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PROJECT ASSISTANCE COMPLETION REPORT

**INTEGRATED CHILD DEVELOPMENT SERVICES PROJECT
(386-0476)**

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I. INTRODUCTION

By 1983 the death rate for India had declined by 70 percent over the previous sixty years; however, rural infant mortality had declined by only about 43 percent. Approximately 47 percent of all deaths in India occur in children under five years of age as compared to 3 percent in the United States. The foremost contributing cause of death in this age group is low birth weight, followed closely by malnutrition. Given the above, USAID initiated the Integrated Child Development Services (ICDS) project in September, 1983. The project proposed to test a comprehensive approach to alleviating young child malnutrition and mortality in Indian villages through the delivery of supplementary feeding, nutrition education and health services to those children and pregnant or nursing women most-at-risk. This was to be accomplished by expanding and improving the Integrated Child Development Services scheme of the Government of India (GOI) and by making more effective use of the Title II food commodities provided by CARE.

II. PROJECT GOAL AND PURPOSE

The broader goal of the USAID assisted ICDS project, as set out in the project paper is to reduce mortality in children 0-36 months of age with the subgoal to reduce prevalence of moderate and severe malnutrition in children 0-36 months of age. The aim was to reduce the infant (0-1 years) mortality rate by 25 percent and the mortality rate of children 1-3 years of age by 33 percent within 6 years of the establishment of approximately 4000 village child care centers called anganwadis. The subgoal was to reduce severe malnutrition in children under 36 months of age by 50 percent and moderate to severe malnutrition by 35 percent within 4 years of starting the anganwadis.

The project purpose was twofold:

(1) to expand and improve the ICDS program in 19 rural and tribal blocks in the two districts of Maharashtra and Gujarat (Chandrapur

and Panchmahals respectively) in order to regularly reach most "at risk" pregnant or nursing women as well as moderately or severely malnourished children aged 0-36 months with Title II foods, nutrition education and health services; and

(2) to determine the feasibility and costs of improving the birth weights of children.

To attain the project's goal and purpose, the following interventions were identified:

- Partial salary support and ICDS operational costs: This component was aimed at strengthening the GOI's ICDS scheme by supporting the staff costs (partially) at anganwadi, supervisory, block, district and state levels. In addition, support was provided for the operational costs for anganwadis and blocks and extraordinary administrative expenses in connection with project operations.
- Nutrition: This component was to be accomplished through an improvement in supplemental feeding and nutrition by making more effective use of PL 480 Title II food commodities and Ready-to-Eat foods as supplementary feeding at ICDS anganwadis (including the establishment of Ready-to-Eat food processing plants).
- Nutrition and Health Education (NHED): Each anganwadi was to provide selected health services and nutrition education for mothers and children stressing prolonged breast feeding, appropriate weaning foods, oral rehydration, and immunization.
- Technical Assistance and Training: This intervention aimed at an improvement in management support systems through an improved staffing pattern, enhanced management skills, improvements in basic training and accreditation of training centers.

- Low Birth Weight (LBW) Research: This research was to be an Indo-US collaborative effort designed to investigate the causes and then implement the most likely strategies to reduce the high incidence of low birth weight. The studies were to be conducted in two categories - infection and nutrition - and were to proceed simultaneously but on separate tracks.

- Monitoring and Evaluation: An automated management information system, an evaluation system and Innovative studies were to be set up to measure the effectiveness of this program in reducing malnutrition.

Chandrapur and Panchmahals districts have undoubtedly benefitted from the ICDS project. Health and nutrition status has improved, infant and toddler mortality rates are lower, mothers have benefitted from improved pre and post-natal care, and more are participating in ICDS activities. Greater knowledge and enthusiasm among anganwadi workers at the village level, increased supervision and closer coordination with the health system are all evident. Importantly, many of these benefits are likely to remain long after the end of USAID assistance to the project.

III. PROJECT HISTORY

As originally estimated in the project paper, the USAID assisted ICDS project, initiated in 1983, was to have a lifespan of six years with a total funding of \$26.5 million, which included a GOI contribution of \$9.5 million. The project was extended to eight and one half years and funding was reduced by \$1.6 million to \$24.9 million, out of which USAID contributed \$7 million in loan funds and \$8.4 million in grant while GOI funding remained at \$9.5 million. PL 480 Title II food commodities provided by CARE amounted to \$32.5 million.

