AFRICA REGIONAL PROJECT
(698–0421)

AGENCY FOR INTERNATIONAL DEVELOPMENT
IN COOPERATION WITH
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL
INTERNATIONAL HEALTH PROGRAM OFFICE
ATLANTA, GEORGIA 30333

Participating Agency Service Agreement
PASA No. 0421 PHC 2233
Date July 12, 1990

From Director, Field Services Division
Child Survival Coordinator

Subject ACSI-CCCD Quarterly Reports for Fourth Quarter CY 1989

To Chief
AFR/TR/HPN

1. Enclosed are the CCCD Country Quarterly Progress Reports for the period October-December 1989.

2. Reports appear in alphabetical order by country.

3. Each country report uses a standard format:
   A. Major Achievements/Activities
   B. Major Objectives for Next Quarter
   C. Problems and Actions being taken
   D. Consultants

4. Quarterly reports are circulated to AID/W, CCCD Field Staff, and collaborating partners to update them on the status of program implementation.

5. Reports describe a broad range of activities being directed to improve Child Survival. Especially noteworthy accomplishments include:
   A. Coverage surveys documenting high immunization levels in Burundi and Swaziland pg. 01,35
   B. Rapidly improving immunization levels in Togo pg. 39
   C. National CDD Symposium for physicians in CAR pg. 06
   D. New HIS feedback bulletin published in CAR pg. 07
   E. ARI workshop in Lesotho pg. 26
   F. Mama Yemo Hospital International DTU training for Cote d'Ivoire and Guinea CCCD personnel.
ACSI-CCCD QUARTERLY PROJECT PROGRESS REPORT
FOR FOURTH QUARTER CY 1989
OCTOBER–DECEMBER 1989

CONTENTS

1. BURUNDI.........................................................01-05
2. CENTRAL AFRICAN REPUBLIC.................................06-11
3. COTE D'IVOIRE..................................................12-17
4. GUINEA..........................................................18-23
5. LESOTHO.........................................................24-29
6. LIBERIA..........................................................30-34
7. SWAZILAND......................................................35-38
8. TOGO............................................................39-51
9. ZAIRE.............................................................52-56
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

A week long vaccination mobilization campaign was held during November. The strategy involved local political officials and the national women's organization to mobilize the population to vaccinate their children at the health centers.

The coverage in 1989, using the administrative method, for children under one year of age is as follows;

<table>
<thead>
<tr>
<th>Vaccination</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>100%</td>
</tr>
<tr>
<td>DPT 1/Polio 1</td>
<td>95%</td>
</tr>
<tr>
<td>DPT 2/Polio 2</td>
<td>91%</td>
</tr>
<tr>
<td>DPT 3/Polio 3</td>
<td>82%</td>
</tr>
<tr>
<td>Measles</td>
<td>73%</td>
</tr>
</tbody>
</table>

Thus except for measles vaccinations the project targets, 80% coverage for all antigens, have been reached over a year and a half before the end of the ACSI-CCCD Burundi Project.

2. CDD

Supervisory visits in Gitega Sector show that after training at the diarrheal training unit, during September 1989, 8 ORT corners have been set up. This brings to 12 the number of ORT corners set up.

3. MALARIA

Workplan for 1990 was prepared. (Annex I)

Responsibility for all malaria activities in the Ministry of Health has been transferred to the Director of Hygiene and Prevention. The Director of Hygiene and Prevention has instructed ACSI-CCCD Burundi and the Belgian Malaria Project to produce a joint workplan for 1990.

The Belgian malaria project conducted a random survey of health centers to determine percent of children under five years old and of adults that have malaria parasites. At the same time the diagnosis of fever was observed.
4. **TRAINING**

Nothing to report.

5. **HEALTH INFORMATION SYSTEMS (HIS)**

Two Wang computers were purchased with bilateral funds to further H.I.S. development.

Vaccination reports were entered on a regular basis for the addition to the 1988-89 data base.

6. **HEALTH EDUCATION/PROMOTION**

A brochure on vaccinations was produced for village level promoters. The brochure was done in French and Kirundi. (Annex II & III)

7. **OPERATIONAL RESEARCH**

Two medical students, working on vaccination related topics, have completed their theses and will defend their work in early February.

8. **SUPERVISION**

Polyvalent supervisors have now been assigned to all the medical sectors.

9. **OTHER**

An extensive AIDS educational campaign was undertaken in the last half of 1989.

---

**B. MAJOR OBJECTIVES FOR THE QUARTER**

**JANUARY-MARCH 1990**

1. **EPI**

Vaccination mobilization campaign for February 26 to March 3, 1990. This campaign will be done in connection with the National Political Party and the National Women's Organization.

Finalization of job aids for EPI. These job aids should be at the printer by the end of the quarter.

2. **CDD**

Training course at diarrheal training unit for sector of Kibuye.

Opening of diarrheal disease training units in Bururi and Ngozi.
3. **MALARIA**

Microscopy training for sectors of Rumonge, Bururi and Makamba.
Supervision of sectors of Cibitoke, Bubanza, Bujumbura, Rumonge, Bururi, and Makamba.

4. **TRAINING**

Send to printer EPI, CDD, Malaria and Nutrition job aids.

5. **HEALTH INFORMATION SYSTEM (HIS)**

Do data entry for vaccination, morbidity and mortality data on a regular basis. Set up a system to evaluate efficiency and timeliness of reporting.


Set up data base and analysis for nutritional surveillance information using EPI-INFO Version 5.

Set up data base for family planning indicators using EPI-INFO 5 in conjunction with maternal child health project of Ministry of Health.

6. **HEALTH EDUCATION/PROMOTION**

Focus group training for health education unit of Ministry of Health. Field work will collect information about mothers' perceptions of diarrhea and use of ORS.

A small brochure will be prepared for use during the February 26, to March 3, 1990 vaccination campaign.

Begin the preparation for a dysentery prevention campaign in the second half of 1990.

7. **OPERATIONAL RESEARCH**

Two operational research projects will be defended as theses leading to M.D. degrees.

8. **SUPERVISION**

Continue monthly supervisory visits from the central level to sector medical officers.

Assist with the training of polyvalent supervisors in the health sectors.

9. **OTHER**

Participation of CCCD Technical Officer, Inspector General, Director of Hygiene and Prevention, and National EPI/CCCD Coordinator at ACSI-CCCD Consultative meeting in Swaziland.
C. PROBLEMS AND ACTIONS BEING TAKEN

Problem:
Ministry of Health has still not set down a health care financing strategy as called for in the project extension.

Action:
A recommendation of the Ministry of Health management review carried out by PRITECH suggested that USAID finance and provide a consultant for a strategic planning exercise within the ministry to develop the ministry plan for health care financing. USAID/Bujumbura has communicated with MOH to proceed with this exercise.

D. CONSULTANTS

1. Dr. Danielle Olivola October 3-15, 1989
Recommendations
a. Modify job aids for diarrhea, particularly diagnosis of dysentery and health education.
b. Reserve ORS for treatment of children under 5 years.
c. Set up diarrheal disease training units at Ngozi and Bururi. These units will be used to train paramedical students.

2. Mr. Kevin Murphy November 2-10, 1989 (Supervisory Visit)
Recommendations
a. Keep up the good work.
b. Collect mortality data using Brass Mcrae technique.

3. ACSI-CCCD Burundi Review
Lawrence M. Delliquadri, Ph.D.
Helene Gaumerais, M.D., M.H.P.
Recommendations
a. Focus on Health Information System development in ACSI-CCCD Burundi.
b. In EPI, ACSI-CCCD Burundi should concentrate on revising national strategy to meet changing epidemiology of vaccine preventable diseases.
c. In malaria ACSI-CCCDD Burundi needs to concentrate on training for effective treatment and assuring an adequate drug supply.

d. In CDD a survey should be conducted to determine how mothers are applying ORT in the home. Supervisors need to be trained in correct case management.

e. Coordinator should be assigned exclusively for EPI.

f. EPI, CDD and malaria positions in ACSI-CCCDD Burundi should be institutionalized by Ministry of Health.
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. **EPI**

Finalized "Social Mobilization" training manual and produced variety of educational flipchart/flyer/publicity materials (T-Shirts, hats, stickers) to be used by community mobilizers upon completion of their training.

Trained 16 prefectural training teams, approximately 1000 community mobilizers and 175 health agents from 8 prefectures in the implementation of social mobilization activities.

2. **CDD**

Conducted national Symposium for physicians on Oral Rehydration Therapy and completed first draft of Symposium Proceedings.

Completed CDD in-service training manual for health agents at sub-prefectural, prefectural and regional levels. Developed a regional CDD training plan for 1990. Selected national and regional workshop facilitators.

Continued elaboration of CDD logistics and management system for ORS, case management recordkeeping and other supplies/equipment necessary to the functioning of ORT Units at regional/prefectural levels and ORT corners at sub-prefectural and village levels.

CDD Program Coordinator attended WHO-sponsored Manager’s course in Brazzaville, Congo.

3. **MALARIA**

No major activities to report.
4. TRAINING

See EPI and CDD Program descriptions.

5. HEALTH INFORMATION SYSTEM (HIS)

Finalized and disseminated for review and comment "Missed Opportunities for Immunization" report based on data from 1988 National Vaccination Coverage Survey.

Collected selected results from EPI Health Facility Survey (post-training) in health regions 3, 4 and 5 and began data entry.

Collected results from CDD Health Facility Survey (pre-training) in health regions 1, 3 and 4; began data entry; and presented results from Health Region 1 during national Symposium for Physicians on Oral Rehydration Therapy.

Analyzed EPI KAP survey data collected from 1400 mothers; prepared graphic displays of data; and incorporated graphs and text in EPI Social Mobilization Training Manual for feedback to prefectural and regional health teams during their Training of Trainers Program.

Published inaugural issue of "DMPGE ECHO", the quarterly Epidemiologic Bulletin of the Department of Preventive Medicine/Bangui.

Continued entry of data from regional and prefectural hospitals and sentinel surveillance system.

Produced 3rd quarter report on EPI doses administered for all antigens in the C.A.R.

6. HEALTH EDUCATION/PROMOTION

Social Mobilization for EPI: See EPI Program description.

Finalized Patient Education Module of CDD in-service training manual.

7. OPERATIONAL RESEARCH

Conducted preliminary laboratory analysis of sodium levels in a sample of cereal-based solutions prepared in selected villages in Health Region 1.

Continued preparations for prospective study on cereal-based home solutions to be conducted in Health Regions 1 and 4 during February-March 1990.

