPRs received. No further analysis of performance variations between the projects is attempted.

HCL Busybee Microcomputer

The HCL Busybee Microcomputer provided under the USAID project to the Department of Women and Child Development at Delhi was received in April 1986 but was not in use at the time of the team's visit. Reasons given for not using the computer were that the officer-in-charge was on leave from April to June and the training given by HCL, the computer company was not adequate. This was valuable time wasted which could have been used to design the input and output formats. Though Dbase III is very easy to understand and "user friendly" software, it must be taught in the context of the ICDS data for the computer. HCL, being an engineering group, was perhaps not suitable for this task. It was obvious from the progress made so far in using the computer that the entry for the computer was not properly planned. As a result there is disappointment with the machine at various quarters, especially from the top.

To remedy this situation, it is now suggested that the MIS Advisor appointed by USAID should design input formats and the output programs recommended in the Integrated Management Information System (IMIS) documents. These should be developed separately at each location, taking the MIS Coordinator and other members of the monitoring team through the process of development, so that they would develop confidence in devising new programs on their own. This, no doubt would be a rather long, repetitive process, while the system analyst's preference would be to develop a menu driven package. Yet, making a menu driven package at this stage may constrain further development of the system as it will create dependence on the pre-determined programs.

The New IMIS

The four components of this Integrated MIS for ICDS namely, health, supplementary nutrition (case report), Anganwadi activity progress report (MPR), and training and social inputs monitoring reports have been carefully designed. There is little duplication between these reports, but these are independently being processed. Bringing some integration among these reporting systems will greatly benefit the program. The training and social inputs monitoring systems are just being developed.

The most critical need seems to be integrating the health data but there are some problems. At the All India Institute of Medical Sciences ICDS Central Technical Committee, the health monitoring reports are received and analysed. Compared with the MPRs, the return rate in MMR is less than 50 percent. None of the four PHCs visited in Chandrapur and Panchmahals were sending these reports. Second, the MMRs are generally sparsely filled. Except for the immunization figures, several other items of information in this report were either not available with PHCs or were not consistent with the CDPO's report.

Third, the MMR did not monitor the nutrition prophylaxis services delivered through health workers such as Vitamin A and Iron/Folic Acid. The argument against including these data was that they were subject to misreporting. It is a valid argument but it applies also to many other data. (Information regarding diarrhoea episodes and ORT are included, but such data are not reliably collected.) On the other hand by not asking for these data, one may be reducing the importance of these nutritional supplements in the program.

Recommendations

1. Uniformity in Reporting System: Changing over to the IMIS registers and reporting system should pose no problem because the existing registers are very akin to the suggested ones. It will be necessary to print them in sufficient quantity. Some extra registers will still be used because CDPOs who take extra interest may want to collect more data. Some flexibility in this area may be desirable.

2. Improving Quality of Data: Many steps are needed to improve the quality of data. As was done in Gujarat, regular workshops should be organised, maybe with the help of NIPCCD, for CDPOs and Mukhya Sevikas to ensure uniform understanding of various terms.

   We feel that improving quality on a sample basis will be helpful. A possible way of doing it each month is that a small number of anganwadis may be selected where supervisors should prepare the monthly report after thoroughly scrutinizing the records maintained by the worker. Through such a process one can ensure better training to the AWW and better quality of data on at least a sample basis.

   Until such a system is implemented one can utilize the baseline and follow-up evaluation surveys done by M.S. University of Baroda to serve the purpose of developing appropriate standards for assessing the accuracy of data collected routinely by AWWs.

3. Developing Computer Based System: Presently the MIS coordinators are expected to develop the monitoring indicators and feedback formats. Since the coordinators do not necessarily possess sufficient technical background in nutrition and health they would find it difficult to proceed unless technical advice is made available to them.

Therefore, a monitoring committee should be instituted consisting of the project directors and a subject specialist from within or outside the department to oversee development of the system.

Four areas where the computer could be used profitably are:

- Analysis of MPRs and to prepare sector wise feedback,
- Indepth evaluation of sampled anganwadis,
- Monitoring of severely malnourished children, and
- Weight monitoring of a selected sample of children.

4. Integrating Health Information with ICDS: Attempts to build an integrated health and nutrition information system at the anganwadi level have succeeded only in a small measure. Specific attention and efforts are needed in this area. However, the major health inputs in the ICDS IMIS reported monthly refer only to immunization. The nutrition supplements such as Vitamin A, and Iron and Folic Acid do not figure in the MPR, nor does use of oral rehydration packets or home made solutions. Though difficulties in getting accurate data on these measures is known, the importance of getting those cannot be minimized. Therefore, emphasis should be given to these inputs and their reporting in the project area, if not in the entire district then at least on a sample basis. MHRD at center should request health services data along with other data currently received.

5. Use of Data: Proper use of data must begin at the state, district and block level to improve the overall quality of data and tempo of the program. State and district level review seminars may be organized to improve the appreciation of the relevance of the data, system data quality, and use of information for program planning and control.

4.7 STAFFING AND SUPERVISION

The need for some additional staff and better use of existing personnel for strengthening program management and technical guidance has been visualized as a key component of the project. Given the large population being covered, the comprehensiveness of the package of ICDS services to be delivered and the multiplicity of organizational entities involved, the achievement of proposed staffing and supervision targets is crucial to the success of the project. Actual outputs at mid-term compared with end of project targets are shown in Table 4.9.

Table 4.9 - Staffing Outputs

Category of Outputs	Specific Output	Quantity of Output Total Planned	Actuals a/o 9/86
1. Additional Service Workers Trained and	AWWs	3844	3160
	Helpers	3844	employed but not trained
Employed at Anganwadis	Trained dais	3844	0
2. Additional Management & Technical Support Staff Trained (or oriented) and employed			
At sub-block level	MSs	338	191
At the block level	Assistant CDPOs	25	11
	CDPOs	19	18
	Other block staff	104	99
At District Cells	Program Officers	2	1
	Technical district staff	10	0
	In-service workshops for MSs, AWWs	338 MSs 3844 AWWs	0
At State Cells	MIS Coordinators	2	2
	Training Coordinators	2	2
	NHED Coordinators	2	0

Recommendations

1. AWC Level. In each district, examine the set of activities needed to be undertaken for successful attainment of coverage targets as laid out in the proposed annual plans of operations. Prioritize them. Critically review AWW workload, their strengths and weaknesses. Also review critically other human resources available such as helper, dais, community leaders, volunteer mothers, women's organizations etc. Reallocate responsibilities and provide modular task-oriented, in-service training to each entity. Use the group approach for training with joint training of key players at the AWC level. If necessary, use innovative studies as a possible resource for testing alternative patterns to systematically develop a working model in each district.

2. MS/Supervisor Level. With existing MS, test out the feasibility of assigning specific AWW, dai and helper training responsibilities together with the use of incentives or disincentives for achieving training targets. This may be done through use of "innovative studies" funds.

The DDO in Panchmahals is about to launch a scheme of selecting one AWC per circle as an "exemplary" site for visits by other MS. These can also be used as AW staff training sites and MS internship sites.

For new MS, revise selection criteria, giving precedence to her residing in her circle headquarters, willingness to undertake and past track record of extensive touring of villages, rather than to her academic background. Develop a system of internship (few weeks) with selected good MS before being assigned her regular tasks.

Develop an objective grading system of AWC performance based on coverage achievement (see section on functional AW). Use this to schedule MS supervisory visits more frequently to delinquent AWC and to institute a reward system for MS to bring up their lagging AWC to acceptable standards.

During group meetings with the review team, MS expressed a need for more specific training in interpreting MIS data, community rapport building and NHED.

3. Block Level Critically review the strengths and weaknesses of ACDPOs and from which cadre they are being recruited. There should be a more clear demarcation of roles and responsibilities vis-a-vis project components and annual operational plans between CDPOs and ACDPOs.

Regular and systematic orientation/training for CDPOs and ACDPOs should be scheduled several times a year. Focus these on use of information (MIS) for taking quick and effective action on key activities such as maintenance of enrollment and coverage targets, adequate food supplies at all AWC at all times. More attention is needed on the present system of reallocation of supervisory and AWW duties to avoid disruptions due to long absences and leaves. There is a need to develop a system of identifying problem circles and problem AWC for extra supervision.

Coordination responsibilities with PHC staff should be made a high priority for CDPOs. The assistance of the DDO may be needed to facilitate this coordination in Panchmahals. This should include monthly meetings to assess progress against pre-set coverage targets for health (immunization, iron/folic acid, Vitamin A, ORT, prenatal checkups and referrals). Assigning overlapping circles/sectors of villages to MS and LHVs/ANMs and scheduling their joint tours.

Explore the possibility of institutionalizing the setting aside of one day per week by PHC staff for ICDS health inputs at each block.

Strengthen CDPO or ACDPO supervision of timely food deliveries in Chandrapur.

4. District Level Strengthen USAID monitoring teams at district level and develop a working model that can be transferred to district cells. Add training responsibilities to the current set of roles anticipated for ICDS district cells. Accelerate filling of district posts, including the possibility of increasing salary scales. Expand the use of CARE field officers in supervision and data gathering to include non-food components as well. The continued and increased commitment of the DDO and CEO are vital for the success of the project. Establish a district level project monitoring committee including health, ICDS, USAID, JSI and CARE functionaries.

5. State Level The posts of NHED Coordinators should be filled at the earliest. MIS and Training Coordinator's roles should be strengthened as described under these components respectively.