For the first two years the project progressed slowly as during that time the Ministry of Human Resources Development (MOHRD) and the two state governments concentrated on filling key positions and ensuring that the anganwadis were operational. However, the USAID-funded final evaluation, completed in March 1992 by The Pragma Corporation of Virginia, noted that the "cooperation (between USAID), GOI, the two state governments, CARE, UNICEF (as a major external supporter of ICDS) and district level officials has contributed to the success of the project." As the project proceeded, the outputs became increasingly useful and relevant in MOHRD's workplan and in implementing its national ICDS program and in 1985, at the request of the MOHRD, two blocks were added to the original 19 which would be part of the expansion and improvement of the ICDS system.

Over time, the project emphasis shifted to an increased attention to training, health interventions (such as immunizations, vitamin A and iron supplements), promotive nutrition, and management improvement with the purpose of providing information and methodologies for potentially replicable improvements to the national ICDS program. This emphasis could better ensure the sustainability of USAID's inputs by altering the infrastructure of ICDS and the behavior of ICDS workers. This was clearly seen in the results of the two most successful aspects of the project, the Management Information System (MIS) and the Mobile-In-Service Training (MIST), both of which will be described in greater detail further in the report.

The benefits which accrued from the enhanced training inputs were initially impeded by the lack of central coordination which can be directly attributed to the GOI's default in filling key National Institute for Public Cooperation and Child Development (NIPCCD) positions. The NIPCCD is the principal agency identified by the GOI for coordinating ICDS training. More active participation by the apex training institution could have added substantially to the sustainability and replicability of the training experiences in this

project. Nevertheless, an alternate training resource at the state level was created through the private voluntary organization, the Crime Prevention Trust (CPT) in Gujarat, and two organizations in Maharashtra, the Pravara Institute of Research in Natural and Social Sciences and the Indian Institute of Youth Welfare.

The Nutrition and Health Education element was not implemented as envisioned in the original project paper due to the delayed arrival of the long-term advisor and a lack of planned government counterparts. Rather, in June 1985, Manoff consultants completely reconceptualized the NHED component based on a more comprehensive plan. The consultants concluded that to change mother and child feeding norms, and not just educate mothers, an appropriate communication strategy was needed. The idea was to identify malnutrition problems rooted in nutritionally inappropriate feeding and health practices and then to use social marketing techniques to effect long-term, sustainable changes in the way mothers feed their young children. Such a strategy was formulated and adopted with an integrated package of print, radio, film/video and interpersonal materials.

During the course of the project the services of several non-governmental organization market research firms, medical colleges, home science colleges, U.S. organizations, consultants and contractors were utilized. Many of the project innovations were developed and implemented by these organizations. Throughout the life of the project, the contractors and consultants performed very well, establishing excellent relationships with their counterparts at the MOHRD, NIPCCD and at the state ICDS cells. As a result, almost all of the activities listed in the project paper were initiated. Although problems relating to procurement of commodities, selection of local groups, and importing of equipment were encountered, all were subsequently resolved.

A mid-project review was completed in July, 1986 with the following conclusions:

a. major advances had been made in the development of the ICDS centers and the original design was still valid.

b. while food supply disruptions continued in Chandrapur, an average of 20-22 days of food distribution per month was maintained in most project areas (as compared to the intended 25 days), and

c. due to the on-the-job training and orientation workshops provided through USAID assistance, regular enrollment of priority groups and growth monitoring of children had begun to occur on a large scale basis. Grass root level workers had acquired a better understanding of the need to strengthen NHED services for pregnant women and children under 3 years of age.

IV. PROJECT STATUS

A. Accomplishments and Replicability

In March 1992, as stated earlier, a final evaluation of the project was carried out by USAID to determine the extent to which the recommendations made by the mid-project review team had been implemented and to assess the progress towards the project goals and purpose. According to the final evaluation, although only 4000 anganwadis had been targetted, almost 99 percent of 4500 anganwadis had been established and were fully functional with trained workers. All of the project's components contributed to the success of the anganwadis as detailed below.

Nutrition: The goal to reduce malnutrition and mortality was in large part achieved. Prevalence of acute malnutrition was reduced and the target of a 33 percent reduction in small child mortality rate was reached in both project districts. The 25 percent

reduction target in infant mortality was reached in Maharashtra, with a lower reduction in Gujarat, which can be attributed largely to the severe, prolonged drought in the Panchmahals district. In spite of the drought, severe malnutrition fell by 25 percent in Panchmahals and by 53 percent in Chandrapur. Vitamin A deficiency and anemia have been greatly reduced. While the project was successful in "nutrition rehabilitation" of moderate and severe malnutrition, i.e., a reduction of wasting, which reflects short-term malnutrition, there was no discernable improvement in long duration malnutrition reflected in stunting. Project inputs were clearly sufficient to reverse short term weight deficits; however, it is not known whether they were adequate to change long term growth patterns. Since some inputs became productive late in the project, there was insufficient time to ascertain their effectiveness on long duration malnutrition.

