



THIRD ANNUAL EVALUATION
OF COMBATTING CHILDHOOD COMMUNICABLE
DISEASES (CCCD) PROJECT
(698-0421)
IN ATLANTA, GA

PREPARED FOR:

OFFICE OF REGIONAL AFFAIRS
BUREAU FOR AFRICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
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By:

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EXECUTIVE SUMMARY

This is the report of the internal evaluation team for the AID Combatting Childhood Communicable Diseases (CCCD) project authorized in September 1981 for \$47 million. It is an eight-year project designed to increase the ability of African Governments to improve the health of children by expanding immunization programs and providing simple treatment for diarrheal disease and malaria.

The CCCD project is managed by AID and implemented by African Ministries of Health, the Centers for Disease Control (CDC), World Health Organization African Regional Office (WHO/AFRO) and the Peace Corps. The project provides services to all of Sub-Saharan Africa as well as having specific projects in as many as 12 countries. The evaluation was conducted between January 12 through 25 at the CDC in Atlanta by an AID/CDC evaluation team assisted by consultants and CDC and WHO headquarters and field staff.

The evaluation team reaffirmed the soundness of the basic project approach and recommended a number of actions to improve its technical impact and management efficiency. A summary of the 16 major recommendations is contained on pages 6 through 12 of this report. These include a series of recommendations to improve and refine delivery of the three disease interventions currently in the project. The feasibility of adding additional interventions was examined.

The team concluded that the control of yaws should be introduced into the Togo project as an operations research and pilot study to determine its compatibility with the current CCCD activities (Togo has a request for this assistance pending). It also recommended that the CCCD project should collaborate with childspacing programs and incorporate relevant information into the health education element of the project. A cautious approach was urged with respect to control of acute respiratory infections, meningococcal meningitis and hepatitis B since the technologies for treating these diseases were not yet far enough advanced to be cost effective and compatible with the current CCCD technologies.

On the week preceeding the evaluation, AID and CDC reviewed with a panel of experts, the methodology and experience in 3 countries of obtaining accurate Mortality and Use of Health Services Surveys (MUHS) data. The need to measure the impact of the program in terms of mortality reduction was recognized but the difficulty and cost of collecting accurate data and attributing cause and effect was also recognized. AID and CDC were urged to make prompt and firm recommendations concerning the most realistic and cost-effective methods of obtaining mortality data to measure the impact of the CCCD project.

Each of the four intercountry components of the project were reviewed and recommendations made to (1) emphasize the development of larger scale studies aimed at solving broader operational problems, (2) develop plans for the regional Health Information System when AID and CDC meet in February 1985 with WHO/AFRO to review WHO/AFRO's first year workplan for CCCD and direct more staff time to the collection and refinement of national health data, (3) use a series of short-term consultant visits to provide senior managers with on-the-job training, augmented when needed by outside short-term courses; eliminate new support to long-term training; and develop plans as soon as possible with WHO/AFRO to meet the inter-country training needs of the project, and (4) insure that health education plans are included in the CCCD bilateral projects.

A number of management improvements were recommended and slow procurement identified as the most serious problem. It was recommended that the four-year guideline for the length of bilateral projects be changed to a five year guideline. This was in recognition that most projects require a minimum of four operational years to become established and sustainable and that the first year was usually spent on planning, organizing and waiting for initial commodities to arrive. Finally the team reviewed the steps that could be taken to free-up existing management time to enable the project to be introduced into more countries.

The team concluded that as some of the present bilateral projects were completed, others could be added. It was recommended that a target of up to 16 AID-supported bilateral programs over the life of the project be set and that CCCD be extended for an additional three years to accommodate this. The additional cost to the program, including continued regional support services would be \$20 million. The evaluation team recommended that AFR/RA seek an amendment to increase the life-of-project funding to \$67 million through FY 1991.

GLOSSARY OF ABBREVIATIONS

AFR/RA	Africa Bureau, Office of Regional Affairs of AID
AFR/CONT	Africa Bureau, Controller's Office
AFRO (see also WHO/AFRO)	African Regional Office of WHO
AID (see also USAID)	Agency for International Development
ARHEC	African Regional Health Education Center
ARI	Acute Respiratory Infection
CCCD	Combatting Childhood Communicable Diseases Project
CDA	Cooperation for Development in Africa
CDC	Centers for Disease Control
CDD	Diarrheal Disease Control Program of WHO
DPT	Diphtheria-Pertussis-Tetanus Vaccine
EPI (see also WHO/EPI)	Expanded Program on Immunization of WHO
FE	Field Epidemiologist
HE/P	Health Education/Promotion
HIS	Health Information System
IHPO	International Health Program Office
LO	Liaison Officer
LOP	Life-of-Project
MCH	Maternal Child Health
MIS	Management Information System
MLM	Mid-Level Management
MUHS	Mortality and Utilization of Health Services (Surveys)
OPV	Oral Polio Vaccine
OR	Oral Rehydration
ORS	Oral Rehydration Solution

ORT	Oral Rehydration Therapy
PASA	Participating Agency Service Agreement
PC	Peace Corps
PHC	Primary Health Care
REDSOs	Regional Economic Development Services Offices (of AID)
REDSO/ESA	for Eastern and Southern Africa
REDSO/WCA	for West and Central Africa
SSS	Sugar and Salt Solution
TCDC	Technical Cooperation among Developing Countries
TO	Technical Officer
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development (refers to field mission)
WHO	World Health Organization
WHO/AFRO	World Health Organization/African Regional Office
WHO-CDD	World Health Organization-Control of Diarrheal Disease
WHO-EPI	World Health Organization-Expanded Program of Immunization

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I. INTRODUCTION

The AID Combatting Childhood Communicable Diseases (CCCD) project was authorized by the Administrator on September 25, 1981. The project provides \$47,000,000 over an eight year period as AID's part in an international program to reduce the morbidity and mortality from childhood communicable diseases in Africa.*

The objective of the project is to increase the ability of African governments to:

- ° prevent measles, polio, tuberculosis, diphtheria, pertussis and neonatal tetanus
- ° provide simple and effective treatment for diarrheal disease
- ° provide treatment of malaria in children under five and pregnant women
- ° control diseases of local importance, such as yaws and yellow fever

The project builds on the existing, primary health care activities of the African Governments. CCCD is designed to strengthen Ministries of Health to implement their primary health care plans which have been developed in accordance with WHO's worldwide programs and policies.

The project includes four intercountry strategies; training, operations research, health education and health information systems. These regional services are available to support and reinforce national programs throughout sub-Saharan Africa.

There are currently 9 (soon to be 11) countries using the CCCD program to introduce or strengthen the Expanded Program on Immunization (EPI), Control of Diarrheal Disease (CDD), and Malaria treatment activities in their primary health care programs. These bilateral projects are at various stages of development.

* This project is being carried out in cooperation with and through the coordinating mechanism of Cooperation for Development in Africa (CDA); Belgium, Canada, Federal Republic of Germany, France, Great Britain, Italy and United States.

Active programs are underway in nine countries where agreements have been signed. An additional agreement is in the final stages of negotiation for Guinea while another is under consideration for the Ivory Coast. This bilateral support consists of technical cooperation in planning and operations, training of field staff, health education, disease surveillance and evaluation, and commodity support.

The project authorization included a target of 15 to 20 AID-supported bilateral projects over the life of the program. Each bilateral project is assigned a CDC Technical Officer (TO) (full or part time) to collaborate with the health ministries to integrate CCCD activities into national primary health care plans. The first bilateral country agreement, with Zaire, was signed in 1982. Togo and Liberia were signed in 1983, and the remaining agreements with Congo, Lesotho, Swaziland, Malawi, Central African Republic and Rwanda were signed in 1984. Bilateral agreements have a life of four years and require annual evaluations. Evaluations were conducted in Zaire, Togo and Liberia in 1984.

The Regional Support activities include the services of field epidemiologists (FEs) to provide epidemiological expertise to the bilateral projects. In addition they provide technical consultation to other countries within the three sub-regions (west, central and east and southern) when appropriate.

The project has three implementing agents: Centers for Disease Control (CDC) which has been actively involved in the project since its inception and primarily responsible for managing the technical elements of the project carried out thus far; WHO/AFRO whose involvement is expected to increase with the January 1985 signing of a grant-agreement with AID, to carry out intercountry training and strengthen the health information system (HIS) to support the other elements of the CCCD project; and the Peace Corps which provides technical cooperation in health education.

To date Peace Corps has placed four specialist Volunteers in CCCD bilateral programs in Malawi and Liberia and six additional specialists in Togo and Liberia will be trained and in the field by the end of CY 1985. Requests for specialists in Rwanda and Lesotho are also anticipated. Approximately 40 generalist Volunteers in the ongoing community health and EPI programs in Zaire have received CCCD-oriented in-service as well as pre-service training with support from the AID PASA with Peace Corps. Five generalists will be trained in Togo during Summer 1985. Inservice training in CCCD technical areas is being provided to 50 generalist Volunteers in Mauritania, Mali, Togo, and Swaziland. The AID PASA with Peace Corps provides sufficient resources to train up to 100 new generalist and specialist Volunteers for assignment to the CCCD project.

II. THE EVALUATION: PURPOSE AND OBJECTIVES

The CCCD Project Paper calls for evaluations of the overall project and bilateral activities every year. Internal evaluations are to be performed alternately with external evaluations. The first external evaluation of the overall project was held in October 1983. The current internal evaluation took place from January 12 through 25 to coincide with the availability of the draft FY 1985 CCCD Annual report and the technical review and assessments of Mortality and Use of Health Services (MUHS) surveys that were conducted in three African countries during 1984.

The general purpose of this internal evaluation was to review the status of intercountry and bilateral activities, to assess the progress of project implementation to date and to examine key management and technical issues. Specifically, this assessment's purpose was to make a comprehensive and problem-oriented review of the CCCD project to determine if it should be modified, by addressing the following issues:

1. Life of project authorization
2. Recurrent costs
3. Mortality and Use of Health Services (MUHS) Surveys
4. Feasibility of adding acute respiratory infections, child spacing, hepatitis B, meningococcal meningitis, and/or yaws* to the CCCD project.
5. Status of current technical interventions of immunization, control of diarrheal disease, and malaria treatment.
6. Status of current activities in health education, training, operations research, and health information systems (HIS).
7. Need for training for senior-level management personnel.

* While the Project Paper cited yaws as one of the diseases that could be included in CCCD under the heading of "diseases of local importance," no program has so far included yaws control. Therefore, for the purpose of this evaluation, yaws is being considered in the category of other potential CCCD interventions.

