

CARE-Bangladesh

SANITATION AND FAMILY EDUCATION

(SAFE) PILOT PROJECT

A

CONCEPT PAPER

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1. EXECUTIVE SUMMARY :

CARE-Bangladesh proposes to implement a one & half year pilot project entitled, Sanitation and Family Education (SAFE) in the Chittagong district. The purpose of SAFE will be to build upon the Water and Sanitation/Hygiene (WASH) project, which was largely a post-cyclone relief effort to provide safe water and sanitation systems to affected families. By providing hygiene education and training, SAFE will seek to improve the health and hygiene status of 9,141 households. Through the SAFE project, community members will gain greater awareness and knowledge of the relationships between water, sanitation, hygiene, and health, and adopt appropriate hygiene behaviors which will reduce the prevalence of water-related diseases.

The WASH Project was implemented between August 1991 - December 1992 in the Chittagong and Cox's Bazaar Districts, and focused on the repair of damaged tubewell platforms, provision of tubewells, and the timely construction and supply of latrine materials to the tubewell sites. WASH also included a small hygiene education component in selected communities, which focused on the proper use of water, installation and use of latrines, and prevention and control of diarrheal diseases. The SAFE project will build upon that effort, using extensive field extension and participatory methodologies.

The primary objectives of the SAFE pilot project are: to develop effective and replicable hygiene education outreach strategies to promote behavior change, to develop and assess different models for health and hygiene education outreach, and to design and implement a behavior-based monitoring system for the health/hygiene education program. Specific project outputs will include 240 trained caretakers at the community level, well-maintained tubewells, 50 community leaders trained in hygiene education outreach, health/hygiene related curriculum for school aged children, a body of field-tested training materials for community-based hygiene education outreach activities.

To achieve the pilot objectives, SAFE will develop, implement, and assess two hygiene education outreach models. Model 1 will examine outreach efforts through local tubewell caretakers and their spouses. CARE Field Extensionists will provide intensive training to the caretakers (male and female), who in turn will provide hygiene education to village dwellers via group meetings. Model 2 will examine additional ways to disseminate messages, in order to extend education to those community members not reached by the tubewell caretakers. And, by using existing avenues such as local schools and community leaders in addition to caretakers, reinforce the education messages in those reached by multiple channels. The school program will use child-to-child, child-to-family and to child-to-community approaches to disseminate messages. Community leaders will be identified (by other community members) and will be involved in developing and disseminating different hygiene education messages.

During the pilot phase, ongoing monitoring will be done to assess and improve the hygiene education activities. To do so, CARE will closely collaborate with other key organizations involved in sanitation and hygiene, such as ICDDR/B and UNICEF. At the end of the pilot, there will be a final evaluation. This process will enable the assessment of the overall effectiveness of the two models, and also permit an evaluation of their relative effectiveness in promoting appropriate hygiene behaviors at the community level. A product of this effort will be a field-tested hygiene education outreach model suitable for full-scale implementation and for adoption by other organizations.

CARE Bangladesh will fund most of the costs for this pilot effort by means of CARE USA funding. External donors will be sought for additional support. The project budget for this 18 month pilot is US \$237,940

2. PROBLEM STATEMENT

2.1 Overview of Bangladesh :

In Bangladesh the leading causes of child death are related to diarrhea, malnutrition, vaccine preventable diseases and respiratory infections. The combination of inadequate and non-available sanitation facilities, limited access to potable water, inappropriate traditional hygiene behaviors and knowledge, have a multiple effect of causing poor health status in the most "at-risk" population in Bangladesh, mothers and children under age five.

Socially, the nation is conservative in its interpretation of the islamic admonition against female participation in public, economic, political and social life. Most women, particularly in rural areas, are confined to their homes and neighborhoods except for a rare, chaperoned excursion or for a specific well-defined purpose. Few women own property or earn income, and even in the few cases when they do, the male head of the household maintains control over all expenditures. Today's adult women in Bangladesh are generally illiterate, un-informed about nutrition and sanitation, and are without any independent source of income. As a result, their children frequently experience chronic malnutrition and repeated bouts of preventable diseases.

This bleak situation is particularly true of the Chittagong Division, which is an area of an unusual degree of conservatism and adherence to "purdah", a custom which restricts the social mobility of women. In Chittagong, the female literacy rate is estimated to be less than 10%. Communications systems are lacking, and the area is underserved by both the Government (GOB) and NGO services. The majority of the population are landless, subsistence-level farmers, or day laborers.

2.2 Water, Sanitation and Hygiene :

Over the last decade, the programming focus of the water and sanitation sector has shifted very noticeably from the delivery of hand-pumps, latrines, and other "hardware" technologies, to an emphasis on people and their motivation to use, manage and maintain them. After more than a decade in the field, the technologies are largely proven but their dissemination is hampered in the case of sanitation by limited effective demand and lack of motivation at the community level. In Bangladesh ponds and rivers are widely used for a number of personal and domestic uses. In contrast to many areas of Bangladesh, where riverain systems are abundantly evident, the only two sources of fresh water available in Chittagong area are tubewells and ponds. This limited access to water only contributes to those indicators resulting in a worse health status. The situation, which was very poor during the pre-cyclone (April 1991) period, has further deteriorated post-cyclone.