Food distribution, which was the responsibility of the state governments, was satisfactory in both Maharashtra and Gujarat. Rations are now provided to all pregnant women, rather than only to those in the third trimester; this fact, along with the accompanying rise in health service in the anganwadi centers, should lead to improved nutritional status and minimize the number of underweight babies. Tables found in Attachment 'A' provide details on the achievements reached under the nutrition element.

Nutrition and Health Education: USAID was successful in using social marketing techniques for NHED activities. The NHED technical assistance resulted in a high quality planning process and communication strategy. Print materials, particularly counseling cards, were well executed and especially useful. The counseling cards were used extensively, most often during home visits, but also during group nutrition education sessions. The mass media was also utilized to some effect. Radio programs were broadcast, films were

shown in cinemas and vans equipped to show videos visited the rural and tribal areas. However, the NHED element suffered because there was little direct involvement of appropriate GOI, State and district/block level staff in material planning and production; hence, "ownership" of and continued interest in the materials was not adequately developed. To some extent, this was balanced by a strong training input shown by the worker's familiarity with and competence in the use of NHED print materials.

Training: Perhaps one of the greatest achievements of the ICDS project was the Mobile-In-Service Training (MIST). Since ICDS services converge in the anganwadi, if the anganwadi worker does not have the knowledge and tools to work effectively, the program cannot succeed. MIST focused training in the villages, rather than at a distant training center with instruction that was hands-on, participatory and skill oriented. MIST was completed successfully and on schedule in a district in both the states of Gujarat and Maharashtra. At the completion of the project, this innovative training methodology was being replicated in other districts in each state with the enthusiastic support of the GOI. 19,000 ICDS and health functionaries have been trained under the MIST program. One of the most significant outcomes of the MIST program was that training focused on supervisors who, in turn, trained front-line workers. Equally significant is the fact that MIST resulted in the first training of health and ICDS workers together and their exposure to skill-oriented participatory training. Previously, there was very little coordination between ICDS functionaries, who reported to social welfare agencies, and health care workers, who reported to state and central ministries of health. Because of these two significant factors, post-training feedback on knowledge and skill assessment of workers suggests high levels of retention, probably facilitated by continuous on-the-job guidance (as against "supervision") and a common platform for health and ICDS workers

which facilitates better dialogue and coordination in the field.

In addition to MIST, the training component has also supported a series of short-term training sessions abroad for senior ICDS management and training personnel, and workshops for mid-level ICDS personnel. The sessions abroad are detailed in Attachment 'B'. Also, at the behest of the GOI, an innovative Adolescent Girls Scheme was developed during the second extension of the ICDS project and began in both USAID assisted districts in mid-91. This scheme piloted the participation of adolescent girls in the activities of the anganwadi and provided training to the young mothers-to-be. This initiative is also being replicated by the GOI elsewhere.

LBW Research: A collaboration between the Indian Council of Medical Research (ICMR) and the Albert Einstein Medical College was being carried out and data being analyzed at the time of the project completion. However, one study based on data collected in Panchmahals and Chandrapur suggesting that newborns weigh almost a quarter of a kilogram more on average when their mothers receive a dietary supplement, and that their risk of LBW is one-third that of babies whose mothers received no supplement, led to a GOI decision to extend ICDS supplementary feeding to women as soon as pregnancy is established. Under the nutrition study of LBW research technical assistance and training in data management have been provided to the National Institute of Nutrition, Hyderabad and Banaras Hindu University (BHU), Varanasi (nutrition study sites). At the request of the ICMR, similar assistance has been provided to its headquarters staff and to other infection study sites established at King George Medical College in Lucknow, King Edward Medical College in Pune, Trivandrum Medical College and Christian Medical College in Vellore and BHU, Varanasi.

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Monitoring and Evaluation: A unique aspect of this project was its built-in evaluation component. An impact evaluation was conducted over a six year period from 1984-90. The data were collected from randomly selected anganwadis in 11 blocks in Panchmahals and 8 blocks in Chandrapur. In all, the entire population within 93 anganwadis was surveyed. By the project completion date, a large database of valuable indicators was available. When analyzed further, this information can provide insight to ICDS policymakers for the purpose of making pragmatic improvements which can significantly enhance the quality of services provided by the ICDS Program nationwide. The list of papers published as a result of these surveys can be found in Attachment 'C'.

