

AGENCY FOR INTERNATIONAL DEVELOPMENT 57886  
UNITED STATES A. I. D. MISSION TO BELIZE  
EMBASSY OF THE UNITED STATES OF AMERICA  
BELIZE CITY, BELIZE, CENTRAL AMERICA

April 23, 1986

Mr. Harold Sillcox  
Director  
C.A.R.E.  
P.O. Box 612  
Belize City, Belize

Subject: Grant No. 505-0032-G-OPG-6003-00

Dear Mr. Sillcox:

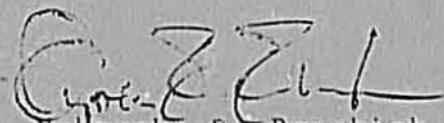
Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter referred to as "A.I.D." or "Grantor") hereby grants to CARE/Belize (hereby referred to as "CARE" or "Grantee"), the sum of \$250,000 to improve the health status of the inhabitants, primarily in Orange Walk and Corozal Districts, by extending Child Survival Technologies, as described in the schedule of this grant and the Attachment 2, entitled "Program Description".

This grant is effective and obligation is made as of the date of this letter and shall apply to commitments made by the Grantee in furtherance of program objectives during the period beginning with the effective date and ending April 30, 1988.

This grant is made to CARE, on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment 1, entitled the Schedule, Attachment 2, entitled "Program Description," and Attachment 3 entitled "Standard Provisions," which have been agreed to by your organization.

Please sign the original and two (2) copies of this letter to acknowledge your receipt of the grant, and return the original and one (1) copy to USAID/Belize.

Sincerely,

  
Neboysa R. Brashich  
A.I.D. Representative

Attachments:

1. Schedule
2. Program Description
3. Standard Provisions

ACKNOWLEDGED:

CARE

BY: *Harold Sillcox*

Harold Sillcox

Title: Director

Date: April 23, 1986

FISCAL DATA

Appropriation : 72-1161021  
Budget Plan Code : LDAA-86-25505-CG13  
Project No. : 505-0032  
Total Estimated Amount: \$250,000  
Total Obligated Amount: \$250,000  
IRS Employer Identification Number:  
Funding Source : USAID/Belize

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SCHEDULE

A. Purpose of Grant

The purpose of this Grant is to provide support for the Maternal and Child Health Project, as more specifically described in Attachment 2 to this Grant entitled "Program Description".

B. Period of Grant

1. The effective date of this Grant is April 23, 1986. The expiration date of this Grant is April 30, 1988.

C. Amount of Grant and Payment

1. A.I.D. hereby obligates the amount of \$250,000 for program expenditures during the period set forth in B.2 above and as shown in the Financial Plan below.

2. Payment shall be made to the Grantee in accordance with procedures set forth in Attachment 3 in the Standard Provision entitled "Payment - Letter of Credit".

D. Summary Financial Plan

The following is the Summary Financial Plan for this Grant, including local cost financing items, if authorized. The plan presented below is based on a more detailed financial plan presented in the Program Description. The Grantee will be expected to adhere to the detailed Financial Plan presented in the Program Description. Revisions to the Financial Plans shall be made in accordance with Standard Provision of this Grant, entitled "Revision of Financial Plans".

2/

| (In U.S. \$000)    |                  |         |            |
|--------------------|------------------|---------|------------|
| Cost Element       | Foreign Exchange | LC      | Total Cost |
| Personnel          | 58,398           | 77,699  | 136,097    |
| Training           | 23,780           | 20,807  | 44,587     |
| Commodities        | 28,064           | 4,558   | 32,622     |
| Evaluation         |                  | 3,444   | 3,444      |
| Overhead (10.34%)* | 22,412           |         | 22,412     |
| Contingency (5%)   | 10,838           |         | 10,838     |
| Total \$           | 143,492          | 106,508 | \$250,000  |

Except for personnel costs a variation of 15% between the line items in the detailed Financial Plan of the Program Description is allowable without prior A.I.D. approval. Any adjustment which exceeds 15% must be approved in advance and in writing by the A.I.D. Representative.

#### E. Reporting and Evaluation

Financial reporting will be accomplished according to the Standard Provision entitled "Payment - Letter of Credit" Attachment 3.

(1) A "Financial Status Report" SF-269, shall be prepared on an accrual basis and submitted quarterly no later than 30 days after the end of the period, in an original and two copies to AID/M/FM/PAFD, Washington D.C. 20523. If the grantee's accounting records are not normally kept on the accrual basis, the grantee shall not be required to convert its accounting system, but shall develop such accrual information through best estimates based on an analysis of the documentation on hand. The final report must be submitted within 90 days after the conclusion of the grant to M/FM/PAFD. The Grantee will also forward an information copy to the AID Mission accounting station at the same time the original and one copy are mailed to M/FM/PAFD, AID/Washington.

(2) The grantee shall submit an original and one copy of SF-272, "Federal Cash Transactions Report," within 15 working days following the end of each quarter to M/FM/PAFD. Grantees shall report all cash advances in the Remarks section of SF-272. Those cash advances in excess of immediate disbursement requirements in the hands of subrecipients or the grantee's field organizations shall be supported by short narrative explanations of action taken by the grantee to reduce the excess balances.

\*Overhead is 10.34% of all project costs.

During the life of the Project, the Grantee shall submit quarterly progress reports prior to the end of each calendar quarter (i.e., March, June, September, December). The project status report will cover a discussion of Project activities accomplished during the quarter, problems and/or delays encountered, and planned activities for the next quarter.

The Grantee shall also submit to USAID/Belize a detailed Plan of Action, which shall include all intended project activities, and a schedule indicating the approximate time they will take place.

Progress of the Program, supported by this Grant, shall be subject to evaluation, which will be carried out cooperatively between A.I.D., the Grantee, the Ministry of Health, and outside consultants, as agreed upon by A.I.D. and the Grantee. One interim and one final evaluation will be carried out.

#### F. Special Provision

The following Standard Provisions of Attachment 3 are inapplicable to this Grant:

- Title to and Use of Property (Grantee Title)
- Title to and Care of Property (U.S. Government Title)
- Patent Rights

#### G. Overhead Rate

The negotiated overhead rate is 10.34% of all project costs.

#### H. Title of Property

Title to all equipment, materials and supplies shall be in the name of the cooperating country (Belize) and, during the period of the Grant, shall be under the custody and control of the Grantee, in accordance with the Standard Provision entitled "Title to and Care of Property (Cooperating Country Title)".

#### I. Authorized Geographic Code

The authorized geographic codes for procurement of goods and services under this grant are the United States and Belize, unless A.I.D. agrees otherwise in writing.

ATTACHMENT 2 "PROGRAM DESCRIPTION"

SPECIFIC SUPPORT GRANT

|                                   |  |
|-----------------------------------|--|
| <u>Project Title:</u>             | Maternal and Child Health                          |
| <u>Project Location:</u>          | Belize, Central America                            |
| <u>PVO Name and Location:</u>     | CARE/Belize<br>P.O. Box 612<br>Belize City, Belize |
| <u>Contact Person:</u>            | Mr. Harold Sillcox<br>Director                     |
| <u>Date of Submission to AID:</u> | February 27, 1986                                  |
| <u>Total Grant Request:</u>       | \$250,000  |

XU. AAY-221-A

CARE-Belize

57887

PROJECT PROPOSAL

COUNTRY:

Belize

MYP PERIOD:

1987-1988

PROJECT TITLE:

Maternal and Child Health  
Project (MACH)

PREPARED BY:

Douglas Clark and Lee Debra  
Gelb assisted by: Estilito  
Loria, Anne Coghlan, and  
other CARE-Belize support  
staff, assisted by Ms. Susan  
Toole, Assistant Director  
Primary Health Care Unit

DATE:

February 20, 1986

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## I. EXECUTIVE SUMMARY

### A. Problem

Recent studies have confirmed that Belize experiences a high incidence of infectious diseases, particularly in the rural areas. This situation contributes a danger, especially to infants and small children. Despite the significant drop in the Infant Mortality Rate (IMR) from 40/1000 live births in 1976 to 23/1000 in 1984<sup>1</sup>, there are still certain rural areas of the country which continue to have relatively high levels of infant and child mortality/morbidity. With economic growth at a standstill for the last four years causing a limitation on health service expenditure, this dramatic decline could easily reverse itself.

### B. Solution Proposed by the Project

It is believed by GOB officials and others working in the health field that there is a tremendous need for expansion of all services relating to Child Survival. It is the intention of CARE/Belize to contribute to this expansion through the strengthening of the educational and technical capacities of both the Corozal and Orange Walk health systems. The measures implemented will directly affect approximately 10,000 children under five years of age and 10,500 women of child-bearing age (15-44) and will indirectly affect the remaining populations of both districts or 25,272.<sup>2</sup>

### C. Strategy

The project goal is to substantially improve the health status of the inhabitants of Orange Walk and Corozal Districts by: upgrading knowledge, attitudes and practices of oral rehydration salts and diarrhoeal disease control; increasing immunization coverage; increasing the prevalence of women breast feeding and upgrading weaning practices; increasing the use of growth charting and improving infant/child feeding practices; decreasing mortality/morbidity attributed to acute respiratory infection; improving availability and accessibility of peri-natal care; and increasing the availability of family life education.

To accomplish these goals the primary health approach will be followed. The first aspect will be to strengthen the capacity of the district hospital and health center as well as the rural health centers in each district to better implement the elements of Child Survival. This will require training in the various aspects of Child Survival not only of government and non-government health workers such as doctors, nurses, pharmacists and Breast-is-Best League Councillors, but also such groups as teachers and social workers. In addition to training, district-level efforts

<sup>1</sup> Child Survival Plan for Belize, 1985-1989

<sup>2</sup> Based on Belize 1980 Census figures

will be directed at strengthening the lines of supply and distribution of medicines, medical supplies and educational materials relating to Child Survival, and assisting other organizations, i.e., Project HOPE, in developing and maintaining an effective health information system.

The second aspect of the project is to develop in each of the 24 selected villages a Village Health Committee (VHC) whose members will serve to promote and educate fellow community members about Child Survival and coordinate efforts by district and national health care providers, both governmental and non-governmental, at the community level. The CARE Village Level Water and Sanitation Project (VLWS) is or will soon be working in 16 of the proposed 24 Child Survival villages. The Water and Sanitation Committees already, or about to be, formed in these villages will greatly facilitate the formation of the VHCs and the implementation of the Child Survival Project.

CARE will coordinate and collaborate with the Ministry of Health and HECOPAB\* in particular, but also with the Ministries of Education and Social Services. National NGOs such as the Breast-is-Best League will take a key role in project implementation as will the REAP/GROWTH District Councils, District Development Councils, and District Health Teams. International agencies, particularly Project HOPE, Enfants Refuges du Monde, and Peace Corps will also collaborate directly in the implementation of this CARE Child Survival project.

#### D. Replicability

This Child Survival project is designed to increase the availability and accessibility of Child Survival services through the strengthening of the ability of national and regional health care institutions to dispense such services and by creating a village infrastructure which will both collaborate and coordinate in their implementation. This will also help provide Child Survival services in Belize with a greater assurance of sustainability. With appropriate modifications, this project design can serve as a model for the implementation of Child Survival services which can be adapted both by CARE and by other groups and agencies around the world.

#### E. Project Financing

FY 1987-1989 (July 1, 1986 to June 30, 1989)  
Total Costs: U.S. \$600,387

Contribution in kind (personnel) of GOB valued at  
U.S. \$205,220

Contribution in kind (personnel) of U.S. Peace Corps  
valued at U.S. \$5,246

\*Health Education and Community Education Bureau.

## II. STATEMENT OF THE PROBLEM

Recent studies have confirmed that Belize experiences a high incidence of infectious diseases, particularly in the rural areas. This situation contributes a danger, especially to infants and small children. The Child Survival Plan for Belize, 1985-1989 is a result of a two-year data collection effort on the part of the Ministry of Health which was done to ascertain the impact of the various Maternal and Child Health activities being implemented in Belize. Such studies included:<sup>3</sup>

- Breastfeeding Survey, Strategies Workshop and Planning Exercise, 1983
- Control Diarrhoeal Disease Programme Evaluation, December, 1983
- Expanded Programme Immunization Evaluation, April, 1984
- Update of the Food and Nutrition Situation, December, 1984

The GOB is the primary provider of health care services in Belize and subscribes to the Alma Ata Declaration of "Health for all by the Year 2000." In accordance with this, a country-wide network of 28 health centers and 6 district hospitals have been established providing primary level coverage to about 75% of the population (only 50% of the rural). In some, but not all the districts, there are mobile health clinics which dispense MCH services to the villages themselves on a monthly basis.

Despite the significant drop in the Infant Mortality Rate (IMR) from 40/1000 live births in 1976 to 23/1000 live births in 1984,<sup>4</sup> there are certain rural areas of the country which still have relatively high levels of infant and child mortality/morbidity. With economic growth at a relative standstill for the last four years causing a limitation on health service expenditure, the dramatic decline cited above could easily reverse itself.