4.8 TRAINING

MLTCs and AWTCs in both Gujarat and Maharashtra were visited in order to assess facilities existing at these training centers, supply of equipment, availability of training materials, library facilities and the number, and qualifications of instructors in the related fields. The list of centers visited are as below. Middle Level Training Center for Supervisor's of Mukhya Sevika = MLTC. Anganwadi Workers Training Center = AWTC:

Gujarat:
1. C.P. Trust, Ahmedabad, MLTC, AWTC
2. Panelav Training Center, AWTC
3. Bhil Sewa Mandal Training Center, Jhalod, AWTC
4. ICCW Training Center, Sabarmati Ashram, Ahmedabad AWTC

Maharashtra:
1. College of Social Work, Nirmala Niketan, Bombay, MLTC
2. Panchayat Raj Training Center, Mul, AWTC
3. Sindewahi Gram Sevika AWTC

Recommendations

1. AWW Task oriented training materials based on the roles and responsibilities of the AWW, though clearly spelled out in GOI guidelines, remain in practice, to be carefully developed. Keeping in mind that preschool education also constitutes an important GOI rationale for ICDS, resources should be devoted to gaining a better appreciation of the AWW responsibilities through time allocation studies. If her record keeping, community surveys for enrollment, community motivation, NHED for mothers, weighing of children, preschool education, distribution of food supplies, first aid and facilitating health services activities are to be conducted effectively, her motivation and support system need strengthening. Specifically a more equitable division of labor with helpers who are adequately trained is needed.

AWW trainees should receive proper orientation to elicit community participation while initiating the anganwadis in their respective villages. Subsequently, AWWs should ask the community to contribute in cash or kind to improve the quality of food served at the AWC as well as to provide accommodation for the AWC.

Channels of communication such as radio, print materials and carefully selected and scheduled supervisory visits should be used as training opportunities on a larger and more systematic basis.

2. Training and Incentives for Dais (Traditional Birth Attendants)

Dais are considered very vital in supporting the early recruitment of infants into ICDS as well as the detection and enrollment of pregnant women in the community. Dais can support the AWW in recruiting both pregnant and lactating women and young children into the program. The training of Dais for this innovative role in ICDS has not taken place as proposed in the Project Paper. An incentive scheme for dais to do ICDS enrollment work is also envisaged in the Project Paper, but a plan needs to be worked out for activating this component.

It is important that the Dai training and incentive program, particularly to support the AWW in enlistment of beneficiaries be initiated immediately as intended through the mobile in-service workshops. Dai training for ICDS can be provided through the AWTCs or by the ANMs at the PHC level, provided a special ICDS training program is designed and introduced for this purpose. The state government should work out an incentive plan for involving Dais in ICDS immediately.

3. AWTC and MLTC

The instructors of AWTCs should be periodically brought in for orientation workshops in participatory training techniques and also task oriented training.

The mobile in-service training workshop envisaged in the Project Paper should be implemented without further delay through MLTCs in both states. This will enhance the skills of ICDS functionaries and the quality of services in the USAID assisted districts.

The MLTCs could be used to provide continuing education and orientation programs for district and state level officials working in ICDS.

The MLTCs should establish closer links with NIPCCD for the academic aspect of training related to ICDS. The State Training Coordinators should work very closely with MLTCs in order to provide a continuous stream of trainees in sufficient number both for job training as well as refresher training

The cost-effectiveness of video-recorders for use by MLTCs to improve the quality and content of training techniques and for standardization of training modules should be explored.

The training centers involved in ICDS are mostly managed by PVOs. Their facilities are minimal in terms of classrooms, dormitories, library, equipment, etc. Grants should be made available to improve these facilities.

Participatory training methods should be insisted upon and the training should be task oriented. This can be done by conducting workshops for re-training the trainees.

4. Involvement of Private Voluntary Organizations (PVO)

The use of indigenous PVOs to run model ICDS anganwadis-cum-training sites should be explored in order to implement an action-oriented training program in ICDS.

5. Linkage Between MLTCs and ICDS Implementation

The existing training centers (MLTCs) can affect the quality of services in an ICDS block assigned to them through their role of philosopher, friend and guide and through field placement of trainees. However, at present none of the training centers visited in Gujarat and Maharashtra have been formally assigned an ICDS block as their field practice site. Also a fair degree of rapport can be developed between the instructors of training centers and MS, AWW and CDPO in the assigned block through block placement of trainees. All such occasions may be exploited by these service-cum-training units to improve the quality of services provided by ICDS. Grants-in aid to selected training centers all over the country which will follow an agreed set of activities in ICDS will add to the motivation of different categories of workers.

6. Strengthening State and District Training Roles

The lack of full-time state training coordinators should be addressed as soon as possible. District ICDS cells should be fully staffed and training teams developed for joint orientation training and continuing education at block level of CDPO, MS, and PHC staff as well as circle level training and orientation of AWW, helper, Dai and CHV.

7. NIPCCD

Existing staff at NIPCCD had made commendable contributions to the USAID ICDS project by organizing district level orientation workshops and by intensively working to improve growth monitoring training modules. However, NIPCCD can be more effective than it is at present in its quality control functions with respect to training at MLTCs and AWTCs. In order to do so, it is imperative that vacant positions at NIPCCD be filled immediately, maybe on a contractual basis which may prove more expeditious than hiring of permanent staff. NIPCCD should also fulfil its responsibilities regarding more frequent visits to

outlying training centers in order to improve the quality of training and also to ensure that the minimum facilities are actually present at these centers. A proper accreditation procedure should be implemented immediately as recommended in the Project Paper.

NIPCCD has to develop closer links with the MLTCs particularly in Gujarat where the MLTCs receive their funds from the state government and not from NIPCCD, unlike Maharashtra. NIPCCD also needs to play a more active role in overseeing the AWTCs in both states. This will help ensure that academically sound training is imparted to enable the ICDS functionaries to acquire essential skills.

4.9 Senior Staff Development (Participant Training Plan)

According to the project design, senior management and technical staff were scheduled to receive training in specific areas relevant to ICDS. A needs assessment was undertaken in July 1985 and a schedule of 13 different types and levels of training activities were identified. The Participant Training Plan was revised in July 1986 as shown in Table 4.10 which indicates the proposed versus actual training.

Recommendations

1. USAID should develop a revised and more realistic participant training plan to reflect current needs and potential. A fund for unanticipated, ad hoc training should be added for activities geared to problem solving as and when operational needs arise. This could be useful, for example, in developing specific in-country training modules on social marketing, new training methods, and MIS. There is little understanding of the broader role of social marketing and its application, participatory approaches to training and how information can be used for decision-making (MIS) at various levels.

2. Management training such as the one proposed by the National Productivity Council (NPC) and other generic training programs

Table 4.10 PARTICIPANT TRAINING SCHEDULE (AS REVISED IN JULY 1986)

Sl. No.	Training Program	No. of participants	Trainer	Duration of Training	Original Date of Training	Proposed Date of Training	Date Training Completed	Comments and Outstanding Problems
1.	CDPO Management Trg.		National Productivity Council					
	a) Gujarat	13		12 days	Feb. 1985	Dec. 1986		Course Design underway.
	b) Maharashtra	11		12 days	Dec. 1985	Nov. 1986		
2.	Management Issues for International Health	1	MSH Boston	3 weeks	April 1986	April 1986	April 1986	Completed.
3.	MIS Operations Trg.		Local Consultant					MIS Coordinators appointed late. Local training found inadequate.
	a) Gujarat	5		10 days	March 1986			
	b) Maharashtra	5		10 days	Oct. 1986			
4.	Manager's Seminar	14	Kris Oswalt	3 days	Oct. 1985	July 1986	July 30 to Aug. 1, 1986	Completed.
5.	Statistician Prog. Basic Training Micro computer/ Software for Evaluation, Data Analysis	6	Kris Oswalt and local Consultants	12 days	Oct. 1985	Aug. 1986	Aug. 4-16, 1986	Completed.

Sl. No.	Training Program	No. of participants	Trainer	Duration of Training	Original Date of Training	Proposed Date of Training	Date Training Completed	Comments and Outstanding Problems
6.	MSU Statistician Prog. Basic Trg. Micro Comp./ Software for Evaluation, Data Analysis	10	Robert Timmons from CSF, Kris Oswalt and local consultants	16 days	Dec. 1985	Oct.13-30, 1986		Course design underway
7.	NIPCCD Computer Trg.	6	Kris Oswalt and local consultants	12 days	Sept. 1986	Nov.-Dec. 1986		Kris Oswalt over extended. Not completed
8.	AIIMS-ICDS Computer Training	6	Kris Oswalt and local consultant	12 days	Dec. 1986			Not complted
9.	Training Technologies NIPCCD Training Specialist	1	University of Pittsburgh	8 weeks	April 28- June 20, 1986	1987 course		NIPCCD Training Specialist not yet appointed.
10.	Master Course in Trg. Management/Tech.	7	David Kahler	3 days		Nov. 1986		
11.	Trg. Technologies and Management of Trg. Workshop (Combined course).	15	David Kahler	18 days	Aug. 1986	Nov. 1986		

Sl. No.	Training Program	No. of participants	Trainer	Duration of Training	Original Date of Training	Proposed Date of Training	Date Training Completed	Comments and Outstanding Problems
12.	Communication Planning & Strategy	2	Cornell Univ.	4 weeks	July 13 - Aug. 8, 2986	1987 course		NHED Coordinator not yet appointed in Gujarat and Maharashtra.
13.	Health Education Training	2	To be decided as as NHED Component materializes					Need to identify District NHED Coordinator.

should include more of a substantive or applied focus that is consistent with USAID's project implementation schedule, content focus and objectives and the proposed annual plan of operations. Experience regarding roles and responsibilities of various staff members such as CDPO's, MS, DDO,and CEO and the thrust of their future work in the project should be reviewed before such training activities can be useful. Again, priority should be given to skills training for achievement of specific coverage and qualitative improvement objectives.

3. Social marketing and communications training proposed at Cornell University should be carefully re-assessed, now that more experience and knowledge exists regarding ICDS-specific needs. The option of developing a course and conducting it at an appropriate field site in India or other Asian country using short-term TA and coordinated by Manoff International should be considered in its place.