Continued negotiations at Pediatric Complex/CNHU, Bangui to conduct a facility-based sodium study for children with diarrhea in Bangui.

Completed entry and analysis of data from 0-2 Mortality Survey conducted at Castors Maternity in Bangui and issued draft report for review by staff of the DMPGE and IHPO/CDC.
8. SUPERVISION

Selected regions completed EPI Health Facility Surveys (post-training) and CDD baseline surveys.

9. OTHER

Compiled Project Implementation Report (PIR) for USAID/Cameroon.

Reviewed Project-related procurement issues with Deputy Director, USAID/Cameroon and conducted end-use inventory of USAID-procured commodities.

Briefed new AID Liaison Officer/Bangui on Project activities and local administrative issues concerning the CCCD Technical Officer and support staff.

B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. EPI

Complete national training program for social mobilization by training 1000 community mobilizers and approximately 175 health agents from 8 prefectures in the implementation of social mobilization activities.

Commence social mobilization efforts at the community level in all major communes of the 16 prefectures of the Central African Republic and begin complementary national mass media strategy.


2. CDD

Conduct three in-service training workshops for approximately 180 health agents from Regions 3, 4 and 5 in appropriate case management of diarrheal disease.

Open 10 ORT units and 60 ORT corners in health regions 3, 4 and 5 and supply centers with sets of essential oral rehydration therapy materials, including packets of ORS, to assure effective functioning of centers. Supervise newly trained health personnel and assist them in the opening and maintenance of ORT units/corners.

Complete and distribute ORT Symposium proceedings.
3. MALARIA

Train regional supervisors in conduct of health facility surveys for malaria prior to in-service training program.

Continue development of malaria in-service training manual.

Begin preparations for national symposium for physicians on national policy on presumptive treatment of fever in children in the C.A.R.

4. TRAINING

See EPI/CDD/MALARIA program descriptions.

5. HEALTH INFORMATION SYSTEM (HIS)

Analyze data from EPI Health Facility Surveys (post-training) to evaluate impact of EPI in-service training program and supervision on health worker performance in the field.

Collect remaining results (Health Regions 2, 5) from CDD baseline health facility surveys; complete data entry; and analyze national results.

Review sentinel surveillance system with regional/prefectural hospital representatives during CDD in-service training program to improve data collection and timely reporting to the Dept. of Preventive Medicine.

Produce 1989 Annual Report on CCCD activities in the Central African Republic and present report during internal staff meeting in Mbabane, Swaziland.

6. HEALTH EDUCATION/PROMOTION

See EPI Program description.

Supervise implementation of health education activities in ORT units and corners in Health Regions 3, 4 and 5 and provide refresher training as needed on site.

7. OPERATIONAL RESEARCH

Conduct facility-based and community phase of prospective study on cereal-based home solutions in Health Regions 1 and 4.

Conduct facility-based sodium study at Pediatric Complex, CNHU/Bangui.

Design community-based case-control study on nutritional practices during diarrhea, develop and pre-test survey instrument, train village-based Peace Corps Volunteers to administer survey and begin survey implementation in Health Regions 4 and 5.

Revise protocol and instruments of 0-2 mortality survey (Preceding Birth Method) conducted at Castors Maternity in Bangui for the purpose of repeating survey at the same maternity center.
Present draft findings of 0-2 mortality survey conducted at Castors Maternity, Bangui to staff of Preventive Medicine and Castors for review and discussion.

Begin preparations for community-based 0-2 mortality survey in conjunction with national Vaccination Coverage Survey to be conducted in April 1990.

8. SUPERVISION

See CDD Program description.

9. OTHER


C. PROBLEMS AND ACTIONS BEING TAKEN

Problem:
Continued lack of HPN Officer, USAID/Cameroon.

Solution:
Continue to work with USAID/Cameroon mission Deputy Director to assure appropriate and timely backstopping to C.A.R./CCCD.

Problem:
UNICEF's inability to provide educational and publicity materials in time for the opening of the EPI social mobilization effort and materials for the opening of ORT units and corners as planned in Health Regions 3, 4 and 5 despite long-standing requests from the Department of Preventive Medicine.

Solution:
Requested that UNICEF advise Copenhagen, again, of the urgency of the EPI materials. CCCD Project will attempt to purchase ORT materials for Regions 3, 4 and 5 by using the local currency account.

Problem:
Shortage of adequate number of vehicles in the regions to complete surveys, supervise health personnel and collect routine and major hospital surveillance data.

Solution:
Encourage USAID/Cameroon to accelerate clearance of CCCD project vehicles through Cameroonian customs in Yaounde. Dispatch drivers from Bangui to Yaounde to collect vehicles and return to Bangui.

Problem:
Increasing unavailability of Project Director Roungou to work on Preventive Medicine activities due to his involvement in health sector-wide and non-health sector activities at the request of the Minister of Health.
Solution:
Request ALO/CAR meet informally with Minister to discuss problem of Roungou's availability to work on CCCD project and other Preventive Medicine activities.

D. CONSULTANTS

Dr. Scott ENDSLEY
October-November 1989
CDD/OR/HIS

Dr. Danielle OLIVOLA
November 1989
CDD/OR

Dr. Mambu, WHO/AFRO
November 1989
CDD Symposium

Dr. Frank Davachi, Mama Yemo, Kinshasa
November 1989
CDD Symposium

Dr. Mutombo, PEV/CCCD/Zaire
November 1989
CDD Symposium
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

MOPH Technical Coordinator for CCCD launched an order for all 26 rural health districts officers to double their efforts to vaccinate against measles in view of the approaching measles season from January through April. Measles cases have fallen considerably since the 1987 National Vaccination Campaign (see Figure 1). However, measles cases are on the increase in Abidjan based on reports received from 5 MCH Centers participating in the Abidjan Measles Sentinel Surveillance Program (see Figure 2).

REDSO issued PIO/C for 64,000 vials of 2.4M IU long-acting penicillin, syringes and needles for yaws treatment activity in three health districts where yaws is hyperendemic. UNICEF was selected as the purchasing agent due to its low cost of $0.38 per 2.4M IU vial versus $11.88 per 3.0M IU vial as quoted by the U.S. manufacturer Wyeth-Ayerst Labs.

New EPI data collection forms have been finalized with the DSPP and will be pre-tested in the two Rural Health Sectors of Divo and Aboisso during the next quarter. The new forms allow for calculation of vaccination rates by target age group (0 - 11 months and 12 + months) by health facility and by antigen.

EPI Committee (MOPH, CCCD, UNICEF and Rotary) met to begin planning 1990 objectives and work plan.
2. CDD

Dr. Lucile Imboua and Nurse Amani, National ORT Unit, CHU-Treichville, attended training for ORT Unit personnel at Mama Yemo Hospital International ORT Course, Kinshasa, Zaire, Oct. 23-27.

Technical Officer, CDO Committee President, MOPH staff-person in charge of International Relations, and REDSO CCCD Program Specialist attended W.H.O. CDD Manager's Meeting in Monrovia, Liberia.

MOPHP requested 3,000,000 packets of oral rehydration salts for CDD program. REDSO initiated PIO/C for 1,400,000 packets and UNICEF ordered 1,600,000 packets.

REDSO initiated PIO/C for audio-visual equipment for ORT Unit.

3. MALARIA

Advised INSP that CCCD willing to finance production of revised malaria posters (which emphasize presumptive treatment of 25 mg. chloroquine/kg. over 3-day period for febrile illness) that will include all age categories. Missing age categories, such as 3-11 months, 19-25 months, 5-year-old, and 8-9-year olds, were not included due to inadequate utilization of poster space.

Malaria Committee met to develop Malaria Sentinel Surveillance 1990 objectives, workplan, and equipment needs (microscopes and materials) for in-vivo testing and surveillance activities.

Received information regarding in-vivo testing materials (e.g., microscopes/supplies) and protocol information from CDC/Atlanta, as requested.

4. TRAINING

In collaboration with MOPHP and REDSO, selected the Centre des Metiers d'Electricité in Bingerville as site for 4th MLM training for estimated 45 participants from 7-9 rural health districts to be held during next quarter. MOPH developed MLM training objectives, program and budget.
Printed 100 sets of training modules, at 10 modules per set, for 4th MLM, 5th MLM, and peripheral level courses.

The DSPP launched request for proposals for peripheral training courses (cours relais) from the 9 health districts having participated in 3rd MLM in July 1989. Focus is to cascade paramedical personnel training activities to the health district level.

5. HEALTH INFORMATION SYSTEMS (HIS)

Finalized for pre-testing 4 forms developed by DSPP for monthly EPI data collection and transmission from the level of the rural health center to the central level in order to demonstrate rates of immunization as well as levels of the "completely immunized child."

Division of Planning and Statistics provided monthly feedback in the form of graphs to 5 MCH Centers in Abidjan which participated in the measles sentinel surveillance program.

6. HEALTH EDUCATION/PROMOTION

Held meetings with Dr. Imboua, ORT Unit, and local artist to design a poster and a decal (for one liter plastic cups available on the local market) that would depict as well as promote use of ORS packets for treatment of children with diarrhea.

7. OPERATIONAL RESEARCH

Determined status of proposal submitted by Mr. Messou, INSP, to study the impact of use of improved household water containers on diarrhea in children aged 0-4 years living in rural areas. Proposal was not approved for funding due to overly ambitious scope and limited time remaining before PACD of CCCD.

8. SUPERVISION

Conducted site visits to Bouake, Danane, Ferkessedougou, Korohgo, and Seguela with DSPP and REDSO Officials.

9. OTHER

Finalized 1989-91 CCCD/Côte d'Ivoire Project Workplan and submitted it to CCCD Technical Coordinator for approval.

Installed new computer equipment in CCCD office.
B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. EPI

Provide the Institut d’Hygiene with computer hardware, software and training for management of vaccines and EPI commodities.

MOPH staff person to attend training at WHO/AFRO in CEIS system with view to implement system at Institut d’Hygiene.

MOPH EPI Committee to finalize 1990 EPI workplan.

2. CDD

Assignment of 6 MOPH personnel to ORT Unit. Unit is currently managed by one physician and one nurse and is receiving 20 patients per week.

Finalize patient record form for ORT Unit and begin flow of ORT patients through Unit. Patient record to be coded and analyzed with DBase.

Inaugurate ORT Unit by Minister of Public Health and U.S. Ambassador, pending assignment of MOPH personnel to ORT Unit.

Finalize design for ORT packet poster and decal.

Assess specific health education message needs for ORT Unit and develop protocol with INSP health education team.

Develop 1990 CDD workplan with MOPH.