The Ministry of Health, international and national agencies, are presently implementing the following components which make up Child Survival:\*

- Growth Monitoring and Child Feeding
- Diarrhoeal Diseases Control
- Breast Feeding
- Expanded Programme of Immunization
- Acute Respiratory Infection Control
- Peri-natal care
- Family Life Education

<sup>3</sup>Ibid

<sup>4</sup>Ibid

\*For a background to the present status of Child Survival Activities in Belize, see Appendix III.

Nevertheless, it is believed by GOB officials and by persons working in the health field at large, that there still exists a tremendous need to expand all services relating to Child Survival. This is evidenced by:

- 1) the scarcity of persons trained to prepare and administer oral rehydration at the village and household levels;
- 2) the insufficient immunization coverage for dpt, polio, and measles;
- 3) the low number of breast-feeding counsellors working at the district and village levels;
- 4) the inconsistent use of growth charting at district and rural health centers;
- 5) the relatively high mortality/morbidity rate due to Acute Respiratory Infection (ARI) among infants and children;
- 6) the low number of women attending pre-natal clinics during the first trimester;
- 7) the few women receiving post-natal examinations and counselling; and
- 8) the minor role that family life education still takes in the Belizean health and education systems.

Through discussions with MOH officials and by examining the data presented in the Plan, we find that:

- 1) Although mortality figures for diarrhoeal diseases have fallen considerably in the last five years, morbidity in this area is still relatively high and therefore presents a danger.
- 2) Immunization coverage for dpt, polio, and measles is only 60%.
- 3) Only 40% of infants 0-4 months subsist solely on breast milk.
- 4) 13% of children under four years of age are in the Gomez II and III range of malnutrition.
- 5) ARI is the second leading cause of death among infants and the first cause of death among children 1-4 years of age.

- 6) Although 81% of Belizean women have at least one pre-natal check-up, only 20% do so in the first trimester.
- 7) Large families continue to be the norm with many rural women having their first child at as early as sixteen years.

GOB/MOH recognizes that improving Child Survival depends upon increasing the availability and accessibility of these services and that doing this requires strengthening at all levels of the health care ladder, from the national and district levels down to the communities themselves. This calls for the upgrading of the educational and technical abilities of those persons dispensing Child Survival services, particularly at the mid-level, developing and maintaining an effective health information system, strengthening the lines of supply and distribution of medicines, medical supplies and equipment, and educational materials, and maintaining a source of reliable transportation.

III. PROJECT STRATEG.

A. Description

In order to help overcome the problems presented above, CARE is proposing a Child Survival Project which, while concentrating primarily in the Corozal and Orange Walk Districts and villages, will also be working closely with GOB to help strengthen Child Survival services in Belize as a whole. Implementation will focus on four main areas:

1. Upgrade the educational and technical abilities of all those dispensing Child Survival services.
2. Strengthen the ability of MOH to implement and coordinate Child Survival services at the village level.
3. Improve data collection at all levels so as to provide for more accurate service documentation and more reliable statistics.
4. Strengthen the lines of supply and distribution for medicines, medical supplies and equipment, and educational materials relevant to Child Survival.

B. LEVELS OF IMPLEMENTATION

1. National Level

Implementation of the project at the national level will consist of the following activities:

- Collaboration with MOH personnel, particularly PHC and MCH department heads and the Nursing School Director and staff (including Project HOPE) in designing Child Survival training modules for mid-level and community health workers.
- Collaboration with Breast-is-Best League (BIB) in designing training modules on breast-feeding, breast care and infant/child feeding for mid-level and community health workers.
- Collaboration with MOH/Project HOPE to improve data collection techniques and statistical record-keeping.
- Collaboration with MOH in strengthening the lines of supply and distribution of medicines, medical supplies and equipment, and educational materials to the districts.

- Collaboration with MOH/Project Concern in the finalization of a policy for Community Health Worker (CHW) selection, training, and support.
- Collaboration with HECOPAB to develop relevant health educational materials.

## 2. District Level

Activities to be implemented at the district level include:

- Training and follow-up of mid-level health workers including medical officers, hospital nurses, public and rural health nurses, midwives and pharmacists in the implementation of Child Survival services.
- Training and follow-up of such ancillary personnel as BIB counsellors, teachers, and social workers.
- Training and follow-up of mid-level health workers to improve their data collection and record-keeping techniques.
- Collaboration with district hospitals and health centers to better strengthen the lines of supply and distribution of medicines, medical supplies and equipment, and educational materials to the rural health clinics.
- Establishment within the private sector for the marketing of ORS packets and the provision of Child Survival health information material.

## 3. Community Level

Activities to be implemented at the community level include:

- Formation of Village Health Committees (VHCs)\* within each of the target villages.
- Training and follow-up of Village Health Committee members\*\* in promotive, educational, and, in certain cases, technical aspects of Child Survival. These persons will also be trained to coordinate any Child Survival activities being implemented from the national or district level in their particular village such as vaccination campaigns.
- Health education to both children and adults through the medium of the village school and the formation of adult groups for purposes of health education, e.g., mothers of neighbourhood groups.

\* VHCs will naturally include those already working in the health field who pertain to the village, including traditional birth attendants (TBAs), Water and Sanitation Committee Members, and Malaria collaborators.

\*\* For purposes of this proposal, the terms Village Health Committee member and Community Health Worker (CHW) are interchangeable.

- Identification of village people with artistic ability who are interested in designing and producing prototypes of health educational materials relevant to Child Survival.
- Establishment within the private sector for the marketing of ORS packets and the provision of Child Survival health information materials.

C. Location of Villages to be Selected

First year and one-half: 12 villages in Corozal District

Second year and one-half: 12 villages in Orange Walk District

D. Number and Type of Participants

Approximately 10,000 children under five years of age and 10,500 women of child-bearing age (15-44) in Corozal and Orange Walk Districts will be the direct beneficiaries of this project. The remaining 25,272 inhabitants of both districts combined will also benefit, albeit indirectly, from its implementation.

E. Rationale for Village Selection

CARE proposes to work in 12 villages in the Corozal District and 12 villages in the Orange Walk District which comply with the criteria for village selection (see Appendix I). The rationale for choosing these two districts in particular is based on three principle factors:

1. Relatively high degrees of infant and child mortality/morbidity
2. The inadequacy of existing health care services to meet the Child Survival needs of the population, particularly in the villages.
3. The high degree of cluster programming opportunities with the CARE VLWS and REAP/GROWTH Projects and, potentially, the Local Foods Project.

F. Relationship to CARE's Two Strategic Principles

1. Cluster Programming

As described above, there exists a number of linkages between both VLWS and REAP/GROWTH and this Child Survival Project. Another possible linkage is with the proposed Local Foods (LoFo) Project scheduled to begin implementation in CY mid-1986.

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a. VLWS

All of the villages in which VLWS is presently, or soon to be working are potential sites for Child Survival. One of the most important aspects of the VLWS Project is the formation of Water and Sanitation Committees made up of community members. These persons are trained in both technical and educational aspects of water and sanitation and could easily serve as foci for the Village Health Committees. Members of these committees could both expand their roles to encompass other aspects of Child Survival and serve as the impetus for other community members to join the Village Health Committee.

The VLWS Project has also served as a medium for involvement by the Departments of Health, Education, and Social Services. HECOPAB, BELCAST, the Belize School of Nursing, REAP/GROWTH District Councils and District Development Councils. The favorable working relationships already established between VLWS and these national counterparts will do much to facilitate similar collaborative efforts during the implementation of Child Survival.

b. REAP/GROWTH

The REAP program has had a long successful history in these two northern districts of Belize in implementing a new and more relevant primary school curriculum. CARE is presently expanding the project to REAP/GROWTH to assist REAP school leavers enter gainful employment in diverse (agriculture and other) areas. It is certain that REAP teachers and other REAP/GROWTH resource persons such as community members, local business people and REAP/GROWTH District Council members, will do much to facilitate the health and nutrition education aspects of the project.

c. Local Foods

The proposed Local Foods Project, which will facilitate the production, consumption and marketing of local nutritious foods, will have as its northern site of implementation the village of San Narciso, Corozal District. This village is also the location of one of Corozal's rural health clinics. As with REAP/GROWTH, it is certain that Local Foods will help to facilitate the nutritional aspects of the Child Survival project by both developing and disseminating information relating to infant and child feeding. Child Survival activities will be coordinated and integrated with, where feasible, LoFo activities.

2. Critical Mass Analysis

The ability of people to participate in activities designed to enhance their individual productivity and/or the overall development of the community is dependent upon their health, among other things. One of the major intended benefits of this project is the positive impact on the health of rural residents living in Belize's predominant demographic group, the rural village. A strong, viable society is dependent upon the health of its children, and this is one of the primary goals of the Child Survival project.

#### IV. GOALS, INDICATORS, MEANS OF VERIFICATION AND PROJECT ACTIVITY TARGETS

##### A. Final Goal

To directly improve the health status of 10,000 rural Belizean children under the age of five and 10,500 women of child-bearing years (15-44). The project will indirectly improve the health status of the remaining 25,272 people living in the two target districts. This goal is to be accomplished by improving availability and accessibility of maternal and child health services to ultimately decrease infant and child mortality and morbidity.

##### B. Intermediate Goals

- (1) Upgrade knowledge, attitudes and practices concerning Oral Rehydration Salts and diarrhoeal disease control at mid-level, community and household levels.

##### Indicators:

##### Tier 2

1. Number and % of mid-level health workers demonstrating ORT knowledge and proper preparation and administration of ORS.
2. Number and % of mid-level health workers demonstrating effectiveness in carrying out educational activities designed to promote measures for prevention of diarrhoeal diseases.
3. Number and % of community health workers demonstrating ORT knowledge and proper preparation and administration of ORS.
4. Number and % of community health workers demonstrating effectiveness in carrying out educational activities designed to promote measures for prevention of diarrhoeal diseases.
5. Number and % of individuals with knowledge of how to prepare and administer ORS correctly.
6. Number and % of children ever given ORT.
7. Number and % of children with diarrhoea in last two weeks given ORT at household level.
8. Number and % of store owners stocking ORS in target villages and towns.

\*Means of Verification

- Pre and post-tests administered to both mid-level and community health workers by Nurse Health Educator and District Implementors (See Indicators #s 1 to 4)
- Pre and post-KAP surveys administered to the members of target villages by Nurse Health Educator, District Implementors and Village Enumerators (See Indicators #5, 6, and 7)
- Weekly examination of mid-level health facilities' medical records and activity and supply reports by Nurse Health Educator.
- Monthly examination of Village Health Committee activity reports by Nurse Health Educator and District Implementors.
- Site visitations by GOB and CARE personnel (See Indicator #8).
- Random sampling of target villages made by CHWs and District Implementors every 3 months (See Indicators 5, 6, 7 and 8). This mini questionnaire will be designed with the assistance of the Technical Assistant and its purpose will be to monitor progress of the Child Survival project at the village level between the pre and post-KAPs in order to modify the projects approach if necessary. It is understood that this represents an indirect reflection on the CHW training program, the CHW him/herself and a direct reflection of actual behavior changes within the community. It is the District Implementor's and Nurse Health Educator's responsibility to review and follow up on the results of the 3-month random sample surveys.

(2) Increase immunization coverage of children 0-1 year and pregnant women 15-44 as shown in the following table:

| <u>Vaccine</u>                         | <u>Desired Increase</u> | <u>Desired Coverage</u> |
|--|-------------------------|-------------------------|
| BCG                                    | 10%                     | 90%                     |
| DPT/Polio                              | 20%                     | 80%                     |
| Measles                                | 20%                     | 80%                     |
| Tetanus Toxoid<br>(for pregnant women) | 20%                     | 80-90%                  |

Indicators:

Tier One

1. Number of mid-level health workers trained.
2. Number of community health workers trained.
3. Number of service units with effective cold chain.
4. Number of service units with vaccines on hand.

\*Persons designated to carry out the various means of verification are consistent for each intermediate goal and therefore are only listed here.

Tier Two

- (5) Number and % of mid-level health workers demonstrating effectiveness in carrying out educational activities designed to promote the need for immunization.
- (6) Number and % of community health workers demonstrating effectiveness in carrying out educational activities designed to promote the need for immunization.
- (7) Number and % of community members in target villages demonstrating knowledge about the need for full immunization, both for their children and for themselves.
- (8) Number and % of pregnant women 15-44 having received 2 doses of Tetanus Toxoid.
- (9) Number and % of children at 12 months having received Polio 1, Polio 3, Measles, DPT 1, DPT 3, and all immunizations.

Means of Verification

- Pre and post-tests administered to both mid-level and community health workers (See indicators 1, 2, 5 and 6).
  - Pre and post-KAP surveys administered to the members of target villages (See indicator 7).
  - Weekly examination of mid-level health facilities' medical records and activity and supply reports (See indicators 8 and 9).
  - Monthly examination of VHC activity reports (See indicator 6).
  - Site visitations (See indicators 3 to 7).
  - Random sampling of target villages every 3 months (See indicators 7, 8 and 9).
- (3) Improve infant/child feeding practices through nutrition education and growth monitoring.

Indicators:Tier Two

- (1) Number and % of mid-level health workers demonstrating growth monitoring skills and nutrition counselling skills designed to promote weaning and child-feeding practices.
- (2) Number and % of community health workers demonstrating effectiveness in carrying out nutrition counselling activities designed to both promote proper breastfeeding, weaning and child-feeding practices.