The Innovative activities developed under this element are simultaneously being replicated in other project areas and states as they are found to be relevant and useful. The computerized Management Information System (MIS) became a key element of the ICDS with the GOI agreeing to a countrywide expansion. Under MIS, the Progress Reporting System software package developed and tested in Maharashtra and on a national level is being extended to 11 states. The highly innovative MIS approach satisfied executive needs at the ministry level and the two project states for timely decision-making and it enhanced the advocacy and analytic capabilities in ICDS. A monitoring mechanism was also established to periodically review the program and take corrective actions and decisions.

In a separate effort, USAID worked with NIPCCD to devise a system for evaluating and eventually accrediting ICDS training institutions. The exercise, completed in 1991, was the first attempt to assess and monitor the training imparted to the anganwadi supervisors and workers according to a consistent standard. Thus, NIPCCD was able to categorize the training centers (over 300) on the

basis of performance, staffing, infrastructure and facilities. Although little use has been made of the information to show how training institutions need to improve, the GOI appears poised to extend the process.

In addition to the above, in June 1990, it was noted that the project had been playing a strong facilitative role in prompting the GOI to expand its use of private and NGO sectors to develop and implement certain components of the ICDS program more effectively. This represented a policy level shift in that the project was demonstrating to the GOI the important role the private sector can play in its health programs.

Finally, it should be noted that not all of the improvements in the districts can be attributed to the ICDS project. The period of the USAID project coincided not only with the devastating drought but also with the expansion of the government's Employment Guarantee Scheme (EGS) in drought-afflicted districts. The day labor employment provided to both men and women under the EGS led to a rise in average household income, particularly in Chandrapur, providing families with more money to buy food and other basic necessities. Furthermore, ongoing government health and education programs benefited all the districts in the area, including Chandrapur and Panchmahals. Panchmahals district had also benefitted from earlier USAID assistance (through the Integrated Rural Health Project) as well as a CARE program to promote the use of ORT. Although the extent to which changes in the two districts can be attributed directly to USAID supported innovations in the ICDS scheme is hard to measure, there can be no doubt they made a positive contribution.

Attachment 'D' provides the end of project status of the planned outputs as per the project paper.

B. Sustainability

Various parts of the project show strong signs of sustainability, with the GOI extending some features to its nationwide ICDS program. Particular examples of sustainability include the fact that the nutrition activities were completely integrated into the regular infrastructure of ICDS in both districts, easing the future translation of successful aspects of other project components as well. Community participation was shown, in a small way, by the contributing of food materials for supplement whenever there was disruption in food supplies for short periods. In Chandrapur District, community participation was also evidenced through the annual contribution made by community members to the anganwadi workers. Although a small sum (Rs.100), it indicates an appreciation and understanding of the importance of the work being done by the anganwadi workers.

Food distribution is also further ensured as two Ready-to-Eat (RTE) plants have been made operational in Gujarat and Maharashtra with the state governments having assumed their operating and maintenance costs. The plants have produced sufficient food to meet the feeding requirements of the two project as well as four non-project districts.

MIS, too, shows good signs of sustainability due to its institutional framework, continued demand and acceptance. In addition, ownership within the GOI, the quality and ease of use of the PRS software, the excellence of the training and support also contribute to its sustainability.

That MIST was extended to two new districts is an explicit statement of the government's acceptance of the technical relevance of MIST. The cascading training concept of MIST (from the supervisor/trainer

to the anganwadi worker, to the health workers, to the helpers, village leaders and most recently the adolescent girls) has much potential for improving service delivery, better health/nutrition coordination, and community participation.

Parts of the NHED component are either being sustained, or show great sustainability potential. The NHED counseling cards were used by ICDS workers long after technical support was withdrawn. The cards have been a crucial vehicle for the transmission of key feeding and health messages to mothers; their innovative concept and attractive appearance are easily replicable with minor adaptation to local conditions. In addition, NIPCCD has incorporated some of the NHED materials into its standard training syllabi and has rewritten its syllabi to make them more task-oriented. Also, the growth monitoring training modules and instruction manuals have been distributed nationally.

V. LESSONS LEARNED

1. The marked improvement in health service use was an important factor for goal achievement in nutrition. This emphasizes the importance of coordination and linkage of ICDS with health. The results of the ICDS project appear to show that integration of nutrition concerns with other child-survival interventions can produce important improvements in the health and nutritional status of women and children. In addition, they confirm the value of a multi-purpose, village based institution (such as an anganwadi) for delivering health and nutrition services.

