

U N C L A S S I F I E D

AGENCY FOR INTERNATIONAL DEVELOPMENT

Washington, D. C. 20523

PROJECT PAPER

PAKISTAN: Child Survival (391-0496)

July 6, 1988

U N C L A S S I F I E D

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

1. TRANSACTION CODE: **A** (A = Add, C = Change, D = Delete) Amendment Number: _____ DOCUMENT CODE: **3**

2. COUNTRY/ENTITY: **PAKISTAN**

3. PROJECT NUMBER: **391-0496**

4. BUREAU/OFFICE: **ANE** [02] CHILD SURVIVAL

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM DD YY **06 30 94**

7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4)
 A. Initial FY **88** B. Quarter **4** C. Final FY **93**

8. COSTS (\$000 OR EQUIVALENT \$) = **17.50**

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AD Appropriated Total	6,000	4,000	10,000	17,959	44,041	62,000
(Grant)	(6,000)	(4,000)	(10,000)	(17,959)	(44,041)	(62,000)
(Loan)	(-)	(-)	(-)	(-)	(-)	(-)
Other U.S. 1.						
Other U.S. 2.						
Host Country	-	3,800	3,800	-	23,000	23,000
Other Donor(s)						
TOTALS	6,000	7,800	13,800	17,959	67,041	85,000

9 SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) DA	510	550		-	-	62,000	-	62,000	-
(2)									
(3)									
(4)									
TOTALS				-	-	62,000	-	62,000	-

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	BR	BN	NUTR	TNG
B. Amount				

13. PROJECT PURPOSE (maximum 480 characters)

To expand and institutionalize Child Survival Programs with special emphasis on decreasing mortality due to diarrheal disease, vaccine preventable diseases and acute respiratory infections.

14. SCHEDULED EVALUATIONS

Interim	MM YY	MM YY	Final	MM YY
	07 90	08 92		08 93

15. SOURCE/REGION OF GOODS AND SERVICES: 000 94 Local Other (Specify)

16. AMENDMENTS DATE OF GRANT: (maximum 4 pages) page 1 of 4 page # Amendment

17. APPROVED BY: **Paul Guédet**
 Title: **Acting Director, USAID/Pakistan**
 Date Signed: **06 08 88**

18. DATE DOCUMENT RECEIVED IN AID/M, OR FOR AID/M DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

19. **Michael E. Hase**
 Title: **A/Controller, USAID/Pakistan**

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT

Washington D.C. 20523

PROJECT PAPER

PAKISTAN CHILD SURVIVAL

391-0496

June 1988

UNCLASSIFIED

CHILD SURVIVAL PROJECT PAPER
PROJECT #391-0496

Table of Contents

	<u>Page</u>
I. SUMMARY AND RECOMMENDATIONS	
A. Recommendations	1
B. Summary Project Description	1
C. Summary Findings	3
D. Statutory Checklists	3
E. ANPAC Concerns and Design Guidelines	4
F. Project Issues	9
G. Contributors to the Project Paper	11
II. BACKGROUND	
A. USG Economic Assistance	12
B. Health Sector in Pakistan	12
C. Recent GOP Efforts in Child Survival	15
D. Primary Health Care Project	21
E. Relationship to AID Strategy and Other AID Projects	23
F. Other Donor Assistance	23
G. Project Rationale	26
III. DETAILED PROJECT DESCRIPTION AND TECHNICAL ANALYSIS	29
A. Project Goal and Purpose	29
B. Project Outputs	30
C. Project Inputs	30
D. Project Components and Activities	31
1. Interventions	32
a. Control of Diarrheal Disease (CDD)	32
b. Expanded Program of Immunization (EPI)	33
c. Acute Respiratory Infection (ARI)	35
2. Components	36
a. Program Planning	36
b. Training	40
c. Communications and Marketing	48
d. Research and Analytical Studies	52
e. Health Information Systems	55
3. Phase II Non Project Managed Activities	58
a. Support for Management Skills Development	59
b. Support for NGO Activities	61
c. Support for the Private Health Sector	62
d. Support for Increased Numbers of Female Health Workers	64
e. Incentive Grants for Medical Schools	65
f. Support for Activities Involving Other Donors	67

	<u>Page</u>
IV. IMPLEMENTATION PLAN	69
A. Administrative and Monitoring Arrangements	69
B. Implementation Schedule	72
C. Acquisition Plan	77
D. Training Plan	83
E. Evaluation Plan	86
V. PROJECT ANALYSES	87
A. Technical Analysis	87
B. Administrative Analysis	87
C. Social Soundness Analysis	91
D. Economic Analysis	92
E. Financial Analysis and Financial Plan	108
F. Environmental Analysis	115
G. Women in Development	115
H. Narcotics Impact Statement	115
VI. CONDITIONS, COVENANTS AND NEGOTIATING STATUS	116
VII. ANNEXES	
A. PID Approval Cable	
B. Statutory Checklists	
C. FAA Certifications	
D. GOP Letter of Request for Assistance	
E. Logical Framework	
F. Waivers	
G. Project Authorization	
H. Draft Congressional Notification	
I. Draft Project Description for Inclusion in the Project Agreement	
J. Supporting Financial Tables	
K. Supporting Management Task Tables	
L. Contributors to the Project Paper	
M. Reports by Design Team Members	

LIST OF ABBREVIATIONS

ADB	-	Asian Development Bank
AHP	-	Accelerated Health Program
AJK	-	Azad Jammu & Kashmir
ARI	-	acute respiratory infection
BCG	-	vaccine against tuberculosis, usually given at birth
BHU	-	basic health unit
CDD	-	control of diarrheal diseases
CIDA	-	Canadian International Development Agency
DPT	-	Diphtheria, Pertussis, Tetanus
DTU	-	diarrhea training unit
EPI	-	expanded program of immunization
FATA	-	Federally Administered Tribal Areas
GOP	-	Government of Pakistan
HT	-	health technician
IDD	-	iodine deficiency disorder
IEC	-	information, education and communications
IMR	-	infant mortality rate
KAP	-	knowledge, attitudes and practices
MCH	-	maternal child health
MO	-	medical officer
MOH	-	Ministry of Health
MPH	-	Masters of Public Health
NA	-	Northern Areas
NGO	-	non government organization
NIH	-	National Institutes of Health
ODA	-	Overseas Development Authority of the United Kingdom
OR	-	Operational Research
ORS	-	Oral Rehydration Salts
ORT	-	Oral Rehydration Therapy
PHC	-	Primary Health Care
PMA	-	Pakistan Medical Association
PP	-	project paper
PVC	-	private voluntary organization
RHC	-	rural health center
SMC	-	Social Marketing of Contraceptives project
TAT	-	Technical Assistance Team
taluka	-	subdistrict (same as tehsil)
TB	-	tuberculosis
TBA	-	traditional birth attendant
tehsil	-	subdistrict
TT	-	Tetanus Toxoid vaccine
UN	-	United Nations
UNDP	-	United Nations Development Program
UNFPA	-	UN Population Fund
UNICEF	-	UN Childrens Fund
WFP	-	World Food Program

LIST OF TABLES

<u>TABLE No.</u>	<u>Title</u>	<u>Page</u>
1.	Regional Trends in Infant & Child Mortality	13
2.	UNICEF Estimate of the Main Causes of Child Mortality and Infant Mortality (0-4) in Pakistan	13
3.	Immunization Coverage	16
4.	Immunization Coverage by Province for Infants	16
5.	Program Planning Linkages	38
6.	Training Linkages	43
7.	Communications and Marketing Linkages	51
8.	Research & Analytical Studies Linkages	53
9.	Health Information Systems Linkages	57
10.	Health Manpower 1965 and 1980	65
11.	Proposed Implementation Schedule	73-76
12.	Proposed Technical Assistance Plan	78-79
13.	Proposed Commodity Procurement Plan	81-82
14.	Proposed Training plan	84-85
15.	Administrative Units per Province	87
16.	Health Facilities and Health Manpower	89
17.	Health Expenditure Patterns in Pakistan	95
18.	Socio-economic and Health Status Indicators of Pakistan and Other Countries in Asia	98
19.	Investigations into the Costs and Impacts of Pakistan's EPI, 1986-88	100
20.	Illustrative Hospital Cost Savings from Expanding the Use of ORT in Pakistan	103-104
21.	Summary of Project Costs by Fiscal Year and Source of Funding	109
22.	Summary of Project Costs by Expense Category and Source of Funding	110
23.	Summary of Project Costs by Project Component, Expense Category and Source of Funding	111
24.	Summary of A.I.D. Funding by Foreign Exchange and Local Costs, Expense Category and Fiscal Year	112
25.	Method of Implementation and Financing	113-114

- 1 -

I. SUMMARY AND RECOMMENDATIONS

A. Recommendations

1. Funding

USAID/Pakistan recommends a Development Assistance grant of \$62 million to finance the first Phase of the Child Survival Project with a life-of-project cost of \$85 million, including GOP \$23 million contribution. The first Phase of \$62 million will finance the project activities coordinated by the Mission and assisted directly by an institutional contractor. A proposed second Phase of the Project such as support for a planned National Children's Commission will be covered by an amendment to the Project whenever the institutional circumstances warrant. The Project Assistance Completion date (PACD) is June 30, 1994.

2. Geographical Code

The Project authorization should specify that, except as USAID may otherwise agree in writing:

a. Goods and services financed by USAID under this Project shall have their source and origin in countries included in USAID Geographic Code 000 or Pakistan; and,

b. Ocean shipping of all commodities financed by USAID under this Project shall be only on flag vessels of the United States, unless a specific individual waiver is issued.

B. Summary Project Description

Diarrheal disease, respiratory infection and vaccine preventable diseases are the major causes of child mortality in Pakistan with malnutrition as an important underlying factor. The Child Survival Project focuses on these life threatening health problems, for which solutions are attainable, using proven practices to produce significant reductions in morbidity and mortality.

The Project builds on past USAID public health programs by using and improving the rural health infrastructure. It has two objectives:

-- to reduce the infant and child mortality rate by 25 percent through support of the GOP's program for Control of Diarrheal Diseases (CDD) and Expanded Program on Immunization (EPI); and

-- to sustain these reductions through institutionalization of public health services and awareness programs.

The Project is designed to support, improve and expand key, high priority, on-going GOP interventions in the first Phase. The Project will primarily expand the Control of Diarrheal Diseases (CDD) program and

sustain the Expanded Program of Immunization (EPI). Assistance will also be provided to provincial health departments for training in case management of acute respiratory infection (ARI) and counseling for nutrition, lactation management, and maternal health.

To control diarrheal diseases (CDD), the Project supports overall program planning, case management training, communications and marketing, research and improved information systems. To achieve widespread correct use of oral rehydration therapy (ORT), it finances experiential training in case management of diarrheal diseases/nutrition counseling and follow-up for medical and paramedical personnel throughout the public and private health system; through mass media and educational campaigns, it promotes the use of ORT, and the benefits of breastfeeding and proper infant feeding practices as preventative measures to CDD; it supports research and analytical studies for service delivery strategies, media messages, social marketing and clinical application; and, it establishes a relevant health information system for planning, management and evaluation purposes. It also finances limited refurbishment of existing facilities designated for ORT training and treatment.

To extend the impact of the Expanded Program of Immunization (EPI) program for children, the Project will help the MOH to improve coverage for remote rural and low-income urban residents and to improve institutional capacity for monitoring, evaluation and implementation of EPI interventions. Funds will be provided for in-service technical training, cold chain equipment (equipment needed to keep vaccines at correct temperatures from production to injection), vehicles and injection equipment. To further develop the existing system for monitoring and surveillance, the Project will help the GOP to develop an improved reporting and record keeping system including improved investigation of reported disease outbreaks, training of health personnel in surveillance, and computerization of data processing. The system will build on existing CDD and EPI data to increase timely and practical use of reports and improve disease control interventions.

Two of the GOP immunization programs which will be supported in Phase I are Tetanus Toxoid and administration of iodated oil. Even though neonatal tetanus is the leading cause of vaccine preventable deaths in infants, Tetanus Toxoid (TT) coverage levels are low. The Project will assist the GOP in determining the best strategies for reaching women with this critical vaccine, in implementing this program and in enhancing local production capacity of TT vaccines. Insufficient iodine intake in the northern mountain valleys of Pakistan has led to devastating rates of cretinism, still-births, deaf-mutism and goiter that are among the highest in the world. Commodities and monitoring assistance for the GOP's iodated oil administration program will be provided as needed. In addition, the Project will cooperate with the GOP and private sector to market iodized salt.

Other national health priorities such as acute respiratory infections, maternal health, lactation management and child spacing will be addressed later in Phase I. The case management training initially developed for

CDD is intended to provide an infrastructure for additional training modules in these areas. These modules will be developed and introduced after the CDD training and supervision processes are operational.

The second Phase will deal with support to non Project managed activities such as incentive programs and grants to medical schools, NGOs and private practitioners, or projects directed by other donors. Funds will be provided to and managed by organizations with appropriate capability to develop and implement child survival activities. Examples are the Pakistan Medical and Dental Council, the NGO Coordinating Council, the proposed National Children's Commission, or other donors. Phase II activities could begin very early in the Project if and when the necessary institutional capacity to manage them is identified and/or developed.

Through organizations such as the proposed National Children's Commission, incentive funds will be set up to encourage participation of non-governmental entities, medical schools and women health workers in the field of maternal and child health. Incentives and grants will also be designed to help medical schools to develop social pediatrics and community medicine departments with relevant curriculum changes, community outreach programs, modernized teaching methodologies and integrated management practices.

Technical assistance and program planning consists of five long-term expatriates providing technical and management skills and approximately 30 Pakistani professionals including 12 counterpart physicians working with the provincial health departments. An institutional contract is envisaged with an organization skilled in advising and managing diverse health programs.

In order to accommodate the various parties involved in this important effort, (differing timetables, project planning and budgets), USAID proposes that the Project be approved in toto but authorized in Phases, with monies for Phase II authorized later, as elements become finalized. The Phase I authorization is proposed to include five components designed to effect interventions in Control of Diarrheal Diseases, an Expanded Program of Immunization and Acute Respiratory Infection.

C. Summary Findings

Phase I of this Project is ready for implementation and is socially, financially and economically sound, and administratively and technically feasible.

D. Statutory Checklists

The Project meets all applicable statutory criteria. Appropriate checklists are included in Annex B.

E. ANPAC Concerns and Design Guidelines

The following issues and guidelines were transmitted to the Mission by STATE 105347 dated 09 April 1987. A copy of the original cable can be found in Annex A.

1. Oral Rehydration Therapy Intervention

The cable asked for information delineating the present situation and the proposed control of diarrheal diseases strategy. It asked for a clear statement/analysis of current efforts, unmet needs, constraints and proposed interventions.

Recognition of the severity of the CDD problem has brought about a strong GOP interest in this area over the past five years (see Background p. 19). Although recent efforts have yielded impressive increases in use of oral rehydration salts, there are indications diarrhea cases are not managed according to WHO standards, that mothers do not mix the salts correctly, that health workers still use dangerous antidiarrheals and antibiotic combinations, that distribution of ORT is irregular, and that education of families about correct use of ORT must be expanded. These problems are addressed respectively in Section III, along with strategies and rationale for targets.

2. Expanded Program of Immunization

The cable asked for a qualitative and quantitative plan of action to achieve the proposed targets. Included should be the specific constraints as well as the specific needs for commodities.

The EPI continues to be very successful in Pakistan with complete immunization coverage of 12 - 23 month olds of about 80 percent. It is clear that the EPI focus must now shift to the second generation of challenges such as extension of coverage to difficult to reach populations, sustainability, integration, and attention to surveillance and disease reduction rather than only coverage. In order to extend and sustain the high coverage and assure that coverage translates into decreases in infant and child deaths from vaccine preventable causes, the GOP has identified two areas of requested USAID support: commodities and an improved system for surveillance and monitoring (III.D.1.b.). There are also related training and communication interventions.

3. Absorptive Capacity of the GOP

The cable recommends that the absorptive capacity of the implementing agency be carefully examined before a project budget level and project objectives are established.

The concern about absorptive capacity is a valid one. Recent trends and priorities for the 7th Five Year Plan (1988-1993) indicate that the emphasis of the Child Survival Project parallels that of the GOP. The Prime Minister's Five-Point Development Plan emphasizes rural

development. There is growing interest in improving the quality of health care and in reducing infant and child mortality rates to levels acceptable for a country at Pakistan's level of economic development. The success of the GOP Accelerated Health Program has greatly increased Pakistan's interest in maternal and child health with a commitment to build on EPI and ORT successes. It is the Mission's judgment that the sums of money programmed for major elements like communications and mass media, training, and commodities are needed and can be effectively used. It is the Mission's conviction that much progress can be achieved by mobilizing the private sector.

Please see Section V.B.3 - Administrative Analysis - for a more detailed discussion of GOP absorptive capacity.

4. Unrealistic Targets

The cable indicated that the initial targets were overambitious relative to the absorptive capacity of current programs. It was suggested that targets be disease specific and acknowledge the unknown factor of replacement mortality.

The Mission agrees that the targets are ambitious, but believes that if the GOP performance in budget allocation and management during the last five years continues, they can be met. The Pakistan Demographic Survey suggests a 14% decline in infant mortality from 1984-86. Although the Project Paper gives specific mortality reduction targets, the Mission and GOP prefer to have an overall reduction target as well. From a policy dialogue and political promotion standpoint it is much easier to deal with a simple overall target. It is also believed that in the Pakistani context there is sufficient progress and a sufficiently balanced approach to dealing with the various threats to child survival that the risk of replacement mortality is not as great in Pakistan as in some countries. The child who is saved from neonatal tetanus death is not likely to die from measles because he is likely to receive measles immunization as well. He is less likely to die of diarrheal dehydration because a significant use rate of ORS has already been achieved and major efforts will continue to achieve high rates of correct use of ORS. Acute respiratory infections (ARIs) remain a major killer; efforts by the Project, as well as WHO sponsored pilot projects using cotrimoxazole, will hopefully lead to a reduction in ARI mortality by the end of the Project as well. Constraints such as poor nutrition and low literacy will affect the speed of mortality reductions, but the high level of the GOP commitment and its successful management of appropriately targeted interventions under the Accelerated Health Program suggest that a 25 percent reduction in six years is possible. Estimated disease specific mortality reductions per year by 1994 total 180,000 against an overall reduction of 165,000 allowing for some replacement mortality.

5. National Children's Commission

The cable expressed concern as to the role of the National Children's Commission.

A complete description of the National Children's Commission, its role, budget and recommended interventions is in Section III.D.3. The Mission believes such a Commission could be very important in influencing policy and strategies for the GOP in child survival, but it is not critical to achieving Project objectives and its existence as a fully operational entity is not imminent. Accordingly, Project inputs for the Commission have been put in Phase II and will be activated when needed.

6. Policy Objectives

The cable encouraged the Mission to pursue a policy related performance disbursement component with a focus on the key topics that make the most difference to child survival.

The Mission agrees with the need to determine specific high impact interventions and emphasize their implementation. For this reason, a budget has been allocated to operational research to isolate specific problems, sample test possible interventions and determine the best approach for large scale implementation. (See Section III.D.2.d) In addition, policy related disbursement is an integral part of monies to be authorized in Phase II for non-project managed activities (See III.D.3). For example, the budget item for NGOs will be made available only if GOP agrees the NGOs should play an important role in child survival. Another example is incentives offered to medical schools for policy changes in curriculum and teaching practices.

7. Involvement of Women

The cable asks for clarification as to the involvement of women, especially with reference to reaching mothers and training female health workers.

The Mission recognizes the extreme importance of this issue (see II.D.2). The February, 1988 international evaluation of PHC has also identified the lack of female health workers as the biggest obstacle to further improvement in PHC. The Project has been designed to focus on women as much as possible. The NWFP has used female vaccinators to raise tetanus toxoid coverage of target women to above 30 percent. Employment of paid village health auxiliaries some of whom would be females is being considered by the GOP. UNICEF, CIDA and Global 2000 are exploring with the GOP modalities for enhancing the role and skills of TBAs in providing MCH care. The successful PHC project experience in recruiting and training female midlevel health workers will be built upon. Additional operations research and pilot projects will identify new approaches (see III.D.2.d), as well as specific attempts in communications and marketing (see III.D.2.c).

8. Relationship Between Public and Private Sector

The cable recommends that the Project be designed to bridge the gap between the public sector and the private sector in health delivery.

The importance of including the private sector in the MOH's health methodologies is detailed in the Background section. The GOP has also recognized this need and has included programs to bridge the gap in their Seventh Five Year Plan (see Section III.D.3.c). The Project intends to support these efforts through supply of funds to the proposed National Children's Commission or other designated organizations.

The Project will also be directly involved in activities designed to reach the private sector, through organizing training seminars for professional groups, developing communications campaigns and coordinating research support. Provision has been made for the development of training modules, supply of initial commodities, use of training staff and payment of expenses for seminars. Communication and marketing campaigns with reinforcing messages will be directed to and for private practitioner involvement in GOP health methodologies. Research will be done to evaluate alternative approaches for including traditional healers in modern methods. The Project also includes representatives of pharmaceutical firms in seminar programs, marketing design and supply and distribution of GOP approved leaflets and brochures.

Lastly, the Project will use private sector expertise on Project activities where possible. It is envisioned that consultants from private firms, NGOs and/or PVOs will be used to help develop training materials, develop and produce media messages, develop and use social marketing materials, conduct operational research, and provide expertise for the computerization of health information systems (see each component in Section III.D.2 for further information).

In summary, Project activities have been focused to encourage GOP efforts to include the private sector in public health deliveries. These activities combined with continued GOP determination will provide significant impetus for increased private sector involvement in public health.

9. Training

The cable expresses concern over large scale training activities; what have been past constraints and how will this training program avoid them?

Some constraints arise from long-standing socioeconomic, cultural and political realities and will remain problems. The Mission believes the biggest problem of previous training programs has been a lack of focused, practical design and follow-up assistance with implementation. As described in Section III.D.2.b, the training begins with one focus, is taught with experiential application, involves defining changed institutional expectations and health care provider behaviors, has a system for monitoring and supervision when in practice, and requires a demonstration of competence by the trainee before s/he begins other skill development.

10. Monitoring and Evaluation

Stating that it is critical to build a strong monitoring and evaluation component into the Project, the cable suggests developing baseline data now in the Primary Health Care Project.

This is also a particular request of the GOP and has accordingly received emphasis in Section III.D.2.e.

11. Disposal of Needles and Syringes

The cable requests a demonstration of methods to assure safe use and disposal of needles and syringes.

The question of appropriate injection equipment is a difficult one. Before any action is taken, research will be done to ascertain cost and effectiveness of alternative supplies of needles and syringes to determine the best type of equipment to be used. For example, a field trial of the new self-destruct syringe is planned in Pakistan in late 1988. The single-use syringes and needles supplied to EPI with USAID funds from the Primary Health Care Project have been marked to facilitate an end use study planned for the fall of 1988. With GOP approval, adjustments will be made according to research results. The costs for research, resulting commodities and a program of training personnel in their use has been incorporated into the Project (III.D.2).

12. Technical Assistance

The cable requests a careful assessment of Technical Assistance needs and costs.

Expatriate and Pakistani technical assistance teams have been built into the Project with a total estimated person years of 112. Breakdowns of responsibilities and costs are contained in the technical assistance plan and budget annexes.

13. Research Needs

The cable requests a research plan and implementation schedule to assure that research efforts get underway promptly.

Research is an important part of the Project. Buy-ins to centrally funded research projects are anticipated. While research subjects and methodologies will be refined during the implementation stage, key topics have been suggested in the Research and Analytical Studies Section (III.D.2.d). Also, see implementation plan, in Section IV.

14. Design Team

The cable recommends that the design team include: AID/W participant with strong health and project design skills as team leader; person with strong background in information, education and

communications; a public health physician with strong service delivery skills and experience; and, a health economist to examine project cost issues.

The design team included individuals with the requested skills. Please see annex L for a complete list of Project Paper contributors.

F. Project Issues

In addition to the issues raised by AID/W above, the Mission addressed the following issues as the Project was developed and this paper prepared.

1. Management Burden

While programs such as ORS distribution and EPI have had an immediate impact on infant and child morbidity and mortality, the key to sustaining and improving child survival is behavioral change. In an effort to support the GOP's request for improved training of health personnel, systems of management and methods to reach mothers, the Project is involved in extensive education and training efforts, communications and research activities. While every effort has been made to keep the Project simple, these activities are inherently management intensive. For this reason, the design includes two approaches to reduce the management burden on Mission staff. In Phase I a technical assistance team (TAT) will manage the interventions, with support and coordination from the Mission. The proposed Phase II policy related interventions, incentives, and grants will be administered by a separate National Children's Commission and/or other designated organizations. Considering the importance placed on child survival by both the U.S. and Pakistan governments, and the potential for major improvements in child health and survival this Project represents, the Mission believes the commitment of workforce required for adequate management and oversight of CDD, EPI and ARI is reasonable and justifiable.

2. Reliance on GOP Health Structure

A 1982 survey by the Federal Bureau of Statistics found that only 16 percent of people reporting illnesses sought care from a government health facility. This finding raises questions of how best to reach mothers and children with child survival services. However, recent evaluations of the Accelerated Health Program, which was begun in 1983, show broad acceptance of GOP disease specific public health interventions. For example, almost all immunizations are currently provided by government programs. The GOP in its Seventh Five-Year plan is seeking to institutionalize such policies of disease specific public health interventions by providing services in villages where private health facilities are unable to meet the need.

The Project is designed to complement the strengths of the GOP system. First, the CDD training program builds on the GOP determination to extend health services to the village level. Second, the trained personnel will

make use of the recent increased awareness of ORT created by the GOP. Third, most immunizations are administered by vaccinators of the provincial health departments with the coordination of the National Institute of Health. More than 80 percent of vaccinations are performed by outreach and mobile teams.

Last, the Project attempts to bridge the gap between the private and the public sector in health services. The mass media and communication campaign of the Project and the funds for NGOs and private practitioners are planned to reduce the overall burden to government health institutions by encouraging additional actors to play a greater and more effective role in maternal and child health.

3. GOP Priority to Child Survival and Adequacy of Budget and Staff

The Sixth Five Year Plan, (1983-88) was a time of remarkable improvements in primary health care and child survival. The Accelerated Health Program ranks among the most successful child survival programs in developing countries. Its achievements include raising full immunization coverage from under five percent to 80 percent, increasing ORT awareness and use from near zero to respectable levels, and training 30,000 traditional birth attendants. Although reliability of data is a problem, the multi-round Pakistan Demographic Survey suggested a 14 percent decline in infant mortality from 1984 to 1986. Although donors provided some crucial inputs, the EPI and ORT programs were largely GOP financed by, in the words of the Minister of Planning and Development, postponing the construction of one large urban hospital complex. During the Sixth Plan health budgets increased two and one-half times in current terms. The draft Seventh Plan (1988-93) continues to stress the themes of rural uplift and improvement in the social sectors that are emphasized in the Prime Minister's Five Point Development Program.

An important concern is whether policy makers will continue the priority on rural health and child survival during the Seventh Plan period, and whether the growing budget crisis arising from inadequate macro-economic domestic resource mobilization policies will permit the allocation of resources required to support a continued push in child survival. Although the draft Plan shows health budgets doubling during the five year period, there is considerable doubt that these increases can be sustained. One Parliamentary Committee is calling for a two year freeze in the overall GOP recurring cost budget. Within the health sector the Prime Minister made political commitments to expensive initiatives such as government employment of doctors and expansion of rural health facilities. If resources were scarce, there would be a risk that the high impact, but less visible, child survival programs would be cut. A scarcity of ORS in the public sector is already developing. The draft Plan budget shows a steady decline in the budget line item for preventive health which has funded programs like EPI, ORT and malaria. The Planning Commission explains that this results from the progressive integration of these formerly vertical programs into the regular health budget, which does show rapid increases. The GOP insists that no real reduction in

priority to these programs is planned. By and large, Phase I activities were designed to impose few additional financial burdens on provincial health departments but rather to make better use of existing staff and budgets. So even if the budget situation worsened, most of the planned Phase I activities could go forward.

In any case, it will be essential to monitor closely the overall budget situation and the assignment of priorities within overall fiscal constraints as project implementation proceeds. An active policy dialogue should be pursued to assure continued high priority for these life saving programs.

G. Contributors to the Project Paper

See Annex L.

II. BACKGROUND

A. USG Economic Assistance

The proposed economic assistance package over six years was designed not only to maximize development impact but also to produce as favorable balance of payments effect as possible. Shaped to assure the widest possible distribution of benefits, the six year package:

- maintains a long-term development assistance relationship which the US views as important because of Pakistan's size, poverty and strategic location;

- provides balance of payments support to address short and medium-term foreign exchange shortfalls, thereby reducing development constraints and strengthening the economy;

- addresses key economic problems to help Pakistan to achieve self-sustaining growth and manage its debt burden; and

- expands resources available for local cost financing.

The package is designed to help one of the world's largest and poorest countries fulfill the basic human needs of its people. It is in this context that USAID is considering financing a six-year project to support the GOP's Child Survival Program.

B. Health Sector in Pakistan

1. Health Profile

In Pakistan, 45 percent of the population are children under 15 years of age. The highest mortality rate is among children under five who comprise 15.3 percent of the population, as compared to 13 percent in developing countries, and nine percent in East Asian countries. Given the lack of reliable health data, estimates of infant mortality in Pakistan vary from 80 infant deaths per 1000 live births to more than 120. The World Bank estimate for 1985 is 115 and UNICEF estimates are similar. Pakistan's National Institute for Population Studies estimated a 1987 infant mortality rate (IMR) of slightly over 100 while some GOP health officials believe that the 1988 IMR may be as low as 80. For this project paper the 1987 IMR is presumed to be 104, the 1-4 year age group mortality 56 and total under five mortality 160 per 1000 live births. Some would argue that the high immunization coverage and ORS use rate measured by the March, 1988 WHO led evaluation would translate into an under five rate of less than 160/1000. Whatever the correct figure, Pakistan's infant and child mortality rate is much higher than it need be, and higher than rates in countries of similar economic development.

Table 1
Regional Trends in Infant & Child Mortality
(deaths per 1000 live births)

	<u>Infant Mortality</u>		<u>Child Mortality</u>	
	(0 - 11 MOS.)		(1 - 4 yrs)	
	<u>1965</u>	<u>1985</u>	<u>1965</u>	<u>1985</u>
Pakistan	149	115	92	64
Bangladesh	153	123	96	72
India	151	89	92	44
Sri Lanka	63	36	24	8
China	90	35	44	8

Source: World Bank Development Report 1987

Although estimates vary widely, there is general agreement that the major killers of children (as shown in Table 2) are dehydration due to diarrhea, neonatal tetanus and acute respiratory infection (ARI). It should be noted that no estimate is made for deaths caused by malnutrition although it is an underlying contributor to a great majority of child deaths, in particular those due to diarrhea and measles.

Table 2
UNICEF Estimate of the Main Causes of
Child Mortality and Infant Mortality (0-4) in Pakistan

	<u>Child Deaths/Year</u>
Diarrheal Diseases <u>1/</u>	313,400
Neonatal Tetanus <u>2/</u>	109,490
Measles <u>2/</u>	35,510
Diphtheria <u>2/</u>	14,570
TB/Polio/Pertussis <u>2/</u>	12,216
Malaria <u>3/</u>	50,000
Acute Respiratory Infection <u>4/</u>	80,000
Others, including accidents and congenital abnormalities <u>5/</u>	74,614
TOTAL	689,800

Sources: 1/ Planning & Development Division Diarrhoea Survey (1984)
2/ Foster, S. EPI Pakistan Report, USAID. (1986)
3/ Population Growth Survey (1971)
4/ Computed from ARI annual progress report, WHO (1985)
5/ By subtraction

The inadequate health information system is not able to measure recent improvements brought about by the GOP's Accelerated Health Program. If one assumed significant reductions and estimated under five mortality conservatively, the numbers might be as follows: diarrheal diseases = 225,000; neonatal tetanus = 75,000; measles, diphtheria, TB, Polio, and pertussis = 30,000; malaria = 5,000; acute respiratory infection = 80,000 and others = 85,000. Even at these lower rates the three major challenges would be diarrhea, neonatal tetanus and acute respiratory infections.

2. Institutional Profile

The existing health delivery system is largely urban-based and curative in orientation. There is a large reliance on private practitioners, particularly in urban areas. Access to government health facilities has improved considerably in recent years, but utilization rates remain low. Nevertheless, the GOP continues to place high priority on the construction of more rural health facilities. The training of doctors and other health workers emphasizes curative care, with little attention given to preventive medicine or community/public health. Serious imbalances exist between personnel needs and supply, with an unemployment of male doctors and chronic shortages of auxiliary health staff, nurses, paramedics and female health workers at all levels.

The federal government is responsible for health policy, but implementation rests with relatively autonomous provinces and territories. There is a high degree of centralization at the provincial level with insufficient decision making authority at the district and local level. Operating under the direction of provincial health offices is a network of about 600 public teaching, district and tehsil (subdistrict) hospitals. These facilities are located almost exclusively in urban areas and are generally out of reach for the 72 percent of the population living in rural areas.

At the provincial level, the Secretary of Health is responsible for the development of health policy in accordance with national plans and the administration of medical colleges and other special institutions. Under his direction, the Director of Health Services is responsible for the day-to-day operation of the provincial health care delivery system. Recent estimates show approximately 500 Rural Health Centers, 3,000 Basic Health Units, 3,500 dispensaries, and 800 mother/child health care centers. It is intended that Rural Health Centers act as referral points for the lower level facilities, plus provide planning, management and supervisory support for preventive and promotional programs in their respective areas.

Within the context of this network must be considered the resources of the Expanded Program on Immunization which, like the CDD Program, is managed in vertical fashion by the National Institute of Health. EPI maintains fixed vaccination centers located in the Ministry's clinical facilities and has outreach teams that operate out of the fixed centers.

3. Financial Profile

Over the last 15 years, the GOP has substantially increased its expenditures for health. During this period total spending increased at an average annual real rate of 8.1 percent, from 1,194.8 million rupees in 1973 to 3,880.6 million in 1988 in 1980 constant rupees. Unlike many countries where the growth rate tends to be higher for recurrent expenditures, the greatest increase was for capital improvements and expansion of public health activities. However, an analysis of the capital budget shows that while spending for public

health programs was significant in absolute terms, the amount allocated for public health programs has remained constant at the low figure of 6 to 12 cents per person per year.

While health spending has increased, its share as a percentage of total GOP expenditures has declined slightly over the period. During the last five years the health share on average has been below 4 percent compared to an average of 4.5 percent over the total period. These expenditures are below those of most developing countries.

C. Recent GOP Efforts in Child Survival

As stated, GOP activities in public health have emphasized building rural health facilities and placing health personnel in these facilities. However, program activities have also made significant progress. A description of past and present programs related to child survival follows:

1. Oral Rehydration Therapy

While good epidemiological information on the prevalence and mortality associated with diarrheal disease is not available, existing data indicate that diarrheal disease is the single largest cause of death in the childhood population with estimates that 30-45 percent of deaths are diarrhea related. The present diarrheal control program began in 1982 with a national Three Year Plan administered by NIH. This plan included production of Oral Rehydration Salts (ORS) by the NIH, distribution through government outlets, training of health workers in ORT use and promotion of ORT through radio, television and newspapers. A second plan was begun in 1985 and augmented by the Accelerated Health Program (1982 to the present).

These programs have been largely effective in producing and distributing ORS to government health facilities. However several problems have been recognized: (a) health workers are unsure of correct procedures and do not present oral or graphic information to the mothers; (b) health workers and mothers often do not know how to use ORS correctly; (c) the ORT program has not emphasized the importance of feeding and nutrition to the child with diarrheal disease, many mothers still delay resumption of feeding or provide diluted foods in meager quantities; (d) many children in remote areas are unable to get to health facilities for ORT treatment; and (e) it is believed that antibiotics and antidiarrheal drugs are often used instead of ORS for treatment of diarrhea.

In response to these findings, the GOP has begun to address some of these issues. In early 1986, the NIH began vigorous promotion of an ORT program. Since then thousands of workers have been trained, mass media promotion has continued and vaccinators and other outreach workers have begun distributing two ORS packets to each home with young children. Recent surveys indicate that there is an increased awareness of ORT use among the medical community and the populace as a whole.

2. Expanded Program of Immunization

Based in the National Institute of Health (NIH) an attached body of the MOH, the EPI program received international recognition for making major strides since 1982 in immunizing the children of Pakistan. Table 3 illustrates the increase in immunization coverage of the past seven years.

Table 3

Immunization Coverage

Year	Children Fully Immunized			Pregnant Mothers Tetanus Toxoid 2
	Infants	(12-23 MOs.)	(2-4 yrs.)	
1981 ^{1/}	2.3%	3.1%	2.1%	0.4%
1982 ^{1/}	3.8%	7.9%	5.6%	0.6%
1983 ^{1/}	11.2%	21.7%	38.6%	3.5%
1984 ^{1/}	33.6%	62.4%	72.6%	6.7%
1985 ^{1/}	23.6%	63.9%	80.8%	8.9%
1986 ^{1/}	41.0%	66.9%	81.0%	17.0%
1987 ^{2/}	24.0%	72.0%	85.0%	18.0%

Source: ^{1/} National Institute of Health (NIH) Annual Report (1986)
^{2/} NIH (June 1987)

Each province set its own targets in collaboration with NIH, but the national program assigned to each province a program manager responsible to the National manager. As illustrated below, there is significant variation in coverage between the provinces. The provinces with the most remote areas have lower coverage rates. Also illustrated is the poor coverage of measles vaccinations relative to other immunizations.

Table 4

Immunization Coverage by Province for Infants
 (Through December 1987)

Province Immunized	Target	BCG	DPT1/ Polio1	DPT2/ Polio2	DPT3/ Polio3	Measles	Fully
	Population						
Punjab	2,045,514	87.8%	91.8%	86.0%	81.8%	66.1%	66.1%
Sind	861,104	50.2%	52.1%	43.7%	38.9%	35.8%	35.8%
Baluchistan	239,280	13.4%	18.2%	12.7%	9.1%	9.4%	9.4%
NWFP	491,900	76.5%	78.7%	60.0%	49.4%	51.1%	51.1%
FATA	97,794	46.3%	46.5%	30.5%	20.2%	25.1%	25.1%
AJK	85,029	57.3%	63.3%	54.3%	46.0%	34.8%	34.8%
NA	22,640	69.4%	66.2%	49.8%	35.6%	39.9%	39.9%
Total	-----	-----	-----	-----	-----	-----	-----
Pakistan	3,843,261	71.9%	75.2%	66.4%	61.2%	52.2%	52.2%

Source: National Institute of Health 1987

Following the accepted vertical, independent WHO model, EPI places heavy emphasis on training, supervision and assessment. However, the program has identified several organizational and managerial problems: (a) weak supervision at the basic health service level; (b) initial attempts to integrate the vertical program for EPI into the health services delivery system have not been well coordinated (integration attempts in the Punjab in 1985 are suggested to be responsible for a sharp fall off in coverage, since corrected); (c) needs for cold chain equipment and maintenance must be addressed; (d) constraints associated with maintaining the cold chain and difficulties in defining roles and responsibility have created a problem in including the private sector in EPI; and (e) irregular surveillance with limited investigation and follow-up of reported outbreaks.

There is inadequate epidemiological surveillance, monitoring and evaluation. Access to current data on morbidity and mortality is essential to the design of appropriate new initiatives and the measurement of outcomes. The GOP has targeted a systematic method of collecting and recording data as high priority. An appropriate surveillance system uses a limited number of health indicators that can be easily and reliably collected. The current EPI program has a basic system using sentinels and periodic cluster surveys. A more comprehensive surveillance system will be built on this base.

3. Child Spacing

The correlation between child spacing and child survival is not widely appreciated in Pakistan. The public sector and NGO family planning service delivery is expanding, as is private sector distribution of contraceptives under the social marketing of contraceptives project. The GOP has separated the administrative responsibility for family planning and health services, leading to about 1200 family welfare centers operated by the Population Welfare Division that are independent from Ministry of Health facilities. At the same time, over 8,000 government primary health care outlets provide health services but do not generally include family planning. A 1985 GOP decision that MOH facilities should add family planning to their services has been largely ignored. The Population Welfare Division centers do, however, provide general maternal and child health services in addition to family planning.

4. Nutrition

Maternal and child malnutrition is a public health problem and a child survival issue in Pakistan. A 1976 GOP survey found that 17 percent of children under five years of age were acutely malnourished and over 50 percent of children were undernourished. Since Pakistan is self-sufficient in food, malnutrition is not a function of national shortages, but rather of high rates of infectious disease, poor infant feeding and inequitable food distribution both within regions and within families. Fifty percent of pregnant women are anemic and an estimated quarter of all newborns weigh less than 2500 grams. Reports suggest that many mothers are not aware of appropriate timing to

introduce solid foods. Further, although breast feeding is still the rule, it is not widely practiced exclusively and may be declining in some urban areas. It is often not initiated until the third or fourth day, i.e. post colostrum. The difficult problems of malnutrition and low birth rate will limit the mortality reductions achievable through simple interventions like EPI and ORT. If Pakistan hopes to see a mortality decline beyond the easily preventable mortality emphasized in this Project, these problems will have to be addressed.

Little has been done to address malnutrition. Preliminary analysis of a 1985 national nutrition survey shows malnutrition rates identical to those a decade earlier, e.g. 15 percent of children under five years of age suffer from acute malnutrition. These rates are comparable to those in India, Bangladesh and Sahel Region of Africa and are more than double those reported for Nepal and Sri Lanka. The World Food Program was established to provide food for malnourished children and pregnant and lactating mothers. However, since the distribution of food is poorly administered it is highly unlikely that the program is improving nutritional status of vulnerable groups. The future of this program is uncertain.

USAID is collaborating with the Planning Commission, MOH and UNICEF in a program of research and workshops on breastfeeding and bottle feeding that will culminate in a November, 1988 national seminar on Breastfeeding and Child Survival that will propose a national strategy on breastfeeding promotion. Also, in accordance with a self-help measure of the 1988 PL480 Title I sales agreement, USAID will work with the Planning Commission to identify additional nutrition studies required for developing a national nutrition strategy.

5. Proposed 7th Five Year Plan (1988-1993)

The 7th Plan draft anticipates a major push to develop primary health care in rural Pakistan. The proposed capital outlay is about \$800 million, 45 percent of which would be for rural primary health care. By the end of the Plan the annual recurring expenditures in the health sector are expected to be \$600 million, about half for primary health care. Some of the major themes include:

- Provision of a rural health center or basic health unit in every Union Council.
- Establishment of urban primary health care centers by local bodies.
- Establishment of a paid cadre of village health auxiliaries, one for every village in Pakistan, to be responsible for immunization, ORT, nutrition monitoring, maintenance of health and demographic information, blood slides for malaria and sputum slides for tuberculosis, first aid, health education, and village hygiene.

Improve maternal care and delivery assistance through continued training of traditional birth attendants (TBAs) and by offering

incentives to encourage females to apply for health auxiliary positions.

- Incorporation of special beds, labor room and family planning services at all BHUs and RHCs.

- Increasing annual output of various kinds of health auxiliaries from 4,000 to 15,000 per year.

- A major stress on recruiting female health workers, e.g. two-thirds of auxiliaries ultimately should be females.

- Provision of child spacing information services to be incorporated at all levels of the health system.

- Evolving an increased role for traditional birth attendants in health services delivery.

- A massive nutrition educational campaign.

- Health systems research.

- Increasing tetanus toxoid coverage.

- Providing injections of iodized oil in iodine deficient areas and provision of iodized salt.

- A decentralization of authority in the health system with creation of local autonomous management boards for medical colleges, large hospitals, and with rural health centers governed by local health committees.

- Training of managers for the health system.

- Development of an appropriate health information system.

- New health services financing mechanisms, e.g. health insurance.

- Greater concessions to encourage private sector health services development and support to NGOs to supplement efforts of GOF.

During the 6th Plan ending June 30,1988, the areas with the least progress were identified as; combating third degree malnutrition, creating a cadre of health managers, introducing user charges, patronizing traditional medicine, and expanding use of private sector.

The draft plan states that the main constraints to the above proposals are inadequate finances on both the development and recurring budgets, lack of trained health managers, opposition to decentralization and people's participation by health bureaucrats, reluctance of local bodies to set up primary health care facilities in urban areas, and persuading doctors to go to rural areas.

It should be pointed out that although Five year plans do represent a fairly valid picture of development directions, there is typically a major gap between targets and achievements. These ideas represent a very ambitious undertaking for the GOP. Given the current budget situation and the difficulties in domestic resource mobilization, there is a possibility that available resources will fall significantly short of the proposed plan allocations. Furthermore, given the shortage of managers in the health system it will be difficult to implement many of the above proposals during the next five years. On a more encouraging note, many of these policies and strategies should contribute to child survival objectives and to increasing the probability of sustainability. It is clear that Pakistan is working to overcome the effects of past neglect in the health sector and the potential for fruitful GOP/donor collaboration to improve the health status of children is significant.

6. International Review of the Accelerated Health Program

In February 1988, a WHO organized and led team including participants from the GOP, USAID/CDC, CIDA, and UNICEF conducted an evaluation of EPI, ORT, and TBA training. The standard WHO approved cluster survey sampling methodology was used to select 240 communities, both rural and urban, throughout Pakistan to interview 1698 mothers as well as TBAs, community leaders, doctors, pharmacists, outreach teams, and health officials. The team measured a most impressive coverage of EPI with about 80 percent of 12-23 month old children fully immunized against the six targeted diseases. About 90 percent of diarrhea cases referred to health facilities were given ORS. Reported use of ORS in household treatment of diarrhea was in the range of 70 percent although there was no attempt to measure correct use. Both the high EPI coverage figures and the surprisingly high reported ORS use rates probably reflect a very intense level of effort by the health services delivery system in the months preceding the evaluation and should not be considered levels that are likely to be sustained without additional efforts.

The External Review team recommended the need for significant increases in health womenpower, expansion of primary health care services at the village level such as the proposed village health auxiliaries, improvement of management skills, increase in priority to primary health care in both the training and responsibilities of medical officers, increase in tetanus toxoid coverage possibly by using female vaccinators, much more attention to the quality of diarrhea treatment including increased emphasis on breastfeeding, hygiene and nutrition, dramatic strengthening of disease surveillance, regular visitation and support of TBAs, rationalization of mass media communications including use of private companies on contract. The evaluation suggests that much of the infrastructure for successful child survival activities has already been put in place. The USAID contribution will be increasingly to sustain EPI with a focus on disease reduction rather than services coverage, greater attention to new challenges such as controlling iodine deficiency disorders, acute respiratory infections, and nutrition.

D. Primary Health Care Project

The current Primary Health Care project (391-0475) was designed with the objective of improving coverage and quality of rural health care. Many of the achievements of and lessons learned by the PHC project provide a foundation for the Child Survival Project.

1. Program Achievements

The PHC provided support and assistance in five areas: program management; training; program operations; research and evaluation; and, for the Accelerated Health Programme. The accomplishments in each of these areas lay a foundation for the Child Survival Project.

A number of workshops and working group meetings were undertaken to improve management at the health facility level. Related management systems such as improved patient records, abstract register of diseases, drug inventory control and monitoring of essential services have been developed and are being introduced at selected facilities. Medical officers in charge of the facilities are being trained in management skills. In addition, job descriptions, standardized training programs and facility operations guides are being developed for all MOs.

As more doctors were posted in rural areas the role of the health technician (HT) changed. The HT became a link between the community and the rural health facility. Correspondingly, PHC was involved in activities designed to train future Health Technicians in needed skills. The training curriculum was revised to focus on preventive health and health promotion, materials were translated into Urdu and health technicians were given practical learning experience at rural health centers. To help institutionalize this training, 13 permanent training schools are being completed.

In order to support both management and training in the field, basic medical kits and education materials were provided.

Research studies were carried out to assess the provision of care and ways to improve services. Studies provided useful information for the PHC Project and isolated problems being approached by AID and other donors in their current programs.

The Accelerated Health Programme was primarily involved with the Expanded Program of Immunization and with control of diarrheal diseases. Funds were allocated for equipment and supplies to support a very successful immunization program. If recent figures on immunization coverage are reasonably accurate, coverage for prevention of neonatal tetanus and measles is still not adequate. A four party Articles of Agreement to achieve EPI coverage targets during the 1986-1988 period was signed by WHO, USAID, UNICEF and the GOP to coordinate donor inputs.

Preparatory research, communication campaigns and materials such as pictorial leaflets for distribution with ORS packets were funded as part of the PHC program in control of diarrheal diseases. In addition, the need for training in correct case management, an information system for CDD surveillance and management, and the creation of Diarrhea Training Units (DTUs) and ORT corners in rural health facilities became priorities.

