EVALUATION OF ACSI-CCCD PROJECT

REPUBLIC OF GUINEA

May 14 - June 4, 1987

Evaluation Team

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Acknowledgements

The CCCD external evaluation team wishes to express its sincere gratitude for the frank and open assistance it received from the Government of Guinea in assessing the progress of the Africa Child Survival Initiative/Combatting Childhood Communicable Diseases (CCCD) project during its stay in Guinea from May 16 to June 4, 1987.

The Minister of Health and Social Affairs, the Honorable Dr. Mamadou Pathe Diallo, and Dr. Mohamed Sylla, Cabinet Director, gave generously of their time to the team. The Minister greatly helped the team in its analysis by his frank explanation of the MOHSA's progress and challenges in making available adequate primary health care to the Guinean people taking into account the priority needs of mothers and children. The Director General of Health and Social Affairs, Dr. Namory Keita, and members of the MOHSA senior staff responsible for preventive medicine, primary health care, maternal child health care, and national directors of the EPI, and Malaria programs made special efforts to meet with the team and share their analysis of the progress to date, and the current problems and bottlenecks faced.

The team is especially gratefull to the National Coordinator for CCCD activities, Dr. Souleymane Diallo, and the CCCD Technical Officer, Ms. Dianna Gerski, for their invaluable assistance in arranging for the meetings in Conakry and for the field trip to Kindia and Telimele prefectures.

The UNICEF representative, Mr. Ian Hopworth and members of his staff were particularly helpful in briefing the evaluation team, as was the WHO resident administrator, Dr. Celestin Gantin. Meetings with the World Bank's Program Administrator, Irene Hopwood, and the MOHSA's National Coordinator for the World Bank health support project, Mr. Magassouba, were also very helpful in placing the Bank's activities in proper context. On the PVO side, the representative of Medecins Sans Frontiere, Mr. Sylvain Charbonneau, Administrator was very cooperative.

Meetings were also held with Mr. Mark Wentling, AID Representative for Guinea, who was also acting Chargee d'Affaires at the U. S. Embassy, and his staff covering the state of the economy, the USAID program in Guinea, and its plans for future assistance. Bob Hellyer, USAID Agricultural Development was also very helpful in providing logistic support and general advice to the team. Ms. Fatime Faye, assisted by Gwen Nott did an excellent job in translating technical text into French and inputting English and French text into the computer.

In sum, the team thoroughly enjoyed its short stay in Guinea, and was very impressed by the motivation and dedication of those it met working on primary health care, CCCD, and child survival activities.

Dr. Nancy Mock, Epidemiologist

Vincent W. Brown, Health
Planner and Team Leader

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EVALUATION OF ACSI/CCCD Project/GUINEA

List of Acronyms

AID	Agency for International Development
AID/W	AID/Washington
BAD	African Development Bank
BCG	Tuberculosis Vaccine
CCCD	Combatting Communicable Childhood Diseases Project
CDC	Centers for Disease Control
CDC/A	Centers for Disease Control/Atlanta
CDD	Control of Diarrheal Diseases Program
CFR	Case Fatality Rate
CIE	International Childrens' Center
DPS	Prefectural Public Health Director
DTCoq/DTP	Diphtheria, Tetanus, and Pertussis Vaccine
EPI	Expanded Program of Immunization
FG	Francs Guinean
GOG	Government of Guinea
GTZ	Government of West Germany Health Project
HC	Health Center
HEP	Health Education and Promotion
HIS	Health Information System
HMIS	Health Management Information System
IHPO	International Health Program Office
JVC	Joint Vaccination Campaign (Conakry)
KAP	Knowledge, Attitudes and Practices
LMAS	Living Standards Measurement Program
LOP	Length of Project
MCH	Maternal and Child Health
MOHSA	Ministry of Health and Social Affairs
MSF	Medicine sans Frontiere (Doctors without Borders)
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PHC (SSP)	Primary Health Care (Soins de Sante Primaire)
REACH	Resources for Child Health Project
SSS	Sugar Salt Solution
STC	Short-term Consultancy
TO	Technical Officer
UNICEF	United Nation's Children's Fund
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization

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EVALUATION OF ACSI/CCCD Project/GUINEA

1.0 Evaluation Team

The external evaluation team for the Africa Child Survival Initiative/Combatting Childhood Communicable Diseases project (referred to in the text as CCCD) was composed of a Health Planner and Management Consultant (Mr. Vincent W. Brown), who served as team leader, and an Epidemiologist with skills in Health Management Information Systems (Dr. Nancy Mock from Tulane University). Following briefings by the CCCD project managers at CDC/Atlanta, the team was in Guinea from May 14 to June 4, 1987 carrying out its Scope of Work (See Annex I).