4.10 Innovative Studies

Annex IVA contains a recent USAID review of this component conducted during the course of this mid-term review. This line item in the budget has not been used so far and these activities are behind schedule. The review team endorses the use of these funds for the design and testing of methods for increasing the cost-effectivenes of various components in the current project. Additional topics emerging from this mid-term review that should be considered are listed below:

a. Identification of who the current non-participants are in a community especially among pregnant and nursing women and children under 3 years. Ethnographic studies of the reasons for their low participation. Testing of methods to increase their participation.

b. Testing the cost-effectiveness of AWW's task-reallocation among helper, Dai, ANM community leaders, AWW and MS. Activities would include relevant training modules, incentive schemes and

supervision. Two or three different models can be tested in each district.

c. Incentive system for Mukhya Sevikas. These could be linked to specific skills successfully imparted to AWW and helpers (e.g. growth monitoring, NHED, record keeping); maintenance of high enrollment and coverage rates in her circle and her ability to use AWC data for appropriate analysis, interpretation and action (MIS).

d. Development of a district level "train-and-visit" system for continuous technical backstopping, in-service training, orientation and a feedback mechanism for block, circle and AWC level functionaries. The present USAID/JSI staff may be a starting point for this. They will need additional support. In the long run, the system should be complementary and supportive of existing resources and if possible, be totally transferable to entities such as CARE, district ICDS cells, and training centers.

e. Development of service-cum-training sites attached to private voluntary organizations, MLTC's and AWTC's preferably those located close to project districts. Each training center would be allocated the budget and resources for a block or circle and given responsibility to implement the ICDS program.

f. Development and market testing of special weaning foods and mothers food supplements through local retail outlets using the new RTE food processing plants.

g. Design and testing of protocols appropriate for ICDS for rehabilitating III and IV grade malnourished children.

h. Design of a cost-effective means to accurately assess mortality impacts of ICDS. This would include strengthening the present system for registering births and deaths in the project

districts in a large enough sample to be able to detect changes in mortality.

USAID and MHRD need to develop a concept paper and implementation plan for innovative studies as soon as possible. Entities to undertake the studies will need to be actively sought out and encouraged. PVOs, training centers and universities should be particularly appropriate for this purpose.

4.11 Low Birth Weight Research

The evaluation team did not review this component of the USAID project. A recent USAID review, however, was conducted. See Annex IV.b. This has highlighted the following issues:

- Unanticipated delays in governmental approvals of the research sites, protocols and importation of equipment has seriously obstructed implementation of this component.

- The collaborating scientists in the Indian and U.S. institutions selected for the research remain eager and anxious to begin full scale implementation. The research has a large potential payoff in terms of understanding how to increase child survival and optimize child development in India. Therefore every effort should be made to operationalize this component.

- If full scale implementation cannot begin by early 1987, the proposed work cannot be completed during the current life of the project (PACD 9/30/90). The project will need another extension or funds in this line-item will need to be re-allocated to other activities. Activities such as social marketing and communications and more focused health inputs should receive high priority in this reallocation.

4.12 COMMUNITY PARTICIPATION

Extensive social and material support for ICDS from the community implied in GOI guidelines and the USAID Project Paper has not been forthcoming. The Project Paper calls for the MS and CDPO to have a catalytic role in mobilizing this support. The team found that little motivation or community organization skills had been systematically imparted to MS and CDPO during basic training. It is left to the individual DCPO or MS to do their best to promote community participation.

In Chandrapur district of Maharashtra it was observed that AWCs were functioning in the accommodation provided by the Panchayat Samiti either in a community building or at a local primary school. In many instances, it was observed that ICDS feeding and pre-school activities for children had to be adjusted to school timings. Food distribution was done very quickly in the early morning before the school children arrived, which led to curtailing all other activities such as pre-school education at the AWC. In some instances food was found to be shared by school children.

Many of these irregularities or defects could have been averted if sufficient time were devoted to village leaders and sensitize them regarding the objectives of the ICDS program and the need for the community to provide a proper building for the AWC. In most of the instances, the AWCs had been established quickly without proper orientation being provided to community leaders.

In the Project Paper, it was envisaged to conduct orientation workshops for community leaders in order to familiarize them with ICDS. Such workshops were to be held once a year during the first 3 years of the USAID assistance. In both districts these workshops have not yet been held in part due to late postings of CDPOs as well as ICDS District Program Officers. It also took a long time to work out the financial arrangements whereby payments will be made available at the block/district level in order to conduct such workshops, since this is an activity not usually funded in ICDS. All this led to delays in conducting these workshops for community orientation.

Recommendations

1. It is recommended that village leaders' workshops be held immediately. Additional means of communication such as through radio, film, print materials (some presently proposed under the NHED component) should be considered. Celebrating one day per year as ICDS day in each community has been found to be a useful mechanism for maintaining community awareness.

2. Some method of supervision of the functioning of AWCs by the community's leaders and according to the needs of the mothers and children should be worked out to ensure better participation.

3. The use of public displays of key indicators on the nutrition situation of children in the village and their coverage with services should be tested. For example, these could be used by MS and CDPO at Panchayat and Mahila Mandal meetings to discuss specific problems in ICDS. Monitoring by village leaders and women's organizations of AWC timings, quality of pre-school activities, food ration sizes, and coverage of priority beneficiaries may be possible.

4. It is also suggested that village/block level committees on ICDS be set up. Such committees should take the responsibility of ensuring regular activities by the AWW and helper at the center. Periodic interruptions in food supply may also be corrected by this committee, by providing local contributions in kind or helping with transportation and storage.

CHAPTER 5: PROJECT INPUTS

The estimated cost of the project as designed in 1983 is summarized in Table 5.1.

The main project inputs are:

- o Management and Coordination
- o Technical Assistance
- o Food
- o Funds for salaries, training, equipment and other operational costs.
- o Community Support.

5.1 MANAGEMENT AND COORDINATION

A summary list of who has primary responsibility for each major project component follows:

Overall Management and Coordination	-	MHRD, USAID
Supplementary Feeding	-	CARE, state governments
Health Services	-	MOHFW, state governments
Nutrition and Health Education	-	State governments, U.S. contractor
Training	-	NIPCCD, ICCW, AIIMS, training centers, U.S. contractor, state governments, in-service workshop contractor
Technical Assistance	-	U.S. contractor
Monitoring and Evaluation	-	USAID, CARE, AIIMS, home science and medical colleges, state governments
Low Birth Weight Research	-	ICMR, and various Indian research institutes, U.S. collaborators
Innovative Studies	-	MHRD, state governments

TABLE 5.1 COST ESTIMATE FOR AID ASSISTED ICDS
($ THOUSAND)

PROJECT ELEMENTS	SOURCE OF FUNDS AID LOAN LC	AID GRANT LC	AID GRANT FX	AID TOTAL	GOI	TOTAL PROJECT COSTS LC	TOTAL PROJECT COSTS FX	TOTAL PROJECT COSTS TOTAL
1. Staff Costs	5,006	-	-	5,006	5,006	10,012	-	10,012
2. Operations	1,007	-	-	1,007	1,643	2,650	-	2,650
a.Petrol, Oil, Lubricant	-	-	-	-	(821)	(821)	-	(821)
b.Medicines	-	-	-	-	(822)	(822)	-	(822)
c.Others	(1,007)	-	-	(1,007)	-	(1,007)	-	(1,007)
3. Furniture and Equipment	411	-	-	411	461*	872	-	872
4. Technical Assistance	-	170	1,763	1,933	-	170	1,763	1,933
5. Training & Nutrition/ Health Education	-	1,903	202	2,105	317*	2,220	202	2,422
6. Research and Innovative Activities	-	1,963	997	2,960	1,803	3,766	997	4,763
7. Monitoring & Evaluation	-	749	-	749	9*	758	-	758
8. Food Processing Plants	-	114	-	114	-	114	-	114
9. Contingency	576	139	-	715	334	1,049	-	1,049
TOTAL	7,000	5,038	2,962	15,000	9,573	21,611	2,962	24,573

Includes inputs expected to be provided by UNICEF under their agreement with GOI as specified in UNICEF Master Plan of Operations, 1981 - 83.

Does not include food inputs to be provided by CARE and state governments with an estimated value of $29 million including Ocean transportation for the period FY 1984-1989.