The Child Survival Project is developed in response to these identified needs. However, it is also important to take note of the lessons learned.

2. Lessons learned

Understanding of the costs of increasing infrastructure for curative medicine versus support for preventive programs is not widespread. PHC was equated with building and equipping rural health facilities rather than improving community access to essential affordable services. Not enough attention was paid to program activities such as revision of medical curricula, modification of policies and development of an appropriate institutional response to public health needs.

Improvements need to be made in the status, pay scales, and career structure of public health physicians. In addition, physician training should emphasize experiential social pediatrics and community medicine rather than a theoretical approach. Such training, will help physicians manage public health interventions in rural facilities.

Since the behavior of mothers has direct consequences for their and their children's health, influencing their decisions could have a major impact on overall morbidity and mortality statistics. A problem identified under the PHC was the difficulty in getting health messages to women. Among those methods being tried by the GOP in the PHC or other projects are: mass media and communications; training traditional birth attendants (TBAs) in both health promotion and provision of basic services; use of volunteer community health workers; active recruitment of females for training as health technicians; and development of a door-to-door EPI outreach program.

There is a need for USAID projects to define a smaller target group and scope of interventions. The objective of the Primary Health Care Project was to improve the quality and coverage of rural health services for a variety of diseases. However, GOP and Project personnel recognized that the undertaking was so comprehensive that it was difficult to have an overall impact. For future efforts, it is desirable to select priority services, examine delivery strategies, include a monitoring system with mutually agreed upon benchmarks, include provincial implementers in overall program planning, and establish case management standards according to WHO recommendations.

For broad based coverage new institutional arrangements and funding mechanisms will be explored to include traditional practitioners, private physicians and non-government organizations (NGOs) in addition to the government health system.

E. Relationship to AID Strategy and other AID Projects

The proposed Project rests firmly on AID's four pillars. It will transfer ORT and immunization technologies to primary users. It will help build and develop institutions to ensure that child survival initiatives are sustained after the AID funded activities. It will expand the role of the private sector. Finally, the Project will target significant policy reforms.

The Project closely parallels the guidelines contained in the AID Administrator's cable on Child Survival Strategy (State 099765 of April 11, 1986). In particular, the proposed USAID Project is centered on the "twin engines" of immunization and diarrheal disease management, and will make use of the same project strategies (institution building, mass media campaigns and training).

The Child Survival Project (CSP), focusing on the health needs of the nation's most vulnerable population -- its infants and child-bearing mothers -- forms a critical part of the Mission's health strategy. Indeed, USAID regards the Project as the centerpiece of its post-87 health initiatives, building on the experience gained in the often difficult to implement Primary Health Care (PHC) Project. The new initiative will not attempt to address all elements of a comprehensive Primary Health Care program but rather will focus on implementation of a few proven high impact interventions.

The Project will supplement and complement the on-going activities of USAID's two population initiatives: the Population Welfare Planning Project and the Social Marketing of Contraceptives Project. Both encourage the type of birth spacing in Pakistani families desired to achieve long range goals to reduce infant mortality and improve the health of the nation's infants.

The Project will benefit from the successful private sector experience of the Social Marketing of Contraceptives Project (SMC) by increasing access to necessary goods and services such as ORS and iodated salt through Pakistan's private sector promotional and marketing distribution channels.

F. Other Donor Assistance

USAID has shared the draft of this PP with all of the major donors operating in the health sector in Pakistan and has had extensive discussions with many of them regarding their prospective involvement in the activity. Although firm commitments cannot be expected from other donors for some time, it is clear that many of them, notably UNDP, UNICEF, WHO, and CIDA will be involved in aspects of the MOH's child survival program. UNDP, for example, has expressed a willingness to provide long-term expatriate technical consultants whose efforts could support, directly or indirectly, various elements of this project. UNICEF, already active in promoting establishment of a National Children's Commission and assisting the control of diarrheal diseases,

immunization and other important health initiatives, likewise has expressed a willingness to coordinate its efforts more closely with USAID in order to join in a comprehensive attack on the problems of child survival. WHO will continue technical support for the CDD and EPI, and CIDA's communications project provides TA and materials to develop the ability of MOH to produce EPI and CDD material for mass media. This enthusiasm is matched by that of the GOP and of the four provincial governments. The prospects are good, therefore, that the proposed project elements will be supported and undertaken.

A complete list of donors and their activities are listed alphabetically below.

1. ASIAN DEVELOPMENT BANK

ADB funds three large health and population loans that support the expansion and improvement of health facilities, management training, maintenance training and technical services.

2. CIDA

CIDA supports vaccine production, a communication cell in NIH for production of child survival messages and training of nurses and traditional birth attendants in child survival activities.

CIDA now provides all the concentrated polio vaccine needed for EPI as well as technical assistance (4.5 million Canadian dollars). The agency may develop a program with NIH in basic production of polio vaccine if current efforts to produce a rabies vaccine prove successful. Recently CIDA has focused on improving communication services to support child survival activities. CIDA provides a full time communications advisor to NIH and has financed a national workshop and field baseline studies to determine village level attitudes toward EPI.

CIDA provides technical assistance to the Aga Khan School of Nursing through McMaster University. CIDA continues to assist the UNICEF TBA training program and plans to develop a field practice team teaching system in the existing district and rural health facilities.

3. ITALY

Italy offered \$6 million for the Joint Nutrition Support Program. The funds were subsequently withdrawn due to the GOPs inability to develop institutional arrangements to manage the funds.

4. JAPAN

Japan has funded the Islamabad Children's Hospital, and the College of Nursing and Paramedical Institute. Future assistance may increasingly focus on primary health care and rural health.

5. NETHERLANDS

Negotiations are underway for the transfer of technology, equipment and financing to NIH for the manufacture of DPT vaccine.

6. OVERSEAS DEVELOPMENT AUTHORITY, U.K. (ODA)

The U.K. provides technical assistance, training and contraceptives for family planning.

A project to strengthen training in community medicine is under consideration in ODA. The project contemplates links with U.K. Universities for the College of Community Medicine in Lahore and for the Ayub and Khyber Medical colleges. Strengthening in the area of curriculum development, health service management, and health statistics is envisioned.

7. UNITED NATIONS DEVELOPMENT PROGRAM (UNDP)

UNDP may provide long-term advisory staff.

8. UN POPULATION FUND (UNFPA)

UNFPA plans a 1987-91 program of \$19 million for clinical training, NGOs, contraceptives and support of sterilization.

9. UNICEF

EPI: Under the four-party 1986-1988 agreement signed by UNICEF, WHO, USAID and the GOP, UNICEF's contribution to EPI is \$3.15 million compared with \$2.5 million from USAID and \$720,000 from WHO. In addition, each year UNICEF procures up to \$3 million worth of vaccine, needles, syringes, and cold chain equipment for NIH on a reimbursable basis. UNICEF's direct financial assistance is for vehicles, cold chain equipment and staff training.

Iodine Deficiency Disorders Central Program (IDD): In the iodine deficient areas of the North-West Frontier Province, Northern Areas and Azad Kashmir, the GOP plans to give iodized oil injections to all children up to the age of 20 and all reproductive age women. UNICEF will provide oil and technical assistance, supplies and equipment; the development of educational materials; training of staff and technical consultants. UNICEF will also assist in the marketing and distribution of iodated salt; strengthening the existing salt iodation plant and establishing a second salt iodation plant, with implementation through the private sector considered a possibility.

UNICEF is providing additional support to programs on ORT, health education, and traditional birth attendant (TBA) training. In toto, the proposed 1988-1993 UNICEF program includes substantial assistance to EPI, ORT, IDD, ARI, nutrition and institutional capacity building.

10. WORLD BANK

The World Bank provides support for non-clinical training and information, education and communication (IEC) under a population loan. They have no health loans but are considering entering the health sector.

11. WORLD FOOD PROGRAM (WFP)

WFP provides food to rural health centers for distribution to children and pregnant and lactating mothers, but food distribution is poorly administered. It is unlikely that this program is improving the nutritional status of vulnerable age groups. An evaluation recommended it be terminated unless major revisions were made.

12. WHO

WHO is contributing technical advisory services, funding of operations staff, monitoring, evaluation, in-country training, participant training, fellowships, supplies, equipment and research grants.

WHO has programmed \$487,000 in long-term technical assistance for 1986-87 for its Expanded Program of Immunization (EPI) and \$70,000 for the Control of Diarrheal Diseases (CDD) programs. The level of EPI assistance is expected to be maintained at the same level in 1988-89. Funding for CDD is likely to be increased.

WHO has provided a Senior EPI technical adviser stationed at NIH and four operations officers, one stationed in each province. Although the EPI assistance ends this year, WHO plans to provide a CDD advisor to work with the NIH national program manager.

G. Project Rationale

A major effort in Child Survival during the 7th Five Year Plan, 1988 to 1993, will be based on the important success of the GOP's Accelerated Health Program (AHP), which was launched on January 1, 1983 because the GOP perceived that the progress in its Expanded Program of Immunization (EPI) was not proceeding satisfactorily. In 1982, immunization coverage of 12 to 23 month old children was under 5 percent. The GOP decided to launch an exceptional effort in EPI, ORT, and the training of Traditional Birth Attendants (TBAs) in an effort to make a radical improvement in child health. Responsibility for the EPI and ORT components was given to the National Institute of Health; the TBA training program was managed by individual provinces. The Ministry of Planning and Development, and Ministry of Finance and Economic Affairs indicated that the required resources would be available for these high priority programs. By the end of 1984, an international evaluation showed immunization coverage of 12 to 23 month old children of over 60 percent. Although reimbursable procurement by UNICEF and technical assistance from WHO were important ingredients of the spectacular

improvement in EPI coverage, there is no denying that the main credit for the success of this program lies completely with the federal and provincial governments who decided that the necessary funding and manpower should be allocated to these high priority programs.

The GOP is justifiably proud of the achievements of the Accelerated Health Program and believes that these interventions have resulted in the saving of 100,000 lives each year. This success is important to new child survival activities because the GOP is confident that it can successfully implement preventive health interventions and is eager to build on past successes in bringing infant mortality rates down to levels acceptable to a country at Pakistan's level of economic development.

A 25 percent decline in infant and child mortality during a five year period is an ambitious target; however, the continued existence of high levels of easily preventable mortality in Pakistan, plus the case histories of countries like China, Sri Lanka, and Kerala in India suggest that this objective can be realized.

There is a perception in Pakistani decision-making circles that the social sectors have been neglected throughout most of Pakistan's history and that special efforts must be made to make up for past neglect. The 7th Five Year Plan reflects these priorities and builds on the Prime Minister's five point Plan enunciated in December 1985 which puts high priority on rural uplift. The lifting of Martial Law in 1985 and the re-emergence of some semblance of democracy with concern for winning the votes of the electorate, has increased demands for policies and investments that will improve the lives of the Pakistani population. The Child Survival Project will respond to these demands and assist Pakistan in implementing programs that can lead to rapid improvements in child health.

Several new themes in the draft 7th Five Year Plan policies reflect a growing concern for health care for the entire population. These will provide a framework for delivering child survival services and for enhancing the long term sustainability of gains in child survival. The Child Survival Project, although specifically targeted to the highest priority child survival interventions, will work within the existing and planned framework to the extent feasible to achieve rapid increases in child health.

The GOP has clearly exhibited openness to the suggestions of donors on most effective health policies and strategies. Although health development is still widely perceived as a matter of physical facilities and equipment, there does seem to be a growing appreciation for the "soft" determinants of the quality of health care such as management, supervision, accountability, training of health care providers in a relevant way, and the need to extend services to where the people are. To support the GOP, the Project includes carefully selected interventions and operations research that will find ways to strengthen the public health delivery system. In addition it will support a variety of activities to mobilize the private sector to contribute to the country's child survival objectives.

In order to assure that the design of this Child Survival Project is fully consistent with GOP priorities and objectives, and reflect the widespread experience of the country in health services delivery and child survival activities, the Mission and GOP agreed that the design process should emphasize collaboration. The design team consisted of expatriate experts in several specialities who were teamed with Pakistani experts in those same areas so that the design reflected the best thinking of the expatriate consultants as well as local Pakistani professionals. At the beginning of the design stage, a two day Child Survival Workshop with a panel of experts and other officials was convened to bring together a comprehensive collection of experiences and opinions on the most appropriate interventions to enhance child survival in the next six years. At various stages in the design process, a wide spectrum of Pakistani expertise was brought to bear on the selection of interventions and the design of the components of the Project. There is a sense therefore that this Project is owned by the GOP, an attitude that should facilitate implementation.

Although this Project will support a variety of activities, it will be more than anything else a massive information and training project. Continued progress in child survival depends upon getting information to health care providers at all levels and to mothers. Although manufacturing and distributing ORS, tetanus toxoid vaccine, iodized salt, etc. are necessary elements of a comprehensive program to eliminate preventable infant and child mortality, the main challenge is to convince health care providers at all levels in both the public and private sector to practice and recommend these simple life-saving technologies and to convince consumers, namely those who care for children, what their role is in safeguarding the lives and health of their children.

To sustain the gains already achieved and those anticipated during the 7th Five Year Plan, it is essential to support various activities that involve institution-building, the development of new capacity and strengthening of existing capacity to implement effective delivery of services and information, the improvement of the management of health resources including the effective supervision and support from top to bottom in the health care delivery system and to attempt to modify basic training of health care providers so that they will appreciate and practice the child survival technologies. Furthermore, because of the limited reach of the public sector services to the population, it is essential that mechanisms acceptable to the GOP be found that would mobilize and motivate important actors in the private sector to promote child health, to recommend child survival methodologies and to support families engaging in appropriate child survival behaviors.

III. DETAILED PROJECT DESCRIPTION AND TECHNICAL ANALYSIS

A. Project Goal and Purposes

The overall Project goal is:

to reduce the infant and child mortality rate by at least 25 percent over the six year life of the Project, and sustain the reduced rates

Although this may seem an ambitious goal there are a number of factors that suggest the goal can be obtained. Pakistan's rate of economic development is significant. Most of the target reduction in deaths can be achieved solely through improving EPI coverage levels of under-ones and pregnant women and correct use of ORT. In addition, the GOP momentum to tackle child survival seems to be growing. Even considering "replacement" mortality, a 25 percent target is not unrealistic, assuming continued economic and political stability and commitment to child survival. Increased understanding and use of ORT, sound nutritional practices and timely medical referrals should result in reduced mortality due to episodes of diarrhea and acute respiratory infections.

The project purpose is:

to expand and institutionalize Child Survival programs with special emphasis on decreasing mortality due to diarrheal diseases, vaccine preventable diseases and acute respiratory infections.

To achieve this expansion, the Project addresses the leading causes of mortality through assistance initially to the Control of Diarrheal Diseases (CDD) program and the Expanded Program of Immunization (EPI), and at a later date for a program on Acute Respiratory Infections (ARI). Support for these interventions will be provided in five components; program planning, training, communications and marketing, research and analytical studies and health information systems that focus on capacities for surveillance and monitoring of program interventions.

Specific interventions will require: (1) increasing the correct use of oral rehydration therapy so that at least 80 percent of reported diarrhea cases receive proper treatment and dietary management in addition to widespread correct management in the home; (2) strengthening and institutionalizing the EPI program so that at least 80 percent of infants (0 to 11 months) receive BCG and the DPT/Polio series, and at least 70 percent receive measles inoculations before age one; (3) immunizing 70 percent of women of child bearing age against neonatal tetanus; (4) educating health workers so that at least 50 percent of patients reporting to a health facility with ARI will receive recommended treatment; and (5) promoting sound infant feeding practices.

B. Project Outputs

Project targets include: (1) 105,000 fewer annual deaths of children due to dehydration from diarrhea; (2) 65,000 fewer deaths annually of children from EPI preventable diseases^{1/}; (3) 10,000 fewer deaths from ARI; (4) training of at least 85 percent public sector medical officers and a minimum of 25 percent paramedical in CDD/EPI related skills; (5) reaching at least 50 percent private sector physicians with CDD/EPI seminars; (6) production of audience tested programs for mass media addressing primarily CDD/nutrition and EPI related topics; (7) training curriculum and ancillary audiovisuals for CDD/nutrition and ARI; (8) training medical personnel in the use of improved health information systems; (9) 18 diarrheal training units (DTU) functioning, 48 feeding/ORT training units (FORT) established and ORT corners set up in 80 percent of government health facilities and progress toward establishment of a comprehensive, permanent, institutionalized primary health care in-service training infrastructure; (10) completion of several operational research and evaluative studies related to improved effectiveness of maternal and child health care services; (11) a system whereby the GOP can assure that all MBBS graduates from 1990 onward are trained in diarrhea case management and in ARI case management; (12) health information systems for child survival interventions.

These outputs, effected together, will allow achievement of the Project purpose.

C. Project Inputs

To achieve these results, the USAID Project will finance: (1) technical assistance; (2) equipment, materials, transportation and personnel costs for DTUs, FORTs and ORT corners; (3) cold chain, injection and sterilization equipment, and related EPI commodities; (4) training materials and local training expertise; (5) communication and marketing support; (6) transportation, personnel, materials and publications for research studies, needs assessments, surveys and other types of research; and, (7) commodity support and training for the development of health information systems; (8) a major portion of local costs required to implement the Project including appropriate budget support for the proposed National Children's Commission;

The GOP will cover the costs of: (1) vaccines and other EPI commodities; (2) health personnel and facilities; and (3) the majority of operational costs.

^{1/} 45,000 From tetanus, 15,000 from measles, and 5,000 others

D. Project Components and Activities

This Project is the product of active collaboration between AID and the GOP. Eighteen individuals, roughly half designated by the Government of Pakistan and half representing USAID, participated on the project design team. The PP reflects a synthesis of views and consensus of what is required to make a significant, lasting impact on infant morbidity and mortality.

The efforts required for such a lasting impact are far too large and complicated for any single donor to undertake bilaterally with the GOP. Accordingly, the project design team used the following criteria to assess assistance priorities: impact on infant morbidity and mortality; efficiency in the use of management and technical assistance resources; track record of USAID in related projects in other countries; known strengths of U.S. assistance; current developments and priorities of the GOP; and, plans of other donors operating in Pakistan.

If the Project is to achieve the reduced mortality rates desired, it is essential to take action on the comprehensive model now being developed by leading authorities in the field. This Project was designed to incorporate strengths of the GOP's health programs as well as accepted child survival strategies. Similar models have been successfully incorporated in other USAID programs. An example is USAID support for Egypt's National Control of Diarrheal Disease program. This program features hands-on training of thousands of health care providers in ORT techniques, distribution of rehydration salts through every available channel, and a targeted media campaign to encourage mothers to use the new therapy. Included is an emphasis on the importance of nutrition during and after diarrheal episodes since traditional Egyptian practices do not normally provide extra food for the child who is sick or has recently been sick. Plans are underway in Egypt for similar programs on immunization, early diagnosis and treatment of acute respiratory infections, child nutrition and child spacing.

Similarly, the Project includes five components designed to effect interventions in Control of Diarrheal Diseases, an Expanded Program of Immunization and Acute Respiratory Infection. Of the three interventions selected, it was agreed by the project designers that Control of Diarrheal Diseases (CDD) and related nutrition interventions would have the major emphasis in terms of inputs and volume of activities. The Expanded Program of Immunization (EPI) requires less management to support, since activities would build on the already successful institutional base. Acute Respiratory Infection (ARI) activities and improved infant nutrition, vitally needed to achieve the level of mortality reduction achieved in countries like China and Sri Lanka, will assume increasing importance during the course of the Project, building on the network established in each of the Project components.

The design team then considered alternative ways to achieve desired objectives in each of the three selected interventions. It was evident that the ambitious efforts of the Project would require considerable

technical assistance and management; this element of the Project is described under the Program Planning component. The Training component will provide in-service and participant training for up to 25,000 people.

To support the training effort, various materials in large quantities will be required, including training modules, newsletters, manuals and videos, in language appropriate to the different regional origin and educational levels of trainees. The preparation of these materials is covered in the Communications and Marketing element of the Project. Additionally, mass media and marketing campaigns carefully tailored to the diverse Pakistani population will be funded. To identify the most effective training modalities and materials for media campaigns, and to effect policy changes in drug registration, medical education and strategies to reach women, considerable Research and Analytical Studies will be required. To assess the effectiveness of Project activities, a series of evaluations will be conducted in different contexts within the country. Finally, reductions in infant and child mortality will have to be carefully monitored to ensure that reduced levels are reached and sustained. To this end, the Project will contribute significantly to the establishment of Health Information Systems. These systems will provide essential information to link various elements of the Project into a unified child survival effort.

1. INTERVENTIONS

a. CONTROL OF DIARRHEAL DISEASE (CDD)

Diarrheal disease is the leading cause of infant and child mortality in Pakistan. In its 7th Five Year Plan, the GOP intends to continue a reduction in infant deaths caused by dehydration due to diarrhea. The strategy to effect this reduction is more comprehensive than that of the Sixth Plan which focused on ORS production and distribution. Future efforts will include ORS marketing and distribution, social marketing using commercial firms, broad use of the public and private health care system, extensive programs in training of health workers, standardization of treatment, and an expanded use of mass media communications to teach families how to prevent deaths due to dehydration.

The Project will support GOP efforts, with two specific objectives: (1) improved case management of diarrheal diseases in public and private health facilities and in the home and, (2) introduction of measures to reduce the number of episodes of diarrhea per year in infants. An overview of CDD activities follows:

Program Planning: The technical advisory team (TAT) will help the MOH to develop CDD operation plans. The team will incorporate nutritional concerns into these plans since sound infant feeding practices are critical for reducing and managing diarrheal episodes. The team will also help MOH coordinate activities in each of the four other components, especially in the start up and monitoring of the training program.

Training: The Project will help the MOH set up an interlinked training system with follow-up supervision for health workers extending from medical colleges to district hospitals to ORT corners at rural health facilities. Additionally, hands-on training and audiovisual training materials will be provided to government health professionals, private physicians, and traditional practitioners in correct case management of diarrhea, including appropriate feeding practices and promotion of breast feeding. The training effort will evolve into a permanent, institutionalized primary health care training infrastructure.

Communications and Marketing: The Project will support the GOP in an extensive communications and marketing campaign, which will include messages illustrating correct ORT use, strong discouragement of bottlefeeding, promotion of exclusive breastfeeding until 4-5 months of age, handwashing, and referral of severely dehydrated cases. Similar messages will be developed for training materials and health workers circulars. Social marketing of ORS and iodized salt will be supported.

Research and Analytical Studies: The Project will collaborate with participating medical colleges, research institutions and the MOH to put into place a network of problem solving research. Methods will include surveys, experimentation with alternative delivery systems, policy studies and studies of diarrheal diseases and nutrition. Buy-ins to the centrally funded Applied Diarrheal Disease Research program and to PRICOR will be considered.

Health Information Systems: The Project will build upon existing health information systems to collect minimal necessary data for logistics, supervision and monitoring of CDD program. Information on diarrheal and severe dehydration cases will be accumulated and fed into a central surveillance system.

b. EXPANDED PROGRAM OF IMMUNIZATION (EPI)

The EPI in Pakistan has achieved impressive results over the last nine years. The GOP now has the difficult task of sustaining and expanding immunization coverage to difficult to reach populations. During their 7th Five Year Plan, the GOP intends to gradually integrate the independent, vertical EPI structure into the rural health system.

Such institutionalization requires development of cost-effective delivery strategies and responsive management systems. It is expected that well-functioning supervision and health information systems such as disease reporting and supply and service statistics will provide the backbone to good management. Accordingly, the Project will offer assistance in improving the EPI monitoring and surveillance systems.

A second objective in the EPI program will be to expand coverage to more remote areas and urban slums. Without exception USAID expert consultants have agreed that EPI should remain primarily the responsibility of the public sector in Pakistan to maintain the cold chain, to ensure potency and quality control of vaccines and to help establish surveillance of the

vaccine-preventable diseases. However, government workers have difficulties improving coverage in urban slum areas for understandable sociocultural reasons. It is recommended that the private sector, particularly NGOs, be enrolled in EPI activities in these areas. Under the direction of MOH, NGOs and perhaps selected private institutions will receive assistance for EPI commodities, communications, information systems and operational research if they strictly follow GOP official immunization schedule, methods and reporting.

The Project will help the GOP to achieve these objectives through:

Program Planning: The Project will support the GOP in integrating the EPI into the national health system. The use of the private sector, particularly NGOs, into EPI will also be encouraged.

The Project will fund commodities (such as vehicles, motorcycles, bicycles, and in collaboration with UNICEF, cold chain equipment) to establish new EPI outlets. Most EPI equipment has to be replaced every five to eight years under Pakistan's field conditions, so the Project will also purchase replacement equipment.

Training: Three types of training for sustained EPI effectiveness will be funded; 1) in-service EPI training, 2) strengthened operational EPI training in Pediatrics Departments of medical colleges and, 3) Masters of Public Health degrees.

Communications and Marketing: Ongoing campaigns in a variety of media will be financed on the importance of immunizations for mothers and children. Emphasis will be placed on tetanus toxoid immunizations for married women of child bearing age and on measles vaccines for young children. Funds will also be provided to create acceptance of the iodinated oil administration program and for the social marketing of iodized salt.

Research and Analytical Studies: The Project includes funds for epidemiological research and the gathering of epidemiological data. The Project will also fund operational research in such areas as strategies for reaching women for tetanus toxoid immunization, cold chain, vaccine carriers, appropriate types of injection equipment to be used and distribution management systems. The MOH policy calls for using disposable syringes in EPI outreach. Alternatives will be explored. If use of disposables continues, it is possible that USAID funding for injection equipment will be substantially increased.

Health Information Systems: Project funds will be used to improve EPI monitoring and surveillance systems to evaluate program performance, perform epidemiologic training and research (serological conversion studies, morbidity trends, etc.) and, if feasible, develop a system to register births and deaths, particularly for newborns.

c. ACUTE RESPIRATORY INFECTION (ARI)

An estimated 80,000 or one-eighth of all child deaths in Pakistan can be attributed to acute respiratory infection (ARI) as either the underlying or associated cause. If this estimate is correct, the problem cannot be ignored in any strategy for child survival. ARI comprises a complex group of clinical conditions of different etiology and severity. As with diarrhea, ARI are caused by many viral and bacterial agents. The main decisions of a medical officer or health worker faced with a child with ARI depend upon discriminating the degree of severity of the illness and taking appropriate action to manage the case.

With the exception of those infections for which vaccines exist (measles, pertussis, diphtheria and tuberculosis), ARI has been overshadowed in the past by other health concerns. This neglect may have stemmed from the lack of a simple control intervention like vaccines or ORT for dehydration from diarrhea, or from a lack of awareness among health workers and families as to correct case management. However, it has become apparent that child survival strategies must confront this major cause of mortality.

WHO has identified three control technologies for ARI in developing countries: immunization, health education (communications) and case management. Implementation of these control strategies forms the core of this child survival project.

Program Planning: Project funds will be used to coordinate ARI drug logistics, training modules, communication messages and operational research into an integrated national program.

Training: ARI training will be phased in gradually after physicians have received control of diarrheal disease training to establish functioning ORT units. Since diarrhea and ARI morbidity usually peak in alternate seasons in Pakistan, the same training network can be used for both CDD and severe ARI case management. ARI case management will train health workers to classify easily identified clinical signs for two major management decisions: whether or not to refer patients to a higher level health facility and whether or not to prescribe medicine. WHO has produced training material for standardized case management and recommended specific data collection for use in monitoring and continuous evaluation.

Communications and Marketing: After the training of health workers is begun, the Project will finance education programs to help families recognize life-threatening ARI symptoms, correctly treat mild cases and practice preventive measures to reduce ARI transmission.

Research and Analytical Studies: Health service delivery research conducted for CDD and EPI, and the experience of the WHO supported ARI project in Abbottabad will be applied to ARI as it becomes a priority in the national primary health care system. Specific studies

to understand treatment compliance and traditional practices for ARI may also be conducted.

Health Information Systems: Data identifying the prevalence and the degree of severity of acute respiratory infections will be included in health information systems.

2. COMPONENTS

a. PROGRAM PLANNING

Much of the success of the Child Survival Project will depend on new initiatives and strengthening of institutional capacity and management of resources in ways that Pakistan has had little experience. Project success, particularly in terms of sustainability, will therefore require intensive human input to achieve institutionalization of new technologies and management techniques. For many tasks of an effective, sustainable primary health care and child survival program there are no easy solutions or short cuts. Because of insufficient investment by the GOP in developing a planning capacity, it remains dependent on external technical assistance for many programs. For this reason the proposed technical assistance team (TAT) is the minimum essential to achieve the Project goals of mortality reduction and sustainability within the Project timeframe.

To minimize the number of long-term expatriates required, the Project will maximize the use of Pakistani expertise both in the Ministry of Health and in the private sector. To the extent possible, short-term technical assistance will be provided by Pakistanis or resident dependent spouses. With this in mind, the TAT will be composed of the following expatriates: a program manager, a physician with CDD expertise, a training coordinator with strong clinical background, a medical epidemiologist with strong computer system skills and an information, education and communication (IEC) /social marketing specialist. They will be supported by locally hired contract professionals, some as an integral part of the Islamabad based TAT and some as counterparts to provincial health officers. The TAT will work with the GOP on the following specific activities:

- Development and implementation of strategies and operational plans for each intervention and component.
- Management of Pakistani contract staff.
- Coordinate between district health facilities and medical colleges to assist implementation of the case management training program, and arrange rapid procurement of necessary equipment.
- Provision of short-term consultants as needed.
- Help with EPI and CDD logistics management and disease surveillance as requested by the GOP. Included will be automation of

inventories, orders, and distributional rosters, improving the supply and control of ORS packets and EPI vaccines, and possibly expanding assistance to other basic drugs and supplies for priority child survival programs.

- Administration of an incentive schemes if feasible to encourage immediate use of training gained.

- Assistance to MOH to publish and disseminate research findings.

- Policy dialogue.

- Strengthening MOH program planning capacity.

- Develop a plan/rationale for selection of long-term training participants and for short-term training.

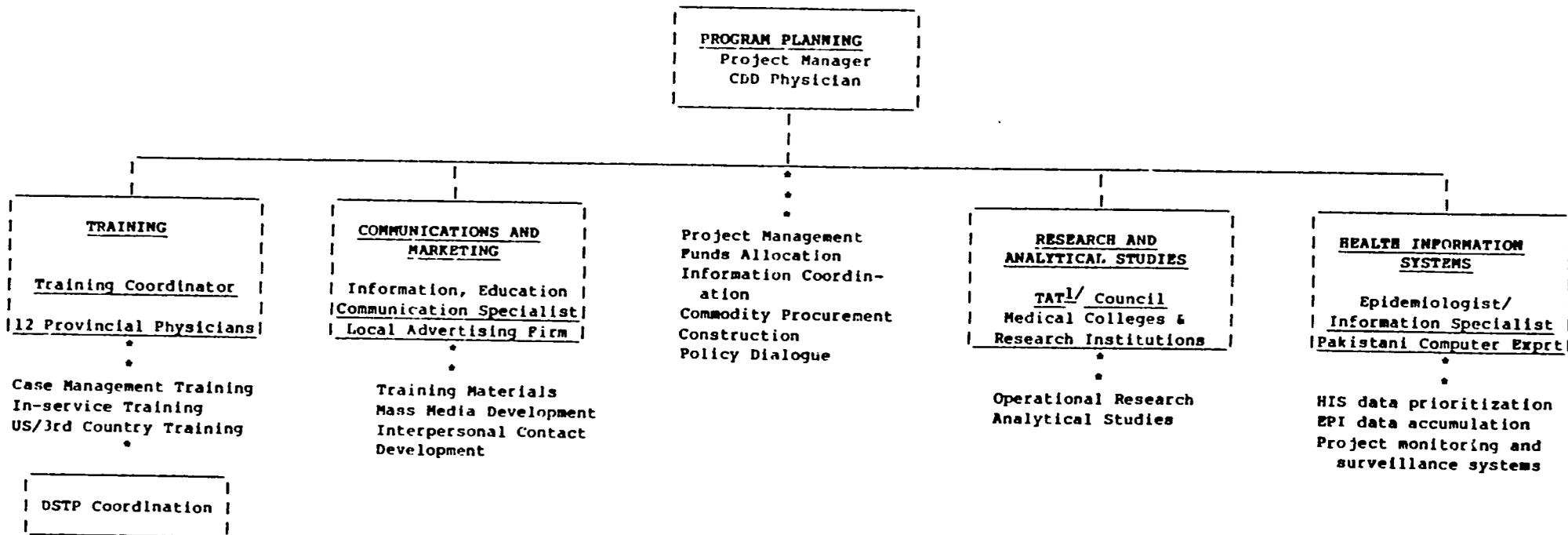
- Establish information systems to measure Project progress towards achieving training and disease/mortality reduction rates.

- Help identify Phase II activities and assure liaison between Phase I and proposed Phase II activities.

Not all of the TAT will be required for the entire period of the Project. As availability of appropriate Pakistani or other locally-hired experts becomes known, changes will be made in the technical assistance plan to minimize the number of long term expatriate advisors in country.

Table 5 is an organization chart illustrating the interrelationship of Project components. Other linkage tables for each individual component appear in respective sections of the pp.

CHILD SURVIVAL PROJECT
PROGRAM PLANNING
LINKAGES



^{1/} Technical Assistance Team (TAT)

For the TAT, a position with clinical expertise and program experience in CDD and ORT is essential because such a major part of the Project is focused in this area. This individual would work with MOH, the provincial health departments, and the medical school based diarrheal training units and other lower level training centers to assure the appropriateness and effectiveness of the training and operational elements of this intervention.

Since the Project includes a major training effort involving the development of curricula and training programs and materials for health care providers at all levels in both the public and private sector, a training coordinator is required to manage USAID support to the various Pakistani institutions that will be developing and conducting these training programs.

Since EPI and CDD have expanded services, it is essential that the next development phase focus increasingly on collecting, monitoring and analyzing epidemiological data. Hence an epidemiologist/information specialist is required to support the development of health information systems that will be able to evaluate program effectiveness and guide the allocation of resources.

The purpose of an information, education and communications specialist with private sector, social marketing and communications experience is to assure the development of a sound strategy and program for communicating needed information and messages about key aspects of child survival to the large population of actors whose behavior needs to be appropriate for child survival. Neither government nor private sector health education and communications specialists have had very much experience in state of the art communication approaches in the social sectors so outside assistance for a limited time is required.

Because of the size and complexity of the Project and the number of staff, a contract Project manager is needed for overall planning and coordination of operational activities. The complexity of coordinating many activities and logistics at the federal level, in all four provinces and the territories requires an individual with broad management skills. The Project Manager will also be responsible for coordinating the construction activities included in the Project.

Construction Activities: The Project will provide 18 Diarrhea Training Units (DTUs), 48 Feeding/ORT centers (FORTs) and 4 warehouses. These will be located in existing medical schools, hospitals and government warehouse facilities and the spaces will be appropriately upgraded/renovated. The Project Manager, in coordination with GOP and provincial authorities, using the services of a PSC engineer and/or a local A/E firm, will survey existing provincial facilities to develop an operations plan, including conceptual drawings and preliminary cost estimates. The plan will establish locations, space needs and upgrading/renovation criteria.

All activity will be done under AID direct contracting and supervised by a Pakistani A&E firm that will provide final designs and tender documents under contract with AID. Construction services contracts will be awarded by AID to Pakistani construction firms under competitive procurement procedures. The Project will fund a full time Pakistani PSC engineer to oversee the entire activity. No funds will be obligated for construction services prior to identification of the actual sites and preparation of at least preliminary engineering plans and construction cost estimates.

b. TRAINING

The GOP would like this Child Survival Project to include a major training effort because of: (a) weaknesses in basic medical education; (b) the need to motivate all health workers to play their role in priority child survival and primary health care programs; (c) the need to update the knowledge and skills of health personnel in clinical, case management and preventive health technologies; and (d) the crucial role of health personnel in influencing child survival behavior of mothers. Because of USAID's long-standing involvement in primary health care in Pakistan, the GOP considers USAID a primary source of training expertise in improved health care delivery.

A major portion of Project resources has been allocated to the various training efforts because of the impact they will have on the Project goal and purpose. In order to reduce infant mortality by 25 percent it is essential to improve the knowledge, skills and tools of health care providers in child survival technologies. Similarly, in order to sustain Project gains it is important to institutionalize continuing education.

Although this Project will be selective in the areas of the training it supports, the total training function is designed with the following basic themes:

- in-service training in child survival knowledge and skills to emphasize prevention and case management;
- training to include management of health resources;
- strengthening of basic medical education.

Much short term training is currently undertaken with both donor and GOP support. However, most of this training is planned on an ad hoc basis resulting in a variety of objectives, methodologies and program purposes with little or no post training follow-up. The training function can be improved by a well planned program that would organize, systematize, and institutionalize the training process.

This Project proposes to assist the GOP in emphasizing two important concepts in a training process. First, that there is a need for periodic updating of skills and knowledge in an institutionalized continuing education structure. Second, that an effective training process involves attention to behavior modification and institutional development

as well as the traditional workshops and seminars. The larger process involves follow up, supervision, changed expectations, accountability and evaluation of training impact. Many previous training programs have been disappointing because there was no follow up or continuing support to assure that suggested changes actually occurred. Therefore, the Project will stress defining institutional expectations, developing a training process with monitoring activities which allow for following up on implementation.

Case management training is a centerpiece of the Project's intervention in the control of diarrheal diseases. An interlinked training system extending from medical colleges to district hospitals to ORT corners at rural health facilities will be created. Because diarrhea causes 40 percent of child deaths, the program will focus initially on training health personnel in correct oral rehydration therapy and essential nutritional practices. Since all of the training will be done in actual diarrhea treatment facilities, the format will be experiential with well developed audio visual materials. Once the infrastructure is successfully established, ARI and other training modules will be introduced.

It is envisioned that during the course of this Project this systematized training structure, namely medical college based diarrheal training units (DTUs) and district hospital based feeding/ORT centers (FORTs), will evolve into permanent, more comprehensive primary health care training centers. Because the top tier of training facilities will be situated at medical colleges, it is expected that interaction between the Project and the medical colleges will lead to a strengthened basic medical education. In addition to providing practical training to a large number of practicing health personnel, this system will provide an institutional capacity to allow all MBBS graduates from 1990 onward to be trained in priority primary health care areas such as CDD and ARI case management and will provide capacity for introduction of additional modules for related child survival activities.

To demonstrate its commitment to improve rural health services through training of public health staff, it will be essential that the GOP post senior fulltime staff to the case management training function. Because the training function may not seem attractive to doctors, careful thought to ways to attract capable personnel will be needed. The GOP will need to provide necessary support services including adequate supervision of all categories of personnel and a monitoring system to ascertain whether trained personnel are applying their new knowledge and skills. In addition, the GOP should make plans and budgets to facilitate workshop training, provide necessary supplies and mobility, and make subsequent changes in public health facilities, e.g. establish ORT corners. Given existing priorities and conceptions about training plans and budgets, this will be a difficult objective and will likely be achieved only partially during the period of the Project. It is a necessary effort, however, because it focuses on improving perceptions about deployment of health resources and quality of care provided in the public health facilities.

During the first year of the Project, a training needs assessment will be conducted by the GOP with the help of a consultant to identify the magnitude and nature of priority training needs, training resources available, and options for implementation. The assessment will determine what training both the federal and provincial health personnel want and help them develop an agreement on training priorities.

All training programs are interlinked with the other Project components. The objective is to clarify management in any one component by reinforcing activities in each of the other components. Table 6 illustrates the interrelationship between the various components and the reinforcement each provides.

TRAINING LINKAGES

TRAINING

PROGRAM PLANNING

Overall coordination w/ MOH and NIH
Commodity procurement for DTUs, FORTs, and ORT corners
Construction needs for health facilities

COMMUNICATIONS AND MARKETING

-- EPI Technical Training
Development of materials (written and a/v) for case management training
Development of reinforcing media messages for CDD
Development of newsletters and circulars for train-program participants

Case Management Training
- DTU development
- FORT staff training
- ORT corner training
- Private sector training development
In-Service Training
EPI Technical Skills
- Systems Analysis
- Computer Use Training
US/3rd Country Training
- MPH in Epidemiology
- Study Tours

RESEARCH AND ANALYTICAL STUDIES

Research on how to best reach women via TBAs
Testing quality control of ORS and vaccine manufacture and distribution

HEALTH INFORMATION SYSTEMS

Registration of infant births/deaths
Computerization of epidemiological data to be used by trained health workers
Recording information on diarrhea cases in rural health facilities

Programs in the training component have been divided into two categories, in-service and participant training. The in-service section has been subdivided into case management and technical skills training.

1. In-service Training

a. Case Management Training

Below is a detailed description of the proposal for a permanent, institutionalized continuing education program of in-service training for primary health care beginning with case management training in CDD/ORT and corresponding activities. It will be modified as necessary by the training needs assessment and by initial implementation experience. The program depends upon preparation in commodity and equipment procurement, supervisory role definitions and some physical infrastructure modifications. These are explained in sequence.

- Twelve Pakistani management specialists will be trained to coordinate the massive training program. Some of the twelve Primary Health Care project provincial staff will be trained to coordinate case management training within each of their respective areas. They will be provided with the same introductory CDD training as the medical officials at the diarrheal training units (DTUs).

- What will evolve eventually into a permanent primary health care training system will be initiated by the establishment of 18-20 diarrheal training units (DTU), primarily in medical schools. This infrastructure will be built on a diarrheal disease training framework being developed under Primary Health Care Project funding. Diarrheal Training Units (DTUs) are being established initially in eight medical colleges with past experience in running diarrhea training courses. A professor of pediatrics, a doctor and a lady health visitor or female health technician will be responsible for the case management training at the DTUs. These in turn will provide technical support and materials for training of health workers in DTUs at another 9-10 medical colleges. The resulting system will allow medical students, division medical officers, and training staff for the Feeding/ORT centers (FORTs) to train in the pediatric ward under the direct supervision of an associate professor of pediatrics. A pediatrician, lady health visitor (LHV) and medical officer (MO) from each FORT will be trained on a staggered basis for one week to become trainers in case management at their respective institutions. Once the FORT staff is trained at the DTU, medical officers from tehsil (subdistrict) hospitals, rural health units, and basic health units in the same district will be called to the medical college DTU for a 3 - 4 day orientation to clinical management of diarrhea illness. In Divisions without a medical college, a DTU will later be established at the Divisional hospital, under the supervision of the child specialist. DTUs will also provide complementary training in nutrition practices, particularly prenatal and infant feeding care. Topics will include exclusive breastfeeding, weaning foods and proper feeding during episodes of diarrhea.

- Forty-eight feeding/ORT (FORTs) centers will be established. Immediately after training at the DTU, the District pediatrician, and selected Lady Health Visitor (LHV) and Medical Officer (MO) trainers, will open their district FORT. A FORT will consist of an area within a district hospital with equipment to train medical personnel in the proper use of ORT. Its principal purpose will be to provide experiential training and ORT instruction to health professionals. The staff will coordinate with their respective Provincial Director of Health to establish affiliated FORT centers at proximate district hospitals. The ultimate number of FORTs established will depend upon a training needs assessment. In this Project, inputs are programmed on the assumption of a requirement for 48. The initial emphasis will be on identifying a space in a district hospital providing equipment and trained personnel to train all the appropriate health staff in appropriate ORT and case management of diarrhea. The emphasis will be on experiential rather than didactic training. The training staff will coordinate with their respective medical superintendent and district health officer in organizing the training and providing the necessary follow-up. Paramedical staff will receive indepth hands-on training for 1 - 2 weeks in residence at the FORT center. The training will be predominantly case management of diarrhea, mother-worker interaction and sound nutrition practices. Training at the FORTs will be carried out every other week. This will allow follow-up visits to the ORT Corners during alternate weeks when training is not taking place to ensure that previously trained medical personnel are properly using ORT techniques. Eventually modules for ARI and other case management training can be introduced. Most of the didactic training in each FORT Center will be through video cassette recordings and local language reading materials in a standardized format.

As the FORT centers evolve into permanent health care training centers, it must be decided how many will be required for the volume of continued training. It may be possible to retain only one permanent center per division for a total of about 25.

- Approximately 4,000 ORT corners will be established by trained Medical Officer in his/her respective rural health center (RHC) and basic health unit (BHU). Upon demonstrating competency in the FORT center, the paramedics will return to their respective health facilities and immediately initiate operation of the ORT corner. To ensure effective implementation, a mobile team consisting of the assistant district health officer and the FORT trainers will regularly visit the facilities where trained people are working to encourage the application of new knowledge and skills.

Since it is crucial that the paramedics be able to implement their training immediately, the ORT corner must be established by his/her return. Therefore, prior to the training period, district level personnel will visit the various health facilities to negotiate with the facility supervisor for space and equipment needs. Equipment needed for the ORT corner should be delivered and the Medical Officer (MO) from the unit should be trained prior to the return of the paramedic.

The process of establishing these ORT centers will be phased according to preparedness of the RHCs and BHUs, on a schedule developed by the TAT and the GOP. Eventually, the ORT corner will become the central contact point for information on the correct use of ORT. Mothers will bring their children to the corners to receive ORT and be weighed. The mothers will be instructed how to prepare the ORT product, as well as the daily amounts necessary to give their children. The mothers will also receive instruction regarding proper lactation management, introduction of supplemental foods and good nutrition for children.

For the program described above USAID will provide technical expertise, logistical support, vehicles, quality control support, equipment and supplies. USAID will provide the necessary funding for technical assistance, curricula development, training materials, commodities, registers, research and, if required, some funds for building physical infrastructures.

Training programs, facilities and initial commodities for CDD will be made available to the private sector on a schedule acceptable to the GOP. In addition, training sessions of private physicians and pharmaceutical representatives through their professional associations will be arranged. The Pakistan Medical Association, the Pakistan Pediatric Association, the Forum of General Medical Practitioners, as well as the hakims have already expressed interest in such ORT training.

After the first few years focus on CDD/ORT training, it is proposed that the infrastructure of DTUs and FORTS will evolve into broader primary health care training centers. By institutionalizing the training function into a permanent continuing education infrastructure, the Project will take a step forward in assuring the achievement of sustainability objectives.

b. Technical Skills Training

The Project will support in-service training outside the medical college based DTUs and FORTS, particularly in the early years. Some in-service training will be supported for EPI technical skills such as sterilization of needles and syringes, cold chain management and disease surveillance. The Project will assist provincial MOH offices to integrate the modules into their ongoing EPI training programs.

Two other training programs are designed to support the establishment of national HIS. The first will train a minimum number of people in systems analysis and the use of epidemiological information. More detailed curriculum will be developed for use in teaching hospitals selected to be part of the sentinel site system. Training will be conducted by a Pakistani computer training firm in coordination with Project staff.

The second will provide basic computer training for the district and provincial health personnel. The training needs assessment may identify the need for short courses in other areas such as management and epidemiology.

2. Participant Training

It is recognized that there is inadequate attention in Pakistani basic medical education to high-impact preventive programs, specific child survival interventions (such as ORT), and management and planning issues. Accordingly, Pakistan needs to develop a larger cadre of individuals with advanced technical training to strengthen and sustain a major effort in child survival and child health. USAID can make a major contribution to the long term commitment of Pakistan to child survival and the sustainability of programs by providing a substantial amount of participant training. The amount budgeted for participant training will be revised upward if there is sufficient demand and the training needs assessment justifies it.

Because of the established institutional arrangement under the Mission's Development Support Training Project, it is possible to mount and manage a major participant training effort with a minimum management burden on child survival contract and Mission staff. The Project provides funding for graduate degree programs and for external short-term participant training courses and workshops. One half of participant trainees will be chosen from the public sector, the other half from the private sector. Private sector participants will be chosen in a manner similar to previous Mission private sector participant training programs where advertising is done to recruit candidates, followed by a screening process carried out by contract personnel using criteria mutually agreed upon by USAID and the GOP. The nomination and approval process for government participants will follow established government practices. The Child Survival Project might also finance U.S. institutions to conduct their established short-term training courses in Pakistan.

Participant training programs already identified include:

Graduate degree programs with specialities in areas such as epidemiology, health administration, nutrition, maternal and child health, biostatistics, child spacing or health education;

Short term training of teams of pediatricians and obstetricians will be arranged. For example, teams might be sent to the University of San Diego Well Start Lactation Management Program. They will be expected to implement programs in their Departments upon return.

Child spacing is a crucial part of maternal/child health. Although child spacing is the focus of two other USAID projects, Child Survival Project funding will also be available for short term international training. One proposal is to expose teams of District Health and District Population Welfare Division staffs to successful family planning programs in Asian or North African countries with developed EPI-CDD-Nutrition programs, good health information systems and efficient supervisory systems. Countries such as Indonesia, Malaysia, Morocco, (also Muslim) or Thailand would be appropriate.

c. COMMUNICATIONS AND MARKETING

Effective communications and marketing will be essential to the success of the child survival interventions. An extensive effort is envisioned, beginning with audience research, development of key messages, dissemination through mass media and interpersonal contact, and monitoring and evaluation of effectiveness to determine necessary revision.