Diarrheal diseases are the major killer of children under age five, and are mainly caused by poor sanitation and hygiene which result from the limited supply of potable water and sanitation systems, and inappropriate hygiene practices. The combination of frequent diarrhea coupled with parasitic infections exacerbates nutritional deficiencies and increases susceptibility to normally non-threatening diseases. This situation effects both adults and children.

A recent review examining the health benefits of water and sanitation interventions showed a median 36% reduction in diarrheal incidence with improved sanitation services (Esrey et.al. 1990).

An integrated approach comprised of three basic components can overcome these problems. These components are: (i) safe drinking water supply; (ii) sanitation; and (iii) hygiene education. Research findings throughout the developing world reveal that if this package is successfully introduced, 80% of water-borne diseases can be effectively neutralized. For effective implementation, the integrated approach has been classified into two parts: the "hardware support," which comprises materials and supply support to the communities, and "software support" through hygiene education, to build awareness among community members and to improve their hygiene behaviors¹.

Fecal pollution of the home environment and community water sources such as ponds and rivers, usually occurs due to the lack of, or non-use of sanitation systems. Fecally polluted water is often used for a variety of domestic purposes, and improper sanitation practices, such as indiscriminate defecation (i.e., in open areas), create many different avenues for fecal-oral transmission of disease causing organisms. For example, the unsanitary disposal of children stools was found to be associated with a 34% increase in clinical diarrhea and a 64% increase in pathogen positive diarrhea when compared to families in which it is properly disposed (Baltazar and Solon, 1989).

¹ Annual Report 89, NGO Forum for Drinking Water Supply and Sanitation.

Similarly, lack of knowledge about the relationships between fecal waste and environmental contamination (through domestic animals and others) can cause the easy spread of diarrheal diseases in a community. Recent studies suggest that though most Bangladeshis consider feces a pollutant, few make the association between fecal contamination and the transmission of organisms that cause diarrhea (Zeitlyn & Islam 1991). For example, in Bangladesh since the feces of infants and toddlers are not usually considered offensive, a mother may leave them lying around the house or courtyard, or may not adequately clean them up. This situation can lead to the subsequent contamination of household food and water by different diarrheal disease pathogens.

The majority of Bangladeshis remain unaware about the relationships between water, sanitation, hygiene and health. A 1987 UNICEF survey found that only 25% of men and 9% of women mentioned "drinking tubewell water" as an activity to promote good health, and 50% of these respondents also described pond water as being "good". In another more recent study, while 85% of the population report using tubewell water for drinking purposes, less than 20% report using tubewell water for all household needs. Latrine use is also very limited, with only about 8% of the population using sanitary latrines (PROGNOTI 1990). Most people cite the reason for use of the latrine as being related to privacy matters instead of health.

It is clear that the promotion of appropriate health and hygiene behaviors, as well as the infra-structural provision and maintenance of adequate sanitation and water systems remain areas of critical needs in Bangladesh.

2.3 Geographical Focus :

One of the two most severe cyclone and tidal waves of the century struck the Bangladesh coastline on the night of April 29, 1991, wreaking the greatest damage on the offshore islands and the coastal areas of Chittagong and Cox's Bazaar Districts. It is estimated that over 135,000 people were killed by the wind and tidal surge with enormous damage done to livestock, housing and agricultural production. An immediate consequence was the damage to, and contamination of large numbers of potable water systems, including tubewells, resulting in greatly increased use of pond water for human consumption. Given the normal pattern of poor latrine coverage and usage in the area, this disaster increased dependency on typically contaminated water sources, and consequently contributed to greater disease incidence caused by fecal-oral transmission.

The WASH project began as a post-cyclone relief effort. The original objective of WASH was to repair damaged tubewells and platforms, and to contract for new tubewells and ringwells, so that the population of the area would have access to safe drinking water. WASH also included a component on the construction and supply of latrines to villages which received new tubewells, and provided hygiene education to selected communities. However, the software component of WASH was limited, and could not accomplish significant changes in existing hygiene behaviors in the given time frame. SAFE will be implemented in a part of the WASH area.

In this pilot phase only two unions of two thanas (one from each) Anwara and Sitakunda will be considered. SAFE will develop and test different hygiene education outreach strategies in 8 villages in Chaturi union of Anwara Thana, which has 4,629 households, and 8 villages in Saidpur union of Sitakunda Thana, which has 4,512 households. Maps of the project areas are shown in Appendix 1.

2.4 WASH Project Experience :

The WASH experience provides CARE with a valuable entry into communities where there has been little outside (NGO or GOB) involvement and where there is a great deal of receptivity among community members, due to CARE's quick post-cyclone response. WASH provided tubewells and latrines in 14 thanas of Chittagong division selecting female caretakers to maintain the water systems.