2. Support ceased prematurely for the intended, cohesive NHED "package", with piecemeal implementation, inadequate monitoring and no provision for needed materials--this was a serious oversight

reflecting the GOI's low priority of providing mothers with education and skills to make more permanent behavioral changes (as reflected in the fact that no NHED coordinator was appointed to the NIPCCD). In large part this was due to the fact that there was never any GOI support for the NHED component and little from the State and district officials. Without that support, sustainability and replicability are difficult. Public "ownership" of and continued interest in the materials might have been more strongly developed.

3. Mass media elements, as executed under NHED, were not as successful as they might have been, given the potential to reach large audiences. Radio messages did not reach mothers since, in the rural and tribal areas, very few women have access to radios and it was difficult to gather them into listening circles. More importantly, although video vans drew large, receptive local audiences, the content and style of the videos were inappropriate for rural and tribal groups. The characters were urban and villagers sometimes found them offensive or vulgar, or the suggested behavior was not relevant to village life. Given the vast potential and popularity of this medium, effort should be made to maximize its effectiveness.

4. Available records show a low attendance of eligible mothers for supplementary feeding, at best 65 percent (below the target of 85 percent). Similarly, there is still a low percentage of eligible children under three years brought to anganwadis for feeding. Although low, improvement has occurred. The community needs to understand the importance of younger child participation in feeding. In addition, as most rural women work in the fields and older children have fixed school hours, modifications in the ICDS system would be required to accommodate these groups.

VI. MISSION FOLLOW-UP

1. The GOI has requested assistance in expanding the Management Information System (MIS) to all the States in India, which will be virtually impossible to do without assistance. The Food and Nutrition Monitoring Project at AID/W is in a unique position to provide such assistance.

2. The GOI would like to exploit the data from the Low Birth Weight (LBW) Research. While the original purpose of the research was achieved under the ICDS project, the GOI feels that the results of additional analysis could be invaluable in shaping the future of the nutritional component of the nationwide ICDS program. It is clear from the LBW research and discussions with the team at ICMR that their current resources will not permit additional and more indepth analysis of the nutrition study. Given this, there is an opportunity for USAID to provide technical assistance and training to enhance the skills of the ICMR team, as well as both field teams, and in the process, to attempt a much more appropriate and sophisticated analysis than would be possible without such support.

3. Likewise, the GOI has requested USAID assistance in analyzing the data produced by the series of impact evaluation surveys. It is believed that such analysis will be of direct relevance in determining the most cost effective aspects of the program, which in turn could have a tremendous effect on the expansion of the ICDS program within the country.

NUTRITIONAL STATUS: WEIGHT-FOR-AGE*
CHILDREN 0 - 36 MONTHS

	<u>Baseline (%)</u>	<u>Final (%)</u>	<u>% Change</u>
<u>Panchmahals</u>			
Moderate/Severe Grades 2,3,4	46	40	-13
Severe Grades 3,4	16	12	-25
<u>Chandrapur</u>			
Moderate/Severe Grades 2,3,4	50	39	-22
Severe Grades 3,4	17	8	-53

*Indian Academy of Pediatrics Classification Final Report,
ICDS Impact Evaluation, M.S. University, Baroda 1991

INFANT AND TODDLER MORTALITY RATES

	<u>Baseline</u>	<u>Final</u>	<u>% Change</u>
<u>Panchmahals</u>			
IMR*	69	63	-9
TMR*	17	11	-35
<u>Chandrapur</u>			
IMR*	82	61	-27
TMR*	16	10	-38

*IMR = Deaths per 1000 live births; TMR = Deaths per 1000 children
12 - 36 months. Final Report, ICDS Impact Evaluation, M.S.
University, Baroda, 1991

TRAINING SESSIONS SPONSORED UNDER THE ICDS PROJECT

<u>Training course</u>	<u>Location</u>	<u>No. Trained</u>	<u>Duration</u>
1. Nutrition: Low Birth Weight Research	Harvard University	4	6 weeks
2. Management Issues in International Health	Management Sciences for Health, Boston	2	4 weeks
3. Managing Drug Supply for Primary Health Care	Management Sciences for Health, Boston	1	5 weeks
4. Influencing Health Behavior Communication	National Council for Int'l Health, Washington	1	4 days
5. Nutrition Program Management	Tufts University, Massachusetts	6	2 weeks
6. Nutrition Program Management	Tufts University, Massachusetts	10	8 days

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Papers Published/presented using the project data:

1. Mothers' Nutrition Knowledge and Child Nutritional Status in India. Rita Abbi, Parul Christian, Sunder Gujral and Tara Gopaldas.
Food And Nutrition Bulletin 1988; 10(3):51-54.
2. The Role of Maternal Education and Nutrition Knowledge in Determining Child Nutritional Status. Parul Christian, Rita Abbi, Sunder Gujral and Tara Gopaldas.
Food And Nutrition Bulletin 1988; 10(4):35-40.
3. Relationship Between Maternal and Infant Nutritional Status. Parul Christian, Sunder Gujral, Rita Abbi and Tara Gopaldas.
Journal of Tropical Pediatrics 1989; 35:71-76.
4. Agreement between Hemoglobin Estimation and Anemia Recognition Card in Assessment of Anemia in Pregnant Women. Sunder Gujral, Rita Abbi, Mary Ann Anderson, Parul Christian and Tara Gopaldas.
European Journal of Clinical Nutrition 1989; 43/7:473-475.
5. Socioeconomic Determinants of Child Nutritional Status in Rural and Tribal India. Parul Christian, Rita Abbi, Sunder Gujral and Tara Gopaldas.
Ecology of Food And Nutrition 1989; 17.
6. At Risk Status of Pregnant Women of Panchmahals (Gujarat) and Chandrapur (Maharashtra). Parul Christian, Rita Abbi, Sunder Gujral and Tara Gopaldas.
Arogya, A Journal of Health and Sciences 1989; XV:85-91.
7. Agreement between Arm Circumference, Weight for Age and Weight for Height Measures of Malnutrition in Children. Mary Ann Anderson, Tara Gopaldas, Rita Abbi and Sunder Gujral.
Indian Pediatrics 1990; 27:247-54.
8. Does Growth Monitoring work as it Ought to in Countries of low literacy?. Tara Gopaldas, Parul Christian, Rita Abbi and Sunder Gujral.
Journal of Tropical Pediatrics 1990; 36:322-327.
9. Impact of Maternal Work Status on Nutrition and Health Status of their Children. Rita Abbi, Parul Christian, Sunder Gujral and Tara Gopaldas.
Food and Nutrition Bulletin 1991; 13(1): 20 - 25.
10. Analysis of the Nutritional and Health Consequences of Drought in Indian Children. Parul Christian, Rita Abbi, Sunder Gujral and Tara Gopaldas.
Ecology of Food and Nutrition (In press).

11. Child Diarrhoea: Oral Rehydration Therapy and Rural Mother. Tara Gopaldas, Sunder Gujral, Rajni Mujoo and Rita Abbi.
Journal of Nutrition International (In press).
12. Maternal Age/Parity and Child loss in Rural and Tribal Women in Panchmahals district of Gujarat. Sunder Gujral, Rita Abbi, Rajni Mujoo and Tara Gopaldas.
Journal of Home Science Association of India (In press).

Papers Under Review

13. Prevalence of Xerophthalmia and Efficacy of Vitamin A Prophylaxis in Preventing Xerophthalmia Coexisting with Malnutrition in Rural Children. Tara Gopaldas, Sunder Gujral and Rita Abbi.
Indian Pediatrics.
14. Determinants of Anganwadi Workers' Performance Sunder Gujral, Rita Abbi, Rajni Mujoo and Tara Gopaldas.
Journal of Tropical Pediatrics.

Papers Presented

15. Degree of Agreement between Weight for Age and Arm Circumference Measurements in Identifying Malnourished Children.
XIX Annual Meeting of NSI On November 29, 1986 at Hyderabad India.
16. Nutrition Knowledge of Mother and the Nutritional Status of Children.
Annual Meeting of NSI, November 6-7 1987, Baroda.
17. At risk status of Pregnant women of Panchmahals (Gujarat)
Annual Meeting of NSI, November 6-7 1987, Baroda.
18. Agreement between Hemoglobin Determination (HB) and Pallor signs in Assessment on Nutritional Anemia.
Fifth Asian Congress of Nutrition 26-29 October, 1987, Osaka, Japan.
19. Effect of Literacy Status and Nutrition Knowledge of Rural and Tribal Mothers on the Nutritional status of their children.
Fifth Asian Congress of Nutrition 26-29 October, 1987, Osaka, Japan.
20. Socioeconomic Determinants of Weight of Preschoolers.
World Congress on Clinical Nutrition held at New Delhi 27th February to 1st March 1988.
21. Interaction effects of Vitamin A Prophylaxis and child Nutrition/Morbidity Status on prevalence of vitamin A deficiency in Rural India.
The XIV International Congress of Nutrition 20-25 August, 1989 Seoul, Korea.