- (3) Number and % of mothers demonstrating proper breastfeeding, weaning, and child-feeding practices.
- (4) Increase by 20% the prevalence of solely breast-fed infants, 0-4 months, in a one and one-half year period in each village.
- (5) Number and % of children breast-fed and eating semi-solid foods at six months.
- (6) Number and % of children under age 5 who were weighed in the last 3 months and had this correctly plotted on the growth chart.
- (7) Number and % of children identified as high risk who received follow-up intervention since last weighing.
- (8) Number and % of children growing as fast or faster than UNICEF standard at last weighing.
- (9) Number and % of children with severe, moderate, and mild malnutrition. (Gomez III, II, and I, respectively)

Means of Verification:

- Pre and post-tests administered to both mid-level and community health workers (See indicators 1 and 2).
  - Pre and post-KAP surveys administered to the members of target villages (See indicators 3, 4, and 5).
  - Weekly examination of mid-level health facilities' medical records and activity and supply reports (See indicators 6, 7, 8, and 9).
  - Monthly examination of VHC activity reports (See indicator 2).
  - Site visitations (See indicators 1, 2, and 3).
  - Random sampling of target villages every 3 months (See indicators 3 to 9).
- (4) Decrease mortality/morbidity attributed to Acute Respiratory Infection (ARI) through nutrition education and immunization.

Indicators:

Tier Two:

- (1) Number and % of mid-level health workers appropriately trained in the management of ARI.
- (2) Number and % of mid-level health workers demonstrating effectiveness in promoting and disseminating educational information concerning ARI.

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- (3) Number and % of community health workers demonstrating effectiveness in promoting and disseminating educational abilities concerning ARI.
- (4) Number and % of individuals demonstrating practices leading to a reduction in morbidity and mortality for ARI. (See indicators for Immunization and Improved Nutrition Practices, also).

Means of Verification:

- Pre and post-tests administered to both mid-level and community health workers (See indicators 1, 2, and 3).
  - Pre and post-KAP surveys administered to the members of the target villages (See indicator 4).
  - Weekly examination of mid-level health facilities' medical records and activity and supply reports.
  - Monthly examination of VHC activity reports.
  - Site visitations by GOB & CARE personnel.
  - Random sampling of target villages. every 3 months. (See indicators 3 and 4).
- (5) Improve availability and accessibility of pre and post-natal care for women (15-44).

Indicators:

Tier 2:

- (1) Number and % of first trimester pre-natal visits increased in each village by 40% by the end of year one.
- (2) Number and % of second and third trimester pre-natal visits increased in each village by the end of year one.
- (3) Number and % of women making post-natal visits increased in each village by 40% by the end of year one.
- (4) Number and % of mid-level health workers effectively carrying out pre- and post-natal examinations and counselling, including nutrition education.
- (5) Number and % of community health workers demonstrating effective, promotive and educative abilities relating to pre- and post-natal care.
- (6) Number and % of village women demonstrating improved knowledge, attitudes and practices concerning pre-and post-natal care.

Means of Verification:

- Pre- and post-tests administered to both mid-level and community health workers (See indicators 4 and 5).
- Pre- and post-KAP surveys administered to women 15-44 (See indicator 6).
- Weekly examination of mid-level health facilities' medical records and activity and supply reports (See indicators 1, 2, 3, and 4).
- Monthly examination of VHC activity reports.
- Site visitations (See indicator 5).
- Random sampling of target villages every 3 months (See indicators 1, 2, 3 and 6).

(6) Improve the availability of family life education.

Indicators:Tier 1:

- (1) Number of mid-level health workers trained in family life education.
- (2) Number of community health workers trained in family life education.
- (3) Number of family life education classes given at village level by community health workers.

Means of Verification:

- Monthly examination of mid-level and community health workers' activity reports (See indicators 1, 2, and 3).
- Site visits (See indicators 1, 2, and 3).

C. Project Activity Targets1. Months 1-18

- A. Complete pre-implementation tasks including approval by parties, signing of agreements, recruitment, and procurement.
- B. Orient Nurse/Health Educator.
- C. Review existing baseline data.
- D. Review training and health education materials.
- E. Orient GOB, National NGOs, and International agencies.
- F. Orient district-level institution and agency personnel.
- G. Design both initial and in-service training modules for district implementors, mid-level health workers, and community health workers in Child Survival.
- H. Train district implementors.
- I. Design KAP survey and pre and post tests.
- J. Develop village selection criteria.
- K. Select 12 villages.
- L. Deliver materials to District Hospital, Health Center, and rural health centers.
- M. Administer pre-tests and train mid-level health workers in Child Survival.
- N. Establish 12 Village Health Committees.
- O. Deliver materials to 12 target villages.
- P. Administer pre-tests and train VHC members.
- Q. Select and train village enumerators.
- R. Implement KAP survey in the 12 target villages.
- S. Conduct on-going follow up training and supervision of mid-level and community health workers in 12 target villages and government health facilities.

- T. Establish within the private sector at both the district and village level the marketing of ORS packets and the provision of Child Survival related health information.
- U. Identify village artists, develop health education prototypes.
- V. Administer post-tests to mid-level and community health workers.
- W. Administer post-KAP survey to 12 villages.
- X. Analyze all data collected from pre and post-tests hospital and clinics and KAP surveys.
- Y. Select 12 villages in target district 2 for months 19-36.

2. Months 19-36

- A. Orient district-level institution and agency personnel.
- B. Deliver materials to District Hospital, Health Center, and rural health centers.
- C. Administer pre-tests and train mid-level workers in Child Survival.
- D. Establish 12 Village Health Committees.
- E. Deliver materials to 12 target villages.
- F. Administer pre-tests and train VHC members.
- G. Select and train village enumerators.
- H. Implement KAP survey in 12 target villages.
- I. Conduct on-going and in-service training and supervise mid-level and community health workers in government health facilities.
- J. Establish within the private sector at both district and village levels the marketing of ORS packets and the provision of Child Survival-related health information.
- K. Conduct on-going supervision and in-services for target district 1.
- L. Produce health education and training materials based on prototypes developed in first 18 months in coordination with HECOPAB.
- M. Administer post-tests to mid-level and community health workers.
- N. Administer post-KAP survey to 12 villages.
- O. Analyze all data collected from pre and post-tests, hospital and clinics, KAPs, and submit final report.
- P. Evaluation.

## V. MONITORING AND EVALUATION PLAN

The Belize Child Survival Plan recognizes that "monitoring and evaluation constitutes the basic mechanisms in the orientation of the planning process. "and notes further that, "presently, there is not a well developed (integrated. dynamic) monitoring and evaluation system for health activities."

Through this Child Survival project, CARE proposes to assist the GOB/MOH in strengthening this very crucial aspect of health care management in the two target districts selected. This will be done both by training and supervising mid-level and community health workers in proper data collection and record keeping and by implementing KAP surveys in the 24 target villages which will help to complement any baseline data collected.

Project HOPE is in the process of submitting a proposal to GOB which is intended to help substantially upgrade health-related data collection and statistical analysis of that data. In addition to strengthening Belize's health system management as a whole, Project HOPE intends to provide a health statistician. At the present time there is no one in Belize who qualifies as such. District and village level data collection will be coordinated both through the existing system (Matron Roberts Health Center and the Belize Bureau of Statistics) and Project HOPE.

### A. Monitoring

The progress of the District Implementor, mid-level and community health workers will be monitored through the administration of pre and post-tests and examination of monthly reports by CARE Child Survival Staff. Further monitoring will be done through clinical observation, performance assessments, and periodic testing.

The trends in knowledge, attitudes, and practices regarding Child Survival by community members will be monitored through performance assessments, key informant interviewing, participation, observations, mother testing, and home visits.

### B. Evaluation

The trends in knowledge activities, and practices in Child Survival activities of the target village population will be evaluated through the administration of baseline and follow-up KAP surveys administered at the beginning and end of each district implementation period. District service statistics will complement the information gathered by means of these surveys. In addition to the individual district evaluations, a final project evaluation will also be carried out.

<sup>5</sup>Project HOPE further intends to provide computer equipment (IBM AT specifically designated for health statistics storage and analysis as stated in Project HOPE draft Maternal and Child Health Program, submitted to USAID/Belize, January 22, 1986.

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As previously mentioned under means of verification for intermediate goal, the CHWs will do random sample surveys in each village every 3 months to determine if the project is proceeding as anticipated. This will be reviewed by the District implementor and modifications in approach will be made if necessary. CARE, the MOH and Project HOPE will be working together very closely to standardize the data collection formats and content required for mid level and CHWs. This part of the proposal is in the development phase and it is expected that the consultant CARE has requested for the design of the KAP will work closely with Project HOPE's health statistician in developing a usable and uniform data collection mechanism which will be reflected in all tests and surveys which follows AID/W guidelines for indicators dealing with Child Survival activities. All appropriate data needed for a final analysis of the Child Survival project will be analyzed using Project HOPE's computer with assistance from the health statistician. This has been discussed verbally and negotiations shall be continued by the Nurse/Health Educator and Project Coordinator.

C. Baseline Survey

There are several sources which CARE-Belize will use in establishing baseline data relative to Child Survival in the two target districts. These include:

Belize Child Survival Plan, 1985-1989

Belize Health Plan, 1985-1988, Volume I

Belize Bureau of Statistics

Corozal and Orange Walk District Hospitals and Health Centers

Belize Food and Nutrition Assessment Survey, 1984

To supplement these available data sources, CARE-Belize, in collaboration with USAID, will design and execute a baseline survey to obtain information regarding knowledge, attitudes and practices, inter alia:

- (1) Oral Rehydration and Diarrhoeal Disease Control
- (2) Immunization
- (3) Breast feeding, Breast care, and Weaning practices
- (4) Growth Charting and Infant/Child Feeding
- (5) Control of ARI
- (6) Peri and Post-natal care
- (7) Family Life Education

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## VII. PROJECT CONSTRAINTS

There are five major areas for possible constraints to the implementation of the project. They include:

### 1. National Policy for Community Health Workers

At the present time, there exists in Belize no clear-cut policy which gives specifications for Community Health Worker (CHW) selection, training, scope of work, and means of compensation, if any.

Project Concern, which is carrying out training and supervision of CHWs in the Toledo District, is presently preparing a proposal which, if acceptable to GOB, would set government policy on these issues. Mr. Robert Tucker, PCI Director in Belize, is the person charged with drafting this proposal. He and his organization were specifically requested by GOB to do so given PCI's nearly four years of involvement in the training and supervision of CHWs in Belize.

CARE proposes to offer whatever input it can into the final drafting of this proposal and will also collaborate closely with MOH in developing the most effective manner of implementing the points of the policy.

Under the question of CHW compensation, CARE does not intend to pay such persons for their services to the community.

CARE is prepared to assist in working with the community to generate the form of compensation agreed upon, whether it be financial or services rendered, from the community itself.

### 2. GOB Personnel

There is presently a scarcity of both government and non-governmental health workers at the mid-level to act as counterparts in the supervision and training of both mid-level and community health workers. There is also a scarcity of time in which to properly carry out these activities.

CARE proposes to help facilitate training and supervision of mid-level and CHWs through the Nurse/Health Educator and District Implementors. These persons will also be involved in the training of nursing students when they are doing their rural clinic rotations in Orange Walk and Corozal, any student teacher training as it involves health education, as well as the recruitment and training of BIB counsellors in these districts. Such efforts are intended to substantially increase both the amount of personnel involved in the implementation of Child Survival activities and, by extension, the time allotted to them.

### 3. Availability of Medicines, Medical Supplies and Equipment, and Educational Materials for Child Survival

There is often a scarcity of the medicines, medical supplies and equipment, and educational materials necessary for the effective implementation of Child Survival activities in Belize, particularly at the rural health clinics but also at the district health centers and hospitals.

CARE may assist, where appropriate, to make available the medicines, medical supplies, and equipment necessary by seeking contributions in kind. A certain amount of medical supplies and equipment, such as ORS packets, hanging scales, and breast pumps, have been budgeted for but these are intended to fulfill a definite need rather than to solely supplement the existing stock. In addition to providing education materials in Child Survival to mid-level and community health workers and teachers, the CARE Child Survival project staff intend to work closely with HECOPAB just as the VLWS staff has been doing, to design and produce health education materials through the use of village artists which are relevant to both the health problems facing Belize and to the Belizean cultural context.

CARE also intends to work closely with GOB to improve the lines of supply and distribution for medicines, medical supplies and equipment, and health educational materials.

### 4. Transportation

The lack of transportation has often been cited by MOH as being one of the major factors interfering with their work at the community level.

Although CARE does not intend to donate a vehicle to the MOH for Child Survival, the vehicle which is assigned to the project will be used by CARE Child Survival personnel with both government and non-governmental health workers accompanying them whenever necessary.

### 5. Data Collection and Statistical Record Keeping

MOH officials have commented upon the lack of reliable data particularly where it concerns morbidity.<sup>6</sup> Ms. Roberta Lee, nurse educator for Project HOPE in Belize has recently drafted a proposal for submission to GOB which includes as one of its project goals the strengthening of this area through both the provision of a National Health Statistician and the training of both national and mid-level health workers in the art of more efficient data collection, record-keeping and statistical analysis of health-related information.