TABLE 5.2 Planned Versus Actual

CRITICAL PERFORMANCE INDICATORS FOR AID ASSISTED ICDS

Critical Performance Indicator	Completion Date		Responsible Party
	Date	Actual	
Request for proposals (RFP) for all contracts issued	10/15/83	July '84	USAID, MHRD, NIPCCD
All project equipment ordered and import clearances and waivers processed	03/01/84	In process	USAID, UNICEF, ICMR NIAID/NIH, state governments, ICCW
Final protocol and questionnaires printed for prevalence of maternal infection studies and tests of anthropometric indicators of fetal growth	04/30/84	Nov. 1984	ICMR, research institutes, US collaborators
All managerial, supervisory and technical staff at block (ICDS and health), district, state MOSW, ICCW, SCCW, NIPCCD, USAID and research institutes hired	05/01/84	August 1986 (Except NIPCCD Dist cell & State cell	USAID, MHRD NIPCCD, state government, ICMR ICMR, research institutes
All contracts and agreements signed and staff on the job	06/30/84	NIPCCD & ICMR delayed	USAID, MHRD ICMR, NIPCCD
Impact evaluation designed	06/30/84	06/30/84	Home Sciences & Medical Colleges, USAID, MHRD
Clearinghouses for NHED established at state governments' ICDS cells	07/31/84	Not done	State governments, TA Contractor
In-Service workshops designed and mobile teams trained	09/30/84	Delayed	Workshop contractor, TA contractor, NIPCCD, USAID
Improved MIS designed	9/30/84	In Progress	TA Contractor, AIIMS, MHRD, USAID CARE

Critical Performance Indicator	Completion Date Date	Actual	Responsible Party
All project equipment delivered to end users	09/30/84	Done except for LBW	UNICEF, MHRD, ICMR, state governments
Reference laboratories for maternal infection studies extablished	10/31/84	Nov '84 identified	ICMR, research institutes, US collaborators
Performance standards for workers and instructors developed	10/31/84	Not done	NIPCCD TA Contractor
NHED materials distributed to anganwadis by state clearinghouses	11/30/84	NHED Research in process	State governments
Syllabi for training CDPO's MSs and AWWs revised	12/31/84	Not done	NIPCCD, TA Contractor, USAID
All villages identified, anganwadi workers recruited and buildings donated	03/31/85	Done for 3,200 AWCS	MHRD, state governments
Revised syllabi and performance standards in use in all training centers and ICDS blocks	06/30/85	Not done	NIPCCD, TA Contractor
Baseline impact evaluation survey reports completed	08/31/85	01/31/86	Home Science & Medical College
All managerial, supervisory and technical staff trained or oriented	12/15/85	40% Staff trained by Sept. '86	NIPCCD, Training Centers, Training Consultants, TA Contractor
Prevalence of infection studies and tests of anthropometric indicators completed	03/31/86	Not done	ICMR, research institutes, US collaborators

Critical Performance Indicator	Completion Date		Responsible Party
	Date	Actual	
All anganwadi workers trained	03/31/86	92% AWWs Trained	Training centers, oe MHRD, state governments
Improved MIS installed	05/15/86	In process	MHRD, state governemnts, TA Contractor, Workshop Contractor
All anganwadis operational	05/15/86	90% AWWs operational by 9/30/86	MHRD, state governments, CARE
Protocol designed for birth weight interventions trials	09/30/86	Not done	ICMR, research institutes, US collaborators
Mid-project review completed	09/30/86	09/30/86	USAID
In-service workshops held for all MSs, AWWs and trained dais and their instructors	05/31/87	Delayed	Workshop Contractor NIPCCD, state governments
Year 2 follow-up impact impact evaluation survey reports completed	08/31/87		Home Science, Medical Colleges
Year 4 follow-up impact evaluation survey reports completed	08/31/89		Home Science Medical Colleges
Final reports or intervention trials to improve birth weight completed	09/30/89		ICMR, research institutes, US Collaborators
End of Project review completed	09/30/89		USAID

The overall management and coordination provided by MHRD and USAID has been according to plan. Individual components that have progressed least in part due to insufficient managerial inputs include:

- o Health Services
- o Low Birth Weight Research
- o Innovative Studies

Table 5-2 gives the planned versus actual dates of accomplishing critical performance milestones that were initially planned. In addition to the 3 components listed above, several training activities have been delayed. But there have been recent indications that training activities will now proceed on schedule.

5.2 TECHNICAL ASSISTANCE

A contract was signed with John Snow Inc. effective August 1, 1984 to run through February 14, 1987 for a total of $1,580,000 to cover technical assistance (TA) needs in the USAID-assisted ICDS Project. As of August 31, 1986 approximately $890,000 had been expended. Subcontractors are Manoff International for Nutrition and Health Education (NHED) and Community Systems Foundation (CSF) for Management Information Systems.

As stated in the contract, the chief functions are to:

provide long and short-term technical assistance in training, NHED, MIS and other areas relevant to ICDS as identified by USAID and GOI.

arrange for non-degree short and long-term training in the U.S., in India and in third countries for senior managerial and technical staff.

Level and Nature of Assistance

The level of effort in the contract and actual level provided to date are as follows (there are still 5 months remaining in the contract):

Table 5.3 Technical Assistance

Training, TA & Staff Support	Contract (in months)	Actual
Boston-based Professional Staff	27.5	17.5
Training/NHED Advisor	30	14
MIS Advisor	30	20
Field Officers/MIS Assist.	60	21
Short-term Consultants (includes CSF & Manoff)	17	22
Clerical Staff	165	Approx. on schedule
Participant Training	48	3.5

There has been some restructuring of the contract with a larger proportion of assistance provided through short-term consultants. The reasons for this shift are as follows:

- The high technical caliber of the short term consultants, specifically of Indian consultants, Manoff International and CSF, their acceptability and credibility among Indian counterparts and USAID led to an enhanced role for them in the project. The subcontracts with Manoff International and CSF have increased from approximately $99,000 to $291,000.

- The delayed arrival of long-term advisors (in January 1985 and July 1985 instead of in August 1984) due to extenuating circumstances and the departure of one advisor in August 1986 decreased the level of long term TA.

The participant training plan has been seriously hampered because of the unavailability of counterparts (See Section 4.9)

Recommendations

1. There is a continued need for U.S. and Indian consultants. However, in the Indian context, participant training may also be an effective vehicle for improving technical exapertise. A significant restructuring of the contract is needed for better support to the project, with a higher proportion of short-term and Indian technical advisors. To coordinate their work and follow up on their recommendations, long-term contract personnel may also be needed. More sustained emphasis should be given to participant training.

2 A new scope of work for this component should be developed at the earliest so that the new contract can be in position when the current contract expires in early 1987.

5.3 FOOD

The following table lists the planned versus actual deliveries made to USAID assisted districts for the ICDS program.

Table 5.4 Food Deliveries vs. Planned

District	Planned (MT)		# OF AWC FUNCTIONING	Actual (MT)	
	Grain	Oil		Grain	Oil
Panchmahals					
1984	4,957	610	1,301	1,107	131
1985	5,737	706	1,851	2,164	257
1986 (April - July)	1,434	176	2,278	1,340	133
Chandrapur					
1984	1,153	185	1,098	460	77
1985	1,819	291	1,098	1,390	232
1986 (April - July)	455	73	1,098	468	78

It can be seen from the above, during 1984 and 1985, less food was utilized in the program than originally expected. This is due to a slower rate of operationalizing AWC and supply disruptions. However, in the current fiscal year utilization at the aggregate district level is according to plan. Distribution to AWC varies by block and within blocks, especially in Chandrapur. Inadequate food inputs at several AWC were observed by the review team during the evaluation period.

5.4 FUNDS

USAID and GOI have made the proposed funding available for the first 3 years of the project. The following tables summarize current approved levels of funding by USAID and GOI.

Table 5.5 USAID Planned Grant Funds ($000).

LOP Planned Grant Funds ($000).

Items	FX	LC
Technical Assistance	3,859	---
Participant Training	320	---
In-Country Training	---	1,009
Equipment/Commodities	462	915
Other Costs (e.g. NHED, LBW research, evaluation)	---	2,605
	4,641	4,529
Contingency = $830,000	Total = $10,000,000	

USAID Planned Loan Funds ($000)

Operating Costs of Anganwadis	3,625
Management and Technical Staff	2,301
Subtotal	5,926
Contingency	1,074
Total	7,000

Total USAID Funding ($)

Grant	10,000,000
Loan	7,000,000
	17,000,000

Table 5.6 GOI Funded Inputs LOP

Items		$ 000
Training		195
LBW Research		1,756
Monitoring and Evaluation		6
Contingency		571
Plus	Total	2,528
Staff, Operational Costs and Equipment		7,045
	Grand Total	9,573

Table 5.7 USAID Inputs vs. Estimated Value of Work Done

Items	% Utilization	Total LOP ($000)
Technical Assistance (grant) 9/30/86	24%	3,859
Participant Training (grant)	14%	320
In-country Training (grant)	37%	1,009
Equipment/Commodities	4%	1,377
Project Specific Inputs		
(Grant NHED, LBW research, evalu. etc.)	9%	2,605
(Loan AWC oper. costs, mgt. & tech. staff)	60%	5,926

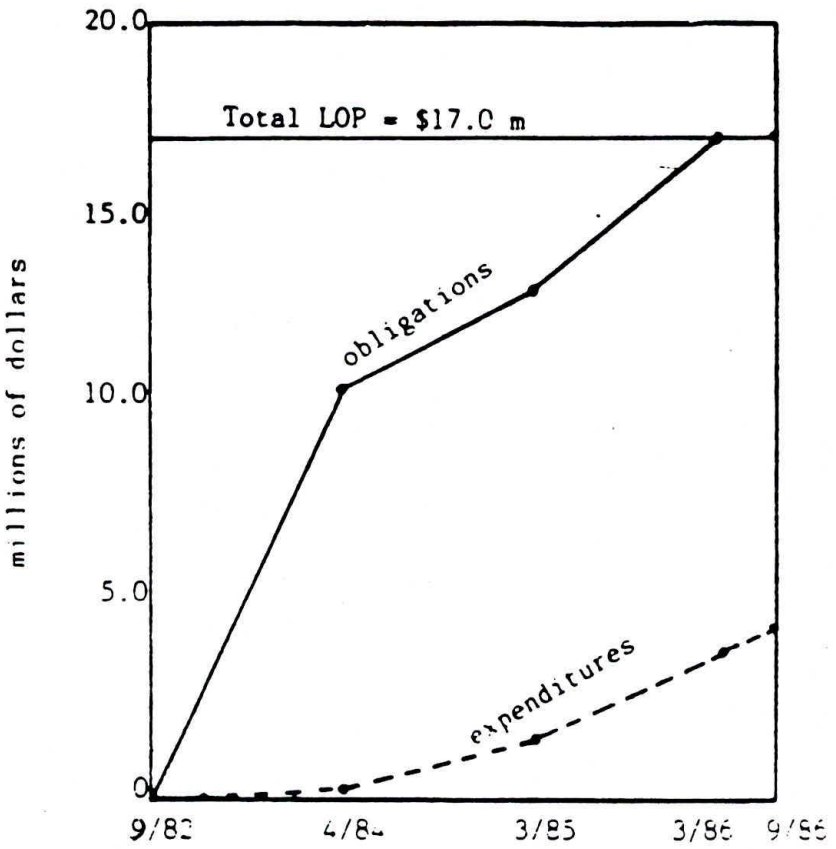
Accrued expenditures under the project are estimated at approximately 20% (a/o 9/30/86) of LOP funding and disbursements at approximately 10% for grant funds and 16% for loan funds (a/o 6/30/86). See Figure 6.