8. Design and use of management information systems (MIS) including staff time utilization.

The internal evaluation team consisting of the Senior Project Officer, AID/AFR/RA Jack Slattery; CCCD Project Officer, AID/AFR/RA Joe Davis; Controller, AFR/CONT Travis Rattan; and Technical Coordinator, CDC/CCCD Andy Agle, was assisted by a number of consultants who provided advise and comments to the team on a broad range of subjects relating to the implementation and conduct of the CCCD project. The consultants included: Dr. E. G. Beausoleil, WHO/AFRO Regional Officer for Malaria; Dr. James Chin, State of California Epidemiologist, (ISTI)*; Dr. Henry Gelfand, University of South Carolina, Epidemiologist (ISTI); Dr. Geoffrey Ferster, Private Economist (ISTI); Dr. Joshua Adeniyi, University of Ibaden (Health Education Specialist); Dr. Jerezy Leowski, WHO/Geneva (Acute Respiratory Infections Specialist); Betsy Stephens, Management and Training Specialist (ISTI); Robert Hogan, WHO/Geneva (CDD), and Noel Marsh, Management Specialist (ISTI) and former AID/CCCD manager.

The week of January 14 was devoted to presentations followed by group discussions involving a number of CDC Atlanta staff, several CCCD field officers and the evaluators. Topics included consideration of additional child health interventions for inclusion in the CCCD project, status of current CCCD interventions, a summary of field staff activities, reports on various aspects of each bilateral project and a review of what had been accomplished in each of the four major regional activities. An overview session dealing with recurrent costs, budget and management issues was held on the last day and followed up with more detailed discussions during the following week when the evaluation core group met to resolve issues, consolidate recommendations and complete the writing of the evaluation report.

* International Science and Technology Institute, Inc.

This present evaluation report also addresses the issues raised in the external midterm evaluation report of October, 1983. One recommendation not discussed below, however is the assignment of a full-time senior project officer. Already given AID personnel ceiling limitations, it was not possible to assign a full-time senior project officer. Instead, AFR/RA assigned 30 to 40 percent of the time to one of two RA senior project officers to supervise this project and recruited a full-time CDC Technical Officer to assist the CCCD project officer in the management of this project.

The rest of the report responds to all but one of the remaining twelve external evaluation recommendations. The only recommendation that was not addressed related to AID top management involvement with CDA, which is felt to be beyond the scope of this evaluation. The report also addresses a number of issues raised in field cable responses to AID/W cable soliciting USAID's and REDSO's comments on topics to be covered in this internal evaluation. Numerous technical papers, CCCD reports and background documents were provided to the team and consultants during the two-week period (these documents are on file in AID, AFR/RA and CDC, IHPO).

III. MAJOR RECOMMENDATIONS

1. Mortality Surveys

Documentation of the health impact of the CCCD project is a high priority. Thorough analysis of the field tests of the prototype Mortality and Utilization of Health Services (MUHS) surveys should be promptly completed and used as a basis for planning how the project will document the impact on mortality, using the most appropriate available mortality estimating techniques. A comparison should be made with other survey techniques in the hope of finding a less expensive means of obtaining accurate and uniform data in future surveys. It was suggested that AID explore the possibility of having Westinghouse, who are funded to conduct health surveys in developing countries, perform some of their work in countries with CCCD programs.

The report from the MUHS review panel is attached (Annex A). The Evaluation Team recommends that AID and CDC promptly review the findings, conclusions and recommendations, resolve issues and make firm recommendations as to future MUHS survey work based on (a) the needs of the project to validate its accomplishments with mortality data, (b) the probability of obtaining reliable and uniform data, and (c) the most cost-effective methods that might be employed.

The MUHS report and its findings should be discussed with AID and CDC field staff during the annual CCCD meeting in Lilongwe, Malawi late March 1985. CDC should then prepare by May 10, 1985 a detailed plan of work including an illustrative budget for review by AFR/RA for future MUHS activities.

2. Immunization (EPI)

a) The policy guidelines developed by the global EPI Advisory Group should be uniformly recommended to national authorities for incorporation into CCCD programs.

b) More attention should be given to administering tetanus toxoid to pregnant women and other fertile-age women.

c) Surveillance systems for measuring the impact of vaccine preventable diseases should be made systematic and should focus on measles, neonatal tetanus and polio.

3. Diarrheal Disease Control (CDD)

a) The program should emphasize 1) the development of ORT demonstration centers; 2) the training of health staff in the proper use of ORT in all health facilities; 3) encouraging the use of home prepared solutions (including salt and sugar solution) to prevent dehydration; and 4) the use of process and outcome data to document the progress and impact of the program.

b) When improved ORS formulations are available and recommended by WHO their incorporation into existing systems should be encouraged.

4. Malaria

With the information generated by concentrating CCCD malaria efforts in two countries, additional control programs should be started in the bilateral programs where countries meet the conditions and criteria that have been developed based on the Togo and Malawi experience. The addition of 2 countries per year is an appropriate target. The program should emphasize:

- a) Collection of baseline information on national drug policies, distribution and practices.
- b) Promotion of drug sensitivity monitoring and other operations research that will allow for development of national malaria plans.
- c) Attempts of computing malaria associated mortality should be done as part of operations research; without this information it will be impossible to conclude whether CCCD objectives, will be achieved.
- d) Promotion of standardizing antimalarial treatment and chemoprophylaxis for pregnant women.

5. Other Potential Interventions

Several interventions are potentially compatible with the overall CCCD goal of reducing mortality of children in Africa. The CCCD project should have a limited role in the development of the additional interventions which should be

included only when requested by countries and where national and CCCD Project infrastructures are determined to have sufficient management capacity to assume additional components. Those that meet the criteria should be introduced cautiously and should generally begin as part of operational research or on a pilot scale with full collaboration of host governments. Specific recommendations pertaining to each of the interventions examined during this evaluation are contained in the body of this report.

6. Operational Research (OR)

Substantial progress has been made in getting small research grants approved for Eastern and Southern African investigators but not without significant personnel and financial cost to the project. It is recommended the focus now be shifted from these small research groups to producing studies with broader operational significance. More of the field epidemiologists' time should be directed at identifying and meeting the bilateral projects' operational research needs. Then, more emphasis should be placed on larger scale studies of operational problems encountered in the application of the current and, to a lesser extent, possible new CCCD technologies. CDC should start immediately to identify consultants and/or institutions to provide technical cooperation to the Eastern and Southern African small research grants program and stimulate the development of a similar program in the West Africa. Reorientation of operational research should be completed by August 1985.

7. Health Information Systems (HIS)

The progress of the HIS activity in bilateral countries should be reviewed by CDC to determine the need for change in the HIS strategy and the need for specific HIS training for country managers. Care should be taken to assure that only essential data needed to operate the program is collected. The procedures for collection should be made as easy and simple as possible and accomplished within

the existing HIS of the country. Each bilateral country should prepare its own HIS plan which should identify the resources needed to implement the plan and that maximizes short-term consultants. CDC/Atlanta should present a report on its HIS planned activities to AFR/RA by June 1985. Consideration should be given to developing an HIS course through the WHO/AFRO grant agreement.

8. Management Information Systems (MIS)

The CCCD MIS should be reviewed and revised by CDC to provide data more useful for national country managers, USAID's, and for CDC. The CCCD annual project report should be made for a calendar year to correspond with host-country reporting schedules instead of the U.S. fiscal year. CDC quarterly reports should immediately be simplified, highlighting problem areas and successes and including copies of field reports. All reports should take full advantage of available electronic graphic techniques to show the trends in service delivery and impact. When data are incomplete, estimates should be made so that the reports are as meaningful and complete as possible. Coverage data for immunization, ORT and malaria activities in Togo and Zaire must be reported by March 1985.

9. Training

Training remains an important part of both the regional and bilateral aspects of the CCCD project. To further focus this training on the operational needs of the program the evaluation team recommended that CCCD should:

a) develop an annotated list of short-term management training courses that are available in Africa and elsewhere which are suitable for intermediate and senior national managers of bilateral project activities. The project should further be prepared to support participants from bilateral project countries to these short-term training courses.

b) involve managers from ongoing CCCD programs in the planning and evaluation of other countries' programs.

c) identify consultants to carry out management, diagnostic and on-the-job training in countries where programs require such assistance. The evaluation team recognized the need for an initial training plan early in the start-up phase of bilateral programs.

d) develop training plans early in the start-up phase of bilateral programs, and

e) cease support for further long-term (more than 4 months) training beyond that already approved.

10. Health Education/Promotion (HE/P)

a) Assure better integration of HE/P into bilateral projects through the development of generic guidelines for planning and implementing health education. Guidelines should be completed by July 30, 1985. These guidelines can be introduced to CCCD staff during country consultative visits and/or in other formal or informal in-service staff training sessions.

b) Identify and begin working with a Francophone institution capable of conducting training similar to that planned for the African Regional Health Education Center (ARHEC) to provide this type of training in Francophone Africa.

c) Arrange supplementary technical cooperation resources with special emphasis on French-speaking capabilities (e.g., through AID centrally-funded projects such as PRITECH, Population Communication Services Project; CDC cooperative Agreement with Association of Schools of Public Health).

d) Improve health education content of the mid-level intercountry and training courses.

11. Procurement of Commodities and Services

In order to improve efficiencies in procurement of commodities and services the following steps are recommended:

a) Given the one-year lag in the availability of project vehicles, AID should consider issuing a blanket approval to procure first year's vehicles noncompetitively.

b) Speed up the procurement of commodities by assigning a short-term consultant (CDC or contractor) to work in-country for one or two months immediately after the Project Agreement is signed to work with the USAID and Ministry to order the commodities specified in the Project Agreement for first year.

c) Provide CCCD Technical Officers and Field Epidemiologists more orientation to AID procurement and other procedures relevant to their jobs, either at AID/Washington or through self-instructing video tapes sent to the field. AID Project Officer training would be useful for all CCCD Field Officers.

d) Each CCCD Technical Officer should do a Life-of-Project procurement plan as early as possible.

e) Consultants (CDC or other) need to be used more frequently by CDC as a means of relieving pressure on field staff and extending the project's ability to provide technical cooperation. A number of specific steps are recommended in the text of this report.

f) AFR/RA establish an ad-hoc management committee with representation, as needed, from CDC and other officers to review and implement these recommendations, as well as develop other means for introducing management efficiencies.

g) Several other specific recommendations were made to change the HIS, MIS and OR procedures, with the view of improving the efficiency of staff time use.