1. Communications

a. Audience Research

Research will be conducted to identify/specify the knowledge, attitudes and practices (KAP) of key target groups. Methods will include qualitative analysis, focus group discussions, indepth interviews and observations and quantitative research (i.e. surveys). Of immediate concern are issues such as: the best method to reach unvaccinated women and children; determining potential impact and cost effectiveness of training materials and communication channels for various groups of health workers; identifying messages that would most enhance appropriate ORT product sales and use; identifying messages to create awareness of symptoms and treatment of acute respiratory infection; and, determining the best method for increasing consumption of iodized salt.

b. Key Messages

Key messages will be developed as a result of audience research, expert opinion and sample trials. The messages should be simple, consistent and repeated by all communication channels. The following are likely to be included: 1) the importance of using ORS and how to use it properly during episodes of diarrhea; 2) benefits of exclusive breastfeeding from immediately after birth to 4-6 months; 3) appropriate, timely, inexpensive supplemental foods - including preparation, proper storage and use; 4) feeding during diarrhea and the importance of weight gain; 5) handwashing, clean water, food hygiene and other preventative measures; 6) need for tetanus toxoid immunization; 7) the need to continue children's immunizations, with emphasis on measles; and 8) the effectiveness of iodized salt in protecting children's health and preventing goiter.

c. Dissemination

The most effective combinations of mass media and interpersonal contact will be determined by audience research and surveys conducted by research firms that specify geographic variances and types of risk. Programs of information, education and communication (IEC) developed by consultants and local public relations firms will include:

1) Development of television and radio spots which stress the importance of ORT, immunizations, personal hygiene and proper nutrition.

The Project will finance airing these spots on television and radio throughout the entire country.

2) Development of leaflets and brochures stressing the correct use of ORS, the importance of immunizations, the treatment of acute respiratory infections, and the relationship of personal hygiene and nutrition to disease.

3) Information materials, scientific publications (subscription services) and meetings of various professional associations will be used to promote modern disease management and prevention messages to doctors.

4) Newsletters with updates of present training material will be developed and distributed to all DTU, FORT and ORT corner personnel.

5) Video training films in local languages will be prepared by a national audiovisual laboratory, and special materials will be available (fliers, leaflets, brochures, calendars, etc) to provide medical personnel with appropriate messages on feeding, handwashing and other measures.

6) Training materials that explain to health workers why ORT, breastfeeding and nutrition are interrelated and essential to sustained reduction in disease rates.

7) Campaigns through mass media and marketing to increase the demand for health services and the promotion of healthy behavior by mothers for their infants.

8) Appropriate materials for use in schools, NGOs, community groups, religious gatherings, women's groups and the public at large.

9) Development of pictorial leaflets and brochures and enlistment of private sector marketers and practitioners will also be important means of interpersonal contact.

d. Evaluation

Periodic analysis and evaluation will be required to assure the effectiveness of the IEC programs. Contracted analytical studies will monitor selected families in different geographic areas to determine attitudinal and behavioral changes. In addition, periodic random surveys and analysis of morbidity and mortality records will be taken to verify results. Based on these evaluations, the IEC programs will be revised or continued as appropriate.

2. Social Marketing

Social marketing efforts use the same approach described above. Marketing research is designed to identify pricing, packaging and promotional effectiveness of various products. Several efforts have been identified for support under this Project.

Under the current Primary Health Care Project, USAID may provide funds to the NIH for the GOP/UNICEF/Aga Khan Foundation iodized oil injection effort in the northern mountain valleys of Pakistan. The Project will provide assistance in the marketing of this effort and if further commodity or surveillance assistance is required for iodized oil administration to complete coverage of at risk population, this Project will provide funds.

Since successful marketing of iodized salt is the long-term solution to the devastating rates of infant mortality, cretinism and goiter for the northern mountain valleys of Pakistan, the Project will also work with the GOP, UNICEF, WHO and Aga Khan in determining the potential for increased distribution and social marketing of iodized salt. Project funding will be provided if necessary for the implementation of such programs.

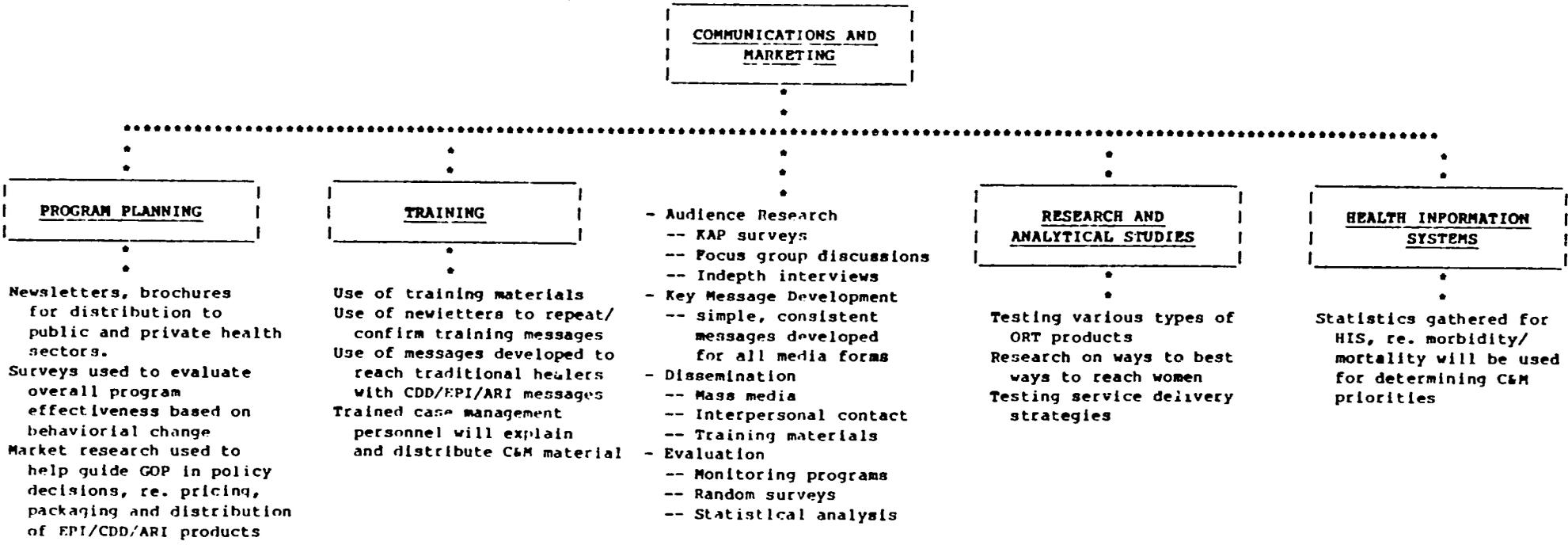
Assistance to investigate other effective distribution networks for appropriate ORT product will be provided, especially commercial systems currently used by pharmaceutical companies to market their products. These companies have had success through deployment of detail men, point-of-sale displays and some cinema ads.

The GOP sees a rapidly expanding role for the private sector in ORT. The Project will try to stimulate private sector marketing of ORT to significantly increase access to and use of appropriate products. A June 1987 UNICEF study reported a very high awareness of ORS among doctors and chemists but relatively small use among homeopaths and hakims. The Project will fund a study covering ORS price, packaging, distribution, promotion, market research, feedback and mass communication to develop a strategy to expand the role of the private sector to become a major channel for ORS production, promotion and distribution. The public sector will continue its role of health education in the correct use of ORT. Activities will be designed for impact on health professionals and pharmaceutical representatives as well as the community at large.

In addition to costs associated with research, key message development, media and marketing dissemination, and evaluation, the Project will provide funds for short term consultants as appropriate.

Again, it is expected that the interrelationship between components will reinforce communications and marketing efforts. Table 7 illustrates the linkages of Communications and Marketing with each of the other components.

COMMUNICATIONS AND MARKETING LINKAGES



d. RESEARCH AND ANALYTICAL STUDIES

Planning for child survival programs is difficult because of the scarcity of reliable data. In response, a major component of this Project includes strengthening the capacity of the GOP to conduct problem solving research in limited controlled settings and to analyze and apply results to health programs. The Project also involves experimentation with alternative delivery systems. Most importantly, the Project requires that each intervention be periodically evaluated for its effectiveness and sustainability. As research projects will be determined by the needs of the other components, the GOP and the TAT as a committee will approve and assign each project.

Operational Research on solving problems identified in each intervention will be conducted in collaboration with the health departments, medical colleges and assigned research institutions such as the Pakistan Medical Research Council. Research will include clinical and nutritional aspects of diarrheal disease control, infant feeding practices, social and medical aspects of service delivery strategies, testing of information and supervision systems, and policy studies on issues relating to ORT products and distribution, effectiveness of EPI injection equipment and strategies to include women.

To facilitate networking between Pakistani and international researchers and to minimize the management burden on USAID and the TAT, some research support will be channelled through buy-ins to centrally funded projects. For example, a planned PHC project buy-in to PRICOR for technical assistance and funding for operations research on health services delivery systems would be continued with Child Survival Project funds.

Assistance in research protocol development, data analysis and report presentation will be given by the TAT. Participation in scientific meetings and national and international congresses to disseminate findings and discuss policy implications will be encouraged. Again, research and analytical studies is closely linked with the other components. Table 8 shows ways in which the TAT team will coordinate activities interrelated with research.

RESEARCH AND ANALYTICAL STUDIES LINKAGES

RESEARCH AND ANALYTICAL STUDIES

PROGRAM PLANNING

Reliable data gathered to be used for program planning coordination within Project and with GOP
Interventions evaluated for effectiveness and sustainability
Coordinate research with medical colleges and research institutions

TRAINING

Use decisions of appropriate ORT Product in case management
Use methodologies for reaching women
Use most effective injection equipment
Trained MPH personnel used to conduct research
Research held at DTU medical colleges

- TAT decides on research projects, works with medical colleges and research institutions
- Problem solving operational research in CDD, EPI and ARI
- Epidemiological and statistical research

COMMUNICATIONS AND MARKETING

Appropriate ORT product will be used for messages
Use methodologies for reaching women
Use methodologies for reaching traditional healers

HEALTH INFORMATIONS SYSTEMS

Epidemiological data gathered will be used for research
Computerization of data used in studies
Baseline and interim evaluations of impact using research evaluations

The Research and Analytical Studies component of the Project provides funding for a variety of studies, pretesting, evaluations and small-scale experimental efforts. The list below is illustrative of the kind of Operational and Epidemiological Research activities that may be included:

1. Operational Research (OR)

A priority will be the search for the best strategy for reaching unserved women. The role of traditional birth attendants (TBAs), health technicians, LHVs or other health auxiliaries will be studied. Another study will examine the possibility of replicating a North West Frontier Province (NWFP) program that has improved TT coverage considerably by temporarily assigning LHVs to female mobile teams.

Another OR topic will be identification of acceptable and safe injection methods and equipment. The current EPI has three delivery strategies - fixed center, outreach and mobile. Approximately 75 percent of the vaccinations are given by outreach teams, sometimes door-to-door. The commitment to an outreach approach requires the transport of vaccines in portable carriers to maintain the cold chain and either single-use injection equipment or easily transportable sterilizers. Reusable syringes and needles are supposed to be used in the fixed centers - both in the EPI and dispenser's room - but single-use syringes and needles are diverted to fixed centers when supplies are exhausted. Ways to improve supply and supervision of injection equipment will be investigated.

Other OR studies will include:

- use of solar-powered refrigerators
- logistical practices and improved management of procurement, distribution, monitoring, and maintenance of supplies and equipment.
- use of injectable polio vaccine for remote areas (only two doses)
- alternative sources of financing primary health care, including feasibility of user fees
- women's use of health facilities, and women as health care givers

2. Epidemiological and Statistical Research

Epidemiological research will be coordinated by the TAT and undertaken by various GOP organizations. It is expected that future assistance will be provided by returned epidemiologists with MPH degrees financed by the Project. A priority will be to conduct evaluations of the epidemiological impact of EPI and ORT.

Other projects will be as follows:

- development of systematic vital events registration
- a specific attempt to assess the true rate of neonatal tetanus (if a neonatal tetanus survey now being considered by Global 2000 is successfully conducted, this information need should be satisfied)
- development of a workable surveillance system to obtain epidemiologic data on disease outbreaks.
- substudies to ensure the longer term development of health information systems.

The application of the existing disease surveillance system and use of health information systems will serve as a future source of epidemiological data.

e. HEALTH INFORMATION SYSTEMS

The weakness of present health information systems in Pakistan makes it difficult to measure and effectively manage a child survival project. Improvement of the information and reporting system for both management and epidemiological data will initially be related principally to the control of diarrheal diseases and the expanded program of immunization. The TAT will assist the MOH to develop and use computerized health information systems at both the federal and provincial levels. Although a lot of data is generated by many different reports, there is nearly universal recognition at the federal and provincial levels that the information needed by decision makers and managers is not presented in a usable, timely fashion. The climate for a major initiative to revamp the system is positive.

The health information systems will upgrade the quality of health services through better identification of needs, more careful monitoring and management of resources and information on which to base decision making. The HIS will provide measures of project impact and form a base from which to investigate disease outbreaks and other epidemiological enquiries.

The HIS needs a system for standardized collection, analysis and dissemination of information. Given the size of Pakistan and the magnitude of the existing data collection problem, the Project will focus on improving existing methods, identifying a limited number of key indicators and progressively introducing new methods of data collection, processing and analysis. This work will draw on the experimental monitoring system developed under the Primary Health Care Project and currently being tested in about 40 health centers. The EPI program information system is fairly good and will also be a basis for further HIS improvements.

HIS usefulness depends not only on the collection and reporting of data, but also on the analysis and application of those data to resource allocation and other decision making. Traditional and political considerations often weigh heavier than specific data. Therefore considerable effort, for example in training, is planned to ensure that health and management data collected become the basis of decision making.

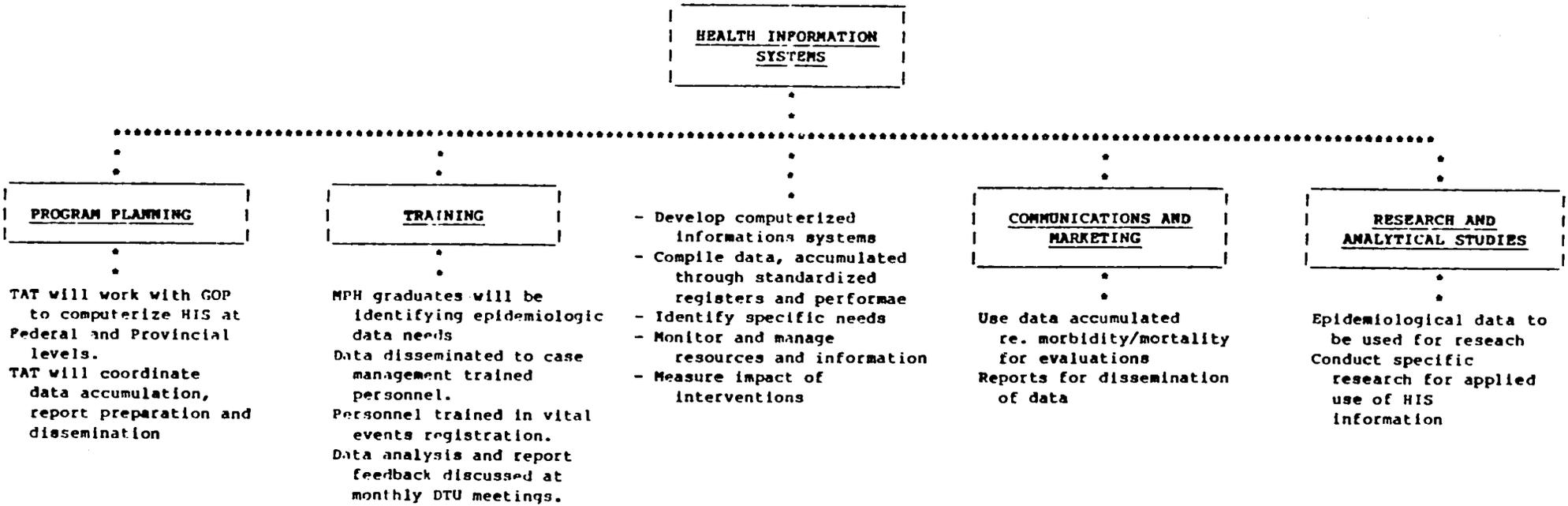
The first objective for the new HIS will be to track EPI and CDD progress. Data on the health and nutrition of the under five population, including establishment of a vital events registration, will eventually be addressed. Lack of standardizations of registers and performae, irregular dissemination of information and the need for computer facilities at provincial and district levels are all problems that will be addressed.

Systems analysis will play a key role in defining information needs for planning and decision making at each level of the health system. Surveys will remain important providers of information. Survey methodologies will be carefully reviewed for validity in order to obtain statistically valid information. Standardization and consistency will be obtained by use of uniform and simple registers and performae in hospitals and health centers. An operation manual will be prepared by the TAT and MOH and will include standard definitions of diseases as well as guidelines for reporting and analysis procedures. The TAT will also coordinate the provision of computer equipment to Provincial and District Health Offices and approximately 20 sentinel reporting hospitals following preparatory training in epidemiology and computer use.

A national demographic and health survey (DHS) with the assistance of the centrally funded Westinghouse project is being planned for 1989 with the National Institute of Population Studies and the Federal Bureau of Statistics. USAID population funds have been allocated for this survey. Excess PL 480 rupees have been allocated for a national health examination survey to be conducted by the Pakistan Medical Research Council and the Federal Bureau of Statistics. Technical Assistance is being provided by the U.S. National Center for Health Statistics and CDC. These two surveys will provide useful baseline data regarding infant mortality for the Child Survival Project. A DHS will likely be planned for 1993 or 1994 for family planning data needs. To the extent practicable it will be designed to provide end of project information on child survival as well.

Coordination of the TAT is an obvious necessity to the implementation of health information systems component. Other linkages to Project components are illustrated in Table 9.

HEALTH INFORMATION SYSTEMS
LINKAGES



3. Phase II Non Project Managed Activities

In the 7th five Year Plan, the GOP intends to continue significant policy revision relevant to health care. Included are initiatives to decentralize the health bureaucracy, increase the participation of women in health care, improve health management capabilities, encourage practitioners of traditional medicine, pursue inclusion of hygiene and nutrition courses at various levels of formal education, promote the private sector and provide support for NGOs.

USAID recognizes the importance of these initiatives and will consider supporting the GOP and private organizations that would further project goals of child mortality reduction and sustainability. The initiation of Phase II is dependent upon the identification of existing institutional capacity or the development of new capacity to manage resources effectively. Approval mechanisms for such activities will be developed acceptable to the GOP and USAID. USAID involvement will be limited to funding capable organizations accompanied by periodic review of activities. Preliminary estimates indicate that \$23 million would be required for Phase II activities, which would include approximately \$5 million for NGOs and an estimated \$5.6 million for support to activities initiated by other donors. The appropriate entity for management of these funds will be identified by the technical advisory team. Possible organizations are the Pakistan Medical and Dental Association, the NGO Coordinating Council or the proposed National Children's Commission.

The GOP is considering the creation of a National Children's Commission. While discussions are still underway regarding its exact role and composition, it is anticipated that the Commission would include the Ministers of Health, Finance and Planning as well as the Chief Ministers of each of the provinces. Such a composition is designed to assure greater political support.

The Commission, assisted by the secretariat, would be a focal point for policies and programs in child survival, health and welfare. It will have a coordinating role with operating agencies such as the MCH and NCH in programs related to children and is not presently envisioned to carry out operational programs of its own. In addition to child health, the Commission is likely to be involved in programs related to early education, handicapped children, child abuse and similar subjects. The proposal includes the establishment and staffing of a permanent, autonomous Institute for Child Survival and Development that would be the operational arm of the Commission. A National Children's Fund would provide resources for approved projects. The Commission offers great promise for increasing awareness and visibility of the child survival effort and to expanding its scope. However, care must be taken that the Institute and Fund do not duplicate responsibilities of existing GOP agencies.

To support the establishment of such a Commission and Institute, USAID will consider providing initial financial support. This could involve rental of a building, salaries and local costs for the staff, computers, office equipment and supplies, vehicles, and publicity materials and

messages. To the extent desired, money for various project activities would be channelled through the Fund. UNICEF strongly supports this proposed GOP initiative and would consider providing additional grant funding.

Further programs which USAID will consider funding are described below. It is intended that these activities not be dependent upon the establishment of a Commission before being funded. Accordingly, another capable organization may be identified to play an intermediary role. Activities have been divided into the following categories; support for management skills development, support for NGO activities, support for the private health sector, support for increased numbers of female health workers, incentive grants for medical schools, and support for activities involving other donors.

a. Support for Management Skills Development

There is a growing recognition by the GOP that considerable improvement in management is required in order to improve the quality and efficiency of the health care delivery system. A PC-1 has been approved for the establishment of a Health Services Academy in Islamabad. This federal institution will provide a variety of short term and degree courses in administration and management of both clinical and public health programs. The Asian Development Bank is funding this institution.

The Punjab has already established an institute for in service training in management and administration. Senior level medical officers, District health officers, assistant district health officers, deputy directors, and medical superintendents are brought to Lahore for two weeks to discuss and learn about program priorities, administrative and management policies and practices of the health department, and some updated knowledge about priority government issues in health. The NWPP is seriously considering the establishment of such a training institute. Sind has also discussed the idea.

Although the Primary Health Care Project has focused considerable effort on improving management, it is not proposed that a major focus in the Child Survival Project be addressed at the overall management of the health departments. This interest of the provinces and the federal government, however, should be encouraged. The GOP has specified the need for management training in its 7th Five Year Plan and has proposed the following:

1. The tehsil/taluka (subdistrict) will be made the main administrative health unit for the national system. Health officers will be provided with appropriate management skills and will be supported by technical staff.

2. A Chief Medical Officer will be responsible for all district facilities including the district headquarters hospital.

3. District and teaching hospitals will have appropriate management systems operated by career health managers.

4. A Health Services Academy will be set up to train managers. It will run courses for M.Sc, Ph.D in health administration as a pre-service requirement. Short courses will be organized for the senior staff, the in-service trained managers and the primary health care physicians.

To support the GOP development of an institutional capacity for management training, USAID will consider assisting with management studies, preparatory training and in-service training as described below.

Contracted Management Studies: Consideration of funding will be made for management studies and analysis needed by the MOH to ascertain existing program effectiveness related to maternal and child health or to review the feasibility of proposed management changes to improve program effectiveness and enhance program sustainability. These studies could be in any area chosen by the GOP (and concurred in by USAID) including logistics, personnel management, delegation of authority and/or regulation of pharmaceuticals. USAID would consider making available a fund to be used by the GOP or other approved entities for studies or evaluations contracted out to Pakistani individuals, institutions, or consulting firms. This fund would provide an incentive to the GOP to make greater use of private sector consultants or non-ministry entities for studying management problems.

Improved Management Initiatives: Funds would also be considered for the federal or provincial governments and approved private entities to initiate specific actions to improve the management, cost-effectiveness and sustainability of maternal and child health activities recommended by the studies referred to above.

Preparatory Training: The interest and feasibility of incorporating a short management training course into the curriculum of medical schools will be explored. This course may be alternatively administered by the MOH and provided at a regional management training facility. Training could take place subsequent to medical school and prior to posting and registration. Some short-term services and training materials will be provided.

In-service Management Training: Initiation and/or expansion of short-term management training to prepare managers of health care entities in skills needed to administer these facilities. These short-term courses would be offered by an appropriate Pakistani entity. If requested, USAID will consider financing the preparation of such courses and the start-up costs for four years at a descending scale.

by an appropriate Pakistani entity. If requested, USAID will consider financing the preparation of such courses and the start-up costs for four years at a descending scale.

b. Support for NGO Activities

There are approximately 4000 NGOs and community based organizations registered with the Social Welfare Department. They range from national to local and have the capability to undertake small-scale, innovative, and flexible programs not addressed by the formal GOP ministries.

In addition to the registered NGOs, there are a large number of unregistered NGOs such as village committees, ward or neighborhood groups, and small, locally based trade groups. Connections to government agencies are usually through elected local bodies such as union councils, district councils, and tehsil councils.

The GOP intends to support NGO activities during their 7th Five Year Plan. In addition, recognizing the current success of NGOs in family planning and child survival activities, USAID suggests that at least \$5 million of the estimated \$23 million be designated solely for NGO use. If the National Children's Commission is operating it will be responsible for allocating monies to approved projects. In the meantime however or as an alternative, the administrative mechanisms under the proposed Special Development Fund, the NGO Coordinating Council or some other institution could play an intermediary role in approving projects and allocating funds.

The Project will seek to energize registered and unregistered NGOs to carry out maternal and child health activities. Appropriate U.S. PVO activities could be funded if approved by the GOP. Preference will be given to programs related to diarrheal disease control and immunizations in areas not currently covered by government services.

In addition, funds will be used to:

- publicize the program nationwide;
- provide technical assistance to help candidate NGOs develop their proposals;
- review proposals for technical/managerial acceptability;
- fund qualified proposals in a timely way; and
- monitor and audit implementation.

Criteria for the entire program will have been previously agreed upon by the GOP and USAID.

c. Support For The Private Health Sector

As has been described, the majority of health services in Pakistan are performed by the private sector. This broad category includes private physicians, traditional practitioners and homeopaths, traditional birth attendants (TBAs) and pharmaceutical representatives. The Project has included their participation in the five USAID managed components. In addition, the Project intends to support the GOP in developing further incentives for private sector participation. The 7th GOP Five Year Plan includes the following:

1. The GOP has initiated a number of incentives to private medical practitioners including duty and sales tax concessions on imports of medical equipment, income tax concessions for practices set up outside municipal limits, provision for subsidized land for hospitals, and a special subsidized credit line provided through the Small Business Finance Corporation.

Unfortunately, the incentives provided to date have not attracted doctors to rural areas (less than five percent of doctors in private practice are located in rural areas of less than 10,000 population). Likewise, economic incentives and personal interests are such that physicians give more emphasis to curative care and the prescription of drugs rather than preventive care and the use of simpler and effective treatments like ORT. Virtually no private practitioners are involved in the immunization program. However, further incentives, training and rewards are being offered by the GOP. It is hoped that these will encourage more doctors to go to rural areas.

2. To encourage and improve the practice of traditional medicine and homeopathy the GOP will implement policy change, develop affiliations between boards/universities and relevant training institutions for the award of diplomas and degrees, develop graduate course curricula for traditional medicine colleges, provide grants to improve educational standards, provide loan facilities for establishment of private clinics, enact measures to control the manufacture, sale distribution, efficacy and quality of traditional and homeopathic medicines and drugs, establish an institute of medicinal botanics and improve functions of the respective National Councils.

3. A key person relating to mothers in the village is the traditional birth attendant (TBA) who delivers 90 percent of the babies. She is perhaps the single most important private practitioner in influencing mothers' behavior because of her close contact at the village level. 30,000 TBA's have already been trained under the Accelerated Health Program. To continue developing the role of the TBA, the GOP intends to provide additional TBA training in functions such as safe deliveries, monitoring the nutritional status of expectant mothers, recording birth weights of newborns, assisting in immunization, treating diarrhea and referring high risk cases.

A continuing linkage between the TBA and the government health system is desired. The consensus seems to be against putting the trained TBA on the payroll of the MOH, but compensation and incentive for these additional activities is being considered. Payments may be supplemented by other incentives (free or subsidized ORS packets which can in turn be sold for the same price that other private practitioners - physicians and chemists - sell them. Since other donors, especially UNICEF and CIDA are active in this field, USAID would contribute only to the extent that TBA training and incentive is left uncovered by other donors.

4. Aside from physicians, there are a large number of pharmacists (chemists) and other retailers of medical supplies which have a significant effect on mothers through their advice and promotion of specific products. The GOP intends to standardize quality and control of drugs and medicines and encourage distribution of recommended treatments. Through their professional associations, pharmaceutical representatives will be invited to appropriate training and promotional courses offered in their area by the Project, and will be targets of educational and communications efforts especially related to ORS, EPI and ARI. Social marketing of ORS (discussed above) will involve incentives to entice retailers to more actively promote its use.

To support these efforts to attract private practitioners and groups to play a more active role in maternal and child health, USAID will consider providing funds for various subgrants:

--Grants to physicians or hospitals to purchase cold chain equipment, vehicles, or other supplies in exchange for agreed upon services with specific groups for ORT, immunization, nutrition or maternal health services.

--Grants to private firms and other entities to organize village-based child and maternal health promotional efforts. Appropriate sharing of the cost with the private firm would be included, as well as careful review of the commercial promotion, if any, contained in the event. Such grants would be to those capable of organizing and carrying out community-based activities which are both entertaining in nature and transmit maternal and child health messages. For example, one commercial firm, to promote its product has been highly successful in organizing "baby shows", village by village, to which mothers bring their babies. It is an occasion for entertainment and light-hearted fun, and attracts most of the women of the village. Another example may be a village level "health fair" with entertaining exhibits. These may be ideal for combining entertainment with maternal and child health education, such as messages on the correct use of ORT. Under the Project, private entities and commercial firms with experience in village-level promotion will be invited to submit proposals for possible financing.

--Grants available to traditional practitioners or homeopaths to strengthen their contribution to child survival and health. For example the hakims have already expressed interest in ORT training.

d. Support for Increased Numbers of Female Health Workers

The cultural constraints on the role of women have a major impact on Pakistan's development. The role of rural women is defined by specific home and agricultural activities. Inaccessibility and lack of education make influencing behavioral change related to child care much more difficult. Their isolation and lack of community activities or organizations means women must be reached for the most part through personal interaction rather than through groups. Cultural factors may substantially increase the cost of services aimed at women and dictate that women, far more than men, are most effective in interaction with mothers and children.

Currently, the GOP public health structure is overwhelmingly male dominated. Those posts open to women in the primary health care structure, (lady health visitors, nurses, and female medical technicians) are characterized by a shortage of applicants. Constraints include lack of education to meet the qualification of the job (in turn due to lack of educational opportunities for women in rural areas), lack of facilities (appropriate hostels and transportation) and a cultural bias against women working outside the home.

Increased participation of women is important to the success of the Project. In its 7th Five Year Plan, the GOP is emphasizing the need to increase the involvement of women. Besides the training and expanded role for the TBA, measures will be taken to increase the numbers of female health workers at all levels. Specific activities include; building necessary facilities for women at training institutions, increasing the percentage of women admitted to training programs so that two-thirds of all auxiliaries are female by the end of the Plan and improving the training, status and pay scale of nurses.

The Project will make every effort to support the GOP in these important efforts. The experience of the PHC project in expanding recruitment and training of female midlevel workers will be built upon. Project training specialists can provide some support to GOP efforts to enlarge and improve the cadre of female staff. In addition to activities in the first Phase, the Project may experiment with performance-based disbursements related to the increased deployment of women in maternal and child health in the GOP primary health care system in both rural and urban low-income areas.

It is intended that Project funds be available to the Provinces for construction of hostels for females, and provision of transport for females on mobile teams. The acceptability of inexpensive three-wheeled vehicles may be tested. This would address two of the key constraints which now discourage women from applying for vacant primary health care posts.

The budget is based upon a maximum U.S. commitment to provide funding for the construction of up to 40 hostels and the same number of outreach vehicles for women. The maximum commitment would only be met over the

life of the project as meaningful innovations to expand the role of women in health programs are implemented.

e. Incentive Grants for Medical Schools

Constant changes in basic medical education are necessary in all countries because of changing priorities, new knowledge and the development of new techniques for child survival and primary health care. There is a particularly urgent need to strengthen medical education in Pakistan because the quality of training in fields relating to child survival and primary health care is so poor. To address sustainability of Project objectives it is essential to strengthen basic medical education in areas such as pediatrics, community medicine, and obstetrics.

The Project proposes a program of grants to medical colleges as part of Phase II that will be funded if management capacity for this program is identified and/or developed. Through policy dialogue there will be an effort to increase the priority given to pediatrics. The concept of social or community pediatrics will be promoted. There will be an effort to convince and encourage obstetricians to give greater priority to preventive child survival measures. Technical assistance and materials will be given to community medicine departments in order to enhance the community orientation of basic medical education.

Other problems in medical education will also be addressed. There are serious imbalances between personnel needs and supply in the health sector in Pakistan, with unemployment of doctors and shortages of female technicians, nurses, and paramedical staff. There are more than three times as many doctors as nurses. This is a result of a rapid increase in the number of medical colleges to 17, and the high degree of subsidization of medical education. It is estimated that 12.5 percent of doctors are either unemployed or working in professions unrelated to their training. Table 10 shows this imbalance in comparison with other countries in the region.

Table 10

Health Manpower 1965 and 1980

	<u>Population/Physician</u>		<u>Population/Nurse</u>	
	<u>1965</u>	<u>1980</u>	<u>1965</u>	<u>1980</u>
Pakistan	3,160	3,480	16,960	13,140
Burma	11,660	4,680	11,410	4,770
India	4,860	3,690	6,500	5,460
Indonesia	31,820	11,530	9,500	2,300
Sri Lanka	5,750	7,170	5,020	2,400

Source: World Development Report 1985,
Planning and Development Div. IBRD

The problem is compounded by the widely accepted view that the medical college curriculum and training place far too little emphasis on

community health, preventive health care, and on management of public health institutions. Curriculum also lacks adequate attention to social pediatrics. Thus, even where excessive competition forces at least some of the excess doctors to the outlying areas, they are not prepared in the primary health care needed by their clientele. For example, one USAID medical consultant observed that at the present time in Pakistan, the treatment for diarrheal disease is more often less effective when treated by a physician than when treated by a trained paramedical.

Under this component, medical colleges will be encouraged to a) initiate community medicine and social pediatrics programs into their curricula, b) carry out operational research of various kinds as needed by the public health system, and c) most importantly, initiate outreach activities in community health. Using the latter example, medical colleges would be encouraged to present proposals to take a direct operating role for primary health care and particularly maternal and child health in presently underserved areas, as agreed upon with the local health department. Proposals would be accepted from medical colleges to operate RHC/BHU type or outreach facilities in a given location, providing all the basic coverage normally associated with provincial health facilities. This outreach activity would serve several important functions:

--as a very practical learning environment for future physicians in needed community health skills;

--as an opportunity to experiment with more effective techniques for providing improved maternal and child health care services, and therefore serve as a demonstration for other neighboring regions; and to provide needed maternal and child health care to populations not adequately served by the MOH facilities.

The medical colleges will play a key role in the Phase I training program at DTUs and primary health care training centers. They will also be involved in some of the research. A conscious effort should be made to engage the medical colleges actively in various Project activities. USAID would consider making a fund available for administration by an agreed upon intermediary (e.g. the National Children's Commission or an agency of the MOH in collaboration with the Pakistan Medical and Dental Council), to publicize the fund and to review proposals from the medical colleges for activities that meet the curriculum reform or outreach criteria of the fund. Grants would then be made to the medical colleges (much as grants described earlier for NGOs) to carry out the agreed-upon activity.

The fund would also be available for some short-term technical consultant services, workshops and seminars related to curriculum reform, teaching equipment and materials, post graduate training for faculty (this would be in addition to participant training budgeted separately) and transport.

f. Support for Activities Involving Other Donors

As previously noted, other donors are involved in child survival activities in Pakistan. The Project has been designed to accommodate rather than duplicate these programs. It is recognized, however, that there are activities not currently addressed in this Project or by other donors that may deserve support. An all inclusive child survival program would include much more activity in safe motherhood, improving the referral system, and water and sanitation than is contained in this Project.

After the initial approval of sub-activities for each program, USAID is not expected to be deeply involved in any operational activities. Approval will be by program management with a system for monitoring and review to be established after the implementation plan has been approved.

Examples of possible collaboration with other donors that have already been discussed include:

--Health information systems. Although Phase I of the Project includes a component to improve HIS, it will focus mostly on child survival related health and management information systems. Global 2000 and the Global Task Force for Child Survival, with technical backing from CDC, are considering responding to the need for revamping the overall health and management information system. The UNDP has also expressed willingness to provide technical assistance toward this effort. If such an effort is undertaken, the Project could supplement the limited resources of other donors with computers and other equipment, funds for training, etc.

--Communications. CIDA is funding a modest communications project in support of EPI and CDD. It will be soon redesigned. USAID and CIDA are exploring the possibilities for coordinating our respective efforts in ways that might involve child survival project funding for audience research, message and materials development, and media time related to CIDA inputs.

--Grants to UNICEF. UNICEF has drawn up a \$80 million five year program, much of it related to child survival, with only half the funding available from UNICEF's regular budget. Funds from other donors are being sought for the other half. The possibility of a project grant to UNICEF to support activities in communications, EPI, ARI, or control of iodine deficiency disorders has been discussed.

--UNDP would like to provide technical advisors in support of child survival and has approached USAID for suggestions. It was agreed that the possibility of project funding for commodities, training or other costs associated with technical assistance from UNDP would be explored.

--Global 2000 is also considering initiatives in TBA training, maternal health, and strengthening the referral system. The Association

for Pakistani Physicians in North America in collaboration with Project Concern International are interested in initiatives in medical education and outreach activities. The Aga Khan University and Foundation want to expand their child survival program. These organizations have approached USAID about supplementary support for projects they are developing.

g. Summary

The above is an outline of the entire Project as designed by a joint Pakistani and American team and cleared by key federal and provincial officials. Elements taken up or otherwise addressed by other donors would be deleted from USAID's bilateral project structure. As USAID's discussions with the other donors and with the GOP reach acceptable conclusions, additional portions appropriate for USAID's support would be considered and, if approved by AID/Washington, the project would be amended accordingly. Our expectation is that over roughly the next two years, most or all of the components proposed by the design team will be addressed and undertaken by USAID, the GOP or another donor.

Coordination and collaboration among the various donors operating in the health sector in Pakistan has been extraordinarily good for a number of years. Regular meetings are held monthly among all the major donors in health. Moreover, informal coordination and contact occurs frequently. Project documents are routinely shared, and operational problems and difficulties are frequently discussed. UNICEF, WHO, CIDA and several other donors were involved in the design process and their comments and observations have been incorporated into the final.

True coordination is, of course, never easy. The simplest way to operate, at least in the short run, is unilaterally. Nevertheless, the greatest long-term benefit derives from true collaboration among all parties so that all efforts are joined to achieve the same objectives. The design of USAID's Child Survival Project probably took longer than it might have had the GOP and the other donors not been so actively involved in it. Also, the Project as proposed is more complicated and larger than any single donor, USAID included, would have prepared itself. We believe the complexity of this Project is more than compensated for by the cooperative intentions of the donors and the GOP that were fostered during its development. We also believe that if many donors do act to take up various portions of the Project, the efforts required of each individually will be much less, much simpler and more successful.

IV. IMPLEMENTATION PLAN

A. Administrative & Monitoring Arrangement

1. Introduction

The Child Survival Project will continue many of the effective linkages and relationships established under the Primary Health Care Project (PHC).

First, to provide further continuity with initial child survival efforts begun during the PHC project, many of the provincial coordinators initially hired under the PHC project will be retained by the Child Survival Project. This will provide staff continuity for the on-going development of Diarrheal Training Units (DTUs) begun under the previous PHC project and expansion of the training structure to the 48 FORTs.

Second, after signing of the project agreement, AID/HPN staff and the provincial coordinators will conduct provincial level pre-planning. Further, they will gather preliminary data, survey perceived training needs and seek provincial input for the steps, decisions and linkages necessary to establish a responsive and effective implementation plan.

After contract signing USAID will provide project oversight and engage in policy dialogue while the Technical Assistance Team (TAT) will coordinate and provide technical input working both as an integral part of a federal planning and coordinating unit and directly with the provinces in planning and implementing the provincial specific programs.

At the provincial level Project Pakistani professional staff will work on-site with Provincial Health Departments to ensure provincial level liaison between the Federal and Provincial Health professionals. Moreover, these provincial project coordinators will help organize provincial project activities. Most importantly, they will provide an important communication and feed back link directly between the TAT and provincial health professionals.

After the TAT is selected, the contract project manager is expected to arrive during the first quarter of 1989. The manager is expected to be followed by the rest of the TAT during the second quarter of 1989. Initial activities will include a training needs assessment conducted in coordination with each provincial Department of Health. The assessment will draw on the survey information developed earlier by AID/HPN staff. The needs assessment will ascertain the number of trainees, the selection of training sites required, and which categories of personnel should be trained. Specific training subjects will also be determined. The results of this needs assessment should be available during the third quarter of 1989.

Furthermore, information from the needs assessment will be used to establish a focused and responsive training plan. Thereafter, provinces will be able to identify and appoint training staff for the DTUs and FORTs.

To better organize the communication linkages between Federal, USAID and Provincial officials, the PHC project practice of holding quarterly inter-provincial coordination meetings will be continued. These key players will monitor, plan, coordinate and compare Project activities in order to identify and resolve project implementation problems.

2. USAID Responsibilities

The first Phase of the Project will be monitored by USAID/Pakistan's Office of Health, Population and Nutrition (HPN) . This office currently has three USDH, two USPSC (dependent spouses), five Pakistani professionals and three Pakistani project assistants. One USDH, two Pakistani professionals and two Pakistani project assistants will monitor the U.S. project management contractor. If various grants under the second Phase are approved later in the Project, Mission staff will be tasked to review and concur in the selection of child survival related sub-projects. Other Mission offices, e.g. the Contracts Office, Commodity Management Office, Project Development and Monitoring Office, Engineering Office, etc., will provide operational backstopping and assistance.

The Office of Health, Population and Nutrition (O/HPN) will be responsible for overall supervision and monitoring of the Project. The Project Officer (PO) will be directly involved in policy dialogue with GOP counterparts. Specifically, USAID will be responsible for:

a. Project Policy

O/HPN will develop policy for the technical assistance team (TAT) and other project intermediaries to facilitate project implementation, thereby providing clear guidelines to enable project objectives to be obtained in an orderly and timely fashion.

b. Supervision

O/HPN will oversee the TAT's operations to ensure that the Project complies with USAID's mandates, thereby providing the team with information and direction to allow smooth, efficient implementation.

c. Monitoring

O/HPN will direct all evaluations of project activities, both internal and external. It will be the responsibility of the PO to coordinate evaluations, ensuring that appropriate adjustments are instituted for improved project implementation.

d. Contracts

In general contracts for commodities, technical assistance, construction and other goods/services will be direct USAID contracts. The TAT will itself contract for staff and support services.

3. Technical Assistance Team (TAT)

The TAT will be responsible for coordinating and managing day-to-day Project activity. In coordination with GOP counterparts and O/HPN the team will handle all hands-on Project management to include:

- a. Program Planning
- b. Training
- c. Communications and Marketing
- d. Research and Analytical Studies
- e. Health Information Systems
- f. Commodity Procurements
- g. Construction

4. GOP Responsibilities

The GOP will ensure that all PC-1's and other documentation related to this Project are prepared and approved in a timely manner. Although other GOP entities may be involved, it will be primarily the MOH that will initially manage the GOP activities under the first Phase of this Project in coordination with the Project Contractor. When and if the second Phase is approved the National Children's Commission or other organization will oversee award of grants and incentive programs. GOP officials will work closely and collaboratively with the TAT and USAID personnel to ensure the efficient operation of Project activities. GOP will designate responsibility to appropriate health entities for the following:

At the federal level:

- a. Draft and submit all relevant GOP documentation.
- b. In consultation with O/HPN, develop overall project policies, strategies, and implementation mechanisms..
- c. Provide policy direction to the National Children's Commission.
- d. Ensure Project follows GOP/USAID agreed objectives, schedule, etc.

At the provincial level:

- a. Implement and supervise standard case management for CDD, ARI, etc in DTUs, FORTs and ORT Corners.
- b. Manage provincial project implementation including:
 1. Planning/Evaluations
 2. Training
 3. Communications and Marketing
 4. Research
 5. Improvement of Health Information Systems
 6. Commodity distributions
 7. Construction supervision

B. Implementation Schedule

Project activities will take six years from the date the Project Agreement is signed. A proposed implementation schedule is provided in Table 11. As shown in Table 11, CDD/EPI activities will continue from the current Primary Health Care Project. Most other activities with the exception of some research will take a minimum of one year to commence. The use of short-term expatriate and Pakistani technical assistance will strengthen the efforts of the long-term technical advisors as shown in Table 12.

Once the Agreement is signed, the first priority will be to draft the request for proposal (RFP) for the TAT. Both the GOP and A.I.D. will participate in that process. Project vehicles which will be used by the TAT will be ordered as soon as the Agreement is signed as will household and office furniture and equipment for the TAT.

The process of contracting with a local A & E firm for the refurbishment or renovation of DTUs, Feeding/ORT centers and warehouses will begin in early 1989, and contracts will be executed with individual construction contractors in late 1989. Construction of training facilities will be phased according to start-up times of case management training programs. Timing of construction for EPI warehouses will be determined by the TAT and appropriate provincial authorities. Orders will be placed for the furniture, equipment to ensure their arrival prior to the completion of each individual construction/renovation project.

A series of task tables and detailed management plans delineating major action steps and milestones necessary to implement the Project are found in Annex K.

Schedule Name: BATTLE BURNING PROJECT 001-4874
 Project Manager: MR. ROBERTO MARTIN
 As of date: 03/01/89 08:00am Schedule File: 001-4874

THE MEXICAN PROJECT, ACCELERATED REDUCTION IN-
 FANT AND EARLY ON LOW-AGE MORTALITY, THROUGH IDO, EPI AND SSI.

Who	Status	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12		
Who	Status	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
001Develop Project Paper	USAID																												
002Review PC-1	MDH, GEP																												
003Review Project Paper	USAID																												
004Prepare final draft R.F.	USAID																												
005Prepare Project Paper-OTAC	USAID																												
006Issue Project Paper to ATC	USAID																												
007Prepare notice	ATC																												
008Prepare authorization	ATC																												
009Congressional notification	ATC																												
010Prepare ID Form	USAID																												
011Issue ID Form	ATC																												
012Issue ID Form	USAID, GEP																												
013Allocate funds, 1st tranche	USAID																												
014Address OFI/initial commit	SOP																												
015Submit P10/T to G/CC-TA	USAID																												
016Issue P10/T-house/office eq	USAID																												
017Issue P10/T-Steril/Inj/EPI	USAID																												
018Review PC-1	MDH, GEP																												
019Develop OFF-TA	USAID																												
020Transmit CRD notice-TA	USAID																												
021Issue P10/T-Cold chain eq.	USAID																												
022Prepare PC-1	MDH, GEP																												
023Issue OFF-TA	USAID																												
024Prepare proposal conference-TA	ATC, USAID																												
025Issue P10/T-vehicles	USAID																												
026Evaluate/rank each prop-TA	USAID																												
027Issue P10/T-supply req. (EPI)	USAID																												
028Negotiate highest ranked TA	USAID, CMA																												
029Issue sale Pub. health can. (EPI)	USAID, AGENC																												
030Issue P10/T	SOP																												
031Sign contract (SOP)-TA	USAID, CMA																												
032Issue household supplies eq.	USAID, CMA																												
033Issue vehicles, (EPI)	SUPPLY																												
034Contract period TA	CONTR																												
035US backstop team TA	CONTR																												
036EPI physician-TA	CONTR																												
037EPI lab person-TA	CONTR																												
038EPI lab equipment-TA	CONTR																												
039EPI lab supplies-TA	CONTR																												

0 GEP
 1 Status
 2 Reserve conflict
 3 Partial dependency
 4 Scale: each character equals 2 weeks

Schedule Name: EARLY SURVIVAL PROJECT (591-6450)
 Project Manager: MR. KAYROND RAFFIN
 As of Date: 2-Jun-88 5:15am Schedule File: A:\2910496C

SCHEMATIC PROJECT: GROWING RESOLUTION IN
 FAMI AND EARLY CHILDHOOD MORTALITY THROUGH CDD, EPI AND ARI.