3. MALARIA

Submit Malaria Sentinel Surveillance proposal to REDSO for funding and begin purchase of equipment (e.g., microscopes, reagents, etc.).

4. TRAINING

Conduct 4th MLM for 45 participants from 8 health districts.

Conduct evaluation of CCCD training activities (MLM and Peripheral Training Courses) with technical assistance from Dr. Jennifer Bryce, CDC/Atlanta.

Facilitate training for MOPH official in the CEIS system for implementation at the Institut d’Hygiene in order to improve vaccine stock management. Training is scheduled for the first quarter CY 1990 at AFRO in Brazzaville.
Develop and print packet of technical handouts ("Fiches Technique") for EPI, CDD, and malaria for use by peripheral health personnel. Packets to be distributed during peripheral training courses.

5. HEALTH INFORMATION SYSTEMS (HIS)

Conduct needs assessment (hardware, software, personnel, training, recurrent costs, etc.) for improved HIS within MOPH Division of Planning and Statistics.

Design one page newsletter using WordPerfect 5.0 and graphs for feedback to MCH centers participating in Abidjan Measles Sentinel Surveillance program.

Purchase large hardbound registers for 40 rural health facilities in two rural health districts in order to test improved system for primary level data collection on immunizations administered, including method for determining "completely immunized child."

6. HEALTH EDUCATION/PROMOTION

Broadcast one radio spot in 14 national languages to promote measles vaccination prior to peak measles season (January to April).

Review and pretest ORS packet poster/decal at ORT Unit.

Install A-V equipment at ORT Unit.

Review CDD, malaria and health education messages and develop 1990 training objectives and work plan.

7. OPERATIONAL RESEARCH

Nothing to report.

8. SUPERVISION

Visit 4 health districts in collaboration with DSPP.

Develop simple and effective supervision checklist for use by central, regional and district level health personnel.

9. OTHER

Meet with Peace Corps/Washington team scheduled to be in-country in February/March to discuss CCCD/Côte d’Ivoire interest in assignment of PCVs to MOPH Rural Health Districts within the context of the CCCD Program.

Refurbish and set up computer equipment to be given over to MOPH for statistics and vaccine management activities.

Attend Consultative Meeting to be held in Swaziland, March 26 - April 6, 1990.
C. PROBLEMS AND ACTIONS BEING TAKEN

Problem:

No significant problems to report.

D. CONSULTANTS

Dr. Jennifer Bryce
Evaluation Specialist
CDC/IHPO, Atlanta
November 9-22, 1989
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

Bi-weekly meetings were held with CCCD technical staff, Prefectoral Directors of Health (DPS) and Conakry supervisors to discuss health center activities in Conakry and progress in implementing EPI strategy developed by CCCD staff and EPI consultants Cutts and Godfrey during the first semester of 1989. During reporting period motorcycles were given to certain Conakry health centers to allow them to begin outreach vaccination activities in areas of dispersed populations. This strategy was implemented sporadically due to general slow-down during the end of the rainy season and reconstruction activities in certain health centers which virtually stopped activities during several months.

Arrival of order of 20 refrigerators. Installation of additional vaccination points at the port dispensary and the health center at Kobaya.

Additional sterilizers were provided to 10 health centers in Conakry to support more intensive vaccination activities in health centers as well as outreach activities in under served areas.

2. CDD

CCCD Project Coordinator and National Diarrheal Disease Director, Dr. Souleymane Diallo, attended a one week CDD managers meeting in Monrovia (October), followed by an ORT training course at Mama Yemo hospital in Kinshasa, Zaire. A CDD National Policy and Action Plan was developed according to WHO and CCCD guidelines.

CCCD Assistant Coordinator reviewed 1989 records received to date.

3. MALARIA

Following review by National EPI/PHC/Essential Drugs Program, treatment policy was changed to reflect a three-dose schedule (25mg/kg).
4. **TRAINING**

One day refresher training in supervision techniques was given by CCCD Coordinator to Conakry supervisors in presence of their respective DPSs. The training guide used was developed by the national program.

During a review of documents for the National EPI/PHC/ED Program, it was decided to include CCCD Health Education manual in all future trainings.

5. **HEALTH INFORMATION SYSTEM (HIS)**

CDC/IHPO consultant for HIS spent three weeks working with administrators, statisticians and computer personnel in the Office of Planning, Studies and Research. This office receives health data from all regional and prefectural hospitals as well as the health centers included in the national program. This first visit by Dr. Hirmisch served to examine existing reports, data collection systems and hardware and software support in entering, analyzing and reporting data. Data collection was reviewed in Conakry health facilities as well as during a visit to health centers in Kindia prefecture. See Consultant section for major recommendations.

Partial equipment order arrived and new computers were installed. CDD data for CCCD zones for 1989 was entered into a Lotus spreadsheet by Project Coordinator and Assistant Coordinator.

6. **HEALTH EDUCATION/PROMOTION**

Several meetings were held between CCCD and Peace Corps to discuss work plans and supervision activities for three PCVs working in health education.

Accompanied Assistant Peace Corps Director and PCV/Conakry/CCCD - Health Education on site visits to Kindia and Telimele. Discussions were held with the Peace Corps volunteers working in health education in each of these two prefectures as well as their DPSs and counterparts. Work plans were reviewed and technical and logistic support detailed.

Worked with Peace Corps in organizing a joint one-week in-service health education training of trainers workshop, December 19 - 23. Participants included the three health education PCVs, plus four counterparts (2 each from Kindia and Telimele). The course was designed and implemented by PCV health education leader and his counterpart as well as facilitators from the Health Education Unit/World Bank project. Course content included techniques and methodologies in health education as well as theory in Adult Education skills and a practical field experience (each group gave a talk in a Conakry health center).

7. **OPERATIONAL RESEARCH**

Nothing to report
8. SUPERVISION

CCCD Technical Officer met with Cabinet Director and Director of Hospital Division from the Ministry of Public Health and Population to discuss follow-up to management training conducted in July in Labe. It was agreed that future trainings needed to be more practical, tailored to the particular realities of the health structure in Guinea. The possible role of CCCD in organizing and financing such training was discussed.

One-day training in supervision techniques (see TRAINING)

9. OTHER

USAID Mission Director met with the Minister of Health to discuss present and possible future health sector support. The Minister requested assistance in increasing the number of health centers in Conakry and by modifying the CCCD bilateral budget to include the purchase of essential drug packets to bring the CCCD project in line with the National Program.

Technical Officer attended a meeting of representatives from the National EPI/PHC/Essential Drugs Program, MCH/Family Planning section and CCCD Project to discuss strategies for Conakry health centers vis-a-vis primary health care activities. Although it was decided not to provide essential drug packages to centers at this time, it was decided that the full strategy of chemoprophylaxis, as defined by the national program, should be instituted by CCCD and MCH/FP. Accordingly, CCCD will provide pregnancy health cards and chloroquine with MCH/FP providing iron and folate supplements.

Coordination meeting was held with the UNICEF Representative to discuss Conakry strategy. UNICEF indicated that it was ready to play a more central role in Conakry and wanted to coordinate activities with CCCD. Towards these ends, UNICEF is planning to hire a national counterpart to their health program officer.

Following an inspection visit of health centers in each of the prefectures, a preliminary selection of health centers to be launched in the second phase (Feb.-March 1990) was made. The CCCD-supported health centers that are concerned are: Friguiabe, Madina Oula, Kolente, Bangouya (Kindia Prefecture) and Santou, Kollet and Konsotami (Telimele Prefecture). If these are all launched, that will bring the number of CCCD health centers included in the national program to 12 out of a total of 44.

Series of meetings were held with AID to discuss project external evaluation report and Mission/Project response to recommendations.

Worked with CCCD Project accountant and USAID person responsible for counterpart funds account on status of remaining budgeted counterpart funds for 1989. In 1989, 41 million Guinean francs from PL-480 funds were spent by the project (out of 59 million budgeted). In comparison, last year only 16 million GF out of 85 million budgeted were spent.

Construction of a new CCCD project building was begun. The building is financed from PL-480 counterpart funds. Initial agreement for the construction and financing of this building was given over two years ago.
B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. EPI

Work with UNICEF to finalize official MOH strategy statement on development of health services in Conakry.

Based on results from past KAP study and Training Needs Assessment, work with Health Education team to develop health education talks for Conakry health centers.

Review EPI results from health centers in Kindia and Telimele.

Deliver cold chain and vaccination equipment as new centers open up in Conakry (KaporO) and Kindia (second center in Kindia town).

2. CDD

Complete analysis of monthly reporting forms for 1989.

Review existing ORT practices; identify training needs.

3. MALARIA

Distribute revised treatment directives (three-dose schedule).

4. TRAINING

Determine in-service training needs in vaccination techniques, cold chain maintenance and oral rehydration therapy.

5. HEALTH INFORMATION SYSTEM (HIS)

Plan follow-up assistance to Statistics unit, including training in computer programming, data entry, analysis and report generation.

Enter and analyze CDD and EPI data for 1989.

6. HEALTH EDUCATION/PROMOTION

Work with Health Education unit to complete first round training in health centers.

Conduct one field visit to each Kindia and Telimele to supervise health education activities.

With a combination of counterpart and bilateral funds (and possibly with support from UNICEF), insure that financing is available to execute workplans for Conakry, Kindia and Telimele.
7. **OPERATIONAL RESEARCH**

Examine possibility of conducting limited health education research activities in Kindia and Telimele.

8. **SUPERVISION**

Continue bi-weekly meetings with CCCD staff and Conakry DPSs to discuss health center progress.

Continue further on-the-job training of Conakry staff in supervision.

Resume discussion with National EPI/PHC/Essential Drugs Program on standardizing reporting tool to be used during supervisory visits.

9. **OTHER**

Nothing to report

---

**C. PROBLEMS AND ACTIONS BEING TAKEN**

**Problem:**
Additional bilateral funds for the project extension are still blocked due to a Condition Precedent in the Pro Ag Amendment requiring proof of a functioning cost recovery system by the project.

**Action:**
A PIL was drafted by the Mission and T.O. and will be sent out pending approval.

**Problem:**
Project is not currently able to provide essential drug packages as mandated by the National EPI/PHC/Essential Drugs Program.

**Action:**
Draft a PIL rearranging budget to allow for purchase of these packages from UNICEF.

**Problem:**
Although the situation has improved, delays in receiving counterpart funds have made it difficult to implement certain project activities (i.e. training).