12. Management

In order to improve efficiencies in management the following steps are recommended:

a) As part of the AID - AFRO project work-plan discussion scheduled to start in Feb. 1985, the role and nature of the Liaison Officer position should be

examined and redefined in terms of the most efficient use of this resource in relation to total program needs.

b) Project evaluation objectives could be met and economies could be realized by scaling down the size and frequency of the evaluations originally set out in the Evaluation Plan. Internal evaluations, both overall and bilateral, should be conducted as in-house project reviews, external evaluation teams should be kept small. For an activity with up to a 5-year life, there should be no more than two external evaluations, one midterm and one final.

c) AFR/RA and the General Counsel's Office for the Africa Bureau (GC/AFR) should develop a set of procedures for legal clearances of various documents which is compatible with the rapid pace of implementation of the CCCD project.

13. Recurrent-Cost

Many African countries have great difficulty meeting recurrent costs of AID and other donor projects. Nevertheless, there are auto-financing methods (e.g. fee-for-service) which can be designed and implemented by host countries to meet recurrent CCCD costs. The evaluation team believes that one of the major strengths of the CCCD project is the requirement that host countries take over 100% of the recurrent costs of bilateral CCCD project by the end of that project, i.e., at the end of four or five years (see Recommendation on Funding, below). Therefore the evaluation team does not recommend changing the recurrent cost requirements but does recommend several steps to strengthen assistance to host countries to develop more effective recurrent cost analysis, recovery techniques, and policies. These include:

a) The ability for CCCD to provide short-term consultants to bilateral countries to assemble data on projected or ongoing recurrent costs of CCCD interventions and to develop cost recovery systems for the services provided under CCCD. (This should be done during the design/assessment for new bilateral activities.)

b) When, at all possible, linking cost recovery or auto-financing plans to the schedules negotiated for government assumption of CCCD recurrent costs.

c) The encouragement of governments to consider auto financing system through users' fees charged for project supplies such as chloroquine and ORS, but not for individual immunization visits.

d) Working with the World Bank recurrent cost analysis process and the WHO Resource Utilization Reviews to promote better recurrent cost analysis and policies in African countries.

e) Establishing within AFR/RA an ad-hoc management committee with representatives, as needed, from CDC and other offices to review and implement recommendations. The committee should also be able to develop and recommend other means for introducing management efficiencies.

14. Coordination

The CCCD project must continue its efforts toward improving coordination at the country level among host country, major multilateral and bilateral health donors, for example, to reduce divergent donor policies that can overtax host-country health systems. CDA health technical coordination meetings should be held in Africa to the extent possible. The process of developing and negotiating bilateral project activities should be used to the maximum extent possible to promote coordination by involving other donors.

15. Funding

There was general recognition that a minimum of four operational years is required to get a sustainable CCCD project underway and that experience has shown the first year of a bilateral project is mostly spent on planning, procuring commodities and organizing. It is thus recommended that consideration be given to amending the current bilateral agreements to extend the Life-of-Project (LOP) and adjust funding when necessary. It is further recommended that a five-year LOP

guideline be used to develop future projects and for ongoing projects. Current practice regarding phasing in of national support for additional recurrent costs engendered by the CCCD project should be maintained. Because of the difficult financial situations facing some of the countries, consideration should be given to stretching out the assumption schedule by adding an additional year e.g. 20% in second year, 40% in third, 60% in fourth and 80% in fifth year or tied to recurrent cost-analysis whenever possible.

16. Additional Bilateral Projects

After reviewing the management capacity available within the CCCD project and assuming that a number of personnel time saving efficiencies will result from the implementation of recommendations made in this report, the evaluation team recommends that as some of the earlier bilateral projects are completed, new country assessments be done so that new bilateral CCCD projects can be undertaken. Given the present schedule of activities, CCCD bilateral projects would increase to 12 in FY 1985. In order to ensure sufficient program and technical resources to manage the CCCD project, additional bilateral activities probably should not commence until FY 1987.

Within this framework, the CCCD life-of-project would be extended by 3 years, an additional \$20 million made available, and a new target of 16 countries established for bilateral assistance from AID. The evaluation team recommends that AFR/RA seek an amendment to the current authorization to extend the project through FY 1991 and increase the LOP funding to \$67 million.

IV. STATUS OF SPECIFIC COMPONENTS

1. Expanded Program on Immunization (EPI)

Immunization to reduce infant and childhood mortality is a key component of CCCD objectives and activities. Initial planning and development of coverage targets and a health facility-based delivery strategy are relatively complete. However, progress in actual implementation and delivery of services is just beginning in most bilateral programs.

No major program changes in the immunizations component appear necessary. However, several needs were identified during the course of the internal review which should be addressed by CCCD staff as soon as possible.

National governments should be encouraged to incorporate the policy guidelines, developed by the Global Advisory Group of WHO's Expanded Program on Immunization (EPI) which call for the immunization of sick children, the beginning of the oral polio vaccine (OPV) schedule as early as birth, and the initiation of diphtheria, tetanus and pertussis (DTP) immunization at six weeks of age. Implementation of all of these recommendations would further the objectives of CCCD. Administration of polio and DPT vaccines as soon as feasible would provide earlier protection for infants against these diseases. These recommendations need to be promoted at country level and routinely incorporated into CCCD training and health education materials. CCCD field staff will need to evaluate the actual implementation of these recommendations and to identify problems which may hinder acceptance and effective implementation.

One area of EPI activities which will need greater effort and emphasis by CCCD staff is the administration of tetanus toxoid to fertile age females. The development of immunization records for women should be given a high priority.

Newer vaccines such as an improved inactivated polio vaccine and the diploid measles vaccine may eventually be shown more advantageous compared to existing vaccines. However, until the WHO EPI Program has accepted these vaccines, CCCD involvement with the vaccines should be restricted to operational research.

There is also a need to develop better surveillance methods for vaccine preventable diseases particularly for measles, neonatal tetanus and polio. Such surveillance systems can be designed to improve surveillance for yellow fever in those areas where the disease constitutes an important public health problem.

2. Control of Diarrheal Disease (CDD)

The improved management of diarrheal disease to reduce infant and childhood mortality continues to be a sound and vital component of CCCD programs. The review of the control of diarrheal disease progress to date within CCCD revealed no major program design problems. However detailed data were not available for specific evaluation of implementation and effective utilization of oral rehydration therapy (ORT) using sugar and salt solutions (SSS) and oral rehydration solution (ORS) packets, especially at the peripheral level.

Because of the enormity of the adverse health impact of diarrheal diseases in Africa, many external donors have made large commitments to CDD. A major task for CCCD is to collaborate more effectively with all of the multiple CDD contributors. CDD intervention strategy is simple, inexpensive and effective if used properly. The major thrust of the CCCD program is to train health care providers in the effective management of diarrhea and dehydration in health care settings. In addition, primary health care workers will be trained to teach parents to recognize and treat diarrhea at home by giving ORT, either by ORS packets, available fluids, or home prepared solutions (SSS).

The national procurement and distribution of ORS packets to peripheral health facilities through the CCCD programs appear feasible.

Increased efforts are underway to develop effective health education strategies for CDD, and the importance of adapting educational interventions and materials to the local situation was recognized and emphasized. There is also a recognized need to evaluate the actual effectiveness of training and retraining health care providers to evaluate the actual preparation and use of fluids and to teach mothers to recognize the signs of dehydration. Experience from individual programs will be helpful but adaptation to local situations is required. As the bilateral CCCD programs progress further, the collection and detailed analysis of process and outcome data will be needed to evaluate and compare the effectiveness of CDD within different CCCD programs.

Further refinement and improvements of newer "super" ORS formulations are expected in the near future. When available and recommended by WHO, they should be recommended to national authorities for inclusion in CCCD programs.

3. Malaria Control

The malaria component of CCCD faces more technical complexities than the immunization and diarrheal disease components. Because of the varying degrees of commitment to the CCCD malaria strategy and the limited number of national and CDC staff familiar with and experienced in malaria control, a management decision was made to concentrate CCCD's malaria intervention in two bilateral projects (Malawi and Togo). This appears to have been a correct strategy and one that has prepared the project to broaden its response.

The activities in Malawi and Togo now permit a number of conclusions, recommendations and reaffirmations of current procedures to be made about the program elements needed to initiate similar malaria programs elsewhere in Africa. These include:

a) Malaria programs should not be undertaken in the absence of demonstrated national will and readiness.

b) A preliminary phase of any program should include: the establishment of a Malaria Advisory Committee (in the Ministry of Health), the appointment of someone responsible for malaria activities, the development of a control policy and a tentative set of procedures, the assembly of available data on antimalarial drug distribution, an inventory of resources, and the collection of data on treatment and prevention practices.

c) The response of P. falciparum to antimalarial drugs in the country must be ascertained, and a surveillance system established for the regular monitoring of drug response.

d) The program should be based on prompt treatment of cases of fever/malaria occurring in children and pregnant women. Prophylaxis of pregnant woman can be included in countries where the health services can deliver the service effectively.

e) The objective of treatment with antimalarial drugs is the clinical cure of the patient and, ideally, complete clearance of parasites from the blood. Recommendations on dosages of antimalarial drugs should be based on studies of the response to antimalarial drugs and knowledge of the availability of such drugs and patterns of use. Where 10 mg/kg of chloroquine has been shown to be effective against P. falciparum this dose is sufficient. Where high level resistance to chloroquine is present, alternate drugs such as amodiaquine and Fansidar may be required. However, many nations may decide to continue to recommend the first line use of chloroquine (a total dose of 25 mg/kg given over 3 days) because of its clinical effectiveness and low cost. “

f) Adequate local training in malaria for all technical and administrative personnel must be provided.

g) A reporting system for morbidity and treatment data must be established, as well as procedures and criteria for evaluation of the malaria component.

Based on the experience in Malawi and Togo, CCCD is ready to offer assistance for the establishment of additional control programs in countries meeting the criteria cited above. The methods and procedures found effective in Malawi and Togo should be described in the form of guidelines, for national adaptation and training.

The efficacy of chloroquine treatment for malaria strains that are sensitive to and partially resistant to chloroquine has been demonstrated. The effectiveness of reducing malaria mortality through this approach, however, has not been shown. In order to convince ourselves and others of the advantages and gains that can be achieved through this procedure, it will be important for the program to demonstrate the cost effectiveness and the epidemiologic benefits of this strategy.

V. STATUS OF BILATERAL PROJECTS

There are 11 AID supported and one UK supported bilateral CCCD projects underway or under active consideration. Three additional countries have also expressed interest in US supported CCCD projects. The French and the UK through the CDA mechanism have agreed to provide commodity and training assistance to five AID supported projects but additional hoped for CDA support has so far not been forthcoming. In general the EPI elements are further ahead, the CDD elements are felt to be progressing well but at a somewhat slower pace, and the malaria component has been concentrated in two countries. The most serious problems on the management side have been slow procurement and in some instances the lack of ability to craft the right kind of arrangements with USAIDs and REDSOs to ensure the smooth working of the project. Adapting to each unique set of circumstances and management styles and finding the correct formula for efficient implementation has sometimes been difficult and time consuming.