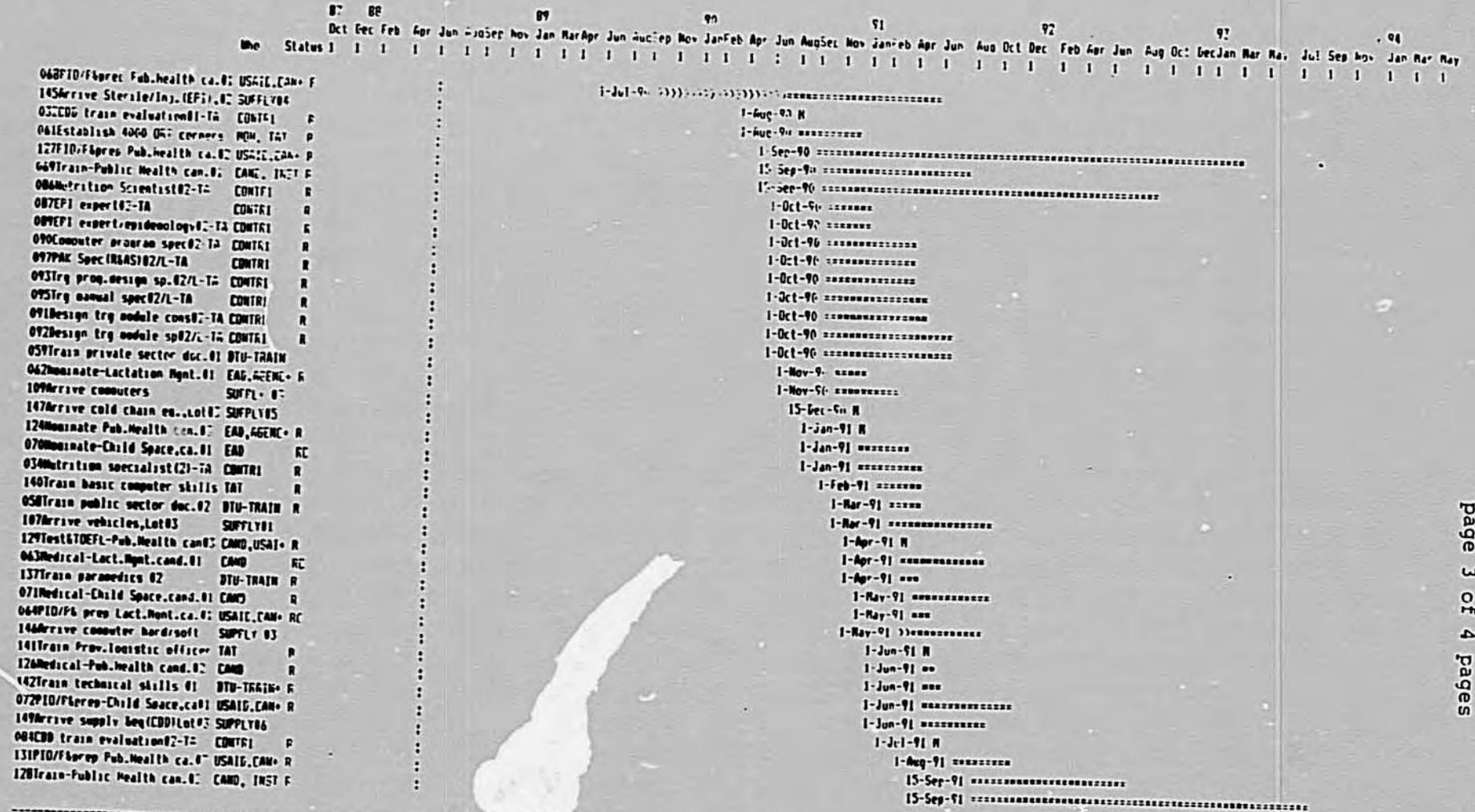
No.	Status	88			89			90			91			92			93			94								
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
027	Trainin. coordinator-TA																											
000	restitUEFL-Fub.health canB																											
026	Provincial Director-TA																											
040	Specialist (TBE)/L-TA																											
041	Specialist (CDD)/L-TA																											
045	Specialist (RAGS)/L-TA																											
047	Specialist (HIS)/L-TA																											
112	arrive cold chain eq. Lot 8																											
114	arrive supply hea(CDD) Lot 8																											
054	Establish 16 DTU-sec school																											
041	try prog. design sp. 01/L-TA																											
042	try annua. spec 01/L-TA																											
037	Design try module const 01-TA																											
043	Design try module sp 01/L-TA																											
031	Inv/ed/comm specialist-TA																											
110	arrive Sterile/Inj. (EPI), 01																											
033	Nutrition Scientist 01-TA																											
030	EPI expert 01-TA																											
056	Establish 4 FGRTS																											
034	Computer program spec 01-TA																											
046	Spec (RAGS) 01/L-TA																											
000	EPI expert/epidemiology 01-TA																											
048	Computer Spec (HIS)/L-TA																											
160	train primary trainers, DTU																											
123	nominate Pub. health can. 02																											
051	Rehab medical godoms																											
125	train FGT operators/direct																											
139	train system analyst/EPI/ TAT																											
060	train public sector doc. 01																											
100	arrive vehicles, Lot 8																											
125	restitUEFL-Fub.health canB																											
136	train paramedics 01																											
162	issue FID-L-computers																											
113	arrive cold chain eq., Lot 8																											
078	Construct-o additions, DTU																											
079	Renovate 4E FGRTS																											
067	Medical-Fub.health can. 02																											
144	arrive supply hea(CDD) Lot 8																											
016	Internal evaluation																											

U Done
 C Critical
 F Resource conflict
 p Partial dependency
 Scale: Each character equals 2 weeks

--- Task
 --- Start task
 M Milestone
 --- Slack time (---), or
 Resource delay (---)
 Conflict

Schedule Name: CHILD SURVIVAL PROJECT (591-0476)
 Project Managers: MR. BAYNOR MARTIN
 As of date: 2-Jun-88 5:20am Schedule File: A:1291496C

5-COMPONENT PROJECT. GOALS: REDUCTION IN-
 FANT AND EARLY CHILDHOOD MORTALITY, THROUGH CDD, EPI AND GRI.



D Done
 C Critical
 R Resource conflict
 p Partial dependency
 Scales: Each character equals 2 weeks

*** Task
 *** Started task
 R Milestone

- Slack time (---) 1, or
 Resource delay (---) 1
 Conflict

Schedule Name: CHILD SURVIVAL PROJECT (791-0496)
 Project Manager: MR. RAYMOND MARTIN
 As of date: 2-Jun-88 5:21am Schedule File: A:\3510496C

S-COMPONENT PROJECT: GOAL-5% REDUCTION IN-
 FANT AND EARLY CHILDHOOD MORTALITY, THROUGH CDD, EPI AND ARI.

Who	Status	87		88		89		90		91		92		93		94		
		Oct	Dec	Feb	Apr	Jun	Aug	Oct	Dec	Feb	Apr	Jun	Aug	Oct	Dec	Feb	Apr	Jun
045Train-Lactation Mnt.can.01	CAND, INST																	
090PA Spec (R6AS103/L-TA)	CONTR1																	
094Trg prog.design sp.02/L-TA	CONTR1																	
096Trg manual spec03/L-TA	CONTR1																	
073Train-Child Space.can.01	CAND, INST																	
055Train private sector doc.02	BTU-TRAIN																	
119Mentor-Lactation Mnt.02	AGENCY, EN-																	
070Mentor-Child Space.ca.02	EAD																	
049Computer specialist (2)-TA	CONTR1																	
133Train public sector doc.02	BTU-TRAIN																	
120Medical Lact.Mnt.cand.02	CAND																	
121PID/Ph prep.Lact.Mnt.ca.02	USAID, CAN-																	
138Train paramedics 03	BTU-TRAIN																	
075Medical-Child Space can.02	CAND																	
130Medical-Pub.Health cand.02	CAND																	
016PID/Ph prep-Child Space.ca02	USAID, CAN-																	
143Train technical skills 02	BTU-TRAIN																	
017External evaluation	CONTR2																	
085CDD train evaluation03-TA	CONTR1																	
122Train-Lactation Mnt.can.02	CAND, INST																	
132Train-Public Health can.02	CAND, INST																	
099PA Spec (R6AS104/L-TA)	CONTR1																	
077Train-Child Space.can.02	CAND, INST																	
057Train private sector doc.03	BTU-TRAIN																	
082External evaluation	CONTR2, US-																	
144Train technical skills 03	BTU-TRAIN																	
010PACB	USAID, GOP																	

15-Sep-91 ***
 1-Oct-91 *****
 1-Oct-91 *****
 1-Oct-91 *****
 15-Oct-91 **
 1-Nov-91 *****
 1-Nov-91 *****
 1-Jan-92 *****
 1-Feb-92 *****
 1-Mar-92 *****
 1-Apr-92 ***
 1-Apr-92 *****
 1-May-92 *****
 1-May-92 ***
 1-Jun-92 ***
 1-Jun-92 *****
 1-Jun-92 *****
 1-Aug-92 ****
 1-Aug-92 *****
 15-Sep-92 ***
 15-Sep-92 *****
 1-Oct-92 *****
 15-Oct-92 **
 1-Nov-92 *****
 1-Nov-93 ****
 1-Jun-93 *****

11-Jul-94

D Done *** task - Slack time (-----), 0
 C Critical *** Started task Resource delay (-----)
 R Resource conflict R Milestone > Conflict
 p Partial dependency
 Scale: Each character equals 2 weeks

76

C. Acquisition Plan

1. Technical Assistance

The Project will finance the TAT along with appropriate U.S. backstop personnel, consisting of 360 person-months of long-term U.S. technical assistance. The Project will also fund 66 person-months of short term expatriate technical assistance.

Long-term Pakistani technical assistance will consist of twelve Provincial management experts for 57 person-months each; six specialists one each for training, communication and marketing, two for research and analytical studies, and two for health information systems. The Project will also fund 90 person-months of short-term technical assistance to provide assistance to the long-term professionals. It will also fund 1560 person-months of Pakistani support staff consisting of administrative, financial and logistical support.

All technical assistance contracts will be contracted directly by A.I.D. in accordance with A.I.D. procedures for direct contracting. Due to prior experience the Mission has determined that it is in the best interest of the Project for A.I.D. to undertake all the contracting for technical assistance. A detailed technical assistance plan is provided in Table 12.

No Gray Amendment set-aside is envisaged. Due to the complexity and specialized nature of skills required for the incountry technical assistance team and the need for specialized support staff in a "home office", it has been determined that the major technical assistance contract should be awarded on a fully competitive basis. Certification for contracting with Gray Amendment organizations is included in Annex C.2.

File Name: ANNEXCHS
Prepared May 31, 1988

Table 12
Proposed Technical Assistance Plan
(All AID Direct Contract)

Category of Personnel	Total PM	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994
		10/88-9/89	10/89-9/90	10/90-9/91	10/91-9/92	10/92-9/93	10/93-9/94
I. US PERSONNEL							
A. U.S. BACKSTOP STAFF							
1. Project Coordinator (\$60,000 - 30%)	18	xxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxx
2. Admin/Fin Officer (\$36,000 - 50%)	30	xxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxx
3. Secretary (\$25,000 - 50%)	30	xxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxx
Total U.S. Backstop Staff	78						
B. FIELD OFFICE PERSONNEL							
a. Long-term							
1. CDD Physician (\$45,000)	60	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
2. Training Coordinator (\$55,000)	57	xxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
3. Epidemiologist/Inf Spec (\$45,000)	57	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxx
4. Inform/Education/Comm Spec (\$55,000)	48	xxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxx	
5. Project Manager (\$60,000)	60	xxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxx
Total Field Office Prof	282						
b. Short-term Consultants							
1. CDD Trg Evaluation (\$60,000)	12		xx	xx	xx	xx	
2. Nutrition Scientist (\$60,000)	6		xxx	xxx			
3. EPI Expert - Epidemiologist (\$60,000)	12		xxxxxx	xxxxxx			
4. EPI Expert-2 (\$60,000)	6		xxx	xxx			
5. Computer Prog Spec (\$60,000)	12		xxxxxx	xxxxxx			
6. Design Trg Module Consult (\$60,000)	18		xxx	xxxxxx			
	66						
II. COOPERATING COUNTRY PERSONNEL							
A. PROFESSIONALS							
1. Program Planning							
a. L.T. Pak Prov Off - 12 (\$18,000)	684	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxx
2. Training and Education							
a. LT Pak Specialist (\$18,000)	57	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
b. ST Trg Prog Design Sp. (\$18,000)	22	xxx	xxxxxx	xxxxxx	xxxxxx		
c. ST Trg Manual Spec. (\$18,000)	22	xxx	xxxxxx	xxxxxx	xxxxxx		
d. ST Design Trg Mod Spec (\$18,000)	18	xxx	xxxxxx				

ANNEXC4S
Page 2

Category of Personnel	Total PM	FY 1989 10/88-9/89	FY 1990 10/89-9/90	FY 1991 10/90-9/91	FY 1992 10/91-9/92	FY 1993 10/92-9/93	FY 1994 10/93-9/94
3. Communications & Marketing							
a. LT Pak Specialist (\$18,000)	57	xxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
4. Research & Analytical Studies							
a. LT Pak Specialists - 2 (\$18,000)	114	xxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
b. ST Pak Specialist (\$18,000)	24		xxxxxx	xxxxxx	xxxxxx	xxxxxx	
5. Health Information System							
a. LT Pak Specialist (\$18,000)	57	xxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
b. LT Computer Specialist (\$18,000)	36		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx		
Total Pakistani Professionals	1,091						
B. SUPPORT STAFF							
1. Project Management							
a. Administrative Officer (\$15,000)	60	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
b. Fin/Budget Officer (\$16,000)	60	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
c. Project Secretary (\$7,000)	60	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
d. Office Assistants - 2 (\$5,000)	120	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
e. Drivers - 16 (\$2,500)	960	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
f. Guards - 7 (\$1,667)	180	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
g. Mail Services (\$1,867)	60	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
h. Janitor (\$1,667)	60	xxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxx
Total Pakistani Support Staff	1,560						

2. Commodities

Funds will be provided under the Project to procure the following commodities: (a) vehicles for TAT; (b) vehicles for EPI outreach teams; (c) vehicles for ADHOs; (d) furniture and equipment for the TAT and support staff; (e) equipment for EPI operations including sterilization units, injection equipment, cold chain equipment, etc.; (f) equipment and supplies for CDD operations including teaching material, necessary supplies and equipment for DTUs, FORTS and ORT corners, ORT kits; (g) equipment and supplies for the health information systems component including computers and software.

USAID/Pakistan will procure the following commodities off-shore in accordance with A.I.D. procurement policies and procedures: vehicles for the TAT, vehicles for provincial Project Officers, four wheel drive vehicles for EPI outreach teams, vehicles for CDD remote operations and vehicles for ADHOs, household and office equipment for the TAT, EPI related commodities and possibly computers and associated hardware. With the exception of the vehicles all these commodities will be procured in the US. The current source/origin waiver to procure right-hand drive vehicles is contained in Annex F.2. The remaining commodities, all of which have the source/origin in Pakistan will be procured either directly by USAID/Pakistan or by the GOP as shown in Table 13.

Table 13
PROPOSED COMMODITY PROCUREMENT PLAN

Category	Quantity	Nature of Commodity	Source	Method of Procurement	Order Placed
1. VEHICLES					
1. For Islamabad Project Office	4	4-Wheel Drive Stn Wagon	Japan	A.I.D.	Late FY 1988
2. For Provinces Project Offices	12	4-Wheel Drive Stn Wagon	Japan	A.I.D.	Late FY 1988
3. For EPI	175	4-Wheel Drive Stn Wagon	Japan	A.I.D.	100 in FY 1989 75 in FY 1990
4. Motorcycles for EPI	400	125cc Assembled in Pakistan	Pakistan	A.I.D.	200 in FY 1989 200 in FY 1990
5. Auto Rickshaws for EPI	50	3-Wheel Assembled in Pakistan	Pakistan	A.I.D.	25 in FY 1989 25 in FY 1990
6. For CDD Baluchistan and Remote	10	4-Wheel Drive Stn Wagon	Japan	A.I.D.	5 in FY 1990
		4-Wheel Drive Stn Wagon	Japan	A.I.D.	5 in FY 1991
7. Vehicles for ADHOs (4-Wheel)	45	4-Wheel Drive Stn Wagon	Japan	A.I.D.	25 in FY 1989
		4-Wheel Drive Stn Wagon	Japan	A.I.D.	20 in FY 1990
2. FURNITURE & EQUIPMENT					
1. Household Equipment	5 Sets	Standard Equip as per list	U.S.A.	A.I.D.	Late FY 1988
2. Furniture & Rugs	5 Sets	Standard Equip as per list	Pakistan	A.I.D.	Late FY 1988
3. Office Equipment and Machines	Bulk	Standard Equip as per list	U.S.A.	A.I.D.	Late FY 1988
4. Office Furniture	Bulk	Standard Equip as per list	Pakistan	A.I.D.	Late FY 1988
3. PROGRAM OPERATIONS					
a. For EPI					
	Bulk	Sterilizer Kits	U.S.A.	A.I.D.	50% in FY 1989 50% in FY 1990
	Bulk	Injection Equipment	U.S.A.	A.I.D.	50% in FY 1989
	4,150	Cold Chain Equipment	U.S.A.	A.I.D.	2150 in FY 1989 2150 in FY 1990
	50	Solar Refrigerators	U.S.A.	A.I.D.	25 in FY 1990 25 in FY 1991
2. For CDD					
	18	Teaching Equip for DTUS	U.S.A.	A.I.D.	2 in FY 1989 8 in FY 1990 8 in FY 1990
	48	Equip/Supp for FORTS	Pakistan	Host Country	8 in FY 89 20 in FY 90 20 in FY 91

File: COMPI14 (Page 2)

Category	Quantity	Nature of Commodity	Source	Method of Procurement	Order Placed
	4,000	Equip/Supplies for ORT Corner	Pakistan	Host Country	400 in FY 89 1,800 in FY 90 1,800 in FY 91
	Bulk	Trg Mat for MDs & Paramedical Trainers	Pakistan	Host Country	\$15000 in FY 89 \$40000 in FY 90 \$40000 in FY 91
	10,000	ORT Kits	Pakistan	Host Country	2,000 in FY 89 4,000 in FY 90 4,000 in FY 91
3. For Health Information System	60	PC Computers	Pakistan/	Host Country/	All in 1990
	bulk	Software	USA	A.I.D.	All in 1990

D. Training Plan

Three categories of training will be financed under the Project: (a) U.S. long-term training; (b) Third country observational visits; (c) in-country case management and technical skills training.

A proposed training plan is provided in Table 14. Primary emphasis will be given to in-country training activities. In-country training will consist of two distinct types: Case management training and technical skills training. Under the case management training six categories of medical professionals will be trained as outlined in Table 14. This training will provide the base for the successful operation of the DTU/FORT/ORT Corner system for CDD. Technical skills training will be provided for EPI workers and for public sector health workers in the areas of sterilization techniques and computer operations. Some of the technical skills training will be directed toward training health personnel to operate computers so that they can successfully implement the health information systems.

21 senior physicians or other specialists will receive long-term training in the U.S. to receive graduate degrees in epidemiology and various child survival fields. Study tours and observational visits to both the U.S. and third countries are planned for pediatricians, obstetricians, senior physicians and trainers. Depending upon the outcome of provincial pre-planning meetings and the training needs assessment, the amount of participant training may be increased substantially.

TABLE 14
PROPOSED TRAINING PLAN

Type of Training	Length of Training	Number of Participants	Categories of Participants	Proposed Schedule
<u>A. Participant Training</u>				
1. U.S. Long-term	104 weeks	21	Sr Physician or other specialists	7 participants each year in 1990, 1991 and 1993
2. U.S. S.T. study tours	4 weeks	20	Obstetricians and Pediatricians	10 participants each year in 1991 and 1992
3. 3rd Country S.T. Observation Visits	2 weeks	8	Senior Physicians and Trainers	4 participants each year in 1991 and 1992
<u>B. Case Management Training</u>				
1. CDD Coordinator Training	3-4 days	12	USAID Program Specialists	Trained under PHC Project No cost to Child Surv
2. DTU Staff Training	3-4 days	30	Assoc Prof, MOs &	24 trained under PHC Pr.

TABLE 14
PROPOSED TRAINING PLAN (contd.)

Type of Training	Length of Training	Number of Participants	Categories of Participants	Proposed Schedule
6. Training in 48 FORTS	1 week	6240	MOH Paramedics	26 courses of 5 participants each in 48 locations; 6 in 1990, 13 in 1991 and 7 in 1992
<u>C. Technical skills Training</u>				
1. EPI Systems Analysis/Computer Training	4 weeks	60	Designated HIS Reps	4 Courses, 15 participants each in Islamabad in 1990
2. Basic Computer Skills	2 weeks	140	Provincial Health personnel	7 Courses, 20 participants all in 1991
3. Provincial Logistics Officers Training	1 week	10	Designated MOH personnel	1 Course, 10 participants in 1991
4. Technical Training Skills	1 week	720	3 Vaccinators and 1 MO from each mobile unit	6 Courses of 40 participants, each year from 1991 to 1993

E. Evaluation Plan

A.I.D. and the GOP will conduct three project reviews utilizing both in house and external resources to be financed under the Project. Baseline data will be gathered during the first year of the Project through a demographic and health survey and a health examination survey. Little or no Project funding is required. The research and analytical studies commissioned as part of the Project, as well as the monitoring system initiated under the PHC project will provide data. A brief summary is provided herein.

The first evaluation is scheduled for twenty months after signature of the Project Agreement. This evaluation will measure progress in the delivery of commodities; implementation of training; compare the status of the establishment of the health information system with the project plan; examine progress in construction activities; and review the quality and effectiveness of activities in communication and marketing and research and analytical studies. A midterm evaluation will be scheduled for thirty-six months, largely focused on the same outputs.

A terminal evaluation is planned for the final year of the Project. In addition to output level indicators measured throughout the Project by the improved HIS, this evaluation will measure implementation, attainment of the purpose and contribution to project goal, specifically the increased availability of CDD services; improvements made in the continuing education capabilities of medical schools; effectiveness of primary level facility delivery of child survival interventions; and establishment of an EPI surveillance system. A second demographic and health survey in about 1993 will provide some assessment of end of project status, including reductions in mortality.

Each evaluation report will, in addition to covering the above points, identify and discuss major changes in the project setting including socio-economic conditions.

Evaluations will be carried out by teams of specialists including external consultants. Evaluation services will be contracted by USAID/Pakistan utilizing project funds under authority contained in the Project Agreement.

V. PROJECT ANALYSES

A. Technical Analysis

The technical analyses are presented by Project component as described in Section III.D. of the Project Paper.

B. Administrative Analysis

1. System of Government

The system of government in Pakistan is Parliamentary and Federal according to the 1973 Constitution. The Federal Government has a President as Head of State, a Parliament comprising two houses, a Prime Minister as Head of Government, with a Cabinet of Ministers, including a Minister for Health whose portfolio and responsibilities are occasionally changed. At present, his title is Minister for Health, Special Education and Social Welfare.

The country has four provinces, the Islamabad Capital territory and the territory of Azad Jammu and Kashmir (apart from some Tribal Areas and Northern Areas). All have their own provincial or regional governments, with Governors, parliaments called Provincial Assemblies, Chief Ministers and Provincial Cabinets of Ministers including Health Ministers.

There is division and sharing of responsibilities between Federal and Provincial levels of Governments. Levy of tax and budgeting is done by both the Federal and Provincial Governments, while implementation of most public health services is carried out by provincial authorities.

For administrative purposes, the provinces and other territories are subdivided into Divisions, Districts, Tehsils and Union Councils. As of June 1987 Pakistan's population is estimated to exceed 100 million. Estimated population by provinces and some other areas (except Azad Jammu and Kashmir) are shown in Table 15.

Table 15
Administrative Units per Province

Admin. Unit	Punjab	Sind	NWFP	Baluch-istan	Fed Cap	FATA	NAs	AJK	Total
Provinces	1	1	1	1	-	-	-	-	4
Divisions	8	3	5	4	-	-	-	-	20
Districts	29	15	13	17	1	11	3	4	92
Union Cncls	2,367	572	562	315	11	6	105	180	4,112
Villages	25,079	5,540	8,203	5,761	201	308	320	1,644	46,594
Est Pop. (in millions)	56.9	22.7	13.2	5.2	-	2.6	-	-	100.6

Source: Rural Health Programme of Pakistan; Planning & Development Division, GOP

2. Health Services

In the public sector, health delivery is largely undertaken by Provincial Governments, while the Federal Government is concerned with health policy, national health planning (largely done by the Health Section in the Planning Commission) and provincial health coordination. Liaison with international agencies and other countries offering collaboration in health matters is reserved for the Federal Government. These responsibilities are under the Director General Health, head of the Health Division of the Federal Ministry of Health, Special Education and Social Welfare. In federally administered areas, health services are provided by the Federal Government. The Federal Minister of Health is the ultimate authority responsible for review, coordination and provision of health services in the country.

Provincial health services are organized on a district basis and each district is divided into sub-districts called tehsils (talukas in Sind). The tehsils are concerned with the administration of hospitals, dispensaries and rural health services. Health services are comprised of rural health centres (RHC), basic health units (BHU) and mobile outreach teams mainly responsible for immunization, malaria control and sanitation.

Because of the differences in health problems and systems at the provincial level, special attention needs to be directed to the provinces when administering this Project.

Teaching hospitals associated with medical colleges and other specialized institutions are under the control of provincial health departments. A specialized administrative unit is the Maternal and Child Health (MCH) unit which is usually headed by a lady medical officer who makes frequent supervisory field visits. However, the MCH units in the provincial health departments remain under-staffed and weak. In the federal government there is a basic health services cell but there is no special unit for MCH. There is an urgent need to strengthen MCH services in the country.

The Project is in full accord with GOP's stated policy of providing sufficient health services to the underserved rural populations through a network of primary health care (PHC) facilities. This policy has been reinforced by the Prime Minister's declared five point program of socio-economic development (December 1985). The program of rural health facilities, RHCs and BHUs began in 1960 with the Second Five Year Plan and has experienced "ups and downs" according to changing emphasis and budgetary allocations. In 1980, two years after the Alma Ata Conference on PHC, rural health facilities received renewed support.

Health facilities and services in place in Pakistan during mid-1986 are shown in Table 16. The reported number of facilities and their locations vary to some extent in different GOP and international agency reports. Only 17 percent of doctors and 18 percent of the hospital beds are located in the rural areas. Table 16 was compiled by the Ministry of Health.

Table 16

Health Facilities and Health Manpower
in mid-1986

<u>Health Facilities</u>	<u>Number</u>
Primary Health Care Facilities	
- Rural Health Centers	488
- Basic Health Units	2,500
- Maternity Child Health Centers	867
- Dispensaries	3,994
- Sub-Centers	632
Total Primary Health Care Facilities	<u>8,481</u>
Hospital Beds	61,690
Health Manpower	
- Doctors	28,650
- Nurses	7,900
- Auxiliaries	48,920
- TBA/dais (trained)	<u>30,750</u>
Total Health Manpower	116,220

Referral of cases, between BHU/RHC and Tehsil/District hospitals which offer specialized care (tertiary care), is generally considered unsatisfactory. Evidently, this is true both for providing medical care and for reporting back to the concerned BHU/RHC. Such a back and forth referral and information flow is an essential but currently weak link in the health care system. The Project addresses this problem through management training and the development of health information systems. If necessary systems are in place and associated training is adequately provided by the Project, the referral system will be substantially strengthened.

Training institutions for health personnel of various categories will be involved in varying degrees in support of this Project. Several such institutions already have a CDD training program. These institutions have indicated their interest in developing further case management training and willingness to assist counterpart institutions to develop similar capacity. Provincial authorities and institutional personnel have indicated their intent to provide the staff and on-going costs needed to develop and sustain such a program. The TAT will coordinate preparation and delivery of case management child survival training.

Coordination among the training institutions will be achieved in various ways; e.g., training modules for health professionals will be developed to include standards for competence at various levels. Case management training will be held in the same districts as the worker is assigned to improve effectiveness. Modules developed for this system will be used for future in-service training programs.

The private sector and NGOs engaged in child survival related activities will have a potentially substantial role in the proposed Phase II of this Project. Close coordination with the MOH will be necessary in regard to private sector development. The concept has been approved in principle by the GOP.

The GOP is considering establishing a National Children's Commission with an Institute as a secretariat. Its concrete form should be decided soon. This autonomous body or other national organization should be able to award incentives and grants provided by the Project.

3. Project Management

This Project is complex as it aims to support and strengthen existing child survival activities as well as propose and develop several new activities. Strengthening health services through behavior modification is labor intensive and requires a lot of technical input. The challenge cannot be met simply by offering commodities and funds.

The Project is separated into three distinct management units to facilitate operations. Mission HPN staff will monitor the entire Project. Under the first Phase USAID inputs will be directly managed by a contractor and will be the most complex on a day-to-day basis. It will deal with the existing federal and provincial health management units and establish health information systems as an immediate priority both for project tracking purposes and to avoid some of the problems experienced under the Primary Health Care Project. Realistic timetables have been outlined for the program planning, training, communication and marketing, research and analysis, and health information components as well as for commodity procurement. It is believed that Mission staff will be able to coordinate successful implementation of the Project since a project management contractor will carry out the heavy operational responsibilities of the first Phase.

Careful negotiations must take place to allow the smooth implementation of activities. It is believed that in addition to the hire of expatriate advisors other suitable professional staff will be located in-country and that the complete management team can be in place by the middle of calendar year 1989.

GOP health officials have been closely involved with both the conceptual and design stages of the Project. MOH staff, especially physicians involved with pediatric care, have not only identified individual roles at both provincial and national levels but will assume responsibility for a great number of the interventions delineated under the Project. Coordination between national and provincial health providers is expected to be improved by the development of health information systems and strengthened operational capacity at the provincial level.

GOP authorities in pediatrics, teaching hospitals and provincial health departments have agreed to the approach outlined for the Project. In

fact, GOP is already training health personnel in their delineated roles and responsibilities for child survival efforts. The Project is designed to reflect the GOP's operational structure for implementing health programs. Administrative arrangements have already been discussed with the MOH and plans are underway to define commitments, roles and responsibilities of both national and provincial health departments and medical schools. A summary of the PP was circulated to provincial authorities with descriptions of their responsibilities for staffing, facility preparation and on-going costs. All authorities indicated acceptance of these responsibilities as well as an intent to sustain the resulting infrastructure after completion of the Project.

Implementation of the second Phase is dependent upon identification of a capable institutional capacity, such as the proposed Children's Commission, to channel incentive and grant funds to a wide range of possible recipients. Even in the most optimistic scenario it will probably be 1991 that such a Commission could begin to place significant amounts of grant and incentive money. Should there be significant delay in the establishment of the Commission other national organizations may be asked to play an intermediary role. Some Phase II activities, subject to AID/W approval, will probably be initiated without any reference to the Commission proposal and therefore could begin as early as 1989.

C. Social Soundness Analysis

1. Social Environment

The population intended to receive direct assistance from this Project all will be citizens of Pakistan. However, far from a homogeneous group, the population is composed of several major ethnic groups including Punjabis, Baluchis, Pathans, and Sindhis. While there are certain commonalities regarding social behavior, and while Islam is the religion of 97 percent of Pakistanis, there are still linguistic differences and significant variations determined by class, local social organization and ecological adaptations.

2. Social Feasibility

Given the heterogeneous nature of Pakistan, the feasibility or success of the Project will rest ultimately on awareness of, and sensitivity to the variations in social environment. To preclude inequity of access by different ethnic groups to the benefits of the Project, the patterns of social interaction in which health services are to be delivered must be grounded in carefully designed and monitored procedures. Access to women is also critical since purdah, or the screening of women, is widespread throughout the country. Communities vary, however, in the mode in which purdah functions. The ability to interact with women in a culturally accepted fashion is a prerequisite for social feasibility as well as the success of the Project. Because of the enormous influence of health care providers on the child survival related knowledge and practices of mothers, the Project strategy emphasized training health personnel and communications, both face to face and through the mass media.

In Pakistan illness beliefs, and thereby curing practices, reflect underlying ideas about the importance of maintaining a proper balance in the body. Certain illnesses, for instance, are attributed to an imbalance in properties that affect the body, notably heat, cold, water, and food. Thus one may become ill by receiving too much of a certain substance that is ultimately "hot" or "cold". Diarrhea may be seen as a sign of excess fluid in the body, thus people will avoid liquids since adding fluids will only increase imbalance. It is considered "hot" and thus "cold" liquids or foods could be recommended during diarrheal episodes. Areas that require investigation prior to project implementation are the local conceptions regarding the hot or cold properties believed present in inoculations, and the extent to which rehydrating a patient with diarrhea conflicts with traditional medical etiology. Issues such as these are meaningful in terms of people's acceptance or comprehension of various therapeutic measures. It is possible to modify behavior (if not always knowledge or beliefs) in these areas without encountering serious resistance, provided the health message and the interpersonal relationships in which it is delivered are based on an understanding of and accommodation to local belief.

3. Impact and Beneficiaries

It is obvious that this Project will have a direct, positive impact on the health of Pakistan's population. By extension, some other consequences of Pakistan's currently high rates of childhood illness and mortality - drain on the family income for medical expenditures, time lost from labor by tending a sick child - might be reduced.

The Project's emphasis on child health, through immunization and oral rehydration, will bring special health benefits to children. In the long run there could also be a social impact on the status of women through women's increased awareness of how to effectively promote child survival. Indirect beneficiaries will be physicians, nurses, Lady Health Visitors, paramedics, hakims and traditional birth attendants. Their training and the effectiveness of their health message can only increase their importance to the community.

D. Economic Analysis

1. Introduction

Social sector projects often are not amenable to the same sort of rigorous cost-benefit analysis and calculation of rates of return that can be performed for projects that involve physical infrastructure, or increases in economic production. A rigorous analysis will yield imprecise results because the causal relationship between improved health status and socio-economic development is difficult to quantify; first, because of a lack of data; second, because the relationships themselves are not fully understood; and third, because health improvements may not be attributable to the Project. The present Project proposes, among other activities, to support health information systems and thus improve

the availability of data, which will be valuable for evaluation purposes in the future.

The rationale for this Project is directly related to the economic benefits to be gained from a nationwide reduction in infant and early childhood deaths and morbidity, as well as from the expected significant decreases in the treatment cost of childhood diseases. Although a formal comparison of benefits and costs will not be attempted here, it is clear from the simple nature of the interventions that the Project will be cost effective relative to alternative approaches of dealing with the same public health problems. For instance, the cost of immunization against measles is far less than the cost of treating an infected child even though more children must be immunized than would contract measles. Similarly, it is far less expensive to provide a packet of oral rehydration salts (ORS) for dehydration than to use an intravenous solution in a hospital.

2. Benefits of Health Activities

The death of a child is a complete economic loss to society because there will be no future economic benefits to offset the investment of the parents. The psychological costs also are significant. Parents and society incur additional costs to replace the dead child. The savings on child raising costs by reducing this wastage are significant and quantifiable, particularly if the total number of surviving children does not increase.

Equally significant are the benefits of increased consumer satisfaction to the parents and child derived from improved health. The objectively verifiable indicators at the goal level of the logical framework define the changes in health status that the Project proposes to achieve. These changes include reduced child mortality, morbidity and an improved health information systems.

Another type of benefit occurs if improved child survival rates lead to increased output due to healthier workers. The causal relationship between improved health status and increased output is not well established and can vary from one society to another. If healthier and thus more efficient workers continue to devote the same amount of effort to productive labor, total output in the economy should increase. A similar result is obtained to the extent that workers lose fewer working hours related to illness of their children, even if productivity does not rise. However, it has been demonstrated that in rural societies, improved work potential may translate into leisure if workers choose to produce the same output in less time. Alternatively, increased underemployment may result if more people reach an employable age and cannot obtain work. It is generally accepted that underemployment in rural Pakistan is widespread, with labor scarcity occurring only during brief periods of the year. As a result, there is no hard evidence to indicate that a reduction in morbidity of the type anticipated under this project is likely to increase output through increased work effort or an increase in work days at the microeconomic level. However, the reduction in mortality and morbidity of the under five age group ultimately should

contribute to higher per capita income because the resulting macro-economic effects on savings and investment levels, dependency ratios, and other variables should improve Pakistan's long run growth potential.

A third set of benefits arises if an improved health system serves as a nation building program that raises development potential by improving the motivation and attitude of the general population. The value of this set of benefits, no matter how vaguely defined, should not be dismissed lightly for Pakistan. Malenbaum, in his pioneering article on the subject, makes a strong argument for the possibility of an important link between health services and output which is not directly related to output derived from a more efficient work force. That is, a health measure can produce economic gains without or before improving health. The argument is that basic attitudinal changes can occur as health services are improved. For example, as people feel society has increased its control over the environment through control of disease, it may become easier to motivate increased work effort.

Table 17

Health Expenditure Patterns in Pakistan, 1970-1988
(in million of rupees)

Year	(1)	Nominal	Nominal	Nominal	80=100	80=100	80=100	80=100	Year	Total	Popu-	Per	Per	Per		Per-	Per	Per	
	Exp.	Govt. Exp.	Govt. Exp.	Govt. Exp.	Real	Real	Real	Real		Exp.	(in	Capita	Capita	Capita		cent	Prevent	Prevent	
	Rec.	Dev.	Rec.	Rec.	Defla- tor	Dev. Real	Health Rec. Real	Dev. & Rec. Real	Change from Prior	Govt. Exp.	lation (in	Exp. ((R&C)	Exp. ((R&C)	Exp. ((R)	Rural Health Exp.	Prevent Health Exp.	Prevent Health Exp.	Health Prog. Exp.	Health Prog. Exp.
	Exp.	Rec.	Dev.	Rec.	Defla- tor	Dev. Real	Health Rec. Real	Dev. & Rec. Real	Change from Prior	Govt. Exp.	lation (in	Exp. ((R&C)	Exp. ((R&C)	Exp. ((R)	Rural Health Exp.	Prevent Health Exp.	Prevent Health Exp.	Health Prog. Exp.	Health Prog. Exp.
	Exp.	Rec.	Dev.	Rec.	Defla- tor	Dev. Real	Health Rec. Real	Dev. & Rec. Real	Change from Prior	Govt. Exp.	lation (in	Exp. ((R&C)	Exp. ((R&C)	Exp. ((R)	Rural Health Exp.	Prevent Health Exp.	Prevent Health Exp.	Health Prog. Exp.	Health Prog. Exp.
	Exp.	Rec.	Dev.	Rec.	Defla- tor	Dev. Real	Health Rec. Real	Dev. & Rec. Real	Change from Prior	Govt. Exp.	lation (in	Exp. ((R&C)	Exp. ((R&C)	Exp. ((R)	Rural Health Exp.	Prevent Health Exp.	Prevent Health Exp.	Health Prog. Exp.	Health Prog. Exp.
1970	7,904				32.5														
1971	7,987			390	34.1		1,143.7												
1972	8,784			371	36.4		1,019.2				64.30								
1973	11,128	503	96	407	42.1	228.0	966.7	1,194.8		4.5	66.84	7.5	17.9	14.5	14.1	34.0	35.4	60.8	1.2
1974	14,520	603	176	427	51.8	339.8	824.3	1,164.1	- 2.6	4.2	68.86	8.8	16.9	12.0	34.2	35.4	20.1	68.3	1.0
1975	19,525	932	363	569	63.4	572.6	897.5	1,470.0	26.3	4.8	70.90	13.1	20.7	12.7	46.6	94.5	26.0	149.1	2.1
1976	22,390	1,795	629	1,166	71.1	884.7	1,639.9	2,524.6	71.7	8.0	73.21	24.5	34.5	22.4	92.2	286.0	45.5	402.3	5.5
1977	24,564	1,635	540	1,095	78.7	686.1	1,391.4	2,077.5	-17.7	6.7	75.44	21.7	27.5	18.4	73.3	435.2	80.6	553.0	7.3
1978	30,793	1,690	512	1,178	85.8	596.7	1,373.0	1,969.7	- 5.2	5.5	77.75	21.7	25.3	17.7	190.9	244.4	47.7	248.8	3.7
1979	36,241	1,905	569	1,336	90.5	628.7	1,476.2	2,105.0	6.9	5.3	80.13	23.8	26.3	18.4	240.7	118.6	20.8	131.0	1.6
1980	41,084	1,925	717	1,208	100.0	717.0	1,208.0	1,925.0	- 8.5	4.7	82.58	23.3	23.3	14.6	232.8	100.2	14.0	100.2	1.2
1981	53,392	2,402	942	1,460	110.8	850.2	1,317.7	2,167.9	12.6	4.5	85.12	28.2	25.5	15.5	285.8	124.1	13.2	112.0	1.3
1982	55,355	2,688	1,076	1,612	120.8	890.7	1,334.4	2,225.2	2.6	4.9	87.76	30.6	25.4	15.2	271.1	89.7	8.3	74.3	0.8
1983	70,560	2,630	1,080	1,550	127.7	845.7	1,213.8	2,059.5	- 7.4	3.7	90.48	29.1	22.8	13.4	330.0	110.0	10.2	86.1	1.0
1984	82,627	3,180	1,613	1,567	140.0	1,152.1	1,119.3	2,271.4	10.3	3.8	93.29	34.1	24.3	12.0	20.0	324.2	20.1	231.6	2.5
1985	97,063	3,385	1,505	1,880	148.2	1,015.5	1,268.6	2,284.1	0.6	3.5	96.18	35.2	23.7	13.2	65.4	217.9	14.5	147.0	1.5
1986	106,135	4,335	1,941	2,394	155.6	1,247.4	1,538.6	2,786.0	22.0	4.1	99.16	43.7	28.1	15.5	27.9	213.3	11.0	137.1	1.4
1987	131,939	5,708	2,598	3,110	161.0	1,613.7	1,931.7	3,545.3	27.3	4.3	102.23	55.8	34.7	18.9	25.0	242.8	9.3	150.8	1.5
1988	151,071	6,791	3,105	3,686	175.0	1,774.3	2,106.3	3,880.6	9.5	4.5	105.40	64.4	36.8	20.0	28.1	312.2	10.1	178.4	1.7

- Source: 1. IMP, Financial Statistics Yearbook, 1987
 2. World Bank, Pakistan Health Sector Review: Financial and Economic Aspects, (Michael Mills), November, 1982
 3. GOP, Planning Commission and Finance Ministry provided for the fiscal years 1983-1988.

- Note: 1. Estimates of total GDP expenditure for the fiscal years 1987 and 1988 were provided by the Ministry of Finance.
 2. The deflator used to calculate real expenditures is the GDP deflator as defined by the IMP.

In order to put the proposed Project in historical perspective, it is useful to consider trends in GOP spending on health services and the achievements of the EPI program; this is done in the next two sections. Additional sections present an analysis of ORT costs savings, the potential role of the private health sector, and a discussion of the benefits and costs of the proposed Project. The final section deals with the more institutional issue of cost recovery.

3. Trends in Government Spending on Health

Over the last fifteen years, the GOP has substantially increased its expenditures for health (see Table 17). During this period, total (recurrent and capital), real (deflated by the GDP deflator with 1980 = 100) spending increased at an average annual rate of about 8.1 percent. Unlike many countries where the growth rate tends to be higher for recurrent expenditures, the greatest increase was for capital improvements and expansion of the public health activities, with the annual increase being over 15.5 percent. Recurrent expenditures increased at about 5.3 percent per year over the same period. The rate of increase varied during the period, with large increases concentrated in the early and late years. The health share of total GOP expenditure has declined slightly over the period, but on average has been about 4.5 percent. Public spending for health has not grown as rapidly as other public goods and services.

GOP health expenditures on a per capita basis are also presented in Table 17. Over the last fifteen years, combined capital and recurrent real per capita health expenditures have doubled from about 18 rupees in 1973 to nearly 37 rupees in FY 1988, with rapid increases in 1976 and the 1986-88 period. Real per capita recurrent expenditures have remained virtually constant, fluctuating around 16 rupees. These data also indicate that growth in government health expenditures has been via the capital account.

Two programs of interest in the capital account are: a) preventive health and; b) rural health programs, which during the mid-1970s comprised over 75 percent of total capital account expenditures. Since 1983, however, the share represented by these two programs dropped sharply to around ten percent, in spite of the Accelerated Health Program. These trends suggest that while a substantial programmatic effort has been launched to expand child survival activities via EPI and ORT, other development projects have been allocated much larger shares of the available resources. One must be cautious in interpreting the budgets because definitions change. When vertical programs are integrated, their identify in the budget disappears.

This trend is evident in the data on real per capita public health program (see the last column in Table 17). These data show that, with the exception of the mid 1970s when the smallpox eradication program was active, real per capita public health expenditures have fluctuated between one and two rupees per person per year, or about five percent of total GOP health expenditures. Thus public health programs are very modest, even when sizeable funding support is available from external

sources. The draft 7th Five Year Plan shows decline in preventive program budgets, but this is explained by the planned integration of several vertical programs so that support will be included in the recurring cost budget for rural health services, which increases rapidly.

4. An Analysis of the Achievements of the EPI in Pakistan

Table 18 presents socio-economic data from the World Bank's 1987 World Development Report, for Pakistan and some of its neighboring Asian countries, in order to establish the context for reviewing the progress of EPI in Pakistan. This table shows the social situation in Pakistan in terms of population growth, infant and child mortality, life expectancy, contraceptive prevalence, food supplies and health personnel availability in comparison with a number of its neighbors. These data show the country has lagged behind most of its neighbors in improving the health status of the people in spite of its rapid economic growth.

Table 18

Socio-economic and Health Status Indicators of Pakistan
and Other Countries in Asia

Country Name	GDP Per Capita \$ 1985	Rate of GDP Growth Per Capita 65-85	Rate of Popu- lation Growth 80-85	Life expec- tancy at birth 1985	Infant morta- lity rate 1985	Child death rate 1985	Crude birth rate 1985	Total ferti- lity rate 1985	Percentage of married women of child- bearing age in 1984 contracepting	Popula- tion per physician 1981	Popula- tion per nursing person 1981	Per Capita daily calorie supply 1985
		Bangladesh	150	0.4	2.6	51	123	18	40	5.7	25	9,700
Burma	190	2.4	2.0	59	66	NA	30	3.9	5	4,900	4,890	2,547
Egypt	610	3.1	2.8	61	93	11	36	4.7	32	760	790	3,263
India	270	1.7	2.2	56	89	11	33	4.5	35	3,700	4,670	2,189
Indonesia	530	4.8	2.1	55	96	12	32	4.1	40	12,300	NA	2,533
PAKISTAN	380	2.6	3.1	51	115	16	44	6.1	8	2,910	5,870	2,159
Philippines	580	2.3	2.5	63	48	4	33	4.3	32	6,710	2,590	2,341
Sri Lanka	380	2.9	1.4	70	36	2	25	3.2	57	7,460	1,260	2,385
Thailand	800	4.0	2.1	64	43	3	26	3.2	65	6,870	2,140	2,462

Source: World Bank, World Development Report, 1987 (Washington D.C. : World Bank, 1987).

Much progress has been achieved in Pakistan since 1982 when the EPI program was launched. In 1982 full immunization coverage of the most vulnerable group in the population, the under-one year of age group, was only 2.3 percent. By 1986, estimates of coverage among this critical group varied between 41 and 60 percent. It is estimated that national coverage of 12-23 month olds was nearly 80 percent at the end of 1987.

In the Punjab and NWFP, the coverage of the EPI in many districts has exceeded 80 percent, and in those areas the program has entered a maintenance phase. The coverage of the vulnerable under one-year-of-age group, however, has not reached such high levels. The lower coverage levels are due in part to the lack of measles coverage and the nonestablishment of mobile teams in some areas, although the data suggest that some progress has been made throughout the country, including Baluchistan and Sind. In these areas where coverage has not achieved the levels of the Punjab, the EPI strategy is to continue to build on the progress made in the first phase of the effort.

The performance data clearly suggest that in the near future, surveys should show a decline in the infant mortality rate. One finding from the 1986 household health expenditure survey was the estimate of infant mortality at around 100 per thousand. If true, then health status is improving in comparison with the figure of 115 for 1985 shown in Table 18 (the Seventh Plan puts the figure at 80 for 1988, while UNICEF estimates that it is around 100). In sample areas the Pakistan Demographic Survey suggests a 14 percent infant mortality decline from 1984-86. While it is too early to say what precise progress has been made, the numbers suggest an improving trend in health status. Indicators of demographic change such as fertility and contraceptive prevalence may soon begin to reflect these important health improvements.

