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WORLD VISION RELIEF AND DEVELOPMENT

**FINAL EVALUATION REPORT
KAMALAPUR CHILD SURVIVAL PROJECT
DHAKA, BANGLADESH**

**Beginning Date: October 1, 1988
Ending Date: September 30, 1991**

Submitted to:

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Office of Private and Voluntary Cooperation
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WORLD VISION RELIEF & DEVELOPMENT INC.

**PART I
KNOWLEDGE AND PRACTICE SURVEY
KAMALPUR CHILD SURVIVAL PROJECT
DHAKA, BANGLADESH**

Submitted by:

Kamalapur CSP Team

Abdul Hye, M&E Officer, KCSP

September 1991

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LIST OF ACRONYMS

AC	Area Coordinators
BWHC	Bangladesh Women's Health Coalition
CDD	Control of Diarrheal Diseases
CDW	Community Development Officer
CHW	Community Health Worker
CMO	Chief Medical Officer
CS	Child Survival
CSPR	Kamalapur Child Survival Project
CV	Community Volunteer
DCC	Dhaka City Corporation
DIP	Detailed Implementation Plan
EPI	Expanded Program for Immunization
FET	Final Evaluation Team
FDP	Family Development Project
FMG	Focus Mothers Group
HKI	Helen Keller International
IEM	Information, Education, and Motivation
MOH	Ministry of Health
MOHFW	Ministry of Health and Family Welfare
MET	Midterm Evaluation Team
MTE	Midterm Evaluation
NHC	Neighborhood Health Committee
NGO	Nongovernmental Organization
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PHN	Public Health Nurse
PVO	Private Voluntary Organization
TBA	Traditional Birth Attendant
UNICEF	United Nations Children's Educational Fund
VAC	Vitamin A Capsule
WHCC	Women's Health Coalition
WVB	World Vision Bangladesh
WVRD	World Vision Relief & Development, Inc.

OBJECTIVES

The main objective of the survey was to assess the coverage on immunization, ORT, nutrition, and family planning among the target population of Ward No. 51 of Dhaka City Corporation, according to the advice of the final evaluation team. The findings were compared to the baseline and MTE results. A separate knowledge/practice survey was conducted in October 1991, and will be discussed in the Detailed Implementation Plan (March 1992).

METHODOLOGY

The survey was conducted using the methodology of 30-cluster sampling recommended by WHO. Ten project community health workers project were engaged in data collection. Data was collected from August 24-27, 1991.

- A. Study Universe**—The survey was conducted in 26 out of 100 clusters, representing the project area in terms of geographical and socioeconomic cultural conditions. According to the rules of 30-cluster sampling, though, it was necessary to collect samples from 30 clusters; but due to the absence of two CHWs and time constraints, we could not collect samples from 30 clusters.
- B. Sampling Procedures**—One set of 30 clusters was selected from the prepared list of 100 clusters with the total number of households and population by using the random sampling recommended by WHO.
- C. Sample Size**—The primary target population of each cluster were seven children 12-23 months, seven infants 0-11 months, as well as the mother of those infants. In finding out this target population, other children 24-71 months and mothers of children under six years who came in contact with the interviewer were also interviewed.
- D. Survey Instruments**—The information was collected through a precoded questionnaire. The questionnaire was finalized after getting valuable inputs from the experienced persons who are involved with Child Survival Project and also from Dr. Sri Chander, WV South Asia Director for Health.
- E. Orientation/Training of Interviewers**—A half-day orientation/training session was arranged for people directly involved with the survey. A field test was also conducted to ensure the quality and accuracy of data collection. Ten CHWs, two PHNs, and two ACs participated in the training. The Monitoring and Evaluation Coordinator and Project Analyst facilitated the training.
- F. Data Editing**—To maintain the accuracy of data, two steps of editing/checking were maintained:
 1. Filled out questionnaires were checked manually by the respective supervisor. Questionnaires found with mistakes were returned to the respective CHW for necessary correction.
 2. Edited by the computer through a checklist program.

- G. Data Analysis**—The survey data were cleaned and banked into the computer for analysis. Analytical work was done by using the package "Statistical Package for Social Science (SPSS+)."

**SUMMARY OF THE FINDINGS
FINAL EVALUATION SURVEY
CSP KAMALAPUR
AUGUST 24-27, 1991**

VARIABLES		FINDINGS	
		Final Evaluation %	Midterm Evaluation (August 1990) %
1.	Children 12-23 months immunized with six EPI vaccines before their first birthday	87.9	84.8
2.	Mothers of the infants immunized with TT2/TT2+	90.6	81.4
3.	Children 6-71 months received VAC in the last six months	82.0	88.0
4.	Mothers practicing breastfeeding to their infants	93.4	91.9
5.	Mothers practicing weaning food to their infant/children at four months of age	31.6	58.4
6.	Competent in ORT	79.7	not available
7.	Had diarrhea in the last two weeks and treated with ORT.	89.7	64.7
8.	Eligible couples practicing modern methods of contraception.	45.5	44.3

**POPULATION PROFILE
CSP KAMALAPUR
FINAL EVALUATION SURVEY**

POPULATION		NUMBER
1.	Infant 0-5.99 Months	69
2.	Infant 6-11.99 Months	113
3.	Infant 0-11.99 Months	182
4.	Children 12-23.99 Months	182
5.	Children >59.99 Months	93
6.	Children 24-59.99 Months	331

DISTRIBUTION INFANT FEEDING BY AGE

VARIABLES	FEEDING PRACTICE OF INFANTS***			
	0-3.99 MONTHS (%)	4-5.99 MONTHS (%)	6-11.99 MONTHS (%)	TOTAL
Infant Breastfed	42 (85.7)	20 (100)	96 (84.9)	158 (86.8)
Infant Bottlefed	18 (36.7)	4 (20.0)	36 (31.8)	58 (31.8)
Any Complementary Foods	14 (28.6)	16 (80.0)	100 (88.5)	130 (71.4)
Total Infant	49	20	113	182

*** More than one thing practiced by some infants.

**PERIOD OF VAC RECEIPT
BY AGE OF INFANTS/CHILDREN**

INFANTS/CHILDREN	VAC RECEIPT		
	WITHIN THE LAST SIX MONTHS	BEFORE THE LAST SIX MONTHS	TOTAL INFANTS/CHILDREN (WHO RECEIVED VAC)
Infant 6-11.99 Months	83 (96.5)	3 (3.5)	86
Children 12-23.99 Months	147 (96.1)	6 (3.9)	153
Children 24-59.99 Months	304 (96.8)	10 (3.2)	314
Children 60-71.99 Months	58 (93.5)	4 (6.5)	62
Total	592 (96.3)	23 (3.7)	615

FINAL EVALUATION SURVEY FINDINGS
CSP KAMALAPUR
24-27 AUGUST 1991

SL #	VARIABLES/EVENTS	FINDINGS							
		FINAL EVALUATIONS				MIDTERM EVALUATION (AUGUST 1990)		BASELINE (OCTOBER 1988)	DHAKA CITY CORPORATION
		REGISTERED		REGISTERED + UNREGISTERED		REGISTERED + UNREGISTERED			
		YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	YES (%)
1.	Received VAC	543	637	615 (78.0)	788	516 (90.0)	573	(16.5)	(67.0)
2.	Diarrhea in the past two weeks	70 (12.6)	556	97 (14.0)	695	191 (31.9)	598	(16.3)	**
	If so, type of treatment:								
	a. Lobon Gur	36 (51.4)		49 (50.5)		74 (38.8)		(13.7)	
	b. ORS (Packet)	51 (72.9)	70	66 (68.0)	97	44 (23.0)	191	(41.5)	**
	c. Rice Water	5 (7.1)		7 (7.2)		1 (0.5)		(00.0)	
	d. Others	0		7 (7.2)		1 (0.5)		(44.8)	
3.	Breastfeeding of infants	127 (93.4)		170 (93.4)		193 (91.9)		(85.7)	**
4.	Bottlefeeding practice of infants	47 (34.5)	136	66 (36.3)	182	78 (37.1)	210	*	**
5.	Infant practicing complementary foods	106 (77.9)		142 (78.0)		162 (77.1)		*	**

* Information not available according to our objectives.

** Information not available.

SL #	VARIABLES/EVENTS	FINDINGS							
		FINAL EVALUATIONS				MIDTERM EVALUATION (AUGUST 1990)		BASELINE (OCTOBER 1988)	DHAKA CITY CORPORATION
		REGISTERED		REGISTERED + UNREGISTERED		REGISTERED + UNREGISTERED			
		YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	YES (%)
6.	Children (12-23 months) immunized with six EPI vaccines before their first birthday.								
	a. With Card	130 (92.8)	140	160 (87.9)	182	178 (84.8)	210	(14.4)	(61.5)
	b. Without Card	113 (80.7)		135 (74.2)		129 (61.5)		49 (23.3)	•
		17 (12.1)		25 (13.7)				•	**
7.	Mothers of the infants (0-11 months) immunized with TT2/TT2+.								
	a. With Card	129 (94.2)	137	165 (90.6)	182	171 (81.4)	210	(18.0)	(54.0)
	b. Without Card	96 (70.0)		120 (65.9)		107 (50.9)		64 (30.5)	•
		33 (24.1)		45 (24.7)				•	**
8.	Received teaching from the CHWs and CVs regarding feeding of infants and children.	484 (99.6)		596 (97.5)		457 (88.7)		•	**
9.	Age of the infants started other foods (in addition to breastfeeding).								
	< 4 Months	9 (1.8)	486	16 (2.6)	611	18 (3.5)	515	•	**
	4 Months	170 (35.0)		193 (31.6)		301 (58.4)		•	**
	5-8 Months	298 (61.3)		379 (62.0)		179 (34.8)		•	**
	> 8 Months	9 (1.8)		23 (3.8)		17 (3.3)		•	**

* Information not available according to our objectives.

** Information not available.

& Mt. = Method

SL #	VARIABLES/EVENTS	FINDINGS							
		FINAL EVALUATIONS				MIDTERM EVALUATION (AUGUST 1990)		BASELINE (OCTOBER 1988)	DHAKA CITY CORPORATION
		REGISTERED		REGISTERED + UNREGISTERED		REGISTERED + UNREGISTERED			
		YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	YES (%)
10.	Heard about ORT	485 (99.8)		611 (100)		513 (99.6)		.	**
11.	Have you ever used ORT (lobon gur packets or rice water) for your children's diarrhea?	429 (88.3)		524 (85.8)		423 (82.1)		.	(30.0)
12.	Would you continue to feed and/or breastfeed a child with diarrhea?	472 (97.1)		583 (95.4)		478 (92.8)		(61.9)	**
13.	Would you give extra feeding during recovery after diarrhea?	477 (98.1)	486	591 (96.7)	611	.	515	.	**
14.	Do you know where to refer your child with severe diarrhea dehydration (any MBBS Doctor, Health Center/Hospital, ICDDR,B)?	479 (98.5)		597 (97.7)		.		.	**
15.	Competent in ORT?	409 (84.1)		487 (79.7)		.		.	**

* Information not available according to our objectives.

** Information not available.

& Mt. = Method

SL #	VARIABLES/EVENTS	FINDINGS							
		FINAL EVALUATIONS				MIDTERM EVALUATION (AUGUST 1990)		BASELINE (OCTOBER 1988)	DHAKA CITY CORPORATION
		REGISTERED		REGISTERED + UNREGISTERED		REGISTERED + UNREGISTERED			
		YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	TOTAL	YES (%)	YES (%)
16.	Currently using any contraception?	245 (50.4)	174 (45.5)		228 (44.3)			Including natural mt. (46.8)	**
	If so, kind of contraception:								
	a. Pills	151 (61.6)		174 (62.6)		155 (68.0)			
	b. Condoms	26 (10.6)	245	27 (9.7)	278	23 (10.1)	228	*	**
	c. Tubal Ligation	10 (4.1)		10 (3.6)		13 (5.7)			
	d. Vasectomy	4 (1.6)		4 (1.4)		0			
	e. Injectable	37 (15.1)		42 (15.1)		14 (6.1)			
	f. IUD	7 (2.6)	245	11 (4.0)	278	8 (3.5)	228	*	**
	g. Norplant	4 (1.6)		4 (1.4)		0			
	h. Others	6 (2.5)		6 (2.2)		15 (6.6)			

* Information not available according to our objectives.

** Information not available.

WORLD VISION RELIEF & DEVELOPMENT INC.

**PART II
SUSTAINABILITY ASSESSMENT REPORT
KAMALAPUR CHILD SURVIVAL PROJECT
DHAKA, BANGLADESH**

Submitted by:

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7. Policy Guideline on Cost-Recovery Mechanism
8. Report on Local Revenues

I. EXECUTIVE SUMMARY

The Final Evaluation Team (FET) for World Vision's Kamalapur Child Survival Project (CSPK) carried out in an urban slum of Dhaka found the project to have very remarkable results in meeting the objectives set by the Midterm Evaluation (MTE). The three-year project began in October 1988 to train families to adopt positive health behaviors: practice of family planning methods, to see that mothers and children are appropriately immunized; to ensure that children are exclusively breastfed during the first four months of life and given appropriate weaning foods thereafter; mothers practice oral rehydration therapy in case of diarrhea; eligible children receive Vitamin A supplementation and are referred for treatment of illness. These behaviors adopted by a majority of families are expected to be sustainable. Support for maintaining these behaviors will be strengthened at the grass-roots level through Neighborhood Health Committees (NHCs), Community Volunteers (CVs), and Focus Mothers Groups (FMGs). Collaboration with other PVOs and/or government personnel, and the successful introduction of a fee-for-service scheme have also emerged as sustainable elements of this project.

The project works in Ward 51 under the supervision of the Dhaka City Corporation (DCC) under whose jurisdiction urban health programs are carried out. The DCC medical personnel have assessed the CSPK team as having set a standard of excellence for similar projects. Although urban health infrastructure is under the DCC instead of the Ministry of Health (MOH), the project staff has also worked positively with the Expanded Program for Immunization (EPI) program of the MOH, and with the National Nutrition Council in helping to field test a new Road-to-Health Weight/Age card for Bangladesh.

At midterm, the project had already achieved a 90 percent reduction in Vitamin A deficiency, and a reduction in the percentage of mothers who had "never heard" of ORT from 89 percent to less than 1 percent. The FET found most of the MTE achievements continue to be maintained:

- 88 percent of children, are immunized by their first birthday with six antigens;
- 91 percent of mothers have received two tetanus toxoid doses;
- 80 percent of families are competent in ORT;
- 90 percent of children suffering from diarrhea in the two weeks prior to the final survey were administered ORT; and
- 46 percent of couples are practicing family planning.

The challenge remaining is for the project to achieve its nutrition objectives. Home visits carried out by the FET revealed cases of severe malnutrition. Only one-third of mothers would introduce appropriate weaning foods by the fourth month of age. These findings could partly be due to the MTE team's recommendation that the project abandon efforts at growth monitoring—understandably in the absence of an approved instrument or government standards at the time.

II. BACKGROUND

Urban Dhaka, Bangladesh, is a rapidly growing city and is now believed to contain more than six million people, many of them recent immigrants from rural areas. Living in shacks and small, crowded, often mud-floor dwellings, they inhabit land built over silt deposits and garbage heaps, often near factories where some hope to find work. The city is divided into wards—each containing between 50,000 and 100,000 people who depend on Dhaka City Corporation for municipal services, including primary health care. A heritage of the colonial system separated urban from rural health care infrastructure, with rural health care under the Government of Bangladesh Ministry of Health, while urban care is at the mercy of the municipal government. World Vision Relief & Development (WVRD) took on a real challenge in working with the DCC to cover one "new" ward, "Kamalapur," with an estimated population of 77,000. That they had done so was propitious for the people of Kamalapur who suffered a disastrous flood soon after the project began. This forced WVRD into a relief mode at the beginning of the project, hence a delay in the implementation of the CS project.