The most serious problems on the technical side have been the complexities of dealing with the control of malaria in Africa, and in finding a accurate, reliable and cost-effective means of assessing the project's impact on childhood mortality.

Most of the projects are on schedule. Those that are behind schedule, largely because project procurement delays resulting in a 9 to 12 month slippage in the planned start-up date, include Togo, Central African Republic (CAR) and Rwanda. Delivery of CCCD services in the Liberia project, which was signed in 1983, has not yet begun. The principle reason has been a decision by the USAID and Ministry of Health to introduce a planned auto financing system for the entire health delivery system rather than moving ahead with the CCCD part which has been ready to be introduced for several months. Since the Project Agreement requires Liberia to have an operable auto-financing system in place for EPI and

CDD before CCCD funds can be disbursed, very little progress has been made. If the project is to move forward Liberia will have to meet this condition precedent and respond by March 31, 1985 to a number of evaluation recommendations.

The most significant successes have been the surprising receptivity to the concept of using auto-financing to cover the recurrent costs associated with CDD through ORT and the treatment of Malaria with chloroquine and the amount of integration that has taken place between CCCD interventions and the rest of the primary health care delivery system. Project costs for many of the bilateral projects seem to be running a little under budget to the extent that it is estimated that some bilateral projects could be extended for one more year by reprogramming funds within the existing CCCD LOP total funding level.

Table I gives brief a synopsis of the activities of the nine ongoing bilateral projects as of October 1984. Annex B describes the highlights of the bilateral activities during FY 1984.

CCD PROJECT SUMMARY

BILATERAL PROJECTS (US)

UPDATED OCT 84 CODE 00022.1

COUNTRY	DATE PROAG AUTHORIZ BY AID/W	DATE PROAG SIGNED	END OF PROJECT DATE	AMOUNT (\$US) OF BUDGET AUTHORIZATION	COUNTRY CONTRIBUTION (\$US)	OTHER CONTRIBUTIONS (\$US)	COUNTRY AS % OF TOTAL	DATE TECH OFF NOMINATED	DATE AID MISSION CONCURS	DATE TECH OFF AT POST
Zaire	Jun 82	Aug 82	Dec 86	4,849,100	4,166,700		46%	Sep 82	Oct 82	Nov 82
Togo	Aug 82	Apr 83	Apr 87	1,140,000	373,800		25%	Dec 82	Dec 82	Jan 83
Liberia	Feb 83	Aug 83	Aug 87	830,000	217,800	526,700	14%	Nov 83 (1)	Dec 83	Jan 84
Congo	Jul 83	Jun 84	Jun 88	447,000	499,900	122,000	39%	Dec 83	Jan 84	Jun 84
Lesotho	Jul 83	May 84	May 88	578,000	375,300	200,000	33%	Nov 83 (2)	Jan 84	Jun 84
Swaziland	Jul 83	Jun 84		703,000	285,200	250,000	23%	Nov 83 (2)	Jan 84	Jun 84
CAR	Feb 84	May 84	May 88		240,000			Jul 84 (3)	Jul 84	Jul 84
Malawi	Feb 84	Jun 84	Mar 88	1,423,100	1,331,000		45%	Mar 84 (4)	Jun 84	Jun 84
Rwanda	Feb 84	Jun 84	May 88	1,072,000	955,600		47%	Aug 84		

NOTES:

1. A TECHNICAL OFFICER WAS FIRST NOMINATED IN AUGUST 1983. AID DID NOT CONCUR. A SECOND NOMINATION WAS MADE IN NOVEMBER 1983.
2. THE INFORMATION CABLE, SENT IN NOVEMBER, WAS USED AS A NOMINATION CABLE.
3. THE CONGO TECHNICAL OFFICER WILL PROVIDE ASSISTANCE TO TH THE CAR PROJECT AND AN AID PROJECT OFFICER WILL COORDINATE THE PROJ
4. THE TECHNICAL OFFICER WAS FIRST NOMINATED IN JANUARY 1984 AND RENOMINATED IN MARCH 1984.

CCCD PROJECT SUMMARY

EVALUATIONS OF BILATERAL PROJECTS (US)

UPDATED OCT 84 CODE 000

COUNTRY	EVALUATION NUMBER ONE			EVALUATION NUMBER TWO			EVALUATION NUMBER THREE			EVALUATION NUMBER FOUR		
	DATE SCHEDULED	DATE OF EVALUATION	DATE OF REPORT	DATE SCHEDULED	DATE OF EVALUATION	DATE OF REPORT	DATE SCHEDULED	DATE OF EVALUATION	DATE OF REPORT	DATE SCHEDULED	DATE OF EVALUATION	DATE OF REPORT
Zaire						Nov 84						
Togo	Jun 84	Jun 84	Jun 84 (1)			Apr 85						
Liberia	Nov 84					Nov 85						
Congo	Mar 85					Mar 86						
Lesotho	Mar 85					Mar 86						
Swaziland	Sep 85					Sep 86						
CAF	Sep 85					Sep 86						
Malawi	Jun 85					Jun 86						
Rwanda	Sep 85					Sep 86						

VI. STATUS OF MAJOR REGIONAL ACTIVITIES

1. Operational Research

The CCCD project includes four categories of operational research program development studies. They are: a) small-scale research activities by African Researchers designed to both address CCCD operational problems and develop African research capabilities; b) bilateral project problem resolution; c) small research activities carried out solely, or in large part, by the field epidemiologists (these often overlap with HIS activities); and d) larger scale, more complex research of both national and regional importance. To date, implementation of the project has focussed on small, developmental research grants to African researchers and research done by individual field epidemiologists. Particular attention has been focussed on the development of African research review committees and promotion of small research grants in eastern and southern Africa. Fifty-eight research protocols have been submitted, 44 have been reviewed, and 23 projects approved and funded or are in the process of being funded. This activity has required large portions of the field epidemiologists' time. To date, several studies have begun in bilateral project problem solving especially in malaria activities. The MUHS surveys are the only large-scale research endeavors that have been undertaken or planned under the CCCD program to date.

Given the overall focus of the CCCD project on rapid application of existing technologies, the evaluation team is of the opinion that operations research efforts should be focussed on studies directly related to general or specific operational problems encountered in bilateral project implementation. An impressive start has already been made in providing grants to African investigators interested in researching operational problems. Because of the large amount of scarce field epidemiologist time required to administer this activity, emphasis will need to be given in the future to assure that more of their time is

channeled into solving some of the more urgent and pressing operational problems. To the extent feasible, short-term consultants should be used to further the work with African researchers that has begun in east and southern Africa and might, possibly under a somewhat different model, be introduced into west and central Africa. Prompt attention should be given to the operational research needs identified in bilateral project implementation problems. This will require some reorientation of field staff as well, in order to identify ways in which focussed research could resolve implementation problems.

Some larger scale research endeavors are needed to apply the CCCD technologies efficiently by modifying them appropriately for the African epidemiological situation, or to test potential additional technologies.

Examples of some of the relevant research questions might include: (a) the extent of replacement mortality in children protected against measles, malaria and diarrhea; (b) feasibility studies of acute respiratory infection (ARI) antibiotic treatment in Africa; (c) pilot studies of yaws control alternatives; (d) cost-benefit studies of antimalarial chemoprophylaxis of pregnant women.

In summary, the evaluation team recommends 1) that the provision of small research development grants be continued but that management responsibilities of the field epidemiologists be reduced through greater use of consultants and administrative support; 2) emphasis be promptly placed on identification of operational research needs of bilateral project implementation and epidemiological resources be brought to bear on those problems; and 3) that the "larger" research agenda based on implementation problems of current CCCD technologies and development of new technologies be promptly identified, and that CCCD staff actively seek extra resources outside of the CCCD project that could be used to help find solutions to these types of problems.

2. Health Education/Promotion

Considerable progress has been achieved in health education/promotion since the October 1983 evaluation. A full-time Public Health Education Specialist joined the IHPO staff in December 1983. She has concentrated her efforts to incorporate health education activities into the existing CCCD bilateral projects. Ideally this involvement should take place during the initial country assessment phase of project development and this should be the pattern for the future. It is important that the Technical Officers and host-country counterparts in all bilateral programs become familiar with the techniques for planning and implementing effective health education programs that are specifically tailored to each country's needs, resources and program priorities. Start-up work plans and requests for technical cooperation must take these requirements into consideration in terms of time and level of effort that will be necessary. Guidelines for planning health education should be developed that will assist Technical Officers and Ministries of Health to integrate health education activities into their projects.

Plans for training in health education are well conceived and justified as a means of improving health education manpower in the project countries. The proposed six-week course to be held at the African Regional Health Education Center (ARHEC) for national health education program managers will be supplemented by continuing education seminars in health education at the country level involving EPI, CDD malaria, and health education program staff. These seminars, as well as the workshop planned for the Second Annual Consultative meeting in Malawi in March 1985, will foster stronger links and more productive relationships between the technical program staff and health education specialists who benefit from the ARHEC training. In addition to national seminars, special 3-5 day courses in health education, planned as a sequel to the mid-level managers' course, will be

designed and conducted for those persons responsible for CCCD health education activities at the regional and district levels in each country. The one outstanding issue related to training in health education is the identification of a francophone institution capable of providing training similar to that planned for ARHEC.

The Peace Corps has demonstrated its ability to recruit and train MPH and other health skilled Volunteers, and bilateral countries have expressed a greater interest than originally anticipated in programming volunteers to work in CCCD health education and related activities. To assure the development of challenging and useful job assignments for both specialist as well as generalist Volunteers, on-going collaboration among Technical Officers, Ministry of Health Officials, local Peace Corps staff and USAID's, is critical.

The responsibilities of the Public Health Education Specialist are considerable in view of the support needs for nine, soon to be 11 bilateral countries, in addition to managing the proposed inter-country training activities at the University of Ibadan.* Sources of supplementary technical cooperation resources, including those with French-speaking capability for francophone Africa, need to be identified in order to meet the demands in health education. The role of the Atlanta based Health Education Specialist should ultimately be one of policy formulation within IHPO, identifying and securing supplementary resources, and coordinating CCCD health education activities among the participating countries.

Technical officers in CCCD countries must take responsibility for managing the health education component of CCCD as they do all other components. A greater portion of their time should be devoted to management of this component.

* Contract is expected to be executed shortly.