Table 19

Investigations into the Costs and Impacts of
Pakistan's EPI, 1986-88

Costs of the EPI Program in Pakistan

Based on the Articles of Understanding Between the GOP and WHO, UNICEF, and USAID, for the Pakistan EPI during 1986-88, expected costs of the program are delineated below (in millions of U.S. dollars):

<u>Cost Elements</u>	<u>GOP Fed/Prov.</u>	<u>Donors Total \$</u>	<u>Total \$</u>	<u>Total Pak. Rps. (17.43)</u>
I. Recurrent Costs:				
1. Salaries & Allowances	12.102	0.378	12.480	217.526
2. Supplies & Equipment	8.061	0.150	8.211	143.118
3. Cold Chain/Transport	1.536	0.374	1.910	33.291
4. Vehicle Op. & Maint.	0.486	0.000	0.486	8.471
5. Media & Health Sd.	0.400	0.000	0.400	6.972
6. Info. System	1.023	0.000	1.023	17.831
7. Staff Training	0.084	0.740	0.824	14.362
8. Monitoring & Eval/Res.	0.024	0.065	0.089	1.551
9. Contingencies/Misc.	1.289	0.045	1.334	23.252
Total Rec. Cost	25.005	1.752	26.757	466.375
II. Capital Costs:				
1. Cold Chain Equip.	0.000	2.110	2.110	36.777
2. Vehicles	0.000	2.513	2.513	43.802
Total Capital Costs	0.000	4.623	4.623	80.579
Total Rec. & Capital Costs	25.005	6,375	31.380	546.953

Estimates of the Deaths Averted (based on calculations and assumptions found in Dr. Stanley O. Foster Evaluation Report of October 1986, pg.3)

I. Estimate for 1986	II. Estimate for 1986-88
Total deaths prevented per year 74,120	Estimate (1): Three fold 1986 est. - 222,350
Share of deaths potentially averted via complete immunization 30.1	Estimate (2): 5%/yr growth in 1986 - 233,663
	Estimate (3): 10%/yr growth in 1986 - 245,337

III. Estimated Cost per Death Averted, 1986-88

	<u>U.S.\$</u>	<u>Pak. Rps</u>
Estimate (1)	141	2,460
Estimate (2)	134	2,341
Estimate (3)	128	2,229

These improvements have been achieved via the concentrated efforts of the country's EPI and the socio-economic changes that have been occurring in the country. While it is slightly presumptive to assume that the entire improvement in the IMR can be attributed to the EPI, it is instructive to compare on the calculation of estimated expenditures on EPI over the 1986-88 period shown in the Articles of Understanding, National Plan of Action for the EPI, 1986-88, (June 1986), by GOP et.al., with the estimated number of infant and child deaths averted over the same period. These illustrative calculations are presented in Table 19.

Table 19 provides three types of information, all based on estimates, rather than actual data. First, the table presents an estimate of the total cost of EPI over the 1986-88 period, based on national and provincial GOP budgets, and what the three donors (WHO, UNICEF, AND USAID) were prepared to commit in 1986. The estimate assumes that the figures for FY 1986 GOP provincial expenditures prevailed for each of the three years. The estimated capital costs for the 1986-88 period also are assumptions because no information was readily available on prior year capital inputs in the form of equipment and vehicles. About 31.4 million dollars (U.S.), or nearly 547 million rupees were allocated to be spent on EPI during the 1986-88 period. Most, i.e. about 93.5 percent, of the envisioned recurrent cost of the program (26.8 million dollars) was to come from various GOP budgets, and all the capital costs would be provided by the donors.

Table 19 contains an estimate of the impact of the 1986-88 EPI in Pakistan based on the 1986 report of Dr. Stanley Foster. Dr. Foster estimated the disease-specific deaths averted for the seven immunizable diseases incorporated into EPI by ascertaining the disease specific immunization coverage rate, vaccine efficacy, case fatality rate for each disease, the attack or incidence rate of the disease, and the target population. On the basis of these calculations and assumptions, he calculated that about 74 thousand child and infant deaths were averted, or about 30 percent of the total potential deaths averted if the immunization program had prevented all potentially preventable deaths (in 1986 this number was estimated by Dr. Foster to be about 246 thousand infant and child deaths). The estimate of the number of deaths averted in 1986 was used in these alternative calculations to provide a first set of estimates of the number of deaths averted over the period, 1986-88. These estimates are presented in Table 19 and show that the number of deaths averted via the immunization effort may be between 222 and 245 thousand deaths.

Based on the information presented above about cost and impact, a rough calculation was made of the cost per death averted. These calculations are summarized at the bottom of the table in both U.S. dollars and Pakistan rupees. The calculations show that the cost per death averted in Pakistan is in the range of 125-140 dollars. Unfortunately comparative figures for other EPI interventions, other health programs, or even other sectoral impacts within Pakistan are not readily available. One international comparison is Kenya where Howard Barnum estimated on an ex-ante basis, that the cost per death averted via EPI in

1979 was about \$85 (about 128 dollars in 1987 prices). Given that Barnum's estimate was based on an hypothetical program, the figure obtained from the calculations presented in Table 19 appear to be reasonable and within the bound of a well implemented program.

5. Analysis of ORT Cost Savings

The section discusses some potential cost savings in ORT, which will be a major activity in the proposed Project. From an economic perspective, new health technologies must justify themselves either by reducing the cost of treating a given illness or by reducing the cost per unit of health achievement, which in this Project is the saving of children's lives. An analysis presented below shows the estimated total and net cost saving of a national program designed to use ORT in all hospitals in the country. This analysis is illustrative since the precise information necessary for conducting such calculations is not readily available. In particular, information has not been obtained in a scientific manner about the a) number of cases treated on an in- and out-patient basis; b) share of diarrhea cases treated on an in- and out-patient basis; c) the proportion of those cases satisfactorily treated via the application of ORT; d) the average length of stay for diarrhea cases; and e) the cost of treating diarrhea cases using other therapeutic interventions.

Table 20 presents an analysis based on various assumptions by international experts, information about hospital costs from other studies in Pakistan, and assumptions about plausible ranges over which certain key parameters might be expected. This information and assumptions relate to the calculation of the cost savings and is used to estimate the range of cost savings (see the second page of Table 20). These calculations suggest that the wide use of ORT in hospitals, both, the inpatient and outpatient, would generate savings between 0.3 and 1.8 billion rupees per year. The preponderance of the savings would result from the use of ORT in the ambulatory setting.

The cost of establishing an ORT corner or Diarrhea Treatment Unit in each hospital has not yet been precisely calculated. If the cost to operate each corner is less than about 470 thousand rupees, the country should realize some savings in the treatment of diarrheal diseases in Pakistan. If the liberal estimate of about 50 thousand rupees per corner is used, i.e. to pay staff, buy supplies and equipment, and amortize capital additions, the savings will be substantial. Additional savings will be forthcoming by the use of similar ORT corners in RHCs and BHUs facilities.

Table 20

Illustrative Hospital Cost Savings from
Expanding the Use of ORT in Pakistan

I. Inpatient Cost Savings

1. Presently admitting 15% of the diarrhea cases.
2. With the use of ORT will reduce the admission of diarrhea cases from 15% to 5%.
3. Admitted diarrhea cases occupy 30-45% of the peds beds.
4. Ave peds ward in District Hospital is about 25 beds.
5. Ave occupancy rate in peds ward varies from 90% in the summer, the time when diarrhea is most prevalent to a low of 70% in the non peak diarrhea period.
6. Ave length of stay for a normal diarrhea case is 3 days.
7. Ave length of stay in district hospital for all patients is about 5.5 days.
8. Ave cost per case in dist. hospital is about 75 rupees (GOP Health Financing Study, 1987).
9. Ave cost per patient day is 14 rupees.
10. Additional cost per IP diarrhea case is 50 Rp. for 2 bottles of IV plus tubing and 25 Rp. of additional medicine.
11. The average size hospital is approximately 100 beds, per data from the GOP Seventh Plan and World Bank. There are about 670 hospitals in the country as of January 1986.
12. Costs of the ORT DTU is the alternative costs required to save the above IP costs. It is estimated that the average annual cost of operating a DTU is

II. Outpatient Cost Savings

1. The average number of outpatients patients treated at a typical hospital in Pakistan is about 500 patients per day.
2. Diarrhoea cases comprise between 10 and 20 percent of the total number of outpatient cases on average.
3. ORT treatment is assumed to be a sufficient treatment to address 90 percent of the outpatient cases of diarrhea.
4. The cost of treating a diarrhea case without ORT is assumed to be equal to the median charge by a private physician for a visit which is 14 rupees, according to the GOP, Health Financing Study, 1987. An alternative figure of 8 rupees is also used for sensitivity testing purposes.
5. The cost of medicines used to treat an outpatient case of diarrhea in Pakistan is assumed to equal the median charge by a private chemist according to the GOP, Health Financing Study, 1987 which varies from 20 rupees for those who self refer (by going directly to the chemist) to 70 rupees for those who come with a prescription.

III. Estimated Annual Hospital Cost Saved (EACSH) = [IP Cost Saving (IPCS) + OP Cost Saving (OPCS)] - ORT DTU Costs.

Thus EACSH = (IPCS + OPCS) - ORTDTU, where,

$$IPCSH = ((\text{No. of peds beds/ hosp (PBDS)} \times \text{Share of peds beds with diarrhea cases (DiarShr)} \times \text{Net reduction in diarrhea cases (DMINUS)} \times \text{Ave occupancy rate in peds beds (OCCP)} \times \text{No of days/ year (365)} \times \text{Ave cost per patient day (Cost 1)}) + ((\text{PBDS}) \times (\text{DiarShr}) \times (\text{OCCP}) \times (\text{DMINUS}) \times (365)) / (\text{ALOSDiar}) \text{ Average length of stay for diarrhea cases} \times \text{Additional cost per diarrhea case (IVMED)}) \times \text{No. of hospital in country (HDSP)},$$

and,

$$OPCSH = (((\text{No of patients per OP clinic per day (VISITS)} \times \text{Share of visits which are diarrhea cases (DVISITS)} \times \text{Ave charge per case (PRICE)}) \times ((\text{VISITS}) \times (\text{DVISITS})) \times \text{Ave charge for medicine at a chemist (MEDPRICE)}) \times (\text{HOSP}) \times (365)).$$

Table 20

Illustrative Hospital Cost Savings from Expanding the Use of ORT in Pakistan (page 2)

AN EMPIRICAL ESTIMATE OF THE HOSPITAL SAVING

I. Alternative Inpatient Cost Saving Estimates

IPCSH	PBDS	DiarShr	OCCP	DMINUS	365	Cost	IPI	ALDS	IVMED	IP II
I	25	0.3	0.8	0.67	365	14	20,542.2	3	75	36,682.5
II	25	0.45	0.8	0.67	365	14	30,813.3	3	75	55,023.8
						HOSP	TOT IP			
						670	38,340,549.0			
						670	57,510,823.5			

II. Alternative Outpatient Cost Saving Estimates

OPCSH	VSTS	DVSTS	DMINSII	PRCE	365	OP I	MED-PRICE	OP II	HOSP	TOT DP
I	500	0.1	0.9	14	365	229,950	20	328,500	670	374,161,500
II	500	0.2	0.9	14	365	459,900	20	657,000	670	748,323,000
III	500	0.1	0.9	5	365	82,125	20	328,500	670	275,118,750
IV	500	0.2	0.9	5	365	164,250	20	657,000	670	550,237,500
V	500	0.1	0.9	14	365	229,950	70	1,149,750	670	924,399,000
VI	500	0.2	0.9	14	365	459,900	70	2,299,500	670	1,848,798,000

III. Estimated Range of Total Annual Hospital Inpatient and Outpatient Savings from the use of ORT DTU's (in millions of rupees)

Inpatient Savings Scenarios	Outpatient Savings Scenarios					
	I	II	III	IV	V	VI
I	412.5	786.7	313.5	588.6	962.7	1,887.1
II	431.7	805.8	332.6	607.7	981.9	1,906.3

IV. Estimated Range of Annual Net Hospital Cost Savings, Given the Cost of Operating the ORT DTU's.

6. Role of the Private Health Sector in Child Survival

Most medical care, with the exception of preventive services, are provided by private physicians, hospitals and clinics, and by chemists, hakims and TBAs. Only about 25 to 30 percent of total utilization as reported in a household expenditure survey is provided in government hospitals and rural health facilities.

The number of medical school graduates has increased in recent years to about 4,000 per year due to the expansion of the number and size of medical school classes. This increment to the number of registered physicians in Pakistan (46,494 in 1986) has created a problem of unemployment among physicians, particularly in urban areas. Besides the increasing number of doctors employed by the GOP, there also are numerous physicians who practice privately on a full time basis (e.g. nearly 6,000 full time general practitioners in January, 1984). Many specialist physicians also work privately, often in their own private hospitals; there were 165 private hospitals in 1986 and the number is growing rapidly. Finally, private retail pharmaceutical outlets not only dispense medicines, but also perform diagnostic functions as well. In addition to the aforementioned modern practitioners, the various private homeopaths and hakims amount to nearly 50,000 individuals as of June 1984. An equal number of TBAs are thought to be working throughout the country.

This above review highlights the breadth of the private health sector. Since they are widely spread through the country, incentives conceivably could be arranged for them to extend the GOP delivery system beyond its present coverage and provide both ORT and immunization services to a larger share of the population. Since these individuals are private providers of services, it is unlikely that many will be willing to provide ORT and immunization services without remuneration in some form.

Research from other developing countries suggests a cost between four and fifteen dollars (70 to 260 rupees) to fully immunize a child for measles, DPT, polio, and tuberculosis depending upon the delivery system involved. It is not possible to obtain the necessary information to make a similar set of calculations for Pakistan at this time. It is clear, however, that it will be important to conduct a cost-effectiveness analysis of the delivery modalities utilized so far and determine whether they will continue to be the most cost-effective modalities in a maintenance phase.

If the above cost range per fully immunized child from other countries is relevant to what might be found in a study of Pakistan's EPI, it suggests that some form of incentive program for private physicians and perhaps other care providers might be feasible with the development of appropriate monitoring and control by the regional departments of the MOH or the NIH. This is particularly true when a) there are unemployed medical school graduates who could be employed by existing private clinics in urban areas to develop a preventive practice, and b) the median fees reported by households as having been paid to private

practitioners in Pakistan range between 50 and 80 rupees per visit (which typically includes some form of medication as well). Some form of reimbursement per fully registered immunized child could be negotiated and monitored on a pilot basis.

A different set of issues are involved in gaining the cooperation of private physicians and chemists to promote the use of ORT. ORT directly competes with more costly, and given standard markup pricing policies employed by both chemists and physicians, more profitable alternate treatment modalities. Unless the GOP is willing to tackle the politically difficult issue of essential drugs and ban the production, import and use of alternative products for the treatment of diarrhea, alternative incentive programs must be devised that could include payments, high allowable markups, and in kind benefits. The MOH has recently deregistered a number of antidiarrheals and antibiotics. Given the substantial benefits which could accrue to Pakistan if ORT were widely used just in the hospitals (see Table 20 above), some form of incentive program, along with a share of cost recovery involved, could be devised and tested during the life of the Project. This resistance may disappear if a mass media campaign educated the population to demand this treatment modality when certain symptoms are present.

7. Benefits and Costs of the Project

The benefits of general health care activities have been discussed earlier. This section summarizes the expected benefits and costs of the proposed Project. As stated in the introduction a rigorous benefit-cost analysis has not been attempted for two reasons: 1) social sector projects do not readily lend themselves to such analyses; and 2) data limitations.

The proposed Project will give rise to major benefits. Economic benefits will result gained from a nationwide reduction in infant and early childhood deaths and morbidity, with some increase in output, brought about by broader EPI coverage and ORT. Declines in infant mortality also have a very important effect on the national psyche, and may lead to increased motivation and feelings of well-being. Lower mortality should eventually lead to lower fertility. The proposed Project will also help in institutionalizing child survival activities. EPI, and also ORT, can then be conducted in the future as a routine part of the normal health care process provided by the private and public sectors. This may decrease the cost per recipient from what it has been during the special campaign period. The institutionalization of EPI and ORT activities will permit outside donors to withdraw.

The Project will cost about \$62 million for Phase I and an estimated \$23 million for Phase II. Both phases will be implemented in the 1988-1994 period, with Phase II being considered as soon as the managing and implementing capacity is identified. The cost of the proposed Project is very modest, especially given GOP public health expenditures and per year costs for the six year program. Costs could also be recovered, as shown in a next section, if the GOP attempts it. The Project will be

cost-effective, since a number of mechanisms for implementing the program are already in place due to the 1986-88 program.

8. Issues of Cost Recovery in Child Survival in Pakistan

Fee-for-service medicine is the norm in Pakistan. GOP health facilities, however, charge very little for services rendered. For example, a recently completed study reports the mean and median cost per visit at GOP hospitals and rural health facilities (RHCs and BHUs) as 16 and 1, and 7 and 2 rupees respectively. When the government of the Punjab in FY 1986 announced a number of fee increases for primarily inpatient care in hospitals under its jurisdiction, intense political and consumer pressure forced withdrawal. The federal government initially proposed a FY 1987/88 budget with a number of tax and user charges. This set of revenue budget proposals was widely criticized by members of the parliament and the public generally. Given withdrawal of these proposals for increased user charges, most observers think it unlikely that further efforts to extend and expand such charges will be fruitful until after the 1990 national elections.

In spite of these sobering political realities, both theoretical and recent empirical evidence suggest that user charges are feasible and realistic within the context of a child survival strategy for the 1988-1993 period. The theoretical case for cost recovery is particularly compelling for ORS packets where the individual and the household capture a large share of the direct benefits of averting death from any given bout of diarrhea. In the case of immunizations, the individual and/or the household is not as likely or able to value the significant social externalities accruing to society at large when a major disease is eradicated, as was the case of smallpox, or controlled. To the extent people in Pakistan value the protection that full immunization affords, they theoretically would be willing to pay for a portion of the cost of that protection. In a number of African countries, for example, cost recovery programs have been implemented for immunization programs via such strategies as a small charge for the immunization record card. In Pakistan, the 100 percent yes response to a question on the willingness-to-pay a charge of at least 10 rupees for immunization services indicates that people value such services at least as much as 10 rupees. Private entities (both private health providers as well as NGOs) are in a position to test the extent to which user charges can be implemented in Pakistan without public opposition. Alternative ways to ensure that the indigent obtain care may be a way to dampen the existing critical public response. With additional information obtained from the experiments and an improved media strategy developed for introducing such a policy, cost recovery appears to be a realistic objective during the life of this Project.

E. Financial Analysis and Financial Plan

1. General

This Project provides funds to support the implementation of the GOP's new child survival initiative. As shown in Table 21, the entire cost of the Phase I Project over the next six years is estimated at \$85,000,000. This amount does not include contributions made by other donors during the six year period for related activities which are not directly a part of this Project.

Total GOP contribution to the Project over the six year period is approximately at \$23,000,000 or 27 percent of the total cost of the Project while A.I.D.'s contribution of \$62,000,000 constitutes 73 percent of Project costs. The proposed obligation schedule for the A.I.D. grant is as follows: under the first Phase of \$62 million: \$10,000,000 in FY 1988; \$10,000,000 in FY 1989; \$10,000,000 in FY 1990; \$10,000,000 in FY 1991; \$10,000,000 in FY 1992; \$12,000,000 in FY 1993. Under Phase II \$23 million of obligations are estimated but the exact obligation schedule will be developed at a later date.

Three summary tables are provided on the following pages. Table 22 summarizes Phase I project costs by expense category and source of funding; Table 23 describes project costs by project component, expense category, and source of funding; and, Table 24 provides a summary of A.I.D. funding by foreign exchange and local costs by expense category and fiscal year. Detailed budget tables appear in Annex J.

2. Summary Cost Estimates and Financial Plan

a. A.I.D. Contribution

The A.I.D. dollar grant will finance Phase I activities: Technical Assistance (12.5 percent); Training (9.1 percent); Commodities (20.9 percent); Construction (1.1 percent); Other Costs (31.3 percent); and, Inflation (15.5%) with the remaining 9.6 percent for Contingency. A.I.D. will finance with dollar funds the international travel costs of all participant training up to and including one year. Annex F contains a justification, signed by the USAID/Pakistan Mission Director which waives the requirement for the host country to cover these costs.

The allocation of A.I.D. funds by project component for Phase I is as follows: 36.8 percent for Program Planning; 17.7 percent for Training; 11.2 percent for Communications and Marketing; 8.1 percent for Research and Analytical Studies; 1.1 percent for Health Information Systems; 15.5 percent for inflation; and, 9.6 percent for contingencies.

Table 21
Phase I a/
Summary of Project Costs by Fiscal
Year and Source of Funding
(in \$000)

Source of Funding	Fiscal Year						Total
	1988	1989	1990	1991	1992	1993	
A.I.D. Dollar Grant	10,000	10,000	10,000	10,000	10,000	12,000	62,000
<u>b/</u> G.O.P	3,800	3,800	3,800	3,800	3,800	4,000	23,000
Total	13,800	13,800	13,800	13,800	13,800	16,000	85,000

a/ A.I.D. Dollar Grant Project costs are defined as anticipated obligations of funds. Costs exclude any amounts likely to be provided by other donors for related activities which are not directly a part of this Project.

b/ Expressed as dollar equivalents at the exchange rate of U.S. \$1.00 = Rs. 17.50 as of January, 1988.

File: EXPCAT22 (CHS)
Child Survival Project

Table 22
Summary of Project Costs by Expense Category
and Source of Funding

Prepared: May 31, 1989

Expense Category	Life of Project Funding			
	A.I.D. Dollar Grant			GOP
	FX	LC	Total	
1. TECHNICAL ASSISTANCE				
Long Term	5,783	606	6,389	
Short Term	1,142	207	1,348	
Sub-Total	6,924	813	7,737	9,494
2. TRAINING				
Long term	871	32	903	
Short term (US & 3rd Country)	82	68	150	
In-country	0	4,591	4,591	
Sub-Total	953	4,690	5,644	1,913
3. COMMODITIES				
Vehicles	3,490	700	4,390	5,726
Furniture & Equipment	200	122	322	0
Operational Equipment	3,160	5,125	8,285	2,286
Sub-Total	7,050	5,947	12,997	8,012
4. CONSTRUCTION Sub-Total	0	684	684	826
5. OTHER COSTS				
Pakistani Staff/Dth Exp	0	4,709	4,709	
Administrative & Logistic Support	0	637	637	
Operational Supp	0	13,910	13,910	
Evaluation	100	40	140	
Sub-Total	100	19,296	19,396	3,085
Total (1-5)	15,027	31,430	46,457	23,330
Inflation (5% on FX, 10% on LC)	1,184	8,428	9,612	
Contingency (Approx 10% of Tot + Infl)	1,746	4,193	5,939	
Grand Total	17,957	44,051	62,008	26,415

File: COMP23 (CHS)
Child Survival Project

Prepared: April 29, 1968

Table 23
Summary of Project Costs by Project Components,
Expense Category and Source of Funding

Expense Category	Life of Project Funding			GDP
	A.I.D. Dollar Grant			
	FX	LC	Total	
1. Program Planning				
a. Technical Assistance	6,924	913	7,737	9,294
b. Commodities	6,389	822	7,211	8,011
c. Construction	0	684	684	826
c. Other Costs incl Evaluation	100	7,084	7,184	845
Sub-Total	13,413	9,403	22,816	18,977
2. Training				
a. Training	954	4,690	5,644	
b. Pakistan: Tech Assistance	0	93	93	
c. Commodities	90	5,125	5,215	
Sub-Total	1,044	9,908	10,951	1,913
3. Communication & Marketing				
a. Other Costs	0	6,955	6,955	1,740
Sub-Total	0	6,955	6,955	1,740
4. Research & Analytical Studies				
a. Pakistan: Tech Assistance	0	36	36	
b. Surveys & Studies	0	5,000	5,000	500
Sub-Total	0	5,036	5,036	500
5. Health Information System				
a. Pakistani Tech Assistance	0	129	129	200
a. Commodities	570	0	570	
Sub-Total	570	129	699	200
Total (1-5)	15,027	31,430	46,457	23,330
Inflation (5% on FX, 10% on LC)	1,184	8,428	9,612	
Contingency (10% of Tot + Inf)	1,749	4,183	5,931	
Grand Total	17,959	44,041	62,000	23,330

File: FILC24 (CMS)
Child Survival Project

Prepared May 31, 1988

Table 24
SUMMARY OF A.I.D. FINDING BY FOREIGN EXCHANGE AND
LOCAL COSTS, EXPENSE CATEGORY AND FISCAL YEAR

(\$ 000)

Expense Category	FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		TOTAL		TOTAL	
	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX + LC	
1. TECHNICAL ASSISTANCE																
Long Term		653	63	1,140	113	1,133	113	1,321	162	1,007	62	448	92	5,783	606	6,389
Short Term		57	9	452	82	534	97	76	13	33	6	0	0	1,142	-207	1,348
Total Tech Assistance		707	72	1,591	195	1,667	210	1,391	176	1,120	68	448	92	6,924	813	7,737
2. TRAINING																
Long Term		0	0	290	11	290	11	290	11	0	0	0	0	871	32	903
Short Term		0	0	0	0	41	34	41	34	0	-0	-0	0	82	68	150
In-country		0	5	0	1,150	0	2,251	0	149	0	37	0	0	0	4,391	4,391
Total Training		0	5	290	1160	331	2,295	331	1,193	0	37	0	0	953	4,690	5,644
3. COMMODITIES																
Vehicles		1,740	350	1,575	350	375	0	0	0	0	0	0	0	3,490	700	4,190
Furn & Equipment		200	122	0	0	0	0	0	0	0	0	0	0	200	122	322
Other Commodities		1,150	537	1,845	2,294	165	2,294	0	0	0	0	0	0	3,169	5,125	8,295
Total Commodities		3,090	1,009	3,420	2,644	540	2,294	0	0	0	0	0	0	7,059	5,947	12,997
4. CONSTRUCTION																
		0	0	0	160	0	160	0	160	0	160	0	44	0	684	684
5. OTHER COSTS																
Per Staff/Dth Exp		0	289	0	1,011	0	1,020	0	999	0	919	0	471	0	4,709	4,709
Adm & Log Support		0	94	0	122	0	122	0	137	0	116	0	45	0	637	637
Operational Support		0	17	0	2,809	0	2,824	0	2,809	0	2,809	0	2,642	0	13,910	13,910
Evaluation		0	0	0	0	0	20	50	0	0	20	50	0	100	40	140
Total Other Costs		0	399	0	3,942	0	3,987	50	3,945	0	3,864	50	3,159	100	19,296	19,396
6. Total (1-5)																
		3,797	1,485	5,302	8,101	2,539	8,946	1,772	5,474	1,120	4,129	498	3,295	15,027	31,430	46,457
7. Inflation (5% on FX, 10% on LC)																
				265	810	260	1,079	279	1,812	241	1,916	138	2,012	1,184	8,428	9,612
8. Contingency (App 10% of Tot+Infl)																
		480	238	600	922	293	1,084	200	463	100	493	75	983	1,748	4,183	5,931
TOTALS																
		4,277	1,723	6,167	9,833	3,092	11,909	2,252	7,748	1,461	6,538	710	6,290	17,959	44,041	
GRAND TOTAL																
		6,000	16,000	15,000	10,000	8,000	7,000	62,000	62,000							

Table - 24

b. Methods of Implementation and Financing

Table 25 provides a summary of the proposed methods of implementation and financing for the subject Project in accordance with AID's Payment Verification Policy Implementation Guidance dated December 30, 1983. No departures from the three preferred methods of financing are contemplated for this Project.

Table 25

Methods of Implementation and Financing

Project component	Method of Implementation	Method of Financing	Approx. Amount (US \$000)
Program Planning	TA competitive contract (TAT)	Direct Payment	7,737
	Commodities (Computer, vehicles equipment) - AID procurement	Direct Payment	4,011
	Construction/Rehabilitation TA	Direct Payment	684
	AID competitive local A&E contract	Direct Payment	700
	Vehicles/Motrcyc/Auto Rickshaw	HC Reimbursement	2,500
	EPI commodities	Direct Payment	4,452
	Local staff (hired by U.S or local contractor)	Direct Payment	637
	Logistic support for Expat. Technical Assistance	Direct Payment	1,955
	Operational support for EPI and CDD programs	HC Reimbursement	140
	Evaluation	Direct Payment	
Sub Total:			22,816
Training	Local training (PIL to earmark fund)	HC Reimbursement	4,590
	Participant training (through DSTP)	FRLC	1,053
	Trg Material & Supplies	HC Reimbursement	5,125
	Teaching Equipment for DTJs	Direct Payment	90
	TA-AID competitive contract	Direct Payment	93
Sub Total:			10,951
Communi- cation & Marketing	Media Materials and costs	Direct Payment	6,955
Sub Total:			6,955

R&A Studies Payment	TA-AID competitive contract Local studies (Govt Inst: PIL to earmark fund) Studies (competitive contracts, buy-ins)	Direct Payment HC Reimbursement Direct	36 2,500 2,500
Sub Total:			5,036
Health Info Systems	Commodities (Computer/software) TA-AID Competitive Contract	Direct Payment Direct Payment	570 129
Sub Total:			699
Total:			46,457
INFLATION AND CONTINGENCY			15,543
Grand Total:			62,000

A) Most, if not all, of these funds may be included in the long-term, direct AID major TA contracts in which case the method of financing would be direct reimbursement/payment to the contractor.

B) The local staff for all these major project components may be hired by a local private sector firm under a direct AID contract, or may be included in the long-term, direct AID major TA contract with a U.S. contracts. In either case, the method of financing would be direct payment to either the U.S or local contractor.

C) In the event a non-profit organization is awarded any of the competitive institutional contracts for TA, the Mission may utilize FRLC as the method of financing.

D) The Development Support Training (DST) Project Contractor (Academy for Educational Development) is a non-profit organization and hence eligible for a FRLC.

F. Environmental Analysis

The ANE/PD/ENV Coordinator has stated that the Child Survival Project is exempt from further environmental review under the "Categorical exclusion" provisions of 22 CFR 216, "AID Environmental Procedures."

G. Women in Development

As mentioned previously, this Project has, as one of its major objectives, the increased involvement of women as both providers and beneficiaries of improved health care services. Accordingly, this Project should have a significant impact on the status of women in Pakistan.

Several activities are planned under this Project which are specifically aimed at accelerating the recruitment, deployment, and retention of female health workers in the GOP health care system. These include incentives for employment, grants for vehicles and hostels specifically for women as well as funds for increased training. It is a goal of the Project that females will play a greater role in health care delivery from the level of doctor down to the community health worker.

The female health professional is a vital link to mothers and married women of child bearing age, the group who will be significantly affected by this Project. This group includes rural women who will be the recipients of improved health care and thus cause an increase in the level of child survival. For women in Pakistan who, because of cultural constraints, have been unable to receive male-provided medical care, this will be a significant change. With the expansion in the numbers of female health providers, it will be more culturally acceptable for village women to leave the seclusion of their homes to seek out both curative and preventive health care for themselves. Such improvements will not only benefit the woman directly but should also contribute to the improved health of her family, especially her children who are the major targets of the Project.

H. Narcotics Impact Statement

The Child Survival Project, being basically humanitarian in nature, does not lend itself to specific actions or policies relative to narcotics suppression. The strengthening of the rural health care infrastructure and the provision of improved health care services to the rural population of Pakistan does not provide a useful vehicle for suppression of narcotics activities. Accordingly, no narcotics impact analysis is submitted for this Project, and no poppy clause will be included in the Project Agreement.

VI. Conditions, Covenants and Negotiating Status

A. Condition Precedent to Disbursement

Except as A.I.D. may otherwise agree in writing, prior to any disbursement under the Grant or the issuance by A.I.D. of documentation pursuant to which such disbursement will be made, the Grantee shall, within thirty (30) days after the signing of the Project Agreement, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

a. an opinion of Counsel acceptable to A.I.D. that the Project Agreement has been duly authorized and/or ratified by and executed on the behalf of the Grantee and that it constitutes a valid and legally binding obligation of the Grantee in accordance with all its terms; and,

b. a statement setting forth the name of the Person holding or acting in the office of Grantee and of any additional representative(s), together with a specimen signature of each person specified in such statement.

The above conditions precedent will be met by the Grantee within 180 days from the signing of the Project Agreement or the Grant may be terminated.

B. Covenants

1. By no later than June 30th of each year, the Grantee, through its Ministry of Health (MOH), and after consultation with USAID/Pakistan, shall provide to USAID in form and substance satisfactory to USAID, its annual training plan for the following year, which plan shall include details as to number of participants, types and duration of training programs as well as a tentative schedule for dates and locations.

2. The Grantee shall ensure that all participants receiving long term training under this Project will continue working in child survival related activities within Pakistan from the date of the completion of training, for a period of time equivalent to three times the length of the training provided, but not less than one year and not more than five years.

LIST OF ANNEXES

- A. PID Approval Cable
- B. Statutory Checklists
- C. FAA Certifications
- D. GOP Letter of Request for Assistance
- E. Logical Framework
- F. Waivers
- G. Draft Project Authorization
- H. Draft Congressional Notification
- I. Draft Project Description for Inclusion in the Project Agreement
- J. Supporting Financial Tables
- K. Supporting Management Task Tables
- L. Contributors to the Project Paper
- M. Reports by Design Team Members*

* Available from ANE/TR/HPN

117

//GT//

UNCLASSIFIED

STATE 105347/01

ANNEX A

Page 1 of 5 pages

ACTION AID INFO AMB DCM JON AREP

WZCZC10240
PP RUEHIL
DE RUEHC #5347/01 0982123
ZNR UUUUU 22H
P 082122Z APR 87
FM SECSTATE WASHDC
TO AMEMBASSY [ISLAMABAD PRIORITY] 7282
BT
UNCLAS SECTION 01 OF 03 STATE 105347

09-APR-87 TOR: 01:42
CN: 48416
CHRG: AID
DIST: AID
ADD:

OFF FILE: PDM

ACTION: HPN

INFO: D,DD,PRO,PDM,
RF,CH

AIDAC

E.O. 12356: N/A

TAGS:

SUBJECT: ANPAC REVIEW, CHILD SURVIVAL PID

1. ANPAC REVIEWED SUBJECT PID FEBRUARY 27 AND AUTHORIZED MISSION TO PROCEED WITH PP DEVELOPMENT. PP SHOULD BE SUBMITTED TO AID/W FOR APPROVAL. FOLLOWING ARE MAJOR DISCUSSION POINTS AND GUIDANCE FOR DESIGN.

2. ANPAC STRONGLY ENDORSED MISSION'S EFFORTS TO DEVELOP A MAJOR PROGRAM IN CHILD SURVIVAL, AND THE FOCUS ON IMMUNIZATION AND DIARRHEAL DISEASE MANAGEMENT AS KEY ELEMENTS OF THE PROPOSED PROJECT. WITHIN THIS FRAMEWORK, THERE WERE A NUMBER OF CONCERNS REGARDING THE DEFINITION OF THE STRATEGY AND APPROACH TO THESE INTERVENTIONS, AND THE FEASIBILITY OF THE SPECIFIC OBJECTIVES LISTED IN THE PID. GUIDANCE BELOW IS INTENDED TO ASSIST MISSION IN ADDRESSING THESE CONCERNS IN PP DESIGN STAGE. AID/W WILL BE HAPPY TO ASSIST IN ANY WAY POSSIBLE IN FURTHER STRATEGY AND PROJECT DESIGN EFFORTS.

3. STRATEGY: PROJECT NEEDS TO START FROM A SPECIFIC ANALYSIS OF THE IMPEDIMENTS TO ACHIEVEMENT OF THE OBJECTIVES. MISSION'S CHILD SURVIVAL STRATEGY, WHICH WE

UNDERSTAND IS IN PREPARATION, IS AN ESSENTIAL LINK IN DELINEATING THE PRESENT SITUATION AND CORRESPONDING STRATEGY TO DEVELOP CHILD SURVIVAL INTERVENTIONS. PROJECT DESIGN AND DEVELOPMENT SHOULD FLOW FROM THIS STRATEGY. FOR EXAMPLE, WITH REGARD TO ORT, PROJECT NEEDS A CLEAR STATEMENT/ANALYSIS OF CURRENT EFFORTS, AND THE RELATED UNMET NEEDS. WHAT IS KNOWN ABOUT ORT COVERAGE AND USE? WHAT ARE THE CONSTRAINTS TO INCREASING COVERAGE AND EFFECTIVE USE? HOW DO THE PROPOSED INTERVENTIONS RELATE TO THESE CONSTRAINTS? GIVEN THE LACK OF PROGRESS TO DATE WITH ORT, AND THE CONTINUED LACK OF LEADERSHIP, ARE THE PROPOSED TARGETS ACHIEVABLE?

WITH REGARD TO IMMUNIZATION, THE PID CONTAINS A CLEAR DESCRIPTION OF THE STATUS OF THE PROGRAM AND FUTURE OBJECTIVES. DESIGN NEEDS TO FOCUS ON WHAT IT WILL TAKE,



//GT//

UNCLASSIFIED

STATE 105347/01

112

IN A QUALITATIVE SENSE, TO ACHIEVE THESE TARGETS. WHAT ARE THE SPECIFIC CONSTRAINTS, IN ADDITION TO THE NEED FOR SPECIFIC COMMODITIES, TO SUCCESSFUL IMPLEMENTATION OF THIS PROGRAM? SINCE THE IMMUNIZATION PROGRAM HAS HERETOFORE BEEN A SPECIAL CAMPAIGN OF THE NH, WHAT CONSTRAINTS EXIST TO ITS INSTITUTIONALIZATION AND LONG TERM SUSTAINABILITY? WILL THE PRIVATE SECTOR PLAY A ROLE IN THE DELIVERY OF IMMUNIZATION SERVICES? IF SO, HOW?

4. PROJECT MAGNITUDE AND TARGETS: GIVEN THE LACK OF EFFECTIVENESS OF THE HEALTH SYSTEM, THE ANPAC RECOMMENDS THAT THE ABSORPTIVE CAPACITY OF THE IMPLEMENTING AGENCY BE CAREFULLY EXAMINED BEFORE A PROJECT BUDGET LEVEL AND PROJECT OBJECTIVES ARE ESTABLISHED. THERE WAS CONCERN THAT THE GOP'S ABSORPTIVE CAPACITY MIGHT BE GREATLY EXCEEDED BY PROJECT OF THIS ORDER AND MAGNITUDE. THE BUDGET LEVEL AND COMPONENTS SHOULD FLOW FROM THE PROJECT STRATEGY. THE ANPAC FELT THE TARGETS IDENTIFIED IN THE PID (SUCH AS 80 AND 90 PERCENT TARGETS FOR VARIOUS OUTPUTS; 90 PERCENT OF FEMALES VACCINATED AGAINST TETANUS ALTHOUGH MOST VACCINATORS ARE MALE) WERE UNREALISTICALLY AMBITIOUS, GIVEN THE CURRENT CAPACITIES OF THE SYSTEM AND THE NEED TO REACH WOMEN FOR MOST INTERVENTIONS. OVERALL MORTALITY REDUCTION GOALS WERE FELT TO BE TOO OPTIMISTIC, GIVEN THE RISK OF DEATH FROM OTHER CAUSES STILL PRESENT IN THE ENVIRONMENT (QUOTE REPLACEMENT MORTALITY UNQUOTE). IT IS RECOMMENDED THAT THE PROJECT FOCUS INSTEAD ON ANTICIPATED DISEASE-SPECIFIC MORTALITY REDUCTIONS.

5. PROJECT INTERVENTIONS: SELECTION OF SPECIFIC ACTIVITIES TO CARRY OUT OBJECTIVES IN ORT AND IMMUNIZATION WILL LOGICALLY FLOW FROM ANALYSIS AND PRIORITIZATION OF CONSTRAINTS. WITHIN THE IMMUNIZATION PROGRAM, PRIMARY ATTENTION TO MEASLES AND NEONATAL TETANUS, AS PLANNED, APPEARS TO BE PARTICULARLY APPROPRIATE. MEASLES PROGRAM SHOULD FOCUS ON THOSE UNDER AGE ONE TO MAXIMIZE MORTALITY IMPACT.

6. CHILD SURVIVAL TASK FORCE AND DEVELOPMENT AGENCY: ANPAC AGREED THAT A HIGH LEVEL TASK FORCE TO PROVIDE POLITICAL VISIBILITY AND SUPPORT COULD BE VERY USEFUL. THERE WAS CONCERN HOWEVER, THAT ITS ROLE SHOULD NOT EXTEND TO PROGRAM IMPLEMENTATION. EXPERIENCE HAS SHOWN THAT SUCH ORGANIZATIONS CAN BECOME MORIBUND, NON-FUNCTIONAL BUREAUCRATIC IMPEDIMENTS REQUIRING SUBSTANTIAL PROJECT MANAGEMENT TIME TO HAVE CREATED AND STAFFED. THE ROLE OF THE TASK FORCE AND AGENCY (IF NEEDED) SHOULD BE CAREFULLY REVIEWED AND LIMITED DURING PROJECT DESIGN.

AIDAC

7. POLICY OBJECTIVES: THE MISSION IS ENCOURAGED TO PURSUE A POLICY RELATED PERFORMANCE DISBURSEMENT COMPONENT, WITH A FOCUS ON THOSE KEY TOPICS WHICH MAKE THE MOST DIFFERENCE TO CHILD SURVIVAL. FOR EXAMPLE, IN A REVIEW OF IMPEDIMENTS TO ORT IMPROVEMENTS, GOP-DETERMINED OR INFLUENCED FACTORS SUCH AS THE SIZE OF ORS PACKETS APPEARED TO BE CRUCIAL. A MAJOR EFFORT TO CHANGE THIS POLICY MIGHT HAVE MORE INFLUENCE ON ACCEPTANCE OF ORT BY POOR MOTHERS THAN ANY OTHER ACTION IDENTIFIED IN THE PID. SIMILARLY, IN THE CHIPS PID, PRICE CONTROL OF MANY HEALTH RELATED COMMODITIES WAS IDENTIFIED AS AN IMPEDIMENT TO MARKETING, AND HENCE WOMEN'S ACCESS TO THE PRODUCTS. ACTIONS TO IMPROVE WOMEN'S ACCESS TO HEALTH SERVICES, SUCH AS TRAINING OF WOMEN CARE PROVIDERS OR OTHER OUTREACH EFFORTS WOULD HEAVILY INFLUENCE THE PROJECT'S ABILITY TO REACH BOTH ITS ORT AND EPI OBJECTIVES. IN CONTRAST, WORK ON MEDICAL SCHOOL CURRICULUM IS A POTENTIALLY DIFFICULT, STAFF INTENSIVE AREA WHICH MAY ADD AN UNNECESSARY LEVEL OF COMPLEXITY TO THE PROJECT, YET IT IS NOT CLEARLY RELATED TO IMPLEMENTATION CONSTRAINTS FOUND IN THE CURRENT PROGRAM.

8. PERFORMANCE DISBURSEMENTS: IN ADDITION TO POLICY RELATED PERFORMANCE DISBURSEMENTS AS DISCUSSED ABOVE, MISSION MAY WISH TO CONSIDER LINKING SOME DISBURSEMENTS TO THE ACHIEVEMENT OF PROJECT IMPLEMENTATION INDICATORS AS WAS DONE UNDER THE EARLIER AID-SUPPORTED BASIC HEALTH SERVICES PROJECT. THIS MAY BE PARTICULARLY APPROPRIATE

IN THE CASE OF DIARRHEAL DISEASE MANAGEMENT, WHERE A LACK OF LEADERSHIP, STAFF, AND A WELL-CONCEIVED OPERATIONAL PLAN HAVE SEVERELY LIMITED PROGRAM EFFECTIVENESS TO DATE.

9. REACHING WOMEN: REACHING MOTHERS IS CRUCIAL TO ACHIEVING PROJECT OBJECTIVES, AND THE STRATEGY DEVELOPMENT EFFORT SHOULD CAREFULLY ADDRESS THIS TOPIC. WHILE THE PID DISCUSSES MEDIA CAMPAIGNS, THERE IS AS YET NO CLEAR APPROACH TO MAKING THE MEDIA CAMPAIGNS EFFECTIVE. RESEARCH INTO BASIC AREAS SUCH AS APPROPRIATE MEDIA MESSAGES, CURRENT BEHAVIOR AND ATTITUDES OF MOTHERS NEEDS TO BE INCLUDED.

10. RELATIONSHIPS AMONG PUBLIC AND PRIVATE SECTOR ACTORS: GIVEN THE WEAKNESS OF THE PUBLIC SECTOR IN HEALTH DELIVERY, AND ITS HISTORICAL RELUCTANCE TO WORK EFFECTIVELY WITH THE PRIVATE SECTOR, THE PROJECT STRATEGY SHOULD SEEK TO BRIDGE THE GAP. MEDIA CAMPAIGNS AND SUPPLY OF VACCINES AND ORS PACKETS ARE AREAS WHERE THE CAPACITY OF THE PRIVATE SECTOR SHOULD BE DRAWN UPON. THE PROJECT'S RELATIONSHIP TO THE CHIPS PROJECT SHOULD BE DEFINED. THE MISSION SHOULD EXPLORE THE POTENTIAL FOR INVOLVEMENT OF PVOS AND NGOS IN IMPLEMENTATION OF THIS PROJECT. MIGHT SOME PORTION OF

THE NGO ACTIVITIES PLAN UNDER THE SPECIAL DEVELOPMENT FUND BE ACCOMMODATED IN THIS PROJECT? IF NOT, WHY NOT?

11. TRAINING: THIS IS IDENTIFIED AS A MAJOR ACTIVITY. PREVIOUS EFFORTS TO ESTABLISH EFFECTIVE LARGE-SCALE TRAINING PROGRAMS HAVE BEEN DISAPPOINTING. THE PROJECT DESIGN SHOULD IDENTIFY PAST CONSTRAINTS IN DEVELOPING A NEW APPROACH. PRIVATE HEALTH DELIVERY PROVIDERS SHOULD BE BROUGHT INTO TRAINING ACTIVITIES.

12. MONITORING AND EVALUATION: IT IS CRITICAL TO BUILD IN A STRONG M&E COMPONENT FROM THE BEGINNING, AND IF FEASIBLE, TO FOCUS ON DEVELOPING BASELINE DATA NOW IN THE PRIMARY HEALTH CARE PROJECT.

13. DISPOSAL OF NEEDLES AND SYRINGES: THE PROJECT DESIGN SHOULD DEMONSTRATE HOW DISPOSABLE NEEDLES AND SYRINGES WILL BE SAFELY HANDLED, AND HOW THIS WILL BE MONITORED.

14. TECHNICAL ASSISTANCE: TA NEEDS SHOULD BE CAREFULLY ASSESSED. THE PROPOSED DOLLARS 1 MILLION APPEARS INADEQUATE FOR THE COMPLEXITY OF THE EFFORT..

15. RESEARCH NEEDS: IN ORDER TO ASSURE THAT RESEARCH EFFORTS GET UNDERWAY PROMPTLY, PARTICULARLY IN REGARDS TO HOT ISSUES OF PACKET SIZE, MIXING CONTAINERS AND MEDIA APPROACHES, PP DESIGN SHOULD INCLUDE RESEARCH PLAN AND IMPLEMENTATION SCHEDULE. SINCE THESE HAVE BEEN UNADDRESSED KEY ISSUES FOR SEVERAL YEARS, MISSION MAY WISE TO CONSIDER TYING SOME DISBURSEMENTS TO RESEARCH EFFORTS.

16. DESIGN TEAM: ANPAC RECOMMENDS THAT DESIGN TEAM INCLUDE AID/W PARTICIPANT, WITH STRONG HEALTH AND PROJECT DESIGN SKILLS. JINNY SEWELL, ANE/TR, HAS THIS BACKGROUND AND IS AVAILABLE TO SERVE AS TEAM LEADER IF MISSION DESIRES. TEAM SHOULD ALSO INCLUDE PERSON WITH STRONG BACKGROUND IN INFORMATION, EDUCATION AND COMMUNICATIONS; A PUBLIC HEALTH PHYSICIAN WITH STRONG

171

AIDAC

SERVICE DELIVERY SKILLS AND EXPERIENCE, PARTICULARLY IN THE AREAS OF DIARRHEAL DISEASE AND IMMUNIZATION; AND A HEALTH ECONOMIST TO EXAMINE PROJECT COST ISSUES. ANE/TR HAS SOME POTENTIAL CANDIDATES. IN ORDER TO ASSURE AVAILABILITY OF CONSULTANTS, REQUEST MISSION'S VIEWS ON TEAM COMPOSITION AND TIMING ASAP. SHULTZ
BT
#5347

NNNN

UNCLASSIFIED STATE- 105347/03.

102

5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only: B(1) applies to all projects funded with Development Assistance; B(2) applies to projects funded with Development Assistance loans; and B(3) applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

- | | |
|--|--|
| 1. <u>FY 1988 Continuing Resolution Sec. 523; FAA Sec. 634A.</u> If money is sought to obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified? | Congressional Notification |
| 2. <u>FAA Sec. 611(a)(1).</u> Prior to an obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U.S. of the assistance? | Yes |
| 3. <u>FAA Sec. 611(a)(2).</u> If legislative action is required within recipient country, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance? | No further legislative action is required. |

4. FAA Sec. 611(b); FY 1988 Continuing Resolution Sec. 501. If project is for water or water related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.) N.A
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively? N.A
- * specifically 6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. Project is not susceptible to execution as part of a regional or multilateral proj. Other Donors, *
7. FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions. No significant effect in these areas is expected.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise). Many of the goods and services procured under this project will have their source and origin in the U.S.
9. FAA Secs. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. The GOP will contribute the equivalent of approximately \$23 million in currency during the life of the project which is 27percent of the total cost of the project.**
- ***of the renewed economic assistance program to Pakistan which is to maximize the balance of payments impact of the program.
- **--The Mission Director has certified the disbursement of U.S. dollars in lieu of U.S. Treasury-owned excess rupees to cover local costs under the proj. This action is consistent with one of the major objectives ***

124

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? Yes, but the use of these rupees are not appropriate for this project.
11. FY 1988 Continuing Resolution Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? N.A.
12. FY 1988 Continuing Resolution Sec. 553. Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel? N.A.
13. FAA Sec. 119(q)(4)-(6). Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas? N.A.