The project director reported it was very difficult in the beginning to convince local leaders who are slightly better off economically to be involved in this project. It took most of the year after the flood to sensitize them. To quote a staff member, "It came about when local leaders began to see that everyone, including themselves, could benefit from better health and sanitation practices and that no-one should be left out. Everyone could receive the services of the project. Then they began to get involved." Thus the project incorporated from the beginning one of the tenets of sustainable family planning services, "Offer the same standard of excellent service to everyone!"

When the project began, there was no local infrastructure with which project personnel could interact to identify leaders and establish local committees. There were no maps or reliable household identification system. There were no data on local demographics or the socioeconomic situation. All these had to be established by staff working side by side with community people, and with the encouragement of the DCC who sent some of their top personnel to oversee the project.

Community Health Workers report that in the early stages of the project it was difficult to interest anyone to join the "Neighborhood Health Committee." Committees were formed primarily on the basis of who showed up and who were willing to help. Little by little, better-off members of the community began to participate and to provide leadership, abandoning their old attitudes that "someone (else) should do something about the poor people encroaching on the land." Today, change has been remarkable—people from different socioeconomic groups constitute the Neighborhood Health Committees.

A key step to this project's implementation was the geographic subdivision of the population to be served from the ward level down to the neighborhood level where local leadership could participate in training families in health-related behaviors. To achieve this, the project management had to do extensive preliminary community

education with people identified in exploratory visits. The project worked with informed leaders to subdivide Ward 51 into two zones, and zones into 12 compartments to accomplish door-to-door coverage. Each Community Health Worker serves a population of less than 2,000 per compartment.

Each compartment was divided into 8-12 small clusters covering 100-125 families each, or "neighborhoods" serviced by a community volunteer. Important community leaders were identified from adjacent clusters to participate in the community meeting for establishing Neighborhood Health Committees. Community Volunteers, or resident-home-visitors, were then recruited by the NHCs, and with their CHW trainers they formed the grass-roots structure of the project.

The project staff could not hold itself responsible to reach any other than the stable, resident population, including all economic classes. However, they quickly discovered in this slum population a transient, highly mobile sector. At any point in a service distribution or evaluation process, the staff had to classify beneficiaries as "registered" (present six months or more) or "unregistered" (transient). The latter population posed some problems—have not been present long enough in the area to be expected to understand the child protective behaviors the project teaches. The Kamalapur Child Survival Project staff tried to encompass these people in its services through a computerized system, but needed to define them separately for evaluation purposes.

Two words characterize this project—"equity" and "surveillance." The spirit that permeates the project is one of "servanthood" as expressed to the FET by one of the doctors.

III. INTRODUCTION

The final evaluation of the Kamalapur CSP was conducted as part of USAID's reporting requirements. The project staff identified other areas for evaluation in addition to the guidelines from USAID. The final evaluation team was given the following scope of work:

- Conduct a project sustainability assessment using guidelines developed for this final evaluation.
- Assist project staff to develop a sustainability action plan to serve as guide for the next three years of project life.
- Assess project achievements against revised project objectives.
- Identify linkages between the CS project and the child sponsorship project.
- Assess plans to introduce new interventions, i.e., pneumonia control, antenatal care in the extension/expansion phase.
- Recommend revised objectives for potential inclusion in the DIP for the extension/expansion phase of the project.
- Provide recommendations for future directions of the project.

A. Composition of the Team—The team members selected by the project staff and the South Asia Regional Health Advisor include the following:

Team Leader: Gretchen Berggren, M.D., M.Sc. Hyg., Lecturer, Harvard School of Public Health, USA;

Facilitator: Sam Voorhies, Ph. D., Evaluation Specialist, World Vision International, USA; and

Coordinator: Kabir U. Ahmed, M.D., M.P.H., National PHC/CS Coordinator, World Vision Bangladesh (WVB) and Project Director, CSPK, Bangladesh.

Team Members:

- Ashraf Uddin, M.D., Chief Health Officer, Dhaka City Corporation, Bangladesh;
- Sri Chander, M.D., M.P.H., Director for Health, South Asia Region, World Vision International, Singapore;
- Jose M. Garzon, M.D., NGO Coordinator, USAID, Dhaka, Bangladesh;
- Fe D. Garcia, M.D., M.P.H., International Health Programs, World Vision Relief and Development, USA; and
- Md. Monir Hossain, Convener, Neighborhood Health Committee, Kamalapur CSP, Dhaka, Bangladesh.

The NGO Coordinator from USAID was unable to join the team because of pressing commitments. Mr. Hossain, the NHC Convener, was able to join the team during its first meeting. The team missed his services due to his later hospitalization. Other NHC conveners met with the team on his behalf or were interviewed by team members. The FET was relieved to report Mr. Hossain's recovery from his heart attack before this FET report was completed.

B. Methodology—The team used the following methods:

- Interviews;
- Informal group discussions with specific groups: senior staff, Community Health Workers, Community Volunteers, and Focus Mothers Groups;
- Field visits/observations;
- Review of project documents, including latest results from the project Health Information System; and
- Analysis and interpretation of the results of the cluster survey, a repeat survey patterned after the midterm survey to measure progress.

1. **Interviews**

Interviews of Families During Home Visits: The team conducted home visits to observe the work of the CHWs in carrying out the cluster survey, and to visit homes chosen randomly from the CHWs' master list. The team devised a simple guide to ascertain whether CS activities meet the obvious needs of families served, and to gain the opinion of some family members on the activities of the Neighborhood Health Committees, the Community Volunteers, and the CHW trainers.

Other objectives of the visits were to verify findings from the CHWs' master list, to understand CHWs' and CVs' constraints in conducting home visits, and to see the beneficiaries' living conditions.

Interviews with Key Informants: These are representatives from MOH, DCC, and other NGOs and their project staff operating in nearby areas. A list of key informants interviewed is found in Appendix 1. The questions posed were geared to discover client linkages between the CSPK and MOH, DCC, or other agencies interested in the effectiveness of CS activities or in possibly helping to sustain them.

2. **Group Discussions:** Group meetings were conducted with the Neighborhood Health Committees, Community Volunteers, Community Health Workers. A list of NHC members are in Appendix 2a. The guide questions are in Appendix 2b. Discussions were held to generate how communities participate in CS activities, the grass-roots workers' roles and responsibilities, their perception of project's effectiveness, and their potential roles/needs once project phases out.

3. **Field Visits/Observations:** The team observed a health education session for a Focus Mothers (FMG) Group where the FMG were being trained how to teach other mothers, and a NHC meeting.

Team members also observed children being immunized or given Vitamin A, and patients seeking curative care.

4. **Review of Project Documents:** Materials reviewed included the Detailed Implementation Plan (DIP), Annual Report, MTE Report, Monthly Reports of Activities, Survey Reports, Cost Recovery Mechanism Documents, Training Manuals, correspondence etc. The major documents reviewed are listed in Appendix 3.

5. **Cluster Survey:** The survey was done simultaneously by core members of the project. The results are provided separately in this report.

IV. FINDINGS

The program has made significant gains in achieving progress towards sustainability. This has primarily occurred through the establishment of an indigenous infrastructure which has the potential for providing effective institutional capacity to continue to deliver health services, to address additional development problems, as well as maintain linkages with the relevant local government and community resources. This has occurred through:

- The establishment of 50 NHCs who are increasingly taking responsibility for meeting the health and development needs of their areas;
- The enlistment by NHCs of 100 CVs who have been trained and are providing the initial dissemination and reporting link with target families for project interventions;
- The establishment of linkages between both government resource and PVO/NGOs and project (NHCs) beneficiaries; and
- Tapping into extensive community resources for carrying out present program activities.

A. Sustainability Status—According to the present status of funding from USAID, the project will cease all its CS activities from October 1994. However, during this three-year period, the project will explore and try to identify long-term development needs of the area. If such needs are identified and the World Vision Bangladesh management is willing to initiate an Area Development Program in Ward 51 of Dhaka City Corporation the project may continue with a different direction beyond FY94.

The major project responsibilities and control gradually being phased over to local institutions are as follows:

Family Planning: This project component could partially be phased over to two local NGOs, namely, SPIRE and Bangladesh Women's Health Coalition (BWHC). Some curative services are already well served by the Telegu clinic, set-up by another NGO. The phase-over activities are progressing as follows:

- SPIRE has been given the responsibilities of community-based distribution of contraceptives by the government. Therefore, the project has worked out a plan to gradually phase out and let SPIRE phase in. From January 1991, the limited number of temporary family planning methods being distributed by the project has been stopped. The project staff and CVs continue to provide education, motivation, and follow-up.
- BWHC provides mainly clinical and fixed center services for family planning, with some educational outreach workers active in Ward 51. For

women choosing methods needing clinical intervention such as IUD insertion, project staff conforms to government guidelines for referral.

Primary Health Care Early Intervention Clinics: Telegu Community Clinic, another local NGO, provides curative treatment from its static center. It provides treatment for parasites and infectious diseases such as tuberculosis. The project staff has been able to see that under-fives get early treatment for TB and other infectious diseases. If Telegu Clinic which began as a "sweeper's clinic" could own more space and facilities, it would be able to take care of the minor ailments treatment component of this project. Currently, the project nurses and doctors provide these services using project funds.

Grass-Roots-Level Institutions: The NHCs have become institutionalized:

- They control and supervise respective CVs.
- They are prepared to advocate with government for continued services such as immunization. More details are discussed later in the document.

Plan for Phase Over with New CS VIII Funding: From the second year of the extension phase, the project will explore avenues to phase over its major responsibilities to local institutions after preparing a phase-over strategic plan. Accomplished already is the following:

- Grass-roots level infrastructure has been created to continue many activities (i.e., NHCs, CVs, and emerging FMGs);
- A plan for retraining some key groups to take over more responsibilities, (i.e., FMGs); and
- A plan with the DCC and other PVOs with whom the project interdigitates to take over some activities as the project, from World Vision's point of view, becomes more development oriented.

B. Sustainability Plan

Project's Plan: The project has laid down its sustainability plan in the Detailed Implementation Plan/Annual Report (Appendix 3). The plan hinges on these key players: the community, the government DMC and MOHFP, and local PVOs in the area. The future of child survival activities will be affected likely by the following:

Community Ownership and Support would be reflected by an increased demand for project interventions; behavioral changes and willingness of families to seek services from elsewhere; self-supporting, community infrastructure (NHC, CVs); participation of the community in cost recovery to finance some of the project's recurrent costs.

Participating Institutions/Agencies would be reflected by continued willingness of the MOHFW to provide all vaccines, Vitamin A capsules, and other logistics as well as technical supports; continued willingness of Dhaka City Corporation to work with the Ministry of Health and Family Welfare (MOHFW) and project to provide training and supervision to CHWs, CVs, and NHCs.

Institutionalization would be increased by Dhaka City Corporation's decision to establish a fixed health facility in Ward 51; a recognition of government and local agencies of the project staff's effort; the emergence of an urban EPI policy and plan of action for Dhaka; the adoption and application of the model in other parts of Dhaka by other institutions and agencies.

Cost Recovery would be measured by the development of small-scale income-generating enterprises; implementation of fee-for-service; CVs functioning as depot holders for pharmacy/pharmacy funds and/or simple drugs (self-sustaining); NHCs reimbursing part of recurrent cost; NHCs supporting their respective CVs.

Action Plan: The status of project progress on sustainability are given in Appendix 4. The staff initiated additional activities which enhance sustainability during the fiscal year through working with community people, i.e. school health education program, fee-for-service, cooperative and savings group with trained CVs, etc.

Counterpart Institutions: The MOHFW, DCC, UNICEF, Helen Keller International (HKI), etc., have been providing assistance in various forms and intend to continue CS activities. The institutions' contributions were assigned a "dollar value" and are elaborately stated in Section C.

Reasons for Success or Failure: Counterpart institutions are able or unable to keep their commitments for the following reasons:

Success

- Strong networking among government, PVOs, Voluntary Agencies for Health (Dhaka City).
- Motivated/committed project staff
- Recognition by the community of the project's importance and contribution
- Recognition by the government
- National policies/priorities are addressed
- Community levels interpersonal communications/equity

These reasons for success have been reflected as positive behavioral change in the community.

Failure

- No plan yet by DCC/MOH
- Political instability
- Lack of government infrastructure
- Time frame: slow

- C. Community Participation and Perception of Project Effectiveness**—There is an agreement among community leaders and beneficiaries that the project has been effective in delivering specific Child Survival interventions to meet community health needs. Across all socioeconomic groups in this population of 77,000, community participation is occurring through the establishment and training of 50 Neighborhood Health Committees, 100 Community Volunteers, and 45 Focus Mothers Groups. The FMGs are emerging as a possible replacement for the Community Volunteers. While local leaders and beneficiaries have increasingly participated in the implementation of project activities, their participation in program planning and their contribution of local resources need to increase if project activities are to continue once CS funding ceases.

Community Participation: For the purpose of this evaluation and CS program, the "Community" is defined as those people who live in Kamalapur Ward.

There was token community participation in the original design of the program, although significant consultation with local leaders was held even before funding started. However, significant and increasing participation is occurring in the implementation of CS targeted health services.

Project Start-up Issues Related to Community Participation: This CS project's beginning was significantly influenced by a flood that occurred in 1988, resulting in a relief effort just as the project was to have been initiated. While an effective response by World Vision to the Ward 51 community's relief needs helped to establish credibility, it was not conducive to involving the community in a long-range development planning process.

It should be also noted that the USAID proposal procedure does not allow time for significant community participation in the initial program design. It would not be advisable for any PVO to get into community involvement until funding is assured. Yet funding is not granted until the program is designed.

Significant community participation has occurred and is increasingly occurring in the implementation of health services. Community leaders who were consulted in the program design include the local government representation (Ward Commissioner), the NGOs working in the area, local business people, religious leaders and a few scattered homes on household visits.

The whole concept of a Neighborhood Health Committee is new to urban Bangladesh. Both government leaders and local residents expressed interest and excitement. As one committee member said about his satisfaction, "There has never been such an assembly and we are very interested to see that even in the slum of Kamalapur we can organize to help ourselves."

Neighborhood Health Committees: A total of 50 Neighborhood Health Committees have been established in the project area and are functioning according to project criteria. While the evaluation team did not independently verify the functioning of all these committees, we did visit meetings which involved five NHCs and interviewed 20 NHC conveners in one group. From these firsthand observations and interviews, evidence does suggest NHCs are functioning throughout the project area.

Further evidence for findings includes testimony of CVs. They report that committee members frequently visit houses with them, especially where mothers refuse to respond. One example identified was a home where there were three polio cases and the mother was not responding to the CV's suggestions. She responded after the CV came to her home with one of the committee members who was able to persuade her to go to the CSPK office for treatment and referral.

A significant finding is that NHC members appear to represent the socio-economic bracket of the slum population. Data for this is based on observation of conveners both in the group meeting and home visits. The fact that "this group of slum residents are actively taking responsibility to assist poorer and even transient members of the community" is a major achievement which has not been realized before, according to local government and NGO leaders.