3. Training

a) Senior-Level Management Training

Senior-level management (SLM) training was a component of the original Project design: based on the training needs projected at that time by WHO/Geneva the project was to have funded WHO/AFRO to train approximately 800 senior-level participants in EPI and CDD. This target has not been met for a number of reasons, including the longer than expected time it took for AID and WHO/AFRO to complete their agreement and the changing assessments of training needs that occurred during the intervening period. CCCD has, however, provided some courses for senior-level managers and was able to arrange for these managers to serve as facilitators in mid-level management courses. As the AFRO first year work plan is developed, new training targets should be set.

Attention also needs to be directed towards addressing some of the inefficiencies and constraints within the administrative structure that mitigate against effective management. Most of the national coordinators spend only 10% - 50% of their time on CCCD and little responsibility/authority is delegated. The foci of decision-making are too centralized in some programs and too dispersed or ill-defined in others. Thus senior managers need problem identification and solving skills and assistance with implementing modifications in the administrative structure (where possibilities for such changes are culturally and politically feasible).

The evaluation team recommended a number of approaches to strengthen senior management in the project without putting unrealistic demands of their time or taking them away from their jobs for long periods. Their recommendations include:

- 1) not supporting any additional long-term training beyond that already committed;

2) organizing regional and country-specific short-term courses (1 or 2 weeks) on specific management skills with subsequent followups of the participants;

3) compiling and periodically up-dating an annotated inventory of all short-term senior-level management training courses offered in Sub-Sahara Africa. CCCD should assure the wide circulation of such a list and be prepared to support appropriate participation in these courses upon requests;

4) continuing to encourage technical cooperation among developing countries (TCDC) as an effective mechanism for transferring management techniques. The team recommended increasing efforts to involve managers from on-going CCCD programs in project planning and evaluation in other countries;

5) increasing the use of consultants to provide short-term on-the-job training of senior managers to resolve factors inhibiting the effective administration of a country program. Sufficient flexibility should be built in to permit the project to respond promptly to additional management skills training needs that might be identified in the process and would also lend themselves to this type of short-term on-the-job training techniques. In order to implement this recommendation it was suggested that CCCD identify consultants to carry out the management diagnosis and on-the-job training (a maximum of 2 to 4 weeks) in the country programs requiring such assistance.

b) Mid-Level Training

The training component within the CCCD program is approaching the stage of full implementation. Although six months behind its originally planned schedule, the training staff has refined the mid-level managers' course curriculum, adapted it to national needs in three countries, provided a CCCD orientation for Peace Corps Volunteers, and broadened its scope to include CCCD staff development and training mid-level management instructors.

The evaluation team reaffirmed the importance of this element of the project and endorsed the participatory style of instruction being employed (e.g., use of facilitators, audio-visual equipment, job aids, etc.). The importance of participant selection and the need to continue to integrate CCCD curricula with African institutions was also noted.

For a variety of reasons most of the bilateral projects experienced start-up delays and much of the first year activity was devoted to training and planning health education promotion while waiting for commodities and vehicles to arrive. Future country assessments should take into account this experience when planning the strategy and allocating resources for the first year's Work Plan.

4. Health Information Systems (HIS) and Mortality and Utilization of Health Services (MUHS) Surveys

Recognizing that all countries in sub-Sahara Africa have their own systems for collecting and distributing health information the CCCD project was designed to work at the bilateral level to improve the quality and use of this data for program management. Considerable time has gone into the development of health information systems in bilateral countries. In FY '84 more than 12 person months of CCCD staff time were spent in this endeavor. Large amounts of CCCD staff time in FY '84 also went into pilot testing mortality and use of health services surveys (MUHS) in three countries as well as into the improvement of national systems of service delivery reporting. Efforts have also gone into development of sentinel surveillance systems, an HIS element not ordinarily included in existing systems. To further strengthen this element of the project it is recommended that consideration be given to develop HIS training.

There is a division of opinion among the technical people working on the project concerning the utility of having general guidance on the procedures and methods of collecting and compiling health information. One group argues that

there is so much national variation that prescribing a single regional model is inappropriate. This school argues that CCCD should build on what already exists and develop the HIS adapted to national needs. The other group feels that there is a need for more guidance and without it too much variation will result. Given this structure, the evaluation team recommends:

a) AID and CDC keep in mind that the primary purpose of the bilateral CCCD health information system components was to obtain data for project management and only secondarily to strengthen national health information systems. (Note: strengthening national health information systems and the development of common national health indicators are goals of the recently signed WHO/AFRO grant).

b) A special review of this topic at the CCCD consultative meeting in March 1985 to:

- ° begin deciding which are the critical variables upon which to collect data for project management
- ° charge CDC technical officers and field epidemiologists with responsibility of developing country HIS activity plans

c) CDC review country specific plans and submit to AID by June 1985 a report on the status of bilateral HIS activities.

d) HIS activities be reviewed in bilateral project reviews and evaluations.

VII. OTHER POTENTIAL CCCD INTERVENTIONS

Other disease/mortality interventions were reviewed for possible inclusion into the CCCD. Some of these interventions are not compatible or consistent with CCCD, but several are and should be further explored for potential incorporation into ongoing and future CCCD programs. Decisions concerning the incorporation of new technologies must be based chiefly on country interest and the ability of field programs to absorb new components in light of management constraints. Each intervention is discussed below. More extensive papers and reports on these subjects were presented during the first week of the evaluation and are available at CDC Atlanta and AFR/RA office in AID/Washington.

1. Yaws

Yaws, as a childhood disease for control/prevention, was included as part of the initial CCCD project proposal and continues to be a potential activity for CCCD intervention in those areas where it is considered to be an important disease. In recent years, there has been increasing documentation of the resurgence of yaws in Ivory Coast, Ghana and Togo. The main problem which has, up to now, precluded any CCCD involvement in yaws control has been the perceived need for a control strategy which involves mass treatment via mobile teams, and considerable outreach efforts to treat contacts. However, a more flexible approach to yaws control is now being advocated. After examining this approach the evaluation team recommended that:

a) Yaws control programs carried out from fixed primary health care sites should be incorporated into CCCD bilateral projects in areas where yaws is an important local disease problem.

b) AID respond positively to the Togo request for assistance in yaws control. This element of the Togo CCCD project should be designed as an operations research activity to provide answers and information on how, or if this intervention should

be incorporated into other CCCD bilateral projects. If it is necessary to supplement the fixed facility (including outreach) approach, which is the characteristic feature of all CCCD activities, with a more mobile team approach this should be done on a pilot basis in order to ascertain its cost effectiveness and compatibility with the CCCD approach.

2. Child Spacing

Child spacing can be a very effective intervention to reduce childhood mortality in Africa, and can be implemented through PHC programs along with other CCCD interventions. CCCD should collaborate as much as possible with child spacing programs since such collaboration can result in mutual and reinforcing benefits to both programs. CCCD field staff should initiate dialogues with USAIDs and African nationals and at appropriate times point out that health delivery systems developed for and used by CCCD interventions are well suited for facility-based distribution of some child spacing technologies, such as, oral contraceptives barrier methods and long-acting parenteral contraceptives. CCCD staff should be informed of the ready availability of other external resources to fund commodities and technical cooperation and the ease with which clinic-based contraceptive, delivery services, training, health information systems and health education implications of child spacing activities could be incorporated in CCCD supported activities. They should share this information with interested host-country officials and put them in touch with people who can provide more information.

3. Acute Respiratory Infection (ARI)

The reduction of childhood mortality due to acute respiratory infections (ARI) by treatment with penicillin, is very similar to the presumptive treatment of malaria with chloroquine. Because of the great potentials for reducing childhood mortality and because of the compatibility of the intervention with other

CCCD interventions, CCCD should cooperate with WHO to further explore this intervention through specific operational research protocols in selected bilateral CCCD programs.

4. Meningococcal Meningitis

Major epidemics of meningococcal meningitis occur at 10 to 15 year intervals in the "meningitis belt" of Sub-Saharan Africa, causing extensive childhood mortality. Continued operational research on the effectiveness of vaccination is appropriate. However, the epidemic control of meningococcal meningitis requires a rapid and massive immunization program when a major epidemic is recognized, rather than routine immunization of children. CCCD programs and staffs should assist in the control of such an epidemic, to the extent possible through the existing EPI activities, but the response to meningococcal epidemics should not be assumed as a primary or regular component of CCCD. Comments during the evaluation called for the need of additional analysis regarding the impact of reactive and preemptive vaccination strategies, of the need to develop modelling techniques to get more information on the pattern and behavior of meningococcal meningitis epidemics, and of the possibility of using Sahel Development Program funds to perform more epidemiologic work on this subject.

5. Control of Hepatitis B

There is no disagreement regarding the magnitude of this disease problem in Sub-Saharan Africa, but the current costs of hepatitis B immune globulin (HBIG) and present hepatitis B vaccines precludes any consideration for inclusion of hepatitis B prevention into on-going CCCD programs.

VIII. COORDINATION

CDA, as the sponsoring organization, has devoted considerable attention to coordination among donors who currently or potentially may provide funds for EPI, CDD, or malaria treatment programs in Africa. Major attention has focussed on collaboration with WHO and UNICEF.

To date, this effort has taken the form of semi-annual meetings of the CDA Health Technical Committee, coordinated funding of country specific activities among CDA members, developing a grant agreement with WHO/AFRO to strengthen their support to national and regional activities, and close collaboration with WHO/Geneva. The CDA Health Technical Committee has met six times since the founding of CDA in 1980 and have shared their concerns about the problems caused by lack of coordination at the country level in Africa. While modest contributions have been made by the United Kingdom in The Gambia and France in Congo, prospects for additional funding for country-specific activities at this time does not appear likely. The evaluation team recommended that efforts continue to use the CDA mechanism to improve coordination particularly at the country level.

The grant agreement signed with WHO/AFRO on January 3, 1985 should strengthen the inter-country training and health information systems elements of the program. WHO/Geneva has consistently been supportive of CCCD and the workings of the CDA Health Technical Committee and the January 3 agreement now formalizes the increasing coordination between the CCCD project and WHO/AFRO.

USAIDs are somewhat unclear as to what can be expected from the CDA coordination efforts and suggests that the CDA meetings and most of the coordinating efforts should take place in Africa rather than Europe. It is clear that the multi-country focus of the CCCD project tends to be more on problems of donor

coordination than does the single country focus of bilateral missions. This characteristic difference between headquarters and field staff seems to affect all the other CDA members as well.

The evaluators believe that the rather modest investment of resources made by CCCD staff in the semi-annual meeting and associated activities is justified. Meetings should take place in Africa to the extent possible and should focus on promoting field coordination. The main emphasis of the CCCD coordination should be at the bilateral level, but continued contact and meetings with the CDA group at the headquarters level is necessary and important.