CARE intends to collaborate very closely in this area of training. The Village Health Committee members will also be trained in certain aspects of record-keeping where they apply to Child Survival activities. This will assist the mid-level in the more concise monitoring of health status at the village level.

## VIII. PARTICIPATION PLAN

The manner in which the various institutions, agencies, and programs will inter-relate during the implementation of the Child Survival Project, and with what frequency, will be as follows:

### A. GOB/CARE

#### 1. National Level

The CARE Child Survival Project Coordinator and/or Nurse/Health Educator will maintain close, regular contact with MOH officials and department heads on a weekly basis.\* Such contacts will include the MOH itself, Belize City Hospitals, particularly the Oral Rehydration Unit, the Belize Bureau of Statistics, Matron Roberts Health Center (Public Health Inspectorate) and the Belize School of Nursing. The Project Coordinator and Nurse/Health Educator will also sit regularly on the monthly Primary Health Care, Maternal-Child Health, and Health Education (HECoPAB) meetings.

Both of these CARE staff members will also maintain contact with representatives of the Ministries of Education and Social Services on a monthly basis through BELCAST, the Curriculum Development Unit, and the Development Council.

#### 2. District Level

On the district level, the Nurse/Health Educator and/or District Implementors will meet with medical officers, hospital nurses, PHNs and RHNs on a weekly basis, District Educational Officers and Directors of Social Services on a bi-weekly basis. In addition, these CARE staff members will sit regularly on the monthly meetings of the District Health Team, District Development Council, and REAP/GROWTH District Council meetings. The Project Coordinator will also maintain monthly contact with district representatives of Education and Social Services.

#### 3. Village Level

The Nurse/Health Educator and/or District Implementors will meet on a weekly basis with GOB extensionists working within the villages themselves such as primary school principals and teachers, village midwives, and malaria collaborators.

\*through Senior CARE Staff. see Appendix V.

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## B. NATIONAL NGO/CARE

### 1. National Level

The Project Coordinator and <sup>or</sup>Nurse/Health Educator will sit on monthly Belize Nutrition Communication Network (BNCN) and Breast is Best League (BIB) meetings held in Belize City.

### 2. District Level

The Nurse/Health Educator and District Implementors will meet with any BIB counsellors on a bi-monthly basis once they are recruited in Corozal and Orange Walk Districts. These persons will also collaborate with any BNCN activities being implemented in the target districts.

### 3. Village Level

The District Implementors will maintain weekly contact with any BIB counsellors based within the target villages themselves as well as any BNCN activity implementors.

## C. INTERNATIONAL AGENCIES/CARE

### 1. National Level

The Project Coordinator will maintain weekly contact with donor agency, USAID. Both the Coordinator and Nurse/Educator will meet regularly once a month with representatives of USAID, UNICEF, Project Concern International, Project HOPE, and Enfants Refuges du Monde at meetings of the Primary Health Care Committee, Maternal-Child Health Committee, and HECOPAB.

### 2. District Level

The Nurse/Health Educator and District Implementor for Orange Walk will hold monthly meetings with Enfants Refuge du Monde. The presence of the Project Coordinator at these meetings is optional. The Nurse/Health Educator and District Implementors will liaise with the HOPE nurse educator at least once a month when he/she visits the Child Survival Project target districts.

### 3. Village Level

The Nurse/Health Educator and District Implementor for Orange Walk will liaise with Enfants Refuges du Monde in joint villages on a weekly basis. Training of VHC members in these particular villages will also be a joint venture.

## IX. TECHNICAL CONSIDERATIONS - POST PROJECT TRAINING AND SUPPLY

Ministry of Health officials at both the national and district levels have stated that one of the major constraints to the successful implementation of Child Survival services is the lack of sufficient follow-up training for mid-level health workers and the inconsistency in the availability of the medicines, medical supplies and equipment, and educational materials needed both to carry out training as well as implement the services:

This project has taken several positive steps toward the establishment of effective post-project capacity to help substantially upgrade the content and frequency of in-service training and to strengthen the lines of supply and distribution to help assure that there be a sufficient quantity of medicines, medical supplies and equipment, and educational materials which are relevant to the provision of Child Survival services. These steps include:

1. Collaborating with appropriate MOH representatives such as the Nursing School Director and staff to design and implement Child Survival training modules for both nursing students and health workers at the district and community levels including Medical Officers, hospital nurses, PHNs, RHNs, and Village Health Committees.
2. Collaborating with GOB in strengthening the lines of distribution and supply for medicines, medical supplies and equipment, and educational materials which are relevant to Child Survival.
3. Providing, where appropriate and if absolutely necessary, basic medical supplies and equipment to complement the existing stock in two district health centers and four rural health centers through CIKs.
4. Collaborating with HECOPAB to identify village artists who could design and produce prototypes of educational materials based within the Belizean context. Such materials would then be refined for mass production for use in Belize. The capacity of HECOPAB would thus be expanded to meet the health educational needs for Child Survival.

## X. PROJECT SUPPORT

A. Staffing Plan

The staffing plan for the Child Survival project will consist of the following CARE personnel:

- 1 Project Coordinator
- 1 Nurse/Health Educator
- 2 District Implementors

In addition to permanent project staff, a media-specialist will be solicited for a two-month consultancy. A second consultant, whose qualifications include survey design and implementation, will also be solicited at the beginning, middle and end of the project for a total of approximately nine weeks.

The Project Coordinator will be based in Belize City at the CARE office. The Nurse/Health Educator will be based in either Orange Walk or Corozal. Each of the two District Implementors will base themselves in each of their respective districts.

Job descriptions are included

B. Village Health CommitteesCriteria for Selection\*

1. Concerned with the health and welfare of the community.
2. A respected member of the community.
3. Already involved in some aspect of health within the community. (TBA, Malaria Collaborator, Water and Sanitation Committee, CHW)
4. Willing to do volunteer work outside the community at the rural health clinic at least twice per month.
5. Able to read and write.
6. Over 18 years of age.

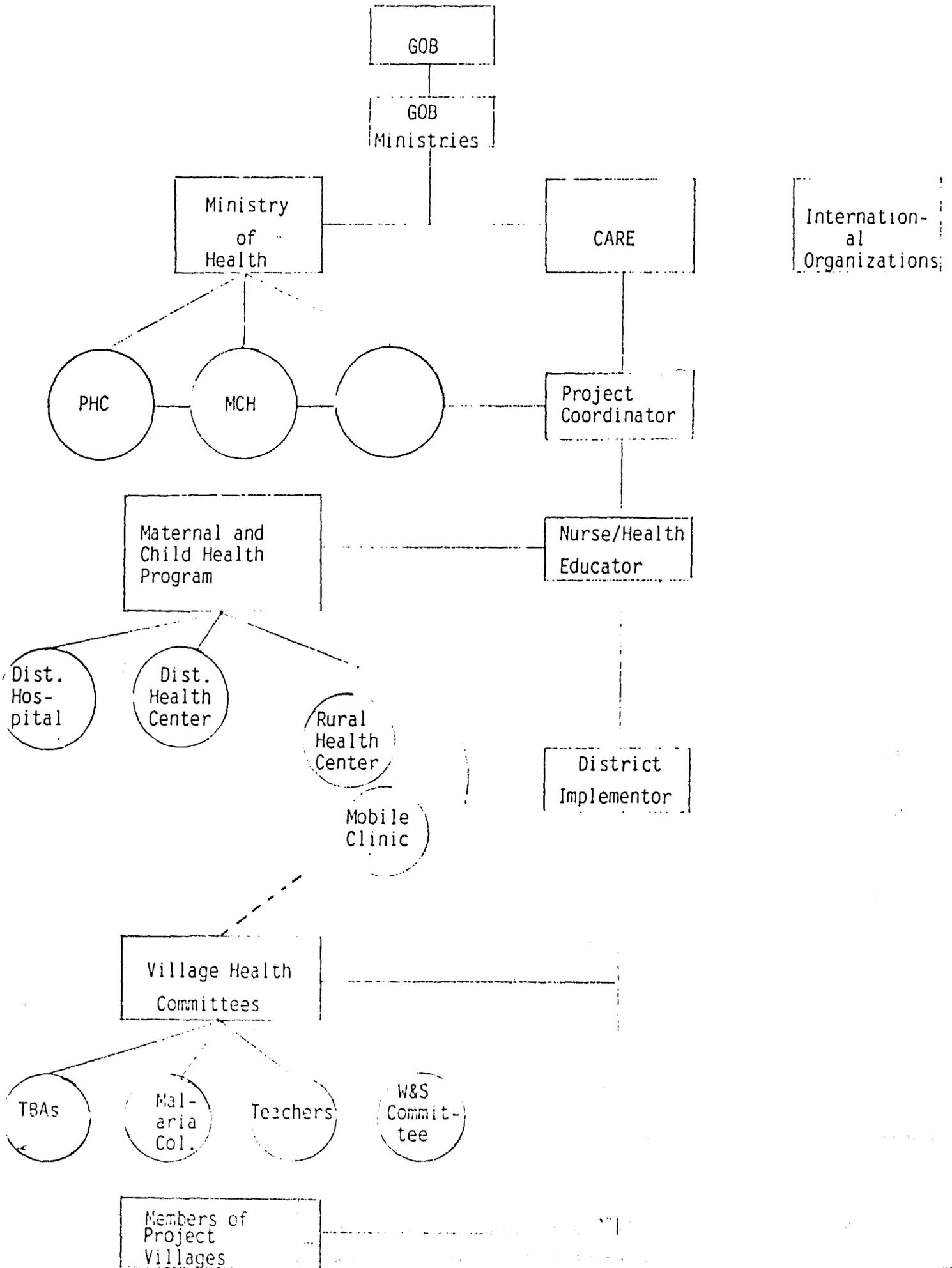
Supervision of VHC Members

In addition to the formal training sessions for members of the VHC outlined in Section XII, those selected will receive ongoing supervision in the field by the Nurse/Health Educator and/or District Implementor on a weekly basis. Some examples of such supervised activities would include health education classes given to school children, to adults, and home visits. Members of the VHC, either singularly or in pairs, will also assist the rural health nurse (RHN) at the rural health clinic nearest them for one-half day at least twice per month. As in the village, the role of the VHC member will be primarily educational. The RHN is often so overtaxed with carrying out curative health aspects, that health education often plays a minor role. Thus, not only will they be helping the RHN be more effective, they will also be gaining valuable practical experience. Supervision will initially be carried out by the Nurse/Health Educator and/or District Implementor. In time, the RHN will take over the supervision of these persons. VHC members will play the same role when the Mobile Health Clinic makes its monthly visits.\*\*

\* Village Health Committees should consist of both male and female members. Given the nature of Child Survival services, however, it is recommended that women with children be given priority in the selection process.

\*\* See organizational chart X, C

# ORGANIZATIONAL CHART



## Referral System

It is very important that a working relationship be established as early as possible between the VHC members and the government nursing staff, particularly the local RHN. This will help to both establish and facilitate a system of referral between the village and the rural and district health centers. Thus, clients seen at either facility will return to their respective communities with instructions for follow-up by the members of the VHC. Again, this will be primarily educational. Clients seen at the community level will, if necessary, be referred by the members of the VHC to the rural or district health center, if necessary.

## Incentive

CARE does not intend to pay members of the VHCs but is willing to assist project communities to generate some form of compensation, either money or services, if so desired. Although prestige is a factor for people electing themselves to be members of community-based committees such as this, the relatively high degree of responsibility, time, and energy involved may eventually require such an action.

Community Health Workers will be selected on a voluntary basis through the village councils as was the case of the members from the Water and Sanitation committee in the VLWS project. Members should be persons who have expressed willingness to be a CHW. Persons who are traditional birth attendants and malaria collaborators will be strongly encouraged to be members of the Village Health Committee. CHWs will need to be able to communicate in English as well as the language used by the majority of the people in the community. CHWs will also need to demonstrate some proficiency in reading/writing and simple mathematical skills.

Training sessions will be held for one to two days depending on the amount of material to be covered. Classes will cover the following topics:

|                          |                         |
|--------------------------|-------------------------|
| General Record Keeping   | Hygiene                 |
| Immunization             | Water Sanitation        |
| Nutrition/Breast feeding | Communicable Diseases   |
| Growth and Development   | pre and post-natal care |
| Oral Rehydration         | Family Life Education   |
| Proper use of Equipment  | ARI control measures    |

Each class will include communicative skills and how to develop teaching aids. Classes will be taught using the 10 activity-based teaching methods developed by the REAP program.

As CHWs progress through the program they will be responsible for teaching others in their village about the subjects covered through home visits and neighbourhood groups. The CHW will also keep a notebook containing any health teaching or care done in the community. These notebooks will be used for evaluation of the CHW and the community on a monthly basis by the

Nurse/Health Educator or District Implementors and MOH personnel. The CHWs, along with the District Implementor will decide among themselves how best to divide up the community so that all families have access to the services CHWs are able to provide. The District Implementor also serves as the liaison between the CHW and the rural health nurses in promoting a feedback mechanism which meets the needs and addresses the issues confronting each group. The CHWs will also provide valuable support to the Mobile Health Team when it visits their village.