**Action:**
Continue to work with Mission on the follow-up of counterpart funds disbursement to project.

**Problem:**
Measles vaccine procurement contract expires in 1990.

**Action:**
Work with Mission, AFR/TR/HPN and UNICEF to identify new sources for procurement of vaccines.
Problem:
Vaccination equipment order (PIO/C 675-0421-4-50345) that was announced for arrival in Conakry 17 December has not arrived. Further inquiries have failed to determine its whereabouts.

Action:
Send a cable to AFR/TR/HPN asking them to follow up order with their purchasing agent.

D. CONSULTANTS:

Gottfried Hirnschall - November 5-23

Major recommendations include: 1) Evaluate various printed materials used in the National Health Information System (SNIS), including standardized reporting forms, utilization guides and registers, and modify accordingly; 2) Implement a reliable system of supervision; 3) Plan adequate training in use of system at all levels; 4) Strengthen analytic capacity at central level through provision of adequate training and computer facilities and 5) Accelerate and improve feed-back mechanisms.

Comment: 1) An overall review of SNIS is planned for second semester 1990, following which printed materials will be revised; 2) Due to lack of personnel at BEPR and no budget, no supervisory system is currently in place. With the ADB support to SNIS finished, it is unlikely there will be an effective supervisory system put in place unless another donor assists; 3) This training should be absorbed by the National/EPI/PHC/ED Program; 4) Planned CDC/IHPO and BUCENS assistance to SNIS should address the training issue. Additional hardware and software support to the section is under discussion; 5) Feedback mechanism is to be addressed by CDC/IHPO and BUCENS consultants programmed for first semester 1990.
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

EPI prepared for the measles serosurvey of primary school enterers, scheduled for January and February 1990. Five teams of nurses will take blood specimens from 600 children in 30 urban and 30 rural schools. The Queen Elizabeth II Hospital laboratory will analyze the specimens. The results will help the Ministry of Health decide whether to recommend compulsory measles immunization upon school entry.

The EPI Manager, together with CCCD and UNICEF advisors, visited Roma HSA to discuss primary school measles vaccination and accelerated immunization efforts in general. In March, April, and November, the HSA team responded to measles outbreaks by vaccinating 1,723 children in three primary schools. EPI encouraged the HSA to have their nursing students continue these efforts. EPI also recommended increased health staff training, especially concerning missed opportunities for immunization.

CCCD helped the MOH and WHO facilitate a visit by Dr. Mark Kane (WHO/Geneva) to explore possibilities for a hepatitis B vaccination program. A record review at the Lesotho Blood Transfusion Service found that between 3.6% and 7% of blood donors are chronic HBV carriers. Another study of inpatient records at QE II Hospital, 1985-1989, indicated a large amount of clinical liver disease. Given this information, the MOH will now assess the feasibility for beginning hepatitis B vaccination.

The Family Health Division, with assistance from UNICEF consultant Mr. George Stroh, completed the neonatal tetanus/polio lameness survey. Interviewers sampled 20,000 households in 70 clusters (40 rural, 30 urban). They found 10 deaths among 2,467 reported live births, none of which was due to neonatal tetanus. Nevertheless, hospital records confirm that some neonatal tetanus cases do occur in Lesotho, which the MOH feels will justify TT immunization for pregnant/fertile age women. Among 12,189 children sampled between ages 5 and 9 years, only two of seven identified lameness cases were attributable to polio. This may confirm EPI's success in reducing estimated polio prevalence from 228/100,000 in 1979 to approximately 18/100,000 in 1989. The preliminary report recommended investigation of all reported polio cases.
2. CDD

The MOH selected five HSAs in which to expand the ORS distribution scheme by village health workers. The CDD Coordinators trained HSA and health center staff and VHWs to implement the scheme in January 1990.

The CDD Coordinators, CCCD and HEALTHCOM met with the Buthe HSA and district traditional healers association to explore ORS promotion and health education possibilities by traditional healers. The healers wish to participate more in diarrheal disease control. However, the association must first strengthen its organization and membership before beginning ORS promotion.

The CDD Coordinators visited 6 hospitals and 3 health centers to review CDD activities, especially to assess the quality of health education talks given to mothers. Though most use the ORT teaching materials adequately, nurses need to strengthen their teaching skills to communicate ORT concepts more effectively. Some nurses still emphasize SSS versus ORS, thus the Coordinators are reviewing the ORT policy during these visits.

CCCD assisted the MOH to request WHO/Geneva guidance in selecting a new ORS sachet filling machine. The MOH anticipates a response by January 1990.

The CDD Coordinators revised and finalized the 1990 ORT workplan.

Following three months' orientation, Ms. Mannuku Mathe formally assumed the position as CDD Coordinator; Ms. Ivy Monoang was transferred to Mafeteng HSA.

3. MALARIA

(not applicable to Lesotho).

4. TRAINING

The Continuing Education Management Committee revised such documents as the CE Unit scope of work, and the HSA Trainer and CE Unit staff job descriptions. The Committee will propose formal establishment of the HSA Trainer position for the 1991-1992 fiscal year. Committee members are defining new incentives for HSA Trainers, and planning more HSA visits to discuss training plans. The Committee is also preparing for the new regional continuing education workshops to start in March 1990.

5. HEALTH INFORMATION SYSTEM (HIS)

The Health Statistics Unit completed and implemented a staff computer training plan, with CCCD assistance.

The Health Information Manager met with QE II Hospital staff to encourage proper use of the new inpatient registers.

6. HEALTH EDUCATION/PROMOTION

Creative Communications, Inc., proposed an ORS promotion strategy to the MOH. Suggested materials include a revised ORS packet dispensing box with instructions, a national logo, and new informational posters and pamphlets. The CDD Coordinator and the Health Education Division, with HEALTHCOM and Peace Corps support, are revising these materials.
HEALTHCOM also assisted the MOH to:

- revise the EPI health education plan developed at ARHEC/Nigeria;
- provide an advisor on health education and communications, Dr. Deborah Glik, to participate in the ARI Control Program Design Workshop;
- evaluate the use of ORT health education materials and develop a health education checklist for use during CDD supervisory visits;
- provide the Health Statistics Unit with a new data entry software program called "IQ" for two surveys planned for January and March 1990.

7. OPERATIONAL RESEARCH

CCCD assisted the EPI Unit to complete a project implementation letter funding the measles serosurvey. The MOH will conduct the survey in late January when primary schools reopen.

8. SUPERVISION

The CCCD Technical Officer accompanied MOH staff to review program progress in the following HSAs:

- Buthe Buthe (ORT Unit, traditional healers, health center corners);
- Mafeteng (ORT Unit, CDD education);
- Scott (ORT Unit, VHW ORS distribution, health center corners);
- T.Y./Berea (Hepatitis B);
- Maluti (Hepatitis B);
- QE II (Hepatitis B);
- Roma (Measles and accelerated immunization activities);
- Quthing (VHW ORS distribution);
- Mohales Hoek (VHW ORS distribution).

9. OTHER

CCCD assisted the MOH to conduct a two-week ARI program design workshop. Participants included MOH and PHAL central staff, doctors and nurses from the three initial HSAs implementing the program, and advisors in medical epidemiology, anthropology, training and health education from CCCD and HEALTHCOM. Three working groups (medical/technical, training and health education) outlined policy and implementation plans for the program’s first phase (through December 1990). The workshop built upon the three clinical and anthropological baseline studies conducted since 1988, as well as the participants’ considerable field experience. The MOH is preparing a full program proposal and budget for Phase One. The workshop documents produced highlighted the following points:

a) The primary ARI control program strategy will stress proper case management, especially prompt and effective treatment of pneumonia cases.

b) Given the differences in geography, population and health infrastructure, HSAs will plan and implement their ARI control programs.
c) Training will begin with facility-based workers to standardize both ARI treatment and health education messages given to mothers. Training will initially target medical officers, hospital outpatient staff and health center personnel who examine children. Workshop participants drafted lesson plans for training this clinical staff.

d) Trained persons will assess children with sefuba (mild ARI) or letsoejesa (severe ARI) to determine whether pneumonia is present, and if present, whether referral is indicated.

e) Clinicians will apply standard drug therapy guidelines for mild ARI, pneumonia, and wheezing illness.

f) Health education efforts, supporting the ARI case management approach, will promote a series of message modules aimed at mothers of children with ARI presenting at health facilities. The messages will integrate the findings of anthropological research, emphasizing use of Lesotho terms with which mothers are familiar.

The Technical Officer outlined CCCD and HEALTHCOM activities during the USAID/Lesotho Annual General Staff Meeting.

The Technical Officer attended the WHO CDD Program Managers course in Brazzaville. The course was especially relevant as Lesotho plans CDD strategies beyond its current 1986-1990 workplan. Lesotho’s new CDD Coordinator will attend the same course in early 1990.

B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. EPI

Conduct measles serosurvey in primary schools; visit 2 HSA teams to discuss accelerated immunization strategies.

2. CDD

Begin nationwide ORS commercial distribution; gain WHO approval for new ORS packaging machine; begin VHW ORS distribution scheme in 5 HSAs; train 5 HSAs in diarrhea management and ORT corner organization.

3. MALARIA

(not applicable to Lesotho).

4. TRAINING

Plan and implement two regional continuing education workshops.

5. HEALTH INFORMATION SYSTEM (HIS)

Provide computer training to a Disease Control and Environmental Health Division staff member to help her edit the Epidemiological Bulletin; encourage efforts to begin a feedback newsletter.
6. **HEALTH EDUCATION/PROMOTION**

Complete arrangements for a national campaign to promote ORS commercial distribution; conduct the second phase of a study to assess the quantities of ORS mothers administer to their children at home; complete revisions to an EPI communications strategy, based on the plan developed at ARHEC/Nigeria.

7. **OPERATIONAL RESEARCH**

Prepare for an ORT home fluids study.

8. **SUPERVISION**

Print and distribute the MCH/FP Health Center Supervisory Checklist; draft a Family Health Supervisory Checklist for central-level staff visits to HSAs.

9. **OTHER**

Finalize ARI training materials for clinicians; begin ARI training in three HSAs.

**C. PROBLEMS AND ACTIONS BEING TAKEN**

**Problem:**

Due to surveys and workshops, EPI completed only 1 of 4 planned HSAs visits concerning primary school measles immunization.

**Action:**

EPI will resume these visits following the measles serosurvey.

**Problem:**

Funding difficulties delayed implementation of nationwide ORS commercial distribution.

**Action:**

HEALTHCOM and the Health Education Division will secure funds to finalize the proposed ORS promotion scheme by January 1990.

**Problem:**

The MOH has not produced a feedback newsletter.