IX. RECURRENT COSTS

The CCCD project was designed during a period of increasing concern about recurrent cost implications of donor supported health programs. During project design, analyses were made of potential recurrent costs of EPI and diarrheal disease programs. These analyses indicated that the cost of furnishing such services was modest. In further efforts to minimize recurrent cost of CCCD programs, all such programs to date have been designed within existing constraints of organizational infrastructure, health care facilities and personnel. All national governments where programs have been designed have been encouraged to consider alternative financing services to supplement regular governmental funding. Project agreements have required national governments to assume an increasing amount of recurrent costs over the life of the project; usually 25% in the second year, 50% in the third year and 75% in the fourth year.

All project agreements have specified a cost study as a component of routine evaluation. An analysis of six of the nine programs designed to date indicate that the additional costs associated with CCCD programs vary markedly between countries from about \$1.00 to \$4.50 per child covered with CCCD services.

The increase in the national health budget which would be required to continue CCCD services at the end of the project also varies from 1% to 8.5%.

Most governments have agreed to either institute alternative fee-for-service financing systems or to study the feasibility of establishing such systems.

It is not yet possible to evaluate the governments ability to finance a portion of additional recurrent costs, except for the three country projects which have been underway for more than one year. One country has instituted a fee system, a second plans to do so in the near future and the third has requested a feasibility study. Probably two of the three countries will finance 25% of

second year additional recurrent costs through fee-for-service systems. The third country is unlikely to meet project agreement requirements.

It has not proven feasible to carry out adequate project cost studies during routine evaluations. CCCD project management intends to support independent costs studies instead.

X. MANAGEMENT - MAXIMIZING CCCD MANAGEMENT AND TECHNICAL CAPACITIES

The CCCD project is in its fourth year of implementation. It is considered by many primary health care specialists to be an effective and important intervention in reducing childhood mortality and morbidity. Over the course of its implementation AID has been asked to consider adding technical components and expanding the bilateral country projects beyond the 12 now programmed.

While it is appealing to consider expanding the activities of this project, it is first necessary to review:

- ° The technical and programmatic feasibility of additional technical components; and
- ° The project and technical management capacities of AID and the project implementers.

Technical and programmatic feasibility of suggested new components are discussed in Section VII of this report. This present section focusses on areas of the project that impinge on the availability of present and future resources of this project for providing project management and technical cooperation. It identifies places where additional resources can be found as well as where present resources can be utilized more efficiently. Finally an attempt is made to estimate the level of effort that could be supported by these resources.

1. Management Information Systems (MIS)

The Management Information System (MIS) for the CCCD project is rather elaborate in comparison to other AID-supported projects. It was specifically designed for the CCCD project by an independent contractor in late '82. The specific content of the MIS can be gleaned from a review of the tables incorporated in the FY '84 Annual Report attached to this evaluation. That report, however, lacks the most important component, the estimated coverage information which will only become available late in the 2nd quarter of FY 85.

To date, the MIS has primarily served to document project accomplishments. Its utility for management purposes has been quite limited. AFR/RA has used the Time-Use Tables to document trends and suggest some modifications. Specifically the FY '84 Time-Use Tables show several trends which warrant attention. They are: a) the high portion of field staff time spent on program management activities instead of technical aspects; b) the low amount of field staff time spent on health education; c) the infrequent use of other CDC personnel as consultants in the field; and d) the continued, relatively high, use of Atlanta staff and consultants for training. These are all trends which could be recognized without the Time-Use Tables, however, the tables were useful for quantifying and documenting the time used in those ways.

The evaluation team recommends that CDC revise by June 1985 the MIS to be more useful to USAID's, MOH's and CDC for management purposes, maintaining or modifying those sections of the current report which document accomplishments in training, health education, health information systems, operations research and accomplishments of coverage and other objectives of the bilateral projects.

2. Management of the WHO/AFRO Grant

On January 3, 1985, a major step was taken in the implementation of the CCCD project with the signing of the AID-WHO/AFRO grant for \$4.0 million for a four-year period. AFR/RA will manage the implementation of this grant. This will include reviewing and approving work plans, budgets and vouchers; scheduling and implementing evaluations; and advising missions of WHO/AFRO intercountry training and health information systems activities funded by AID.

For the past year a CCCD Liaison Officer has been assigned to Brazzaville, Congo, the location of WHO/AFRO headquarters. This officer facilitated communications between WHO/AFRO and the U.S. Embassy/Brazzaville and AID/Washington in

the complex negotiations of this grant. However it is unclear at this time if the position should continue, and if so, what the scope of work should be. In February 1985, AFR/RA and CDC/Atlanta will meet with WHO/AFRO officers to review the first year work plan and discuss AFR/RA grant management and CCCD technical liaison functions. At that time the question of the continued need for a CCCD Liaison Officer will be discussed and the decision made shortly thereafter.

3. Delegation of Authority-Technical and Project Management

There appears at this time little scope for further delegation of project management or technical cooperation management either from AID/Washington to field mission or from CDC/Atlanta to CDC field staff. AFR/RA has delegated all project management authority and responsibility for bilateral activities except for:

- ° Determination of evaluation schedules and content;
- ° Changing bilateral project goals and objectives; and
- ° Changing life-of-project (LOP) funding levels and length of project.

In order to maintain the integrity of the overall CCCD project, the team does not advise that any of these remaining responsibilities be delegated.

4. Evaluations

Substantial management time and funds can be saved over the life of the CCCD project by streamlining both the bilateral and overall project evaluation process. The CCCD Project Paper presently calls for external biannual evaluations for each bilateral activity and the overall project starting with the second year of activity and internal evaluations for the first year and all years between the external evaluations. The experience to date shows that a large amount of staff time and funds have gone into these evaluations. This was important to track project progress during the initial years and to use this experience in designing and modifying various project components. However, as bilateral activities increase, it will not be possible to maintain yearly evaluations as now scheduled and formulated. Nor is it now necessary to have such an intensive schedule of

evaluations to monitor and manage activities given the base of experience at hand. The following is recommended to streamline the evaluation and review process:

a) Biannual external evaluations of the overall program by a small team (three to four outside consultants plus representatives from AID/Washington and CDC/Atlanta). The evaluation might follow the model of the October 1983 external evaluation in size and content, i.e. visit one or two bilateral activities and, if possible, attend the CCCD annual consultative meeting.

b) On years when there are no overall external evaluations, AFR/RA and CDC/Atlanta staff would meet to do an indepth internal review of project activities. The report of the review committee would replace the biannual evaluation report.

c) External evaluations of bilateral activities would be limited to a mid-project and final project evaluation. The evaluations would be conducted by a two or three person team of outside consultants along with representatives from AID/Washington and CDC/Atlanta. These evaluations should take no longer than two weeks, including the completion of the report.

d) During each of the other project years, bilateral project reviews will be conducted. These reviews should take no longer than one week, including the completion of the report. One AFR/RA and one CDC/Atlanta staff would participate with the concerned USAID or Embassy and Ministry of Health representatives. Every effort should be made to conduct these internal project reviews in conjunction with CDC supervisory visits to conserve staff time. Also these reviews should be scheduled sequentially so that CDC/Atlanta and AFR/RA staff can include more than one review in a single trip to Africa.

e) AFR/RA should send to AID field missions a cable detailing the new evaluation guidelines and specific schedule, requesting mission concurrence by August 1985.

5. Review and Revision of CDC Staff Scope of Work

CDC staff, both in Atlanta and the field are a valuable resource to the CCCD project. During this evaluation the utilization of time in various project activities was reviewed. The team found several areas where CDC staff effectiveness could be enhanced to have a more direct impact on the core activities of the CCCD project. This was specially the case with Field Epidemiologists.

These changes are described throughout the report and may entail some modification in scopes of work for CDC field staff and perhaps for CDC/Atlanta staff ad hoc. It is therefore recommended that CDC/Atlanta in consultation with AFR/RA revise and CCCD management review, the scopes of work as necessary by May 15, 1985.

6. Procurement of Commodities and Services

It is clear that the start-up phase of the bilateral programs can and must be improved. There are many steps that need to be taken that could collectively result in much higher efficiencies during the start-up phase. These actions would be complementary to each other, but are not necessarily dependent, so success in implementing one or partial implementation of any should result in improved efficiencies.

Among the steps recommended are:

a) Continue to try to find ways to reduce procurement delays, especially with regard to vehicles. The problem of an up-to-one-year lag in the availability of project vehicles is so generally observed and so costly in terms of loss of time and momentum that serious consideration should be given by AID to issuing a blanket waiver of competitive procurement requirements for first year vehicles.

b) Speed up the procurement of all commodities. One way this could be accomplished would be to assign a short-term consultant (CDC or contractor) to spend up to one or two months working with the USAID and Ministry to execute Project Implementation Orders (PIOs) for commodities and services specified in

the Project Agreement for first year procurement. This person should be in the country immediately after the Project Agreement is signed. He or she should also work on developing the necessary Project Implementation Letters (PILs). Overlap with the permanent CDC Technical Officer would be desirable, but not essential.

c) Technical Officers, and to some extent Field Epidemiologists, should be given as part of their preparation for service in the field more exposure to AID procurement and other procedures relevant to their jobs. This could be done either at AID/Washington (if timing permits) or through self-instructing video tapes sent to the field.

d) AFR/RA and GC/AFR should work out a schedule and operating arrangement whereby legal review of project documents especially those concerning procurement can be accomplished expeditiously.

e) Efforts to improve procurement should be considered by the ad hoc management committee for the CCCD project.

7. CCCD Fiscal and Accounting Records

Part of this internal evaluation involved an examination of the financial data and fiscal procedure used in the CCCD project. Detailed findings of this review are contained in a memorandum from Travis Rattan, AFR/CONT, to Jack Slattery and Joe Davis dated January 23, which is on file in AFR/RA. The report identified no major problems but made several recommendations designed to simplify some of the procedures and ease the field reporting requirements.

8. Length of Bilateral Project Activities

There is a consensus among CCCD staff that a minimum of four operational years is required to get a sustainable project underway. Experience has shown that the first year, because of delays in procurement and other start-up impediments, cannot be properly viewed as an "operational" year. The four-year guideline for bilateral projects should be relaxed in recognition of the differing conditions

and absorptive capacities of each country. CCCD can stimulate activity, but it is often the Government itself that sets the pace. For planning purposes, a five-year guideline is recommended. However, it is important that flexibility to meet country conditions continue to be maintained. In some instances support may be required for longer (or shorter) periods. Such determinations can be made during project evaluations.

9. Expanding the Efficiency of Field Staff

The use of consultants by CDC field staff to supplement and complement their technical cooperation to bilateral and regional activities could be markedly expanded. However CDC/Atlanta staff have had difficulty convincing field staff of the importance of using consultants. Field staff state that they are reluctant to use consultants for activities that they believe they should be doing themselves. Also, they believe that the process of obtaining and supervising consultants takes more time than it is worth. In addition, fewer than 50 percent of the CDC field staff have hired local administrative assistants to help them complete routine reports and handle logistical matters.