The team was greatly assisted in its evaluation by the CCCD national coordinator, Dr. Augustin Diallo, and the CDC Technical Officer stationed in Conakry, Ms. Dianna Gerski, Mr. Russ Charter, Country Supervisor from CDC/Atlanta was in Guinea for the first week of the evaluation and provided valuable services as a resource person. In addition, Wendy Roseberry, CCCD Project officer AID/Washington, joined the team during its last week in Guinea and was very helpful as a resource person.

2.0 Executive Summary/Recommendations

2.1 Evaluation Team and Process

The external evaluation team for the Africa Child Survival Initiative / Combatting Childhood Communicable Diseases project (referred to in the text as CCCD) was composed of a Health Planner and Management Consultant (Vincent W. Brown), who served as team leader, and an Epidemiologist with skills in Health Management Information Systems (Dr. Nancy Mock from Tulane University). The evaluation team was called upon in its Scope of Work to evaluate the progress of the CCCD project since the project agreement was signed on June 22, 1985, and to recommend whether the project should be extended or not.

From May 17 to June 4, 1987 the team visited the capital, Conakry, and the Kindia and Telimele Prefectures which constitute the three geographic areas covered by the CCCD project. It met with the Minister of Health and Social Affairs, the Director General of Public Health and Social Affairs, the Director for Prevention, the National Coordinator for the CCCD project, and the Directors of the National programs in EPI, Health Education and Malaria, as well as the responsible officer for Health Information Systems. At the field level the team met with the Prefectoral Health Directors (Directeurs Prefectorals de la Sante (DPSs).

In addition to the USAID Director and staff, the team met with other principal donors in the health field such as UNICEF, WHO, World Bank, BAD, and PVOs such as Medecin sans Frontiere, German Technical Assistance (GTZ).

2.2 Country Background

The Republic of Guinea, situated on the West Coast of Africa, has 6.2 million people distributed over 246,000 km2 (95,000 sq miles). There are four main geographic regions divided into eight provinces, 36 prefectures, 347 sub-prefectures, and 2500 districts. Three ethnic groups out of 24 comprise 75% of the population. At least 75% of the persons are Muslim; over 20% maintain their animist traditions; and less than 1% are Christian. Seven national languages are widely used but French is now the official language.

Since independence in 1958, the Second Republic took power only three years ago in April 1984. The political and economic climate of the first regime was not conducive to development and although Guinea is one of the best endowed countries with natural resources in West Africa, it is one of the least developed. The present regime has announced dramatic, new economic policies to reverse development trends. Among the many reforms, the improvement of health services is now considered vital to the economic and social rehabilitation of the country. Government's attitude on population growth has also changed - discounting the pro-natalist policy of the previous regime.

If the low life expectancy at birth of 39 years was correct in 1982, the health status of Guinea is inferior to that of most African countries. The high infant mortality of 186/1000 calculated in 1984 and under-age-five mortality rate of 50/1000 calculated in 1982 would confirm this finding.

2.3 General Anaylsis

The following points list the principal pros and cons concerning the implementation and proposed extension of the CCCD project in Guinea:

2.3.1 Positive Indicators

The evaluation team was impressed with the progress that has been made in meeting project objectives despite major and unusual constraints. There are many indicators that with an extended length of project the objectives of the project will be largely obtained. These include:

- Major fiscal commitment of the GOG to the health sector albeit somewhat reduced in the last several years.
- Substantial resource commitments of other donors in areas complimentary to those of CCCD have been obtained by the government to help offset this reduction.
- Availability of a substantial number of highly trained health personnel in spite of the great variation in the overall quality of doctors, nurses and other health professionals, thus highlighting the need for further training and general upgrading of skills.
- Demonstrated commitment of the GOG to CCCD objectives focusing on child survival and improving the health of mother and child.
- Assignment of a full-time national coordinator to the CCCD program.
- Existence of national programs, directors and plans in the areas of EPI and Malaria Control.
- Demonstrated capability to undertake major vaccination campaigns both in Conakry and the interior.
- Establishment of ORT demonstration centers at the central and prefectoral level.

In addition, the CCCD project has been instrumental in assisting the government to plan and operationalize programs in the areas of EPI, diarrheal disease and malaria control.

2.3.2 Constraints

Some of the specific constraints noted by the team which delayed the project are as follows:

- National economic crisis and changes in the manner of handling of counterpart funds which hindered the availability of local currency funds.
- Major limitations in infrastructure particularly in transportation, communications, energy supply.
- Major lack of management training at all levels of the health system.
- Lack of technical training in the areas of EPI, diarrheal disease and malaria control.
- Inadequate technical support in the areas of epidemiology, data processing and analysis, health and management information systems, microcomputer applications, and applied research.