In December 1992, an evaluation of the WASH Project took place. Main findings from this evaluation reveal that very few children under age six use latrines. Ash and/or soap for cleansing hands after defecation was available in only 38% of the latrines checked during the evaluation. Focus group discussions showed that tubewell beneficiaries mostly use tubewell water for drinking, but other sources such as ponds for a range of other domestic purposes. Of the latrines examined, only 38% of the pit latrines and 68% of the water sealed latrines were well-maintained. In general, while the community members interviewed seemed to have a basic knowledge of the relationships between water and sanitation and health, their knowledge was often incomplete or inaccurate, and they still practice behaviors which make them susceptible to a range of water-related diseases. The evaluation recommended that hygiene education outreach be continued in WASH Project areas to ensure the long term sustainability of benefits from the hardware water and sanitation systems in these communities.

3. GOALS & OUTPUTS

Based on the situation described above, CARE Bangladesh proposes to implement an 18 month hygiene education outreach pilot project in two thanas which were badly affected by the 1991 cyclone. The project will promote appropriate hygiene behaviors to community members through community participation, and develop effective and replicable models and methodologies for hygiene education outreach.

During this pilot phase, two different models will be developed, implemented, and assessed. Model 1 will examine the more "conventional" approach of outreach through tubewell caretakers. At the village level, there is usually one tubewell caretaker per water system. Tubewell caretakers are individuals who are selected from the community, and trained to maintain and do simple repairs on the tubewell. In Bangladesh, both Government (DPHE) and NGOs often expect the tubewell caretakers to also serve as information points in the village to disseminate hygiene messages to families living in the catchment area of the tubewell.

But, tubewell caretakers have limited scope, and may not reach all members of the community (e.g., children, adolescents). Thus, Model 2 will examine a more diverse base for communicating at the community level by using different channels such as schools and community leaders, in addition to tubewell caretakers. Model 2 will be assessed as to whether education messages are extended to those thought not to be reached by caretakers, and if education messages are better reinforced in those reached by multiple channels.

A comparison of the findings from these two models will show if a variety of communication channels works more effectively than just one (e.g., the caretaker model), and will help to determine the elements of an effective community-based outreach program. While one might reasonably assume that a model with several channels to diffuse messages will be more efficient than one with just one channel, this may not necessarily be the case. For example, at the end of the pilot we may find that model 1 is just as effective as model 2 in reaching children; or that working through schools is not a resource effective option.

In this design, we will be able to compare three areas: model 1, model 2, and control (no intervention). Thus, we expect to measure :

- o Model 1 compared to control area : determine (a) if caretakers who are trained in outreach via courtyard sessions succeed in disseminating messages more effectively than caretakers who are not; (b) if involving caretaker spouses is more effective; (c) if the community level knowledge and practice is improved in the model 1 area; and (d) the level of improvement that can be expected with this model.
- o Model 2 compared to control area : determine (a) if different channels allow you to reach different individuals (e.g., children); (b) if using different channels increases the effect of the program on the individuals reached (e.g., more behavior change); (c) if community level knowledge and practice is improved in the model 2 area; and (d) the level of improvement that can be expected with this model.
- o Compare relative effectiveness of model 1 and model 2 : That is, examine (a) if different (more) individuals are being reached through model 2; (b) if receiving information through multiple channels and from multiple sources (model 2) reinforces and increases the effectiveness of the program (e.g., more change in knowledge, more behavior change in model 2); (c) estimate the overall benefit of the expanded model 2, compared to the "basic" model 1. While it can be expected that model 2 will be at least as effective or more so than model 1, it is important to estimate how much more effective it is.
- o We can examine who is being reached by the different channels, how big an effect we are having on them, and the magnitude of difference between the two models. We can thus evaluate programmatic implications.

- o Lay out problems in the process as we go along : e.g., getting involved in schools is too difficult to replicate, organizing community leaders does not seem to reach other groups, etc.,
- o We can find out at the beginning and at the end, where people get information from. This will allow us to see if mobilizing different channels has any effect on this.

3.1 The Final Goal of the pilot phase is :

To improve the health and hygiene status of 9,141 households in the rural areas of two thanas of Chittagong district.

3.2 The Intermediate Goals include :

- i) To promote behavior change through appropriate practices related to water, sanitation and hygiene in 9,141 families in cyclone-affected villages;
- ii) To develop, implement, and assess two models and methodologies for health and hygiene education outreach; and
- iii) To develop the capacity to design and implement a rigorous behavior-based monitoring system for the health and hygiene education program.

3.3 The Outputs of the Pilot include :

- i) 240 caretakers trained in hygiene education outreach;
- ii) Well-maintained tubewells and latrines in the project sites;
- iii) 50 community leaders (male & female) identified and trained in hygiene education and how to disseminate health/hygiene educational messages to the community;
- iv) A team of 13 trained field extensionists;
- v) A partner organization engaged in hygiene education outreach in the project site;
- vi) Health/hygiene related curriculum developed for school-aged children;
- vii) Training materials developed and tested for hygiene education outreach at the community level;

- viii) 10% increase in latrine coverage;
- ix) A monitoring and evaluation (M&E) system to accurately track and assess the program effectiveness vis-a-vis behavioral change. The M&E system will also assess the relative effectiveness of the different channels used in each model to disseminate messages to the community; and
- x) A replicable model for hygiene education outreach outlining important channels for disseminating messages at the community level.