Based on the FET meetings with NHC members and from reviewing documentation of their meetings and actions, the FET concludes the following:

- Most NHCs meet regularly on an average of once per month and some as often as two or three times a month.
- There is significant female leadership in NHCs. Of the 20 conveners represented at the group meeting, 12 were female and 8 were male. The names of NHC members with occupation of each were available to the team.
- NHCs have a clear understanding of their roles and responsibilities—as motivators of families to take responsibilities for their own health and for incorporating CS interventions into their family life. They were actively involved in supervising the activities of the community volunteers.
- Perhaps one of the most significant indications of potential sustainability is that NHCs were actively identifying other problems outside the program interventions about which they could motivate the community to do something. Some examples include cleaning the ditches, draining ponds,

cleaning water hyacinths from clogged ditches and cleaning up latrines. These activities also demonstrated effective linkages being made between NHC and local government resources. For example, one NHC approached the local DCC accountability section to ask for assistance in mosquito control; another worked on the removal of garbage which was collected by the community; another identified a government food-for-work program that could benefit the community.

- Where tube wells have been supplied, evidence suggests that NHCs are taking responsibility for the maintenance and repair. This has included appointing people to be responsible for the care of the pump and collecting money from committee and community members for maintenance.

While NHCs were very pleased with the effectiveness of the CSPK in providing health services, they also felt that they needed additional help in meeting the total health and development needs of the community.

Examples of additional help NHCs felt they needed include further training in health practices such as sanitation, nutrition, and environmental control; assistance in identifying and training more CVs; training in community organizing and planning, and vocational skill training for income generation; water development and literacy.

NHC Meetings: Neighborhood Health Committee meeting minutes were made available to the team. Below is a chart listing the topics discussed, decisions made, and actions taken from 12 representative NHC meetings.

Topics Discussed

Decision Made/Action Taken

- | | |
|--|--|
| 1. Work of CV | 1. Express appreciation |
| 2. Breakdown of tube well | 2. Identify person to be responsible and collect money for repair |
| 3. Problem: Some women are disinterested in CS interventions | 3. Intensify home visit |
| 4. Review last monthly agenda | 4. Follow-up on items unattended |
| 5. Arrange for NHC training at CSPK | 5. Get date and names of possible participants |
| 6. NHC member attention | 6. Choose a replacement for the NHC member who moved. |
| 7. Prepare for annual general meeting | 7. Invite community members |
| 8. Three polio cases identified in new family | 8. Went to CSPK for help and accompanied mother and children for treatment |
| 9. Clean up streets, drain ponds for mosquito and water hyacinth removal | 9. Contract DCC for assistance and get work day for community |

As we can see from the list, one of the most significant indicators of the effectiveness of NHCs is the multiplicity of problems they have identified and are doing something about outside of the initial CSPK program interventions.

Experience in Establishing Neighborhood Health Committees: The process to establish NHCs has evolved over the course of the project. The responsibility for establishing the committees primarily resides with CHWs. The CHWs first carry out domiciliary visits in the catchment area to register and to get acquainted with individual households. During the course of these visits, CVs identify the community leaders. CVs also may visit religious meetings and other community gatherings to identify local leaders. CVs approach these leaders, and with the leaders' interest and help, call a community meeting. At the community meeting, individuals are chosen to form the committee. The committee chooses a convener or chairperson who calls and hosts the meetings. "Convener" was a term purposely chosen to avoid relegated authority being granted to the person. During the community meeting, the roles and responsibilities of NHC are reviewed and then agreed upon by selected members. After the committee is constituted, each committee member undergoes eight hours of training in project objectives and the roles and responsibilities of NHC members.

As the project has gained visible effectiveness, more and more people are attending community meetings for the selection of the NHCs. "We can still not say that NHCs are elected by popular vote but are chosen by community members on the basis of their willingness to serve and their recognized leadership in the community," said one community leader. The evaluation team attended five NHC meetings out of the 50 NHCs. Each meeting lasted an average one and one-half to two hours. The FET also had a group meeting with 20 NHC conveners at the CSPK office.

Additional data reported here also includes extracts from the last month's minutes of eight NHC meetings. Also prior to the evaluation team arrival, NHC members were interviewed using focus group guidelines (Appendix 5).

According to conveners, one of the primary benefits and assets of serving as an NHC member is the training. The members wanted more training. When asked how the NHC work would continue when World Vision phases out, one NHC member responded saying, "See that man" (pointing to someone in the meeting), "he was a freedom fighter. When he came back and turned in his weapons he did not return his training. He received effective training and is ready to use it when the need arises. We will be able to continue to help the community with the training we have received even when World Vision leaves."

NHC members had no shortage of ideas on how they could better help their areas and how World Vision might assist them. CSPK's challenge in the next program phase will be to most appropriately respond to their ideas and initiatives in the most helpful and developmental ways.

One idea, for example, regarding training that the NHC members expressed to increase volunteer service of community members was to provide focused training for different age groups.

Community Leaders' Perception: The local government, NGOs, and community leaders see CSPK as an effective program in meeting communities' health needs.

Government Health Institutions: The EPI director with whom the evaluation committee met said, "We have a very good relationship with World Vision and have appreciated their work very much. They have provided some very innovative concepts which we feel may be models for other parts of the country. The NHC is something we never had before in the whole [urban] country" (parentheses added).

The Chief Health Officer for health services for the Dhaka City Corporation, Dr. Ashraf Uddin, participated as an active member of the evaluation team, collecting and analyzing data. He stated, "I not only see this as a project which meets the health needs for Kamalapur but a model project which perhaps we can reproduce in municipalities throughout the country."

Local Government: The local ward commissioner, the lowest level of local government authority, has also been actively involved in the project. The local government has committed to provide space in a community center to be constructed for the continuation of CSPK program activities and health services.

The local zonal leader was also interviewed and said he felt the project had brought many lessons in self determination; now people know they can take control of at least some things in their lives. He expressed hope that a community center could be constructed and house some of the meetings which have been crucial to project success. Land has been set aside for this purpose; a plan has been approved by Dhaka City Corporation. He sees NGOs joining hands with government in the new center, and would set aside some space for this. He noted another NGO is providing clinical services under extreme conditions—the Telegu Clinic.

Community Leaders: Additional comments were made by local community leaders attending the NHC conveners' meeting. These included a local doctor, a businessman, superintendent of police, and a teacher. Below is a summary of their comments:

"We have greatly appreciated the assistance of the CSPK, and for the first time we see the lives of many babies being saved."

"Because of the initiation of our NHC by CSPK, we have also been able to address other environmental needs in our community."

"There were no government health services in our area before and most of us did not know how to access existing government and other external resources to meet our community needs. We are now learning."

Perhaps the most poignant comment illustrating the effectiveness of CSPKs work was made by a mother, "We used to play the role of the silent observer. So many infants died and we couldn't do anything about it. Now we know how to teach and advise the mothers and our babies are living."

One of the unanswered questions in this evaluation is whether or not there is equitable access and coverage of health service between socioeconomic groups. Data on occupation, income, and education, although originally collected in the baseline survey, has not since been utilized. These data could be analyzed to determine equity and coverage among socioeconomic groups.

Community Resources: Significant progress has been made in the area of resources contributed by the community despite the fact that the project's focus during this first phase has not been on local resource utilization.

These contributions, which have not yet been finalized as a part of cost recovery, are significant and should be recognized. They are made through counterpart institutions which have emerged in the form of the NHCs, CVs, and FMGs. The NHCs are on the verge of forming neighborhood associations which could become indigenous institutions.

Contribution of Local Institutions, Including Government: Counterpart institutions have contributed a total of 405 man hours in technical assistance, and 424,206 Taka (equivalent US\$11,465) in equipment and supplies. These counterpart institutions include the EPI team, the Public Health Institute of Nutrition, UNICEF, and other agencies working in the area such as NORP, C.D.S., BHE, local schools, and some other NGOs and religious institutions. A breakdown of these contributions by institution is given below:

COUNTERPART INSTITUTIONS' CONTRIBUTION

SL#	Sources/ Counterpart	Contributions	Approx. Costs (In Taka)
1.	EPI (MOHFW)	a. Vaccine carrier, cold box, steam sterilizer, etc.	51,966.00
		b. Communication materials: (posters, charts, flip charts, folder, booklet flash card, etc.)	150,000.00
		c. Training for mid-level managers (40 hours)	6,000.00
		d. Consultancy (20 hours)	3,000.00

SL#	Sources/ Counterpart	Contributions	Approx. Costs (In Taka)
2.	Institute of Public Health Nutrition (1 PHN) MOHFW	a. Training for CHW/PHN (48 hours) b. Communication materials c. Consultancy (20 hours)	4,800.00 2,000.00 3,000.00
3.	Civil Surgeon, Dhaka (Dte. of Health Services)	a. Supply of high-potency Vitamin A capsule (10,000 I.U.) b. Consultancy (6 hours)	60,000.00 900.00
4.	National Oral Rehydration Program (NORP) MOHFW	a. ORS Packet b. Communication materials	30,000.00 3,500.00
5.	Control of Diarrheal Diseases (CDD) MOHFW	a. Communication materials b. Consultancy (4 hours)	4,000.00 600.00
6.	Family Planning Directorate MOHFW	a. Communication materials b. Consultancy (4 hours)	11,500.00 600.00
7.	Bureau of Health Education (BHE) (Dte. of Health Services)	a. Communication materials b. Consultancy (100 hours)	67,690.00 15,000.00
8.	UNICEF	a. Communication materials b. Consultancy (8 hours)	10,250.00 1,200.00
9.	HKI (NGO)	a. Communication materials b. Consultancy (2 hours)	2,600.00 300.00
10.	VHSS (NGO)	a. Training of CHW (20 hours) b. Communication materials	3,000.00 10,150.00
11.	ICDDR,B	a. Consultancy (8 hours)	1,200.00
12.	NIPSOM	a. Consultancy (2 hours)	300.00
13.	Director, PHC (Dte. of Health Services)	a. Books b. Consultancy (8 hours) c. Circular	2,000.00 1,200.00
14.	Asst. Director (School Health) (Dte. of Health Services)	a. Consultancy (3 hours)	450.00
15.	WHO	a. Booklet b. Consultancy (3 hours)	500.00 900.00
16.	Joint Secretary (MOHFW)	a. Consultancy (3 hours)	450.00
17.	Pathfinder (NGO)	a. Flip book	300.00

SL#	Sources/ Counterpart	Contributions	Approx. Costs (In Taka)
18.	Directorate of Primary Education	a. Consultancy (20 hours)	3,000.00
19.	Directorate of Secondary and Higher Education	a. Consultancy (4 hours)	600.00
20.	Dhaka City Corporation	a. Consultancy (20 hours)	3,000.00
21.	Dy. Director F.P. Dhaka (F.P. Directorate)	a. Consultancy (4 hours)	600.00
22.	World Vision, Bangladesh (Field Office)	a. Medicine b. Communication materials c. Consultancy	17,500.00
23.	Local Commissioner	a. Consultancy (20 hours)	3,000.00
24.	ADAB	a. Communication Materials b. Training	500.00 3,000.00
25.	Imams of Mosques	a. Consultancy (13 hours)	1,950.00
26.	CSPM	a. Consultancy	
		TOTAL	482,256.00 US(\$13,509.06)

Contribution of Kamalapur Community: The table below illustrates the dollar value of local time and resources contributed to project activities. This primarily includes space and supplies being provided for meeting and EPI outreach, maintenance of program inputs such as tube wells, as well as volunteer time being contributed by NHC members, CVs, and some beneficiaries.

A total of 34,000 man hours is volunteered per year at an estimated value of 580,763 Taka (US\$15,696) broken down as follows:

<u>Time Spent by Local People</u>	
<u>Volume Time:</u> Hours per month—1,600; per year—19,200.	Total = 19,200
<u>Assume:</u> 2 hours per week for each member using an average of 4 per committee = 50 committees; value estimated—25 Taka per hour.	Taka Value = 480,000 U.S. Value = \$12,972
<u>CVs:</u> Hours per month—1,400; per year—16,800 calculated on the basis of 1 hour per day.	Total = 16,800
<u>Assume:</u> 28 hours per month for each CV (50); value estimate is calculated at 4 taka per hour (US \$ use 37 Taka per \$).	Taka Value = 100,800 U.S. Value = \$2,724
<u>Focus Mothers Groups:</u> (43) Each person spends 2 hours per week; total—86 hours per week, hence 344/month and 4,128/year.	Total = 4,128 (hour) Taka Value = 12,384 U.S. Value = \$334
Value estimated 3 Taka per hours. Total time in hours per year.	
Taka value	46,128
	593,147
U.S. Value	\$16,031
Grand Total for community participation for FY91 (one year)	Taka 650,534 U.S. \$17,582

An additional 56,288 Taka (US\$1,551 equivalent) value is being contributed in space and supplies, making up a grand total of 636,991 Taka (US\$17,215) in local community contributions. Details are given in the table below:

ITEM	COST BY YEAR		
	1ST YR.	2ND YR.	3RD YR.
1. Place/house/room given by the community for outreach immunization sessions. (Approximately Tk. 50/-per EPI session at 7 sites)	50x7x12 Tk. 4200	50x12x12 Tk. 7200	50x12x12 Tk. 7200
2. Expenses of NHC meeting are being provided by the community.	Expenses were borne by CSPK		100x20x12 Tk.24000/
3. Place/room for group health education sessions are given by the community.	There were no group H.E. sessions	50x12x12 Tk. 7200/-	Same
4. Tubewell/public toilets given by CSPK and maintained by the community.	200x16= Tk. 3200/	200x32= Tk. 6400/-	300x42= Tk. 12600
5. Minor ailments treatment fee contributed by the community, (Tk. 3/-per visit).	X	X	Tk. 11861/
6. Cost of the lost cards is being borne by the community. (Tk. 5/-per card.)	X	X	567/-
Subtotal	7400/-	20800/-	56228
TOTAL			

There have been significant increases each year in contributions by both local institutions and community members over the life of this project. This represents a 800 percent increase over three years.

A more detailed explanation of these local resource contributions related to an overall cost/recovery strategy for program sustainability is described in Section G.

D. Institutional Sustainability

Linkages

Government: The project has established linkages with the following government institutions:

- The Dhaka City Corporation (DCC), under whose jurisdiction all Dhaka urban health projects operate, in contrast to rural health projects which operate mainly under the MOH;
- The Ministry of Health, especially the Expanded Immunization (EPI) section, the Public Health Nutrition Section, the Department or Division of Health Education; and
- The National Nutrition Council.

The project has taken on an entire ward (51) and is recognized by the DCC as a significant contribution.

Other Private and Nongovernmental Organizations: This project has taken the initiative to get PVOs together for CS sharing sessions. A publication has resulted, and is sent to all PVOs doing health activities. Nearby NGOs or PVOs with which the project collaborates include:

- Telegu Clinic, a private clinic staffed with Bangladesh government-paid doctors as well as expatriates;
- Women's Health Coalition Clinic (WHCC) and their workers;
- Two NGOs engaged in family planning in the area; and
- The Urban Health Volunteers Program.

The project has been assured by the WHCC and a newly formed community-based distribution program for family planning that their workers will continue family planning activities the project has initiated.

Neighborhood Health Committees formed by the project have started reaching out and finding other resources for the community. For example, a women's group spawned by a member of one of the NHCs has begun to look for funds to form a cooperative for her neighbors.

Strengthening Program Management Skills: DCC is the government "local institution;" its members are currently developing a plan to replicate this project in other wards. Although DCC personnel is limited, they explained to the FET that now that they have been helped to develop this model, they plan to "try something similar" with their own personnel and will ask other PVOs to emulate the model in terms of working together with them in other wards. When a team member asked if they would use Ward 51 as a training area, they replied affirmatively. Training and supervision, then, are two new parts of DCC's array of management activities, thanks to this project.