- Little or no Health Education/Communications capacity exists although significant media help was mobilized for the Conakry vaccination days.

2.3.3 Conclusions

The government seems firmly committed to child survival activities, and strongly supports the CCCD project. From the Minister of Health and Social Affairs to those responsible for the principal CCCD activities, the evaluation team was unanimously encouraged to extend the project for an adequate amount of time (five years). Also the team observed a very positive attitude towards suggestions for further technical, program and management improvements. In the light of its contacts with the government, other donors, field staff, and given the progress to date, the team firmly believes that an extension for five years is justified.

2.4 Current Status of CCCD Activities and Recommendations

The following summary by major subject, and principal recommendations is self contained. However these subjects are more fully considered in the body of the report. (Annex VI contains a listing of all the recommendations by subject.)

2.4.1 Planning and Strategy

Current Status: The CCCD project is scheduled to end in six months on December 31, 1987. More time is needed to meet project goals. In addition, a significant extension will bring the project tenure more in line with UNICEF and World Bank activities which are planned into the 90's. One of the basic considerations in limiting the CCCD project to 30 months was to "test the waters" and see how the project would work out in practice. The government has a number of Public Investment plans, and Primary Health Care multiyear plans which give high priority to CCCD activities and provide for necessary local currency support.

Recommendations

a. It is recommended that the CCCD project be extended for five years beginning January 1, 1988 and ending on December 31, 1993.

b. The CCCD project strategy should be reoriented in keeping the recent developments in the health sector to focus on the strengthening of strong national programs in the areas of control of diarrheal disease (CDD) and malaria.

c. The project agreement extension should include a condition precedent (CP) that no U. S. dollar funds will be dispersed prior to the assignment of a national coordinator for the Control of Diarrheal Diseases (CDD)

d. Activities in the CCCD designated geographic areas should be enhanced, and reinforced so that these areas can become demonstration sites. This will increase the value of the continued CDD, EPI, malaria and other work under the proposed project extension.

e. Applied Research should be encouraged in Guinea given the need to know much more about the technical/social/ economic side of child survival activities. Given the strong interest on the part of MOHSA to do more in this area, CDC/Atlanta should provide a short term expert to help them organize for it (e.g. appointment of a steering/approval committee, terms of reference, preparation of research protocols, etc.).

f. CDC/Atlanta and AID/Washington should send a team of two persons to Guinea for three weeks in late summer or early fall to prepare with the MOHSA detailed plans and budget for the major components of the extension as well as drafting an appropriate amendment to the existing project agreement -- provided the project extension is approved.

2.4.2 Management and Administration

Current Status: The MOHSA is in final stages of reorganization. Under this organization all of the major CCCD activities are located in the Division of Preventive and Primary Health Care. The CCCD national coordinator will to report directly to the Director of the Preventive and Primary Health Care Division. The team found that CCCD activities were already well integrated into the governments primary health care plans.

The government is moving to decentralize the management of its primary health care program, and the operations of the sub prefect level Health Centers, prefect level hospitals, maternal child care centers, dispensaries and other health facilities. These steps auger well for improved management of the primary health care programs in the mid to long term.

Donor coordination has not been a significant problem in Guinea. Informal coordination between CCCD and UNICEF, the World Bank, WHO, ADB, and PVOs, and government has worked well to date. However, the government is in the process of setting up commissions under the Minister of Health and Social Faires to facilitate coordination both within and outside the government.

The MOHSA is highly motivated and highly receptive to advice on how to manage effectively its programs in the health field. In a number of areas it still needs to set up effective systems to carry out these programs. The GOG has need of substantial additional technical help in order to avoid program and implementation difficulties, and to train up their own personnel to handle these programs efficiently in the coming years.

Recommendations

a. Short term consultants should be provided in several areas most notably in computer applications, data processing and analysis, and in the implementation of CDD programs.

b. During the next phase of the project the team feels strongly that longer term technical assistance is needed in the areas of epidemiology, data processing and analysis, and research methods. (This need was spontaneously voiced by most government and donor representatives contacted during the evaluation).

c. The qualifications of the CCCD Technical officer appointed for the extension should include epidemiology, knowledge of health information systems, organizing

training programs, plus substantial experience working at the national level. Complete professional fluency in French is essential.

2.5 Training.

Current Status: There is a significant health infrastructure, and trained health personnel already in place which include doctors, nurses and health technicians educated and trained in Guinea. However, the quality is variable and in urgent need of upgrading.

The CCCD project has provided training for 351 Guineans, out of a life of project goal of 500. Additional training is planned in CCCD activities through the balance of the calendar year 1987.