Some steps are being taken to increase project disbursements and bring them in line with utilization. Activities accounting for approximately 70% of grant funding and all of the loan funding are now at various stages of implementation. However, the remaining 30% grant funds are still tied up in LBW research and innovative studies activities for which no early action seems possible. A concept paper and implementation plan need to be developed and approved for innovative studies as soon as possible and a mechanism for timely disbursement of funds needs to be found.

For LBW research, USAID and GOI should begin discussions on a contingency plan to utilize the funds elsewhere in the project should full scale implementation be delayed beyond 1/31/87.

FIGURE 6

USAID Budget



Annex I

ICDS Package of Services as Upgraded with USAID Assistance

A. Supplementary Food

Targets

- Increased enrollment of pregnant and nursing women, and children 6-36 months from 74% to 95%
- Increased and regular attendance of pregnant and nursing women, and children 6-36 months to 85% consuming food at least 15 days per month.
- Ration size equalling 300 calories and 8-10g. protein for all children, 600 calories and 16-20g. protein for severely malnourished children, pregnant and nursing women.

Activities

- Quarterly house to house surveys to recruit malnourished 0-36 months old children, at-risk pregnant and nursing mothers.
- Registration system to monitor individual attendance and identify defaulters
- Dai incentive for regular attendance by pregnant and nursing women, AWW and helper incentive for rehabilitation of malnourished.
- Home visits focused on irregular and non-participants (pregnant and nursing women, 6-36 months)
- Selective take-home for young children, pregnant and nursing women, mothers coupled with nutrition education.
- Community's role strengthened. Local women to contribute time and labor, trained to conduct weighting and feeding. Village committees, donation of room, AWW selection, monitoring, fuel, condiments and food donations, orientation of village leaders.

Annex I (continued)

B NHED/Communcations

Targets

- Increased number of AWW-mother interpersonal sessions.
- Improved quality of AWW-mother interaction to change behavior.
- Increased use of growth monitoring as a teaching tool for mothers.
- Community awareness regarding program services, roles of functionaries and program objectives increased.

Activities

- Selection of AWW with credibility.
- Workload of AWW and re-scheduling of AWC was to allow increased mothers availability for NHED by AWW.
- Use of home visits for NHED.
- AWW training in communications techniques and use of growth monitoring.
- MS and CDPO training in communications techniques and use of growth monitoring.
- Supervisory duties of MS and CDPO vis-a-vis communications activities strengthened.
- Annual village leader orientation during first 3 years.
- Use of multi-media to add interest and reinforce interpersonal (AWW - mother and MS - mother) communication.
- Expand target group to older siblings, grandparents, Dais.
- Monthly evening group sessions with audio-visual media.
- Use of print material as appropriate.

C Health Services

Targets

-	Pregnant women	* 2TT * 3 health checkups * Regular supply of Iron/Folic Acid * Deliveries by trained health personnel (FHW, ANM, trained Dai)
-	Nursing Women	* One check up after delivery
-	0-1 years olds	* 3 doses DPT * BCG * 3 doses of OPV * Measles * 4 health checkups per year * 2 vitamin A megadoses per year * ORT for diarrhea
-	1-3 year olds	* Booster doses for OPV and DPT * Regular health checkups * 2 vitamin A megadoses per year
-	3-6 year olds	* DT 2 doses * Vitamin A 2 megadoses per year * Health checkups

NOTE: The preschool education component in the project districts follows the standard pattern and has not been upgraded by USAID.

Annex III

STATUS REPORT OF THE ICDS PROJECTS ASSISTED BY USAID IN MAHARASHTRA AS ON 30TH JUNE 1986

(Part-A: Recruitment & Training of personnel)

Sl. No.	Name of the Project	PROJECTS			No.of Anganwadis reporting	PERSONNEL											
		Year of sanction	Nature	Fully operational Yes/No		CDPOs			ACDPOs			SUPERVISORS			ANGANWADI WORKERS		
						Sanctioned	Appointed	Trained	Sanctioned	Appointed	Trained	Sanctioned	Appointed	Trained	Sanctioned	Appointed	Trained
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Rajura	1983-83	Tribal	Yes	196	1	1	-	2	-	-	12	10	8	204	196	193
2.	Warora	1983-83	Tribal			MPR NOT RECEIVED											
3.	Mul	1983-84	Tribal	Yes	142	1	1	1	1	-	-	8	8	5	141	137	133
4.	Gondpimpri	1983-84	Tribal			MPR NOT RECEIVED											
5.	Bhadrawati	1983-84	Tribal	Yes	122	1	1	1	1	-	-	7	7	7	127	123	123
6.	Chimur	1983-84	Tribal	Yes	174	1	1	1	2	1	1	10	9	9	174	161	157
7.	Sindewahi	1983-84	Tribal	Yes	105	1	1	1	1	-	-	7	7	6	116	110	109
8.	Nagbhid	1983-84	Tribal	Yes	92	1	1	-	1	-	-	6	6	5	113	112	110
	TOTAL - 30.6.1986				831	6	6	5	8	1	1	50	47	40	875	839	825

(Q/aidmjun.86a)

STATUS REPORT OF THE ICDS PROJECTS ASSISTED BY USAID IN MAHARASHTRA AS ON 30th JUNE 1986

(Part-B: Services - Supplementary Nutrition)

Sl. No.	Name of the Project	PROJECTS			No. of Anganwadis functioning	No. of Anganwadis providing service	CHILDREN					MOTHERS	
		Year of sanction	Nature	Fully operational Yes/No			Below 3 years	Average per AW (8/7)	3-6 years	Average per AW (10/7)	Total children	Average per AW (12/7)	Total	Average per AW (14/7)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Rajura	1982-83	Tribal	Yes	196	196	6415	32.73	6080	31.02	12495	63.75	2715	13.85
2.	Mancra	1982-83	Tribal				MPR NOT RECEIVED							
3.	Mul	1983-84	Tribal	Yes	142	142	5234	36.86	5086	35.82	10320	72.68	1982	13.96
4.	Gondpimpri	1983-84	Tribal				MPR NOT RECEIVED							
5.	Bhadravati	1983-84	Tribal	Yes	122	122	3852	31.57	4737	38.83	8589	70.40	1136	9.31
6.	Chimur	1983-84	Tribal	Yes	174	165	3280	19.88	6379	38.66	9659	58.54	1496	9.07
7.	Sindewahi	1983-84	Tribal	Yes	105	105	1946	18.53	2384	22.71	4330	41.24	859	8.18
8.	Mankapur	1983-84	Tribal	Yes	92	92	3297	35.73	3737	40.62	7034	76.35	1165	12.66
	TOTAL - 30.6.1986				881	822	24,014	29.21	28,403	34.55	52,417	63.77	9,353	11.38

STATUS REPORT ON THE USAID ASSISTED ICDS PROJECTS OF MAHARASHTRA AS ON 30TH JUNE 1986.

(Part-C: Services - Education)

Sl. No.	Name of the Project	PROJECTS Year of sanction	Nature	Fully operational Yes/ No	No.of Anganwadis reporting	No. of AWs providing pre-school education	Total No.of children attending pre-school education	Average No.of children per Anganwadi (8/7)
1	2	3	4	5	6	7	8	9
1.	Rajura	1982-83	Tribal	Yes	196	196	6417	32.74
2.	Warora	1982-83	Tribal		MPR NOT RECEIVED			
3.	Mul	1983-84	Tribal	Yes	142	142	5064	35.66
4.	Gondpimpri	1983-84	Tribal		MPR NOT RECEIVED			
5.	Bhadrawati	1983-84	Tribal	Yes	122	122	3457	28.34
6.	Chimur	1983-84	Tribal	Yes	174	174	5869	33.73
7.	Sindewahi	1983-84	Tribal	Yes	105	105	4028	38.36
8.	Nagbhid	1983-84	Tribal	Yes	92	92	3756	40.83
	TOTAL - 30.6.1986				831	831	28,591	34.41

(Q/aidmajun.86c)

STATUS REPORT OF THE ICDS PROJECTS ASSISTED BY UNICEF IN GUJARAT AS ON 30TH JUNE 1986.