Specific indicators to measure (a) health knowledge; and (b) health behaviors are listed in Appendix 2.

4. STRATEGY & ACTIVITIES

4.1 CARE's Role :

CARE has a long history of working in various communities of Chittagong, and has had an infra-structural and administrative presence in this area for over 35 years (when it was previously East Pakistan). CARE currently supports a number of ongoing projects in the Chittagong Division including, the Rural Maintenance Project (RMP); the Child Health Initiatives for Lasting Development (CHILD) Project; and the Rohingya Emergency Sanitation Project (RESP). In addition, two pilot agriculture projects New Options for Pest Management (NOPEST) and Chittagong Homestead Agroforestry Project (CHAP), are also taking place.

In addition to the fact that very few government or NGO services are available in the Chittagong Division, the unique geographical, linguistic, and cultural factors of the region contribute to the consistently poor health and development indicators noted in Chittagong. The SAFE project outlined here will place emphasis on the issue of hygiene behavior change as it relates to adequate and appropriate human waste disposal, and the use of potable water.

4.2 Participants :

As mentioned above, there will be two models of outreach for hygiene education. One will work through tubewell caretakers, and the other through a combination of local community leaders, schools, and tubewell caretakers.

The first model will work through 170 male and female tubewell caretakers. In this model, the caretakers will be well-trained in hygiene education, and will organize & conduct group meetings or "courtyard sessions" for the households in the tubewell catchment areas. Where possible, spouses of the caretakers will also be involved in this activity. The wife will be encouraged to hold meetings for the women in the catchment area, & the husband to hold sessions for the men.

Under this model, CARE will also work with caretakers who have received initial training from a local NGO currently engaged in other development activities in the area. The local NGO in question, Community Development Center (CODEC) is presently involved in promoting income generating activities for women, and works through 30 samities (groups) in the project area. CARE fieldworkers will provide hygiene education training to the CODEC-trained caretakers, who in turn will conduct outreach activities in their communities. CARE will liaise, and make joint field visits with CODEC representatives from the district, union, and field levels, to show them how caretakers conduct hygiene education outreach via courtyard sessions. These field observations will enable CODEC to provide feedback to CARE on the outreach strategies used, and help CARE determine their applicability to local NGOs.

The second model will examine how hygiene education can be diffused through other community groups in addition to caretakers, in order to extend education to those not reached by caretakers. Model two will assess the effectiveness of working through other channels to complement and reinforce the education messages in those reached by multiple channels. This will be done by involving primary and secondary school children, local community leaders, and tubewell caretakers. This model will involve, 70 caretakers, 8 primary schools, 3 high schools, and 50 community leaders.

These two models have quite different styles of information dissemination. Under this pilot, a monitoring system will be developed to compare these two models: to assess the overall effectiveness of each model, as well as to examine the relative effectiveness of the different approaches and channels of communication used in the models.

4.3 Interventions :

A package of three interventions will be provided during the pilot phase of the SAFE Project as follows :

- i) Sanitation & Hygiene
- ii) Safe water use
- iii) Diarrhea prevention and management.

These interventions will provide a range of information to increase community-level knowledge, attitudes and practices, vis-a-vis hygienic behavior in relation to water and sanitation, and how poor sanitation can create an unhealthy environment. Through different methodologies, messages on sanitation and water-related diseases, domestic hygiene and ORT use and home management of diarrhea will be disseminated. Messages will focus on human fecal contamination of water, and how the environment can set the stage for transmission of diseases to a new host. As there are various roots of fecal-oral transmission of diarrheal diseases, there are also many points at which behaviors may intervene to interrupt disease transmission.

Some animals also carry pathogenic organisms in their feces which can infect humans, for example, chicken feces can transmit campylobacter which causes diarrheal diseases. A number of studies have noted the presence of animal pathogens in highly contaminated environments (Black et. al. 1989, Wadstrom and Ljungh, 1991). Rural people are not aware of these relationships and often chickens have free access to the household, and can easily infect children who are often heavily exposed to their feces while playing. Messages are needed here for maintaining hygiene as like as hand washing before food handling and after defecation, water and food storage, and general domestic hygiene.

These points will be made using local terms and language to illustrate the merits of latrine use and maintenance, the benefits of using safe water for many personal and domestic purposes, domestic and personal hygiene, and the importance of proper fecal and garbage disposal.

The interventions will be disseminated differently in Model 1 and Model 2 as follows:

MODEL I

Working Through Local Caretakers :

In Saidpur union of Sitakunda thana there are 20 female caretakers and 150 male caretakers of tubewells. Each caretaker and his/her spouse will be trained by the SAFE FEs in hygiene education outreach. The caretakers will then provide group health/hygiene education in their courtyards, to beneficiaries in the catchment area of their tubewells. In this way, the husband will conduct group meetings for male members of the catchment area, and the wife will provide group sessions for female members of the community. The group meetings will be highly participatory in nature.

CODEC, a local NGO, has trained some tubewell caretakers in the project site. CARE fieldworkers will provide hygiene education to these caretakers and their spouses, who in turn will conduct courtyard sessions in the community. CARE fieldworkers will make joint field visits with CODEC representatives to demonstrate how this approach works, and to encourage and receive their input on this strategy.