UNICEF, WHO, World Bank, and the African Development Bank (BAD), Private voluntary agencies such as Medicins sans Frontieres, and GTZ (Germany), have also been training Guinean health personnel in their assigned geographical areas emphasizing child survival activities (EPI, CDD, Malaria, HIS and HE, etc.). Increased training is planned in these areas over the next several years.

Recommendations:

a. Development by the MOHSA of a multi year national training plan and budget, including retraining and refresher courses for its primary health care program.

b. Appointment of a national training coordinator who would be charged with the responsibility for developing the national training program and assuring proper coordination with donors.

2.6 Major CCCD Programs

2.6.1 Expanded Program of Immunization (EPI)

The national EPI program is well planned and organized for reaching UCI objectives by 1990. A national plan for increasing vaccination coverage to within 5 years has been formalized. Most commodities and technical assistance required for execution of this program will be provided by UNICEF. However, the CCCD project is expected to continue to assure certain supplies and technical support to EPI activities in Conakry, Kindia and Telimele. With the assistance of CCCD and UNICEF, the government recently undertook a very successful mass vaccination campaign in Conakry. The team feels, however, that follow-up plans for maintenance of vaccination coverage are inadequate. In addition the team feels that training and supervision in the project area is inadequate.

Recommendations

The CCCD project should maintain an advisory role to the national EPI program assisting in the development of national plans, training protocols, supervisory protocols, etc. Active field involvement and the provision of commodities should remain limited to geographic areas already designated to the project. The team feels that more emphasis should be placed on treating project areas as "pilot zones" where strategies for EPI are tested and protocols for implementation, training, management, supervision, evaluation, and community

motivation are developed. This will necessitate systemmatic assessment of training, management and supervisory needs; and the development of relatively standardized protocols.

2.6.2 Control of Diarrheal Diseases (CDD)

Current Status: Guinee does not yet have a national diarrheal disease control program. However, all Ministry officials expressed the commitment to the establishment of such a program and have requested that CCCD take the lead in assisting the government to develop and implement it.

Due to recent experience with the use of ORT in the management of the latest cholera epidemic, health professionals are enthusiastic about the use of ORT in diarrheal disease management. The CCCD was instrumental in setting up an ORT program in the national university hospital which is currently operational. Kindia and Telimele, pediatricians have taken the initiative to set up ORT programs that are currently functional.

On the other hand, the team noted several problems. First, of greatest importance is the lack of a national program: ie, appointment of a national coordinator and staff, and development of national program plans. Secondly, the centers that have been set up in the CCCD project areas require substantial refinement before they can become demonstration/teaching centers. The organization, training management and supervision of the units (especially in Conakry and Telimele) were assessed to be inadequate. In addition, the national system of distribution of ORS packets is problemmatic. Both Kindia and Conakry experienced important shortages, although substantial stocks are available in Conakry.

Of critical immediate importance is the lack of cholera preparedness. Diarrheal disease transmission is soon to reach peak yearly levels and areas of the country are believed to be endemic cholera reservoirs.

Recommendations:

a. A national coordinator and assistant coordinator should be named to head up a national diarrheal disease program as soon as possible. Subsequently a national program plan and budget should be developed and adopted.

b. Immediate action should be taken to prepare the country for a possible cholera epidemic including effective surveillance and adequate supplies in areas prone to epidemics.

c. Short term technical assistance should be requested to assist in the refinement of the ORT demonstration centers and development of the national plan.

2.6.3 Malaria Control

Current status: A national malaria control program has existed for more than 10 years in Guinea. National plans have been developed, staff have been trained at the central level in the technical aspects of malaria control, and a national laboratory is staffed and is being equipped by the CCCD project. A study on the effects of malaria on pregnancy outcomes is currently underway. In addition, personnel have been trained for in vivo falciparum sensitivity surveillance.

On the otherhand, the team felt that certain aspects of the national malaria control program were weak. Health education/communications was notably absent from the national planning documents. In addition, the national program resources are being underutilized for applied research purposes.

Recommendations:

a. A health education/communications component should be added to the national program plans.

b. A senior level CDC malaria specialist should travel to Conakry as soon as commodities arrive in order to provide refresher training in laboratory techniques, assist in upgrading the national plan, and assist in outlining priority areas and methods for applied research.

2.6.4 Health Information Systems (HIS)

The current health information systems in both project and non-project areas do not provide timely standardized data for program planning and evaluation. Although a basic morbidity reporting system has existed in Guinea since the colonial period, this system was inappropriately cumbersome resulting in ad-hoc modifications that lead to unstandardized data. However, certain facilities have maintained reasonable recording procedures. Retrospective assessment of data from these centers should be considered.

Both the African Development Bank and the World Bank have committed resources to strengthening the planning capacity of the MOHSA. Major emphasis is being placed on the design and implementation of a new health and management information system. A draft design of the system has been completed with the assistance of CCCD and is expected to be approved shortly.