**Action:**

The MOH awaits the results of a World Bank-funded HIS review, as well as Health Education Division action to coordinate newsletter production.
Problem:
Various studies and workshops delayed implementation of the supervisory checklists.

Action:
The Family Health Division will print and distribute the health center checklists in January 1990, and draft the HSA checklist by March 1990.

D. CONSULTANTS

Dr. Stephen Redd, Dr. Ruth Wilson and Ms. Anne Rodman represented CDC as advisors to the ARI Control Program Design Workshop. Dr. Redd facilitated discussions concerning clinical assessment and management, drug therapy, and overall policy development. Dr. Wilson assisted MOH and PHAL staff to further analyze the anthropological data, and used this information to advise various working groups. Ms. Rodman helped staff develop lesson plans for training clinicians in ARI case management. Finally, Dr. Deborah Glik of HEALTHCOM advised on the health education component of the ARI control program.
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

The fifth annual National Vaccination Week (NVW) was held from November 20-24, 1989. More than 250,000 doses of vaccine were administered, accounting for approximately 40% of total antigens given in 1989. President Doe, launched the campaign by delivering the first dose of oral polio vaccine at the JFK Hospital OPD in Monrovia. Publicity for this year’s campaign highlighted the importance of vaccinating children under 1 year of age and stressed the need to return for follow-up doses. Radio spots and dramas broadcast in local dialects, posters, billboards, newspaper articles and four episodes of the weekly "Roadway-to Health" TV show emphasized these themes.

Reports from County Supervisors (Jan 11-12 F/U mtg) indicate that logistics for the 1989 NVW (supply procurement/distribution systems) were generally well managed at the county level. Decentralized planning experience gained from previous campaigns accounts for significant improvements in this area. To assure the availability of pure kerosene in the remote counties, kerosene tankers (1,000 gal) were set up in Zorzor (Lofa County) and Zwedru (Grand Gedeh County). Community participation and support from various concessions/organizations helped to alleviate problems of inadequate transportation and cold storage facilities in some areas. New cold chain equipment and vehicles/motorcycles ordered through CCCD/UNICEF (expected April 1990) should address these problems and provide greater opportunities for routine vaccination.

County Supervisors emphasized the importance of involving village chiefs and traditional midwives in vaccination activities. Plans are underway to extend social mobilization strategies field tested in the 1989 Operational Research work of MaCauley/Bender ("Chiefs and Midwives as Extenders of the Vaccination Team in Bomi and Cape Mount Counties") to other counties.

2. CDD

Participated in WHO CDD Programme Manager’s Meeting in Monrovia (October 16-19).

Supported Health Ed/Training Consultant to review/revise existing CDD health education materials, training modules and standard treatment charts.

With assistance from CDC Diarrheal Disease Coordinator, reviewed CDD Program activities, discussed strategies to improve ORS management/distribution systems and developed draft plan of action for 1990.
3. **MALARIA**

Supported Health Ed/Training Consultant to review/revise existing malaria health education materials, training modules and standard three-day treatment charts for chloroquine (tablets and syrup).

Participated in WHO Intercountry Workshop on Regional Malaria Control Strategies for Primary Health Care (Nov 30-Dec 8).

4. **TRAINING**

Supported 1-2 day county level EPI refresher training workshops for clinic workers and volunteers in preparation for National Vaccination Week.

Continued on-the-job training of medical records personnel from six sentinel hospitals on EPI-INFO Hospital Disease Surveillance Program.

Supported Health Ed/Training Consultant to review and revise CDD/Malaria training modules in preparation for 1990 Training of Trainers.

5. **HEALTH INFORMATION SYSTEM (HIS)**

Continued training/supervision of personnel at hospitals using EPI-INFO Hospital Disease Surveillance Program.

Procured three Zenith 286 Supersport portable computers for HIS use at county level; ordered AST 386 for use in data entry and analysis of incoming hospital files at central DPC.

6. **HEALTH EDUCATION/PROMOTION**

Supported Health Ed/Training Consultant to review and revise CDD/Malaria health education materials and treatment charts.

7. **OPERATIONAL RESEARCH**

Finalized plans for health finance study to assess Fee-for-Service and Revolving Drug Fund schemes operational in Liberia. Study results will be used by National Drug Service RDF Monitoring Unit to develop standardized RDF system for nationwide use.

Coordinated with University of Liberia School of Pharmacy instructors and student interns to develop protocol for "Survey of Malaria and Diarrhea Treatment Practices among Liberian Pharmacists and Medicine Store Dispensers".

8. **SUPERVISION**

Provided routine supervision with emphasis on EPI/NVW activities. Technical Officer participated in supervisory visits to Grand Cape Mount County and St. Paul River District (Montserrado County). Supervisory HIS visits with T.O. were made to seven hospitals in Montserrado, Margibi, Bong and Nimba Counties.
9. OTHER

Participated on Steering Committee to develop National Health Policy and Five-Year National Health Plan (1991-1995). Assisted EPI, CDD and Malaria Programs to draft five-year plans for incorporation in overall MH&SW plan.

Participated in two-day UNICEF Programme Strategy Meeting (Dec 13-14).

Drafted 1990 CCCD Workplan

B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. EPI


Conduct follow-up EPI activities (Jan-Feb) and second National Vaccination Week (March).

Participate in Multi-National PolioPlus Workshop in Monrovia (Feb 12-14). Discuss Rotary support for Liberia EPI social mobilization.

2. CDD

Coordinate with Health Ed/Training Consultant to complete revision of CDD health education materials, training modules and standard treatment chart.

Visit Diarrhea Training Unit (DTU) at Freetown, Sierra Leone to assess suitability as training site for team of Liberian physicians/nurses who will assist with establishment of DTU at JFK Hospital and coordination of clinical ORT training at JFK DTU.

3. MALARIA

Coordinate with Health Ed/Training Consultant to complete revision of malaria health education materials, training modules and standard three-day treatment charts for chloroquine (tablets and syrup).

4. TRAINING

Conduct two-day seminar for county registrars and supervisors (See HIS section).

Coordinate with Health Ed/Training Consultant to complete revision of CDD/Malaria training modules.

Participate in pre-service training on EPI/CDD/Malaria/HIS for two new CCCD Peace Corps Volunteers (Jan-Feb).
5. **HEALTH INFORMATION SYSTEM (HIS)**

Support HIS consultant to finalize 1990 Hospital Disease Surveillance Program; train MH&SW/BVHS personnel in management and analysis of multiple hospital data; draft 1989 sentinel hospital surveillance report and finalize EPI-INFO program to analyze out-patient data.

Conduct two-day training seminar for county registrars to introduce new MH&SW out-patient Report Form and review routine MH&SW/BVHS report procedures. Produce and distribute initial supply of out-patient forms to counties.

Complete repair of two PS/2 computers at Data Processing Center (DPC). Install AST 386 at DPC.

6. **HEALTH EDUCATION/PROMOTION**

Coordinate with Health Ed/Training Consultant to complete revision of CDD/Malaria health education materials and standard treatment charts.

Provide support for follow-up visit by consultants from African Regional Health Education Centre (ARHEC) to assess progress on EPI/Health Education Plan developed at July 1989 workshop (Feb 6-10).

7. **OPERATIONAL RESEARCH**

Conduct Health Finance study to assess FFS/RDF schemes operational in Liberia.

Conduct "Survey of Malaria and Diarrhea Treatment Practices among Liberian Pharmacists and Medicine Store Dispensers".

8. **SUPERVISION**

Use results of Facility Needs Assessment Survey to review clinic supervisory checklist.

9. **OTHER**

Finalize 1990 annual workplan and technical assistance/training requirements.

Conduct first bi-annual CCCD Meeting for County Health Officers, County Supervisors, Peace Corps Volunteers and representatives from cooperating agencies (Feb 28-March 2). Purpose: 1) review 1989 achievements, 2) present findings from 1989 Liberia Facility Needs Assessment Survey, 3) finalize 1990 workplans, 4) discuss EPI social mobilization strategies, 5) present new out-patient report form.

Participate in National Health Policy Workshop to finalize draft National Health Policy and Five-Year Plan (March 5-9).


Assist Liberian counterparts with preparation of CCCD Consultative Meeting presentations.

Attend CDC Staff meeting in Swaziland (March 26-30).
C. PROBLEMS AND ACTIONS BEING TAKEN

Problem:
Two PS/2 computers at Data Processing Center have not been functional since June 1989. Parts needed to repair these units (not available locally) have still not arrived in-country. This has reduced computer availability for HIS and EPI data entry/analysis, routine word processing, training, etc. DG portable computer assigned to T.O. has not functioned properly (despite numerous repair efforts on both computer and adapters) since T.O.'s arrival in Jan 1989.

Action:
CDC/Atlanta is aware of problem and has assured delivery of spare parts ASAP. CCCD T.O. has requested Zenith 286 portable computer to replace DG.

Problem:
MH&SW and CCCD/Liberia were not informed of the WHO Intercountry Workshop on Regional Malaria Control Strategies (Nov 30- Dec 8) held in Monrovia until two days after the meeting began. Lack of advance information resulted in a missed opportunity for Liberian physicians and county health officers to participate.

Action:
The Minister of Health has discussed issue with the Liberian Institute for Biomedical Research (LIBR), the organization responsible for coordinating Workshop with WHO. MH&SW/CCCD has requested WHO technical assistance/support for a national Malaria Symposium for Liberian physicians (Oct 1990).

D. CONSULTANTS

1. Ms. Nancy Lowenthal, Health Education Consultant, CDC/Atlanta
   Date of Visit: Sept 29-Nov 18
   Purpose: Assist MH&SW IEC/CDD/Malaria Programs to review/revise CDD/Malaria training modules, health education materials and standard treatment charts.

2. Dr. Danielle Olivola, M.D., CDD Program Coordinator, CDC/Atlanta
   Date of Visit: October 23-27
   Purpose: Review Liberia CDD Program activities and assist with development of 1990 CDD Plan of Action.
   Provide input on OR plans for 1) study to assess mother’s ability to prepare SSS 2) community assessment surveys to determine home based knowledge/treatment practices for diarrhea.
ASCI-CCCD QUARTERLY PROJECT PROGRESS REPORT

REPORT QUARTER: October-December 1989  COUNTRY: Swaziland

DATE SUBMITTED: December 15, 1989  NAME: Larry K. Brown

A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

WHO consultants reviewed the SEPI strategy and surveillance system this quarter. The main recommendations included full implementation of the current Health Information System plan and shifting emphasis from vaccine coverage to disease reduction.

A UNICEF review of the SEPI was conducted this quarter. The main recommendation was to strengthen overall management and supervision of the program.