In order to encourage the greater efficiency, the following is recommended:

a) CDC continue to encourage field staff to secure local administrative assistants either through the Ministry of Health or the local Embassy or USAID;

b) CDC and AFR/RA continue to provide information on the sources and skills of consultants available through CDC/Atlanta, AID, and TCDC arrangements locally in Africa and other sources;

c) AFR/RA and CDC/Atlanta explore additional mechanisms for short-term technical consultants (e.g., PRITECH, Schools of Public Health etc.); and

d) CCCD field staff identify potential uses for consultants in annual work plans starting March 1985; overall consultants' requirements be coordinated at annual consultative meetings; and use of consultants become a part of personnel performance evaluations.

10. Scope for Additional Activities under the CCCD Project

Given the future availability of CDC and AFR/RA staff, the present implementation status of CCCD core activities, and the projected resources available from WHO/AFRO, Peace Corps and outside consultants, it appears feasible for the CCCD project to:

a) Expand the scope of its childhood disease interventions in the limited manner recommended in this evaluation;

b) Be willing to extend the four-year life of project for bilateral projects to a minimum of five years; and

c) Increase the number of bilateral projects to 16.

The CCCD project should seek an authorization amendment to include a three year LOP extension and an additional \$20 million to establish a new LOP funding level of \$67 million.

XI. BUDGET AND LIFE-OF-PROJECT REQUIREMENTS

It appears feasible to extend the life of most of the currently planned bilateral projects by one year without additional funds. This assumes that: (a) the project can operate with very small contingency reserves (These funds allocated for inflation and other contingencies would under this recommendation be reprogrammed to finance the recommended project extensions); and (b) the host countries would seek an additional year of technical cooperation and would agree to continue to support the program and meet its own commitments under the project agreement.

The budget implications of broadening the childhood disease interventions to be included in CCCD are not clear and will require careful analysis when such interventions are proposed. Expanding the number of bilateral projects from 12 to 16 would require an additional \$20 million assuming countries of population of about 5 million each. Using a 20% cumulative inflation factor the average cost of a future bilateral project is assumed to be approximately \$5 million LOP, including CDC support costs. This compares to an average cost of about \$4 million for the current projects.

APPENDIX A

CCCD MORTALITY AND USE OF HEALTH SERVICE SURVEYS (MUHS)

LIBERIA, TOGO, ZAIRE

SUMMARY OF REVIEW MEETING AT CENTERS FOR DISEASE CONTROL

JANUARY 9-11, 1985

Field Staff

Liberia:

Stan Becker

Jim Thornton

Togo:

Ron Waldman

Jean Roy

Zaire:

Bill Taylor

Jean Roy

Consultants

Uche Isiugo-Abanihe - University of Pennsylvania

Robert Black - University of Maryland

Pierre Cantrelle - ORSTROM, Paris, France

Douglas Ewbank - University of Pennsylvania

Marc LaForce - University of Colorado

Cheikh Mbacké - University of Pennsylvania

Anne Pebley - Princeton University

Jeremiah Sullivan - Westinghouse Health System

William Ward - University of South Carolina

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CONSULTANTS' REPORTS:	
Demographic Analysis I - Anne Pebley	
Demographic Analysis II - Douglas Ewbank	
Pregnancy History - Cheikh Mbacké	
Foster Children - Uche Isiugo-Abanihe	
Morbidity, Mortality, and Health Services - Robert Black	
Health Education and Health Behavior - William Ward	

BACKGROUND

CCCD is an AID-funded program of technical cooperation directed at strengthening the capability of African nations to improve their children's health. CCCD inputs are directed toward strengthening national Primary Health Care through bilateral agreements (currently nine) and through regional cooperation with WHO, and through intercountry support in Training, Health Information Systems, and Operational Research. Although country-specific objectives and targets have been developed as part of national planning, project objectives and targets as specified in the 1984-1985 CCCD work plan summarize expected project-wide achievements.

Objectives	Quantitation
1. Under Five Mortality	(-) 25%
2. Neonatal Tetanus Mortality	(-) 25%
3. Measles Morbidity	(-) 50%
4. Diarrhea Mortality	(-) 25%
5. Malaria Mortality	(-) 25%
6. Low Birth Weight Babies (< 2500 gms.)	Decrease
Target	
7. Vaccination Coverage of Under Ones	10% -> 50%
8. Vaccination Coverage of Pregnant Women	10% -> 50%
9. ORT Use at Health Facilities	1% -> 50%
10. ORT Use in Community	5% -> 20%
11. Malaria Treatment of Fever	25% -> 75%
12. Malaria Chemoprophylaxis of Pregnant Women	Increase
13. Local Production of Chloroquine	Develop
14. Local Production of ORS	Develop

In a September 1983 external evaluation of the CCCD project, the development of a system to quantitate baseline levels of mortality and service delivery and document changes over time was identified as a high program priority. During October and November 1983, CDC Headquarters, under the leadership of Melinda Moore, developed the concept of a Mortality and Use of Health Services Survey (MUHS) to document current levels of infant and child mortality, vaccination coverage (infant and pregnant women), coverage of diarrhea with ORT, coverage of malaria and fever with appropriate chemotherapy, and coverage of pregnant women with malaria chemoprophylaxis.

In January 1984, the concept and preliminary survey design were presented to IHPO staff, other CDC staff with survey experience, and three outside consultants. Recommendations of the January consultation included:

1. MUHS survey be conducted in each bilateral country
2. Surveys be carried out in Years 1 and 3
3. Parallel comparison area be surveyed in each country to monitor background trends in mortality
4. Mortality be estimated indirectly using Brass techniques and directly through truncated maternity histories of children born in the last six years.
5. Coverage data be obtained on the three priority CCCD interventions - immunizations, diarrhea, and malaria.
6. Knowledge, attitudes, and practice data be obtained to facilitate health education planning
7. Information be collected on attributed and selected causes of death (tetanus, measles, diarrhea)
8. Data entry and initial entry be carried out in-country on microcomputers.

During January and February, a draft questionnaire was finalized in Atlanta (Ref. 4). Questionnaire was then circulated to the field (Liberia, Togo, Zaire) where additional modifications took place and survey programs were developed.

During July-December, four surveys were carried out (Liberia, Togo, and Zaire [two surveys]). In January 1985, CDC field staff presented preliminary results to Atlanta staff and to a distinguished group of outside consultants (See cover).

METHODS

Methods used are described in the individual country-specific reports. (Refs. 6-17) Selected country-specific innovations/differences drawing attention during the review are summarized below.

Survey Timing

Selection of survey time is critical. Two factors, physical access and availability of family at home, are important.

Personnel Selection

In one country, health staff were utilized for the survey in the expectation that the survey capability could be institutionalized within the Ministry of Health. In two other countries, personnel were recruited specifically for the survey. High performance as a condition for continued employment was identified as an effective supervisory tool.

In two countries, recruitment and training was carried out by category (supervisor, team leader, field worker). In one country, field staff were recruited and best performers were appointed supervisors and team leaders.

Most countries used a mixture of male and female interviewers. Female workers were, in general, thought to be more effective in enumerating full maternity histories. Further analysis of data by interviewer will hopefully provide hard data on this question.

Questionnaire

A generic questionnaire was developed in Atlanta and modified in the field. Countries in which trainees participated in the adaptation, field testing and revision succeeded in developing a sense of questionnaire ownership among field staff.

Traditionally, maternity histories have focused on live births. In one country, pregnancies "You ever get belly" appeared to be more effective in ensuring enumeration of all live births, especially for those dying during the neonatal period (first month of life). Use of pregnancy approach in sub-sample verification was recommended.

Questionnaire language is a major problem in African surveys. Where survey area involves one language group and language is written, use of questionnaire in that language is preferable. Where multiple ethnic groups are involved, questionnaire in the *lingua franca* with translation into local dialect is required.

MUHS used a truncated maternity history - births in the last 5-7 years. Full maternity histories were identified as possibly more effective in ensuring full enumeration.

Training

Training is the single most important element to an effective survey. Three to four weeks were required in the training process. Two documents (Refs 11, 15) detail training procedures as carried out in two countries. Technical knowledge on survey methods and rationale and field experience in interviewing, recording, and verification are essential components of the training experience.

Field Work

All three surveys effectively used protocol procedures to gain access to and cooperation of the survey population. Cooperation was optimum in one country where team lived in village for the two days required to complete each cluster, paying for food and accommodations. (Payment was verified by a supervisor.)

Importance of privacy for interview evoked considerable discussion. Privacy and presence of family member to verify events and fill in gaps both had their advocates.

Procedures to handle foster children, 20-40% of total children in certain West African countries, must be carefully developed. Although birth and mortality rates are determined by interviews of women (maternity histories), all under-five residents should be included in determining utilization of health services.

Verification

Field verification to ensure full entry of questionnaire and elimination of obvious errors is extremely important. In one country, a system of evaluation involving five steps proved very effective in minimizing obvious errors.

1. Interviewer checking own form (all)
2. Cross-check by other interviewer (all)
3. Team leader check (all)
4. Supervisor check (sample)
5. Validation of data entry (all)

Data Entry

Data entry and preliminary analysis, as originally proposed, was carried out in-country using 1-3 Kaypro 4s. Data entry required as long as 7 weeks.

Because of limited storage capacity of Kaypro 4, questionnaires were separated into distinct files. Use of Kaypro 10 with a hard disc would have facilitated data analysis.

Data Analysis

Preliminary analysis has been completed and is summarized in the country reports. Additional analysis is ongoing.

RESULTS

Questionnaire

Questionnaire length was excessive and included a number of questions which did not provide useful information. Questions were assessed as to their utility in meeting program objectives.

TABLE 1

MUHS QUESTIONS BY IMPORTANCE

<u>Essential</u>	<u>Controversial</u>	<u>Not Useful</u>
Class Questions	Prenatal Care	Distance to Health Center
Fertility History	IT Coverage	Distance to Water
Demographic (Age, Sex, Tribe)	Literacy - Husband	Knowledge/Attitude re Diarrhea/Fever/Malaria
Education	Symptoms at Time of Death	Abortion/Still Births
Literacy - Wife	Malaria Prophylaxis during Pregnancy	Measles
Deaths	Breast Feeding	Cause of Death
Percentage of Deaths		
Perinatal Tetanus Mortality		
Immunization Coverage		
Diarrhea in last 2 weeks		
Diarrhea Rx received		
Malaria/Fever in last 2 weeks		
Malaria Rx received		

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Preliminary Results

Initial tabulations are available for the four surveys (6, 7, 13, 14).
Selected results are summarized in Table 2.