(Part-A: Recruitment & Training of personnel)

Sl. No.	Name of the Project	PROJECTS: Year of sanction	Nature	Fully operational Yes/No	No. of Anganwadis reported	PERSONNEL: CDPOs Sanctioned	CDPOs Appointed	CDPOs Trained	SUPERVISORS Sanctioned	SUPERVISORS Appointed	SUPERVISORS Trained	ANGANWADI WORKERS Sanctioned	ANGANWADI WORKERS Appointed	ANGANWADI WORKERS Trained
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Dohad	1980-81	Rural	Yes	88	1	-	-	32	8	6	320	100	88
2.	Jhalod	1981-82	Tribal	Yes	274	1	1	-	29	14	8	246	236	268
3.	Jasdan	1982-83	Rural	Yes	29	1	-	-	3	2	2	30	29	23
4.	Shihora	1982-83	Rural			MPR NOT RECEIVED								
5.	Limkheda	1982-83	Rural	Yes	199	1	1	1	23	8	4	230	214	179
6.	Santrampur	1982-83	Tribal			MPR NOT RECEIVED								
7.	Limkheda	1982-83	Tribal			MPR NOT RECEIVED								
8.	Devgadh	1983-83	Tribal	Yes	319	1	-	-	38	21	16	390	333	360
9.	Kalol	1983-84	Rural	Yes	124	1	1	-	14	6	6	140	130	123
10.	Halol	1983-84	Rural	Yes	105	1	1	1	12	5	5	118	106	101
11.	Godhra	1984-85	Rural	Yes	165	1	1	1	34	19	16	337	273	160
	TOTAL - 30.6.1986				1294	8	6	3	185	83	63	1841	1466	1222

(D/aidsjun.86a)

STATUS REPORT OF THE ICDS PROJECTS ASSISTED BY USAID IN GUJARAT AS ON 30th June 1986

(Part-B: Services -Supplementary Nutrition)

Sl. No.	Name of the Project	PROJECTS			No.of Angan walis repo rting	No.of Anga providing service	CHILDREN						MOTHERS	
		Year of sanction	Nature	Fully operational Yes/No			Below 3 yrs	Average per AW (8/7)	3-6 years	Average per AW (10/7)	Total children	Average per AW (12/7)	Total	Average per AW (14/7)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Dhad	1980-81	Rural	Yes	88	88	5522	62.75	4958	56.80	10,550	119.55	1412	16.01
2.	Jhalod	1981-82	Tribal	Yes	274	274	9894	36.12	7604	27.75	17,498	63.86	3665	13.23
3.	Jambughoda	1982-83	Rural	Yes	30	24	723	30.13	587	24.46	1310	54.58	242	10.08
4.	Shehra	1982-83	Rural				NEW NOT RECEIVED							
5.	Lunawada	1982-83	Rural	Yes	189	189	2483	13.14	5170	27.35	7653	40.49	1491	7.94
6.	Santrampur	1982-83	Tribal				NEW NOT RECEIVED							
7.	Limkheda	1982-83	Tribal				NEW NOT RECEIVED							
8.	Devgadh	1982-83	Tribal	Yes	319	319	8136	25.50	6958	25.49	15,094	51.33	2916	9.14
9.	Halol	1983-84	Rural	Yes	124	124	2193	17.69	2565	20.69	4758	38.37	912	7.35
10.	Halol	1983-84	Rural	Yes	105	101	4015	39.75	3941	39.02	7956	78.77	1753	17.36
11.	Godhra	1984-85	Rural	Yes	165	165	7264	43.96	6331	38.37	13,595	82.32	2840	17.21
	TOTAL - 30.6.1986				1294	1284	40,218	31.32	39,454	31.73	79,672	62.05	15,193	11.83

(Q/aidgujn.86b)

STATUS REPORT OF THE USAID ASSISTED ICDS PROJECTS OF GUJARAT AS ON 30TH JUNE 1986.

(Part-C: Services - Education)

Sl No.	Name of the Project	PROJECTS			No.of Anganwadis reporting	No. of AWs providing pre-school education	Total No.of children attending pre-school education	Average No.of children per Anganwadi (8/7)
		Year of sanction	Nature	Fully operational Yes/ No				
1	2	3	4	5	6	7	8	9
1	Dohad	1980-81	Rural	Yes	88	88	2380	27.05
2	Jhalod	1981-82	Tribal	Yes	274	274	7604	27.75
3	Jambughoda	1982-83	Rural	Yes	30	30	587	19.57
4	Shehra	1982-83	Rural		MPR NOT RECEIVED			
5	Lunawada	1982-83	Rural	Yes	189	189	5170	27.35
6	Santrampur	1982-83	Tribal		MPR NOT RECEIVED			
7	Limkheda	1982-83	Tribal		MPR NOT RECEIVED			
8	Devgarh	1982-83	Tribal	Yes	319	319	14893	46.69
9	Kalol	1983-84	Rural	Yes	124	124	4758	38.37
10	Halol	1983-84	Rural	Yes	105	101	3941	39.02
11	Godhra	1984-85	Rural	Yes	165	155	7252	46.79
	TOTAL - 30.6.1986				1294	1280	46,585	36.39

(O/aldgujun.86c)

Annex III

Summary of Meeting held at NIPCCD on September 11, 1986 to discuss the Preliminary Finds of the Review Team

The evaluation objectives, methodology, findings and recommendations were presented by members of the review team. Mr. Subramanian, Secretary Rural Development Department, Maharashtra State Government, chaired the meeting. In addition to senior officials from the Central and State governments of Gujarat and Maharashtra, USAID's mission Director and Chief of the Health and Nutrition Division were present. The following is a summary of the discussion following the formal presentation.

Mr. Quaraishi: It will be useful to identify differences between AWC visited at random and those purposely selected for good performance.

Mr. Subramanian: The review should be able to comment on ICDS in the overall context of development. How do the findings relate to the general level of development in different areas? What is the role of the food supplement in deficit areas?

Mr. Fernandes: More specific recommendations are needed on the following issues:

i) Supervision problems and what steps to take to increase the effectiveness of Mukhya Sevikas.

ii) How to generate more community participation.

iii) What specific role should Dais play and how can she be operationalized for ICDS?

iv) What was the effect of the differences in health sector activities on ICDS in Gujarat vs. Maharashtra.

v) What specific role can the AWW play in the delivery of health services?

Mr. Soni: The MIS component should help institutionalize use of management by exception principles through special monitoring and follow-up of AWC and blocks not meeting coverage targets. Grade III and IV children need more specific health care. AWC constructed under NREP should be allocated Rs.4,000 to Rs.5,000 rather than Rs.1,500 currently allowed by GOI.

Dr.Contractor: NHED has been the weak link in the program so far which needs to be remedied. Existing education materials should be reviewed and used as appropriate. Regarding growth monitoring, wherever weighing scales are available the need for the AWW to do mid-arm circumference seems redundant and confusing. Regarding training, more emphasis is needed on frequent refresher training of AWW.

Miss. Lalitha: There is a need for developing a systematic program to work with the community prior to starting an ICDS program in a village.

Mr. Quraishi: As pointed out by the review team, more integration with health inputs is needed. Specifically, MDRD should increase its monitoring of health inputs directly. Motivational tools such as films on ICDS for PHC staff could be used. The potential of using AWW for distribution of contraceptives needs to be carefully re-examined; the suggestions of the review team regarding this issue would be useful. Regarding ways of improving community participation, perhaps celebrating one day each year as community participation day for ICDS will be a useful and concrete activity that can be institutionalized.

The general consensus was that the increased level of monitoring provided to the USAID assisted districts was responsible in bringing about the improvements seen so far. Any recommendations made for qualitative improvements should be carefully assessed in terms of replication costs.

Project Proposal and Current Status

The Project also includes an allocation for innovative research and development activities to improve ICDS operations in general and those in the two Project districts in particular. It was originally envisioned that the Central Ministry of Social Welfare, (now Human Resource Development, MHRD) and the nodal ICDS Departments at the State level would have independent budgets reimbursable by USAID to conduct studies which arose out of needs and problems encountered during project implementation. A total of $ 1 million (Rs.12.6 million) was set aside for this activity over the 6 year period of the Project. Of this amount $542,900 (Rs.6.84 million) were budgetted for FY'84, '85 and '86. To date, no studies have been conducted under the Project and these funds remain unutilised.

Because of the objective of relating the studies to field experience, studies to be undertaken were not specified. However, a few topics were identified at the inception of the Project as being potentially useful.

1. Task analyses and time-and-motion studies of the Anganwadi Worker, conducted in the first and fourth years of the Project. The findings of the first study could have been useful in connection with the revision of training syllabi, while the follow-up study would have indicated whether training improvements had been successful. No such studies have been conducted under the Project although we understand that similar studies elsewhere may have been supported by the MHRD.

2. Another study suggested was on methods to increase attendance of children under three years of age and of pregnant and nursing women. Our field visits confirm that there is a real need for such 'operational research'. NIPCCD is currently engaged in planning a Workshop to be held in January 1987 on Strategies to Reach Out to Under-three's. The Workshop will draw on the experience of other programs in the country, culling lessons that are relevant to and implementable in ICDS. Some of these strategies could then be tried on a pilot basis in the AID-assisted districts.

3. Other suggestions given in the Project Paper for innovative studies/research were:

- incentives to Anganwadi Workers for good performance and to parents for good child feeding behaviour.
- development of a ration planning system based on attendance and malnutrition rates
- development of acceptable food supplements for pregnant women
- child-to-child nutrition and health education
- regular weighing of pregnant women and mother cards
- regular weighing of newborns by dais.

Future Directions

In the course of our review of field activities we have identified some critical areas of program operation where studies might be helpful to improve implementation.

1. Nutrition and Health Inputs

   a. A Pregnant Women's Food Supplement, eg. matruahar. There is currently a proposal from the M.S. University, Baroda to develop and field test a methi flavoured product. There is a need also to test approaches to increasing mothers participation at Anganwadis eg. through education-demonstration.

   b. The iron-folic acid tablet distribution system from central source to beneficiary, particularly in terms of coverage and health impact.

2. Coverage of Target Groups

   c. A take home food system for mothers and especially for malnourished children under three years of age who may not attend the Anganwadi. For example, one day a week could be set aside exclusively for delivering services to pregnant and nursing women and infants on an experimental basis.

d. On community perceptions of ICDS and participation, especially of mahila mandals. The proposal to orient village leaders should be implemented and monitored to reveal useful approaches.

e. Enlisting trained dais (and offering them incentives) to assist ICDS objectives, particularly regarding antenatal and postnatal care and coverage of mothers by anganwadi services, as well as newborn care, and weighing at birth.

3. Anganwadi Workers Role

f. A task allocation study (as described in the Project Paper and mentioned above), whose extension could be operations research of 'good' Anganwadis, focussed on the successful AWWs' behaviour, work performance and processes.

g. On supervision, to establish linkages between workers (AWWs, ANMs, MSs).

h. On the use of the Quarterly surveys to streamline and assess the AWWs activities.