The CSPK staff has created a "local institution" in the form of the Neighborhood Health Committee. Its members told the DCC personnel during this evaluation that they would continue to meet and accomplish development objectives even when World Vision staff leave. They reasoned that their interaction to clean up

the environment in their own neighborhoods had paid off visibly, and that they have now learned how to be advocates for their own communities. Examples cited included finding resources for tubewells, assessing their own members for money to repair broken water systems, cleaning the ditches where mosquitoes are breeding, and organizing to collect and dispose of garbage cluttering their streets and alleyways.

Collaboration: The project recently contacted the MOH to obtain letters affirming their continued approval and support in terms of health education personnel for the extension phase of this project. These were reviewed by the team and found the MOH enthusiastic.

MOH and DCC personnel interviewed by the evaluators expressed confidence that CSPK activities are effective, had input into the design and interpretation of the final survey to prove the effectiveness, and have provided supervision along the way.

The DCC has had direct input into all phases of the project and participated actively in this evaluation. The director of the EPI office expressed to the team his appreciation that because of his experience with World Vision in Ward 51 and elsewhere, he would hope to continue to work with them or with other PVOs who would adopt their way of working.

A list of persons interviewed is already given in Appendix 1.

Institutions' Ability to Sustain Project Activities: The DCC, as the executing agency of the MOH for health activities, explained its handicap in terms of very limited infrastructure. However, the mayor of Dhaka recently assured the DCC chief medical officer that he would commit more funds to strengthen the health activities of the chief medical officer. With this new commitment, the CMO informed the project team of his intent to replicate to the greatest extent possible some key activities of the project in other wards and to better prepare to sustain activities already put in place by CSPK staff. He conveyed that the DCC personnel would definitely continue their EPI relationship with all immunization activities; would give moral support through regular contact with the newly formed NHCs; and would respond to the communities' requests to the greatest extent possible, putting them in touch with appropriate MOH entities.

Vaccines, cold chain equipment, and vaccinators made available to the DCC through the MOH have been assigned to the project. At least one full-time government-paid worker, a health educator, spends most of his time with the project. In addition, the DCC/CMO has taken as his responsibility to closely monitor and supervise the project, and would continue to give time to meetings with whoever Ward 51 staff would be left in place. He plans to use the project as a model and as a training unit for other areas. He assured the project that his personnel would take over immunization and Vitamin A distribution activities once the project phases out.

Two PVOs are now active in family planning in the area. Both were contacted by team members and agreed to take over and/or continue family planning activities, including door-to-door contraceptive distribution.

Referral clinics, including the Women's Coalition Clinic nearby, are developing outreach workers who have collaborated already with the project and will continue to work in the Ward. They agreed to organize and help continue certain activities such as weighing children and updating Road-to-Health weight/age charts.

Unsustainable Project Components: The full-time paid CHWs, as they now exist, will not be easy to sustain by any organization or institution. They have no government counterpart, or those who might be thought of as counterparts are spread too thin to be effective, e.g., one government primary health care worker per ward; in this case 1:77,000 people. Phasing over this level of worker toward becoming a Community Development Worker (CDW) will guarantee a better chance for sustainability because World Vision will likely be continuing development activities in the ward. The Ministry of Social Welfare has a similar level of worker who could be matched as counterparts.

The two full-time paid public health nurses and the physician coordinator will not likely be sustained by any institution. If they can be thought of as "trainers," it would be logical to phase them out once their training of CHWs and CVs has been accomplished.

E. Monitoring and Evaluation

Indicators: The indicators used to track progress towards achieving sustainability for the project are summarized in a document as follows:

Community Ownership and Support

- 85 percent EPI coverage and 90 percent Vitamin A Capsule (VAC) coverage will be achieved and sustained after three years.
- At least 70 percent of the NHCs will be functioning after three years.
- At least 70 percent of the CVs will be active after three years.

Participating Institutions/Agencies

- Continued EPI Directorate's active support for regular, prompt and free delivery of adequate quantities of EPI vaccines each month.
- Continued Institute of Public Health Nursing's (IPHNs) willingness for regular, prompt and free delivery of VAC every six months.
- Continued DCC's willingness for secondment of five municipal health workers for at least two training sessions.

Institutionalization

- Continued DCC's plan to establish a fixed health facility in Ward 51 by the end of three years.
- Emergence of an urban EPI policy and plan of action for Dhaka by the end of three years.
- Continued adoption/application of institutions through four PVO sharing workshops per year on "Lessons Learned on Child Survival."

Income Generation/Cost Recovery

- Continued establishment of any mechanism for cost recovery like fee for service.
- Continued exploring of small-scale income-generating enterprises in the project area.
- Continued exploring the issue regarding NHCs supporting CVs.

Documentation of Changes in Sustainability Indicators: This section is already discussed in Appendix 4.

In-Country Agencies: The development and implementation of the midterm and final evaluations were participated in by the following agencies:

Midterm Evaluation

- Director, Primary Health Care, MOHFW, GOB
- Health Program Officer, UNICEF, Dhaka

Technical assistance was also received from the following:

- EPI Consultant/WHO in Bangladesh
- Project Director, EPI MOHFW, GOB
- Director, Institute of Public Health Nutrition, MOHFW, GOB
- Chief of Bureau of Health Education, MOHFW, GOB
- Chief Health Officer, Dhaka City Corporation

Final Evaluation

- Chief Health Officer, Dhaka City Corporation
- NGO Coordinator, USAID, Dhaka
- Convener of one of the NHCs of the Project area

Technical assistance was received from these people:

- Director, EPI, MOHFW GOB

- Director, Institute of Public Health Nutrition, MOHFW, GOB
- Chief of Bureau of Health Education, MOHFW, GOB

F. Recurrent Costs

Planned Budget vs. Actual Expenditure (up to July 1991): At the field level, the total combined budget for the project life is US\$312,920. USAID contribution is US\$162,667 (51.98 percent) matched with WVRD's US\$150,253 (48.01 percent). Actual expenditure up to July 1991 is US\$265,667 (84.9 percent). USAID's share of actual expenditure is US\$141,827 (53.38 percent) while WVRD's share is 123,840 (46.62 percent). Up to July 1991, USAID money spent is 87.18 percent of total actual expenditure.

The budget has three cost-elements: procurement, evaluation, and other program costs excluding indirect cost.

Procurement

DIP Budget (Revised) (10/01/88 to 09/30/91)			Actual Expenditures to Date (10/01/88 to 07/31/91)		
USAID	WVRD	TOTAL	USAID	WVRD	TOTAL
95,853	44,709	140,562	87,700	34,204	121,904

The total planned budget was US\$140,562 against total actual expenditure of 121,904 (86.73 percent). Approximately 97 percent of the expenditures were for supplies and equipment which account for 38 percent of the total project budget.

Evaluation

DIP Budget (Revised) (10/01/88 to 09/30/91)			Actual Expenditures to Date (10/01/88 to 07/31/91)		
U.S.A.I.D.	WVRD	TOTAL	U.S.A.I.D.	WVRD	TOTAL
9,500	2,608	12,108	3,289	2,504	5,793

Total planned budget was US\$12,108 which is 3.9 percent of the total project budget. Up to July 1991, approximately 48 percent (US\$5,793) of the evaluation budget has been spent. These spent funds covered the cost of the first Annual and Midterm Evaluations. The remaining US\$6,315 money will be used for the Final Evaluation, i.e., consultants, staff support, survey, etc.

Other Program Cost

DIP Budget (Revised) (10/01/88 to 09/30/91)			Actual Expenditures to Date (10/01/88 to 07/31/91)		
U.S.A.I.D.	WVRD	TOTAL	U.S.A.I.D.	WVRD	TOTAL
57,314	102,936	160,250	50,838	87,132	137,970

Total planned budget was US\$160,250 which accounts for 51.2 percent of the total project budget. About 86 percent (US\$137,970) was expended up to July 1991. The cost breakdown is as follows: personnel (63 percent), other direct cost (i.e. utility, printing, rent and maintenance) (32 percent), and travel/per diem (4.3 percent).

Note:

- DIP Budget was revised soon after it was submitted. In the contract, there were only two cost elements, namely program and procurement. Succeeding reporting guidelines expanded the elements which now include procurement, evaluation, and other program costs. Hence, budget was adjusted according to guidelines.
- Cost includes US\$12,724 of pre-project costs incurred in FY88. This amount was added to WVRD's match.
- Indirect cost is not included in the analysis.

Recurrent Cost: Recurrent cost in this project includes salaries, travel, office expenses, depreciation, cost of equipment, training, program supply costs, and in sub-heads cost for basic medicine.

In calculating recurrent cost, two assumptions were made:

1. There were two computations: one is from project inception up to July 1991, and the other for recurrent cost for FY90 only.
2. For common expenditures of different interventions, different percentages were assigned on the basis of activity reports, empirical observation, and experience.

Salary covers 17 operations staff, 17 administrative and support staff, and honoraria and consultancies.

Training includes cost of staff orientation, in-house training, workshop, and seminars/meetings; workshops for community leaders/focus mothers.

Travel covers the cost of office conveyance (administration), fuel, repair, and maintenance of vehicle.

Supplies include the cost of administrative supplies, pharmaceuticals, staff uniforms, computer, photocopy and typewriter supplies, bank charges, etc.

Rent costs are for gas, electricity, telephone bills, sub-center, and project office rent.

Repair and maintenance costs for the office.

The assignment of percentages is as follows:

Code	Activities (in US\$ and %)				
	EPI	NUT	ORT	FP	SM
Salary	\$21,315 (24%)	\$17,763 (20%)	\$7,993 (4%)	\$7,993 (9%)	\$33,749 (38%)
Travel	1,495 (25%)	897 (15%)	897 (15%)	897 (15%)	1,794 (30%)
Office Expenses	8,949 (20%)	8,949 (20%)	2,237 (5%)	11,187 (25%)	13,424 (30%)
Training	5,143 (20%)	6,428 (25%)	3,857 (15%)	2,571 (10%)	7,714 (30%)
Basic Medicine	731	1,463	1,280	183	---
Total Specific Cost per Intervention	37,633 9,926	35,500 17,257	16,264 2,630	22,831 3,469	56,681 13,440
Total Recurrent Cost (215631)	47,559	52,757	18,894	26,300	70,121
Prop. & Equipment (50036)	US\$ 17,513 (35%)	7,505 (15%)	1,501 (3%)	5,004 (10%)	18,513 (37%)
GRAND TOTAL	65,072	60,262	20,395	31,304	88,634

The recurrent cost item under each intervention is given below:

Immunization: outreach, conveyance, supplies

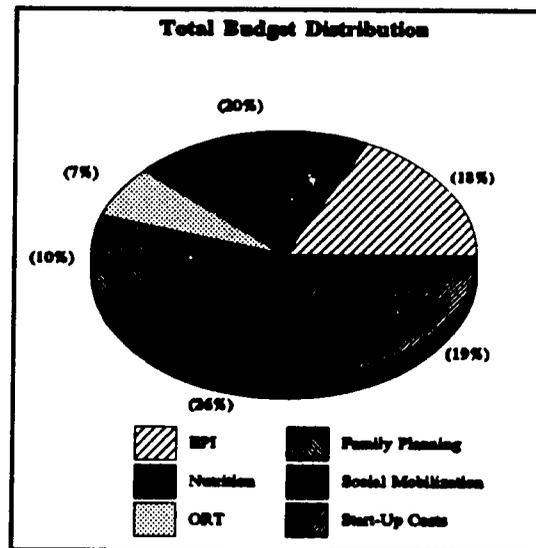
ORT: ORT packets, ORT demonstration, water and sanitation (tubewell, latrine)

Nutrition: VAC program, nutrition demonstration program, nutrition supplement/growth monitoring, remuneration for data entry, domiciliary visit, and family registration (supplies).

Family Planning: contraceptive supplies, Information, Education, and Motivation (IEM) on family planning.

Community Participation (Social Mobilization): World Health Day, World Vision Day, cinema slides, film-show and related poster activities; public address system, public meetings, etc; helping with Midterm Evaluation, binding of family registration report, helping send out CSP newsletter, gathering information, etc.

A graphical representation of the distribution of the total budget according to intervention/activity is given below:



Project calculation cost estimates were based on the following information:

1. The estimated total population for FY91 in the project area is US\$77,316 (stable population = 67,321 + 15 percent increase).
2. Target beneficiaries by interventions include the following:
 - EPI:** Children 0-11 months and women 15-44 years
 - ORT Competence:** Household
 - Nutrition/Vitamin A:** 0-71 months and mothers with child under 2 years.
 - Family Planning:** Eligible couples
3. Cost by intervention is based on actual achievement (coverage within 7/91).

4. **Cost per Beneficiary:** Total actual recurrent cost per capita is US\$2.71, while the total actual cost per capita is US\$3.43.
5. **Total Actual Program Cost (TAPC) Per Beneficiary (Total Population)**
 - a. **Total actual project cost until July 91/Total Population:**
\$265,667/77,316 = US\$3.43
 - b. **Total actual recurrent cost until July 91/Total Population:**
\$215,631/77,316 = US\$2.7
 - c. **Duration of Project = 34 months**

The computation of **recurrent cost by intervention** is as follows:

EPI

Assumption: Each fully immunized child 0-11 months should have four service contacts, and women 15-44 years should have two service contacts (TT2).

- a. **Total number of Service Contacts (SCs) for children 0-11 months = Total number 0-11 months X 4 SC = 18,928.**
- b. **Total number of SCs for women 15-44 yrs = Total number of 15-44 years X 2 SC = 44,330.**
- c. **Total Actual Recurrent cost for EPI until FY91: US\$47,559.**

The actual recurrent cost per child fully immunized by the 1st birthday is US\$3.15, while the actual recurrent cost per women 15-44 years receiving TT2 is US\$1.57.

Notes: The above computation does not include the following:

- Cost of government supplies such vaccines, needles, syringe, etc.;
- Cost of partial immunization for children 0-11 months and women 15-44 years;
- Cost in the last two months of project life (August-September 1991);
- Children above one year who are fully immunized; and
- Cost of immunizing women 15-44 years with more than two doses of TT.

The details of the computation for other interventions in Appendix 6-Other Computations.

The computed recurrent costs for each year up to July 1991 are as follows:

<u>FY89</u>	<u>FY90</u>	<u>(JULY 1991)</u>
\$104,159*	\$82,873	\$65,911
*21,286 spent for equipment		

Cost Per Beneficiary FY90: The total actual recurrent cost per capita is \$1.07, i.e., total cost/total population registered and unregistered or \$82,873/77,315.

Actual Recurrent Cost Per Beneficiary by Intervention FY90

EPI: The cost per child fully immunized by first birthday is \$2.21 while the cost per woman 15-45 years immunized with two doses of TT is \$1.50.

ORT: The cost per beneficiary is \$1.49 (Cost/No. of households competent in ORT = \$6,972/4,689).

Nutrition: The cost per beneficiary is \$1.88 (\$22,669/12,065).

Family Planning*: The cost per eligible couple in union practicing modern method of contraception is \$6.59.

*Those who accepted method in 1989 and still practicing not included in the calculation (Cost/No. of couples covered in 1990 = \$6,565/996).

Community Participation: The cost per family is \$2.03.