Unfortunately, however, given the lack of adequate numbers of trained personnel in the health planning unit (the central locus of the HIS) and the paucity of technical assistance programmed for this year, it is unlikely that the system will be operational within the next year.

A major obstacle to producing and using information for project and program decision-making is the lack of data processing and analysis capability both among the CCCD staff and within the MOHSA. Final reports are not yet available for any of the three sample surveys undertaken with the assistance of the CCCD project. Substantial data bases are available even in Conakry but have not yet been analyzed.

Recommendations:

a. Short term technical assistance in data processing and analysis should be provided to the project as soon as possible for the purposes of data processing and analysis, training, and assistance in implementing new collection strategies in the field. The consultancy should be for a minimum length of three months.

b. The data collection, analysis and reporting systems in project areas should be assessed and standardized as soon as possible.

2.6.5 Health Education/Communications

Although this support area is key to the realization of project objectives, current infrastructure, staffing and fiscal resources are grossly inadequate to address needs currently. UNICEF and the World Bank have committed substantial assistance to the vitalization of this unit. But for the next year it is expected that staff and resources will be skeletal.

Recommendations:

The project should proceed with a focused approach to health education/communications. Strategies, materials and protocols for each of the three CCCD project components should be developed, beginning with EPI in Conakry. Short term technical assistance will probably be required.

2.6.6 Special Problems: Neonatal Tetanus in Conakry

Current status: Between May 1986 and February 1987, 108 cases of neonatal tetanus were admitted to the University hospital in Conakry. More than half of these infants were born in a maternity and a similar percentage of mothers of these infants reportedly made at least one prenatal visit to an MCH center.

Although these findings are dramatic, little has been done to address the problem.

Recommendation:

The MOHSA should take official and prompt action to prevent neonatal tetanus in Conakry and elsewhere. Actions should include aggressive vaccination strategies to immunize all women of childbearing age, assurance of proper obstetrical procedures, and education of mothers about hygenic postnatal care of infants.

2.7 Financing and Costs

Current Status: The government is in very difficult financial straits, and local currency financing is limited with priority going to support economic restructuring activities. The government's CCCD contribution comes from counterpart funds generated by PL 480 food imports and by other counterpart generating economic support programs financed by USAID. The fact that the government has already included local currency financing for the CCCD project over the next several years in its public investment budget is a very positive sign of the high priority the government gives the CCCD project.

Regarding sustainability and government self help efforts, the GOG continues to show great commitment in its efforts to charge for primary health care services calling on the World Bank, UNICEF and CCCD for technical help in developing this activity.

Generally speaking the project finances are satisfactory. To date, 22 months into the project, $514,795 (58%) has been committed (sub obligated) out of a total dollar project funding of $885,000. This rate of sub obligation is about average for other CCCD bilateral projects at this stage of development.

Regarding the local currency GOG counterpart contribution, the amounts provided have been more than satisfactory. The total GOG cash contribution as of May 1987 is the Guinean

Franc equivalent of $354,844 or 87% more than the $190,000 equivalent in cash required under the Project Agreement.

However, the CCCD project has been delayed in the past, given the severe difficulties encountered in obtaining timely release of local currency funds to carry out CCCD project activities. While approval by the Ministry of Plan has been prompt, substantial delays have occurred in the processing by the Ministry of Finance.

Recommendations

a. The MOHSA, as part of its effort to decentralize primary health care, should consider favorably the possibility of leaving a substantial percentage of receipts earned by the peripheral facilities with these units, or at least at the Prefectural level under the control of the Director of Prefectoral Public Health (DPS).

b. The CCCD National Coordinator and TO should continue to work closely on self-help measures with the MOHSA and other major donors such as UNICEF and the World Bank to harmonize their efforts, and to make available any additional technical help that may be needed.

c. No U.S. dollar funds should be released under the proposed extension until an advance of at least 50% of the GOG's annual contribution (from PL480 counterpart) has been deposited in a special project bank account.

3.0 Evaluation Process

The external evaluation team for the CCCD Project in Guinea visited the capital, Conakry, and the Kindia and Telimele Prefectures which constitute the three geographic areas covered by the CCCD project from May 17 to June 4, 1987. (See Figure 1, Map of Guinea)

The team met with the Minister of Health and Social Affairs, the Director General of Public Health and Social Affairs, the Director for Prevention, the National Coordinator for the CCCD project, and the Directors of the National programs in EPI, Health Education and Malaria, as well as the responsible officer for Health Information Systems. (There is no national director for the Control of Diarrheal Diseases Program at present.)

At field level the team met with the Prefectoral Health Directors (Directeurs Prefecturals de Sante (DPSs) responsible for Primary Health Care in Conakry (Sectors I, II, III), Kindia and Telimele prefectures. Prefectural level hospitals, health centers, and Maternal Child Health centers were visited.