ICDS PROJECT PLANNED OUTPUTS VERSUS ACHIEVEMENTS

CATEGORY OF OUTPUT	SPECIFIC OUTPUT	PLANNED QUANTITY OF OUTPUT	ACHIEVED QTY OF OUTPUT
ADDITIONAL SERVICE WORKERS TRAINED AND EMPLOYED AT ANGANWADIS	AWWs	4,000	4,500
	Helpers	4,000	4,500
	Trained dais	4,000	4,500
ADDITIONAL MANAGEMENT & TECHNICAL SUPPORT STAFF TRAINED (OR ORIENTED) AND EMPLOYED			
.AT SUB-BLOCK LEVEL	MSs	348	376
.AT THE BLOCK LEVEL	Assistant CDPOs	18	16
	CDPOs	19	21
	Other block staff	104	104
.AT DISTRICT CELLS	Program Officers	2	2
	Other district staff	24	24
	In-service workshops for:		
	MSs	348	376
	AWWs	4,000	4,501
	Helpers	4,000	4,570
.AT STATE CELLS	MIS Coordinators	2	2
	Other state staff	8	8
EXISTING HEALTH WORKERS RECEIVING IN-SERVICE TRAINING THROUGH MOBILE WORKSHOPS	Female Health Workers (LHVs & ANMs)	800	282 LHVs 1178 ANMs
	Dais	3,786	4,072
	CHVs	1179	947

CATEGORY OF OUTPUT	SPECIFIC OUTPUT	PLANNED QUANTITY OF OUTPUT	ACHIEVED QTY OF OUTPUT
MANAGEMENT & TECHNICAL SUPPORT STAFF RECEIVING ADDITIONAL TRAINING	Short and long term training in India and abroad	5 person years +30 person months	1 course at MSH Boston for two persons for a total of 42 person days 3, five day courses at Tufts University for five persons for a total of 75 person days
ADDITIONAL TRAINING SUPPORT STAFF TRAINED AND EMPLOYED			2 persons attended conference in US
.AT NIPCCD	National Training Coordinator	1	Not appointed
	Assistant Training Coordinator	1	Not appointed
	Clerk-Typist	1	Not appointed
.AT ICCW	Program Officer	1	1
	Steno Typist	1	1
.AT SCCWs	Program Officers	2	2
.AT STATE CELLS	Training Coordinators	2	2
.AT TRAINING CENTERS	ICDS Instructors trained at in-service workshops	120	4 workshops/year 2 in Pre-school education 2 in WHED & GMP 1 in Community Participation
ADDITIONAL COMMUNITY MEMBERS ORIENTED	Village Panchayat leaders oriented annually during first 3 years of implementation	8,000	5458 leaders in Panchmahal 2230 leaders in Chandrapur. Also booklet for village leaders

CATEGORY OF OUTPUT	SPECIFIC OUTPUT	PLANNED QUANTITY OF OUTPUT	ACHIEVED QTY OF OUTPUT
ADDITIONAL TRAINING MATERIALS PRODUCED AND APPLIED IN ALL TRAINING CENTERS	Revised syllabi and materials for <u>Basic Training</u> of:		
	CDPOs, CDPO Instructors, MSs, MS Instructors, AWWs AWW Instructors	1	1
	Training materials for MIST:		
	Instructor's Guide for MSs Student's	1	Manual and training module prepared for use by Instructors of MSs and AWWs
	Guide for AWWs	1	
	Slide sets	150 copies of 2 sets	Copies of .14 slide set of 2 video films
	Performance standards for CDPOs MSs, AWWs & Instructors of each of these workers	1	Developed for CDPOs only Also first accreditation survey completed for all MLTCs and AWTCs
ADDITIONAL NHED TECHNICAL SUPPORT STAFF TRAINED AND EMPLOYED			
.AT DISTRICT CELLS	District Education and Media Officers designated as NHED Coordinators	2	In both district the DEMO's were designated to work as District NHEE Co-ordinators. However, due to change in the strategy of NHEE component their services were not fully utilized.