4. Impact Assessment

i. A births and deaths registration system to improve mortality impact assessment of ICDS.

We propose that these areas of interest be publicised by MHRD, and proposals for specific studies be solicited from action-research oriented institutions/individuals and screened so that in FY 87 a number of studies can get underway. The emphasis should be on operationally relevant studies that can be carried out quickly, say within 6 months to 1 year, so that their results can in turn be incorporated into project design and implementation as soon as possible.

Annex IV.b LOW BIRTH WEIGHT RESEARCH

Recognising that low birth weight is an important contributor to high infant mortality in India, the Project includes research to examine the causes of low birth weight and design and implement suitable interventions to reduce its incidence. The research will be conducted by a number of Indian scientific institutions, coordinated by the Indian Council of Medical Research (ICMR), with collaboration from several U.S. based research institutes. The Institute of Medical Sciences, Banaras Hindu University, the King Edward Memorial Hospital, Pune, the King George's Medical College, Lucknow, and the Trivandrum Medical College are the four centres involved in studying the role of infection in low birth weight, with the Christian Medical College, Vellore, as a reference laboratory. The role of nutrition will be studied at two field centres: the Institute of Medical Sciences, Banaras Hindu University, and the National Institute of Nutrition at Hyderabad. The collaborating institutions in the U.S. are the Albert Einstein College of Medicine, New York, the Centers for Disease Control, Atlanta, the Harvard University School of Medicine, and the National Instititute of Allergy and Infectious Diseases (NIAID).

There have been a number of delays in getting the research underway. The USAID ICDS Project Paper, dated June 1983, proposed that the research be done by three different research institutions at Chandigarh, Pune and Vellore. A protocol was also drafted for the infection studies in May 1983 but per the Project Agreement signed in September 1983, the details of the research were to be finalized by the ICMR subject to the approval of the Ministry of Health and Family Welfare(MOHFW). In June 1984, the MOHFW informed ICMR that they did not concur with the sites and institutions selected to do the research (with the exception of Pune) and suggested that new sites and institutions be identified in states with high, medium, and low infant mortality rates, namely Uttar Pradesh, Maharashtra, and Kerala, respectively. In October 1984, with the help of the U.S. collaborators, a reappraisal was done, and new sites and institutions were identified in the states recommended by the MOHFW. Details of the Nutrition studies were also worked out at that time and a revised protocol for Nutrition and Infection studies was jointly prepared

by the Indian investigators and U.S. collaborators and finalized by ICMR and USAID in November 1984. However, formal clearance from the MOHFW and other concerned GOI entities, which was necessary to commence the research, was not received until September 1985. The original Project assistance completion date of September 1989 was revised to September 1990 in early 1985 in order to accommodate the one year delay experienced at that time. However, further delays in clearance procedures have resulted in the low birth weight research being more than two years behind schedule at the current time.

In view of these delays, this progress review, reflects activities over the past one year, rather than three years, as is the case with the main ICDS Project. The delayed start of the Low Birth Weight research was also due in part to the complexity of the research and to the involvement of several institutions in India and the U.S. This complexity continues to be a contributing factor to the slow progress made by this Project component. It is apparent that an additional extension of the life of project by 1 1/2 - 2 years will be necessary to complete all phases of the research as originally planned.

The Research Programme

The research consists of separate Nutrition and Infection studies. The latter commence with measurement of the prevalence of four specific gynecologic infections and the effects of these on birth weight. The Nutrition studies go directly into assessing the effects of maternal nutritional status and food supplementation in the ICDS programme on birth weight. Both sets of studies investigate the role of socio-economic and related factors, such as physical activity, on birth weight. In its later phases, the Infection study envisions an intervention trial using antibiotics against infection to increase birth weight.

The technical feasibility and cost of improving birth weights through anti-microbial therapy or food supplementation will be assessed in these studies. The ultimate goal is to develop cost-effective interventions widely useable in India to improve birth weights. It is also envisioned that the technology developed and skills transferred would have applications to topics of research other than low birth weight.

The Project Paper envisioned the following Infection study phases and specific tasks:

Phase I - 6 months (Over)

A. Recruit laboratory and field staff, and train principals of the Infection Study Centers and Reference Laboratories for three months in the U.S.

Status: Done

B. Finalize research protocols and develop and pre-test field questionnaires and manuals.

Status: Almost done.

C. Train research staff in questionnaire administration and clinic and field techniques.

Status: Done

D. Equip laboratories, standardize laboratory procedures between Indian and U.S.-based labs, and develop the logistics of specimen handling upto the investigating labs.

Status: Not done. Equipment import delayed on account of clearance procedures.

Phase II - 18 months (Ongoing, but commencement delayed. Estimated to run through FY 87 and atleast first half of FY 88).

A. Conduct prevalence studies of maternal infection in hospital settings. In this connection, test laboratory methodologies including a cold chain for specimens, and effect quality control through exchanges of specimens with U.S. laboratories.

Status: Not yet begun

B. Extend the hospital-based Infection study to a rural population.

Status: Not yet begun.

Inter Phase - 6 months (Future: Estimated in second half of FY 88)

A. Analyse the results of Phase II, and prepare protocols for subsequent phases.

B. Identify appropriate institutions for Infection study intervention.

Phases III and IV - 3 years (Future: Contingent on prevalence of infections and their association with low birth weight as determined in Phase II. Unlikely to commence before FY 89.)

A. Test relation between infection and low birth weight through an antimicrobial intervention designed based on results of Phase II.

B. Train relevant Indian personnel in the U.S.

C. Continue quality control system, periodic progress reviews, etc.

D. Analyse intervention's cost benefit/effectiveness and assess its suitability for large-scale application.

The phasing of the Nutrition study is as follows:

Phase I - 1 year (Ongoing)

A. Select experimental and control sites and ensure supplementary food supply to test areas.

Status: Being done

B. Finalise and pre-test protocols and instruments.

Status: Almost done

C. Recruit and train field staff.

Status: Done

D. Initiate field survey and recruit pregnant women into study.

Status: In progress

Phase II - 3 years (Estimate commencement during FY 87 and continuation into FY 90)

A. Continue to recruit pregnant women into study, ensure prenatal supplementation, measure birth weights and do one year infant followup.

Status: Not yet begun

B. Begin data analysis.

Status: No data yet.

Phase III - 1 year (Future: estimate in FY 90)

A. Analyze data and write report.

Recommendations

Although staff have been recruited and trained at all the investigating centers, research protocols, questionnaires and manuals have been prepared, and some preliminary field work has begun, the above review clearly shows that the research particularly in the Infection study is considerably behind schedule. Laboratory and field equipment has been ordered in the U.S. but its import into India has been delayed on account of GOI clearance procedures. Local procurement of other equipment is similarly handicapped by the lack of a mechanism to advance USAID funds to the participating centers. These procedures clearly need to be worked out before the research can begin in earnest. The participating investigators are eager and anxious to get the research underway.

The project provides for a Senior Research Officer to be hired by ICMR specifically to manage these studies. This has not been done but in our view remains advisable because of the procedural delays encountered thus far.

It is clear that the antimicrobial treatment trial for maternal infections (Phases III and IV) is unlikely to commence before January 1989. As it will take three years to complete, the Infection research study will not be possible to finish within the current Project assistance completion date of September 1990. It will be necessary for USAID to assess the successful completion of the Phase II Infection prevalence studies in late FY 88. If it seems warranted to proceed with the Phase III - IV intervention trials, the Project assistance completion date will then have to be extended for 1 1/2 - 2 years.

USAID ASSISTED INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS) MID-PROJECT EVALUATION

Scope of Work

I. OBJECTIVE

The overall objective of this scope of work is to conduct a mid-project evaluation of the USAID assisted Integrated Child Development Services (ICDS) Project in order to assess the progress in achieving the targets, outputs and purpose as specified in the ICDS Project Paper (PP) dated June 1983. The evaluation will be conducted by a team of three members. The specific tasks to be performed by each of the team members in order to accomplish the overall objective of this scope of work are outlined below. The evaluation will be conducted in the USAID assisted districts of Panchmahals, Gujarat, and Chandrapur, Maharashtra, with necessary discussions with government officials at the state and central levels.

II. BACKGROUND READING

All team members will be expected to read the following documents:

A. Integrated Child Development Services Project Paper, USAID/New Delhi, June 1983.

B. USAID Assisted Integrated Child Development (ICDS) Project in the districts of Panchmahals, Gujarat and Chandrapur, Maharashtra - A Baseline Appraisal, USAID/India, February 1984 by S. Sen Gupta and M.A. Anderson.

C. USAID Assisted ICDS Impact Evaluation Baseline Survey, M.S. University, Baroda, 1985.

III. TEAM LEADER: DR. TINA G. SANGHVI

The team leader will have primary responsibility for coordinating the work of the evaluation team members and for writing consolidated evaluation reports and a Project Evaluation Summary (PES) in AID specified format.

A. Specific tasks include evaluation of:

1. Performance by ICDS Project's Technical Assistance Contractor, John Snow Inc, (JSI) and sub-contractors, Manoff International and Community Systems Foundation, (CSF) of the scope of work in their contract, and the quality of their services. Assessment will be made in India as well as through one day visits by the team leader to the offices of JSI, Boston, CSF, Ann Arbor and Manoff International, Washington, D.C. for discussions with ICDS contract staff.

2. Achievement of PP targets for establishment of functional anganwadis (village child care centres).

3. Achievement of PP targets for filling managerial, supervisory and technical posts at all levels.

4. Achievement of Participant Training Plan, John Snow Inc., July 1985.

5. Progress in the Nutrition and Health Education (NHED) component (Essential reference - ICDS Social Marketing Consultancy Report by Daniel,Lissance and Marcia Griffiths - entitled Project Implementation Plan, Manoff International, July 1985.