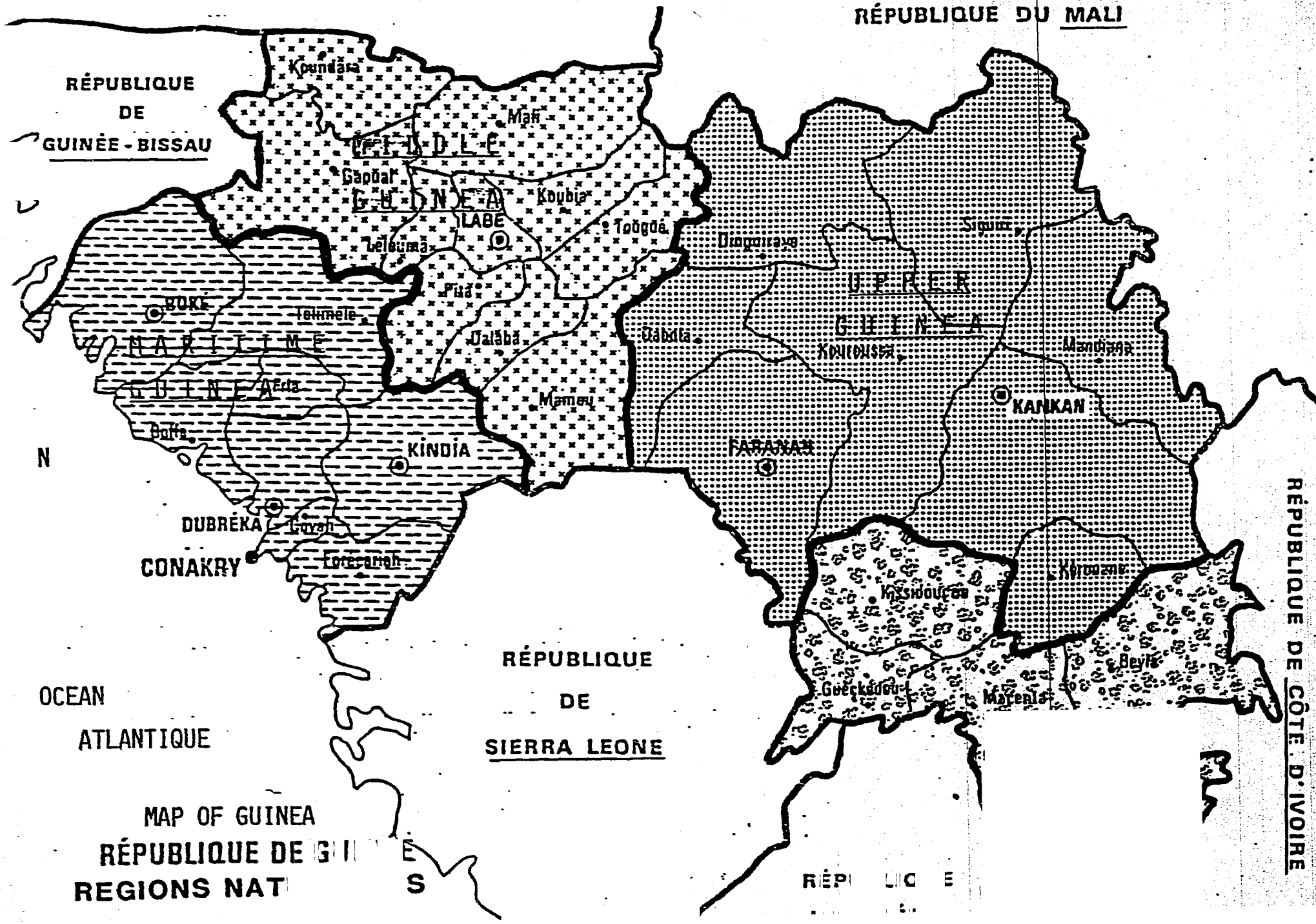
In addition to the USAID Director and staff members, other principal donors in the health field such as UNICEF, WHO, World Bank, BAD, and PVOs such as Medecin sans Frontiere, German Technical Assistance (GTZ) were contacted. (Annex II contains a list of persons contacted by the team.)

The team also reviewed documentation in French and English related to CCCD, child survival, and primary health care activities in Guinea. (Annex III contains a list of the documents consulted.)

The evaluation team was called upon in its Scope of Work to evaluate the progress of the CCCD project since the project agreement was signed on June 22, 1985, with special emphasis on the principal areas of concentration (EPI, CDD/ORT, and Malaria Control) as well as support activities such as Health Information Systems (HIS), Health Education/Communications (HE), and Applied Research. Other questions such as the degree of integration of CCCD activities with the Primary Health Care program of the Government of Guinea (GOG), self-help, and donor coordination were explored.