125

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)? N.A
15. FY 1988 Continuing Resolution. If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? Yes
16. FY Continuing Resolution Sec. 541. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.? Yes
17. FY 1988 Continuing Resolution Sec. 514. If funds are being obligated under an appropriation account to which they were not appropriated, has prior approval of the Appropriations Committees of Congress been obtained? N.A
18. FY Continuing Resolution Sec. 515. If deob/reob authority is sought to be exercised in the provision of assistance, are the funds being obligated for the same general purpose, and for countries within the same general region as originally obligated, and have the Appropriations Committees of both Houses of Congress been properly notified? N.A
19. State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision). Yes

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FY 1988 Continuing Resolution Sec. 552 (as interpreted by conference report). If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities (a) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (b) in support of research that is intended primarily to benefit U.S. producers?

N.A

b. FAA Secs. 102(b), 111, 113, 281(a). Describe extent to which activity will (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and

a) The objective of the project is to reduce infant and child mortality which will have a direct impact on the quality of life of the poor.

121

insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

b) A large portion of project activity is geared toward rural poor to improve health delivery systems
c) N.A.
d) There will be a training program for both LHVs and TBAs which will improve the status of women.
e) N.A.

- c. FAA Secs. 103, 103A, 104, 105, 106, 120-21. Does the project fit the criteria for the source of funds (functional account) being used? Yes
- d. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)? Yes
- e. FAA Secs. 110, 124(d). Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? Yes. The GOP will provide at least 25% of the DA costs of the Project
- f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority? Yes

128

- g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.
- The program is designed to institutionalize key child survival interventions and thus improve the health service delivery systems, nationwide.
- h. FY 1988 Continuing Resolution Sec. 538. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?
- NO
- Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?
- NO
- Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?
- NO
- i. FY 1988 Continuing Resolution. Is the assistance being made available to any organization or program which has been determined to support or participate in the management of a program of coercive abortion or involuntary sterilization?
- NO
- If assistance is from the population functional account, are any of the funds to be made available to voluntary family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services?
- N.A

129

- j. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?
- k. FY 1988 Continuing Resolution. What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 20 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?
- l. FAA Sec. 118(c). Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (a) stress the importance of conserving and sustainably managing forest resources; (b) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (c) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (d) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (e) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared

Every reasonable attempt will be made to provide disadvantaged enterprises the maximum portion of project funding.

N.A



or degraded; (f) conserve forested watersheds and rehabilitate those which have been deforested; (g) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (h) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (i) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (j) seek to increase the awareness of U.S. government agencies and other donors of the immediate and long-term value of tropical forests; and (k) utilize the resources and abilities of all relevant U.S. government agencies?

- m. FAA Sec. 118(c)(13). If the assistance will support a program or project significantly affecting tropical forests (including projects involving the planting of exotic plant species), will the program or project (a) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (b) take full account of the environmental impacts of the proposed activities on biological diversity?

N.A

131

- n. FAA Sec. 118(c)(14). Will assistance be used for (a) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (b) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas? N.A
- o. FAA Sec. 118(c)(15). Will assistance be used for (a) activities which would result in the conversion of forest lands to the rearing of livestock; (b) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undegraded forest lands; (c) the colonization of forest lands; or (d) the construction of dams or other water control structures which flood relatively undegraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development? N.A
- p. FY 1988 Continuing Resolution If assistance will come from the Sub-Saharan Africa DA account, is it (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) being provided in N.A

122

accordance with the policies contained in section 102 of the FAA; (c) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (d) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in admitted policy reforms, the need to protect vulnerable groups; (e) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

132

3. Economic Support Fund Project Criteria

- a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA? Yes
- b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purposes? No
- c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? The Mission is negotiating with the GOP to have these funds deposited in a special account for reuse in the Child Survival Program.

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to: (A) FAA funds generally; (B)(1) Development Assistance funds only; or (B)(2) the Economic Support Fund only.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FY 1988 Continuing Resolution Sec. 526.
Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully?

It has not been so certified.

2. FAA Sec. 481(h). (This provision applies to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government), has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without

The President has so determined in the INSCR of March 2, 1988

Congressional enactment, within 30 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (a) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to prevent illicit drugs produced or processed in or transported through such country from being transported into the United States, and to prevent and punish drug profit laundering in the country, or that (b) the vital national interests of the United States require the provision of such assistance?

3. Drug Act Sec. 2013. (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug producing country" or "major drug-transit country" (as defined for the purpose of FAA Sec 481(h)), has the President submitted a report to Congress listing such country as one (a) which, as a matter of government policy, encourages or facilitates the production or distribution of illicit drugs; (b) in which any senior official of the government engages in, encourages, or facilitates the production or distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails to provide reasonable cooperation to lawful activities of U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

- (a) No,
- (b) No,
- (c) No,
- (d) No.

12/10

4. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government?
- (a) and (b): We are aware of no such liability.
5. FAA Sec. 620(e)(1). If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?
- We are aware of no such liability.
6. FAA Secs. 620(a), 620(f), 620D; FY 1988 Continuing Resolution Sec. 512. Is recipient country a Communist country? If so, has the President determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism? Will assistance be provided directly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, South Yemen, Iran or Syria? Will assistance be provided to Afghanistan without a certification?
- (a) No
(b) No
(c) No
7. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property?
- It has not.
8. FAA Sec. 620(l). Has the country failed to enter into an investment guaranty agreement with OPIC?
- It has not.

- 9. FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters?
(b) If so, has any deduction required by the Fishermen's Protective Act been made?
(a) It has not.
(b) It has not.

- 10. FAA Sec. 620(q); FY 1988 Continuing Resolution Sec. 518. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1988 Continuing Resolution appropriates funds?
(a) No
(b) No

- 11. FAA Sec. 620(s). If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)
Yes.

- 12. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?
It has not.

138

13. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the Taking into Consideration memo.)
- UN has not determined the country to be in arrears.
14. FAA Sec. 620A. Has the President determined that the recipient country grants sanctuary from prosecution to any individual or group which has committed an act of international terrorism or otherwise supports international terrorism?
- We are aware of no such action.
15. FY 1988 Continuing Resolution Sec. 576. Has the country been placed on the list provided for in Section 6(j) of the Export Administration Act of 1979 (currently Libya, Iran, South Yemen, Syria, Cuba, or North Korea)?
- No
16. ISDCA of 1985 Sec. 552(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?
- He has not.
17. FAA Sec. 666(b). Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?
- It does not.
18. FAA Secs. 669, 670. Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)
- FAA Section 620E permits a special waiver for Pakistan through April 1, 1990 (FY 1988 Continuing Resolution Section 55

139

19. FAA Sec. 670. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device?
- It has been so determined and was waived by the President on January 15.
20. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)
- It was so represented, but it disassociated itself from the communique
21. FY 1988 Continuing Resolution Sec. 528. Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States?
- No
22. FY 1988 Continuing Resolution Sec. 513. Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance?
- (a) No
(b) No
23. FY 1988 Continuing Resolution Sec. 543. Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin?
- Yes.

140

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy? No

FY 1988 Continuing Resolution Sec. 538. Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? No

2. Economic Support Fund Country Criteria

FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest? It has not been so determined.

FY 1988 Continuing Resolution Sec. 549. Has this country met its drug eradication targets or otherwise taken significant steps to halt illicit drug production or trafficking? Yes

141

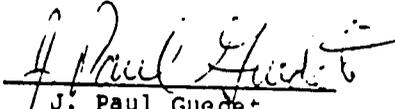
CHILD SURVIVAL

FAA SECTION 612(b) CERTIFICATION

A major purpose of the economic assistance program between the governments of the U.S. and Pakistan is to provide balance of payments assistance to Pakistan.

I have carefully reviewed the advisability of disbursing U.S. dollars in lieu of U.S.-owned excess foreign currency to pay for local costs of projects being implemented in Pakistan. In light of the U.S. Government's objectives concerning this program, I have determined that it would be prejudicial to U.S. interests and goals to pay for all local currency costs with U.S.-owned rupees. Such a procedure would prevent the U.S. from providing the maximum amount of balance of payments support under the economic assistance package, and would consequently undercut one of the basic objectives of the program. The objective of providing balance of payments assistance to Pakistan can best be achieved by disbursing U.S. dollars to pay for local costs of the program. Section 612(b) of the Foreign Assistance Act of 1961, as amended, authorizes the administrative official approving the voucher to determine that local costs will be funded with direct payment of dollars for the program. Pursuant to this provision, Handbook 19 requires that the Mission Director (or his designee) make a determination as to the reason in any instance where U.S. dollars are used (disbursed) when U.S.-owned foreign currency is available.

In view of the above rationale, I, J. Paul Guedet, acting principal officer of the Agency for International Development, in the Islamic Republic of Pakistan, pursuant to Section 612(b) of the Foreign Assistance Act of 1961, as amended, do hereby certify the need to disburse dollars to cover local currency costs in lieu of using U.S.-owned excess rupees under the Child Survival Project.



J. Paul Guedet
Acting Director
USAID/Pakistan

6/8/53
Date

CERTIFICATION FOR COMPLIANCE WITH THE GRAY AMENDMENT

It is hereby certified that the acquisition plan in the Child Survival Project Paper was developed with full consideration of maximally involving Gray Amendment Organizations in the provision of required goods and services and that the project is not appropriate for Gray Amendment Organization contracting. During the course of implementation, opportunities for such organizations to participate will be fully considered.



J. Paul Guedet
Acting Director
USAID/Pakistan

6/8/55

Date

142

ANNEX D

*****GOP LETTER OF REQUEST TO COME*****

144

ANNEX E
CHILD SURVIVAL PROJECT
LOGICAL FRAMEWORK



NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>Reduction of the infant and child mortality rates by at least 25% over the six year life of the Project, and obtain a sustained reduction of those rates.</p> <p>A-1</p>	<p>Measures of Goal Achievement:</p> <ul style="list-style-type: none"> - 25% reduction of disease specific mortality - computerized health information systems in place at Federal and Provincial Health Offices - Institutionalization of Public Health training and service delivery <p>A-2</p>	<ul style="list-style-type: none"> - GOP federal and provincial statistics - Project evaluations - Donor generated data <p>A-3</p>	<p>Assumptions for achieving goal targets:</p> <ul style="list-style-type: none"> - GOP continues commitment to child survival and health - GOP will maintain current rate of economic growth and corresponding allocation to health sector <p>A-4</p>
<p>Project Purpose:</p> <p>To expand and institutionalize Child Survival programs with special emphasis on decreasing mortality due to diarrheal diseases, vaccine preventable diseases and acute respiratory infections.</p> <p>B-1</p>	<p>Conditions that will indicate purpose has been achieved. End of Project Status.</p> <ul style="list-style-type: none"> - reduction in number of cases of severe dehydration at DTUs - percent of private-public practitioners trained in correct use of ORT - percent of mothers giving ORT fluid to children with diarrhea - percent of mothers exclusively breastfeeding for 4-6 months - funds to continue for child survival programs in 8th 5-year plan - EPI surveillance system providing up to date information which is applied for disease control - national institutions will be functioning for child survival - EPI coverage rates for children remain at current level with an increase in TT coverage for women <p>B-2</p>	<ul style="list-style-type: none"> - Eighth Five Year Plan - Evaluation of EPI and CDD GOP reporting statistics - WHO/GOP sponsored external review of EPI and CDD programs - KAP Survey (Knowledge, Attitudes & Practices) <p>B-3</p>	<p>Assumptions for achieving purpose:</p> <ul style="list-style-type: none"> - MOH line departments, NIH, and medical schools cooperate on child survival efforts - GOP maintains reporting systems for CDD and EPI - GOP continues to support efforts to include private practitioners in child survival activities - External review is conducted <p>B-4</p>

CHILD SURVIVAL PROJECT
LOGICAL FRAMEWORK

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Output:</p> <ul style="list-style-type: none"> - 105,000 fewer annual deaths of children due to dehydration from diarrhea - 65,000 fewer annual deaths of children from EPI preventable diseases - GOP national program plans for EPI and CDD - Training of about 15,000 medical personnel and 6,000 paramedical in CDD/EPI related skills - Production of media messages - Completion of operational research and studies - Increased use of targetted products such as ORS or iodized salt <p>C-1</p>	<p>Magnitude of Outputs:</p> <ul style="list-style-type: none"> - 18 DTUs, 48 PORTs, and approx. 4,000 ORT Corners functioning - Health information systems developed - Provincial training facilities operating - Regular dissemination of CDD/EPI media messages - Analytical studies completed - Increased sales of ORS/iodized salt <p>C-2</p>	<ul style="list-style-type: none"> - On-site visits - MOH records/reports - Training evaluations - Annual review of radio and TV programming - Reports of research and evaluation teams - Sales and marketing response data <p>C-3</p>	<p>Assumptions for achieving outputs:</p> <ul style="list-style-type: none"> - GOP continues commitment to inter-linked training system including provision of staff & facilities - A functional surveillance system for EPI and CDD will be developed - Market and operational research will lead to effective media messages and behavior changes - Effective strategies are developed to reach women <p>C-4</p>
<p>Inputs:</p> <ul style="list-style-type: none"> - Technical Assistance/Program Planning - CDD/EPI commodities - Financial support of national child survival activities - Small scale construction and refurbishment of DTUs, PORTs - Long-term and short-term training <p>D-1</p>	<p>Implementation Target (Type and Quantity):</p> <p><u>Phase I</u></p> <ul style="list-style-type: none"> - \$ 7.7 million for Technical Assistance - \$ 5.6 million for Training - \$ 12.9 million for Commodities - \$ 1.0 million for Construction - \$ 19.3 million for Other Costs - \$ 15.5 million for Cont & Infl <p><u>Phase II</u></p> <ul style="list-style-type: none"> - \$23 million for Contingencies <p>D-2</p>	<ul style="list-style-type: none"> - USAID records. - MOH records - TAT records - Child Survival Commission records <p>D-3</p>	<p>Assumptions for providing inputs:</p> <ul style="list-style-type: none"> - Project design approval and agreement signed. - Funds continue to be available as planned. <p>D-4</p>

1/1/88

EF

UNCLASSIFIED

STATF

2777

ANNEX F
page 2 of 3 pages

3. UNDER THE BLANKET WAIVER APPROVED BY THE ADMINISTRATOR, THERE ARE TWO DIFFERENT PROCEDURES--ONE FOR VEHICLES WHICH HAVE ALREADY BEEN SPECIFICALLY IDENTIFIED AS NOT BEING MANUFACTURED IN THE U.S. AND--A SECOND FOR THOSE VEHICLES WHICH WILL HAVE TO BE IDENTIFIED CASE BY-CASE. THE PROCEDURES ARE AS FOLLOWS:

A. FOR THE CATEGORIES OF VEHICLES IN PARAGRAPH 1A AND 1B ABOVE, ONCE THE MISSION OR A.I.D./W BUREAU RESPONSIBLE FOR A PROJECT DETERMINES THAT THE VEHICLES ARE NEEDED FOR THE PROJECT, NO FURTHER WAIVER IS NECESSARY. MISSIONS/BUREAUS USING THIS WAIVER AUTHORITY WILL MAINTAIN A RECORD OF THE NUMBER, TYPE AND VALUE OF VEHICLES PURCHASED UNDER THIS AUTHORITY. THE INFORMATION WILL HAVE TO BE PROVIDED TO A.I.D./W FOR REVIEW WHEN WAIVER RENEWAL IS CONSIDERED.

B. FOR THE CATEGORIES OF VEHICLES IN PARAGRAPH 1C ABOVE, IF THE MISSION OR A.I.D./W BUREAU DETERMINES A NEED FOR A RIGHT-HAND-DRIVE VEHICLE OR MOTORCYCLE THAT MAY NOT BE MANUFACTURED IN THE UNITED STATES, THE MISSION/BUREAU WILL SEND A REQUEST TO THE COMMODITY SUPPORT DIVISION OF THE OFFICE OF PROCUREMENT (M/SER/OP/COMS) SPECIFYING THE TYPE OF VEHICLE NEEDED. M/SER/OP/COMS WILL DETERMINE WHETHER ANY VEHICLES MEETING THE SPECIFICATIONS ARE MANUFACTURED IN THE UNITED STATES. IF THERE ARE NONE, THE BLANKET WAIVER AUTHORITY MAY BE USED TO COVER THE PROCUREMENT OF THOSE VEHICLES FROM OUTSIDE THE UNITED STATES. AGAIN,

MISSIONS/BUREAUS WILL MAINTAIN A RECORD OF THE NUMBER, TYPE AND VALUE OF VEHICLES PURCHASED UNDER THIS AUTHORITY.

C. IN EITHER 2A OR 2B ABOVE, SPARE PARTS SETS FOR THESE VEHICLES THAT ARE PURCHASED IN THE SAME CONTRACT OR ORDER ARE ALSO INCLUDED IN THE WAIVER. SHULTZ

BT
#2777

NNNN

EH

UNCLASSIFIED

STATE #92777

148

USAID/PAKISTAN MISSION DIRECTOR'S WAIVER FOR A.I.D
PAYMENT OF INTERNATIONAL PARTICIPANT TRAVEL COSTS

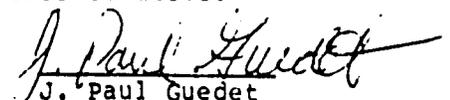
A.I.D. Handbook 10, Chapter 15B1, provides that the cost of international travel, including incidental costs en route as well as the cost of travel between the participant's city and the points of departure and return in the participant's home country, shall be paid by the host government or other sponsor unless, in the case of Mission-funded programs, the Mission Director has justified and authorized full or partial waivers and has so notified S&T/IT.

Training and institution-building are important components of the economic assistance program between the Governments of the U.S. and Pakistan. USAID/Pakistan's experience, however, has been that the Government of Pakistan (GOP), due to serious foreign exchange and budgetary constraints, has been historically unable to fund international travel costs for short-term training programs. The consequence has been that Pakistani participants have, on numerous occasions, been denied worthwhile and much needed training, inhibiting the achievement of project targets.

I have carefully reviewed the advisability of requiring full GOP funding for travel costs for participant training of one year or less and the alternative of funding such travel with grant funds provided through USAID/Pakistan to the GOP. Recognizing the objectives of many of our projects and the fact that project success will be enhanced by encouraging opportunities for short-term training, I have determined that it would be prejudicial to U.S. interests to require that the GOP pay the entire international participant travel costs for training programs of one year or less.

Therefore, on all Mission-funded training programs up to and including one year, USAID/Pakistan shall be responsible for the entire cost of the round-trip economy class air ticket and other necessary incidental costs en route. Where a PIC/P has been originally written for a program of one year or less, but, after the participant has initiated his or her program, the program is extended one year in total, USAID/Pakistan shall also fund the round-trip ticket. The justification for funding programs that are extended is to minimize administrative problems which are otherwise likely to occur.

On the basis of the above justification and pursuant to Handbook 10, Chapter 15B1a, I J. Paul Guedet, acting principal officer of the Agency for International Development in Pakistan, do hereby waive the requirement that the host government fully fund international travel for training courses of one year or less and authorize payment with USAID/Pakistan grant funds for travel costs as specified above.


J. Paul Guedet
Acting Director
USAID/Pakistan

6/8/98
Date

PROJECT AUTHORIZATION

Name of Country; Pakistan

Name of Project; Child Survival

Number of Project; 391-0496

1. Pursuant to Sections 104 and 531 of the Foreign Assistance Act of 1961, as amended the (FAA), I hereby authorize the Child Survival Project for the Islamic Republic of Pakistan (the "Cooperating Country") involving planned obligations of not to exceed Sixty-two Million United States Dollars (US \$62,000,000) in grant funds over a six-year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is six years from the date of initial obligation.

2. The Project consist of support for child survival efforts through financing of training, construction, technical assistance and commodities for, among other things, (a) program planning; (b) training; (c) communications and marketing; (d) research and analytical studies; and, (e) health information systems.

3. The Project Agreement(s) which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and Delegation of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

4. a. Source and Origin of Commodities, Nationality of Services

Commodities financed by A.I.D. under the Project shall have their source and origin in the Islamic Republic of Pakistan or in the United States except as A.I.D. may otherwise agree in writing. The suppliers of commodities or services shall have the Islamic Republic of Pakistan or the United States as their ~~place of nationality~~, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

251

b. Third Country Participant Training

Third country participant training sponsored by A.I.D. under this project shall, except as A.I.D. may otherwise agree in writing, be only in the Selected Free World List, Geographic Code 941.

c. Covenants:

(i) No later than June 30th of each year, the Cooperating Country, through its Ministry of Health (MOH), and after consultation with USAID/Pakistan, shall provide to USAID, in form and substance satisfactory to USAID, its annual training plan for the following year, which plan shall include details as to number of participants, types and duration of training programs as well as a tentative schedule for dates and locations.

(ii) The Cooperating Country shall ensure that all participants receiving long term training under this Project will continue working in child survival related activities within Pakistan, from the date of the completion of training for a period of time equivalent to three times the length of the training provided, but not less than one year and not more than five years.

d. The requirement that travel costs for trainees must be paid by the Cooperating Country or other sponsors may be waived for this project in accord with A.I.D. Handbook 10, Section 15 B1.

Julia Chang Bloch
Julia Chang Bloch
Assistant Administrator
Bureau for Asia and Near East

July 26, 1988
Date

Clearances:

DAA/ANE: Thomas H. Reese THR
ANE/PD: Ronald F. Venezia RFE
ANE/DP: Peter Benedict (Draft)
ANE/SA: J Pielemeier (Draft)
ANE/DP: P Benedict (Draft)
ANE/TR: Barbara Turner (Draft)
GC/ANE: J Silverstone (Draft)

ANE/PD/SA: G Spence: lm: 7/22/88: 3304n

151

DRAFT CONGRESSIONAL NOTIFICATION

UNCLASSIFIED
AID 06/05/88
A(DIR):JPGUEDET
PDM:GRANDERSEN:GRA:4287F
1. PRO 2. FM 3. RLA 4.HPN
AID AMB DCM, ECON 4

AEMBASSY ISLAMABAD
SECSTATE WASHDC, PRIORITY

AIDAC

FOR ANE/PD, TOM RISHOI

E.O. 12356: N/A

SUBJECT: CHILD SURVIVAL - 391-0496 DRAFT CONGRESSIONAL NOTIFICATION

1. DRAFT LANGUAGE FOR THE CN FOR THE SUBJECT PROJECT. THIS IS TO ADVISE THAT AID INTENDS TO OBLIGATE DOLS 10 MILLION IN FY 88 FOR THE SUBJECT PROJECT FROM THE CHILD SURVIVAL FUND.

2. ACTIVITY DATA SHEET:

COUNTRY	PAKISTAN
TITLE	CHILD SURVIVAL (CS)
NUMBER	391-0496
APPROPRIATION CATEGORY	CHILD SURVIVAL FUND (DA)
LIFE OF PROJECT	FY 1988 - FY 1994
PROPOSED OBLIGATION	FY 1988 - DOLS 10 MILLION (DA) LOP - DOLS 62 MILLION
INITIAL OBLIGATION	FY 1988

ESTIMATED FINAL
OBLIGATION FY 1993

3. NARRATIVE IS AS FOLLOWS:

PURPOSE: TO EXPAND AND INSTITUTIONALIZE CHILD SURVIVAL PROGRAMS WITH PARTICULAR EMPHASIS ON DECREASING MORTALITY DUE TO DIARRHEAL DISEASE, NEONATAL TETANUS, MEASLES AND ACUTE RESPIRATORY INFECTION.

BACKGROUND: IN PAKISTAN 45 PERCENT OF THE POPULATION ARE CHILDREN UNDER 15 YEARS OF AGE. THE MORTALITY RATE OF CHILDREN UNDER FIVE, WHO COMPRISE 15.3 PERCENT OF THE POPULATION, IS ESTIMATED TO BE 160 PER 1000 LIVE BIRTHS (LB). IN THE PAST GOP HEALTH EMPHASIS HAS BEEN ON THE URBAN AND CURATIVE SIDE: EQUIPMENT, BUILDINGS AND DOCTORS. THE GOP'S SUCCESSFUL ACCELERATED HEALTH PROGRAM (AHP) HAS BEGUN TO REDUCE INFANT MORTALITY AND HAS HELPED CONVINCE THE GOP OF THE NEED TO PUT EMPHASIS ON RURAL AND PREVENTIVE HEALTH CARE. GOP HAS INCREASED EFFORTS FOR AN EXPANDED PROGRAM OF IMMUNIZATION (EPI), CONTROL OF DIARRHEAL DISEASES (CDD) AND INTENSIFIED TRAINING. THE CS PROJECT IS DEVELOPED TO ADDRESS IDENTIFIED NEEDS BASED ON LESSONS LEARNED DURING THE GOP'S AHP AND USAID'S PRIMARY HEALTH CARE (PHC) PROJECT.

PROJECT DESCRIPTION: THE PROJECT WILL BE IMPLEMENTED THROUGH THE GOP MINISTRY OF HEALTH WITH TECHNICAL ASSISTANCE PROVIDED BY A PRIVATE CONTRACTOR. CHILD SURVIVAL ACTIVITIES INVOLVE APPLYING PREVENTIVE HEALTH TECHNOLOGIES AND SERVICES TO IMPROVE THE HEALTH AND SURVIVAL OF CHILDREN. SINCE THE KNOWLEDGE AND TOOLS EXIST IN PAKISTAN, USAID BELIEVES A FOCUS ON THE HEALTH PROBLEMS OF CHILDREN AND MOTHERS WILL PRODUCE SIGNIFICANT REDUCTIONS IN THE MORTALITY/MORBIDITY RATES OF CHILDREN.

THE PROJECT WILL BE IN TWO PHASES: ONLY THE FIRST PHASE IS TO BE AUTHORIZED AT THIS TIME. THE FIRST PHASE WILL CONSIST OF A DOLS 62 MILLION DA/ESF GRANT OVER A SIX YEAR PERIOD. THREE INTERVENTIONS WILL BE COORDINATED BY THE MISSION AND DIRECTED BY A TECHNICAL ASSISTANCE TEAM (TAT). INITIALLY THE PROJECT FOCUS WILL BE TO INSTITUTIONALIZE THE CDD PROGRAM AND THE ACCELERATED EPI. HEALTH PERSONNEL WILL ALSO BE TRAINED IN CASE MANAGEMENT OF ACUTE RESPIRATORY INFECTION (ARI) AND OTHER CHILD SURVIVAL COMPONENTS. PHASE ONE INCLUDES FIVE COMPONENTS: 1) TECHNICAL ASSISTANCE/PROGRAM PLANNING; 2) TRAINING; 3) COMMUNICATIONS AND MARKETING; 4) RESEARCH AND ANALYTICAL STUDIES; 5) HEALTH INFORMATION SYSTEMS TO DEVELOP CAPACITY FOR SURVEILLANCE AND MONITORING OF PROGRAM INTERVENTIONS.

A SECOND PHASE OF AN ESTIMATED \$23 MILLION WILL BE CONSIDERED FOR AUTHORIZATION WHEN THE CAPACITY TO DEVELOP AND MANAGE THE PLANNED ACTIVITIES IS IDENTIFIED AND/OR CREATED. THESE ACTIVITIES CONSIST OF INCENTIVE FUNDS AND GRANTS TO ORGANIZATIONS FOR A WIDE RANGE OF

153

INSTITUTIONAL INNOVATIONS TO SUPPLEMENT AND REINFORCE THE PHASE I ACTIVITIES. THE PAKISTAN MEDICAL AND DENTAL COUNCIL, NGOS MEDICAL COLLEGES, PRIVATE SECTOR FIRMS, PROFESSIONAL ASSOCIATIONS AND NATIONAL CHILDREN'S COMMISSION UNDER CONSIDERATION BY THE GOP ARE EXAMPLES OF POSSIBLE ENTITIES. COOPERATIVE EFFORTS WITH OTHER DONORS WORKING IN COLLABORATION WITH THE USAID CHILD SURVIVAL PROJECT CAN BE SUPPORTED WITH COMMODITIES, TRAINING AND OTHER COSTS. THE FUNDS UNDER THIS PHASE WILL BE CONSIDERED TO SUPPORT CHILD SURVIVAL RELATED ACTIVITIES BEYOND THE OPERATIONAL CAPABILITY OF THE PHASE ONE MANAGEMENT STRUCTURE.

RELATIONSHIP OF THE PROJECT TO A.I.D. COUNTRY STRATEGY: THE PROJECT IS FUNDED FROM THE PROPOSED SIX YEAR PROGRAM OF ASSISTANCE TO PAKISTAN AND SUPPORTS GOP EFFORTS TO ACCELERATE PROGRESS IN THE SOCIAL SECTOR. THE PROJECT IS EXPECTED TO BE THE CENTERPIECE FOR A.I.D. HEALTH SECTOR INVOLVEMENT AND REFLECTS PAKISTAN'S DESIGNATION AS A CHILD SURVIVAL EMPHASIS COUNTRY. THE PROJECT, FOCUSING ON THE HEALTH NEEDS OF THE NATION'S MOST VULNERABLE GROUP -- CHILDBEARING MOTHERS AND YOUNG CHILDREN -- FORMS A CRITICAL PART OF THE MISSION'S HEALTH STRATEGY AND BUILDS ON THE EXPERIENCE GAINED FROM THE PHC PROJECT. THE PROJECT IS CONSISTENT WITH AID'S CORE POLICIES AND WILL TRANSFER TECHNOLOGY, HELP BUILD INSTITUTIONS TO SUSTAIN THE INITIATIVES, EXPAND THE ROLE OF THE PRIVATE SECTOR AND WILL SUPPORT POLICY REFORMS.

BENFFICIARIES: THE BENEFICIARIES OF THE PROJECT WILL BE CHILDBEARING-AGE WOMEN AND UNDER FIVE CHILDREN THROUGHOUT PAKISTAN AS WELL AS HEALTH PRACTITIONERS TRAINED UNDER THE PROJECT.

HOST COUNTRY AND OTHER DONORS: THE GOP WILL CONTRIBUTE THE EQUIVALENT OF DOLS 23 MILLION TO THE CS PROJECT. THE PROJECT WILL BE COORDINATED WITH CHILD SUPVIVAL ACTIVITIES OF UNICEF, WHO AND OTHER DONORS E.G. CIDA, NETHERLANDS, ODA. PHASE TWO OF THE PROJECT WILL SUPPORT COLLABORATIVE EFFORTS WITH OTHER DONORS.

MAJOR OUTPUTS: PHASE ONE OF THE CHILD SURVIVAL PROJECT WILL PROVIDE THE FOLLOWING MAJOR OUTPUTS:

- (1) 105,000 AVERTED DEATHS ANNUALLY OF CHILDREN DUE TO DEHYDRATION FROM DIARRHEA;
- (2) 65,000 AVERTED DEATHS ANNUALLY OF CHILDREN FROM EPI PREVENTABLE DESEASES;
- (3) TRAINING OF 85% OF PUBLIC SECTOR AND 60% OF PRIVATE SECTOR PHYSICIANS AND 6000 PUBLIC/PRIVATE PARAMEDICAL STAFF IN CDD/EPI RELATED SKILLS;
- (4) PRODUCTION OF AUDIENCE TESTED CDD/NUTRITION AND EPI RELATED PROGRAMS FOR MASS ELECTRONIC AND PRINT MEDIA;
- (5) TRAINING CURRICULA AND ANCILLARY AUDIO VISUALS FOR CDD/NUTRITION AND ARI;

52

- (6) TRAINING OF 500 MEDICAL PERSONNEL IN BASIC COMPUTER SKILLS TO OPERATE HEALTH INFORMATION SYSTEMS;
- (7) ESTABLISHMENT OF 18 DIARRHEAL TRAINING UNITS (DTU), 48 FEEDING/ORT TRAINING UNITS (FORT) AND ORT CORNERS SET UP IN 80% OF GOP RURAL HEALTH FACILITIES;
- (8) COMPLETION OF SEVERAL OPERATIONAL RESEARCH AND ANALYTICAL STUDIES;
- (9) REVISION AND MODIFICATION OF MEDICAL SCHOOL CURRICULA TO ENSURE THAT ALL MBBS GRADUATES FROM 1990 ONWARD ARE TRAINED IN DIARRHEA AND ARI CASE MANAGEMENT;
- (10) A HEALTH INFORMATION SYSTEM FOR CHILD SURVIVAL INTERVENTIONS.

AID FINANCED INPUTS LIFE OF PROJECT
(DOLS 62,000)

PHASE I	
TECHNICAL ASSISTANCE	7,737
TRAINING	5,643
OTHER COSTS	42,588
CONTINGENCY	6,032
TOTAL PHASE I	62,000

TOTAL DOES NOT INCLUDE PHASE II

Clearances in USAID/Pakistan:

FPN:	R. Martin	<u>(DRAFT)</u>
PDM:	R. Mathia	<u>(DRAFT)</u>
PDM:	G. Andersen	<u>(DRAFT)</u>
PRO:	P. Davis	<u>(DRAFT)</u>
FM:	D. Pratt	<u>(DRAFT)</u>

DRAFT PROJECT DESCRIPTION FOR INCLUSION IN THE PROJECT AGREEMENT

I. OVERVIEW

This six year project is designed to assist the Government of Pakistan (GOP) to reduce the infant and child mortality rates in Pakistan. The broader goals are expand and institutionalize Child Survival programs with special emphasis on decreasing mortality due to diarrheal disease, neonatal tetanus, measles and acute respiratory infections.

II. PROGRAM COSTS

This A.I.D. Child Survival Project will provide approximately US\$ 62 million over the six year period beginning in FY 88 to assist the GOP in implementation of a nationwide Child Survival program. During this period, GOP contribution directed to A.I.D. funded activity components will be approximately US\$ 23 million.

III. A.I.D. ASSISTANCE ACTIVITIES

In achieving its purposes of institutionalizing the GOP capacity to address the problem of child survival, A.I.D will finance the following five components:

- Component 1: Program Planning
- Component 2: Training
- Component 3: Communications and Marketing
- Component 4: Research and Analytical Studies
- Component 5: Health Informations Systems

Activities, inputs and outputs of each component are described in the following section.

IV. PROJECT COMPONENT DESCRIPTION

A. Component 1: Program Planning

This component will provide the Ministry of Health (MOH) with the technical assistance necessary to coordinate and integrate priority child survival programs. A technical assistance team (TAT) consisting of an estimated five expatriate consultants will form the core of this component. The TAT will be composed of the following proposed expatriates: a program manager, a physician with CDD expertise, a training coordinator, a medical epidemiologist with strong computer system skills, and an information, education and communication (IEC) /social marketing specialist. Additionally this component will include a small construction activity to refurbish existing interior space.

15/1

Much of the success of the Child Survival Project will depend on new initiatives and strengthening of institutional capacity and management of resources in ways that Pakistan has had little experience. Project success, particularly in terms of sustainability, will therefore require intensive human input to achieve institutionalization of new technologies and management techniques.

To minimize the number of long-term expatriates required, the Project will maximize the use of Pakistani expertise both in the Ministry of Health and in the private sector. To the extent possible, short-term technical assistance will be provided by Pakistanis abroad or resident dependent spouses.

The output of this component will be efficient project management. The TAT in concert with the MOH and the Mission's office of Health, Population and Nutrition (O/HPN) will plan, implement and evaluate project activities.

Implementation consists of provision of long and short term technical assistance. These requirements will be largely met through contracting project activities to a health management organization.

B. Component 2: Training

Programs in the training component have been divided into two categories, in-country and US/third country. The in-country training has been further divided into case management and in-service programs.

Case management training is a major activity of the Project's intervention in the control of diarrheal diseases. An interlinked training system extending from medical colleges to district hospitals to ORT corners at rural health facilities will be created. Initially, the program will focus on experiential training of health personnel in correct oral rehydration therapy and essential nutritional practices.

All training programs are interlinked with the other Project components. The objective is to simplify management burden in any one component by reinforcing activities in each of the other components.

The expected output of this component is an improved level of case management awareness and practice throughout Pakistan.

C. Component 3: Communications and Marketing

Effective communications and marketing will be essential to the success of the child survival project. Audience research will be conducted to identify/specify the knowledge, attitudes and practices (KAP) of key target groups. The most effective combinations of mass media and interpersonal contact will be determined by audience research

and surveys conducted by research firms that specify geographic variances and types of risk. Programs of information, education and communication (IEC) will be developed by consultants and local public relations firms.

Periodic analysis and evaluation will be required to assure the effectiveness of the IEC programs. Contracted analytical studies will monitor selected families in different geographic areas to determine attitudinal and behavioral changes. In addition, periodic random surveys and analysis of morbidity and mortality records will be taken to verify results. Based on these evaluations, the IEC programs will be revised or continued as appropriate.

Training at all levels is the key to the institutionalization of child survival strategies and is therefore stressed in this project.

D. Component 4: Research and Analytical Studies

Planning for child survival programs is difficult because of the scarcity of reliable data. In response, a fundamental component of this Project includes strengthening the capacity of the GOP to conduct problem solving research in limited controlled settings and to analyze and apply results to health programs.

Operational Research on solving problems identified in each intervention will be conducted in collaboration with the medical colleges and assigned research institutions. Assistance in research protocol, data analysis and report presentation will be given by the TAT.

A priority will be the search for the best strategy for reaching unserved women. The role of traditional birth attendants (TBAs), health technicians, LHVs or other health auxiliaries will be studied.

Epidemiological research will be coordinated by the TAT and undertaken by returned trained epidemiologists with MPH degrees financed by the Project. A priority will be to conduct base-line and interim evaluations of the epidemiological impact of EPI and ORT.

The output of this component will be the creation of the basic research and analytical capacity within the MOH.

F. Component 5: Health Information Systems

The weakness of present health information systems in Pakistan makes it difficult to measure and effectively manage a child survival project. Improvement of the information and reporting system for both management and epidemiological data will initially be related principally to the control of diarrheal diseases and the expanded program of immunization. The TAT will assist the MOH to develop computerized health information systems at both the federal and provincial levels.

15/11

The health information systems will upgrade the quality of health services through better identification of needs, more careful monitoring and management of resources on which to base decision making.

Systems analysis will play a key role in defining information needs for planning and decision making at each level of the health system. Survey methodologies will be carefully reviewed for validity in order to obtain statistically valid information.

Coordination by the TAT is an obvious necessity to the implementation of health information systems component.

F. Project Evaluation

Funds will also be provided in this project for short term technical assistance for conducting external evaluations to assess progress towards accomplishing the stated Project goals and purposes.

1.91

Prepared: May 31, 1988

Summary of Project Costs by Expense Category
 and Source of Funding

Expense Category	Life of Project Funding			GDP
	A.I.D. Dollar Grant			
	FX	LC	Total	
1. TECHNICAL ASSISTANCE				
Long Term	5,783	606	6,389	
Short Term	1,142	207	1,348	
Sub-Total	6,924	813	7,737	9,494
2. TRAINING				
Long term	871	32	903	
Short term (US & 3rd Country)	82	68	150	
In-country	0	4,591	4,591	
Sub-Total	953	4,690	5,644	1,910
3. COMMODITIES				
Vehicles	3,690	700	4,390	5,726
Furniture & Equipment	200	122	322	0
Operational Equipment	3,160	5,125	8,285	2,255
Sub-Total	7,050	5,947	12,997	8,011
4. CONSTRUCTION Sub-Total	0	684	684	824
5. OTHER COSTS				
Pakistan Staff/oth Exp	0	4,709	4,709	
Administrative & Logistic Support	0	637	637	
Operational Supp	0	13,910	13,910	
Evaluation	100	40	140	
Sub-Total	100	19,296	19,396	2,085
Total (1-5)	15,327	31,430	46,757	27,331
Inflation (15% on FX, 10% on LC)	1,184	8,428	9,612	
Contingency (Approx 10% of Tot + Inf)	1,748	4,183	5,931	
Grand Total	17,959	44,041	62,000	29,336

160

File: 60PCPART
May 31, 1988

Child Survival Project
ESTIMATED COSTS OF GOP COUNTERPART EXPENSES

I. TECHNICAL ASSISTANCE

1. Compensation & Travel, BHS Cell, Islamabad	588,462
2. Compensation & Travel, Provi Proj Directorates	1,199,809
3. Compensation & Travel, N.I.H., Islamabad	1,100,453
4. Salary & Compensation, 18 DTUs	1,320,585
5. Salary & Compensation, 48 FORTS	5,284,954

TOTAL TECHNICAL ASSISTANCE 9,494,163

II. TRAINING (Salaries, Allow & Benefits of Officials)

A & B. U.S. & Third Country

a. 21 Senior Physicians - Grade 18 (2 years each)	
Rs. 10,800 pm (Rs. 10,800 x 12 x 2 x 21/17.50) =	311,040
b. 20 Obst to U/S Diego - Grade 18 (4-weeks each)	
Rs. 10,800 pm (Rs. 10,800 x 20/17.50) =	12,343
c. 8 MCH/PAE DTU to Indonesia - Grade 18 (2 yrs)	
Rs. 10,800 pm (Rs. 10,800/2 x 8/17.50)	2,469

C. IN-COUNTRY TRAINING

1. a. DTU Staff Trg - 30 Officials Various Grades - 4 days each	
10 Assoc Professors Gr. 19 (Rs. 13,500/4x10/17.50)	1,929
10 Senior M.Ds. Gr. 18 (Rs. 10,800/4x10/17.50)	1,543
10 L.H.Vs. Grade 9 (Rs. 3,400/4x10/17.50)	486
b. FORT Trainers - 144 Officials Grade 17/9 - 2 wks each	
96 M.Ds. Grade 17 (Rs. 9,600/2x96/17.50)	26,331
48 L.H.Vs. Grade 9 (Rs. 3,400/2x48/17.50)	4,663
c. Training in 18 DTUs - 8,424 Grade 17 - 4 days each	
M.Ds. Grade 17 (9,600/4 x 8,424/17.5)	1,155,291
d. Training in Seminars	
No GOP expense	0
e. Training in 48 FORTS - 6,240 Paramedics Grade 9 - 1 wk	
6240 Paramedics Grade 9 (Rs. 3,400/4 x 6240/17.5)	303,086

161

2. a. EPI Systems Analysis - 60 Officials Grade 15 - 4 wks		

HIS Repres Grade 15 (Rs.5,600x60/17.50)	19,200	
b. Basic Computer Skills - 140 Off Grade 15 - 2 weeks		

Prov Health Pers Grade 15 (Rs.5,600/2x140/17.50)	22,400	
c. Provl Logistics Officers - 10 Off Grade 17 - 1 week		

Des MUH Pers Grade 17 (Rs.9,600/4x10/17.50)	1,371	
d. Tech Trg Skills - 720 (180 Gr 17, 540 Gr B) - 1 week		

M.Os. 180 Mob Units Gr.17 (Rs.9,600/4x180/17.50)	24,684	
Vaccinators 540 Grade 9 (Rs.3,400/4x540/17.50)	26,229	

TOTAL TRAINING	1,913,066	

III. COMMODITIES

1. VEHICLES

a. Drivers 175+10+45 = 230 @ Rs.2,500 p.m. 5 yrs.	1,971,429	Rs.2,500 x 12 x 230 x 5 / 17.5
b. Drivers for Rickshaws = Rs.2,500 p.m x 50 x 5 yrs.	428,571	Rs.2,500 x 12 x 50 x 5 / 17.5
c. P.O.L. 230 Vehicles @ Rs.24,000 p.y. 5 yrs.	1,577,143	Rs.24,000 x 230 x 5 / 17.5
d. Maintenance 230 vehicles @ Rs.24,000 p.y. 5 yrs.	1,577,143	Rs.24,000 x 230 x 5 / 17.5
e. P.O.L. 50 Autorickshaws @ Rs.6,000 p.y 5 yrs	85,714	Rs.6,000 x 50 x 5 / 17.5
d. Maintenance 50 Autorickshaws @ Rs.6,000 p.y. 5 yrs.	85,714	Rs.6,000 x 50 x 5 / 17.5

2. OTHER COMMODITIES

a. Storage, transp, mgt, distribution	5,725,714	
	2,285,714	Rs.8,000,000 per year committed by NH

TOTAL COMMODITIES 8,011,429

IV. CONSTRUCTION

1. Construction Cost 2 Rooms for 18 DTUs (600 sft ea.)	308,571	Rs.500 x 600 sft x 18 / 17.50
2. Construction Cost 1 Room for 48 FORTS (300 sft ea.)	411,429	Rs.500 x 300 sft x 48 x / 17.50
3. Maintenance utilities (Rs. 250 p.m.)	56,571	(48x18) = 66 x Rs.250 x 12 x 5 / 17.50
4. Engineer One Grade 18 for 5 years	37,029	Rs.10,800 x 12 x 5 / 17.50
5. Travel, Per Diem (1/3rd of Salary)	12,343	

TOTAL CONSTRUCTION 825,943

V. OTHER COSTS

1. Research Supvn & Facility for Res (20% of \$ 5 m / 2)	500,000	Assume 50% res will be carried under GOP Supvn
2. Communication (50% Subsidy for TV/Radio Air Time)	1,215,000	(1,980,000 + 450,000) / 2
3. Distrib Newsletter, leaflets, broch, calendar (30%)	525,000	1500,000+500,000+750,000) x .3
4. 3 Evals (Trvl) of GOP Staff, 2 Pers, Gr.19 - 4 weeks)	1,543	Rs.150 p.d. x 30 days x 2 x 3 /17.50
5. Off & Other Costs for BHS Cell, Islamabad	475,151	
6. Off & Other Costs for 4 Provl Project Directorates	368,399	
<hr/>		
TOTAL OTHER COSTS	3,085,093	
<hr/>		
GRAND TOTAL	23,329,693	
<hr/>		

163

S. No.	Title	No. of Monthly		FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	Total	
		Grade	Posts							
1. BASIC HEALTH SERVICES CELL, ISLAMABAD										
A. Salary & Compensation										
1.	Deputy Dir Gen	19	1	13,500	162,000	178,200	196,020	215,622	237,184	989,02
2.	Asst Dir Gen (Trg)	18	1	11,000	132,000	145,200	159,720	175,692	193,261	805,87
3.	Section Officer	18	1	11,000	132,000	145,200	159,720	175,692	193,261	805,87
4.	Assistants	15	5	5,600	336,000	369,600	406,560	447,216	491,938	2,051,31
5.	Stenographer	15	1	5,600	67,200	73,920	81,312	89,443	98,388	410,26
6.	Stenotypists	12	2	4,500	108,000	118,800	130,680	143,748	158,123	659,35
7.	Lower Div Clerks	5	3	2,700	97,200	106,920	117,612	129,373	142,311	593,41
8.	Office Messengers	1	5	2,000	120,000	132,000	145,200	159,720	175,692	732,61
9.	Asst Dir Gen (Oper)	18	1	11,000	132,000	145,200	159,720	175,692	193,261	805,87
10.	Stenographers	15	2	5,600	134,400	147,840	162,624	178,886	196,775	820,52
11.	Machine Operator	4	1	2,500	30,000	33,000	36,300	39,930	43,923	183,15
12.	Driver	4	1	2,500	30,000	33,000	36,300	39,930	43,923	183,15
13.	Chowkidars	1	2	2,000	48,000	52,800	58,080	63,888	70,277	293,04
14.	Mali	1	1	2,000	24,000	26,400	29,040	31,944	35,138	146,52
15.	Sanitary Worker (Janitor)	1	1	2,000	24,000	26,400	29,040	31,944	35,138	146,52
16.	Despatch Rider (Messenger)	4	1	2,500	30,000	33,000	36,300	39,930	43,923	183,15
Total Sal & Compen in Pak Rupees					1,606,800	1,767,480	1,944,228	2,138,651	2,352,516	9,809,67
Equiv in US \$ @ \$1.00 = Rs.17.50										560,55
B. Office Expenses										
1.	Rent (Rs.50,000 p.m.)			50,000	600,000	660,000	726,000	798,600	878,460	3,663,06
2.	Utilities (Rs.10,000 p.m.)			10,000	120,000	132,000	145,200	159,720	175,692	732,61
3.	Telephones & (Rs.7,500 p.m.)			7,500	90,000	99,000	108,900	119,750	131,769	549,45
4.	Maintenance Building (Rs.1,000 p.m.)			1,000	12,000	13,200	14,520	15,972	17,569	73,26
5.	Rep Maint Furn/Equip (Rs.5,000 p.m.)			5,000	60,000	66,000	72,600	79,800	87,846	366,30
6.	Stationery (Rs.20,000 p.m.)			20,000	240,000	264,000	290,400	319,440	351,384	1,465,22
7.	Postage & Contingencies (Rs.20,000 p.m.)			20,000	240,000	264,000	290,400	319,440	351,384	1,465,22
Total Office Expenses					1,362,000	1,498,200	1,648,020	1,812,822	1,994,104	8,315,14
Equiv in US \$ @ \$1.00 = Rs.17.50										475,15
C. Travel Expenses										
1.	Deputy Dir General	19	1	35,000	35,000	38,500	42,350	46,585	51,244	212,67
2.	Asst Dir General (Trg)	18	1	20,000	20,000	22,000	24,200	26,620	29,282	122,10
3.	Asst Dir General (Oper)	18	1	20,000	20,000	22,000	24,200	26,620	29,282	122,10
4.	Driver	4	1	5,000	5,000	5,500	6,050	6,655	7,321	30,52
Total Travel Expenses in Pak Rupees					80,000	88,000	96,800	106,480	117,128	488,40
Equiv in US \$ @ \$1.00 = Rs.17.50										27,90
TOTAL BHS CELL, ISLAMABAD					3,048,800	3,353,680	3,689,048	4,057,953	4,463,748	18,613,22
Equiv in US \$ @ \$1.00 = Rs.17.50										1,063,61

S. No.	Title	Grade	No. of Posts	Monthly Compens	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	Total
II. PROVINCIAL PROJECT DIRECTORATES										
A. Salary & Compensation										
1.	Project Director (CDD)	19	1	13,500	162,000	178,200	196,020	215,622	237,184	989,026
2.	Project Director (EPI)	19	1	13,500	162,000	178,200	196,020	215,622	237,184	989,026
3.	Stenographers	15	2	5,600	134,400	147,840	162,624	178,886	196,775	820,519
4.	Assistants	15	2	5,600	134,400	147,840	162,624	178,886	196,775	820,519
5.	Statistical Assistant	9	2	3,400	81,600	89,760	98,736	108,610	118,471	498,177
6.	Lower Division Clerk	5	1	2,700	32,400	35,640	39,204	43,124	47,437	197,805
7.	Driver	4	2	2,500	60,000	66,000	72,600	79,860	87,846	366,306
8.	Office Messengers	1	2	2,000	48,000	52,800	58,080	63,888	70,277	293,045
Total Sal & Compensation					814,800	896,280	985,908	1,084,499	1,192,945	4,974,413
Equiv in US \$ @ \$1.00 = Rs.17.50										284,252
US \$ for 4 Provinces										1,137,0
B. Office Expenses										
1.	Utilities (Rs.5,000 p.m.)			5,000	60,000	66,000	72,600	79,860	87,846	366,306
2.	Telephones 3 (Rs.4,500 p.m.)			4,500	54,000	59,400	65,340	71,874	79,061	329,675
3.	Maintenance Building (Rs.500 p.m.)			500	6,000	6,600	7,260	7,986	8,785	36,631
4.	Rep Maint Furn/Equip (Rs.2,000 p.m.)			2,000	24,000	26,400	29,040	31,944	35,138	146,522
5.	Stationery (Rs.5,000 p.m.)			5,000	60,000	66,000	72,600	79,860	87,846	366,306
6.	Postage & Contingencies (Rs.5,000 p.m.)			5,000	60,000	66,000	72,600	79,860	87,846	366,306
Total Office Expenses in Pak Rupees					264,000	290,400	319,440	351,384	389,522	1,611,750
Equiv in US \$ @ \$1.00 = Rs.17.50										92,103
US \$ for 4 Provinces										368,3
C. Travel Expenses										
1.	Project Director (CDD)	19	1	20,000	20,000	22,000	24,200	26,620	29,282	122,102
2.	Project Director (EPI)	19	1	20,000	20,000	22,000	24,200	26,620	29,282	122,102
4.	Driver	4	1	5,000	5,000	5,500	6,050	6,655	7,321	30,526
Total Travel Expenses in Pak Rupees					45,000	49,500	54,450	59,895	65,885	274,109
Equiv in US \$ @ \$1.00 = Rs.17.50										15,663
US \$ for 4 Provinces										62.7
TOTAL PROV. DIRECTORATE EACH					1,123,800	1,236,180	1,359,798	1,495,778	1,645,756	6,860,9
Equiv in US \$ @ \$1.00 = Rs.17.50										392,0
TOTAL FOR FOUR PROVINCES					4,495,200	4,944,720	5,439,192	5,983,111	6,581,422	27,443,6
Equiv in US \$ @ \$1.00 = Rs.17.50										1,568,2

contd.