2. CDD

At the end of this quarter, the Swaziland National Diarrheal Disease Treatment and Training Center will have completed its first year of operation. It has been a resounding success. Over 1600 patients were treated during this period.

Swaziland now has a national treatment and training center, three regional ORT treatment units and 10 fully equipped and staffed ORT corners.

3. MALARIA

The Ministry of Health convened a week long review and discussion of the current strategy and policies of the malaria program.

Recommendations were made and those accepted are in the process of implementation.

Plans have been developed for future involvement of the CDC Malaria Branch to assist the Ministry of Health in further program development and research.

4. TRAINING

Three training sessions were held at the Swaziland Diarrheal Disease Treatment and Training Center this quarter and they reached their goal of completing eight training courses during the year. More than 80 health personnel were trained at the Swaziland Diarrheal Disease Treatment and Training Center this year.

The Mobile Outbreak Control Units were trained by the director of the Central Laboratory in Manzini in obtaining laboratory confirmation of measles cases.
5. HEALTH INFORMATION SYSTEM (HIS)

The central statistics unit is back in operation. 1988 and 1989 morbidity data will be available in January 1990.

The Italian Society for Tropical Medicine (SIMET) will work with the Government of Swaziland over a one year period to improve inpatient data collection and reporting.

Outpatient data collection and reporting forms have been revised to correlate with implementation of the Health Information System in regions and to simplify and promote accurate data collection and reports.

The Health Information System has been established in three of the four regions in Swaziland.

6. HEALTH EDUCATION/PROMOTION

New malaria health education materials have been distributed throughout the lowveld.

Swaziland Control of Diarrheal Diseases materials are currently being pretested before final printing.

The Ministry of Health has purchased T-shirts promoting the use of ORS.

7. OPERATIONAL RESEARCH

The 1989 SEPI coverage survey has been completed.
Results: DPT1 - 95%; DPT3 - 89%; POLIO 1 - 95%;
POLIO 3 - 89%; MEASLES - 85%; FULLY COVERED - 83%

A CDC consultant worked with the Ministry of Health Swaziland Control of Diarrheal Diseases program in conducting a study of the descriptive epidemiology of diarrheal diseases in Swaziland. Results will be available next quarter.

During the National Malaria meeting it was recommended that further study be given to the question of whether or not Rural Health Motivators should distribute chloroquine as a means of increasing early presumptive treatment of fever due to malaria.

8. SUPERVISION

An internal review of the CCCD program was completed with assistance from CDC and USAID/Washington.

The Swaziland ARI coordinator participated in the Lesotho ARI program design activities.
B. MAJOR OBJECTIVES FOR THE QUARTER  
JANUARY-MARCH 1989

1. EPI

Begin implementation of the school assessment and vaccination program.

Assist the SEPI manager in preparation of paper for possible presentation at the ACSI/CCCD consultative meeting.

2. CDD

Complete establishment of regional ORT treatment units.

Establish ORT corners in 10 clinics.

Assist SCDD manager in preparation of paper for possible presentation at the ACSI/CCCD consultative meeting.

3. MALARIA

Make necessary plans and arrangements for CDC consultancy scheduled for April.

Assist the Malaria Unit Manager in preparation of paper for possible presentation at the ACSI/CCCD consultative meeting.

4. TRAINING

Conduct two training sessions at the Swaziland Diarrheal Disease Treatment and Training Center for 16 to 20 health workers.

Train, through the PHC project, personnel who will be involved with the Health Information System in Lubombo Region.

5. HEALTH INFORMATION SYSTEM (HIS)

Extend the HIS to the Lubombo Region.

Obtain and distribute 1988/89 morbidity and vaccine data.

6. HEALTH EDUCATION/PROMOTION

Complete the pretesting and printing of the SCDD health education materials.

Begin pretesting the proposed SEPI health education materials.
7. OPERATIONAL RESEARCH

Complete the diarrheal disease study.

Complete the CCCD cost study.

8. SUPERVISION

Nothing to report.

C. PROBLEMS AND ACTIONS BEING TAKEN

Problem:
Still awaiting the new generator which is to be installed at the central vaccine store.

Action:
Continue working with the shipper in Durban.

Problem:
The contract for the ACSI/CCCD Consultative meeting has not been awarded.

Action:
An individual proficient in conference planning and having local contacts and resources will be hired 1 January to start initial logistics preparations. This person will also be available to assist the contractor as needed.

D. CONSULTANTS

CCCD Internal Evaluation - Myra Tucker
CCCD Internal Evaluation - Mark LaPointe
Malaria - Jack Sexton
CDD - Lisa Lee
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

National evaluation of vaccination coverage was conducted. 30 clusters of 7 children 12-23 months of age were chosen from each of the five regions and 30 clusters were chosen for the capital city. Results are as follows:

<table>
<thead>
<tr>
<th>Vaccination</th>
<th>With card</th>
<th>BCG</th>
<th>DTP 1</th>
<th>POLIO 1</th>
<th>DTP 2</th>
<th>POLIO 2</th>
<th>DTP 3</th>
<th>POLIO 3</th>
<th>Measles</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>86%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTP 1</td>
<td>91%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLIO 1</td>
<td>84%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTP 2</td>
<td>74%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLIO 2</td>
<td>75%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTP 3</td>
<td>55%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLIO 3</td>
<td>55%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>62%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Completely vaccinated: 43%

Coverage for women of childbearing age 12-45 years as follows:

<table>
<thead>
<tr>
<th>Vaccination</th>
<th>With card</th>
<th>TT 1</th>
<th>TT 2</th>
<th>TT 3 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>78%</td>
<td>77%</td>
<td>63%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Although the figures are slightly lower than those last year, it should be kept in mind that last year was an evaluation of the accelerated campaign activity. Given that the confidence intervals for this kind of survey are plus or minus 5%-10%, it can be safely said that the gains of the accelerated activity were sustained the following year.

It is notable that in the region receiving particular attention this year, the city of Lome, coverage increased from 36% to 54% completely vaccinated. The full report of the evaluation was sent to the SPHA responsible for Togo.

On the basis of the survey results, strategies are being developed for special activities before the measles season begins in January. Health education/public awareness campaign for measles is being developed.
Year end reports on doses of vaccine administered and cases of vaccine preventable disease were prepared.

WHO/CEIS (Computerized EPI Information System) was installed with assistance from OCCGE/Centre Muraz/Unite de Vaccinologie. The system was developed by WHO and others to create a standard reporting format for the management of EPI. Information is entered on doses of vaccine administered, cases of target diseases, vaccine stocks, equipment inventory control, and coverage.

2. CDD

Technical officer and CDD program manager attended WHO/CDD conference in Liberia.

Pilot training, document testing and revision of materials and strategy was conducted in Haho prefecture in collaboration with USAID/HSSCS project and UNICEF.

REDSO engineer visited Lome to discuss status of conditions precedent for the construction of the ORT training and demonstration unit. The plans have been finalized and resubmitted to REDSO and the engineer guarantees approval this time.

Diarrhea treatment practices survey was conducted in conjunction with the coverage survey as had been recommended by the CCCD external evaluation team. Results were as follows:

3,600 children 0-5 years surveyed

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported episode of diarrhea past 2 weeks</td>
<td>21%</td>
</tr>
<tr>
<td>Diarrhea episodes/child/year</td>
<td>5.3</td>
</tr>
<tr>
<td>Treated the diarrhea</td>
<td>69%</td>
</tr>
<tr>
<td>Treated with SRO</td>
<td>11%</td>
</tr>
<tr>
<td>Treated with SSS</td>
<td>2%</td>
</tr>
<tr>
<td>Treated with pills/capsules</td>
<td>47%</td>
</tr>
<tr>
<td>Treated with home solutions/remedies</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source of treatment:

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market</td>
<td>55%</td>
</tr>
<tr>
<td>Dispensary</td>
<td>22%</td>
</tr>
<tr>
<td>Hospital</td>
<td>9%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>21%</td>
</tr>
</tbody>
</table>
3. MALARIA

Malaria policy seminar was organized for private physicians in Lome and for representatives of the Togolese Ordre des Medecins. Purpose of meeting was to convince the growing number of private practitioners to respect the recently changed national policy for malaria treatment and prophylaxis.

A survey of fever incidence and household practices was conducted in conjunction with the national vaccination coverage survey. Principle results were as follows:

3,600 children 0-5 years surveyed

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported fever past 2 weeks</td>
<td>43%</td>
</tr>
<tr>
<td>Febrile episodes/child/year</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Treated the fever | 96%

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Used tablets for treatment</td>
<td>83%</td>
</tr>
<tr>
<td>Used syrup for treatment</td>
<td>6%</td>
</tr>
<tr>
<td>Used injections for treatment</td>
<td>8%</td>
</tr>
<tr>
<td>Used infusions/home solutions</td>
<td>8%</td>
</tr>
<tr>
<td>Used another form of treatment</td>
<td>4%</td>
</tr>
</tbody>
</table>

N.B. Treatment figures = 100% as multiple responses were accepted

Of those treating the fever

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Treated with an anti-malarial</td>
<td>47%</td>
</tr>
<tr>
<td>Anti-malarial plus another drug</td>
<td>29%</td>
</tr>
<tr>
<td>Treated with another drug only</td>
<td>12%</td>
</tr>
<tr>
<td>Impossible to determine</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source of treatment:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>24%</td>
</tr>
<tr>
<td>Health center</td>
<td>34%</td>
</tr>
<tr>
<td>Market</td>
<td>36%</td>
</tr>
<tr>
<td>Home</td>
<td>5%</td>
</tr>
</tbody>
</table>

Procurement of laboratory equipment was initiated for malaria service.

Draft research protocols developed for chemoprophylaxis of pregnant women and use of impregnated bed nets.

4. TRAINING

Training of peripheral health workers was conducted in EPI for the Ogou prefecture as a pilot training after the national coverage survey and evaluation of EPI and in the context of the missed opportunities study to be carried out in that region.

Training program developed and tested for CDD in Haho prefecture. The program will eventually be standardized and used for the peripheral health worker training planned for 1990.
5. **HEALTH INFORMATION SYSTEMS (HIS)**

Hospital in-patient reporting system was finalized and computer program developed for data entry and analysis with assistance from CDC/Atlanta computer specialist.

Presentation on health information systems was given to CCCD program managers and to the director general of public health. As the HIS is expanding and becoming more refined, it was considered important to present the program managers with an overview of HIS. Presentation was elaborated with assistance from CDC/TSD medical epidemiologist assigned to Togo. Presentation also included demonstration of new in-patient reporting system.