SOURCE: GOG Planning Document, 19 7 - 19)

FIGURE 1



4.0 Observations and Findings

4.1 Background

The Republic of Guinea, situated on the West Coast of Africa, has 6.2 million people distributed over 246,000 km2 (95,000 sq miles). There are four main geographic regions divided into eight provinces, 36 prefectures, 347 sub-prefectures, and 2500 districts. Three ethnic groups out of 24 comprise 75% of the population. At least 75% of the people are Muslim; over 20% maintain their animist traditions; and less than 1% are Christians. Seven national languages are widely used but French is now the official language.

Since independence in 1958, the Second Republic took power only three years ago in April 1984. The political and economic climate of the first regime was not conducive to development and although Guinea is one of the best endowed countries with natural resources in West Africa, it is one of the least developed. The present regime has announced dramatic, new economic policies to reverse development trends. Among the many reforms, the improvement of health services is now considered vital to the economic and social rehabilitation of the country. Government's attitude on population growth has also changed - discounting the pro-natalist policy of the previous regime.*

If the low life expectancy at birth of 39 years was correct in 1982, the health status of Guinea is inferior to that of most African countries. The high infant mortality of 186/1000 calculated in 1984 and under-age-five mortality rate of 50/1000 calculated in 1982 would confirm this finding. Table 1 which follows provides the basic population, health and nutrition indicators for Guinea.

4.2 General Analysis

4.2.1 Positive Indicators

The evaluation team was impressed with the progress that has been made in meeting project objectives despite major and unusual constraints. There are many indicators that with an extended length of project the objectives of the project will be largely obtained. These indicators include:

- Major fiscal commitment of the GOG to the health sector albeit somewhat reduced in the last several years.
- Substantial resource commitments of other donors in areas complimentary to those of CCCD have been obtained by the government to help offset this reduction.
- Availability of a substantial number of highly trained health personnel in spite of the great variation in the overall quality of doctors, nurses and other health professionals, thus highlighting the need for further training and general upgrading of skills.

Table 1

BASIC POPULATION, HEALTH AND NUTRITION INDICATORS*

FOR GUINEA

Area (sq. km.)	256,000.0
Mid-1985 population (in millions)	6.1
Average annual population growth rate (%)	
1960-70	1.5%
1970-82	2.0%
1980-2000 (projected)	2.4%
Population density per Km2	24.7
Urban population, 1984 (%)	27.0%
Population aged 0-14 (%), 1984	40.0%
Total fertility rate	6.0
Crude birth rate per thousand, 1984	49.0
Crude death rate per thousand, 1984	26.0
Life expectancy at birth, 1982	39.0
Infant mortality rate per thousand, 1984	186.0
Child death rate per thousand, 1982 (age 1-4)	50.0
Adult literacy rate, 1980 (%)	20.0%
Enrollment (%) in Primary school, 1981	33.0%
Secondary school, 1981	16.0%
Population with access to safe water, 1980 (%)	10.0%
Annual growth in labor force, avg. for 1980-2000	2.3
Population per physician, 1981	8551
Population per nursing person, 1984	1518
Daily per capita calorie supply as percentage of requirement, 1984	81.7
GNP per capita U.S. dollars, 1982	310.0
Average annual growth rate, 1960-82 (%)	1.5%
MHSA BUDGET AS % of 1984 National Operational Budget: (Personnel = 55%, Pharmaceutical = 34%, Supplies = 11%)	5.0%

*Source: *The World Bank, The World Development Report, 1984 and World Bank/WHO Sector Review Mission, 1984*

- ~~Demonstrated commitment of the GOG to CCCD objectives focusing on child~~ survival and improving the health of mother and child.
- Assignment of a full-time national coordinator to the CCCD program.
- Existence of national programs, directors and plans in the areas of EPI and Malaria Control.

- Demonstrated capability to undertake major vaccination campaigns both in Conakry and the interior.

- Establishment of ORT demonstration centers at the central and prefectoral level.

- Demonstrated concern of the government for the health of its citizens by the major vaccination campaign held in Conakry at the end of 1986, and other initiatives in the health field.

In sum, the CCCD project has been instrumental in assisting the government to plan and operationalize programs in the areas of EPI, diarrheal disease and malaria control.

4.2.2 Constraints

Concerning the constraints encountered to date, although there have been some delays in start-up of the project on both the US and GOG sides (for example, due to delays of preparation and processing of procurement documents (PIO/Cs) leading to delays in the arrival of essential equipment and commodities, and delays by the GOG in releasing PL 480 local currency for project use), the team found these "start-up" problems in many ways similar to those found in other CCCD countries.