All the services mentioned in this proposal are available at the rural health centers and at the village level through the Mobile Clinic. The Mobile Clinic may not operate on a regular basis, but it does exist. The GOB cannot, and will not, extend their health professionals beyond the rural health clinic and periodic mobile clinics for financial reasons and lack of personnel. CARE's Child Survival project is, therefore, trying to increase the utilization of existing services primarily through education at the village level by CHWs whose capacities are generally limited to this only per government mandate. CARE is therefore trying to promote the utilization of existing services while simultaneously increasing the ability of mid-level health professionals to perform these services.

CARE-BELIZE

CHILD SURVIVAL PROJECT COORDINATOR

Job Description

1. Provide coordination for the project.
2. Schedule project activities.
3. Procure and distribute local supplies within the project.
4. Provide overall supervision of District Implementors and participate in their training.
5. Hold regular project staff meetings to monitor progress and problems.
6. Liaise, coordinate and collaborate with all National and International counterparts.
7. Control project vehicles and their maintenance.
8. Organize project data collection.
9. Prepare project reports, as required, for CARE and participating donor agency(ies).

Job Qualifications

Must possess a post-high school degree or equivalent in the health and/or education field.

Must have 5 to 10 years working experience, at least 3 years at the level of project manager or project coordinator.

Must have good written and oral communication skills and be fluent in English and conversant in Spanish.

Requires possession of a valid driver's license.

Should have experience in rural development or related field, ideally in Rural Health and Child Survival methodology.

Should be familiar with GOB organization and procedures at both the national and district levels.

Should also have prior experience in developing annual budgets, workplans and preparation of project reports.

CHILD SURVIVAL NURSE/HEALTH EDUCATOR

Job Description

1. Assist in the coordination of project activities, particularly activities transpiring in the field.
2. Develop and maintain working relationships, coordinate and collaborate, with MOH as well as other counterparts, agencies and field personnel of these agencies.
3. Train/supervise District Implementors, mid-level and Village Health Committee members.
4. Design and implement training of district and village-level health workers.
5. Work with media-specialist in identifying and developing appropriate communication materials.
6. Assist in data collection and data analysis.
7. Represent the Project by sitting on national committees.
8. Monitor progress of all project activities.
9. Prepare and submit to CARE regular written progress reports.

Job Qualifications

Masters in Public Health or 3 years experience in health program management

Registered Nurse or practical nurse background

Experience, at least 2 years, working in nursing/health education in the Third World.

Ability to work closely with representatives of local government field personnel to plan and coordinate project implementation.

Willingness to live and work in different cultural environment and take extensive field travels, often beyond normal working hours.

Fluent in English and conversant in Spanish.

Possession of a valid driver's permit.

## CARE-BELIZE

## CHILD SURVIVAL DISTRICT IMPLEMENTORS

Job Description

1. Day-to-day coordination and implementation of field activities at district level.
2. Participate in the training and supervision of Village Health Committee members and mid-level health workers.
3. Liaison with project communities, community leaders, and local committees.
4. Submission of work programs and reports to the Project Coordinator.
5. Supervision and/or implementation of data collection.

Job Qualifications

Secondary school graduate

Prior work experience in health field

Ability to work closely with representatives of both central and local governments, rural community members, and government field personnel to plan and coordinate project implementations.

Willingness to live and work in different cultural environment and take extensive and difficult travels, sometimes under adverse climatic conditions and beyond normal working hours.

Fluent in English, conversant in Spanish

Possession of a valid driver's permit

Initial Baseline Surveys\*

Duration: 6 weeks total, 3 weeks at beginning of year 1 1/2 for initial baseline survey of target district 1 and 3 weeks at end of year 1 1/2 for initial baseline survey of target district 2. At each visit, one day to be spent at CARE-New York before arriving in Belize; another day at CARE-New York upon return, depending upon perceived needs of CARE.

1. Review project documentation and discuss (with CARE, GOB and AID as appropriate) to obtain a clear idea of project goals and objectives.
2. Review data collected by MOH concerning mortality/morbidity figures and causes and present status of health facilities and personnel for Orange Walk and Corozal Districts.
3. Review data collected through the Belize Food and Nutrition Assessment, Breast-is-Best League, and the HECOPAB Health Education Survey.
4. Review other pertinent MCH data other than mortality/morbidity such as low-birth weight babies, numbers of women seen in pre-natal clinic, numbers of women seen post-natally, number of infants seen at well-baby clinic, and immunization figures.
5. Develop scope of work and budget for the initial baseline survey.
6. Recruit and train field personnel for data collection
7. Pre-test survey instrument and revise.
8. Execute baseline survey.
9. Design information feedback system for collecting the data necessary for ongoing monitoring.
10. Analyze data and prepare report, including financial accounting for expenses incurred for survey.
11. Train CARE's two district implementors to conduct future baseline and follow-up surveys.

Qualifications

1. Master's Degree or equivalent experience in public health or a related field.
2. Fluent in English and conversant in Spanish.

\*AID/W is to identify and provide this technical assistance at no cost to USAID-Belize or to CARE.

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3. Two years experience in health-related project(s) in rural areas of developing countries, including field experience in epidemiologic analysis.
4. Experience in the design and execution of surveys.
5. Willingness to undertake extensive field travel, sometimes under adverse climatic conditions and beyond normal working hours.
6. Possession of a valid driver's license.

Scope of Work - District Evaluations\*

Duration: 6 weeks total, 3 weeks at end of year 1 1/2 to analyze the results of follow-up KAP survey and any additional relevant data for target district 1 and at the end of project to analyze the results of follow-up KAP survey and any additional relevant data for target district 2.\*\* At each visit, one day to be spent at CARE-New York before arriving in Belize, another day at CARE-New York upon return, depending upon perceived needs of CARE.

1. Review project documentation (including baseline and follow-up data) and discuss evaluation with project personnel (CARE, GOB, AID as appropriate).
2. Develop scope of work and budget for evaluation activities to be implemented locally by field personnel.
3. Coordinate evaluation with KAP follow-up surveys implemented by CARE Nurse/Health Educator, District Implementors, and village enumerators.
4. Design evaluation instrument.
5. Recruit and train field personnel with District Implementors.
6. Execute field work.
7. Interview GOB, AID and staff of other agencies (as appropriate) to obtain relevant quantitative or qualitative data.
8. Analyze data and prepare report, including financial accounting for local expenses incurred during the evaluation.
9. Conduct a financial analysis of project activities.

Qualifications

1. Master's degree or equivalent experience in public health or a related field.
2. Fluent in English and conversant in Spanish.
3. Two years' experience in health-related project(s) in rural areas of developing countries.
4. Experience in the design and execution of evaluations (including financial review) of health-related projects.
5. Willingness to undertake extensive field travel, sometimes under adverse climatic conditions and beyond normal working hours.
6. Possession of a valid driver's license.

\*AID/W is to identify and provide this technical assistance at no cost to USAID-Belize or to CARE.

\*\*The repeat KAP surveys for each district will be carried out by the Child Survival project staff immediately prior to the arrival of the surveyor.

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Scope of Work - Media Specialist\*

Duration: 8 weeks (one day to be spent at CARE-New York before arriving in Belize; another day spent at CARE-New York upon return, depending upon perceived needs of CARE).

1. Review project documentation and discuss (with CARE, GOB and AID as appropriate) to obtain a clear idea of project goals and objectives.
2. With the CARE Nurse/Health Educator and GOB HECOPAB Director, review and evaluate available materials for health education regarding Child Survival components.
3. Develop appropriate messages for various target audiences in Child Survival for the cultures and language groups involved, particularly Creole and Mestizo. This activity probably will include field work to talk to various representatives in target villages (e.g. school teachers, village councils, public health nurses, children).
4. Recommend and field test appropriate media and materials for the messages developed. Develop budget to illustrate costs of various options.
5. Recommend strategies for introducing the new educational materials to the target populations.
6. Prepare report.

Qualifications

1. Master's degree or equivalent experience in non-formal education, media development, communications or a related field.
2. Fluent in English and conversant in Spanish.
3. Two years' experience in development of educational materials for health projects in rural areas of developing countries.

\*AID/W is to identify and provide this technical assistance at no cost to USAID-Belize or to CARE.

## XI. MATERIALS AND LOGISTICS PLAN

CARE proposes to supply the district hospitals and health centers and rural health centers of each project district with such basic supplies as vaccine carriers, baby scales, growth charts, breast pumps, and educational materials, at the onset of mid-level health worker training. Thus, Coroza! would be supplied at the beginning of the first one-year and a half period and Orange Walk at the beginning of the second. It is important that these materials be linked to the training sessions designed for their use. In the case of breast pumps, these will be supplied to the districts once BIB counsellors have been recruited for these areas. However, some pumps will be placed at the disposal of the district hospitals, health centers, and rural health centers in the beginning for the purposes of training. CARE will also supply the target villages with ORS, breast pumps, and educational materials once the members of the VHCs have been trained. Storage of all medical supplies, equipment, and education materials will be maintained by CARE until needed.

## XII. TRAINING PLAN

Training will involve three main groups of trainees. These are the District Implementors, the mid-level health workers, and the members of the Village Health Committees. Training content as it applies to specific technical areas, such as immunization techniques, will vary according to the type of trainee. The time frame for training activities will, by necessity, follow along the same lines as the time frame for project implementation in each district and group of villages. Thus, mid-level health workers in Corozal will receive training at the beginning of the three years followed by training of the village health committee members. The entire twelve villages per district will not be trained at once but rather staggered, with six committees being trained initially and the remaining six four months later. The same process will ensue at the project's mid-point of 18 months in Orange Walk District and its villages. For the District Implementors, the time frame will be slightly different. (See below)

### Training Plan Time Frame

A. Trainees: District Implementors

Trainers: Project Coordinator  
Nurse/Health Educator

Time Frame: One month initial training followed by on-going supervision and training in the field. District Implementors will also receive training during workshop sessions with mid-level and community health workers where they will take the role of facilitator/participant.

The District Implementor for Corozal will be the first to be trained. The one for Orange Walk will be employed to begin work at twelve months or six months before work actually commences in Orange Walk. During that interim period, she/he will be working alongside the Corozal District Implementor.

Training Content: The District Implementors will be trained to effectively carry out educational and promotional activities in the following areas:

- ORT and diarrhoeal disease control\*
- Immunization
- Breast-feeding, Infant and Child-feeding practices
- ARI
- pre and post-natal care
- family-life education

These persons will also be trained in:

- community organization

\*ORT training will include how to prepare and administer the solution correctly.

- community assessment
- patient assessment
- health education
- data collection and record keeping
- motorcycle maintenance

B. Trainees: Mid-level Health Workers\* (Doctors, Nurses, Midwives, Pharmacists, BIB Counsellors, Public Health Inspectors).

Trainers: Nurse/Health Educator, District Implementor, National Nursing Staff, Physicians, BIB Director

Time Frame: Initial two-week training course with a one-week refresher workshop administered every six months during the life of the project (3 years).

Mid-level health workers will also receive weekly follow-up and evaluation for the first month following the initial training and then twice-monthly follow-up and evaluation for the next twelve months. CARE Child Survival staff will be maintaining regular contact with these mid-level health workers during the life of the project.\*\*

Training Content: The CARE MCH staff, in conjunction with MOH personnel, will assist in the training of mid-level health workers in both technical and theoretical areas as follows:

- ORT and diarrhoeal disease control \*\*\*
- immunization including maintenance of the cold chain
- Breast-feeding and infant/child-feeding practices
- ARI prevention and management
- pre and post-natal examinations and counselling
- family life education

These persons will also be trained in:

- community organization
- community assessment
- health education
- data collection and record keeping

\*It is recognized that many of these mid-level health personnel have already had some degree of training and experience in Child Survival; therefore, the training module will vary accordingly.

\*\*See Section VIII, PARTICIPATION PLAN

\*\*\* ORT training will include how to prepare and administer the solution correctly.

C. Trainees: Village Health Committee Members

Trainers: Nurse/Health Educator, District Implementor, District Nursing Staff, BIB counsellors, Enfants Refugees du Monde.\*

Time Frame: Initial two-week training course with a one week refresher course every six months during the life of the project. The first VHC training will involve six of the twelve villages and following that, the remaining VHCs will be trained. This same time frame will be followed for the second half of the project (target district two).

VHC members will also receive once weekly all-day working sessions during the first month following the initial training. This will change to twice-monthly after the first month and continue for the next twelve months. Following this, monitoring of the VHCs will occur on a weekly basis with training implemented as needed.

In addition, VHCs will meet as a group once a month. These meetings will serve as forums both for sharing of information and additional training. The Nurse/Health Educator and/or District Implementor will be maintaining regular contact with these committees during the life of the project.

Training Content: Village health committee members will be trained to effectively carry out educational and promotional activities in the following areas:

- ORT and diarrhoeal disease control\*\*
- Immunization
- Breast feeding and infant and child feeding practices
- ARI
- pre and post-natal care
- family life education

These persons will also be trained in:

- community organization
- community assessment
- patient assessment
- health education
- data collection and record keeping

D. CARE Child Survival staff will select and train local enumerators from each target village to assist in carrying out the Knowledge, Abilities and Practices (KAP) surveys in their own villages. They will be trained once the Village Health Committees have been formed.