The director of health statistics service conducted a supervisory field trip to collect in-patient data from hospitals and late out-patient reports so that 1989 annual report might be published promptly.

With assistance from the CDC/Atlanta computer specialist, hardware, software and training needs were identified so that computer procurement can be initiated.

6. **HEALTH EDUCATION/PROMOTION**

Health education materials pre-tested for CDD program during Haho prefecture pilot training.

A short KAP questionnaire was administered along with the coverage survey for vaccinations. 1,239 mothers of children less than 2 years were surveyed. Results of the survey were as follows:

**Source of information about vaccinations:**

<table>
<thead>
<tr>
<th>Source of Information</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health centers</td>
<td>63%</td>
</tr>
<tr>
<td>Traditional leaders</td>
<td>28%</td>
</tr>
<tr>
<td>Mobilizers</td>
<td>8%</td>
</tr>
<tr>
<td>Market/neighbors</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Knowledge of target diseases:**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuberculosis</td>
<td>23%</td>
</tr>
<tr>
<td>Polio</td>
<td>22%</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>7%</td>
</tr>
<tr>
<td>Pertussis</td>
<td>19%</td>
</tr>
<tr>
<td>Tetanos</td>
<td>33%</td>
</tr>
<tr>
<td>Measles</td>
<td>39%</td>
</tr>
</tbody>
</table>

**Knowledge of number of contacts necessary for complete vaccination of children:**

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No idea</td>
<td>37%</td>
</tr>
<tr>
<td>3 times</td>
<td>24%</td>
</tr>
<tr>
<td>5 times</td>
<td>24%</td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
</tr>
</tbody>
</table>
7. OPERATIONAL RESEARCH

Measles and vitamin A study instituted in infectious disease ward of University Teaching Hospital.

Preceding birth technique of mortality measurement instituted in large maternity in Lome.

Protocols reviewed for chemoprophylaxis of pregnant women and prevention of malaria using insecticide-impregnated bednets.

Questionnaire tested for long term follow-up of children coming to ORT units in view of a complete study on CDD in Kara region.

Levels of natremia are being measured in severely dehydrated children admitted to pediatric ward of principal hospital in Lome in view of a complete study on sodium concentrations in weaning foods and rehydration solutions.

Preliminary contacts made for potential research activities in Hepatitis B.

Hardware and vehicle procurement initiated for O.R. program.

8. SUPERVISION

See supervisory activities under Health Information Systems.

Inventory and evaluation of health centers and district public health offices was included in coverage survey. Summary of results as follows:

80 fixed vaccination centers were visited.

Cold chain:

90% of refrigerators had thermometers.

60% had temperatures between 0-8 degrees day of evaluation.

Vaccine generally well arranged in refrigerator with few opened or expired vials observed.

Injection/sterilization equipment:

75% of centers visited equipped with new steam sterilization equipment.

Very few of these centers use this equipment, preferring to use traditional technique of boiling needles and syringes.

Supervision:

Supervision was found to be irregular and lacking in uniform objectives. Evaluation recommended the institution of a regular calendar of supervision and use of a supervisory checklist.
B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. EPI

Training programs on vaccination techniques and policies will be conducted in the Plateaux Region. (PEV/CCCD, UNICEF, SNES).

Special public information activities will be conducted to increase awareness of the approaching measles season. (PEV/CCCD, UNICEF, SNES).

Health education materials will begin development according to the evaluation findings. (PEV/CCCD, UNICEF, SNES).

Active surveillance and follow-up system will be put in place for polio eradication activities. (PEV/CCCD/SNSS)

Workplan for CY 1990 will be elaborated. (PEV/CCCD)

2. CDD

45-50 sentinel sites will be chosen for the CDD program. These sites will be used to gather additional information on diarrhea treatment practices, complications and severity of cases. (CDD/CCCD, UNICEF)

New reporting forms will be developed for CDD activities in dispensaries and in hospitals. (CDD/CCCD/SNSS)

Training materials will be finalized and a training program organized for the functioning of the ORT training and demonstration units at the prefecture level. (CDD/CCCD, USAID/HSSCS, UNICEF)

3. MALARIA

Missing statistics from passive surveillance system will be collected for completion of annual report 1989. (SNP/CCCD, SNSS)

Research will begin on chemoprophylaxis of pregnant women. (SNP/CCCD, SNSS)

Malaria service staff will be trained in Sakker-Solomon technique of chloroquine detection and measurement in urine for use in research. (SNP/CCCD, CDC/Malaria Branch)

Health education materials will be printed and distributed. (SNP/CCCD, SNES)

Health education activities for malaria prevention will begin testing for next malaria season. (SNP/CCCD, SNES)
4. **TRAINING**

See training activities under EPI, CDD and Malaria.

5. **HEALTH INFORMATION SYSTEMS (HIS)**

Missing statistics will be collected for compilation of 1989 annual report. (SNSS/CCCD)

New computer hardware will be procured and installed at health statistics. (SNSS/CCCD, CDC/TSD)

Analysis will be conducted on in-patient data for the first time with assistance from CDC/TSD. (SNSS/CCCD, CDC/TSD)

Computer training needs and local capacity to meet them will be assessed. (CCCD, CDC/TSD)

New standardized hospital reporting forms will be finalized, printed and distributed. (CCCD, CDC/TSD)

Construction will begin on improvements to computer center at health statistics office. (CCCD)

Program highlights will be chosen and format finalized for 1989 annual report. Report could be sent to printer late in the quarter. (SNSS/CCCD, CDC/TSD)

6. **HEALTH EDUCATION/PROMOTION**

Follow-up visit from Zaire School of Public Health health education training program will be conducted. (SNES/CCCD, ZSPH)

See health education activities under EPI, CDD, and malaria sections.

7. **OPERATIONAL RESEARCH**

Measles and Vitamin A study will be on-going.

Brass-McRae mortality measurement study at large maternity in Lome will be on-going.

Chemoprophylaxis of pregnant women study will be approved and work will begin after Sakker-Solomon training mentioned in Malaria section.

Protocol will be developed for Edmonston-Zagreb measles trial at infectious disease ward of hospital.

Three other protocols will be reviewed by research committee. One on hepatitis B, one on adenitis associated with BCG immunization and one on prescription practices for malaria.
8. SUPERVISION

Routine supervision will continue.

Work will begin on the development of supervisory checklists for use of the regional medical officers.

9. OTHER

Annual programming and coordination meeting will be held with principal donors and divisions involved in child survival activities. Work plans will be developed for CY 1990 in concert with other programs and donors.

C. PROBLEMS AND ACTIONS BEING TAKEN

Evaluation conducted in September has still not been received by AID mission. Mission and CCCD are eagerly awaiting final report to be able to discuss with the government some of the changes proposed by the evaluators. AID/W claims that final report will arrive soon.

As reported many times before, the fact that the Minister of Health himself signs all financial documents, including checks and disbursement of small funds for project activities constitutes a severe constraint on the effective management of the project. At this writing, CCCD is more than six months behind schedule for financial disbursements. This has caused severe problems for the project accounting and has hampered project implementation activities. Project is awaiting the arrival of the evaluation to address this important issue with the Ministry of Health.

D. CONSULTANTS

Bernard Moriniere, CDC/DOI - Vaccination coverage survey, Missed opportunities for immunization study

Michael Toole, CDC/IHPO/TSD, - H.I.S., Operational Research

Kelly Bussell, CDC/IHPO - H.I.S.
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. OPERATIONAL RESEARCH

Assisted Dr. Ruth Wilson with her visit to review social science aspects of selected operational research studies.

Visited Kano to review progress in revision of proposal for approved study on malaria and to meet potential investigators from Bayero University.

Conducted site visit to Ibadan to discuss status of study on cerebral malaria.

Planned and conducted the Ninth Research Review Committee Meeting in Lagos.

Developed a draft 1990 Workplan for operational research activities.

Assisted staff at Ahmadu Bello University develop proposal on quality assurance testing of chloroquine tablets in PHC Zone C.

Assisted staff at the Kaduna School of Midwifery develop proposal on neonatal tetanus.

Assisted with the revision of the University of Ilorin proposal on the Kambari in Kwara State.

2. MALARIA

Visited Maiduguri to review activities of the National Malaria Surveillance Team, to analyze PHC Zone D sentinel surveillance data and to assess potential sites for sentinel surveillance in Borno State.

Developed draft 1990 Workplan on malaria for review and revision by FMOH.

Developed scope of work for Dr. Sexton's proposed visit in early 1990.
Conducted PHC Zone C Seminar to introduce "National Guidelines on Malaria Control in Nigeria" to State Ministries of Health.

Drafted health worker training module on malaria for review and revision by FMOH and IHPO.

3. HEALTH INFORMATION SYSTEMS (HIS)

Visited Minna twice to plan computer installation and training for improved HIS activities.

Assisted Dr. Olise, Abuja MOH, with use of selected software applications.

Assisted the Zone C PHC Coordinator's staff with HIS activities.

Developed a draft 1990 Workplan for HIS for review and revision by FMOH, Mr. Ochuko and Dr. Spiegel.

4. OTHER

Monitored activities of Dr. Michael Kliks, Fulbright Scholar, regarding the Guinea Worm Eradication Programme.

Assisted with preparations for and the implementation of the National EPI/CDD In-Depth Review.

Assisted the Kaduna State Ministry of Health Department of Planning, Research and Statistics with its reorganization.

Reviewed CCCD Project activities and plans for career development with Dr. Foster during his October visit.

Developed draft terms of reference for the extension of my detail to AID for review by Mr. Merrill, Mr. Nelson, and Dr. Foster.

Reviewed three funding proposals for the AID Affairs Office, Lagos.

Participated in Dr. Jennifer Bryce's debriefing in Lagos.

Served as Acting Project Coordinator after Mr. Nelson's departure.

Assisted the three American Medical Student Association (AMSA) International Health Fellows at ABU with the development of projects for their work in Zaria.

Developed a comprehensive draft 1990 Workplan for review by Mr. Jones, Mr. Merrill, IHPO and FMOH.

Assisted with plans for CCCD assistance with the data entry and analysis of the National Guinea Worm Eradication Programme 1989 National Search results.

Briefed the new UNICEF Zonal Assistant Programme Officer, Mrs. Guenet Francois, re CCCD activities.
Briefed Dr. Frank Grant, WHO onchocerciasis consultant, re CCCD activities.

Participated in the Kaduna State Guinea Worm Eradication Programme launching.