MODEL II

Working Through Caretakers, School Groups and Local Community Leaders :

In Chaturi union of Anwara thana, there are 70 caretakers (trained by WASH and DPHE). As in Model 1, each caretaker will be trained and be responsible for providing courtyard health and hygiene education sessions for the families in the tubewell catchment areas.

Diffusion of hygiene education messages in schools will take place through didactic and participatory sessions. Primary School students of class III, IV & V, and High School students of class VI to X will be trained on topics related to hygiene education. FEs will provide this training in classrooms by group discussions, showing slides, and conducting interactive sessions with the children. Promotion of latrines and handwashing in schools will also be emphasized. In addition, outside the school (i.e. in the courtyard of caretakers) the caretakers and FEs will involve the children in the larger community through activities such as folk songs and role plays.

Qualitative techniques will be used to identify "Community Leaders" from each tubewell area, who will be trained by the CARE FEs. Other community members will identify these individuals as having a key influence in the community, and may include dais, religious leaders, village doctors, or any other person turned to for information by a majority of people. They will serve as opinion leaders and "change agents" for diffusing messages to families, and influencing and reinforcing behavior change at the community level. Community leaders will also be invited to the classroom slide shows and courtyard sessions.

For both models, one intervention package will be provided every month, so that after three months, the three packages will be completed and one cycle accomplished. In this way, after four cycles the pilot implementation will be finished by 12 months. It must be noted that the interventions contain a lot of overlapping information, so there will be constant reinforcement and clarification of information during the 12 month period. The remaining 6 months are for staff recruitment, project start up, baseline surveys, analysis and evaluation of data, workshops, submission of reports and other related works.

4.4 Expansion of the Project :

During the pilot phase, there will be constant monitoring of the interventions to assess and improve the hygiene education activities. After the pilot phase the project will be evaluated, and depending on the findings and recommendations, be expanded to other thanas. The purpose of the pilot is to develop appropriate and effective outreach strategies which can be implemented by other organizations involved in similar activities at the community level.

4.5 Linkage to other Agencies :

At least one service delivery organization (CODEC) will be engaged from the very beginning. CARE FEs will train CODEC caretakers in hygiene education outreach in the project site. CARE FEs will also liaise with CODEC field workers to show them these outreach strategies in action, and receive their feedback. Exchange visits and workshops will be scheduled for sharing experiences, with the objective to engage other NGOs at the union level.

DPHE and UNICEF personnel will also be invited to those meetings and introduced to the caretakers and Community Leaders. The respective Thana Education Officer (TEO) and Head Masters will also be involved initially and invited to the workshops for analyzing existing curricula and for making suggestions for further development. The Thana Health Inspector will also be involved in this process.

CARE will also collaborate closely with ICDDR/B to develop and implement the monitoring and evaluation systems to measure hygiene behavior change.

It should be noted that individuals from these agencies have already expressed interest in being involved in this kind of hygiene education outreach activity.

5. **MONITORING AND EVALUATION :**

Why Develop a Monitoring and Evaluation System?

In general, evaluation of water and sanitation programs have focused mainly on mid-term and final evaluations, and on direct inputs (money, labor, commodities), implementation activities, and direct outputs (primarily hardware and hygiene education activities). Because of cost and technical difficulties, health impacts are seldom measured. Hygiene behavior change is seen as the link between the hardware services and health impacts, and hygiene education components have increasingly been included in water and sanitation programs. But, hygiene behavior change is difficult to achieve, and the effectiveness of hygiene education programs to change behavior is seldom measured.

In order to maximize the health impact of water and sanitation programs, water and sanitation programs should include a strong monitoring component, which can monitor data for prospective evaluation, problem identification and solution development, leading to program change and continuous program improvement. Such an activity would pull together recent advances in defining and monitoring hygiene behaviors; management information systems; and program management methodologies for continuous improvement.

In collaboration with ICDDR/B, a sound and effective monitoring and evaluation system will be developed and assessed in the pilot phase. The system will allow for the comparison of the two models with each other to assess the relative effectiveness of each approach, and will also help to determine the overall effectiveness of either model and the communication channels used. For evaluation and comparison, two other unions from the thanas will be considered as controls (without intervention) and baseline and follow-up surveys will also be conducted in these control areas.

5.1 a) Objective of Monitoring will be to :

- * Ensure and improve the quality of services provided
- * Test validity of models and methodologies
- * Achieve goals
- * Accomplish goals within the scheduled time
- * Develop a systematic, rapid but consistent examination of progress
- * Develop effective monitoring tools

b) System of Monitoring :

The pilot will maintain a monthly reporting system on the basis of annual implementation plans.

Internally, tools such as, monitoring checklists, diarrheal case management checklists, records of attendance in group discussions/sessions, job aids for FEs and caretakers will be developed and maintained by respective staff as per the project's schedule. Monthly reports will be prepared by the project coordinator to submit to donors with the Project Implementation Reports (PIR).