TABLE 2
PRELIMINARY RESULTS OF MUHS SURVEY

	<u>Zaire Kikongo</u>	<u>Zaire Paikongila</u>	<u>Togo</u>	<u>Liberia</u>
Births	3901	3836	4966	4703
Deaths	317	346	279	1380
Neonatal	50	44	54	273
1-11 months	118	113	102	680
1 year	69	85	50	310
2 years	43	54	23	69
3 years	23	30	23	32
4 years	13	16	8	7
5 years	1	4	5	9
Direct Estimates Mortality				
Infant Mortality			33	154-227
0-4 Av. Mortality	28.5	28.9	18.5	
0-4 Total Mortal.	142.5	144.5	73.9	266-356
Indirect (Bross) Estimated Mortality				
Infant Mortality	38	42	70	
0-4 Mortality	112	139		
Immunization Coverage %				
DPT ₁	22	6	35	
DPT ₃	10	2	12	
Measles	20	19	25	
% Diarrhea 2 weeks	5	4	15	
% Fluid Therapy at home	6	1	1	
% Health Center	48	51	36	
% Fever 2 weeks	15	14	34	
% Treated Chloroquine	24	26		

Additional Analysis

Additional analysis will be carried out in-country during February and March 1985. Further consultant demographic analysis, a comparative analysis of the three surveys, and a comparison of results with other available data is planned.

CONCLUSIONS

1. Measurement of baseline levels of mortality and changes in mortality level is integral to the ongoing evaluation of the CCCD program. Although the mortality preventive effect of each of the three interventions (immunization, diarrhea, malaria) is well proven, the net effect on child survival is less clear.
2. CCCD program needs to continue to search for, experiment with, approaches to monitoring program impact on mortality.
3. Consultants were unanimous in their acclaim for the quality and quantity of work that had been produced by national and CDC field staff in all three countries.
4. Given the range in mortality levels determined in the three studies, verification studies of a sub-sample of all three surveys is a high priority.
Consultant recommended that a uniform sample instrument (Brass Questions and Maternity History of pregnancies) be applied to a sub-sample of mothers in each of the four survey areas.
5. Further demographic analysis should then be carried out on each survey, comparing the four surveys.
6. Data on the utilization of CCCD services (immunization, diarrhea, malaria) provides useful baseline data and information for planning.

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7. Opportunities to look at mortality levels and use of services should be explored.
8. Timing of follow-up surveys should be revised. Follow-up surveys should be carried out when process indicators indicate a high level of service delivery.
9. In view of the significant time required of CDC field staff for the surveys (6 person months in one country) and the programmatic opportunity costs of such a time allocation, other resources to carry out the mortality survey (the new AID funded - Family Health and Demographic Survey) need to be vigorously pursued. Reducing the number of countries from all bilaterals to four was recommended.
10. In choosing countries for future MUHS surveys, priority should be given to countries with the following characteristics:
 - High Mortality
 - Accessibility
 - High probability of success
 - National interest in survey
11. Several suggestions were offered for improving survey quality:
 - Addition of community questionnaire to more accurately reflect availability/distance of resources (health, water, sanitation) of community level.
 - Addition of heights and weights (controversial)
 - Use of MUHS data to identify groups for in depth studies for health education/mortality studies

TIME TABLE

February - April	Finalize in-country analysis of data
May - June	Verification survey
July - September	Demographic analysis
October - December	Develop strategy, plan for future surveys

Document List for Review of CCCD

Mortality Use Health Survey

January 9-11, 1985

1. Document List
2. Agenda
3. CCCD Briefing Booklet
4. Proposal for Integrated Community-based CCCD Mortality Survey -- March 3, 1984
5. Sample Size and Selection - Memo - September 18, 1984
6. Togo Survey in French
7. Togo Survey English Translation
8. Zaire Survey and Introduction Z1 and 2
9. Zaire questionnaire (Final)
10. Annotations to Zaire Questionnaire
11. Zaire Training Materials
12. Zaire Verification, Supervision, Logistics Z3-Z15
13. Zaire Rural Survey - Kingandu (Z16-48)
14. Zaire Rural Survey Pas Kongila
15. Liberia Interviewers' Instruction Manual, Chapters 1-4
16. Liberia Questionnaire
17. Liberia Preliminary Mortality Results (Lexis Diagram)

APPENDIX B

BILATERAL PROJECTS (See also detailed summaries in Annexes 1-9)

1. Outputs

- o Country assessments/project proposals for CAR and Malawi, prepared in FY83, were reviewed and approved for funding during FY84. Approval of the Burundi bilateral project was deferred; the Congo project, conditionally approved in FY83, received full funding approval. The bilateral project in Guinea, prepared in June 1983, was approved for funding at the end of the third quarter of FY84.
- o One country assessment was conducted during the year in Rwanda. This project was approved for funding by the end of January. Country assessments in Upper Volta, Ivory Coast, Cameroon (with PRITECH) and Benin were under discussion.
- o Six bilateral project agreements were signed during the fiscal year as follows:

<u>Country</u>	<u>Month</u>	<u>AID Budget</u>
Lesotho	May	\$578,000
Central African Republic	May	581,000
Congo	June	667,000
Malawi	June	1,423,100
Rwanda	June	1,072,000
Swaziland	June	703,000
	<u>TOTAL</u>	<u>\$5,024,100</u>

- o A second candidate for Technical Officer in Liberia was proposed by CDC following rejection of the first nominee by USAID and the Government of Liberia. This person was approved as T.O. and proceeded on TDY to Liberia in early January. Final posting occurred in May. The T.O. for Lesotho/Swaziland also went to the field on a two-month TDY in January 1984 with final posting occurring in early June, immediately following signature of the project agreement. Direct-hire CDC personnel were also posted as T.O.'s in Malawi and Congo/CAR in June.
- o A candidate for Technical Officer in Rwanda was identified, and procedures were initiated to hire this individual under a Personal Services Contract (PSC). Due to personnel ceilings, CDC requested and received from AID, a Delegation of Authority to use the PSC mechanism for future CCCD field positions.
- o A year-one project evaluation was conducted in Togo, and a second was planned for Liberia in December 1984. In Zaire, a joint CDC and AID/W program assessment was conducted in March to review project objectives and financing, as suggested in the October 1983 CCCD Mid-Term Evaluation Report.

- o Start-up activities in the newly operational bilateral project countries listed above included the following:
 - establishment of project office;
 - review of existing programs and plans for the three CCCD interventions to determine priorities for assistance under the project;
 - development of project work plan and detailed line of project budget including local currency budget;
 - establishment of administrative and fiscal procedures with host governments, USAID's and CDC;
 - organization of CCCD coordinating committees or ad hoc groups; and
 - initiation of procurement procedures for project commodities; including vehicles.
- o Training and training development at the national level were of particular importance in Zaire, Togo and Swaziland. National-level MLM training in Liberia was scheduled for early CY 1985, training materials were only in the initial stages. Lesotho hosted an intercountry mid-level managers course in December that included participants from Swaziland and Malawi. An intercountry course in Malawi was planned for December 1984. Planning for district or zonal training and development of materials were underway in Lesotho and Zaire.
- o Detailed plans for EPI and/or CDD were prepared and/or updated in Zaire, Malawi and Swaziland. In Zaire, a strategy and work plan for health education/promotion in support of oral rehydration therapy was included in the CDD plan.
- o A health education assessment and initial work plan in support of CCCD was prepared in Togo in June.
- o Research and training related to the detection and treatment of chloroquine-resistant malaria were conducted in Malawi and Togo to assist in the development of effective policies for malaria control, especially in the context of CCCD. Operational research on knowledge, attitudes and practices related to malaria was carried out in Togo.
- o Pilot Mortality and Use of Health Services surveys (MUHS) were conducted in Togo and Zaire; a third survey was scheduled for Liberia in early FY85.

- o Autofinancing for CCCD commodities was initiated successfully in Zaire. A draft fee-for-service plan was prepared in Liberia. In Togo, initiation of a fee-for-service system was recommended in the project evaluation.
- o Operational research protocols were submitted for possible CCCD funding from Liberia (1), Malawi (8), Swaziland (1), and Togo (1). The Togo study and one study in Malawi were approved for funding. Two protocols each from Malawi, Swaziland and Lesotho were submitted for review in early FY84 by the East/Southern Africa Research Review Committee.
- o A sentinel surveillance network was established in Togo in the initial project area. A similar network was under development in Malawi, and Liberia was considering a proposal for a sentinel surveillance system from the CCCD Field Epidemiologist.
- o Peace Corps Volunteers were actively involved in CCCD activities in Zaire and Liberia. Liberia and Malawi will receive specialist Volunteers for health education (i.e. MPH-level and/or graphic artist) in early CY 1985. Peace Corps/Togo requested one MPH/health educator and five generalists for CCCD-related health education. Preliminary discussions were held in Lesotho and Rwanda about the use of Volunteers in those programs.

2. Impact to Date

The projects in Zaire and Togo are the only two that have been operational long enough to have demonstrated any measurable impact to date. Project implementation in Liberia has been delayed for better than one year for a number of reasons: delays in concurrences on, and posting of the Technical Officer; acceptance of fee-for-service and motorcycle purchase plans as required in the conditions precedent, and others. Projects in CAR, Congo, Lesotho, Malawi, Rwanda and Swaziland have been in operation for five months or less, and have been occupied with planning, identifying staff needs/responsibilities, methods of CCCD integration with existing services, compilation of baseline data, ordering commodities, and training materials development.

The tables that display project data, summary and for individual countries are not available at the time of this printing. They will appear in the final document.

3. Current Potential of Bilateral Projects to Reach Project Goal

While experience to date has involved delays in full-scale implementation of the four-year bilateral projects for a number of reasons (fulfillment of conditions precedent, commodity procurement, etc.), it has been found that several critical start-up activities can and should occur early in the project. These activities include baseline data collection, establishment of sentinel surveillance networks, planning and development of health education and training materials, and development of operational research protocols.

Draft generic project implementation and evaluation plans that include suggested scheduling for these activities have been developed for country adaptation, especially in the six newly operational projects. This systematic approach, based on actual experience to date and combined with the refinement of administrative procedures, should enhance the potential for each bilateral project to achieve its goals within the four-year period.

4. Recommendations and Action Items

- o Efforts to resolve administrative and management problems in conjunction with AID/W, USAID's and REDSO's should continue.
- o A project agreement should be signed in Guinea as soon as possible.
- o Assessments in the Ivory Coast, Cameroon (with PRITECH) and an appropriate Sahel country should be conducted.