CATEGORY OF OUTPUT	SPECIFIC OUTPUT	PLANNED QUANTITY OF OUTPUT	ACHIEVED QTY OF OUTPUT
.AT STATE CELLS	NHED Coordinators	2	In Maharashtra a post of state NHED Co-ordinator was created and filled. However, in Gujarat the state Nutrition Officer of the rank of Deputy Director was designated to man this position
ADDITIONAL NHED SYSTEMS ESTABLISHED			
.AT ANGANWADIS	Monthly NHED sessions	In 4,000 anganwadis by third project year	Regular monthly NHED sessions with mothers were organized at all the 4,500 anganwadis centers in both the project districts.
.AT STATE CELLS	NHED clearinghouse for materials		Due to change in NHED strategy the idea of a state clearing house was dropped.
ADDITIONAL NHED MATERIALS SUPPLIED			
	Additional sets of NHED materials for anganwadis (five sets of different materials)	4,000 of each set	Under the NHED component a set of counselling cards, bubblegrowth charts for children below 3 years, pregnant women's action card and other related NHED material were developed and distributed in adequate quantities to all 4500 anganwadi centers. All workers and their supervisors were given training in the use of materials

CATEGORY OF OUTPUT	SPECIFIC OUTPUT	PLANNED QUANTITY OF OUTPUT	ACHIEVED QTY OF OUTPUT
FOOD CONSUMPTION BY TARGET GROUP	Existing CARE Title II food consumed in 4,000 ICDS anganwadis	85% of at-risk pregnant and nursing women and moderately and severely malnourished children under 3 years of age in communities served by 4,000 anganwadis, regularly receiving Title II foods by 4th project year	They have been receiving food regularly in both districts
ADDITIONAL MANAGEMENT SYSTEMS ESTABLISHED	Quarterly enrollment system for the anganwadi	1	1
	Management information system	1	1
	Independent monitoring system including "spot" checks	1	1
	Baseline and 2 follow-up impact evaluation surveys	In 19 blocks 228 anganwadis	In 19 blocks 228 anganwadis
ADDITIONAL ANALYSES/ INNOVATIVE ACTIVITIES	Time and motion study of the AWW	1	Not carried out
	Innovative activities	3	1 scheme was carried out
LOW BIRTH WEIGHT RESEARCH	Establishment of Indian reference laboratories	2	2
	Prevalence of infection and maternal malnutrition studies	3	3

CATEGORY OF OUTPUT	SPECIFIC OUTPUT	PLANNED QUANTITY OF OUTPUT	ACHIEVED QTY OF OUTPUT
	Intervention trials	3-4	Both Infection and Nutrition Studies have been completed. However, trials have been delayed.
	Review meetings of collaborators in India	4	4

SPECIAL COVENANTS

The special covenants, as outlined in the project agreement, are detailed below with their status.

Section 6.1 (a): The Cooperating Country will assure that CARE supplied Title II foods are assigned and delivered to AID assisted ICDS project.

STATUS: This was done as CARE supplied \$32.5 million worth of food commodities to the AID assisted ICDS project.

Section 6.1 (b): The Cooperating Country will assure that the District Health Education and Media Officers in AID assisted districts are designated as ICDS Nutrition and Health Education Coordinators by December 31, 1983.

STATUS: Although both states designated district NHED coordinators, the role played by these officers was not significant given the changed NHED strategy.

Section 6.1 (c): The Cooperating Country will cause the state governments of Maharashtra and Gujarat to designate personnel to act full time as an ICDS Nutrition and Health Education Coordinator, and ICDS Training Coordinator and an ICDS Management Information System Coordinator respectively by December 31, 1983.

STATUS: The Training Coordinator, MIS Coordinator and NHED Coordinator posts were filled by both states.

Section 6.1 (d): The Cooperating Country will make available to AID data and reports generated by the management information system and impact evaluations in AID assisted ICDS project areas.

STATUS: MIS reports have been received regularly from both Maharashtra and Gujarat. The reports from the impact evaluation surveys were received on completion of each of the four rounds.

Section 6.1 (e): The Cooperating Country will fill posts for health workers in AID assisted ICDS project areas to the level of the GOI's model plan on a priority basis.

STATUS: The necessary infrastructure, per the GOI's model health plan was established in both Chandrapur and Panchmahals.

Section 6.2: The Parties agree to establish an evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter: (a) evaluation of progress toward attainment of the objectives of the Project; (b) identification and evaluation of problem areas or constraints which may inhibit such attainment; (c) assessment of how such information may be used to help overcome such problems; and (d) evaluation, to the degree feasible, of the overall development impact of the Project.

STATUS: A mid-project evaluation and a final project evaluation were conducted in July 1986 and March 1992 respectively. These evaluations covered the above covenant's requirements.

Section 6.3: The cooperating country/grantee shall exercise every responsible effort to require each person trained under the project to work in activities related to the project or in activities approved for financing under this project agreement, in India, for not less than three times the length of time of his or her training program.

STATUS: Most of the training under the ICDS project was at the grass roots level, and these functionaries are still working in the project activities. Of those trained in the U.S., all but three are working in ICDS activities.