5.2 a) Objective of Evaluation will be to :

- * Ensure the quality of services
- * Assess project goals and outputs
- * Evaluate the needs of project's further expansions
- * Evaluate the effectiveness of models & methodologies
- * Examine whether further modification of methodologies is needed
- * To assess the extent of the communities acceptance/adoption of expected behaviors

b) System of Evaluation :

At the beginning and end of the pilot phase, baseline and follow-up surveys on knowledge, attitudes, and practices related to water and sanitation, will be conducted. An ongoing monitoring system will be developed and analyzed periodically to identify needed improvements and/or modifications in project activities. Progress will be measured through the use of job aids, activity registers and applying interview techniques.

The Final Evaluation will be carried out by an external evaluator and findings will be the guideline for further implementation and expansions.

6. OPERATIONAL PLAN

The pilot will be implemented in two thanas of Sitakunda and Anwara based on two models of health and hygiene education outreach. In these two thanas there will be two SAFE Project Offices. From the very beginning those offices will be included in the management of the project. During the pilot phase, the project's administrative, accounting and logistical requirements will be covered by CARE's regional sub office in Chittagong. At the end of this period, it will be determined if these functions can be carried out at a project office level.

6.1 Staffing :

The field team will consist of 13 (11 female and 2 male) field extensionists to carry out field level health and hygiene services. There will be 7 FEs (6 female + 1 male) for Model 1, and 6 FEs (5 female + 1 male) for Model 2. All caretakers will be selected from among the caretakers in those thanas and unions of the project area.

At the field level, there will also be 1 Project Manager, 1 Training Officer and 2 Project Officers, who will oversee the activities of the field extensionists. At CARE Headquarters, there will be 1 Project Coordinator, 1 Program Development Officer, 1 Technical Officer/Data Manager, and 1 Administrative Assistant.

The Project Organogram is shown in Appendix 3.

6.2 Logistical Support :

The field team will be equipped with one 4WD vehicle, motorcycles and bicycles. Motorcycles and bicycles are from WASH project. Those will be used for at least in pilot phase.

6.3 Implementation Plan :

Major activities include designing methodologies, enlisting the support and participation of community members, and developing a monitoring and evaluation system, with the objective of providing health and hygiene education as related to water & sanitation. Consult the annexes for a timeline for the pilot phase (Appendix 4).

6.4 Budget :

The Summary Budget for the pilot phase is attached in Appendix 5.

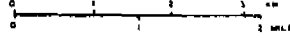
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6. Ahmed Shahnaz, December 1992, Evaluation Report of WASH, CARE-Bangladesh - unpublished.