165

S. No.	Title	Grade	No. of Posts	Monthly Compens	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	Total
111. NATIONAL INSTITUTE OF HEALTH										
A. Salary & Compensation										
1.	National E.P.I. Manager	19	1	13,500	162,000	178,200	196,020	215,622	237,184	989,026
2.	Operational Officer	18	1	11,000	132,000	145,200	159,720	175,692	193,261	805,873
3.	Statistical Officer	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,308
4.	Stores Officer	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,308
5.	Administrative Officer	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,308
6.	Assistants	11	3	4,200	151,200	166,320	182,952	201,247	221,372	923,091
7.	Statistical Assistants	11	2	4,200	100,800	110,880	121,968	134,165	147,581	615,394
8.	Stenographers	15	2	5,600	134,400	147,840	162,624	178,886	196,775	820,525
9.	Accountant	14	1	4,900	58,800	64,680	71,148	78,263	86,089	358,980
10.	Stenotypists	12	2	4,500	108,000	118,800	130,680	143,748	158,123	605,351
11.	Store Keepers	11	3	4,200	151,200	166,320	182,952	201,247	221,372	923,091
12.	Upper Division Clerk	7	1	3,000	36,000	39,600	43,560	47,916	52,708	219,784
13.	Lower Division Clerks	5	3	2,700	97,200	106,920	117,612	129,373	142,311	593,416
14.	Drivers	4	5	2,500	150,000	165,000	181,500	199,650	219,615	915,765
15.	Messengers/Janitors	1	11	2,000	264,000	290,400	319,440	351,364	386,522	1,611,746
16.	Labourers	1	4	2,000	96,000	105,600	116,160	127,776	140,554	586,090
17.	Evaluation Team Superv.	8	4	3,200	153,600	168,960	185,856	204,442	224,866	937,744
18.	Assistant Supervisors	6	4	2,800	134,400	147,840	162,624	178,886	196,775	820,525
19.	Health Education Officer	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,308
20.	Media Production Specialis	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,308
21.	Script Writer	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,308
22.	Photographer	14	1	4,900	58,800	64,680	71,148	78,263	86,089	358,980
23.	Artists	12	2	4,500	54,000	59,400	65,340	71,974	79,061	329,675
24.	Projectionist	11	1	4,200	50,400	55,440	60,984	67,082	73,791	307,697
25.	Mechanics	11	4	4,200	50,400	55,440	60,984	67,082	73,791	307,697
26.	Record Clerk	1	1	2,000	24,000	26,400	29,040	31,944	35,138	146,522
Total Sal & Compens in Pak Rupees					2,858,400	3,144,240	3,458,664	3,804,530	4,184,983	17,450,811
B. Travel Expenses										
1.	National EPI Manager	19	1	25,000	25,000	27,500	30,250	33,275	36,603	152,628
2.	Operational Officer	18	1	20,000	20,000	22,000	24,200	26,620	29,282	122,102
3.	Statistical Officer	17	1	15,000	15,000	16,500	18,150	19,965	21,962	91,577
4.	Stores Officer	17	1	15,000	15,000	16,500	18,150	19,965	21,962	91,577
5.	Eval. Team Supervisor	8	4	8,000	32,000	35,200	38,720	42,592	46,851	195,365
6.	Assistant Supervisor	6	4	6,000	24,000	26,400	29,120	32,052	35,246	146,818
7.	Health Education Officer	17	1	15,000	15,000	16,500	18,150	19,965	21,962	91,577
8.	Media Production Spec.	17	1	15,000	15,000	16,500	18,150	19,965	21,962	91,577
9.	Script Writer	17	1	15,000	15,000	16,500	18,150	19,965	21,962	91,577
10.	Photographer	14	1	12,000	12,000	13,200	14,520	16,072	17,569	73,262
11.	Artist	12	2	10,000	20,000	22,000	24,200	26,620	29,282	122,102
13.	Mechanics	11	4	10,000	40,000	44,000	48,400	53,240	58,564	244,204
Total Travel Expenses in Pak Rupees					296,000	325,600	358,160	393,976	433,374	1,807,111
TOTAL NIH, ISLAMABAD					3,154,400	3,469,840	3,816,824	4,198,506	4,618,357	19,257,922
Equip in US \$ @ \$1.00 = Rs.17.50										1,100,451

contd.

1/66

S. No. Title	Grade	No. of Posts	Monthly Compens	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	Total
IV. Diarrheal Training Units (DTUs) - 18									
1. Associate Professor (15%)	19	0.15	17,500	24,300	26,730	29,400	32,343	35,575	149,351
2. Medical Officer	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,307
3. Lady Health Visitor	9	1	3,400	40,800	44,980	49,368	54,305	59,735	249,098
4. Driver	4	1	2,500	30,000	33,000	36,300	39,930	43,920	183,150
5. Office Messenger	1	1	2000	24,000	26,400	29,040	31,944	35,138	146,522
Total Staff Comp. per DTU				210,300	231,330	254,463	279,909	307,900	1,283,932
TOTAL FOR 18 DTUs				3,785,400	4,163,940	4,580,334	5,038,367	5,542,204	23,110,247
Equiv in US \$ @ \$1.00 = Rs.17.50									1,320,58
V. FORTS (48)									
1. Pediatrician	18	1	10,800	129,600	142,560	156,816	172,495	189,747	791,228
2. Medical Officer	17	1	9,600	115,200	126,720	139,392	153,331	168,664	703,307
3. Lady Health Visitor	9	1	3,400	40,800	44,880	49,368	54,305	59,735	249,098
4. Driver	4	1	2,500	30,000	33,000	36,300	39,930	43,920	183,150
5. Office Messenger	1	1	2000	24,000	26,400	29,040	31,944	35,138	146,522
Total Staff Comp. per FORT				315,000	347,160	381,876	420,064	462,070	1,926,772
TOTAL FOR 48 FORTS				15,148,800	16,663,680	18,330,048	20,163,053	22,179,355	92,484,522
Equiv in US \$ @ \$1.00 = Rs.17.50									5,284,55
GRAND TOTAL IN PAF RUPEES				29,632,600	32,595,860	35,855,446	39,440,993	42,385,090	162,909,552
GRAND TOTAL IN US DOLLARS				1,693,291	1,862,621	2,048,883	2,253,771	2,479,149	10,337,71

Date: 10/1/77
 Prepared: 10/21/1981

CHILD SURVIVAL PROJECT 1981-85
 COST ESTIMATES: EXPATRIATE TECHNICAL ASSISTANCE

Page: 3
 of: 4

291

(All costs are F1 except otherwise mentioned.)

Expense Category	F1 or LE	Unit	Total F1	FY 1985		FY 1986		FY 1987		FY 1988		FY 1989		Total	Basis for calculations: Fin guideline 1980 and notes on page 5
				Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit				
10. HOME OFFICE BACKSTOP STAFF															
1. Project Coordinator (50%)	F1	yr	18	12,000	0.75	18,000	0.30	18,000	0.30	18,000	0.30	18,000	0.10	72,000	90,000
2. Assoc./Fin Officer (50%)	F1	yr	20	12,000	0.50	18,000	0.50	18,000	0.50	18,000	0.50	18,000	0.17	72,000	90,000
3. Secretary (50%)	F1	yr	30	6,000	0.50	12,500	0.50	12,500	0.50	12,500	0.50	12,500	0.17	41,250	62,500
Total Base Salaries			78	30,000	1.75	48,500	1.30	48,500	1.30	48,500	1.30	48,500	0.44	161,250	242,500
Fringe benefits (25% of Sal)				6,625		12,125		12,125		12,125		12,125		4,642	60,625
Overhead (100% of Sal & Fringe)				46,417		60,625		60,625		60,625		60,625		26,206	307,125
TOTAL HQ BACKSTOP STAFF				80,822		121,250		121,250		121,250		121,250		40,417	609,250

11. LONG TERM FIELD STAFF

A. Salaries & Overhead

1. CDD Physician	F1	yr	60	30,000	0.50	60,000	0.50	60,000	0.50	60,000	0.50	60,000	0.50	240,000	325,000
2. Training Coordinator	F1	yr	52	27,500	0.25	55,000	0.25	55,000	0.25	55,000	0.25	55,000	0.50	27,500	267,250
3. Epidemiol/Inf Spec.	F1	yr	57	27,500	0.50	60,000	0.50	60,000	0.50	60,000	0.50	60,000	0.25	16,250	306,750
4. Inform/Educ/Commun Spec.	F1	yr	48	18,323	0.33	55,000	0.33	55,000	0.33	55,000	0.33	55,000	0.00	0	220,000
5. Project Manager	F1	yr	60	25,000	0.58	60,000	0.58	60,000	0.58	60,000	0.58	60,000	0.42	25,000	300,000
Total Base Salaries			287	132,663	2.17	300,000	2.17	300,000	2.17	300,000	2.17	300,000	1.67	101,250	1,415,000
Fringe benefits (25% of Sal)				39,625		90,000		90,000		90,000		90,000		36,750	424,500
Overhead (100% of Sal & Fringe)				171,708		390,000		390,000		390,000		390,000		151,625	1,835,500
Total Salaries & Overhead				343,997		780,000		780,000		780,000		780,000		267,375	2,675,000

E. Allowances

1. Post-Exp CDD of Salaries	F1			21,427		60,000		60,000		60,000		60,000		21,427	211,427
2. Success Diff CDD of Salaries	F1			6,000		15,000		15,000		15,000		15,000		6,000	75,000
3. T.S.F. 2.67% of Salaries	F1			5,227		9,015		9,015		9,015		9,015		5,227	57,761
4. Education Allowance	F1	tax	3	10,500		21,000		21,000		21,000		21,000		10,500	105,000
5. Supp Post-Exp (travel only)	F1	tax	3	10,500		5,250		5,250		5,250		5,250		5,250	63,000
Total Allowances				64,381		110,265		110,265		110,265		110,265		52,404	562,588

contd.

Expense Category	IFA or LC	Unit	Total FA	F 1979		F 1980		F 1981		F 1982		Total Amount	Basic per calculation for calendar 1980 and notes on page 5
				Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount		
C. Travel & Transportation													
1. International Travel													
Travel to Post				5	22,500	0	0	0	0	5	22,500	45,000	
Travel back home	LC			0	0	0	0	0	0	0	0	22,500	45,000
Travel home Off Staff	LC			1	2,000	1	2,000	1	2,000	1	2,000	8,000	12,000
Medical Emerg. Travel	LC			0	0	5	15,000	5	15,000	4	12,000	42,000	62,000
Home Leave Travel	LC			0	0	5	45,000	5	45,000	0	0	90,000	50,000
				6	25,500	6	62,000	6	62,000	5	15,000	275,000	264,000
2. In-country Travel (Fare Only)													
Long Term Field Staff	gr	LC	2,352 yr	2.17	5,096	5	11,760	5	11,760	4.67	11,972	32,628	$(2,570 + 550 + 310) \times 12 / 17.5 = 2,352$
Home Off Backstop Staff	nr	LC	49 yr	1	49	1	49	1	49	1	49	294	$(550 + 310) / 17.5 = 49$
				1	2,145	1	11,809	1	11,809	1	11,821	32,922	
3. International Per Diem													
ST Field Staff Arrival	st		600 fac	5	2,400	0	0	0	0	5	2,400	4,800	
LT Field Staff Departure	st		600 fac	0	0	6	6	6	6	5	2,400	4,800	
Long Term H/L & R/F	st		120 fac	0	0	5	2,400	5	2,400	4	1,600	4,800	
Home Office Coordinator	st		400 trip	1	400	1	400	1	400	1	400	1,600	
				1	2,400	1	6,400	1	6,400	1	5,800	22,800	
4. In-country Per Diem													
Long-term Field Staff	st	LC	2,560 yr	2.17	11,380	5	27,800	5	27,800	4.67	35,220	101,600	$12 \times 7 \times 890 = 7,560$
Home Off Backstop Staff	nr	LC	515 trip	1	515	1	515	1	515	1	515	2,090	$5 \times 810 = 515$
				1	16,895	1	28,315	1	28,315	1	25,735	103,690	
5. Transportation To and Back													
Shipment of MHE (LT)	st	LC	8,820 fac 1-way	5	44,100	0	0	0	0	10	88,200	132,400	
Shipment of UAP (LT)	st	LC	1,875 fac 1-way	5	9,375	0	0	0	0	10	18,750	28,125	
Shipment of PDV (LT)	st		4,410 fac 1-way	5	22,050	0	0	0	0	10	44,100	66,150	
				10	75,525	0	0	0	0	20	132,050	206,675	
6. Storage of MHE & PDV													
			1500 fac	2.17	3,255	5	7,500	5	7,500	4.67	7,000	25,255	
7. Other Expenses													
Pre-shipment			5.5 fac	5	27,500	0	0	0	0	5	27,500	55,000	
Restocking			2.75 fac	0	0	0	0	0	0	0	0	27,500	27,500
Sub-total: Other Expenses				5	27,500	0	0	0	0	5	27,500	55,000	
Total Travel & Transportation				1	157,211	1	227,624	1	227,624	1	227,117	714,621	921,951
FOI: LONG TERM FIELD STAFF					57,175		1,617,534		1,617,534		1,220,127	920,751	1,221,952

011

Expense Category	IFI or	Unit	Total	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	Total	Basis for calculations Fin Guideline 1986 and Notes on page 5					
	LC	Cost	PH	Unit	Amount	Unit	Amount	Unit	Amount	Unit		Amount				
		(US \$)			(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)					
III. SHORT-TERM FIELD CONSULTANTS																
A. Salaries																
1. CDD Trg Evaluation	1	5,000 mo	12	0	0	2	10,000	4	20,000	4	20,000	2	10,000	0	0	60,000
2. Nutrition Scientist	1	5,000 mo	6	0	0	3	15,000	3	15,000	0	0	0	0	0	0	30,000
3. EPI Expert Epidemiologist	1	5,000 mo	12	0	0	6	30,000	6	30,000	0	0	0	0	0	0	60,000
4. EPI Expert-2	1	5,000 mo	6	0	0	3	15,000	3	15,000	0	0	0	0	0	0	30,000
5. Computer Prog Specialist	1	5,000 mo	12	0	0	6	30,000	6	30,000	0	0	0	0	0	0	60,000
6. Design Trg Module Consult	1	5,000 mo	18	3	15,000	6	30,000	9	45,000	0	0	0	0	0	0	90,000
Total Base Salaries			66	3	15,000	26	130,000	31	155,000	4	20,000	2	10,000	0	0	330,000
Fringe Benefits (30% of Salary)	1				4,500		39,000		46,500		6,000		3,000		0	99,000
Overhead (100% of Sal & Fringe)	1				19,500		169,000		201,500		26,000		13,000		0	429,000
Total Salaries & Overhead					39,000		338,000		403,000		52,000		26,000		0	858,000
B. Allowances																
1. Post Diff (20% of Salaries)	1				3,750		32,500		38,750		5,000		2,500		0	82,500
2. Sunday Diff (5% of Salaries)	1				750		6,500		7,750		1,000		500		0	16,500
3. B.B.A. (2.67% of Salaries)	1				401		3,471		4,139		534		267		0	8,811
Total Allowances					4,901		42,471		50,639		6,534		3,267		0	107,811
C. Travel & Transportation																
1. International Travel	1	3,000 return trip	1		3,000	6	18,000	6	18,000	1	3,000	0	0	0	0	42,000
2. International Per Diem	1	400 trip	1		400	6	2,400	6	2,400	1	400	0	0	0	0	5,600
3. In-country Travel	n/	196 trip	1		196	6	1,176	6	1,176	1	196	0	0	0	0	2,744
4. In-country Per Diem	n/	3,090 mo	1	3	9,270	26	80,340	31	95,790	4	12,360	2	6,180	0	0	203,940
5. Other Expenses	p/	400 trip	1		400	6	2,400	6	2,400	1	400	0	0	0	0	5,600
Total Travel & Transportation					13,266		104,316		119,766		16,356		6,180		0	259,004
TOTAL SHORT TERM FIELD CONSULTANTS					57,167		484,787		573,405		74,890		35,447		0	1,225,695
TOTAL (Items I-III)					708,175		1,623,571		1,706,589		1,424,267		1,080,088		491,138	7,033,927
IV. Fixed Fee (10% of Items I - III)					70,818		162,357		170,669		142,427		108,009		49,114	702,393
TOTAL (Items I - IV)					778,993		1,785,928		1,877,257		1,566,693		1,188,096		540,252	7,737,319
V. Inflation 5% Compounded Annually							89,296		192,429		246,956		256,042		149,262	933,979
VI. Contingency (10% of Items I - V)					77,899		187,522		206,979		181,364		144,414		68,951	967,130
GRAND TOTAL					856,892		2,062,747		2,274,765		1,995,067		1,586,552		758,464	9,538,428

(2,270 + 550 + 310) / (7.5) = 196
 1.0 x 8103) = 3,090

SUMMARY

I. TOTAL HQ BACKSTOP STAFF	81,833	121,250	121,250	121,250	121,250	46,417	64,250
II. TOTAL LONG TERM FIELD STAFF	576,175	1,017,534	1,012,034	1,228,127	923,391	426,721	5,261,982
<hr/>							
Total HQ & LT Expat TA	651,009	1,138,784	1,133,284	1,349,377	1,044,641	491,138	5,808,232
Fixed Fee (10% of Items I - II)	65,101	113,878	113,328	134,928	104,464	49,114	580,823
<hr/>							
	716,110	1,252,662	1,246,612	1,484,314	1,149,105	540,252	6,389,055
Inflation (5% Compounded Annually)		62,633	127,778	232,965	247,639	149,262	821,277
Contingency (10% of Total)	71,611	131,530	137,439	171,828	139,074	68,951	722,033
<hr/>							
TOTAL LONG TERM TA	787,721	1,446,825	1,511,829	1,890,107	1,526,418	758,464	7,931,364
<hr/>							
III. TOTAL SHORT TERM FIELD CONSULTANTS	57,167	481,787	573,403	74,890	35,447	0	1,225,695
Fixed Fee (10% of Items I - III)	5,717	48,179	57,340	7,489	3,545	0	122,570
<hr/>							
	62,883	532,266	630,745	82,379	38,992	0	1,348,265
Inflation (5% Compounded Annually)		26,663	64,651	12,985	8,403	0	112,703
Contingency (10% of Total)	6,288	55,993	69,540	9,536	4,739	0	146,097
<hr/>							
TOTAL LONG TERM TA	69,171	615,922	704,936	104,900	52,134	0	1,607,064
<hr/>							
GRAND TOTAL	856,892	2,062,747	2,276,765	1,995,007	1,588,552	758,464	9,538,428
<hr/>							

Please Turn Over for Explanatory Notes

Notes:

- a/ An inflation rate of 5% compounded annually, has been used for all US Dollar costs, local currency expenses are converted at an exchange rate of US \$1.00 = Rs. 17.50.
- b/ Assumes each Long-term expat will be on a 3-year contract.
- c/ Travel for LI personnel is calculated for a family of 3 (Spouse and 1 Child). Fare calculated @ \$1,500 single one-way and that each family will be replaced after three years.
- d/ Estimated one trip to Pakistan each year by Project Coordinator.
- e/ Assumes all families, one person return travel per family per year.
- f/ Assumes each family travels once a year either for home leave or R&H except for years of arrival and departure.
- g/ Estimated one trip Islamabad-Karachi, one trip Islamabad-Lahore and one trip Islamabad-Peshawar each month for each long-term expat advisor.
- h/ Estimated one trip to Lahore and one trip to Peshawar each time the Coordinator visits Pakistan.
- i/ \$600 per family on arrival and same on departure.
- j/ \$1200 per family as mentioned in f.
- k/ \$400 international per diem per trip for Home Office Coordinator.
- l/ Estimated 7 days each month for all 4 long-term expatriate staff at an average of \$90 per day.
- m/ Estimated 5 days per diem for Islamabad each year for Home Office Coordinator.
- n/ Estimated one trip Islamabad-Karachi, one trip Islamabad-Lahore and one trip Islamabad-Peshawar for each expatriate short-term consultant.
- o/ Estimated at \$103 per day for total period of stay.
- p/ Estimated \$400 per trip for medical examination, visas, taxis, cabs, etc.

Please turn over for Local Currency breakdown

(All costs are shown in US \$)

Expense Category	Unit	FY 1990		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total	Basis of Calculation - IFB guidelines 1986		
		Price	LC	FX	LC	FX	LC	FX	LC	FX	LC	FX	LC			FX	
A. LONG TERM (U.S.)																	
21 Senior Physicians for MPH (2 yrs)																	
Tuition, Room & Board	40,000		0	7	1280,000	7	1280,000	7	1280,000		0		0	840,000			
Travel	3,000		0	7	10,500	10,500	7	10,500	10,500	7	10,500	10,500		31,500	31,500		
TOTAL LONG TERM			0	0	1290,500	10,500	1290,500	10,500	1290,500	10,500		0	0	871,500	31,500		
B. SHORT TERM																	
1. U.S.																	
20 Physicians to U of San Diego (4 weeks)																	
Tuition, Room & Board	3,500		0		0	10	35,000	10	35,000		0		0	70,000			
Travel	3,000		0		0	10	30,000	10	30,000	10		0	0	60,000	60,000		
Sub-Total U.S. Short Term			0	0	0	0	35,000	30,000	35,000	30,000		0	0	70,000	60,000		
2. Third Country																	
B RDM/PMD Study Tour to Indonesia (2 weeks)																	
Tuition, books	1,500		0		0	4	6,000	4	6,000		0		0	12,000			
Travel	1,000		0		0	4	4,000	4	4,000	4,000		0	0	8,000	8,000		
Sub-Total U.S. Short Term			0	0	0	0	6,000	4,000	6,000	4,000		0	0	12,000	8,000		
TOTAL SHORT TERM			0	0	0	0	41,000	34,000	41,000	34,000		0	0	82,000	68,000		
C. IN-COUNTRY TRAINING																	
1. Case Management Training																	
a. DDU Staff Training - Assoc. Prof. NUs, LHVs (Total 30) (1 Course at IF places, 4 days, 3 Participants)																	
Travel (Rs. 1,000)	171	10		1,714			0							0	1,714	$11,000 \times 3 / 17.5 =$	171
Per Diem (Rs. 350)	240	10		2,400			0							0	2,400	$185.35 \times 4 \times 3 =$	240
Dist Expenses (Rs. 1,000)	57	10		571			0							0	571	$185.1,000 / 17.5 =$	57
Sub-Total CDD Coordinators				4,686			0							0	4,686		

TRC (Page 2)

Expense Category	FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total		Basis of Calculation - If in Guidelines 1986	
	Unit Price	LC														
b. FORT Trainers - 1 Ped, 1 LMW, 1 MD at DTUs (Total 144) (24 Course, 8 each year in 18 DTUs, 2 weeks, 6 participants)																
Travel (Rs.1,000)	343		0	1	2,743		2,743		2,743		0		0	0	8,229	1Rs.1,000x6/17.5 = 343
Per Diem (Rs.350)	1,800		0	1	14,400		14,400		14,400		0		0	0	42,206	1Rs.350x15x6/17.5 = 1,800
OTH Expenses (Rs.2,000)	171		0	1	1,371		1,371		1,371		0		0	0	4,114	1Rs.3,000/17.5 = 171
Sub-Total Training of Trainers			0	1	18,514		18,514		18,514		0		0	0	55,545	
c. Training in 18 DTUs - MDs from Hosp, RHC, DHUs (Total 8,424) (Total 52 courses each in 18 places, 4 days, 9 participants)																
Travel (Rs.1,000)	514		0	1	120,343		240,686		120,343		0		0	0	481,371	1Rs.1,000x9/17.5 = 514
Per Diem (Rs.350)	720		0	1	168,480		336,960		168,480		0		0	0	673,920	1Rs.350x4x9/17.5 = 720
OTH Expenses (Rs.2,000)	114		0	1	26,743		53,486		26,743		0		0	0	106,971	1Rs.2,000/17.5 = 114
Sub-Total Med Stud, DHUs, etc.			0	1	315,566		631,131		315,566		0		0	0	1,262,263	
d. Training in Seminars - Private Physicians (Total 7,000) (8 Seminars each in 5 places, 2 days, 175 participants)																
Travel (Rs.1,000)	10,000		0	1	100,000		200,000		100,000		0		0	0	490,000	11,000x175/17.5 = 10,000
Per Diem (US \$100)	35,000		0	1	350,000		700,000		350,000		0		0	0	1,400,000	18100x2x175 = 35,000
OTH Expenses (Rs.10,000)	571		0	1	5,714		11,429		5,714		0		0	0	22,857	1Rs.10,000/17.5 = 571
Sub-Total Private Physicians			0	1	455,714		911,429		455,714		0		0	0	1,822,857	
e. Training in 48 FOSTIS - RHM Paramedics (Total 6,240) (26 courses each in 48 locations, 1-week, 5 participants)																
Travel (Rs.500)	143		0	1	41,143		89,142		48,000		0		0	0	178,286	1Rs.500x5/17.5 = 143
Per Diem (Rs.350)	700		0	1	201,600		426,860		235,200		0		0	0	873,660	1Rs.350x7x5/17.5 = 700
OTH Expenses (Rs.2,000)	114		0	1	32,914		71,314		38,400		0		0	0	142,629	1Rs.2,000/17.5 = 114
Sub-Total RHM Paramedics			0	1	275,657		597,257		321,600		0		0	0	1,194,514	
Total Case Management Training			0	1	1,055,451		2,159,231		1,111,394		0		0	0	4,329,663	
2. In-Service Training																
a. EPI Systems Analysis/Computer - Designated HIS Reps (Total 60) (4 Course in Islamabad, 4-weeks, 15 participants)																
Travel (Rs.2,500)	2,142		0	1	8,571						0		0	0	8,571	1Rs.2,500x15/17.5 = 2,142
Per Diem (Rs.350)	9,000		0	1	36,000						0		0	0	36,000	1350x30x15/17.5 = 9,000
OTH Expenses (Rs.10,000)	571		0	1	2,286						0		0	0	2,286	1Rs.10,000/17.5 = 571
Sub-Total Systems Analysis			0	1	46,857						0		0	0	46,857	

(All Costs are F1 except otherwise mentioned)

Expense Category	IFI or LC	Unit	Total Units	FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total Amount	Component
				Cost	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit		
		(US \$)		(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	
I. VEHICLES																	
1. For: Islamabad (4-Wheel Drive)		15,000	ea.	4	4	60,000	0	0	0	0	0	0	0	0	0	60,000	
2. For: Provincias (---)		15,000	ea.	12	12	180,000	0	0	0	0	0	0	0	0	0	180,000	
3. For: EPI (---)		15,000	ea.	175	100	1,500,000	75	1,125,000	0	0	0	0	0	0	0	2,625,000	
4. Motorcycles for EPI	LC	1,500	ea.	400	200	300,000	200	300,000	0	0	0	0	0	0	0	600,000	
5. Auto Rickshaws for EPI	LC	2,000	ea.	50	25	50,000	25	50,000	0	0	0	0	0	0	0	100,000	
6. CDD Saluch & Remote (4-Wheel)		15,000	ea.	10	0	0	5	75,000	5	75,000	0	0	0	0	0	150,000	
7. Vehicles for AMMDs (4-Wheel)		15,000	ea.	45	0	0	25	375,000	20	300,000	0	0	0	0	0	675,000	
TOTAL VEHICLES						2,090,000		1,925,000		375,000		0		0		4,390,000	Program Planning
II. FURNITURE & EQUIPMENT																	
1. Household Equipment		18,000	once	on arr	5	90,000	0	0	0	0	0	0	0	0	0	90,000	
2. Furniture & Bags	LC	22,000	once	on arr	5	110,000	0	0	0	0	0	0	0	0	0	110,000	
3. Office Equipment and Machines		List Attached				110,000	0	0	0	0	0	0	0	0	0	110,000	
4. Office Furniture	LC	List Attached				12,000	0	0	0	0	0	0	0	0	0	12,000	
TOTAL FURNITURE & EQUIPMENT						322,000		0		0		0		0		322,000	Program Planning
III. OTHER COMMODITIES																	
1. For EPI																	
a. Sterilizer Kits		60	Kitt	2,000	1,000	80,000	1,000	80,000	0	0	0	0	0	0	0	160,000	
b. Injection Equipment		30	ea.	42,000	21,000	630,000	21,000	630,000	0	0	0	0	0	0	0	1,260,000	
c. Cold Chair Equipment		200	ea.	4,150	2,150	430,000	2,000	400,000	0	0	0	0	0	0	0	830,000	
d. Solar Refrigerators		5000	ea.	50	0	0	25	125,000	25	125,000	0	0	0	0	0	250,000	
Sub-Total for EPI						1,140,000		1,235,000		125,000		0		0		2,500,000	Program Planning
2. For CDD																	
a. Teaching Equip for DTUS		5000	ea.	12	2	15,000	5	45,000	0	40,000	0	0	0	0	0	90,000	
b. Equip/Supp for FORTS	LC	2700	ea.	48	8	21,600	20	54,000	20	54,000	0	0	0	0	0	129,600	
c. Equip/Supp for DRT Corners	LC	1200	ea.	4,000	400	480,000	1,800	2,160,000	1600	2,160,000	0	0	0	0	0	4,800,000	
d. Trg Mat for MDs & Para Trainers	LC		bulk			15,000		40,000		40,000	0	0	0	0	0	95,000	
e. DRT Kits	LC	10	ea.	10,000	2,000	20,000	4,000	40,000	4000	40,000	0	0	0	0	0	100,000	
Sub-Total for CDD						546,600		2,334,000		2,334,000		0		0		5,214,600	Training

File: COMENS (Page 2)

Expense Category	LC	Unit	Cost	Total Units	FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total Amount
					Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	
C. For Health Information System																	
a. Computers			3000 ea.	60	0	0	66	390,000	0	0	0	0	0	0	0	0	390,000
b. Soft/hardware for Computer			bulk					270,000	8	6	0	0	0	0	0	0	270,000
Sub-Total for Health Info Sys					0		570,000		0		0		0		0		570,000 (Health Inf System)
TOTAL OTHER COMMODITIES							1,486,600		4,139,000		2,459,000		0		0		8,284,600
TOTAL (Items I - III)							6,098,600		6,064,000		2,834,000		0		0		12,996,600
V. INFLATION (5% Compounded Annually)									303,200		290,485		0		0		593,685
VI. CONTINGENCY (10% of I - VI)							409,860		636,720		312,449		0		0		1,359,029
GRAND TOTAL							6,508,460		7,003,920		3,436,934		0		0		14,949,314

COSTS TO BE PAID IN LOCAL CURRENCY

I. VEHICLES

1. Motorcycles for EPI	LC	1,500 ea.	400	200	300,000	200	300,000	0	0	0	0	0	0	0	0	0	600,000
2. Auto Rickshaws for EPI	LC	2,000 ea.	50	25	50,000	25	50,000	0	0	0	0	0	0	0	0	0	100,000
Total Vehicles					350,000	350,000		0		0		0		0		0	700,000

II. FURNITURE & EQUIPMENT

1. Furniture & Rugs	LC	22,000 once	on arr	5	110,000	0	0	0	0	0	0	0	0	0	0	0	110,000
2. Office Furniture	LC	List Attached			12,000	0	0	0	0	0	0	0	0	0	0	0	12,000
Total Furniture & Equipment					122,000		0		0		0		0		0		122,000

III. OTHER COMMODITIES

1. Equip/Supp for FORTS	LC	2760 ea.	48	9	21,600	20	54,000	20	54,000	0	0	0	0	0	0	0	129,600
2. Equip/Supp for DRT Corners	LC	1200 ea.	4,000	466	480,000	1,800	2,160,000	1800	2,160,000	0	0	0	0	0	0	0	4,800,000
3. Trg Mat for NDs & Para Trainers	LC	bulk			15,000		40,000		40,000	0	0	0	0	0	0	0	95,000
4. DRT kits	LC	10 ea.	10,000	2,000	20,000	4,000	40,000	4000	40,000	0	0	0	0	0	0	0	160,000
Total Other Commodities					536,600		2,294,000		2,294,000		0		0		0		5,124,600

File: CONST
Prepared May 25, 1988

CHILD SURVIVAL PROJECT (291-0496)
COST ESTIMATES FOR CONSTRUCTION

(Costs shown in US Dollars; will be paid in LC)

Expense Category	Unit Cost		Total	FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total	Component
	Unit	Unit	Units	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount		
	(US \$)			(US \$)		(US \$)		(US \$)		(US \$)		(US \$)		(US \$)		(US \$)	
I. CONSTRUCTION COSTS																	
1. Refurbishment of DTUs	10,000	ea.	18	0	0	4	40,000	4	40,000	4	40,000	4	40,000	2	20,000	180,000	
2. Renovation of 48 FORIS	3,000	ea.	48	0	0	10	30,000	10	30,000	10	30,000	10	30,000	8	24,000	144,000	
3. Renovation of EPI Warehouses	90,000	ea.	4	0	0	1	90,000	1	90,000	1	90,000	1	90,000	0	0	360,000	
TOTAL CONSTRUCTION COST					0		160,000		160,000		160,000		160,000		44,000	684,000	Program Planning (Component 1)
II. INFLATION (10% Compounded Annually)							16,000		33,600		52,960		74,256		26,862	203,678	
III. CONTINGENCY (10% of Total)					0		17,600		19,360		21,296		23,426		7,086	88,768	
GRAND TOTAL					0		193,600		212,960		234,256		257,682		77,949	976,446	

CHILD SURVIVAL PROJECT (391-0496)
COST ESTIMATES PAKISTANI STAFF & OTHER EXPENSES a/

(Costs shown in US Dollars; will be paid in LC) b/

Expense Category	Unit		FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total Amount	Basis for calculation - Fin Guidelines 1986 and Notes on Page 3 - Component	
	Cost	Unit	PH	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit			Amount
	(US \$)			(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)	(US \$)		
1. SALARIES																	
A. Pakistani Professionals																	
Long Term																	
1. Training - 12 Pak Prov Off	18,000	yr	684	3.00	54,000	12	216,000	12	216,000	12	216,000	12	216,000	6.00	108,000	1,026,000	
2. Training - 1 Pak Spec.	18,000	yr	57	0.25	4,500	1	18,000	1	18,000	1	18,000	1	18,000	0.50	9,000	85,500	
3. Comm & Mktg - 1 Pak Spec.	18,000	yr	57	0.25	4,500	1	18,000	1	18,000	1	18,000	1	18,000	0.50	9,000	85,500	
4. Res & Anlyt Stud - 2 Pak Spec.	18,000	yr	114	0.50	9,000	2	36,000	2	36,000	2	36,000	2	36,000	1.00	18,000	171,000	
5. Health Inf Sys - 1 Pak Spec.	18,000	yr	57	0.25	4,500	1	18,000	1	18,000	1	18,000	1	18,000	0.50	9,000	85,500	
6. Health Inf Sys - Computer Sp	18,000	yr	36	0.00	0	1	18,000	1	18,000	1	18,000	0	0	0.00	0	54,000	
7. Engineer (PSC) b/	18,000	yr	60	0.00	0	1	18,000	1	18,000	1	18,000	1	18,000	1.00	18,000	90,000	
Sub-Total LT Pak Prof			1,065	4.25	76,500	19	342,000	19	342,000	19	342,000	19	342,000	9.5	171,000	1,597,500	1,597,500 - Program Planning (1)
Short Term																	
1. Program Planning																	
2. Training																	
a. ST Trg Program Design Sp.	1,500	mo	22	3	4,500	6	9,000	6	9,000	7	10,500	0	0	0	0	33,000	
b. ST Trg Manual Spec.	1,500	mo	22	3	4,500	6	9,000	6	9,000	7	10,500	0	0	0	0	33,000	
c. ST Design Trg Module Spec.	1,500	mo	18	3	4,500	6	9,000	9	13,500	0	0	0	0	0	0	27,000	
Sub-Total ST Training			62	9	13,500	18	27,000	21	31,500	14	21,000	0	0	0	0	93,000	93,000 - Training (2)
3. Communications & Marketing																	
4. Research & Analytical Studies																	
a. ST Pak Specialist	1,500	mo	24	0	0	6	9,000	6	9,000	6	9,000	6	9,000	0	0	36,000	36,000 - Res & Anlyt Stud (4)
Sub-Total ST Op Research			24	0	0	6	9,000	6	9,000	6	9,000	6	9,000	0	0	36,000	
5. Health Information System																	
Sub-Total ST Pak Prof Salaries			9		13,500	24	36,000	27	40,500	20	30,000	6	9,000	0	0	129,000	129,000 - Health Infora Sys (5)
Total Pak Prof Salaries			1,151		90,000		378,000		382,500		372,000		333,000		171,000	1,726,500	

a/ These services will either be contracted directly by the US TA Contractor or sub-contracted through a Pakistani Company, except for Engineer, will be directly hired by USAID and placed in O/ENG.

Expense Category	Unit		FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total	Basis of Calculation - Fin Guidelines 1986 and Notes on Page 3 - Component	
	Cost	Unit	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount			
B. Pakistani Support Staff																	
1. Administrative Officer	16,000	yr	60	0.5	8,000	1	16,000	1	16,000	1	16,000	1	16,000	0.5	8,000	80,000	
2. Fin/Budg Officer	16,000	yr	60	0.5	8,000	1	16,000	1	16,000	1	16,000	1	16,000	0.5	8,000	80,000	
3. Project Secretary	7,000	yr	60	0.5	3,500	1	7,000	1	7,000	1	7,000	1	7,000	0.5	3,500	35,000	
4. Office Assistants - 2	5,000	yr	120	1.0	5,000	2	10,000	2	10,000	2	10,000	2	10,000	1.0	5,000	50,000	
5. Drivers - 16	2,500	yr	960	8.0	20,000	16	40,000	16	40,000	16	40,000	16	40,000	8.0	20,000	200,000	
6. Janitor	1,867	yr	60	0.5	934	1	1,867	1	1,867	1	1,867	1	1,867	0.5	934	9,335	
Total LT Pak Support Staff			1320	11	45,434	22	90,867	22	90,867	22	90,867	22	90,867	11	45,434	454,335	454,335 - Program Planning (I)
Total Pakistani Salaries			2,471		135,434		468,867		475,367		462,667		423,867		216,434	2,180,835	
C. Overhead (50% of Salaries)					67,717		234,434		236,684		231,434		211,934		108,217	1,096,418	1,090,418 - Program Planning (I)
TOTAL SALARIES					203,150		703,301		710,051		694,301		635,801		324,650	3,271,253	
II. TRAVEL AND PERDIEM																	
1. Travel LT Professionals c/	2,400	yr	1	4.25	10,200	18	42,200	18	42,200	18	42,200	17	40,800	8.5	20,400	201,000	Rs. 3,500 x 12 / 17.5 = 2,400
2. Perdiem (Pak Prof - Mkks) d/	7,560	yr	1	1	7,560	4	30,240	4	30,240	4	30,240	4	30,240	2	15,120	143,640	12 x 7 x 890 = 7,560
3. Perdiem (Pak Prof - Prov) e/	12,960	yr	1	2	25,920	8	103,680	8	103,680	8	103,680	8	103,680	4	51,840	492,480	12 x 12 x 890 = 12,960
4. Perdiem Other LT Prof f/	7,560	yr	1	1.25	9,450	6	45,360	6	45,360	6	45,360	5	37,800	2.5	18,900	202,230	12 x 7 x 890 = 7,560
5. Travel ST Professionals g/	200	mo	1	9	1,800	24	4,800	27	5,400	20	4,000	6	1,200	0	0	17,200	Rs. 3,500 / 17.50 = 200
6. Perdiem ST Professionals h/	630	mo	1	9	5,670	24	15,120	27	17,010	20	12,600	6	2,780	0	0	54,180	7 x 890 = 630
7. Travel Engineer i/	2,400	yr	1	0	0	1	2,400	1	2,400	1	2,400	1	2,400	1	2,400	12,000	Rs. 3,500 x 12 / 17.5 = 2,400
8. Perdiem for Engineer j/	12,960	yr	1	0	0	1	12,960	1	12,960	1	12,960	1	12,960	1	12,960	64,800	12 x 12 x 90 = 12,960
TOTAL TRAVEL & PERDIEM					60,600		257,760		266,250		254,440		232,860		121,620	1,187,530	1,187,530 - Program Planning (I)
III. OTHER EXPENSES h/																	
1. Telephone	6,857	yr	1	0.5	3,429	1	6,857	1	6,857	1	6,857	1	6,857	0.5	3,429	34,286	Rs. 10,000 x 12 / 17.5 = 6,857
2. Gas & Motor (16 Veh)	2,057	yr	1	8	16,457	16	32,914	16	32,914	16	32,914	16	32,914	8	16,457	164,571	Rs. 3,000 x 12 / 17.5 = 2,057
3. Office Supplies	6,857	yr	1	0.5	3,429	1	6,857	1	6,857	1	6,857	1	6,857	0.5	3,429	34,286	Rs. 10,000 x 12 / 17.5 = 6,857
4. Miscellaneous Supplies	3,429	yr	1	0.5	1,714	1	3,429	1	3,429	1	3,429	1	3,429	0.5	1,714	17,143	Rs. 5,000 x 12 / 17.5 = 3,429
TOTAL OTHER EXPENSES					25,029		50,057		50,057		50,057		50,057		25,029	250,286	250,286 - Program Planning (I)
TOTAL (Items I - III)					288,779		1,011,118		1,020,358		996,798		918,718		471,299	4,709,068	
IV. FIXED FEE (10% of TOTAL)					28,878		101,112		102,036		99,880		91,872		47,130	470,907	
TOTAL (Items I - IV)					317,657		1,112,229		1,122,393		1,096,677		1,010,589		518,429	5,179,975	
V. INFLATION (10% Compounded Annually)							111,223		232,703		363,662		459,015		316,506	1,496,108	
VI. CONTINGENCY (10% of I - V)					31,766		122,345		135,810		146,234		147,960		83,493	667,608	
GRAND TOTAL					349,422		1,345,799		1,493,906		1,608,574		1,627,564		918,429	7,343,692	

PAIA (Page 3)

Notes:

- b/ An inflation factor of 10%, compounded annually, has been used on all local currency costs. Local currency expenses are converted at an exchange rate of US \$1.00 = Rs. 17.50.
- c/ Estimated at Rs. 3,500 per month for each Long-term Pakistani Professional.
- d/ Estimated 25% time in field (7 days per month).
- e/ Estimated 50% time in field (12 days per month).
- f/ Estimated 25% time in field (7 days per month).
- g/ Estimated at Rs. 3,500 per month for each Short-term Pakistani Professional.
- h/ Estimated 25% time in field (7 days per month).
- i/ Estimated at Rs. 3,500 per month.
- j/ Estimated 50% time in the field (12 days per month).
- k/ It is assumed that in Islamabad, Office space will be provided in the Office of Expatriate Tech Assistance Team and in the provinces by the GOP.