The recurrent costs by intervention is presented in this table:

Intervention	Recurrent Cost In US\$ (FY90 Only)	Recurrent Cost In US\$ (FY89-July 91)
Family Planning Cost per eligible couple in union, practicing modern methods of contraception.	6.59	4.25
EPI *Cost per child fully immunized by first birthday. *Cost per woman (15-45 years) immunized with two doses of TT	2.21 1.1	3.00 1.50
Community Participation Cost per nuclear family mobilized.	2.03	5.28
Nutrition Cost per nutrition beneficiary (0-71 months).	1.88	4.37
ORT Cost per beneficiary household competent in ORT.	1.49	1.46

Projected Cost and Revenues to be Maintained After A.I.D. Funding Phases Out

Assumptions

- The project funds will end on September 30, 1991.
- All project interventions will continue.

Definitions

Projected Cost refers to cost required to continue operations using project expenditure as base. This cost is equated with recurrent cost defined earlier.

Revenues were defined as cash generated from fee for service, i.e., penalty for lost cards and fee for health services rendered, and cost-sharing with GO, NGOs and community.

<u>Activities to Be Maintained</u>	<u>Projected Cost (US\$)</u>
EPI: 0-11 Months	\$ 7,139
15-44 Months	24,638
ORT	6,669
Nutrition	14,719
Family Planning	6,465
Community Mobilization	27,712
Basic Curative Care	3,014
Total	<u>\$86,135</u>

The potential sources of revenues for recurrent cost:

- Personnel and supplies absorbed by local NGO such as Bangladesh Women's Coalition Clinic, SPIRE, etc.
- Replacement of CHWs by upgraded CVs translated as reduction in salary.
- Reduction of costs for renting physical facilities i.e., subcenter and project base instead of the community center to be built.
- Operating costs, i.e., supervision, supplies, training to be borne by GOs and NGOs.

Unsustainable Costs: These costs include recurrent costs defined earlier.

Findings:

1. The project made effective use of funds evidenced by the early achievement of project objectives and its ability to sustain protective behaviors such as promotion of positive health habits, community involvement, etc.
2. The staff exerted impressive efforts to calculate recurrent cost by using the results to formulate strategies for future efforts aimed at sustainability.
3. The cost per beneficiary seems reasonable given the infrastructure at the grass-roots level.

G. Cost-Recovery Attempts

Given the cultural and political context of Bangladesh, the project has initiated cost recovery in two ways: (1) cost savings through improved project management, and (2) through initiation of community financing schemes.

Strategies

Cost Saving Through Improvement in the Project's Management System:

- The project manager and the finance and administrative officer have used technical assistance from Professor William Reinke of Johns Hopkins University to track and reduce costs especially recurrent costs by intervention, and to assess financial sustainability of program components by understanding the true cost of all program activities.
- The project's Health Information System has been streamlined to increase efficiency and reduce costs by:
 1. Consolidating record-keeping activities/instruments: e.g., the following have been eliminated: Family-Based Registration Cards; Birth Register, Death Register; Vaccine Preventable Register, Diarrheal Diseases Register.

The treatment and referral register have been consolidated into one record.

2. Introducing a sound management system, backed by appropriate supervision and a vigorous cost control system of checks and balances and accountability.
3. Revising existing staffing problems regularly to ensure that the time of each project staff is optimally utilized and to ensure that his/her work correspond to the actual job description.
4. Reducing in-country consultancy costs by recruiting technical assistance from the government, e.g., staff of the CDD program and UNICEF.

Community/NGO Financing:

- The local NGO clinics have been encouraged to progressively absorb the project's recurrent costs into their budgets as they take over certain CS interventions, e.g.:
 1. The Bangladesh Women's Health Clinics—Social workers have begun IEM activities to promote birth spacing and permanent methods.
 2. A new NGO, SPIRE began, from January 1991, a community-based program to distribute oral contraceptives and condoms in the project area.
 3. Two volunteers and one social worker from the ICDDR,B's Urban Volunteer Program have just begun distributing Oral Rehydration Solution (ORS) packets and promoting ORT in both zones.
 4. World Vision's two Family Development Projects (FDPs) have absorbed five of the project's CVs in the northern zone and have picked up their ongoing training and supervision costs.
- The project is using more local resources evidenced by the following cost-saving/cost-reducing measures:
 1. The communities have absorbed the costs for these expenses:
 - Use of facilities (e.g., community halls) for outreach immunization sessions.
 - NHC meetings and annual general meetings.
 - Maintenance of tubewells/public toilets provided by the project.
 2. The use of certain project facilities and office sessions has been changed to other cost centers (e.g., local NGOs).

- The project's IEM activities related to the specific CS interventions have been progressively taken over by the NHCs working alongside their CVs; this has reduced the cost per beneficiary by increasing coverage.

Specific Cost-Recovery Mechanisms Implemented

1. Policy guidelines on cost-recovery mechanisms were introduced by the project in February 1991 (Appendix 7).
2. A fee-for-service fee for medicine of Taka 3/per visit per patient has been levied since March 1991 for treatment of intervention-related minor ailments by the project's PHNs (Appendix 8).
3. A fee/penalty of Taka 5 for lost immunization and home-based cards was also introduced in March 1991 to record costs and to reduce the high loss rate of these cards.

Management of Cost-Recovery Mechanisms

1. The project's two PHNs—one each for the northern and southern zones' static centers are responsible for collecting fees for service and lost cards in their respective zones. Accounts for both types of fees are maintained in a separate register by the PHNs, who will also record the amounts they receive each time in the mother's/patient's card. The PHNs submit all collected cash to their respective Area Coordinators (ACs) daily; the latter, in turn, will deposit them with the Finance and Administrative Officer fortnightly. A separate cash ledger and bank account are maintained for this.
2. As fee collections for service and for lost cards take less than five percent of the PHNs' time, these cost-recovery attempts have not reduced the time and effort committed to delivering health services.
3. Hence, these cost-recovery attempts have not had a significantly adverse impact on the project.

Dollar Amount of Cost-Recovery

1. A total of Taka 11,861 (US\$320) and Taka 567/=(US\$15) have been collected from March to July 1991 from fee-for service and fee-for-lost cards, respectively.
2. These generated funds are a small part of the project's recurrent costs; however, the level of effort was nominal.

Reasons for Success of Cost-Recovery Activities

Fee-for-Service/Fee-for-Medicine:

- In spite of the GOB's policy of free health services and the mothers' lack of success in exchanging a small fee for curative service, the experienced NGO clinics/private sector clinics indicate that Dhaka residents (even the poor) are open to a sliding scale of fees.
- Discussions with NHC members and mothers have also revealed an openness to fee-for-service.
- Hence the Fee-for-Service/Fee-for-Medicine was introduced when the project accepted the recommendations of the MTE team to "make available curative care for minor ailments more predictably so that the communities' expectations are reliably met.

Fee-For-Lost Cards:

- Sample surveys indicate that about 13 percent of registered families given home-based cards free of charge lost their immunization cards.
- Upon the MTE team's recommendation to "consider use of a fee or penalty for lost home-based cards to address the problem of frequent loss of these cards," the project conducted focus group discussions with NHC conveners and members, local leaders, as well as mothers. The feedback received was generally positive.

Effects of Cost-Recovery Activities

1. Initially, there was some resistance from mothers towards World Vision's introduction of a fee/penalty for the loss of home-based cards and fee-for-service. However, the project, under its "Policy Guidelines on Cost-Recovery Mechanisms," gives the PHNs discretionary authority in waving this fee for mothers who are poor. This provision for variable charging, as well as provision of five curative care visits to those who cannot pay, has helped overcome the initial resistance of mothers and has preempted any inequities in service coverage.
- H. Income Generation**—IGAs are in their gestational stage to date. Two activities have been undertaken: (1) formation of a CV's Cooperative; and (2) the formation of an adhoc committee for CSPK credit union.

CV's Cooperative: The objectives of the cooperative are: (1) to form a saving's habit; (2) to create a united fund; (3) to use the funds for IGAs and; (4) to help the members in their old age. In May, the CVs met to explore the feasibility of forming a cooperative society. They then elected an executive body to manage the affairs of the cooperative. Sixteen CVs participated in a five-day training on cooperatives, savings, and accounts led by the Cooperative Credit Union League

of Bangladesh (CCULB). Sixty of the 95 functioning CVs are now enrolled in the cooperative. The cooperative charges 10 takas (Tk.) as membership fee. Cooperative members deposit 20-30 Tk. each month from donations (other sources) if available. Presently, the cooperative has an accumulated savings deposit of Tk. 4,000, which will soon be deposited in a bank account. The cooperative plans to use part of the funds after six months to embark on IGAs. The use of revenues generated from these IGAs have not been decided upon.

Adhoc Committee for CSPK Credit Union: The project formed a committee to initiate potential activities that could assist the staff and other health workers acquire basic concepts on cooperatives and savings account; provide them the knowledge on how to form credit unions which they could later tap as a funding source for IGAs; and the mechanics of running the savings account of a credit union. The committee's first activity was the five-day training described earlier also participated by the CHWs and development workers.

The project also plans to extend these training activities to the focus mothers' groups and the NHCs. Poor women's groups will be linked to other female organizations or other registered groups in order learn from their expertise and experience, and may be assist them find resources for their own IGAs.

It is too early to know the future of the above activities, what effect it will have on WV's reputation in the community, and whether it will create problems of equity.

V. LESSONS LEARNED AND RECOMMENDATIONS

One of the most critical components of this program effectiveness and its potential sustainability is the whole process of establishing an indigenous infrastructure. This has taken place in the form of the NHCs, Focus Mothers Groups and Community Volunteers. These groups of community members and leaders have been successful in effective health service delivery and in reporting on indicators. This has contributed to the successful implementation of the project. They also offer the potential for establishing an indigenous institution that can be self-sustaining.

The FET urges that the successful methods employed by the project be documented to provide an accurate understanding of the processes including problems encountered, lessons learned, and future plans. This is critical to the program's next phase and the possibility of seeing it replicated.

A. Future Strategy

1. As the program expands and includes sustainability and community mobilization, participation should be included with its own objectives. The FET therefore recommends:

- a. The role of the CHW be expanded to become a Community Development Worker (CDW). This new role will require a new job description and additional training to fulfill responsibilities. CVs and NHCs' to assure more responsibility of health service interventions.
 - b. A training curriculum needs to be established for CHW, CDW, and CVs with the primary focus on facilitating community mobilization and training of trainers in various development interventions.
 - c. Specific training, curriculum also needs to be considered for NHCs as a primary planning and management unit for future development interventions.
2. The DCC/other agencies and Kamalapur Ward Leaders with WVB field Office should develop a long-term, 10-15-year development strategy for the Ward and adjacent slum areas. This should include an integrated development approach utilizing the concept of Area Development Program, (ADP) planning and design which would eventually involve and integration of sponsorship and non-sponsorship funding.

The issue here is to break out of the USAID mode of funding for CS and development and appropriate strategy utilizing lessons and experienced.

3. More thought should be given to an integrated communications strategy for the diffusion and facilitation process of all interventions. At the moment it appears communication is taking place through various mediums such as posters, announcement, etc. but there is no overall integrated strategy with specific objectives. This should also incorporate interpersonal dimensions as a key component. UNICEF Communications Division Chief, Neil McKee, is available for advice.

As the role of the CHW moves to CDW, focussed areas which could be included in community motivation should include the use of mapping by community members as a means of community awareness building and resource identification; as NHCs develop into a more organized consortium, competition can be encouraged as an incentive between various communities for specific interventions.

4. Continue to explore local institutional development in the schools as a long-term strategy for both health and other development interventions.

B. Neighborhood Health Committees

1. Assist the NHC Conveners and members in forming a legally constituted neighborhood association. A central committee or consortium could be selected by the members to govern the association. The indigenous institution could serve as the primary local infrastructure for establishing

continued program activities and strategies for sustainability as well as serve as a primary point of linkage and planning at the Ward level with government and other NGOs.

2. Increase NHC training in the following: resource identification, planning and management and community organizing.
3. Formalize the establishment of the NHCs with signed agreement in relation to a larger consortium of NHCs which could be legally constituted for the WARD.
4. Collect and analyze data on socioeconomic, cultural aspects of community members, and whether or not they are participating. This will help the staff target community participation and sustainability strategy to those not yet participating and will better assure the continuation of an approach that emphasizes equity. The lower socioeconomic groups need identification also for a targeted approach to relief if that is required.
5. Utilize a strategy that would establish a "critical mass" of effective NHCs. This could involve responding more actively with additional training and program inputs to those NHC which respond to community mobilization efforts. Once viable sustainable models of NHCs are established, other community areas will have a model, be motivated by it and learn from it.

C. Community Participation

1. The NHC Conveners, either as a group or as selected, be brought together for specific input in the design of the DIP for the extension phase. They should be included in decision-making about appropriate objectives as well as for input on implementation strategy.

Local "linkage" organizations of government and NGOs should participate in this process. This could be accomplished in the form of a workshop which could provide training in program design and planning as well as producing the DIP.

2. The project objectives needs include not only interventions, but also community mobilization and sustainability. It is recommended that revised objectives include specific process interventions related to sustainability, community mobilization and participation, and additional development activities as identified and prioritized by community leaders and beneficiaries. These might include literacy , water, income generation and skill development. Specific objectives and indicators should be established for each of these areas.

- #### **D. Cost-Sharing and Fee-for-Service**—Mothers are paying for lost home-based health records, and the introduction of fee for service for curative medicine is

quite successful. This indicates that many people can afford to pay something for services they want. There are, however, at least two other institutions active in providing curative care in the area. The DCC intends to develop a municipal center in Ward 51 which might house some primary health care facility.

1. Restructure the provision of drugs through curative clinics conducted by public health nurses, since the latter are unlikely to be sustained. The plan for provision of drugs to CVs, most of whom are young students, should be reviewed carefully with the DCC who will have to supervise this activity eventually, especially if a precedent is set. CSPK staff should review the capability of the Women's Coalition Clinic, with its full time physician nearby, and/or of the Telegu Clinic to provide curative drugs through physician services for Ward 51.
 2. Organize a follow-up training workshop on cost-effectiveness to build on the initiative attempt at cost-effectiveness analysis.
 3. Consider employing a mix of management and cost-sharing strategies among GOs/NGOs and the community to sustain CS interventions.
- E. **Equity**—The inclusion of all socioeconomic levels in project design, with successful involvement of upper levels in provision for the poorest of the poor has brought a chance for sustainability that is laudable.

Neighborhood Health Committees include persons from all walks of life, from physicians and teachers down to very poor mothers. Although there may be a danger of the committee becoming an "elitist" group, at present it functions actively to address the needs of the neighborhoods, such as identifying sanitation and water needs and resources to meet those needs, as well as in supervision of the CVs who report monthly on their work. The regular reporting of births and deaths-by-cause to this committee keeps it aware of population growth and of the toll being taken by killer diseases in its midst.

Recommendation: The project should continue to implement its strategy for the formation of Neighborhood Health Committees, taking care to include members from all socioeconomic groups, and continuing to aim for a conscientization of persons with resources within the community vis-a-vis their responsibility for their poorest citizens.