\* Enfants Refugee du Monde's Dr. Thierry Gateau will participate jointly in VHC members training taking place in the seven villages in which he is working.

\*\* ORT training will include how to prepare and administer the solution correctly.

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*Received*  
 3-26-86  
 HEALTH BELIZE  
 GENERAL DEVELOPMENT OFFICE

XIII BUDGET FOR MATERNAL AND CHILD HEALTH (MACH)/CARE-BELIZE

| DESCRIPTION  | YEAR 1 |        | YEAR 2 |        | TOTAL  |        | TOTAL  |
|--|--------|--------|--------|--------|--------|--------|--------|
|  | FC     | LC     | FC     | LC     | FC     | LC     |        |
| <b>I. PERSONNEL</b>  |        |        |        |        |        |        |        |
| 1. Health Nurse Educator   | 28,346 | 9,239  | 29,414 | 8,960  | 57,760 | 18,199 | 75,959 |
| 2. Project Implementor   | 0      | 6,731  | 0      | 7,404  | 0      | 14,135 | 14,135 |
| 3. Project Implementor   | 0      | 0      | 0      | 6,731  | 0      | 6,731  | 6,731  |
| 4. Project Costs/Vehicle Operation   | 304    | 10,949 | 334    | 12,044 | 638    | 22,993 | 23,631 |
| 5. Project Coordinator   | 0      | 7,448  | 0      | 8,193  | 0      | 15,641 | 15,641 |
| <b>II. MATERIALS AND EQUIPMENT</b>   |        |        |        |        |        |        |        |
| 1. Medical Supplies (ORS packets, etc.)  | 440    | 0      | 1,018  | 0      | 1,458  | 0      | 1,458  |
| 2. Medical Equipment - 27<br>Hanging scales, 30<br>Growth charts, 30<br>Measuring tapes, 2<br>Vaccine carriers, breast pumps 12,<br>Speculums, 6 sets, bicycles, 2 | 3,098  | 0      | 225    | 502    | 3,323  | 502    | 3,825  |
| 3. Educational Materials - charts, manuals, slides, pamphlets, GYN tables  | 3,294  | 135    | 2,758  | 100    | 6,052  | 235    | 6,287  |
| 4. Educational Equipment   | 1,000  | 0      | 1,231  | 0      | 2,231  | 0      | 2,231  |
| 5. Workshop Expenses   | 0      | 4,500  | 0      | 4,950  | 0      | 9,450  | 9,450  |
| 6. Materials for Producing Training Aids   | 0      | 4,050  | 10,660 | 2,000  | 10,660 | 6,050  | 16,710 |

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| DESCRIPTION                          | YEAR 1 |        | YEAR 2 |        | TOTAL   |         | TOTAL          |
|--------------------------------------|--------|--------|--------|--------|---------|---------|----------------|
|                                      | FC     | LC     | FC     | LC     | FC      | LC      |                |
| 7. Consultant                        | 6,535  | 2,643  | 6,585  | 2,664  | 13,120  | 5,307   | 18,427         |
| 8. Honda Generator & Accessories     | 0      | 671    | 0      | 0      | 0       | 671     | 671            |
| 9. Vehicle F-250 4x4 Pickup Crew Cab | 15,000 | 0      | 0      | 0      | 15,000  | 0       | 15,000         |
| 10. Motorcycles (Implementors)       | 0      | 1,500  | 0      | 1,650  | 0       | 3,150   | 3,150          |
| III. EVALUATION                      | 0      | 1,640  | 0      | 1,804  | 0       | 3,444   | 3,444          |
| IV. SUB-TOTAL                        | 58,017 | 49,506 | 52,225 | 57,002 | 110,242 | 106,508 | 216,750        |
| V. CONTINGENCY                       |        |        |        |        |         |         | 10,838         |
| VI. OVERHEAD                         |        |        |        |        |         |         | 22,412         |
| <b>TOTAL</b>                         |        |        |        |        |         |         | <b>250,000</b> |

VII. KAP Surveyor\*

VIII. Media Specialist\*

\* AID/W is to identify and provide this technical assistance at no cost to USAID-Belize or to CARE

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XIII. BUDGET FOR CHILD SURVIVAL/CARE-BELILE

| DESCRIPTION  | YEAR 1 |        | YEAR 2 |        | YEAR 3 |        | TOTAL   | TOTAL  |        |
|--|--------|--------|--------|--------|--------|--------|---------|--------|--------|
|  | FC     | LC     | FC     | LC     | FC     | LC     | US\$    | FC     | LC     |
| <b>I. PERSONNEL</b>  |        |        |        |        |        |        |         |        |        |
| 1. Health Nurse Educator   | 28,346 | 9,239  | 29,414 | 8,960  | 32,355 | 9,856  | 118,170 | 90,115 | 28,055 |
| 2. Project Implementor   | 0      | 6,731  | 0      | 7,404  | 0      | 8,144  | 22,279  | 0      | 22,279 |
| 3. Project Implementor   | 0      | 0      | 0      | 6,731  | 0      | 7,404  | 14,135  | 0      | 14,135 |
| 4. Project Costs/Vehicle Operation   | 304    | 10,949 | 334    | 12,044 | 367    | 13,248 | 37,246  | 1,005  | 36,241 |
| <b>II. MATERIALS AND EQUIPMENT</b>   |        |        |        |        |        |        |         |        |        |
| 1. Medical Supplies (ORS packets, etc.)  | 440    | 0      | 485    | 0      | 535    | 0      | 1,460   | 1,460  | 0      |
| 2. Medical Equipment - 27 hanging scales, 30 growth charts, 30 measuring tapes, 2 vaccine carriers, breast pumps, 12 speculums, 6 sets, bicycles | 3,098  | 0      | 75     | 0      | 150    | 0      | 3,323   | 3,323  | 0      |
| 3. Educational Materials - charts, manuals, slides, pamphlets  | 3,294  | 135    | 1,105  | 0      | 1,655  | 100    | 6,287   | 6,052  | 235    |
| 4. Educational Equipment   | 1,000  | 0      | 0      | 0      | 1,231  | 0      | 2,231   | 2,231  | 0      |
| 5. Workshop Expenses   | 0      | 4,500  | 0      | 4,950  | 0      | 5,445  | 14,895  | 0      | 14,895 |
| 6. Materials for Producing Training Aids   | 0      | 4,050  | 10,660 | 1,000  | 0      | 1,000  | 16,710  | 10,660 | 6,050  |
| 7. Consultant  | 6,535  | 2,643  | 6,585  | 2,664  | 0      | 0      | 18,427  | 13,120 | 5,307  |
| 8. Honda Generator & Accessories   | 0      | 671    | 0      | 0      | 0      | 0      | 671     | 0      | 671    |
| 9. Vehicle F-250 4x4 Pickup Crew Cab   | 15,000 | 0      | 0      | 0      | 0      | 0      | 15,000  | 15,000 | 0      |
| 10. Motorcycles (Implementors)   | 0      | 1,500  | 0      | 1,650  | 0      | 0      | 3,150   | 0      | 3,150  |

CHILD SURVIVAL - BELIZE

| DESCRIPTION     | YEAR 1  |        | YEAR 2 |        | YEAR 3 |        | TOTAL   | TOTAL   |         |
|-----------------|---------|--------|--------|--------|--------|--------|---------|---------|---------|
|                 | FC      | LC     | FC     | LC     | FC     | LC     | \$      | FC      | LC      |
| III. EVALUATION | 0       | 1,640  | 0      | 1,304  | 0      | 1,984  | 5,428   | 0       | 5,428   |
| IV. SUBTOTAL    | 58,017  | 42,058 | 48,658 | 47,207 | 36,291 | 47,191 | 279,412 | 142,966 | 136,446 |
|                 | 100,075 |        | 95,865 |        | 83,472 |        |         | 279,412 |         |
| V. CONTINGENCY  |         |        |        |        |        |        | 13,971  |         |         |
| VI. OVERHEAD    |         |        |        |        |        |        | 28,891  |         |         |

322,274

- VII. KAP Surveyor\*
- VIII. Media Specialist\*

\*AID/W is to identify and provide this technical assistance at no cost to USAID-Belize or to CARE

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CHILD SURVIVAL - CARE-MANAGED INPUTS

| DESCRIPTION             | YEAR 1        |               | YEAR 2        |                         | YEAR 3         |               | TOTAL          | TOTAL          |                |
|-------------------------|---------------|---------------|---------------|-------------------------|----------------|---------------|----------------|----------------|----------------|
|                         | FC            | LC            | FC            | LC                      | FC             | LC            | \$             | FC             | LC             |
| 1. Country Director     | 25,619        | 4,916         | 28,180        | 5,407                   | 30,998         | 5,948         | 101,068        | 84,787         | 16,271         |
| 2. Administrative Costs | 11,000        | 42,298        | 12,100        | 46,528                  | 13,310         | 51,809        | 177,045        | 36,410         | 140,635        |
| <b>TOTAL</b>            | <b>36,619</b> | <b>47,214</b> | <b>40,280</b> | <b>51,935</b>           | <b>44,308</b>  | <b>57,757</b> | <b>278,113</b> | <b>121,207</b> | <b>156,906</b> |
|                         | <b>33,833</b> |               | <b>92,215</b> |                         | <b>102,065</b> |               |                | <b>278,113</b> |                |
|                         |               |               |               | <u>NON-CARE MANAGED</u> |                |               |                |                |                |
| 1. GOB (In Kind)        | 0             | 62,000        | 0             | 68,200                  | 0              | 75,020        | 205,220        | 0              | 205,220        |
| 2. U.S. Peace Corps     | 0             | 1,600         | 0             | 1,760                   | 0              | 1,936         | 5,296          | 0              | 5,296          |

TOTAL BUDGET

USAID - \$322,274  
 CARE - \$278,113  
 GOB - \$205,220  
 U.S. PEACE CORPS - \$5,296  
\$810,903

CHILD SURVIVAL Direct Cost  
P/N - TB<sup>A</sup>  
Fund Code 1100 CARE  
Fund Code TBD

| <u>Account</u> | <u>Description</u>                 | <u>Amount</u> |
|----------------|------------------------------------|---------------|
| 4502           | Health Nurse Educator              | 15,500        |
| 4504           | Benefits                           | 5,115         |
| 4503           | Project Implementor                | 6,731         |
| 4505           | Benefits                           | 203           |
| 4506           | Allowances                         | 1,170         |
| 4507           | Health Nurse Pers. Effects         | 500           |
| 4508           | Office Supplies                    | 462           |
| 4509           | Postage, Telephones & Cables       | 462           |
| 4510           | Office and Warehouse rent          | 792           |
| 4511           | Light, Heat and Maintenance        | 1,184         |
| 4514           | Vehicle Maintenance and Repairs    | 3,600         |
| 4515           | Travel and Lodging                 | 4,650         |
| 4519           | Sundry                             | 1,465         |
| 4520           | Internal Delivery                  | 300           |
| 4523           | Insurance                          | 445           |
| 4525           | Location Allowance                 | 3,600         |
| 4527           | Education Allowance                | 3,000         |
| 4528           | Relocation Allowance               | 250           |
| 4529           | R and R                            | 2,640         |
| 4530           | Personal Effects Insurance         | 250           |
| 4531           | Travel Costs                       | 1,700         |
| 4534           | Post Adjustment                    | 1,550         |
| 4001           | Evaluator/Consultant               | 6,535         |
| 4001           | Truck 4x4                          | 15,000        |
| 4001           | Medical Equipment                  | 3,098         |
| 4001           | Medical Supplies                   | 440           |
| 4001           | Education Materials                | 3,294         |
| 4001           | Education Equipment                | 1,000         |
| 4002           | Education Materials                | 135           |
| 4002           | Workshop Expenses                  | 4,500         |
| 4002           | Training Aids Materials            | 4,050         |
| 4002           | Evaluator/Consultant               | 2,643         |
| 4002           | Honda Generator and Extension Cord | 671           |
| 4002           | Motor Cycle                        | 1,500         |
| 4002           | Evaluator                          | 1,640         |

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| APPRO NUMBER |  |  |  |  |  |  |  | SPENDING ACCOUNT | CONTROL FUND | INDICATOR CONTROL |
|--------------|--|--|--|--|--|--|--|------------------|--------------|-------------------|
| REV SOURCE   |  |  |  |  |  |  |  |                  |              |                   |