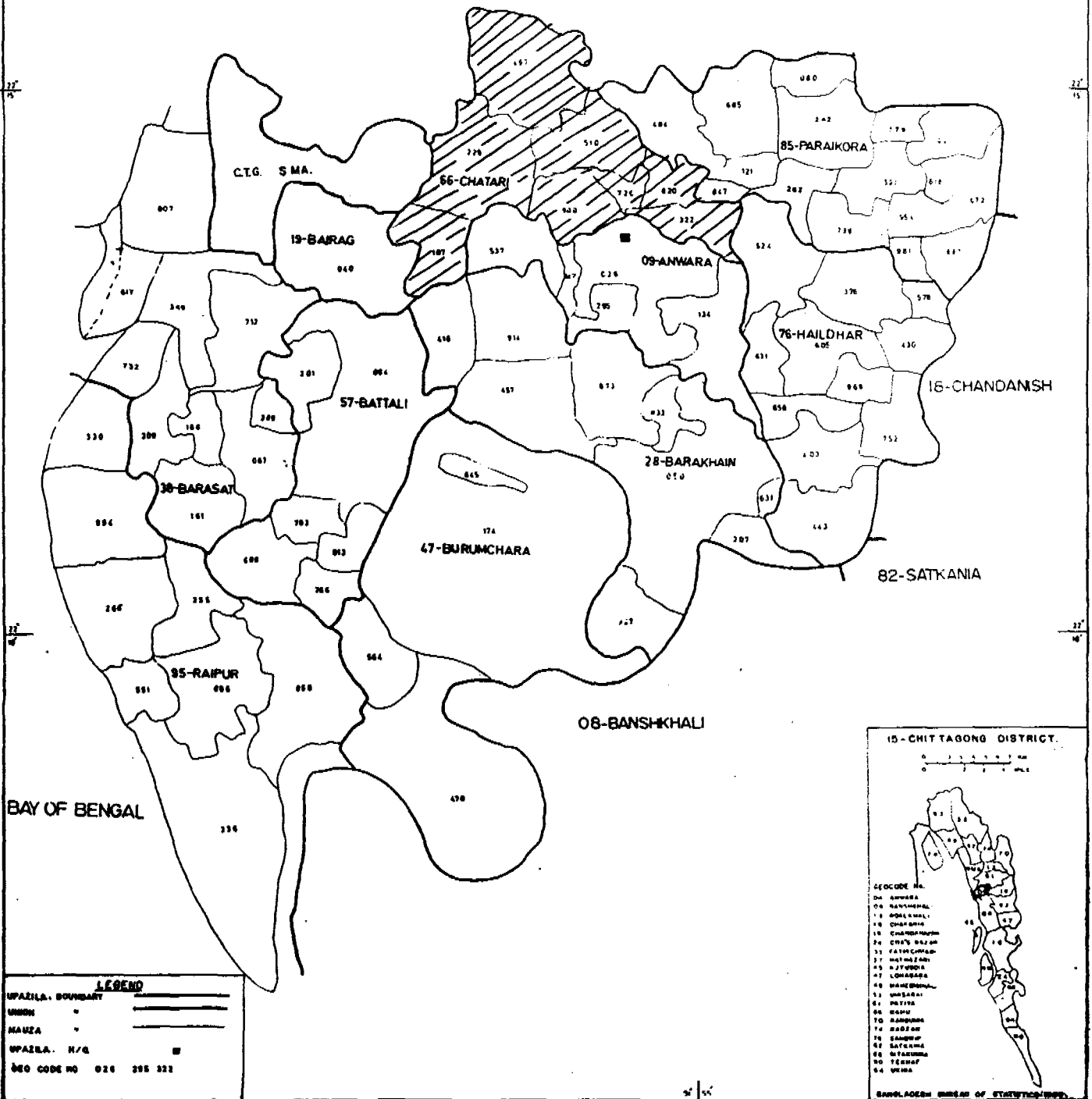
CHITTAGONG DISTRICT

ANWARA THANA

15-CHITTAGONG DIST



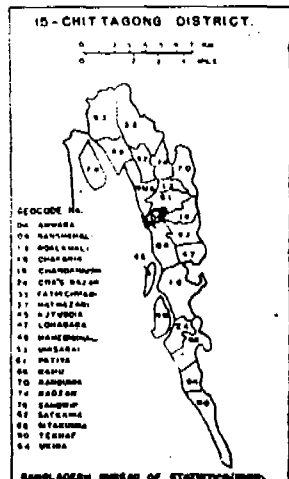
61-PATYA



BAY OF BENGAL

LEGEND

UPAZILA BOUNDARY	—————
UNION	—————
MAUZA	—————
UPAZILA. N/O	■
GEO CODE NO	026 295 322



LIST OF INDICATORS

The effect of the hygiene education outreach can be examined by looking at a range of indicators that measure health knowledge and health practice. The pilot's outputs will be measured by following indicators :

To Measure Health Knowledge :

Goal : By July 1994, 80% of mothers will have basic knowledge of personal and domestic hygiene, appropriate use and maintenance of latrines, and appropriate use of ORT.

- ~~% of mothers who can name at least three measures to prevent diarrheal disease.~~
- % of mothers who can name at least two situations in which it is important to wash their hands (their examples should relate to fecal-oral contamination, i.e., before contact with food, after contact with feces).
- % of children who can name at least 2 situations in which it is important to wash their hands.
- % of mothers who can explain what LGS is used for.
- % of mothers who can name the ingredients and quantities needed to make home made LGS.
- % of mothers who can name at least one cause of diarrhea (will want them to explain what causes diarrhea).

To Measure Health Behaviors :

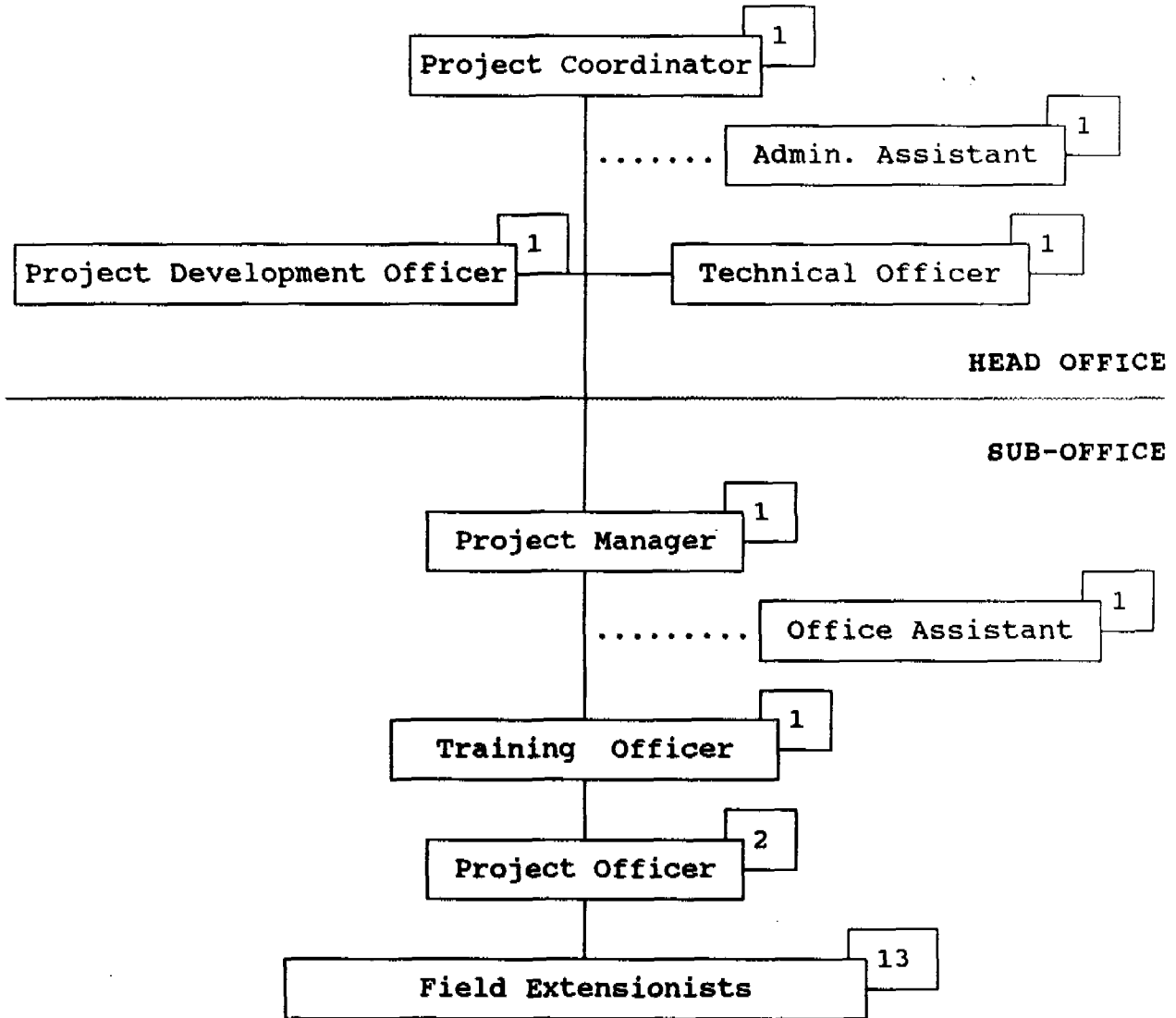
Goal : By July 1994, basic health practices in personal and domestic hygiene, appropriate use and maintenance of latrines, and appropriate use of LGS will be in place in 60% of households.