**APPENDIX 1
LIST OF KEY INFORMANTS**

Dhaka City Municipal Corporation

**Major Khandaker Nurul Afser (Rtd.)
Zonal Executive Officer**

**Dr. Asraf Uddin
Chief Health Officer**

**Dr. Mir Mustafizur Rahman
Assistant Health Officer
Zone 1**

Ministry of Health

**Dr. L. Rahman Talukdar
Director, EPI Project**

**Dr. Syeeda Begum
Junior Clinician
Institute of Public Health Nutrition**

**Mrs. Farkhunda Akhter
Nutritionist
Institute of Public Health Nutrition**

Bangladesh Women's Health Coalition

**Dr. Ashoka Dey Choudhury
Medical Officer**

**Mrs. Jhama
Project Coordinator**

Telegu Community Clinic

**Dr. Bernard Dipak Sarker
Clinic Physician**

**Mr. Hubert Gomes
Clinic Coordinator**

APPENDIX 2a.
List of NHC Conveners
Focus Group Interviews

SL#	NAME	OCCUPATION	DESIGNATION	ADDRESS
1.	Mr. Sekandar Alam	Service	Convener	60/3 Manik Nagor
2.	Mr. A. R. Subedar	Pension holder	DO	81/1/91 North Zatrabari
3.	Mr. Abdul Mannam	DO	Member	76/2-E/8/2 North Zatrabari
4.	Mr. Fazhur Rohman	S.P. (rtd.) ¹	Convener	Not mentioned
5.	Mr. Shahzahem	Business	DO	67/3 North Yolabag
6.	Mr. A. Sattar	Service	Member	70 North Zatrabari
7.	Mr. Golam Mostafa Chy	Business	DO	13/3 K.M. Das Lane
8.	Mr. Uma Charan	DO	Convener	14 Kazirbag
9.	Mrs. Kohinur Rashid	Service	DO	10 Outfall
10.	Mrs. Lutfan Naher	Housewife	DO	23/4 Golapbag
11.	Mrs. Shahida Akterkhomman	Teacher	DO	68 North Zatrabari
12.	Mrs. Sukura Uhalek	Housewife	Member	90/1 Dholpur
13.	Mrs. Saleha Chowdhury	Service	Convener	98/1 Manik Nagor
14.	Mrs. Momena Ashraf	Housewife	Member	25/4 Golapbag
15.	Mrs. Helena Sikdar	DO	DO	60/1 Dholpur
16.	Mrs. Shahida	DO	Convener	8/2 Sayedabad
17.	Mr. Din Islam	Business	DO	31 Dholpur
18.	Mr. Shamsuddin Ahmed	Social worker	DO	63 Brammonchiron
19.	Mr. Almasuddin	Service	Member	89/3/D R.K. Mission Road
20.	Mr. Ismail Hossain	Business	Convener	70 Manik Nagor
21.	Mr. Shahabuddin Sorker	DO	DO	3/2 North Zatrabari
22.	Mr. Shamsul Huda	DO	DO	98 R. K. Mission Road
23.	Mr. Rokeya Almas	Doctor	DO	89/3/d R. K. Mission Road
24.	Mrs. Jaheda Khatun	Housewife	DO	90/3 Dholpur
25.	Mrs. Hasina Akter	DO	DO	96/B Dholpur

S.P. = Superintendent of Police

क्र.सं.	नाम	पेशा	पदवी	पता	संस्था
201	(श्री: श्रीगणेश/श्रीगणेश)	कर्मचारी	ब्रह्मचर्य	१०२३ अमरावती नगर	
202	(श्री: श्रीगणेश/श्रीगणेश)	कर्मचारी	ब्रह्मचर्य	१०२३ अमरावती नगर	
221	(श्री: श्रीगणेश/श्रीगणेश)	कर्मचारी	ब्रह्मचर्य	१०२३ अमरावती नगर	
222	(श्री: श्रीगणेश/श्रीगणेश)	कर्मचारी	ब्रह्मचर्य	१०२३ अमरावती नगर	
223	(श्री: श्रीगणेश/श्रीगणेश)	कर्मचारी	ब्रह्मचर्य	१०२३ अमरावती नगर	
224	(श्री: श्रीगणेश/श्रीगणेश)	कर्मचारी	ब्रह्मचर्य	१०२३ अमरावती नगर	

APPENDIX 2b.
KAMALAPUR CHILD SURVIVAL FINAL EVALUATION
GUIDE QUESTIONS FOR NHCs AND CVs FOCUS GROUP DISCUSSION

Neighborhood Health Committees

1. How were you chosen?
2. What are your roles and responsibilities as NHCs?
3. Have you had any training as NHCs?
4. How much time do you spend each month as NHCs?
5. How have you participated in the design and implementation of CSP activities?
6. What were the topics you discussed at your last NHC meeting? Decisions made? Actions taken?
7. Do you perceive CS activities are effective in meeting current health needs? What other health problems need to be addressed?
8. What other problems in your community would you like to do something about?
9. What activities would you like to see continued in your area?
10. What resources can your community contribute to ensure that activities continue after WV phases out?

Do you have any questions for us? THANK the NHCs for their cooperation.

Community Volunteers

1. What are your roles and responsibilities as CVs?
2. How much time do you spend per day or per week as a CV?
3. When was the last time you met with your NHC/CHW? What did you discuss with them?
4. Will you continue your work as a CV after the project phases out? Why? What will keep you going on?
5. What else would you like to learn?

Do you have any questions for us? THANK the CVs for their cooperation.

**APPENDIX 3
ACTION PLAN ON SUSTAINABILITY FY91
KAMALAPUR CHILD SURVIVAL PROJECT
FINAL EVALUATION (AS OF JULY 1991)**

SL#	ACTIVITIES	PURPOSE	IMPLEMENTATION PERIOD	REMARKS
1.	Continue keeping contact with GOs and NGOs	Ensure support and guidance	Regularly as needed	Networking is significant
2.	Continue to publish quarterly CSP newsletter	Disseminate messages, achievement/progress for awareness-building and earn ownership	October, January, April, July	4 issues jointly with other CSP of WVB
3.	Complete formation and functioning of NHCs	Develop leadership and make responsible for ensuring services at local level	FY91	48 NHCs functioning
4.	Continue NGO coordination meeting/gathering	Exchange knowledge, avoid duplication of services and honor referrals	FY91 quarterly meeting	10 NGOs working in and around project area are having regular meetings
5.	Train community volunteers 6, 7, 8, and 9th batch	Develop Human stewardship for providing health messages/services (limited) at local level with costs.	November, January, March, April	6 and 7th batch of CVs completed training
6.	Arrange workshop for the conveners/members of NHC	Take responsibilities to make aware the community	December, January, February, April, May	Two workshops arranged for NHC conveners/members
7.	Continue and follow up NHC/CV monthly, quarterly, special meetings	Review progress, solving problems through area group meetings	FY91	Regular meeting is going on
8.	Distribute high-potency Vitamin A capsules (5th and 6th round) with the help of CVs/NHCs	Develop practices of taking responsibility	November, May	CVs actively involved in distribution
9.	Arrange workshop/seminar for focus mothers group	Develop cadres to disseminate health messages at the door step of the community	May, July	2 groups are found active
10.	Organize reorientation/refresher courses on CSPK interventions for the convener/members of NHCs and CVs	Update with latest progress/achievement of the project and give more responsibility for earning ownership	February, June, July	Response is satisfactory
11.	Organize interschool sports in the project area	Disseminate health message among the students	January	Instead of sports, health education curriculum was introduced in each school
12.	Explore possibilities to introduce charges for lost card	Community participation for recovering the costs as well as a lesson for giving values of the services	June	Lost rate is reducing
13.	PVO sharing workshops on lessons learned on CS	Sharing lessons learned through experience and receiving appraisal/recommendations	November, January	Held on one in March
14.	Explore the possibilities for introducing income generation activities for CVs	Sustain their participation/involvement by ensuring continuous income source	November	Nothing mentionable except forming savings group

SL#	ACTIVITIES	PURPOSE	IMPLEMENTATION PERIOD	REMARKS
15.	Assessment on level of commitment/ active involvement of NCH/CV	Reinforce their knowledge and enhance skill level	June	Not done yet
16.	Organize annual gathering for CVs/ NHCs	Strengthen the unity and keep motivation as launched	July	Only NHC gathering was held
17.	Explore the possibilities of forming central NHC (consortium)	Establish an infrastructure (network) at the community/ ward level to ensure the sustainability of the services	July	Preliminary discussion was held. Final meeting will be organized in September 1991
18.	Introduce school health education in the primary/secondary schools situated in the project area	Disseminate PHC/CS knowledge among future citizens (parents) who will also teach their parents/neighbor at home level. Also to institutionalize the CS program.	July	Regular session is going on at the school level conducted by respective trained teacher of the school
19.	Introduce fee for services for minor ailments	Encourage participation of the service recipient in the cost recovery program	March	Response is satisfactory
20.	Explore the possibilities of forming cooperative society for CVs	Create an avenue for the CVs to respond to their personal needs through proper utilization of their savings	May	Savings started with 60 CVs
21.	Explore the possibilities of introducing health education through local religious leaders	Involve and ensure participation in disseminating knowledge and changing behavior of the target people	July	Started compartment wise
22.	Involve local club members in service delivery of the program	Involve and ensure participation in disseminating knowledge and changing behavior of the target people	April	Organized and waiting for support from DCC
23.	Introduce focus group discussion through CVs/focus mothers	Disseminate health messages using mothers at the house level basing on their personal experience	May	Responding satisfactorily

APPENDIX 4
INDICATORS TRACING PROGRESS IN ACHIEVING SUSTAINABILITY
KAMALAPUR CHILD SURVIVAL PROJECT
FINAL EVALUATION (AS OF JULY 1991)

INDICATORS	MEASURED BY (INDICATORS)	ACHIEVEMENT (UP TO JULY 1991)	REMARKS
A. Community Ownership & Support 1. Utilization	85% EPI coverage and 95% VAC coverage achieved and sustained after three years	<ul style="list-style-type: none"> * 86% of the target children were fully immunized with 6 EPI vaccines and 72% were immunized with TT2 * An effective immunization service delivery system is in place, including registration, establishment of a cold chain monitoring system, and strict sterilization procedures, as well as quick regular reporting to EPI, MOHFW. * 93% of children 6-71 months were administered with VAC 	Source: 3rd Round Routine Domiciliary findings (March 1991) EPI and VAC program is integrated as recommended by WHO/UNICEF. 4th round mass VAC distribution held in May 1991
2. NHCs' commitment	70% active after three years	<ul style="list-style-type: none"> * 96% NHCs (48 out of 50 formed) are active * NHC conveners receiving monthly reports of the CVs and discussing with community during monthly meetings * Attending regular monthly meetings and special events (e.g., World Health Day) * Providing space for immunization outreach session and area meetings * Updating NH health information monitoring boards 	<ul style="list-style-type: none"> * Participate in MTE process with valuable feedback * Extended cooperation being an active team member of the Final Evaluation on behalf of the community

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INDICATORS	MEASURED BY (INDICATORS)	ACHIEVEMENT (UP TO JULY 1991)	REMARKS
3. CVs' commitment	70% active after three years	<ul style="list-style-type: none"> • 90% CVs (101 out of 112 CVs) are active • Visiting target families: ORT training, nutrition/FP education • Attending regular monthly meetings/special events • Participating in VAC distribution (6 monthly) • Organizing immunization outreach sessions • Participating in social mobilization campaign • Updating NH Health information and monitoring boards and submitting monthly activity report • Assisting CHWs in data collection 	Respective of CVs of selected compartments in southern zone participated in the field testing of 150 growth monitoring card for 150 target children given by the National Nutrition Council
B. Participating Institutions/Agencies			
1. EPI Directorate's willingness	Regular, prompt, free delivery of adequate quantities of EPI vaccines each month	<ul style="list-style-type: none"> • All vaccines, EPI logistical supplies, training materials are being procured from EPI Zonal office free of costs on a regular basis 	<ul style="list-style-type: none"> • EPI director, MOHFW, is personally involved with CSPK • EPI included project staff in national coverage survey held in Jan.-Feb. 1991 • World Vision of Bangladesh awarded with a recognition certificate for joining in achievement of National EPI Coverage (specifically by two CSPs of WVB in Dhaka Urban)
2. IPHN's willingness	Regular, prompt, free delivery of VAC every six months	<ul style="list-style-type: none"> • VAC teaching materials were supplied by IPHN/Civil Surgeon Office along with film shows free of cost 	<ul style="list-style-type: none"> • Project has been receiving special attention from IPHN • National Nutrition Council included the project for field testing growth monitoring card among 150 target children
3. DCC's willingness	Secondment of five municipal health workers for at least two training	<ul style="list-style-type: none"> • Six municipal health workers (vaccinators) participated in the 4th batch CV training • Chief Health Officer visited the project and distributed certificates to the participants • Provided every possible assistance (such as DCC Area Map) to the project 	<ul style="list-style-type: none"> • DCC has been provided all administrative supports • Local Ward Commissioner (DCC representative in Ward 51) is extending all necessary support • Extended support through active participation as a Team member in Final Evaluation

INDICATORS	MEASURED BY (INDICATORS)	ACHIEVEMENT (UP TO JULY 1991)	REMARKS
C. Institutionalization			
1. DCC's plan	Decision to establish a fixed health facility in Ward 51 by end of three years	Decision was made and budget was approved by DMC to construct a community center in Ward 51 where a community health clinic will be installed	<ul style="list-style-type: none"> • According to the information provided by the Ward Commissioner in January 1990 • Action is being delayed due to changes in the government
2. EPI integration	Emergence of an urban EPI policy and plan of action for Dhaka by end of three years	<ul style="list-style-type: none"> • The project's immunization service delivery is now effectively integrated with the new USAID funded government urban EPI program for Dhaka City. In Phase I, Ward 51 was allocated under EPI Zone 3 and assigned to CSPK to achieve National EPI targets • Project did establish a very good work relationship with urban EPI personnel/advisors including WHO, UNICEF, REACH, and USAID 	<ul style="list-style-type: none"> • Only one session on Vitamin A (breastfeeding and VAC administration) was held at UNICEF office • A local NGO forum has been formed with 10 NGOs having regular meetings quarterly
D. Income-Generation/Cost-Recovery			
1. Cost-Recovery mechanism	Fee for service	<ul style="list-style-type: none"> • Project is now seriously exploring the feasibility of initiating some cost recovery mechanisms with the community, other NGOs, and the related government sectors 	Fee for service has been introduced from March 1991. Response in payment is satisfactory. Please see the detailed report for clarification
2. Small-scale income-generating enterprises	Functioning	<ul style="list-style-type: none"> • Project is exploring with the community local NGO's government sectors including EPI to initiate income-generating activities for CVs, NHCs, and mothers of high-risk children 	A female handicrafts group in the project area was visited and dialogued for exploring better ideas on the issue
3. NHC's supporting CVs	70% supporting CVs after three years	<ul style="list-style-type: none"> • The project is actively exploring the issue through continual dialogue with the NHC's community leaders, local NGOs and related government sectors 	<ul style="list-style-type: none"> • CVs have formed two cooperative and savings societies for exploring income-generation sources for their own benefit • CVs are not taking any reward in cash/kind after providing full-time service for projects' interventions

APPENDIX 5
FOCUS GROUP GUIDELINES FOR NEIGHBORHOOD HEALTH COMMITTEE
KAMALAPUR CHILD SURVIVAL PROJECT

We interviewed 10 Neighborhood Health Committee (NHC) members/conveners by using the Focus Group Guidelines of one NHC from each Zone, i.e., Northern and Southern Zones.

We individually interviewed 10 NHC members/conveners of two NHCs by using the Focus Group Guidelines addressing six questions:

1. What health services are provided by CSP in the in the community;
2. How long have you been a member of the NHC;
3. What role does the NHC play in the community;
4. Do the services provide for the community's health needs;
5. Has the health of the children of the community improved;
6. What can the community do to ensure the continuance of these services?

After collecting all the answers from 10 respondents, we compiled them and found out the percentage of different answers. They are as follows:

1. **What health services are provided by CSP in the in the community?**
Answers:

(a) Immunization of Infant/Women	100%
(b) * Vitamin A capsules distribution	50%
* Sanitation	50%
(c) Control of Diarrhea	30%
(d) Training of NCH/community volunteers	20%
(e) * Child health care	10%
* Family planning	10%

2. **How long have you been a member of the NHC?**
Answers: Since December 6, 1989.
 From the beginning of the Committee, i.e., September 19, 1989.