I. DIRECT AND FIXED COST

| EFFECT PERIOD | Entire FY | Entire FY |  |  |  |  |  | TOTAL   | HDQS   | LOCAL      |    |
|---------------|-----------|-----------|--|--|--|--|--|---------|--------|------------|----|
| FC            | 1100      | USAID     |  |  |  |  |  |         |        |            |    |
| 4502          | 13,113    | 15,500    |  |  |  |  |  | 28,613  | 28,613 | ////////// | 2  |
| 4503          | 21,550    | 6,731     |  |  |  |  |  | 28,281  | 0      | 28,281     | 3  |
| 4504          | 4,327     | 5,115     |  |  |  |  |  | 9,442   | 9,442  | ////////// | 4  |
| 4505          | 2,375     | 203       |  |  |  |  |  | 2,578   | 0      | 2,578      | 5  |
| 4506          | 849       | 1,170     |  |  |  |  |  | 2,019   | 0      | 2,019      | 6  |
| 4507          | 1,980     | 500       |  |  |  |  |  | 2,480   | 2,480  | 0          | 7  |
| 4508          | 1,221     | 462       |  |  |  |  |  | 1,683   | 0      | 6,683      | 8  |
| 4509          | 1,848     | 462       |  |  |  |  |  | 2,310   | 330    | 1,980      | 9  |
| 4510          | 3,267     | 792       |  |  |  |  |  | 4,059   | 0      | 4,059      | 10 |
| 4511          | 1,820     | 1,184     |  |  |  |  |  | 3,004   | 0      | 3,004      | 11 |
| 4513          | 1,810     | 0         |  |  |  |  |  | 1,810   | 0      | 1,810      | 13 |
| 4514          | 1,588     | 3,600     |  |  |  |  |  | 5,188   | 0      | 5,188      | 14 |
| 4515          | 1,954     | 4,650     |  |  |  |  |  | 6,604   | 452    | 6,152      | 15 |
| 4516          | 2,610     | 0         |  |  |  |  |  | 2,610   | 2,610  | ////////// | 16 |
| 4517          | 0         | 0         |  |  |  |  |  | 0       | 0      | ////////// | 17 |
| 4518          | 1,683     | 0         |  |  |  |  |  | 1,683   | 1,386  | 297        | 18 |
| 4519          | 3,944     | 1,465     |  |  |  |  |  | 5,409   | 2,164  | 3,245      | 19 |
| 4520          | 0         | 300       |  |  |  |  |  | 300     | 0      | 300        | 20 |
| 4522          | 2,756     | 0         |  |  |  |  |  | 2,756   | 1,764  | 992        | 22 |
| 4523          | 391       | 445       |  |  |  |  |  | 836     | 452    | 384        | 23 |
| 4525          | 2,885     | 3,600     |  |  |  |  |  | 6,485   | 0      | 6,485      | 25 |
| 4527          | 1,485     | 3,000     |  |  |  |  |  | 4,485   | 4,485  | 0          | 27 |
| 4528          | 83        | 250       |  |  |  |  |  | 333     | 333    | 0          | 28 |
| 4529          | 667       | 2,640     |  |  |  |  |  | 3,307   | 0      | 3,307      | 29 |
| 4530          | 165       | 250       |  |  |  |  |  | 415     | 415    | 0          | 30 |
| 4531          | 2,501     | 1,700     |  |  |  |  |  | 4,201   | 981    | 3,220      | 31 |
| 4532          | 99        | 0         |  |  |  |  |  | 99      | 0      | 99         | 32 |
| 4533          | 660       | 0         |  |  |  |  |  | 660     | 0      | 660        | 33 |
| 4534          | 1,311     | 1,550     |  |  |  |  |  | 2,861   | 2,861  | ////////// | 34 |
| 4536          | 0         | 0         |  |  |  |  |  | 0       | 0      | ////////// | 36 |
| 4537          | 0         | 0         |  |  |  |  |  | 0       | 0      | ////////// | 37 |
| SUB TOTAL     | 78,943    | 55,569    |  |  |  |  |  | 134,511 | 58,768 | 75,743     |    |

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Criteria for Village Selection

The village selection process will be a two step process.

- A. Step One - Initial Screening. The selection process will begin with orientation sessions at the national and district levels. The purpose of the orientation sessions will be an informative presentation of the project to GOB staff, village councils, and other interested community groups from Orange Walk and Corozal Districts.

Villages which have the potential for being selected for the project must meet the following criteria:

- poor availability of and accessibility to existing health services
- high incidence of preventable diseases
- VLWS presence
- REAP/GROWTH presence
- Existence of existing health care workers in the community including CHWs, malaria collaborators, and traditional birth attendants.

The screening will be carried out by the CARE Child Survival team in conjunction with representatives from the Ministry of Health. Input will also be solicited from the Ministries of Education and Social Services, REAP/GROWTH District Councils, USAID, Project Concern, Enfants Refuges du Monde, and Project HOPE. Selection will not depend upon the results of a baseline survey as in the case of VLWS; however, a baseline survey will be carried out once the villages are selected for purposes of monitoring and evaluation.

B. Step Two - Final Selection

Each of the 24 villages which pass the initial screening will then be met with and the implementation plan, goals and objectives presented to the village councils and the members of the communities as a whole. Final selection will depend upon the communities accepting the provisions of the Plan.

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Government Health Providers, Health Facilities  
and Infant Mortality Rates for Corozal and Orange Walk<sup>1</sup>

## A. COROZAL

1. IMR: 42.6/1000 live births

## 2. HEALTH PROVIDERS

a. Public Health Staff

|                               |   |
|-------------------------------|---|
| Medical Officers:             | 1 |
| Public Health Nurses:         | 1 |
| Rural Health Nurses:*         | 4 |
| Family Nurse<br>Practitioner: | 0 |
| Public Health<br>Inspectors:  | 1 |

b. Hospital Staff

|                   |   |
|-------------------|---|
| Medical Officer:  | 1 |
| Nurses:           | 6 |
| Auxillary Nurses: | 8 |

c. Traditional Birth Attendants

|            |    |
|------------|----|
| Trained:   | 14 |
| Untrained: | 4  |

d. Community Health

|                 |   |
|-----------------|---|
| <u>Workers:</u> | 0 |
|-----------------|---|

<sup>1</sup> IMR figures are from the 1982 BHNA records for 1980. These figures are reportedly lower at this time. All other figures are from the Child Survival Plan for Belize, 1985-1989, except for hospital staff which were given verbally.

\* Rural Health Nurses are also trained Practical Nurse Midwives.

## 3. HEALTH FACILITIES

|                          |   |
|--------------------------|---|
| Hospital:                | 1 |
| Urban Health Center:     | 1 |
| Rural Health Centers:**  | 2 |
| Mobile Health Clinic:*** | 0 |

## B. ORANGE WALK

1. IMR: 36.7/1000 live births

## 2. HEALTH PROVIDERS

a. Public Health Staff

|                               |   |
|-------------------------------|---|
| Medical Officers:             | 1 |
| Public Health Nurses:         | 1 |
| Rural Health Nurses:          | 3 |
| Family Nurse<br>Practitioner: | 0 |
| Public Health<br>Inspector:   | 1 |

b. Hospital Staff

|                   |   |
|-------------------|---|
| Medical Officer:  | 1 |
| Nurses:           | 9 |
| Auxillary Nurses: | 3 |

\*\* Although Progresso is geographically a part of Corozaal district, it comes under the jurisdiction of Orange Walk in matters of health. At the present time, there is no one staffing this clinic. Seventh-day Adventists nurses had been doing so until November of last year. There is no clear word on whether they will return. According to MOH, this clinic will be staffed by government RHN sometime this year.

\*\*\* There is presently no Mobile Health Clinic based in Corozaal. Corozaal does get to share the Orange Walk unit 15 days per month. According to Dr. Reneau, Director of MCH Services, efforts are being made to provide Corozaal with its own unit sometime this year. The Mobile Health Clinic dispenses MCH services directly to the villages approximately once per month.

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c. Traditional Birth Attendants

|            |    |
|------------|----|
| Trained:   | 15 |
| Untrained: | 22 |

d. Community Health  
Workers

14 (seven villages) \*\*\*\*

## 3. HEALTH FACILITIES

|                       |   |
|-----------------------|---|
| Hospital:             | 1 |
| Urban Health Center:  | 1 |
| Rural Health Centers: | 2 |
| Mobile Health Clinic: | 1 |

\*\*\*\* These 14 community health workers were recently trained by Enfants Refugees du Monde. There are two in each of seven villages. These villages have sizable refugee populations. CARE Child Survival will coordinate efforts with ERM in these particular villages.

Background to the Present Status of Child Survival Activities  
in Belize

A. Growth Monitoring and Child Feeding

Growth charting was first introduced in Belize on a general basis in January, 1984. Although infant and child feeding education is given to mothers it does not occur to any great extent once mothers leave the hospital. Village trained birth attendants (TBAs) are trained to do nutrition education but this is inconsistent at best. The GOB/MOH has called for some system of nutrition surveillance for the country but this has yet to be implemented. At the present time there exists no facilities specifically designated as nutrition centers for the care of the malnourished.

B. Diarrhoeal Disease Control and Oral Rehydration

The Oral Rehydration Unit (ORU) at the Belize City Hospital first opened its doors in December, 1980, following a seminar held in Jamaica in April of that same year. <sup>1</sup> A Control of Diarrhoeal Disease Committee was formed at the same time. There are presently four community health workers working in CRT in Belize City and three in Belize Rural. An ORU was recently established in Orange Walk District as well, but there are no ORT outreach workers there as yet.

The main objectives in forming the ORU and its services were:

- To provide wide dissemination of information on ORT to all health facilitators
- To provide wide dissemination of information on ORT to the community
- To introduce the use of pre-packaged ORS in place of the homemade solution. <sup>2</sup>

The ORU itself is an in-patient unit whose patients, mostly infants and small children, suffer from dehydration which, though not so severe as to require intravenous therapy on the regular pediatric ward, does, nevertheless, require stabilization in a carefully monitored setting. Included in the overall program of the ORU is the health education associated with the control of diarrhoeal disease and diseases associated with poor water and sanitation in general.

C. Breast-Feeding

The Breast-is-Best League (BIB) is based in Belize City. Although there are a few breastfeeding counsellors in the district towns, most of the BIB counsellors work in Belize City. There are no BIB representatives in either Corozal or Orange Walk Districts. Their scope of work includes:

<sup>1</sup> From Belize Control of Diarrhoeal Diseases, a position paper written and delivered by Matron Courtenay of the ORU at the National Water and Sanitation Workshop in Belize City, November 11-15, 1985.

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- Training of women in proper breast-feeding and breast care
- Education of the general public concerning the importance of breast over bottle-feeding
- Education of mothers in proper nutrition both for themselves and for their infants. This includes the proper way of introducing solid foods and the type of foods to use.

BIB is very active in the Belize City Hospital where its workers counsel women about breastfeeding both before and after the birth of the child.

#### D. Expanded Programme of Immunization (EPI)

The immunization of infants and children in Belize is generally carried out in the district and rural health centers. In order to overcome the relatively inadequate coverage that exists for diphtheria pertussis, tetanus, polio and measles, the MOH is launching a vaccination campaign which will be implemented at the village level between March and August of 1986. According to MOH/PAHO figures, immunization coverage for children under one year of age is only 60% on average with coverage being as low as 40% in some areas. Coverage of pregnant women with tetanus toxoid is also low.

Senior Nurse Collymore of the Matron Roberts Health Center in Belize City, states that the relatively low coverage for vaccines can be attributed in the main to problems in supply and distribution of the necessary vaccines and to the need for stronger promotional and educational activities at the community level. She also asserts that there are no serious problems in the maintenance of the cold chain but that additional storage units at the district and rural health centers would allow for better implementation.

#### E. Acute Respiratory Infection Control (ARI)

Although the control of ARI requires aggressive, curative therapy, its incidence can be significantly reduced through good nutrition, proper hygiene and full immunization coverage. The relatively high death rate among the under-five group can be attributed both to the factors which inhibit a child's resistance to the severity of the diseases as well as to the inconsistencies in the supply of appropriate antibiotics.

<sup>2</sup> Although the government policy does favor the pre-packaged variety of ORS, it nevertheless recognizes the importance of teaching the homemade variety and allows this to be done. (Statement by Matron Courtenay, ORU, Belize City Hospital, November, 1985)

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F. Peri-natal Care

Peri-natal clinic is a regular service done at all district and rural health centers in Belize. However, only 20% of women attend during their first trimester.\* MOH recognizes that here both promotional and educational activities must be strengthened, particularly in the rural areas so as to encourage women to attend peri-natal clinic more regularly.

A concern has been expressed by MOH as to the need for better post-natal care and counselling of the post-partum woman. In Corozal and Orange Walk Districts this service is not readily available.

G. Family Spacing and Family Life Education

Belize has traditionally been a pro-natalist country; large families are still the norm in Belize, particularly in the rural but also in the urban areas. The GOB has recently expressed its concern over this situation and has approved a plan to introduce family life education into the normal school curriculum. In January of 1986 a family life educator was hired to oversee this task. Certain forms of birth control are available in Belize but much more effort in the way of promotion and education is necessary if it is to be used. A large majority of rural women in this country give birth to their first child when they are as young as sixteen.

\*MOH/PAHO

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International Organizations involved in Child Survival  
Programs in Belize

A. Project Concern International (PCI)<sup>1</sup>

PCI has been implementing its primary health care training program since March of 1982 in the southern Belize district of Toledo. This program will be terminated in March of 1987. The focus here has been in the training and supervision of community health workers (CHWs) and other community-based health workers including traditional birth attendants (TBAs). The purpose and goal of PCI's program is to "design and field test a PHC system which would accomplish the desired extension of essential services, and would be fully integrated into the community structure as well as that of the national health care system." The long-range goal is to improve the health status of the rural inhabitants of Toledo District and the strategy involves strengthening of Child Survival services at both the district and community levels. PCI intends to expand its program into the Stann Creek District at a later date.