6. Progress toward establishing two food processing plants (Essential reference - ICDS Food Processing Plant Feasibility Study by J.M. Harper and G.R. Jansen, August 1985)

7. Achievement of PP targets for coverage of malnourished children 6-36 months of age, pregnant women and nursing mothers with regular supplementary feeding.

8. Adequacy of supervision of Anganwadi Workers (village child care workers) by Mukhya Sevikas (middle level supervisors), and of Mukhya Sevikas and Anganwadi Workers by Child Development Project Officers (CDPOs - block level).

B. Report

The team leader will write the following reports: (1) an ICDS mid-project evaluation report on overall progress which will incorporate the findings of each of the evaluation team members, (2) a JSI contract performance report, and (3) a Project Evaluation Summary in AID specified report. All of these reports will be presented to USAID in draft form by September and in final form by September 6, 1986.

C. Timetable and Itinerary (Team leader)

Date	Place	Activity
July 1986 (5 days)	U.S.A.	Read background documents; visit JSI, CSF, and Manoff International.
August 4-6	New Delhi	Read project documentation; meet with USAID, CARE, JSI, and Ministry of Human Resource Development/Department of Women and Child Development officials.
August 7-13	Panchmahals District, Gujarat	Visit 3 blocks, spending 2 days in each and visiting 4-6 anganwadis in each (Different sample for Team leader and Team member 2).

Date	Place	Activity
August 14	Ahmedabad/ Gandhinagar	Meet government of Gujarat ICDS officials in the Health and Family Welfare Department and CARE.
August 15		Independence Day (Holiday)
August 16-17		Free
August 18-23	Chandrapur District Maharashtra	Visit 3 blocks spending 2 days in each and visiting 4-6 anganwadis in each (Different sample for team leader and team member 2).
August 24		Free
August 25	Bombay	Meet government of Maharashtra ICDS officials, in the Rural Development Department, CARE, MODE, advertising agency, Maharashtra State Cooperative Marketing Federation, and Mixi-Therm Engineers.
August 26-September 1	New Delhi	Write report.
September 2	New Delhi	Attend mid-project review meeting with central and state government ICDS officials and present report in draft.
September 3-6	New Delhi	Finalize report and Project Evaluation Summary and present to USAID.

IV. TEAM MEMBER 2: DR. SAMIR CHAUDHURI

Team member two will concentrate on evaluation of the health services, community participation, training and growth monitoring components of the USAID ICDS project.

A. Specific tasks include evaluation of:

1. Coverage of ICDS project beneficiaries with essential health services, i.e.
   a. Pregnant women - tetanus toxoid immunization, iron/folic acid supplements and health check-up,

   b. Nursing women (first six months) - health check-up,

   c. Children (0-3 years of age) - immunization, health check-up, megadose Vitamin A (1-3 years).

2. Achievements of PP targets for basic training of Anganwadi Workers, Mukhya Sevikas and Child Development Project Officers.

3. Achievement of PP targets for orientation of village leaders and extent of community participation and capacity building.

4. Progress toward retraining field level, service delivery and supervisory ICDS and health workers through Mobile In-service Workshops.

5. Progress toward accomplishing training improvements envisioned in the PP, namely revised syllabi and performance standards for all levels of workers, accreditation of Anganwadi Wokers' Training Centres, and enhanced monitoring by the Indian Council of Child Welfare (ICCW) and the State Councils of Child Wefare (SCCW) of Anganwadi Training Centres run by them.

6. Role and performance of the John Snow Inc. resident Training Advisor in achievement of items 4 and 5 above.

7. The extent and quality of growth monitoring conducted by the Anganwadi Workers.

B. Report

The consultant will write a report on the findings of the evaluation of the items specified in section A and present it to the team leader by August 29, 1986.

C. Timetable and Itinerary (Team Member 2)

Date	Place	Activity
July 1986 (2 days)	CINI, West Bengal	Read background documents
August 4-6	New Delhi	Read project documentation; meet with USAID, JSI, NIPCCD, ICCW, and Ministry of Human Resource Development/Department of Women and Child Development officials.
August 7-13	Panchmahals District, Gujarat	Visit 3 blocks, spending 2 days in each and visiting 4-6 anganwadis in each (Different sample for team leader and team member 2).
August 14	Ahmedabad/ Gandhinagar	Meet government of Gujarat officials in the Department of Health and Family Welfare, SCCW, and staff of other training centres.
August 15	-	Independence Day (Holiday)

Date	Place	Activity
August 16-17	-	Free
August 18-23	Chandrapur District, Maharashtra	Visit 3 blocks spending 2 days in each and visiting 4-6 anganwadis in each (Different sample for team leader and team member 2)
August 24	-	Free
August 25	Bombay	Meet government of Maharashtra ICDS officials in the Rural Development Department and Health and Family Welfare Department, SCCW, and staff of training centres.
August 26-29	New Delhi	Write report
August 30 - September 1	-	Free
September 2	New Delhi	Attend mid-project review meeting with central and state government ICDS officials and present report.

VI. TEAM-MEMBER 3: DR. NIRMALA MURTHY

Team member three will concentrate on evaluation of the management information system (MIS) and monitoring components of the USAID ICDS project at the central, state, district, block, supervisoy (Mukhya Sevika) and anganwadi levels. An assessment will be made of the extent to which an improved MIS system has been installed, with reference to use of the system prescribed in the ICDS Integrated MIS Manual prepared by the Department of Women and Child Development in 1985 and modifications to that system to insure the accurate reporting and use of weight data on nutrition status and coverage of supplementary feeding, health services, and nutrition and health education, as prescribed in the USAID ICDS Project Paper (PP).

A. Specific tasks include evaluation of:

1. Regularity, completeness, and accuracy of quarterly community surveys by Anganwadi Workers, including weight data on all children under six years of age, and vital statistics and census data for all families.

2. Standardization of register formats at the anganwadi level, and accuracy and completeness of such registers.

3. Comprehension of recordkeeping and use of the information by the Anganwadi Worker.

4. Accuracy and completeness of Monthly Progress Reports prepared by Anganwadi Workers.

5. Use of Monthly Progress Report data by the Anganwadi Worker to assess the performance of her anganwadi and take corrective action.

6. Use of Monthly Progress Report data by the Mukhya Sevika to assess the performance of her anganwadis, to give feedback to Anganwadi Workers and to take corrective action.

7. Use of solar calculators (provided with USAID assistance) by Child Development Project Officers and Mukhya Sevikas for MIS work.

8. Accuracy and completeness of Monthly Progress Reports prepared at the block level by the Child Development Project Officer (CDPO).

9. Use of AWW Monthly Progress Report data by the Child Development Project Officer, and Assistant Child Development Project Officer (where relevant) to assess the performance of and give feedback to Anganwadi Workers and Mukhya Sevikas and to take corrective action.

10. Use of CDPO Monthly Progress Report data by the District ICDS Program Officer to assess the performance of various ICDS blocks under his supervision, to give feedback to Child Development Project Officers and to take corrective action.

11. Use of CDPO Monthly Progress Report data by the State government's ICDS cell to assess the performance of various ICDS blocks in the state, to give feedback to the District ICDS Program Officer, or CDPOs and to take corrective action.

12. Extent to which the HCL Busybee microcomputer (provided with USAID funds) is being effectively used for ICDS-MIS work by the state government's ICDS cell.

13. Use of CDPO Monthly Progress Report data by the Department of Women and Child Development, Ministry of Human Resource Development to assess the ICDS performance of various states, to give feedback to state governments, and to take corrective action.

14. Extent to which the HCL Busybee microcomputer (provided with USAID funds) is being effectively used for ICDS-MIS work by the Department of Women and Child Development's ICDS staff in New Delhi.

15. Linkages established between: (1) ICDS health inputs monitoring system under AIIMS (Monthly Monitoring Reports), (2) ICDS supplementary nutrition monitoring system designed by CARE, (3) the Monthly Progress Report system under the Department of Women and Child Development and (4) social inputs and training monitoring system designed by NIPCCD.

16. Effectiveness of project monitoring services performed by the district level field officers under contract with John Snow, Inc. and regularity and usefulness of their monthly reports.

17. Role and performance of the John Snow, Inc. resident MIS Advisor in achievement of items 1-15 above.

B. Report

The consultant will write a report on the findings of the evaluation of the items specified in Section A and present it to the team leader by August 29, 1986.

C.

Date	Place	Activity
July 15-17	New Delhi	Read background documents; review MIS at Ministry of Human Resource Development/Department of Women and Child Development and meet with USAID, JSI, CARE, NIPCCD and AIIMS.
July 18	Chandrapur	Review MIS at district level
July 19-23	Chandrapur District	Visit 2 blocks, spending 2 days in each and visiting 2-3 anganwadis to review MIS.

Date	Place	Activity
July 24-25	Bombay	Review MIS at state level in Rural Development Department.
July 26-27	-	Free
July 28	Godhra, Panchmahals	Review MIS at District level
July 29-August 1	Panchmahals District	Visit 2 blocks; spending 2 days in each and visiting 2-3 anganwadis.
August 4	Ahmedabad/ Gandhinagar	Review MIS at state level in Health and Family Welfare Department
August 5	New Delhi	Debriefing at USAID
August 26-29	New Delhi	Write report
August 30 - September 1	-	Free
September 2	New Delhi	Attend mid-project review meeting with central and state governments ICDS officials and present report.

VI. Relationships and Responsibilities:

The Evaluation Team will work under the technical guidance and supervision of the Chief, Nutrition Division and the Program Specialist (Nutrition) in the Office of Health and Nutrition, USAID/New Delhi.