3. **What role does the NHC play in the community?**
Answers:

(a) Motivate community people	80%
(b) * Dessiminate messages	20%
* Guide community volunteers	20%
* Take initiative to solve problems	20%
(c) * Make community aware of health hazards	10%
* Keep contact with CSPK	10%

4. **Do the services provide for the community's health needs?**
Answers: Partially addressing health needs. 100%

5. **Has the health of the children of the community improved?**
Answers: Yes. 100%

6. **What can the community do to ensure the continuance of these services?**
Answers: Take joint initiative to continue the services, getting help from either GOs, NGOs, or Dhaka City Corporation. 100%

(The percentage for each answer is given out of 100.)

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**APPENDIX 6
OTHER COMPUTATIONS**

<u>ORT</u>		
Cost	=	US\$18,894; Total number of household beneficiaries = 12,929
ARC for ORT	=	\$1.46
<u>Nutrition</u>		
Cost	=	US\$52,757; number of beneficiaries = 12,065
ARC for Nutrition	=	\$3.46
<u>Family Planning</u>		
Eligible couples	=	12,891
Eligible couples (achieve)	=	6,188 (48%)
Cost	=	US\$26,300

The cost per beneficiary is US\$4.25.

APPENDIX 7 POLICY GUIDELINE ON COST-RECOVERY MECHANISM

Based on the working experience and practices of other NGOs as well as Child Survival Project Kamalapur for the last two to three years, the time has come for the project to consider and formulate certain policies in establishing cost-recovery mechanism in the health service delivery system.

Accepting the recommendations of the midterm evaluation team (a) to "make available curative care for minor ailments more predictably so that the communities' expectation are reliably met; and (b) to consider the use of a fee or penalty for lost home-based card to address the problem of frequent loss of these records,"¹ the project has discussed the matter with NHC conveners, local leaders, and some of the potential target mothers. Receiving positive feedback², we propose the following plan/strategy on cost-recovery mechanism for implementation and practice in the project area.

WHAT DO WE MEAN BY COST-RECOVERY MECHANISM?

To us, it is a policy guideline through which we plan to introduce a nominal charge initially for the following two issues:

- a. Fee/penalty for lost home-based card;
- b. Fee-for-service/fee-for-medicine or intervention-related minor ailments.

WHY SHOULD WE INTRODUCE THIS?

To comply with the project proposal and abide by the sustainable development policy, project is deeply concerned to find out some possible ways and means to address financial sustainability along with administrative (institution-building) and transformation (sustained health behavior changes) sustainability³. To make it easier, we identify the following reasons for introducing the above policies:

- a. Study shows that 13 percent of the registered families (who were given home-based cards free of charge) lost their immunization or home-based cards⁴. Since the card is provided free of cost, it does not give them any value. If a nominal charge/penalty is introduced for the lost cards, it will be at least some value and card holders will be more careful for maintaining it in order to receive further services from the project at Tk. 5.00 for the "duplicate" card.
- b. In spite of the GOB's policy of free health services and the MOHFW's lack of success in charging a small fee for curative service, the experience of NGO/private sector clinics indicate that Dhaka residents (even the poor) are open to a sliding scale of fees⁵. Accepting this openness and positive feedback of the NHC conveners, the project earned the confidence to introduce fee-for-service/fee-for-medicine (Tk. 3.00 per visit per person) for the treatment of minor ailment cases related to interventions.

- c. The system and the collected money will bring impact on the day-to-day expenses, quality service as well as on future budgeting. It means that only selected (real and needy) patients will come for receiving the service as a result, time for the concerned staff and money for the unused drugs will be saved. The selected patients will be satisfied with better service/advice and consultancy. On the other hand, the collected money can be utilized for compensation of the services of any staff/CV or other inputs.

It is expected that in the long run, community people will earn the "ownership" of the service and involve themselves to sustain the service by their own.

HOW THE CHARGES WILL BE INTRODUCED/MAINTAINED

- a. The present policy guideline will be shared with the core team members of the project after receiving a positive feedback from the field.
- b. The information and final decision will be disseminated in the community through focus group discussions, NHC/CV meetings, domiciliary visits by the CHWs, public address system, etc.
- c. Tk. 5.00 (five) will be charged for a "duplicate" card as penalty for the lost home-based cards at the clinic of two static centers of the project. Tk. 3.00 (three) will be charged to each patient each time for getting the service and medicine related to interventions. Accounts for both the cases will be maintained by the respective PHNs in a separate register and she will record the amount (she receives) each time in the card of the patient. PHNs will submit collected cash to respective ACs daily and the ACs will deposit it to the Accounts Section fortnightly. A separate cash ledger will be maintained through opening a separate bank account. Later, a Plan of Action will be developed for proper utilization of the fund. The WVB field office finance department will be informed prior to action in a separate memo.

WHEN WILL IT BE IMPLEMENTED?

Charges for lost cards will start from February 1, 1991, and fees for services and medicine will be introduced from March 1, 1991, in both the static centers.

ORIENTATION AND FINE-TUNING

A short orientation on the system will be arranged for the respective staff members.

Monitoring and evaluation of the system will be done on a regular and routine basis whenever needed.

Improvement of the system or rate of the charges/fees may be reviewed/revised to make it more appropriate and acceptable.

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N.B.: EXCEPTION

A discretionary power/authority lies with the respective PHNs in considering the rate of charges in both the cases (lost card and minor ailment treatment) depending on individual cases/situation.

For instance, a mother/patient has come to the center for lost card and/or for minor ailment treatment but she is unable to pay the full amount (Tk. 5.00+3.00) at that moment. In this case, if the PHN finds that she (patient) really deserves the service but is unable to pay the full amount, she (PHN) is allowed to use her discretionary power/authority as a "case by exception" and will note down in the register. In a nutshell, less payment or free service than the desired amount may be honored/accepted under the discretion of the respective PHNs and it would be treated as "cases by exception."

**Prepared by Sylvester Costa
February 13, 1991**

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APPENDIX 8
REPORT ON LOCAL REVENUES
KAMALAPUR CHILD SURVIVAL PROJECT
AS OF JULY 1991

SL#	MONTH	SOURCES		Total Amount in TK.
		Health Card	Service Fees	
1	March 1991	232	1,504	1,736
2	April 1991	25	1,004	1,209
3	May 1991	150	3072.5	3,222.5
4	June 1991	90	3,345.5	3,425.5
5	July 1991	70	2,935	3,005
	Grand Total	567	11,861	12,428

Note:

- Tk. 5.00 is charged for duplicate Family Health card at the time of clinical service.
- Tk. 3.00 is charged as fee for service per visit per patient at the time of minor ailment treatment provided with necessary drugs.
- Collected money is in hand. Papers area being process for opening a bank account with the collected money.
- Plan for utilization of the collected money will be prepared in the second quarter of FY92.

WORLD VISION RELIEF & DEVELOPMENT INC.

**PART III
END-OF-PROJECT PIPELINE ANALYSIS
KAMALPUR CHILD SURVIVAL PROJECT
DHAKA, BANGLADESH**

December 1991

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1991 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS
W.V.R.D./BANGLADESH KAMALAPUR CHILD SURVIVAL PROJECT
#PDC-0505-A-00-5065-00

FIELD COST ELEMENTS	Actual Expenditures To Date (10/1/88 to 9/30/91)			Projected Expenditures Against Remaining Obligated Funds			Total Agreement Budget (Columns 1 & 2) (08/01/88 to 9/30/91)		
	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL
I. PROCUREMENT									
A. Supplies	14,513	18,385	32,898	(9,125)	32,633	23,508	5,388	51,018	56,406
B. Equipment	14,695	35,222	49,917	10,831	(9,032)	1,799	25,526	26,190	51,716
C. Services/Consultants	525	0	525	9,012	2,620	11,632	9,537	2,620	12,157
SUB-TOTAL I	29,733	53,607	83,340	10,718	26,221	36,939	40,451	79,828	120,279
II. EVALUATION/SUB-TOTAL II	2,986	0	2,986	12,014	1,000	13,014	15,000	1,000	16,000
III. INDIRECT COSTS									
Overhead on Field (%)	9,651	2,324	11,975	0	(2,324)	(2,324)	9,651	0	9,651
SUB-TOTAL III	9,651	2,324	11,975	0	(2,324)	(2,324)	9,651	0	9,651
IV. OTHER PROGRAM COSTS									
A. Personnel	50,419	58,949	109,368	(20,006)	34,155	14,149	30,413	93,104	123,517
B. Travel/Per diem	4,990	992	5,982	3,366	(992)	2,374	8,356	0	8,356
C. Other Direct Costs	19,102	39,227	58,329	(6,092)	(7,469)	(13,561)	13,010	31,758	44,768
SUB-TOTAL IV	74,511	99,168	173,679	(22,732)	25,694	2,962	51,779	124,862	176,641
TOTAL FIELD	116,881	155,099	271,980	0	50,591	50,591	116,881	205,690	322,571

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WORLD VISION RELIEF & DEVELOPMENT INC.

**PART IV
OTHER EVALUATION FINDINGS
KAMALPUR CHILD SURVIVAL PROJECT
DHAKA, BANGLADESH**

Submitted by:

The Final Evaluation Team

September 1991

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OTHER FINDINGS

A. Organization Development

1. **Human Resources:** One of the most significant findings of this evaluation team is the model for working with indigenous human resources in a deprived urban community.

Grass-roots Level Health Workers: The project depends on three types of grass-roots-level workers or liaisons with Ward 51 neighborhoods. These are Neighborhood Health Committees, Community Volunteers, and a newly emerging group which might replace the CVs or at least work with them, the Focus Mothers Groups.

Neighborhood Health Committees: NHCs form the backbone of this project, and represent all socioeconomic classes. Potential members were identified by the staff through exploratory talks within the communities; most were identified as natural leaders by the CHWs who came into the area to conduct door-to-door registration. Some leaders are the more outspoken members of very poor neighborhoods; some come from the more educated population, including doctors, engineers, retired teachers, who live in Ward 51 as close neighbors to the poorest of the poor. Initially, some upper class members' homes were closed to the CHWs. Later on, these doors were opened and many of the more educated citizens have become members of the NHCs. The NHCs form a valuable resource in identification, recruitment, and supervision of the CVs who report to them on a monthly basis. Currently the active NHCs meet fortnightly. Their duties include interpretation of the data gathered by the CVs, community liaison for preventive health activities, identification of water and sanitation needs at appropriate locales, and in some cases as advocates with local authorities on behalf of their neighborhoods.

Community Volunteers: CVs are literate local residents who are interested to promote health in their communities. Many of them are young students who are eager for more training in almost any area of their lives. Their most important job is to train families in protective health behaviors such as ORT, appropriate breastfeeding and weaning practices, and introducing mothers to the possibilities of family planning. CVs carry rosters of under-six-year-olds and of all women age 15-45 to help them in home visits, and they keep a health worker diary which allows them to report vital events and migrations. They send "personal prompt" or invitation to all parents of under-twos to attend immunization clinics and Vitamin A distribution points.

Focus Mothers Groups: FMGs have recently emerged as support grass-roots level liaisons. Although many are illiterate, they are eager to learn and are capable of training other mothers in health behaviors the FMGs have mastered. Trained by the CHWs, CVs, and senior staff, the FMGs appear capable of reporting on

their neighborhoods and could form the nucleus of the "Posyandu," or rally post, as seen in Indonesia, possibly for growth monitoring/promotion.

Middle-Level Health Workers: CHWs are 12 in number at one per 900-1,200 households. These CHWs are recruited from outside the impact area. They are male and female, and have at least secondary school education. They supervise the CVs monthly, and make routine domiciliary home visits to all households each six months. They visit families in special need identified by the CVs; for example, a family having just lost a child or a family with a new birth or an illness.

Public Health Nurses: There are two PHNs one in each zone. They receive and compile data and hold immunization clinics fixed and outreach sites. Two times weekly from 9:00 to 1:00, PHNs see target groups who are ill. A fee for service is charged—three Takas per person per visit. The fee covers medications which the project stocks. Referrals are made to the nearest appropriate facility. PHNs do not hold antenatal clinics or interact with Traditional Birth Attendants (TBAs), although this is planned for the future.

Senior Level Staff: The senior level staff are all Bangladeshis who have clear-cut job descriptions. Their positions are summarized as follows:

- Project Director—Dr. Kabir Ahmed, Public Health Physician
- Project Manager—Sylvester Costa, a Social Scientist;
- Operations Coordinator—Dr. Faruq, assisted by 11 other local WV physicians for technical assistance, such as Dr. Iqbal, an experienced physician nutritionist; Dr. Sukanta, an Epidemiologist and Health Management Specialist
- Two Area Coordinators—Mr. M. R. Howlader, a Social Scientist and Mrs. Samina Rashid, a Social Scientist
- Monitoring and Evaluation Officer—Mr. Abdul Hye
- Training Coordinator—Mrs. Pascolina Mondol

The staff's extraordinary quality is their enormous dedication to their calling to serve a deprived community. Their qualifications are appropriate, and are partly the reason why the project is respected so much by the Dhaka City Corporation and by the Ministry of Health officials.

2. **Use of Technical Resources:** Three sources of technical resources have been used by the project:

Local Resources: ICDDR,B Scientists, the local Bureau of Statistics, the National Nutrition Council, the EPI team from the MOH, and personnel from other PVOs.

World Vision Relief and Development Headquarters and Regional Resources: Dr.Chander, a highly qualified and experienced Asian public health expert working out of World Vision Singapore office.

International Experts/Consultants: For workshops, training, and evaluation assistance, usually with USAID resources through the Johns Hopkins PVO/CS assistance mechanism.

The project has obviously sought appropriate help whenever it was needed. Data are now of a quality that the project staff may wish to analyze and interpret and publish.

3. **Health Information System (HIS):** At the grass-roots level, the CVs maintain monthly contact with families in their own neighborhoods. They carry rosters of under-six-year-olds and all women 15-45 years of age. This roster is used as a checklist; information is recorded in the CV diary only where no systematic method is in place.

To record a vital event, the CV reports monthly to the Neighborhood Health Committee using a one-page reporting format with a copy to the CHW. The CV also reports on family planning acceptors and on immunizations of children in her respective neighborhood. The NHC interprets the report and may correct her. The CHW uses her copy of the report along with a verbal questioning of the CV to update her "master list" and to aggregate monthly data—numbers of births by sex, deaths by age, sex and probable cause, family planning acceptors, and immunizations. {N.B. The "master list" contains names, birth month/year or age of under-six-year-olds, and women 15-45.}

At the project level, the CHW submits the report to the Public Health Nurse who aggregates the data for five to seven CHWs. The aggregate data are submitted by the PHN to the respective area coordinator monthly. The PHN also reports on immunization doses by age group from her EPI registry form. Periodic sample surveys serve to corroborate the above data and to document progress in other areas: EPI accomplishment, ORT competency, contraceptive practice, Vitamin A distribution, infant feeding practices, and population mobility. A detailed description of the HIS is described in Appendix 9.