CHILD SURVIVAL PROJECT (191-049a)
COST ESTIMATES FOR ADMIN & LOG SUPPORT SERVICES

(Costs shown in US \$; will be paid in LCU)

Expense Category	Unit		FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total Amount	Basis for calculation taken from financial guidelines issued on June 26, 1986				
	Cost	Unit	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount						
	(US \$)		(US \$)		(US \$)		(US \$)		(US \$)		(US \$)		(US \$)							
I. HOUSING FOR LONG TERM EXPATRIATE STAFF																				
1. Rent	9,957	yr	1	2.17	21,573	5	49,783	5	49,783	5	49,783	1	4.67	46,464	1	1.67	10,594	233,979	Rs. 12,000 x 1.1 x 1.1 x 12 / 17.5 =	9,957
2. Utilities	3,319	yr	1	2.17	7,191	5	16,594	5	16,594	5	16,594	1	4.67	15,400	1	1.67	5,531	77,993	Rs. 4,000 x 1.1 x 1.1 x 12 / 17.5 =	3,319
3. Insurance	249	yr	1	2.17	539	5	1,245	5	1,245	5	1,245	1	4.67	1,162	1	1.67	415	5,849	Rs. 500 x 1.1 x 1.1 x 12 / 17.5 =	249
4. Maintenance of Equip	1,037	yr	1	2.17	2,247	5	5,186	5	5,186	5	5,186	1	4.67	4,840	1	1.67	1,725	24,373	Rs. 1,250 x 1.1 x 1.1 x 12 / 17.5 =	1,037
5. Maint of Leasehold	2,489	yr	1	2.17	5,393	5	12,440	5	12,440	5	12,440	1	4.67	11,616	1	1.67	4,149	58,495	Rs. 5,000 x 1.1 x 1.1 x 12 / 17.5 =	2,489
6. Guard (1/2 hr)	1,867	yr	1	2.17	4,045	5	9,334	5	9,334	5	9,334	1	4.67	8,712	1	1.67	3,111	43,671	Rs. 2,250 x 1.1 x 1.1 x 12 / 17.5 =	1,867
7. Mail (one time)	115	once on arrl	5		575	0	0	0	0	5	575	0		0	0	0	0	1,150	95 x 1.1 x 1.1 =	115
8. Draperies and Upholstry	23	once on arrl	5		11,416	0	0	0	0	5	11,416	0		0	0	0	0	22,833	91,887 x 1.1 x 1.1 =	2,283
9. Renovation & Mis.	2,283	once on arrl	5		11,416	0	0	0	0	5	11,416	0		0	0	0	0	12,558	91,887 x 1.1 x 1.1 =	2,283
TOTAL HOUSING EXPENSES					64,395		94,587		94,587		107,720			88,282			31,529	481,101		
II. OFFICE EXPENSES																				
1. Office Rent	13,714	yr	1	1	13,714	1	13,714	1	13,714	1	13,714	1	6.5	6,857	1			75,429	Rs. 20,000 x 12 / 17.5 =	13,714
2. Renovation (one-time)	1,429	one-time	1	1	1,429	0	0	0	0	1	1,429	0		0	0	0	0	2,857	Rs. 25,000 once only =	1,429
3. Utilities	4,114	yr	1	1	4,114	1	4,114	1	4,114	1	4,114	1	6.5	2,057	1			22,629	Rs. 6,000 x 12 / 17.5 =	4,114
4. Maintenance Leasehold	2,489	yr	1	1	2,489	1	2,489	1	2,489	1	2,489	1	6.5	1,245	1			13,690	Rs. 3,000 x 1.1 x 1.1 x 12 / 17.5 =	2,489
5. Maintenance of Equip	1,037	yr	1	1	1,037	1	1,037	1	1,037	1	1,037	1	6.5	519	1			5,704	Rs. 1,250 x 1.1 x 1.1 x 12 / 17.5 =	1,037
6. Regn/Insurance (1/2 Veh)	400	yr	1	16	6,400	16	6,400	16	6,400	16	6,400	16	6.5	3,200	1			35,200	Rs. 7,000 / 17.5 =	400
TOTAL OFFICE EXPENSES					29,183		27,755		27,755		29,183			27,755			13,877	155,509		
TOTAL (Items I & II)					93,578		122,342		122,342		136,903			116,037			45,407	636,610		
III. INFLATION (10% compounded annually)							12,234		25,67		45,315		50,855				27,721	164,815		
IV. CONTINGENCY (10% of I - III)					9,358		13,458		14,803		18,222		10,789				7,313	80,142		
GRAND TOTAL					102,937		146,034		162,826		200,441			136,678			80,441	881,567		

Notes:

- All costs will be paid directly by USAID in local currency. Exchange rate of US \$1.00 = Rs. 17.50 has been used for conversion of Pak Rupees.
- An inflation factor of 10% compounded annually, has been used.
- A separate FIO-1 will be issued for services mentioned above and charged to "Other Costs".

CHILD SURVIVAL PROJECT (CSP-0496)
OTHER COSTS AND EVALUATION

(All costs are local currency except Evaluation)

Expense Category	FI or LC	Unit Cost	Total Units	FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total Amount	Component
				Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount		
I. EVALUATION																	
1. Internal Evaluation (Biennial)		20,000 ea.	2	0	0	0	0	1	20,000	0	0	1	20,000	0	0	40,000	
2. External Evaluation	FI	50,000 ea.	1	0	0	0	0	0	0	1	50,000	0	0	0	0	50,000	
3. Terminal Evaluation	FI	50,000 ea.	1	0	0	0	0	0	0	0	0	0	0	1	50,000	50,000	
Total Evaluation					0	0	0	20,000	50,000	20,000	50,000	20,000	50,000	50,000	140,000		Prog P1g (1)
II. OPERATIONAL SUPPORT																	
A. Program Planning																	
1. For EPI																	
a. Mobile Team 2 Vacc/1 Driver		0 0	0	0	17,000	0	34,000	0	34,000	0	34,000	0	34,000	0.00	17,000	170,000	
b. Trvl (10 days/dist x 2 rounds)		4,000 dist	345	0	0	69	276,000	69	276,000	69	276,000	69	276,000	69.00	276,000	1,380,000	
c. Incentive Schemes		halt		0	0	0	18,000	0	18,000	0	18,000	0	18,000	0.00	18,000	90,000	
Sub-Total EPI					17,000		328,000		328,000		328,000		328,000		311,000	1,640,000	
2. For CDO																	
a. Supv Visits ex FORT/ORT Corners		75 H.U.	4,000	0	0	800	60,000	800	60,000	800	60,000	800	60,000	800	60,000	300,000	
b. Develop supv proced checklist		halt		0	0	0	0	15,000	15,000	0	0	0	0	0	15,000	15,000	
Sub-Total CDO					0		60,000		75,000		60,000		60,000		60,000	315,000	
Total Program Planning					17,000		388,000		403,000		388,000		388,000		371,000	1,955,000	Prog P1g (1)

File: DCOST (Page 2)

Expense Category	FI or	Unit	Total	FY 1989		FY 1990		FY 1991		FY 1992		FY 1993		FY 1994		Total	Component
	LC	Cost	Unit	Unit	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	
		(US \$)				(US \$)		(US \$)		(US \$)		(US \$)		(US \$)		(US \$)	(US \$)
B. Communications & Marketing																	
1. Training Newsletter 15,000/yr		1.00 ea.		0	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	75,000
2. Television Advertisements		30,000 ea.	20	0	0	4	120,000	4	120,000	4	120,000	4	120,000	4	120,000	4	480,000
3. Airline TV Ads		3,300 min	600	0	0	120	396,000	120	396,000	120	396,000	120	396,000	120	396,000	120	1,584,000
4. Radio Ads		10,000 yr.	50	0	0	10	100,000	10	100,000	10	100,000	10	100,000	10	100,000	10	500,000
5. Airline Radio Ads		250 min.	1,800	0	0	360	90,000	360	90,000	360	90,000	360	90,000	360	90,000	360	450,000
6. ORT/EPI Training Manuals		50 ea.	10,000	0	0	2,000	100,000	2,000	100,000	2,000	100,000	2,000	100,000	2,000	100,000	2,000	500,000
7. Other Training Manuals		50 ea.	10,000	0	0	2,000	100,000	2,000	100,000	2,000	100,000	2,000	100,000	2,000	100,000	2,000	500,000
8. Leaflets		0.10 ea.	3,000,000	0	0	11,000,000	100,000	11,000,000	100,000	11,000,000	100,000	11,000,000	100,000	11,000,000	100,000	11,000,000	500,000
9. Brochures		0.10 ea.	3,000,000	0	0	11,000,000	100,000	11,000,000	100,000	11,000,000	100,000	11,000,000	100,000	11,000,000	100,000	11,000,000	500,000
10. Calendars		0.15 ea.	3,000,000	0	0	11,000,000	150,000	11,000,000	150,000	11,000,000	150,000	11,000,000	150,000	11,000,000	150,000	11,000,000	750,000
11. Video Training Files		150,000 ea.	4	0	0	1	150,000	1	150,000	1	150,000	1	150,000	1	150,000	0	600,000
Total Comm & Marketing					0		1,421,000		1,421,000		1,421,000		1,421,000		1,421,000		6,955,000
C. Research & Analytical Studies																	
Estimated \$1,000,000/yr		11,000,000 yr.	5	0	0	1	1,000,000	1	1,000,000	1	1,000,000	1	1,000,000	1	1,000,000	1	5,000,000
Total Operational Cost						17,000	2,809,000		2,824,000		2,809,000		2,809,000		2,642,000		13,910,000
III. TOTAL (Items I + II)						17,000	2,809,000		2,844,000		2,809,000		2,829,000		2,642,000		14,050,000
IV. INFLATION (10% Compounded Annually)							280,900		417,240		946,329		1,332,939		1,693,493		4,920,901
V. CONTINGENCY (10% of I - IV)						1,700	308,990		346,124		382,533		416,194		438,549		1,897,090
GRAND TOTAL						18,700	3,398,890		3,807,364		4,240,862		4,578,133		4,824,042		20,867,991

Compensation to EOF Employees

PPS	Base Salary (Mean)	House Rent (45%)	Conv. Allow	Annual Leave 16.66%	Casual Leave 8.33%	Leave Fare 8.33%	Medic Allow (est)	Pension 16%	Non-Pract Allow	Total (Min)	Total (Max)	Max Routed to
With Minimum Base Salary												
1.	600	270	70	100	50	50	250	96	---	1,485	1,991	2,000
2.	625	281	70	104	52	52	250	100	---	1,535	2,156	2,150
3.	650	293	70	108	54	54	250	104	---	1,583	2,321	2,300
4.	675	304	70	112	56	56	250	108	---	1,632	2,487	2,500
5.	700	315	70	117	58	58	250	112	---	1,680	2,652	2,700
6.	725	326	70	121	60	60	250	116	---	1,729	2,817	2,800
7.	750	338	70	125	62	62	250	120	---	1,777	2,982	2,381
8.	790	356	70	132	66	66	250	126	---	1,855	3,177	3,000
9.	800	374	70	138	69	69	250	133	---	1,933	3,410	3,200
10.	870	392	100	145	72	72	500	139	---	2,291	3,923	3,400
11.	910	410	100	152	76	76	500	146	---	2,368	4,156	4,200
12.	970	437	100	162	81	81	500	155	---	2,485	4,506	4,500
13.	1035	466	100	172	86	86	500	166	---	2,611	4,865	4,900
14.	1100	495	100	183	92	92	500	176	---	2,738	5,225	5,200
15.	1165	524	100	194	97	97	500	186	---	2,864	5,623	5,600
16.	1350	606	100	225	112	112	500	216	---	3,223	6,284	6,300
17.	2,065	2,051	285	344	170	170	750	330	500	6,665	9,646	9,600
18.	2,710	2,250	285	451	226	226	750	434	500	7,872	10,740	10,800
19.	4,130	3,000	285	656	344	344	750	661	700	10,902	13,351	13,500

(With Maximum Base Salary)

1.	800	360	70	140	70	70	250	136	---	1,951		
2.	945	425	70	157	79	79	250	151	---	2,156		
3.	1030	464	70	170	86	86	250	165	---	2,321		
4.	1115	502	70	185	93	93	250	178	---	2,487		
5.	1200	540	70	200	100	100	250	192	---	2,652		
6.	1285	578	70	214	107	107	250	206	---	2,817		
7.	1370	617	70	228	114	114	250	219	---	2,982		
8.	1470	662	70	245	122	122	250	235	---	3,177		
9.	1590	716	70	265	132	132	250	254	---	3,410		
10.	1710	770	100	285	142	142	500	274	---	3,923		
11.	1830	824	100	305	152	152	500	293	---	4,156		
12.	2010	905	100	335	167	167	500	322	---	4,506		
13.	2195	989	100	366	183	183	500	351	---	4,865		
14.	2380	1,071	100	397	198	198	500	381	---	5,225		
15.	2565	1,167	100	431	215	215	500	414	---	5,623		
16.	2925	1,316	100	467	244	244	500	468	---	6,284		
17.	3,925	2,250	285	654	327	327	750	628	500	9,646		
18.	4,065	2,250	285	776	386	386	750	746	500	10,740		
19.	5,770	3,000	285	961	481	481	750	923	700	13,351		

10/15

SP

Task	Type	How Long	Early Start	Early End	Notes 1	Notes 2
014 Establish ID CU-med school	Fixed	153 days	1-Jul-85	8:00am	056AC/DTH INST. Technical support, training materials from	current experienced 6 med schools + TA team.
041 Trg prog. design sp. 01/L-1A	Fixed	243 days	1-Jul-85	8:00am	041AC/DTH Staff. ST. Loc. TRAINING AND EDUCATION (First of	three parts, total 22 person months. Ref. 0071, 094.
042 Trg manual spec 01/L-1A	Fixed	243 days	1-Jul-85	8:00am	042AC/DTH Staff. ST. Loc. TRAINING AND EDUCATION (First of	three parts, total 22 person months. Ref. 0092, 096.
043 Design trg module cons 01-L-1A	Fixed	274 days	1-Jul-85	8:00am	043AC/DTH Staff. ST. Loc. Design training module consultant.	(First of two part, total eighteen person months). Ref. 0051.
044 Design trg module sp 01/L-1A	Fixed	274 days	1-Jul-85	8:00am	044AC/DTH Staff. ST. Loc. Design training module specialist.	(First of two part, total eighteen person months). Ref. 0052.
031 Imp/ed-com specialist-TA	Fixed	1461 days	1-Jul-85	8:00am	031AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
014 Arrive Sterile inj. (EPI). 01	Fixed	6 days	1-Aug-85	8:00am	014AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
022 Nutrition Scientist 01-TA	Fixed	3 months	1-Oct-85	8:00am	022AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
025 EPI expert 01-TA	Fixed	3 months	1-Oct-85	8:00am	025AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
052 Establish 45 FORTS	Fixed	92 days	1-Oct-85	8:00am	052AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
060 Computer program spec 01-TA	Fixed	6 months	1-Oct-85	8:00am	060AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
065 FFL expert/epidemiology 01-TA	Fixed	6 months	1-Oct-85	8:00am	065AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
046 Computer Spec 01/L-1A	Fixed	1050 days	1-Oct-85	8:00am	046AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
061 Train primary trainers, DTG	Fixed	3 weeks	1-Dec-85	8:00am	061AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
123 Nominate Pub. Health can. 02	Fixed	90 days	1-Jan-90	8:00am	123AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
061 Arrive medical vaccines	Fixed	720 days	1-Jan-90	8:00am	061AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
123 Train FORT operators/direct	Fixed	3 weeks	15-Jan-90	8:00am	123AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
139 Train system analyst/EPI/	Fixed	122 days	1-Mar-90	8:00am	139AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
060 Train public sector doc. 01	Fixed	214 days	1-Mar-90	8:00am	060AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
106 Arrive vehicles, Lot 02	Fixed	0 days	1-Apr-90	8:00am	106AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
125 Test & DEFL-Pub. Health can 02	Fixed	24 weeks	1-Apr-90	8:00am	125AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
136 Train paramedics 01	Fixed	153 days	1-May-90	8:00am	136AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
102 Issue P10/C-computers	Fixed	0 days	1-Jun-90	8:00am	102AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
113 Arrive cold chain eq., Lot 02	Fixed	0 days	1-Jun-90	8:00am	113AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
072 Construct-6 additions, DTU	Fixed	467 days	1-Jun-90	8:00am	072AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
079 Acquire 48 FORTS	Fixed	579 days	1-Jun-90	8:00am	079AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
067 Medical-Pub. Health can. 01	Fixed	30 days	1-Jul-90	8:00am	067AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
148 Arrive supply eq (CDD) Lot 02	Fixed	0 days	1-Jul-90	8:00am	148AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
016 Internal evaluation	Fixed	45 days	1-Jul-90	8:00am	016AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
068 P10/P4 prep Pub. Health ca. 01	Fixed	320 days	1-Jul-90	8:00am	068AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
145 Arrive Sterile inj. (EPI). 02	Fixed	0 days	1-Aug-90	8:00am	145AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
022 CDD train evaluation 01-TA	Fixed	4 months	1-Aug-90	8:00am	022AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
041 Establish 4000 QRI corners	Fixed	912 days	1-Sep-90	8:00am	041AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
127 P10/P4 prep Pub. Health ca. 02	Fixed	320 days	15-Sep-90	8:00am	127AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
069 Train-Public Health can. 01	Fixed	24 months	15-Sep-90	8:00am	069AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
086 Nutrition Scientist 02-TA	Fixed	3 months	1-Oct-90	8:00am	086AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
087 EPI expert 02-TA	Fixed	3 months	1-Oct-90	8:00am	087AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
089 EPI expert/epidemiology 02-TA	Fixed	0 months	1-Oct-90	8:00am	089AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
090 Computer program spec 02-TA	Fixed	6 months	1-Oct-90	8:00am	090AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
097 FFL expert/epidemiology 02-TA	Fixed	0 months	1-Oct-90	8:00am	097AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
092 Trg prog. design sp. 02/L-1A	Fixed	7 months	1-Oct-90	8:00am	092AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
093 Trg manual spec 02/L-1A	Fixed	7 months	1-Oct-90	8:00am	093AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
094 Design trg module cons 02-TA	Fixed	9 months	1-Oct-90	8:00am	094AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
095 Design trg module sp 02/L-1A	Fixed	9 months	1-Oct-90	8:00am	095AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
059 Train private sector ecc. 01	Fixed	2 months	1-Nov-90	8:00am	059AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
062 Nominate-vaccination Mgt. 01	Fixed	120 days	1-Nov-90	8:00am	062AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
109 Arrive computers	Fixed	0 days	15-Dec-90	8:00am	109AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
147 Arrive cold chain eq., Lot 02	Fixed	0 days	1-Jan-91	8:00am	147AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
024 Nominate Pub. Health can. 02	Fixed	60 days	1-Jan-91	8:00am	024AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
074 Nominate-CDD Swacc, ca. 01	Fixed	120 days	1-Jan-91	8:00am	074AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
034 Nutrition specialist 01-TA	Fixed	85 days	1-Feb-91	8:00am	034AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
141 Train basic computer sl. 113	Fixed	61 days	1-Mar-91	8:00am	141AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
053 Train public sector doc. 02	Fixed	214 days	1-Mar-91	8:00am	053AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)
107 Arrive vehicles, Lot 03	Fixed	0 days	1-Apr-91	8:00am	107AC/DTH Staff. ST. Loc. (Information, education and comm-	ication specialist)

TIME LINE Task Table Report

Task	Type	How Long	Early Start	Early End	Notes 1	Notes 2
1271test&DEP- Pub. health cand.	Fixed	24 weeks	1-Apr-91 8:00am	15-Sep-91 5:00pm	1271PA/PAR LT. test for ST. English improve course prior to us	By 6:00:00 train include in timetable. Ref. 0124,136,131,122
1272Medical-Lact. Mont. cand. 01	Fixed	30 days	1-Apr-91 8:00am	30-Apr-91 5:00pm	1272PA/PAR ST. Medical examination, clearance for LACTATION	MANAGEMENT TRAINING/ (up of 2) Ref. 004,004,005,115
1273train paramedics 02	Fixed	150 days	1-May-91 8:00am	30-Sep-91 5:00pm	1273PA/OTN INST. 5, 7-day sessions held during period @ ea of	48FUN; 5 participant @ ea; 240 total. (6p8of2) Ref. 0120,130,
071Medical-Child Space, cand. 01	Fixed	30 days	1-May-91 8:00am	30-May-91 5:00pm	071PA/PAR 4 Nos., 2-week stud. tour, Indonesia; child spacing;	medical clearance. (6p8of2) Ref. 0070,072,073,074.
0671ID/Ph prep. Lact. Ngnt. ca. 01	Fixed	137 days	1-May-91 8:00am	14-Sep-91 5:00pm	0671PA/PAR ST. Issue FID/F & more placement prep. for cand.	LACTATION MANAGEMENT TRAINING/ (6p8of2) Ref. 002,005,119
144drive computer hardsoft	Fixed	6 days	1-Jun-91 8:00am	1-Jun-91 8:00am	144PA/CSH arrival of computer hardware/software. Ref. 0100,	109.
143train. Prov. logistic officer	Fixed	7 days	1-Jun-91 8:00am	7-Jun-91 5:00pm	143PA/OTN INST. 1-week course; 15 attendees; 11 participants;	Ministry of health personnel.
120medical-Pub. health cand. 02	Fixed	30 days	1-Jun-91 8:00am	30-Jun-91 5:00pm	120PA/PAR ST. Medical clearance of candidate for LT. training;	Ref. 0125,126,127,128.
142train technical skills 01	Fixed	180 days	1-Jun-91 8:00am	30-Nov-91 5:00pm	142PA/OTN INST. 1-week course held during period; 40 part-	icipants @ ea; 720 total over 3-yr. (6p8of2) Ref. 0142,145,
0721ID/Ph prep-Child Space, cand.	Fixed	120 days	1-Jun-91 8:00am	30-Sep-91 5:00pm	0721PA/PAR 4 Nos., 2-week study tour, Indonesia; child spacing.	(6p8of2) Ref. 0070,071,073,074.
145drive suppl. bag (CDD) Lot 02	Fixed	0 days	1-Jul-91 8:00am	1-Jul-91 8:00am	145PA/SHI arrival of teaching, equipment, and supplies for	084AC/OTN Staff, ST. Expat. (second part of total of 12 per-
084CDD train evaluation 02-TA	Fixed	4 months	1-Aug-91 8:00am	28-Nov-91 5:00pm	084AC/OTN ST. Issue FID/F and more placement preparation for	son month over 3 year period. Ref. 0022,005
128train-Public health cand. 02	Fixed	24 months	15-Sep-91 8:00am	31-Jul-92 5:00pm	128PA/PAR LT. 7nos. (6p8of2) Ref. 0122,125,126,127.	candidate for Public Health. (6p. 8of 3) Ref. 0124,125,130,132
062train-Lactation Ngnt. cand. 01	Fixed	4 weeks	15-Sep-91 8:00am	12-Oct-91 5:00pm	062PA/PAR ST. LACTATION MANAGEMENT TRAINING/ 1-mos. (6p8	of 2). Ref. 002,002,004,110
070FAM Spec (R&S) 02/L-TA	Fixed	0 months	1-Oct-91 8:00am	28-Mar-92 5:00pm	070AC/OTN Staff, ST. Loc. /RESEARCH AND ANALYTICAL STUDIES/	Third of 4 parts, total 24 person months). Ref. 0040,097,099
0461rg prog. design sp. 03/L-TA	Fixed	7 months	1-Oct-91 8:00am	27-Apr-92 5:00pm	046AC/OTN Staff, ST. Loc. /TRAINING AND EDUCATION/ (third of	three parts, total 22 person months). Ref. 0041,052.
0461rg manual spec 02/L-TA	Fixed	7 months	1-Oct-91 8:00am	27-Apr-92 5:00pm	046AC/OTN Staff, ST. Loc. /TRAINING AND EDUCATION/ (third of	three parts, total 22 person months). Ref. 0042,095.
0721train-Child Space, cand. 01	Fixed	2 weeks	15-Oct-91 8:00am	28-Oct-91 5:00pm	0721PA/PAR 4 Nos., 2-week study tour, Indonesia; child spacing.	(6p8of2) Ref. 0070,071,072,074.
0551train private sector doc. 02	Fixed	2 months	1-Nov-91 8:00am	30-Dec-91 5:00pm	0551PA/OTN INST. 3, 2-day seminar held during period in ea	of the 5 sites in country; 175 part. @ ea (6p8of2) Ref. 0057,059
1190onmate-Lactation Ngnt. 02	Fixed	120 days	1-Nov-91 8:00am	28-Feb-92 5:00pm	1191PA/PAR ST. 1-mos. Obstetricians, Univ. San Diego/LACTATION	MANAGEMENT TRAINING/ 4 weeks. (6p8of 2) Ref. 0120,121,122,062
0740onmate-Child Space, ca. 02	Fixed	121 days	1-Jan-92 8:00am	30-Apr-92 5:00pm	0741PA/PAR ST. 4 nos., 2-week study tour, Indonesia; child spac-	ing. Identify & nominate. (6p8of2) Ref. 0070,075,076,077.
0490computer specialist 121-TA	Fixed	360 days	1-Feb-92 8:00am	31-Jan-93 5:00pm	049AC/OTN Staff, ST. Loc. Health Information System. (total	12 PM over assigned period). Follows by 6 mo other comp. TA.
1251train public sector doc. 03	Fixed	214 days	1-Mar-92 8:00am	30-Sep-92 5:00pm	1251PA/OTN INST. 17, 3-day seminar held during period @ ea of	18 DTU; 5 participant @ ea; 240 total. (6p8of 2) Ref. 0058,066.
1200Medical Lact. Ngnt. cand. 02	Fixed	30 days	1-Apr-92 8:00am	30-Apr-92 5:00pm	1200PA/PAR ST. Medical examination, clearance for LACTATION	MANAGEMENT TRAINING/ (6p8of2) Ref. 0119,121,122,062
121P1G/Ph prep. Lact. Ngnt. ca. 02	Fixed	137 days	1-Apr-92 8:00am	15-Aug-92 5:00pm	1211PA/PAR ST. Issue FID/F & more placement prep. for 10 cand.	LACTATION MANAGEMENT TRAINING/ (6p8of2) Ref. 0115,120,122,062
1261train paramedics 03	Fixed	150 days	1-May-92 8:00am	30-Sep-92 5:00pm	1261PA/OTN INST. 8, 7-day sessions held during period @ ea of	48FUN; 5 participant @ ea; 240 total (6p8of2) Ref. 0120,137.
0750Medical-Child Space cand. 02	Fixed	30 days	1-May-92 8:00am	30-May-92 5:00pm	0751PA/PAR 4 Nos., 2-week study tour, Indonesia; child spacing.	Medical clearance. (6p8of2) Ref. 0070,074,076,077.
1300Medical-Pub. health cand. 03	Fixed	30 days	1-Jun-92 8:00am	30-Jun-92 5:00pm	1301PA/PAR LT. Medical clearance of candidate for LT. training.	Ref. 0124,125,131,132.
076P1D/Ph prep-Child Space, cand.	Fixed	120 days	1-Jun-92 8:00am	30-Sep-92 5:00pm	0761PA/PAR 4 Nos., 2-week study tour, Indonesia; child spacing.	(6p8of2) Ref. 0070,074,075,077.
1421train technical skills 02	Fixed	180 days	1-Jun-92 8:00am	30-Nov-92 5:00pm	1421PA/OTN INST. 6, 1-week course held during period; 40 part-	icipants @ ea; 720 total over 3-yr. (6p8of2) Ref. 0142,144.
017Eterminal evaluation	Fixed	45 days	1-Aug-92 8:00am	14-Sep-92 5:00pm	017AC/OTN/EVAL	
085CDD train evaluation 03-TA	Fixed	4 months	1-Aug-92 8:00am	28-Nov-92 5:00pm	085AC/OTN Staff, ST. Expat. (final part of total of 12 per-	son months over 3 year period. Ref. 0022,005
1221train-Lactation Ngnt. cand. 02	Fixed	4 weeks	15-Sep-92 8:00am	12-Oct-92 5:00pm	1221PA/PAR ST. LACTATION MANAGEMENT TRAINING/ 1-mos., (6p8	of 2) Ref. 0119,120,121,062
1221train-Public Health cand. 03	Fixed	24 months	15-Sep-92 8:00am	4-Sep-94 5:00pm	1221PA/PAR LT. 7nos. (6p8of 2) Ref. 0124,125,130,131.	
0991FAM Spec (R&S) 04/L-TA	Fixed	6 months	1-Oct-92 8:00am	29-Mar-93 5:00pm	099AC/OTN Staff, ST. Loc. /RESEARCH AND ANALYTICAL STUDIES/	(fourth of 4 parts, total 24 person month). Ref. 0046,097,098
0771train-Child Space, cand. 02	Fixed	2 weeks	15-Oct-92 8:00am	26-Oct-92 5:00pm	0771PA/PAR 4 Nos., 2-week study tour, Indonesia; child spacing.	(6p8of2) Ref. 0070,074,075,076.
0571train private sector doc. 03	Fixed	2 months	1-Nov-92 8:00am	30-Dec-92 5:00pm	0571PA/OTN INST. 3-day seminar held during the period in ea	of 5 sites in country; 175 part. @ ea. (6p8of 2) Ref. 0055,059.
062Eterminal evaluation	Fixed	45 days	1-Nov-92 8:00am	14-Jun-93 5:00pm	062AC/OTN/EVAL end of project evaluation	
1441train technical skills 02	Fixed	180 days	1-Jun-93 8:00am	30-Nov-93 5:00pm	1441PA/OTN INST. 6, 1-week course held during period; 40 part-	icipants @ ea; 720 total over 3-yr. (6p8of2) Ref. 0142,143.
018FACE	Fixed	0 days	11-Jul-94 8:00am	11-Jul-94 8:00am	018AC/INT	

17
es

Schedule Name: CHILD SURVIVAL PROJECT (391-0496)
Project Manager: Mr. KATHOND KASTIN
As of date: 2-Jun-86 5:30am Schedule File: A:13910496

5-COMPONENT PROJECT. GOAL=5% REDUCTION IN
FANT AND EARLY CHILDHOOD MORTALITY, THROUGH (VD, EPI AND ARI.

This is a selective report. All items shown
* Notes (1) contains "ADM"

Task	Type	How Long	Early Start	Early End	Notes 1	Notes 2
001Develop Project Paper	Fixed	223 days	1-Oct-87 8:00am	16-May-88 5:00pm	001ADM/INT	
002Develop FC-1	Fixed	365 days	1-Oct-87 8:00am	31-Jul-88 5:00pm	002ADM/EXT	
003Review Project Paper-USAID	Fixed	21 days	11-May-86 8:00am	31-May-86 5:00pm	003ADM/INT	
004Prepare final draft.F.P.	Fixed	7 days	7-Jun-86 8:00am	6-Jun-86 5:00pm	004ADM/INT	
005Approve Project Paper-USAID	Fixed	5 days	8-Jun-86 8:00am	12-Jun-86 5:00pm	005ADM/INT	
006Send Project Paper to AIG/M	Fixed	5 days	13-Jun-86 8:00am	17-Jun-86 5:00pm	006ADM/INT	
007AMFAC review	Fixed	1 week	16-Jun-86 8:00am	24-Jun-86 5:00pm	007ADM/INT	
008Project authorization	Fixed	1 day	25-Jun-86 8:00am	25-Jun-86 5:00pm	008ADM/INT	
009Congressional Notification	Fixed	15 days	26-Jun-86 8:00am	10-Jul-86 5:00pm	009ADM/INT	
010Issue FAF	Fixed	0 days	11-Jul-86 8:00am	11-Jul-86 8:00am	010ADM/INT	
014Sign PROAG	Fixed	0 days	12-Jul-86 8:00am	12-Jul-86 8:00am	014ADM/INT	
015Address CPB1=instial condit	Fixed	60 days	12-Jul-86 8:00am	9-Sep-86 5:00pm	015ADM/EXT form & substance of alleged obligation of grantee	& b) name and signature of grantee responsible party. Ref. 0031
012Review FC-1	Fixed	31 days	1-Aug-86 8:00am	31-Aug-86 5:00pm	012ADM/EXT	
013Approve FC-1	Fixed	10 days	1-Sep-86 8:00am	14-Sep-86 5:00pm	013ADM/EXT	
051Satisfy CPB1	Fixed	0 days	7-Jan-87 8:00am	7-Jan-87 8:00am	051ADM/EXT Satisfy, alleged obligation of grantee and b)	name and signature of grantee's responsible party. Ref. 0015
016FACD	Fixed	0 days	11-Jul-94 8:00am	11-Jul-94 8:00am	016ADM/INT	

Schedule Name: CHILD SURVIVAL PROJECT (391-0496)
Project Manager: MR. RAYMOND MARTIN
As of date: 2-Jun-88 5:27am Schedule File: A:3910496C

5-COMPONENT PROJECT. GOAL=25% REDUCTION IN-
FANT AND EARLY CHILDHOOD MORTALITY, THROUGH EDD, EPI AND ARI.

This is a selective report. All items shown
Notes (1) contains "TRA/"

Task	Type	How long	Early Start	Early End	Notes 1	Notes 2
065Nominate Pub.Health can.#1	Fixed	90 days	1-Jan-89 8:00am	31-Mar-89 5:00pm	065TRA/PAR LT.7 Mos. for Master in Public Health (in epidem-	ology-related field. (6p81 of 3)Ref. 8056,067,068,069,123,124
066Test&DEFL-Pub.Health can#1	Fixed	24 weeks	1-Apr-89 8:00am	15-Sep-89 5:00pm	066TRA/PAR LT. Test/for ST.English improve.course prior to ea	by USAID;Eng train include in timeframe.Ref. 8065,067,068,069
108Train primary trainers,DTU	Fixed	3 weeks	1-Dec-89 8:00am	21-Dec-89 5:00pm	108TRA/OTH INST. 16Mos.in 1,3-week course, at a medical	school that has experience and facilities for DTU training
122Nominate Pub.Health can.#2	Fixed	90 days	1-Jan-90 8:00am	31-Mar-90 5:00pm	122TRA/PAR LT.7Mos. for Master in Public Health (in epidemol	ogy-related field. (6p82 of 3)Ref. 80125,126,127,128,605,124.
123Train FORT operators/direct	Fixed	3 weeks	15-Jan-90 8:00am	4-Feb-90 5:00pm	123TRA/OTH INST.14Mos(iron each FORT 1 Med.Officer, 1 Dist.	Ped., 1Laser Health Visitor at ea.DTU.in groups 2-3 FORTS ea.
139Train system analyst/EPi	Fixed	122 days	1-Mar-90 8:00am	30-Jun-90 5:00pm	139TRA/OTH INST.4,4-week course,consecutively,during period;	15Jan-90:15 part.eea.ov tot.HIS reps.System anal.,Com.,EPi
066Train public sector doc.#1	Fixed	214 days	1-Mar-90 8:00am	30-Sep-90 5:00pm	066TRA/OTH INST.18,2-day seminar held during period in ea of	18 DTU:9 participant @ ea:240 total;(6p81of 3)Ref. 8058,135.
125Test&DEFL-Pub.Health can#2	Fixed	24 weeks	1-Apr-90 8:00am	15-Sep-90 5:00pm	125TRA/PAR LT. Test/for ST.English improve.course prior to ea	by USAID;Eng train include in timeframe.Ref. 8123,126,127,129
136Train paramedics #1	Fixed	153 days	1-May-90 8:00am	31-Jul-91 5:00pm	136TRA/OTH INST.9,7-day session held during period @ ea of	48FORT;5 participant @ ea:240 total;(6p81of 3)Ref. 8137,138.
067Medical-Pub.Health cand.#1	Fixed	30 days	1-Jun-90 8:00am	30-Jun-90 5:00pm	067TRA/PAR Medical clearance of candidates for LT. training	Ref. 8045,066,068,069.
066PID;Pprep Pub.health ca.#1	Fixed	320 days	1-Jul-90 8:00am	16-May-91 5:00pm	066TRA/PAR LT. Issue PID/P and make placement preparation for	candidate, Public Health. (6p81 of 3) Ref. 8065,066,067,069.
127PID;Pprep Pub.health ca.#2	Fixed	320 days	15-Sep-90 8:00am	31-Jul-91 5:00pm	127TRA/PAR LT. Issue PID/P and make placement preparation for	candidate, Public Health. (6p81 of 3) Ref. 8123,125,126,128.
069Train-Public Health can.#1	Fixed	24 months	15-Sep-90 8:00am	3-Sep-92 5:00pm	069TRA/PAR LT.7Mos. (6p81of 3) Ref. 065,066,067,068.	
059Train private sector doc.#1	Fixed	2 months	1-Nov-90 8:00am	30-Dec-90 5:00pm	059TRA/OTH INST.3,2-day seminar held during the period in ea	of 5 sites in country;175 part. @ ea. (6p81of 3)Ref. 8055,057
062Nominate-Lactation Mnt.#1	Fixed	120 days	1-Nov-90 8:00am	28-Feb-91 5:00pm	062TRA/PAR ST.10 Obstetricians, Univ San Diego LACTATION	MANAGEMENT TRAINING/4 weeks. (6p81of 3)Ref. 8063,064,065,119
124Nominate Pub.Health can.#3	Fixed	90 days	1-Jan-91 8:00am	31-Mar-91 5:00pm	124TRA/PAR LT.7Mos. for Master degree in Public Health(epide	miology-related field) (6p81 of 3) Ref. 129,130,131,132,065,119.
070Nominate-Child Space,ca.#1	Fixed	120 days	1-Jan-91 8:00am	30-Apr-91 5:00pm	070TRA/PAR ST.4 Mos.,2-week study tour,Indonesia,child spac-	ing. Identify and nominate. (6p81of 3) Ref. 8071,072,073,074.
140Train basic computer skills	Fixed	61 days	1-Mar-91 8:00am	30-Apr-91 5:00pm	140TRA/OTH INST.7,2-week course held during the period,con-	secutive:20 part.eea;140 tot.Far PROVINCIAL HEALTH PERSONNEL
058Train public sector doc.#2	Fixed	214 days	1-Mar-91 8:00am	30-Sep-91 5:00pm	058TRA/OTH INST.17,2-day seminar held during period in ea of	18 DTU;9 participant @ ea: 6424 total;(6p82of 3)Ref. 8060,115.
129Test&DEFL-Pub.Health can#3	Fixed	24 weeks	1-Apr-91 8:00am	15-Sep-91 5:00pm	129TRA/PAR LT. Test/for ST.English improve.course prior to ea	by USAID;Eng train include in timeframe.Ref. 8124,126,127,132
068Medical-Lact.Mnt.cand.#1	Fixed	30 days	1-Apr-91 8:00am	30-Apr-91 5:00pm	068TRA/PAR ST. Medical examinations/clearance for LACTATION	MANAGEMENT TRAINING/ (6p81 of 3) Ref. 8062,064,065,119
137Train paramedics #2	Fixed	153 days	1-May-91 8:00am	30-Sep-91 5:00pm	137TRA/OTH INST.9,7-day sessions held during period @ ea of	48FORT; 5 participant @ ea:240 total;(6p82of 3)Ref. 8136,138.
071Medical-Child Space,cand.#1	Fixed	30 days	1-May-91 8:00am	30-May-91 5:00pm	071TRA/PAR 4 Mos.,2-week study tour,Indonesia,child spacing;	medical clearance. (6p81 of 3) Ref. 8070,072,073,074.
064PID;P prep Lact.Mnt.ca.#1	Fixed	137 days	1-May-91 8:00am	14-Sep-91 5:00pm	064TRA/PAR ST. Issue PID/P & make placement prep. for 10 cand.	/LACTATION MANAGEMENT TRAINING/ (6p81 of 3) Ref. 8062,063,065,119
141Train Prov. logistic officer	Fixed	7 days	1-Jun-91 8:00am	7-Jun-91 5:00pm	141TRA/OTH INST.1-week course; 18Jan-91:18 participants;	Ref. 8127,125,127,128.
126Medical-Pub.Health cand.#2	Fixed	30 days	1-Jun-91 8:00am	20-Jun-91 5:00pm	126TRA/PAR LT. Medical clearance of candidate for LT. training	Participants @ ea: 720 total over 3 yr. (6p81of 3)Ref. 8142,144.
142Train technical skills #1	Fixed	163 days	1-Jun-91 8:00am	30-Nov-91 5:00pm	142TRA/OTH INST.6,11-week course held during period;40 part-	icipants @ ea: 8070,071,072,074.
072LID;Pprep-Child Space,ca#1	Fixed	122 days	1-Jun-91 8:00am	30-Sep-91 5:00pm	072TRA/PAR 4 Mos.,2-week study tour,Indonesia,child spacing.	of 3) Ref. 8062,063,064,119
128Train-Public Health can.#2	Fixed	24 months	15-Sep-91 8:00am	3-Sep-93 5:00pm	128TRA/PAR LT. 7Mos. (6p82of 3) Ref. 8123,126,127.	
065Train-Lactation Mnt.cand.#1	Fixed	4 weeks	15-Sep-91 8:00am	12-Oct-91 5:00pm	065TRA/PAR ST. LACTATION MANAGEMENT TRAINING/ 10Mos., (6p81	of 3)Ref. 8062,063,064,119
073Train-Child Space,can.#1	Fixed	2 weeks	15-Oct-91 8:00am	28-Oct-91 5:00pm	073TRA/PAR 4 Mos.,2-week study tour,Indonesia,child spacing.	(6p81of 3)Ref. 8070,071,072,074.
055Train private sector doc.#2	Fixed	2 months	1-Nov-91 8:00am	20-Dec-91 5:00pm	055TRA/OTH INST.2,2-day seminar held during the period in ea	of 5 sites in country;175 part. @ ea. (6p81 of 3)Ref. 8057,059
119Nominate-Lactation Mnt.#2	Fixed	120 days	1-Nov-91 8:00am	28-Feb-92 5:00pm	119TRA/PAR ST.10Mos.Obstetricians, Univ. San Diego/LACTATION	MANAGEMENT TRAINING/4 weeks. (6p81 of 3) Ref. 8120,121,122,066
074Nominate-Child Space,ca.#2	Fixed	121 days	1-Jan-92 8:00am	29-Apr-92 5:00pm	074TRA/PAR ST.4 Mos.,2-week study tour,Indonesia,child spac-	ing. Identify & nominate. (6p82of 3)Ref. 8070,072,076,077.
125Train public sector doc.#2	Fixed	214 days	1-Mar-92 8:00am	30-Sep-92 5:00pm	125TRA/OTH INST.17,2-day seminar held during period @ ea of	18 DTU;9 participant @ ea:240 total. (6p82of 3)Ref. 8058,060.
120Medical-Lact.Mnt.cand.#2	Fixed	30 days	1-Apr-92 8:00am	20-Apr-92 5:00pm	120TRA/PAR ST. Medical examinations/clearance for LACTATION	MANAGEMENT TRAINING/ (6p81 of 3) Ref. 8119,121,122,062.
121PID;P prep Lact.Mnt.ca.#2	Fixed	127 days	1-Apr-92 8:00am	15-Aug-92 5:00pm	121TRA/PAR ST. Issue PID/P & make placement prep. for 10 cand.	/LACTATION MANAGEMENT TRAINING/ Govt. center. 8119,120,122,062
138Train paramedics #3	Fixed	153 days	1-May-92 8:00am	20-Sep-92 5:00pm	138TRA/OTH INST.9,7-day sessions held during period @ ea of	48FORT; 5 participant @ ea:240 total;(6p82of 3)Ref. 8136,137.
075Medical-Child Space can.#2	Fixed	30 days	1-May-92 8:00am	30-May-92 5:00pm	075TRA/PAR 4 Mos.,2-week study tour,Indonesia,child spacing.	Medical clearance. (6p82of 3) Ref. 8070,074,076,077.
136Medical-Pub.Health cand.#3	Fixed	30 days	1-Jun-92 8:00am	30-Jun-92 5:00pm	136TRA/PAR LT. Medical clearance of candidate for LT. training	Ref. 8124,129,131,132.
068PID;Pprep-Child Space,ca#2	Fixed	122 days	1-Jun-92 8:00am	30-Sep-92 5:00pm	068TRA/PAR 4 Mos.,2-week study tour,Indonesia,child spacing.	(6p82of 3) Ref. 8070,074,075,077.
143Train technical skills #2	Fixed	183 days	1-Jun-92 8:00am	20-Nov-92 5:00pm	143TRA/OTH INST.6,11-week course held during period;40 part-	icipants @ ea: 720 total over 3 yr. (6p82of 3)Ref. 8142,144.
127Train-Lactation Mnt.cand.#2	Fixed	4 weeks	15-Sep-92 8:00am	12-Oct-92 5:00pm	127TRA/PAR ST. LACTATION MANAGEMENT TRAINING/ 10Mos., (6p82	of 3)Ref. 8119,126,121,066
122Train-Public Health can.#2	Fixed	24 months	15-Sep-92 8:00am	4-Sep-94 5:00pm	122TRA/PAR LT.7Mos. (6p82of 3)Ref. 8124,129,128,131.	
077Train-Child Space,can.#2	Fixed	2 weeks	15-Oct-92 8:00am	28-Oct-92 5:00pm	077TRA/PAR 4 Mos.,2-week study tour,Indonesia,child spacing.	(6p82of 3) Ref. 8070,074,075,076.

107

Task	Type	How Long	Early Start	Early End	Notes 1	Notes 2
057train private sector doc. 03	Fixed	2 months	1-Nov-92 8:00am	30-Dec-92 5:00pm	057TRA/DIM INST. 2, 2-day seminar held during the period in ea	of 5 sites in country; 175 part. 0 ea. (6p0Jul 3) Net. 0055, 059.
144train technical skills 03	Fixed	183 days	1-Jun-93 8:00am	30-Nov-93 5:00pm	144TRA/DIM/INST. a, 1-week course held during period; 40 part-	icipants e ea: 720 total over 3-yr. (6p0Jul 3). Net. 0142, 143.

Contributors to the Project Paper

A.I.D.

Mr. Gerald R. Andersen	Project Development Officer, Office of Project Development and Monitoring, USAID/Pakistan
Dr. Akram Bhatti	Child Survival Project Manager Office Health, Population and Nutrition, USAID/Pakistan
Ms. Suzanne Dawson	Technical Writer, Office Project Development and Monitoring, USAID/Pakistan
Mr. Bill Deichler	Project Design Coordinator, Office of Health, Population and Nutrition, USAID/Pakistan
Ms. Nancy Ely	Special Project Officer, Office of Project Development and Monitoring, USAID/Pakistan
Dr. Heather Goldman	Project Officer, Primary Health Care Project, Office of Health, Population and Nutrition, USAID/Pakistan
Dr. Rifaq Ismail	Project Officer, Malaria Control II Project, Office of Health, Population and Nutrition, USAID/Pakistan
Mr. Charles Johnson	Backstop Officer, Health, Population and Nutrition, ANE, USAID/Washington
Mr. Shahabuddin Khan	Program Specialist, Office of Project Development and Monitoring, USAID/Pakistan
Mr. Raymond Martin	Chief, Office of Health, Population and Nutrition, USAID/Pakistan
Mr. Robert Nachtrieb	Chief, Office of Project Development and Monitoring, USAID/Pakistan

Consultants

Dr. David Dunlop	Health Economist, Resources for Child Health (REACH), A John Snow, Inc. Project
Ms. Lucia Ferraz-Tabor	Communications Specialist, PRITECH
Dr. Jean-Jacques Frere	Health Information System Specialist, Resources for Child Health (REACH), A John Snow, Inc. Project
Dr. Rob Northrup	Project Management and Design Specialist, PRITECH
Dr. Didier Patte	EPI Specialist, Resources for Child Health (REACH), A John Snow, Inc. Project
Mr. Glenn Patterson	Project Design Specialist, Retired Deputy Assistant Administrator, A.I.D., PRITECH
Dr. Jon Rohde	ORT Specialist, PRITECH
Dr. Tina Sanghvi	Nutritionist, Resources for Child Health (REACH), A John Snow, Inc. Project
Dr. Bob Simpson	Health Management Consultant, PRITECH
Dr. Peter Spain	Communications Specialist, PRITECH
<u>GOVERNMENT OF PAKISTAN</u> <u>Federal Government</u>	
Prof. Dr. A.J. Khan	Director-General Health
Dr. Siraj-ul-Haq Mahmood	Senior Chief Health Section, Planning Division
Maj. Gen.(Retd.) M.I. Burney	Executive Director, N.I.H.
Dr. M. Zafar Ahmed	Deputy Director-General Health, Basic Health Services Cell (BHS)
Mr. Abdul Sattar Chaudhry	Health Education Advisor, (BHS)

Dr. Syed Aqa Zafir

Program Management Specialist,
Retired W.H.O. Advisor

Mr. H.U. Beg

Finance Specialist, Retired GOP
Finance Secretary

Dr. Khwaja Abbas

Pediatrician, Islamabad Children's
Hospital

Mr. Saeed Ahmed Rashid

Health Statistician,

Dr. M. Akmal Khan

Nutritionist, Pakistan Medical
Research Council

REPORTS BY DESIGN TEAM MEMBERS

Index

1. Dr. Akram Bhatti - "Support to a Collaborative MCH Community-Based and Task-Oriented Training and Service Program of Medical Colleges and Health Sector"
2. Dr. David Dunlop/Mr. H.U. Beg - "Economic Analysis of the Child Survival Project"
3. Dr. Jean-Jacques Frere - "Health and Management Information System"
4. Mr. Charles Johnson - "Child Spacing"
5. Dr. Didier Patte - "EPI Component"
6. Dr. Jon Rohde - "Plan For Strengthening Health Services in Pakistan Through Diarrheal Disease Control"
7. Dr. Tina Sanghvi - "Improving Infant Feeding Practices for the Control of Diseases"
8. Dr. Peter Spain - "Communications and Social Marketing"
9. Dr. Syed Aqa Zafir - "Role of Medical Education in support of the Project"