- ~~% of households where food is kept covered.~~
- % of households where stored water is kept covered.
- % of households that are free of human feces.
- % of households with an effective latrine (Pit, WS, Sanitary).

- % of mothers who can demonstrate effective hand washing/cleansing.
- % of children who can demonstrate effective hand washing.
- % of respondents, mothers, children >5 who usually use a "good" latrine for defecation.
- % of latrines which are free of feces inside or outside.
- % of latrines that show signs of use.
- % of children ages 3 - 5 that can demonstrate how to use the latrine or sanitary alternative.
- % of mothers who have ever tried LGS.
- % of mothers who used LGS during the last diarrhea episode in children under 5.
- % of mothers who knows the correct preparation of LGS.
- % of mothers who say they would continue feeding during diarrhea.
- % of breast feeding mothers who say they would continue breast feeding during diarrhea.
- % of households which have hand washing/cleansing sites where soap/ash/mud is available.
- % of children ages 1 - 5 who use latrine or fixed place to defecate.
- % of households which use a kolshi to store drinking water.
- % of households which have a fixed place for children <3 to defecate.

**SANITATION AND FAMILY EDUCATION
(SAFE) PILOT PROJECT**

ORGANOGRAM



CARE-BANGLADESH
PROJECT :- SANITATION AND FAMILY EDUCATION (SAFE)
FY-93/94 (18 MONTHS : JAN. '93 TO JUN. '94)

Account Code	DESCRIPTION		US \$
4540	Gross Salaries	International staff	≈ 13,050
4541	Gross Salaries	National staff	- 102,480
4542	Employee Benefits	International staff	≈ 7,010
4543	Employee Benefits	National staff	- 10,975
4544	Quarter's & Relocation Allowances	International staff	≈ 6,130
4545	R & R and Home Leave Allowance	International staff	≈ 845
4546	Post Adjustment	International staff	0
4547	Education Allowance	International staff	≈ 1,530
4548	Allowances	Local staff	- 2,965
4549	Moving Cost	Incoming International Personnel	≈ 1,080
4550	Home Leave		- 1,060
4555	Office Supplies		2,445
4556	Furniture & Office Equipments		8,265
4557	Communication		3,910
4558	Facilities Rent		6,065
4559	Utilities, Maintenances & Repairs		4,050
4560	Vehicle Operation & Fuel		2,125
4561	Vehicle Repairs, Spareparts & Maintenances		1,000
4565	Travel & Lodging		17,210
4566	Training		3,905
4567	Representation		90
4570	Materials & Equipment (CWHQ)		0
4571	Materials & Equipment (Mission)		5,970
4572	Materials & Equipment (3rd Continent)		0
4576	Vehicle Purchase (CWHQ)		0
4577	Vehicle Purchase (Mission)		5,000
4578	Vehicle Purchase (3rd Continent)		0
4580	Consultants		19,000
4581	Regional Technical Advisor (RTA) service		3,000
4586	Depreciation & Amortization		340
4587	Insurance		1,215
4588	Sundry & Miscellaneous		7,225
GRAND TOTAL			237,940

International staff 29645 12.5%
 Nat/Local staff 117480 49% > 60% staff cost
 Office etc 24735 10%
 Travel/Transport/Lodging 25335 11%
 Training 2 0%
 Materials & Equipment 9 0%
 Consultants/RTA 9 0%
 95%