- B. **Project Design and Implementation Plan**—Clearly, a major accomplishment has been the training of families in most "child protective behaviors." The sustainability of these behaviors, once adopted, does not depend on the project itself. A mother convinced to breastfeed, for example, is likely to continue to do so. Stated as behaviors, the grass-roots level workers have successfully convinced most families to:

- See that children and women are immunized;
- Provide ORT for under-fives with diarrhea;
- Adopt appropriate and timely child-spacing methods;

- See that children receive Vitamin A capsules when they are distributed each six months, and that they receive fruits and vegetables rich in Vitamin A precursors;
- Recognize serious illness and see that children are seen by health workers early enough in the disease process to be treated or referred for treatment; and

Certain behaviors need to be ingrained and intensified during education sessions with mothers—the adoption of appropriate breastfeeding and weaning practices including the provision of colostrum, exclusive breastfeeding during the first four months of life with gradual introduction of weaning foods thereafter, and continued breastfeeding to age 24 months.

If the above objectives had been stated in behavioral terms, the project could be proud that most objectives have been met. Nutrition objectives are the only ones probably not met, due in part to the lack of growth monitoring and counseling with an appropriate intervention. Explanatory notes for the review of objectives are given in Appendix 1.

C. Findings and Recommendations

General Objective on Vaccinations: According to the DIP, the vaccination objective was "To reduce by 40 percent the under six mortality and morbidity due to vaccine-preventable diseases, specifically measles." According to revised objectives after the MTE, the related specific objectives may be stated as the following:

•*Specific Objective:* To fully immunize 85 percent of infants less than one year of age with six EPI vaccines by September 1991 and 85 percent of women 15-45 years of age with two doses of tetanus toxoid by September 1991.

FET Finding: Eighty-seven percent of children were fully immunized by their first birthday, while 91 percent of mothers of infants received two doses of tetanus toxoid.

FET Note: Although information on age-specific, cause-specific death rates are not yet available as implied in the DIP, morbidity data and mortality data may be collected in the future.

Verbal autopsy data which will be collected over the next six months are not expected to reveal any deaths caused by measles or other vaccine-preventable diseases in the registered population; deaths from diarrhea are expected to be diminished compared to data from other studies, e.g., compared to ICDDR,B data.

General Objective on ORT/Dehydration: The objective according to the DIP was "To reduce by 40 percent the under-six mortality due to diarrheal dehydration by September 1991."

•*Specific Objectives as Stated in the DIP:* "To ensure that 80 percent of registered households at one per household is competent in ORT usage."

FET Finding: Eighty percent of families have at least one member competent in ORT.

The Revised Objective Stated After the MTE: "To ensure that 60 percent of registered households at one per household will be competent in ORT usage."

•**Specific Objective Stated in the DIP:** "To ensure that 95 percent of children less than six years of age are appropriately treated with ORT."

Revised Statement After MTE States: "To enable 60 percent of diarrhea cases among 0-5-year-olds to be appropriately treated with ORT."

FET Finding: Where the child had diarrhea in two weeks prior to survey, ORT had been administered 90 percent of the time. **FET note:** Information on the use of other drugs in addition to ORT was not tapped; exploratory questions on the part of the team revealed possible reliance on pharmaceuticals easily available to mothers through local merchants.

General Objectives for Reduction in Vitamin A Deficiency Disease: The DIP objective states: "To reduce by 20 percent the prevalence of Vitamin A deficiency among children less than six years by September 1991." The revised specific objective related to Vitamin A is stated below:

The Specific Objective After MTE: "To distribute high potency Vitamin A capsules to 90 percent of children 6-71 months of age every six months."

•**Specific Objective After MTE:** "To provide therapeutic doses of Vitamin A to children 7-15 years who are night-blind, or with ocular signs of Vitamin A deficiency."

FET Finding: Eighty-two percent of children 6-71 months of age had received Vitamin A as recommended within six months of the final survey. Mothers were taught Vitamin A-rich foods in nutrition demonstration education sessions.

General Objective for Combatting Undernutrition: According to the DIP this objective was "To assist in reducing the prevalence of undernutrition among children less than two years old by September 1991."

•**Specific Objective After MTE:** "To enable at least 60 percent of mothers with children less than 23 months of age to know correct weaning and infant feeding practices by September 1991."

FET Finding: Mothers know but do not seem to practice appropriate introduction of weaning foods according to final survey-only one third of mothers claim to introduce weaning foods by the fourth month of age. FET exploratory visits with CHWs to randomly chosen homes found that cases of severe malnutrition are neither prevented nor addressed by the project.

Note: The staff recently conducted an exploratory survey in focus-group mode. The survey revealed some traditions and beliefs of mothers which hinder appropriate weaning practices. World Vision staff has experienced the success of a nutrition rehabilitation and education center in Mohammedpur—a separate impact area. The combined findings from these two sources can be used as building blocks for an innovative program. The CSPK staff also assisted government agencies to pilot the Bangladesh Road-to-Health weight/age chart which will eventually serve as a home-based record for growth monitoring. When such instruments are available and in place, the team hopes to measure their results in terms of the general objective stated above.

General Objective for Reducing Maternal Mortality and Morbidity Through Family Planning: According to the DIP, the objective was "To assist in reducing general mortality and morbidity secondary to frequent childbearing."

•**Specific Objective after MTE:** "To increase contraceptive prevalence rates among eligible couples to 40 percent by September 1991."

FET Finding: Forty-six percent of eligible couples are practicing contraception by September 1991.

General Objective for Social Mobilization: A more detailed description on social mobilization is found in the section on Sustainability. As stated in the DIP, "At least 100 CVs will be trained to promote the Child Survival interventions, with one CV serving 100-125 families, or about 600-800 people." The recruitment and training of NHCs was not stated as an objective, but was set forth as a part of the strategy.

•**The Revised Objective After the MTE:** "To launch continuous social mobilization activities to enable the target children and women to locate and use health services by the end of FY91." **Note:** The measurable indicator is not implied in this objective.

FET Finding: This objective has not been clearly defined, but the team notes very active CVs in place, and the emergence of "Focus Mothers Groups" as an additional evidence of social mobilization. The latter group, plus CVs and the NHCs, are meeting the health needs of women and children as revealed in the above objectives and in the utilization of PHN clinics.

Nutrition: The need for timely reintroduction of growth monitoring and promotion to combat severe (third degree) malnutrition.

The FET questions the MTE recommendation that growth monitoring/promotion be temporarily dropped, even though the reasons were valid, i.e., due to lack of national guidelines and lack of an appropriate intervention. The recommendation caused an inability of the project staff to identify children with growth faltering early enough to provide timely intervention to a carefully targeted group—children suffering growth faltering due to infection or lacking "catch-up growth" after an infection. Even if the intervention was only intense education for mothers of children most-at-risk, it might

have prevented some of the severe marasmus that was apparent to the team during their home visits.

Recommendation: The project should continue its demonstration education in nutrition and adopt new national norms for growth monitoring and promotion including the use of the newly adopted Bangladesh home-based growth chart. The activities could begin in one neighborhood in each compartment utilizing focus mother's groups,

Oral Rehydration Therapy: Intensive demonstration education has resulted in the ability of families to demonstrate competency in ORT, but has not identified: a) families who have no sugar or "gur;" or b) other medicines which families give in addition to ORT and upon which they depend.

Recommendation: The project should explore, with the assistance of ICDDR,B consultants, the possibility of teaching cereal-based ORT as it expands into a new area. The above constraints should be well documented as a justification for this new strategy. Medications being given by families which may be detrimental to the child, should be documented and an educational curriculum developed for slum families.

Family Planning: Through door-to-door distribution of contraceptives family planning acceptance has reached 45.5 percent utilization rates. Another 10 percent of eligible couples using might be anticipated as the project expands. Other PVOs are offering the same in Ward 51.

Recommendation: The project should phase over this activity to other PVOs willing to distribute contraceptives door-to-door and/or motivate couples for family planning in Ward 51.

Immunization and Vitamin A Activities: The project has reached 87 percent coverage of children having been completely immunized by their first birthday, up from 16 percent when the project began. Mothers with infants are 91 percent covered with at least two doses of tetanus toxoid. Eighty-two percent of children targeted for Vitamin A are receiving it at six monthly intervals.

Recommendation: The project should work closely with DCC personnel who will be assigned to the area so that they know the assembly points for mothers attending vaccination and Vitamin A distribution. Counterpart DCC personnel should be assigned to the area as soon as possible for collaborative purposes, so that phase-over can proceed smoothly when the project ends.

- D. **Health Information System (HIS)**—The HIS has provided the FET with excellent documentation of the project's progress against its objectives, using appropriate output indicators. Impact indicators, including age-specific death rates have emerged for the past six months and seem reasonably accurate. A brief description of the HIS is in Appendix 2.

Recommendation: Since it appears that the project has had a major impact on infant mortality and 1-4 year death rates, the project should tighten its supervision and checking-up on the reporting of vital events, so that age/cause-specific death rates could be used as a part of community diagnosis. Training in verbal autopsy will be necessary for physicians who could later be trainers in the method.

The HIS has potential as an MIS Management Information System. If the project phases over to a development mode, the FET recommends the following:

1. The present HIS should be expanded and called a development Management Information System (MIS) to include data collection and analysis on occupation, income, education and socio-religious factors. Also consideration will have to be given to additional development indicators in areas such as literacy, income generations, etc.
2. In the expanded MIS, emphasis should be placed on collecting some qualitative data which will help monitor indicators of progress on community member's ability to manage their own development. This could be accomplished through a standardization of the CHW diary. The diary as now kept has no format that allows CHWs to consistently track families. Training is required for this and for qualitative interviews.

It is also recommended that for the expansion phase, an ethnographic study be commissioned as originally planned, to document the success of community mobilization. This will help clarify socio-cultural and religious issues related to health and other behaviors. Subsequently, strategies could be developed to narrow the knowledge-practice gap.

3. The HIS-MIS should be geared toward use at the community level. CVs, Focus mothers, and NHC members need to be able to participate in monitoring and interpreting data about their own progress, just as they should be participants in program planning, monitoring and design.

E. Staff—The remarkable dedication of the staff appears to be a real internalization of the ideas of "servanthood," common to Moslem and Christian teachings.

1. To the greatest extent possible, the activities that have brought about positive staff attitude need to be continued.
2. Future staff roles and descriptions should be designated in the context of counterparts in government or the NGO Community. This might include training levels well as specific certification and qualifications. This will enable temporary project staff a better chance of ongoing employment.

APPENDIX 1 REVIEW OF OBJECTIVES—EXPLANATORY NOTES

- ***Behavioral Objectives, vis-a-vis, Health Intervention Objectives.*** The project design is summarized in the background statements. Objectives in terms of health strategies are summarized in this section.
- ***Evaluating Impact in a Community that has a Highly Transient Component.*** Two separate figures are given for the "registered" and an "unregistered" population to assess effectiveness objectives. The justification for this phenomenon is that the project correctly served all community members to the greatest extent possible, even though they might be visitors or new arrivals not yet registered through home visits. To evaluate impact the staff wished to distinguish between families exposed to project interventions for six months or more ("registered" and followed) and the transient ("unregistered") population.
- ***Correction Concerning Objectives.*** The objectives as stated in the DIP imply strong research and impact documentation. The Midterm Evaluation team wisely revised these with the CSPK/WV staff to realizable, measurable output-oriented objectives. To show the evolution of these objectives, the FET listed both the general objectives as stated in the DIP and the more specific objectives as stated after the MTE.

For each objective, there is a statement as to whether the objective has been dropped or revised in accordance with a mid-course correction, and whether the objective appears to have been met.

Review of Objectives Using Benchmarks at Beginning, Midterm, and at Final Evaluation

The Final Evaluation Team was requested to review the progress made since the Midterm Evaluation, although this is not a USAID requirement. The FET observed each of the interventions implied by the objectives and found their technical quality to be excellent. This included maintenance of the cold chain and sterilization of instruments for immunization, appropriate ORT training using mothers to demonstrate salt and sugar solution, demonstration education in nutrition, and appropriate training in the distribution of contraceptives.

As the project moves more into the area of prevention of malnutrition, as the FET hopes it will, there will be a need to reinforce nutrition training so that all workers are aware of the early and late signs of marasmus, vitamin B deficiency disease, and the necessity of teaching mothers how to achieve "catch-up growth" with their children after infections.

APPENDIX 2 HEALTH INFORMATION SYSTEM

The Kamalapur Child Survival Project (CSP) Health Information System (HIS) is well designed to measure progress toward project objectives. The system used population registration, with a CHW (Community Health Worker) and 8-12 CVs (Community Volunteer) following a compartment of 900-1,200 families. The HIS functions smoothly, providing good quality data, consuming approximately 10-15 percent of workers' (ACs, PHNs (Public Health Nurses) and CHWs) time.

The families residing in the project area for at least six months are registered using the Domiciliary Visit Form. However the project provide its services for the total target population irrespective of whether they are register or not. For ongoing data collection, project staff using Domiciliary Visit Form for periodic updates of demographic and health status information. Home-based records include the Immunization Card and the Home-Based Registration Card. Semiannual distributions of Vitamin A are recorded on the VAC Distribution Form supplied by the Government of Bangladesh for that purpose, and nightblindness of xerophthalmia cases are recorded in a register in which treatment of follow-up care is also documented.

EPI records for periodic use include the Monthly Reports on EPI Components to record doses delivered, stock use and wastage (transcribed for these reports from the Vaccine Stock Register), the Temperature Chart, and a supervisory Cold Chain Monitoring Form. The immunization records for every child are recorded in the Master Vaccination Register by the PHN. CHWs maintain some vital events, key diseases and information of NHCs and CVs in their diaries. Referrals and clinical care provided by the PHNs is recorded in Minor Ailment Treatment and Referral Register, contraceptives provided are recorded in the Family Planning Client Register, Supervision Checklist is being used by Supervisor to ensure the quality of work done at field level during domiciliary visit and to validate the cause of death a Death Investigation Form has been developed which is being used by Doctor/ Supervisor.

In this Fiscal Year the project has performed a sample survey on population shifting/migration and according to the Plan of Action another sample survey on "To assess the level of Commitment/active involvement of NHCs/CVs" will be conducted in this fiscal year.

For smoothly running of HIS the project has developed monthly reporting system through specific form for each staff which help to assess the monthly progress of the work as well as to take the plan of action for the next month. The Community Volunteers also submit their monthly report to the respective NHCs which reflect the work done by the findings/ achievement of the CVs report are shared in the monthly NHC meeting by the convener of the committee and sometimes on the basis of that report they take the necessary measurements.

The project's use of the information collected approaches the ideal. Baseline survey results were used to adjust the project's objectives, targets, and implementation schedule.

Information collected in this and other HIS components has been effectively and promptly prepared for presentation to project staff, CVs and the NHCs at monthly/quarterly/half yearly/yearly meeting. Project staff have used coverage and target figures to predict performance outputs for each project compartment and zone, intensifying supervision if these targets are unmet.

Results are also systematically circulated outside the project to the Ward Chairman, MOHFW officials, other PVOs and ICDDR,B. Although the NHCs have worked with project staff to set up displays of project data in the community on neighborhood health information monitoring boards, it has been more difficult to assure that this feedback link to other community members has been effective.

According to the recommendations of Mid-term Evaluation team the project excluded the following Forms from their HIS .

a. Name of the Forms/Register:

1. Family Registration and Monitoring Card
2. Birth Register
3. Death Register
4. Six Vaccine Preventable Surveillance Register
5. Register for under-five children with diarrheal episode

b. Sample Survey:

In the first two years, the project conducted six sample surveys. The MTE suggested it will be wise to cut down the number of surveys (e.g., immunization coverage, assessment of the coverage of high potency Vitamin A capsule distribution etc.) rather very useful if all the interventions are included in one questionnaire of a survey. They also suggested to conduct at least one survey in one issue, (e.g., population shifting, involvement of CV/NHC) the information of which are not collected through on-going data tools.