At the request of the AID Affairs Office, accompanied the new U.S. Ambassador, Hon. Lannon Walker, to Ibadan for a visit to the University College Hospital.

Reviewed areas for possible CCCD/FHS collaboration with Dr. Sturgis and CCCD/FHS staff.

Briefed Ambassador Walker re CCCD activities during his visit to Kaduna.

Represented CCCD at the FMOH International Donors Coordination Committee Meeting to review 1990 EPI/CDD Workplans.

Prepared a draft CCCD 1990 EPI/CDD Workplan as requested by the FMOH.

Reviewed a manuscript for the Nigerian Journal of Parasitology.

B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. OPERATIONAL RESEARCH

Review selected research proposals and assist with the development of new proposals.

Assist selected investigators with the implementation and completion of approved studies.

Continue to monitor the completion of outstanding approved studies.

Visit Katsina and Sokoto to clarify the status of approved studies.

Pursue the clarification of plans to integrate the coordination of operational research activities into the FMOH.

Brief Mr. Jones re operational research activities and revise the draft 1990 Workplan.

Plan and conduct the Tenth Research Review Committee Meeting in Lagos.

Prepare a summary of operational research activities for the CCCD Staff Meeting in Swaziland in March.
2. MALARIA

Review the draft 1990 Workplan with FMOH.

Brief Mr. Jones re malaria activities and revise the draft 1990 Workplan.

Assist Dr. Sexton with his proposed visit.

Develop the scope of work for Dr. Breman's proposed visit.

Follow-up Zone C State MOH plans for implementing the National Guidelines.

Assist with plans to integrate coordination of malaria activities into the FMOH.

Assist with planning and conducting the National Malaria Technical Committee Meeting in March in Lagos.

3. HEALTH INFORMATION SYSTEMS (HIS)

Follow-up on Niger State MOH progress with computerization of HIS activities.

Assist Mr. Ochuko brief Mr. Jones re HIS activities and revise draft 1990 Workplan.

Assist the Zone C PHC Coordinator with HIS activities, as requested.

Assist Mr. Ochuko brief Dr. Spiegel re HIS activities.

4. OTHER

Continue to serve as Acting Project Coordinator until Mr. Jones' arrival.

Coordinate preparations for Mr. Jones' and Dr. Spiegel's assignments to Nigeria.

Plan and coordinate briefings for Mr. Jones.

Assist the AMSA Fellows in Zaria with their projects, as required.

Assist with preparations for the proposed FSD supervisory visit in March.

Assist with preparations for the CCCD Staff Meeting and the CCCD Consultative Meeting scheduled for Swaziland.
D. PROBLEMS AND ACTIONS BEING TAKEN

Integration of Research Review Committee into the Federal Ministry of Health: Professor Yakubu, Dr. Sorungbe, Professor Makanjuola, and Mr. Merrill to discuss appropriate actions.

Malaria Coordination: Mr. Jones and Dr. Breman to discuss with FMOH to identify Lagos-based mechanism for coordination of CCCD-supported malaria activities.

Future of Kaduna Office: Mr. Jones, Mr. Merrill and FMOH to consider options.
A. MAJOR ACHIEVEMENTS/ACTIVITIES

1. EPI

The EZ Vaccine/Measles Control in Kinshasa demonstration trial continued; a preliminary seroconversion study in 6- and 7-month old children was concluded in December. Dr. OTHEPA Okit’osodu supervised this effort. Dr. Felicity Cutts visited in October, and planning initiated for seroconversion study at age 3.5-4.0 months in 1990. Planning efforts initiated with UNICEF to coordinate greater measles control activity in Kinshasa in 1990. Details resolved regarding UNICEF purchase of EZ vaccine for Kinshasa in 1990; USAID will provide additional vaccination equipment.

Field work for polio study in Kinshasa concluded; testing for HIV antibody in cases and controls nearly completed at Project SIDA laboratory; efforts to culture poliovirus began at INRB, and duplicate specimens at CDC have yielded positive results.

Project initiated urban accelerations in Tshikapa, Kananga, Likasi, Kalemie, and Lodja. Accelerations were completed in Matadi and Boma. Thus, 10 of the 16 urban campaigns planned for 1989 were undertaken during the year. The report on the first urban acceleration at Mbuji-Mayi indicates that 26%, 11% and 13% of the estimated number of 12, 12-23, and 24-35 month old children were vaccinated against measles during the campaign. The wastage rate for measles vaccine during the campaign in Mbuji-Mayi was estimated to be 59%. Reports on other accelerations are in preparation.

Dr. Roland Sutter visited to assess feasibility of a study of vitamin A therapy in acute measles. If funding can be assured through IHPO, Dr. Sutter will return in January 1990 to initiate this effort.

Medical Epidemiologist (ME) assisted project staff in preparing presentation on hepatitis B vaccination.

Project personnel conducted a one-week workshop on vaccination acceleration activities for those 14 cities scheduled for acceleration in 1990, in December.
2. CDD

Persistent diarrhea protocol has been reviewed extensively with Project SIDA and their associated ICAR group, who have now submitted a revised protocol to GPA/WHO. The proposed study would utilize the Perinatal Study population, in a prospective fashion. M.E. is sending a letter of support to GPA/WHO, requesting that this protocol be funded in lieu of that which he submitted earlier.

Evaluation of Mama Yemo ORT Center Training Course scheduled for February 1990, with Health Facilities Survey to follow. Dr. Olivola will participate.

M.E. consulted on proposed community-based study of childhood diarrheas to be conducted by Parasitology Service, UNIKIN and Sante Pour Tous, in 1990.

Dr. Mutombo served as facilitator for the CDD Managers Course in Brazzaville in December. Technical Officer Wilkins and Drs. Kabuya, Ntshioko, and Wembonyama participated in that course.

Drs. Mutombo and Davachi participated in CDD symposium in Bangui in November.

3. MALARIA

Final cleaning of data file from study of malaria prophylaxis in pregnancy completed; analysis to follow shortly.

Preliminary analysis in in-vivo studies of antimalarial sensitivity conducted in Kinshasa and in eastern Zaire (ZSR Katana, near Bukavu) completed. Slide review by two expert readers in Kinshasa confirm continuing efficacy of Quinine and Fansidar. Potency testing of medication utilized at this site is underway at CDC/Atlanta.

Discussions for Mama Yemo pediatric mortality review renewed. No progress yet due to continued absence of key personnel at Mama Yemo.

Project personnel participated in a WHO conference on environmental aspects of malaria control in Bujumbura, in December.

4. TRAINING

Technical Division chief completed a two-month course on epidemiology and statistics at IMT/Antwerp.

Director’s secretary scheduled for training in health care management and financing at Boston University in 1990.

WHO/AFRO terminated funding for Zaire national ORT courses. Search for alternative funding sources initiated in December.
M.E. gave the following presentations:
1) Study of Polio in Kinshasa: Comite Directeur
2) Urban Polio Surveillance: Acceleration Workshop
3) Polio Study in Kinshasa: Rotary Clubs of Kinshasa

Nurse from Matadi affiliated with local Rotarian spent one week in Kinshasa for training in polio surveillance activities.

The IEC course at the School of Public Health was completed in October.

5. HEALTH INFORMATION SYSTEMS (HIS)

Bulletin #11 finalized and awaiting printing.

6. HEALTH EDUCATION/PROMOTION

Consultants Marion Clark and Kathleen Singleton visited in November/December to conduct IEC training needs assessments in five target health zones. Trip report pending.

7. OPERATIONAL RESEARCH

Ongoing activities noted above.

8. SUPERVISION

Wilkins supervised Bukavu antenna in October.

Project personnel did no supervision due to lack of funds.

9. OTHER

Internal Review of project conducted in November, with staff from USAID/Washington and IHPO present.

Visit of Surgeon General designee Dr. Antonia Novello to Project SIDA and USAID mission. M.E. made brief presentation on CCCD/Zaire.

Meetings of the Comite Directeur and the Conseil de Gestion were held in December and November respectively.

John Izard of the Zaire School of Public Health began collaborating with project for computerization of inventory.
B. MAJOR OBJECTIVES FOR THE QUARTER
JANUARY-MARCH 1990

1. EPI
Complete polio study analysis
Continue EZ trial
Complete EZ seroconversion study analyses
Begin urban accelerations in 6 cities
Begin preparations for 1990 rural acceleration

2. CDD
Assist in obtaining funding for persistent diarrhea protocol
Execute Mama Yemo Hospital ORT Center evaluation

3. MALARIA
Complete report on 1989 in-vivo studies
Begin preparations for malaria workshop

4. TRAINING
Expedite replacement of M.E. with trainer
Assure continued funding for ORT Center courses in 1990
Conduct workshop for preparation of teacher guide for use in ITM
Train 11 PEV staff members in DOS and WP

5. HEALTH INFORMATION SYSTEM (HIS)
Receive and distribute new project computers
Continue supervision/review of surveillance data
Publish two issues of Sauvons Nos Enfants

6. IEC
Increase IEC Unit involvement in EZ trial
Train Head nurses in five target zones in communication techniques

7. OPERATIONAL RESEARCH
Begin Vitamin A in Measles Study

8. SUPERVISION
Supervise five Antennae and two Depots Relais

9. OTHER
Computerize PEV inventory system

55
C. PROBLEMS AND ACTIONS BEING TAKEN

Problem:
Personnel gap will be created by departure of M.E. in January.

Action:
Official request sent to speed recruitment of trainer who will occupy post vacated by M.E.

Problem:
Continued slow generation of Counterpart Funds for reasons independent of the project.

Action:
Attempt to fund key activities through UNICEF or with bilateral funds until the problem is resolved.

Problem:
USAID vehicles have arrived but without papers, therefore licensing is impossible. Official distribution list has not yet been submitted for approval to USAID.

Action:
Unofficial license plates have been procured and the vehicles are on the road. USAID may hold up future distribution pending submission of distribution list.

D. CONSULTANTS

1. Dr. Antonio Novello, Surgeon General designee (November)
2. Mr. Andrew Agle, Asst. Dir., IHPO (October) (AIDS PASA evaluation)
3. Dr. Felicity Cutts, Consultant, Measles Control in Kinshasa (October)
4. Ms. Marion Clark, Consultant, IEC Course follow-up (Nov.-Dec.)
5. Ms. Kathy Parker, Consultant, IEC Course (October) (& AIDS PASA evaluation)
6. Ms. Kathleen Singleton, Consultant, IEC Course follow-up (Nov.-Dec.)
7. Mr. John Izard, Consultant, ZSPH, Computerization of Inventory
8. Dr. Roland Sutter, Consultant, Vitamin A in Measles