Mr. Robert Tucker, Director for PCI/Belize is presently submitting a proposal to GOB which would outline a national training and support policy for CHWs in Belize.

B. Enfants Refuges du Monde<sup>2</sup>

Enfants Refuges du Monde is an organization based in France which works with refugees in the Developing World. It has been working in the Orange Walk district of Belize since June of 1985 in collaboration with the GOB and UNHCR under the direction of Dr. Thierry Gateau. The goal is to strengthen the delivery of Child Survival services through the training and supervision of CHWs. The seven target villages involved all have considerable refugee populations. As of August, 1985, fourteen CHWs have been trained and are implementing primarily educational and promotional aspects of Child Survival in their respective villages.

C. Project HOPE<sup>3</sup>

Project HOPE has submitted a proposal to GOB for a project entitled Maternal and Child Health Program. Its primary goal is to assist the MOH to improve the health, growth/development of high risk rural children under five years of age. Its purpose is to give technical assistance through education and training at both national and district levels and to help implement the MOH's 1985-1989 Child Survival Plan. Project HOPE intends to substantially upgrade data collection, record keeping, and statistical data storage and analysis and will be providing both a Health Statistician and the computer equipment (IBM AT) necessary for this purpose.

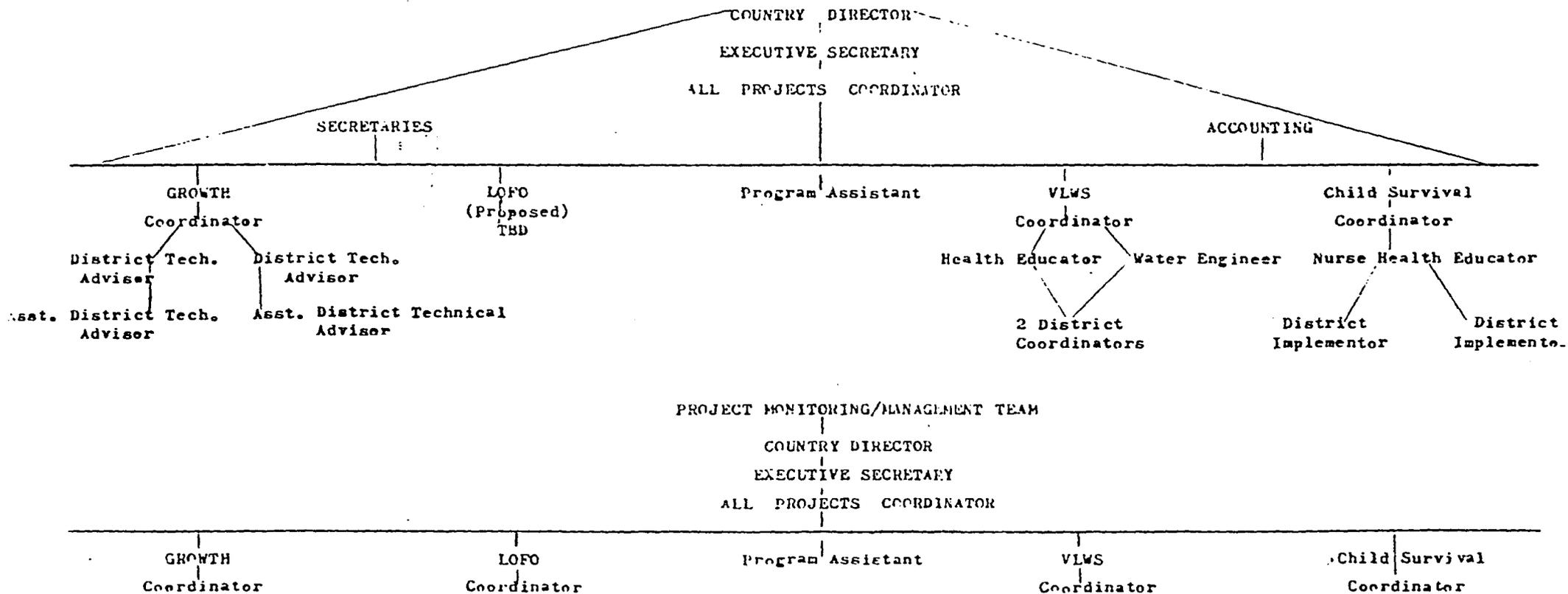
- 1 Trip Report to Belize, August, 1985, Project Concern International, FVA/PVC, V. Kunkle, 11/22/85.
- 2 Discussions with Dr. Gateau held between June and December, 1985.
- 3 Maternal Child Health Program, Project HOPE/Belize, Roberta Lee, 1/22/86.

D. Health Talents International<sup>4</sup>

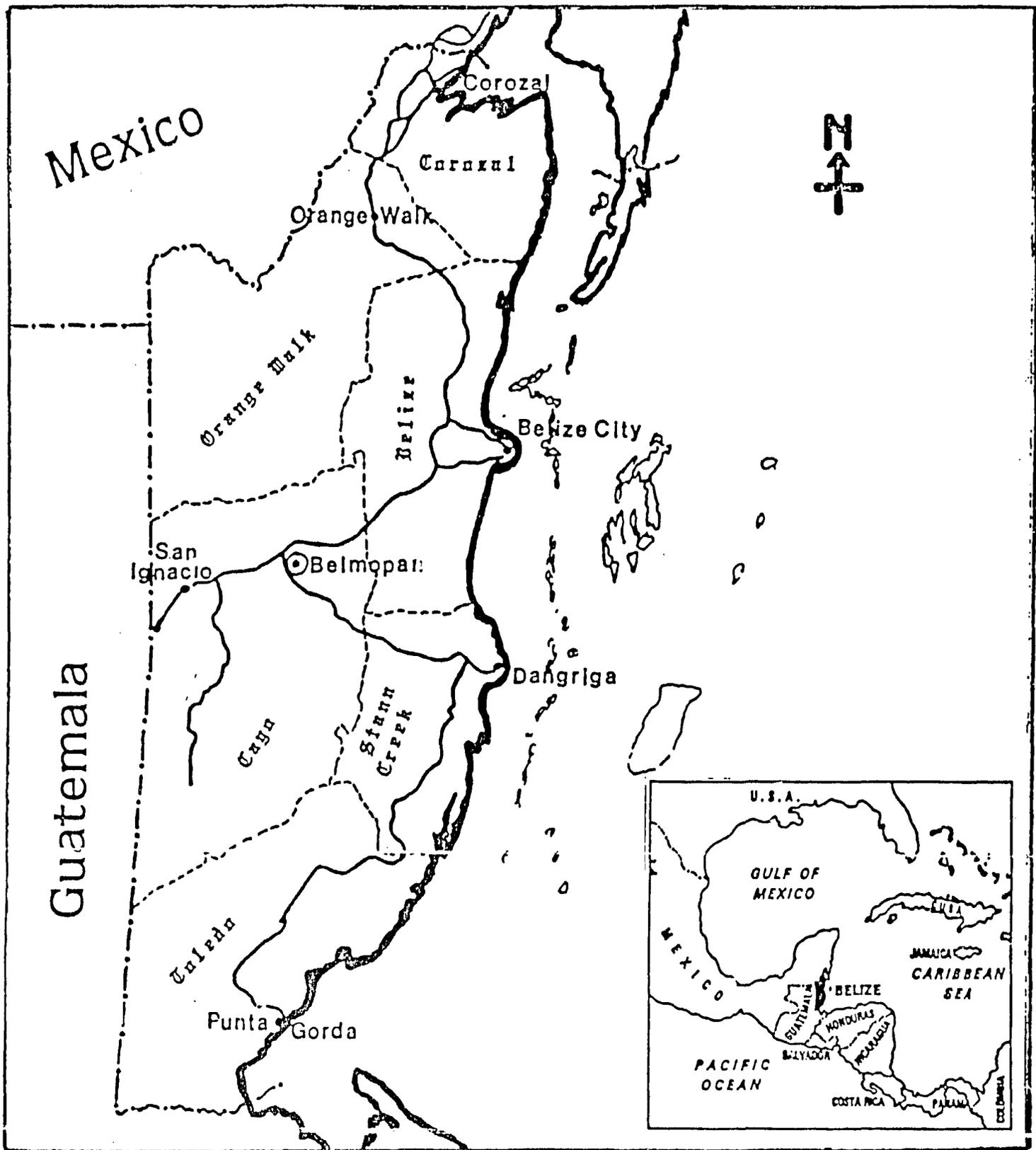
Health Talents International (HTI) has been active in Belize since June, 1984. This organization was very instrumental in developing the malaria program in the northern districts. GOB recently approved a proposal submitted by HTI for the implementation of an MCH program in southern Stann Creek District. One of the primary aspects of the program is the training of CHWs to complement the existing MCH services.

<sup>4</sup>Health Talents International MCH proposal, February, 1986

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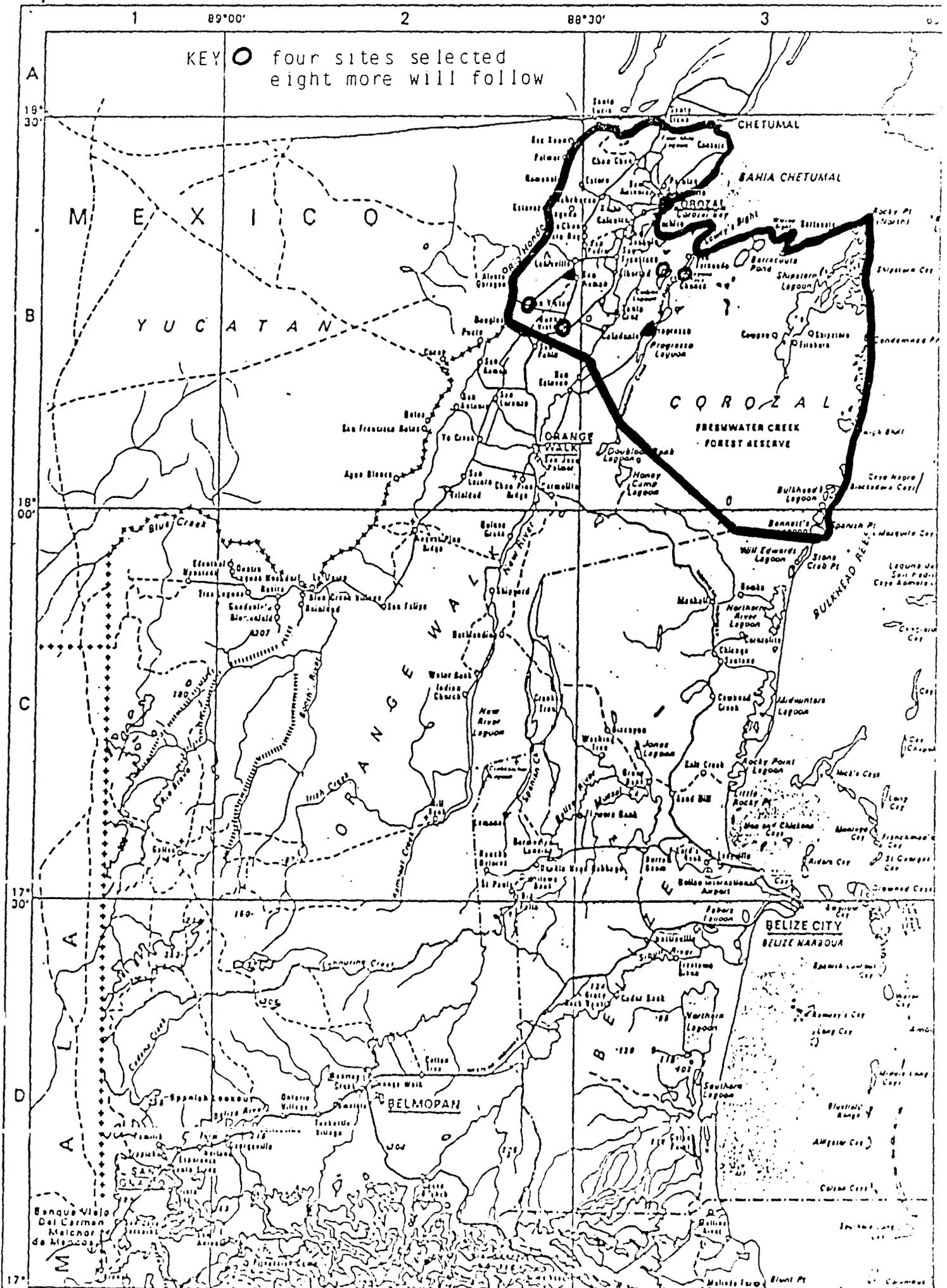


# BELIZE



- · - · - International Frontiers  
 - - - District Boundries  
 — Main Roads  
 ⊙ Capital City

Corozal — District Towns  
 Carnxul — Districts



KEY ○ four sites selected  
○ eight more will follow

KEY ● District Health Center & Hospital

▲ Rural Health center