The short duration of the present CCCD project of 30 months is adequate, in terms of a trial period, to determine whether further project activity is merited. However, given the rapid structural changes occurring throughout the Guinean economy, the stated objectives of 30-50% reductions in morbidity and mortality rates in major CCCD project areas were unrealistic, and not achieved.

Some of the specific constraints noted by the team which delayed the project are as follows:

- National economic crisis and changes in the manner of handling of counterpart funds which hindered the availability of local currency funds.

- Major limitations in infrastructure particularly in transportation, communications, energy supply.

- Major lack of management training at all levels of the health system.

- Lack of technical training in the areas of EPI, diarrheal disease and malaria control.

- Inadequate technical support in the areas of epidemiology, data processing and analysis, health and management information systems, microcomputer applications, and applied research.

- Little or no Health Education/Communications capacity exists although significant media help was mobilized for the Conakry vaccination days.

While major strides forward have been made in establishing the CCCD National Coordinator's office and participating in the operational studies and activities listed above, certain CCCD project areas still need strengthening such as:

- Documentation of the CCCD project management process.

- Training of CCCD project personnel.
- Supervision of project field activities.
- Systemmatic approach to needs assessment and evaluation of project training activities.
- Increased administrative and technical backstop support from CDC/Atlanta in the selected areas mentioned above.

4.2.3 Conclusions

In spite of the difficulties and constraints listed above, the team found the motivation very high at both the central and field levels of the government's primary health care system with high priority given to child survival. The government is very pleased with the assistance provided to date by the CCCD project. From the Minister of Health and Social Affairs to those responsible for the principal CCCD activities, the evaluation team was unanimously encouraged to extend the project for an adequate amount of time (five years) with a very positive attitude towards suggestions for further technical, program and management improvements.

4.3 Planning and Strategy

4.3.1 Status of Current Planning

The current project is scheduled to end on December 31, 1987. More time is needed to meet project goals. In addition, a significant extension will bring its tenure more in line with UNICEF and World Bank activities which are planned into the 90's. One of the basic ideas in limiting the CCCD project to 30 months was to "test the waters" and see how the project would work out in practice. While there have been a number of teething problems and the start up has been delayed somewhat, the progress made to date is very encouraging and the project is now geared up to move ahead. The program goals 30-50 per cent reduction in infant morbidity and mortality by December 1987 in the original project were simply not realistic, although there have been a number of positive signs as indicated in the background sections above.

4.3.2 Work Plan for Balance of Project

The present CCCD project emphasizes EPI co-equally with CDD and Malaria with continuing support for HIS and Health Education. Training occupies an important place in project activities. In addition there is significant EPI support available from UNICEF using Italian funds.

The CCCD national coordinator and the CDC Technical Officer have worked out revised plans for the balance of the calendar year identifying activities that they can perform between now and the 31st of December (current termination date for the project). Activities will include: Health Education/Communications, Training, Control of Diarrheal Diseases (CDD), EPI, Malaria Control, Health Information Systems) to be carried out in close cooperation with other donors such as UNICEF, WHO, the World Bank, BAD, and private voluntary agencies such as the French MSF and German GTZ.

4.3.3 Strategy/Plans for Continuation of Project

The government has done significant multiyear planning for the economic and social development activities of the country, both in the context of overall development activities (1987-1991) including health (documents 28 & 33), but also within the framework of the Health Action Plan for the period -- 1987-89 (31).

Maternal child health, including vaccination, ranks very high among the primary health care activities included in the MOHSA's Health Action plan for the period 1987-89 (31). Also, the government's general policy paper for development of public health, 1987-91 (33) addresses problems of reducing the general mortality rate, eradication or control of the principal infectious diseases, providing the mother with curative and preventative pre and post natal care, and in particular vaccinations.

Another positive is that the Ministry of Plan and International Cooperation in its program for Public Investments, 1987-89 (29) included a line item for the continuation of the local currency financing for the CCCD project. This planned local currency financing for the period of three years (1987-99) is 226.7 million FG (or $533,000 equivalent). (Note: the local currency is expected to come from PL 480 funds already generated.)

More specifically, within the terms of the CCCD project objectives, national plans have been developed for EPI/PHC (Enlarged Program of Immunization integrated into the Primary Health Care Program, 1986-91, (32), and the Control of Malaria, Operational Plan, 1986-87. While preliminary work has been done on a national program for CDD (Control of Diarrheal Diseases [39]), it has not been completed. This important activity is behind schedule in part because the MOHSA has not yet assigned a national CDD coordinator.

4.3.4 Conclusions

After weighing and assessing the above points, and given the significant progress made in the 22 months since the signing of the CCCD project agreement, the team firmly believes there is sufficient positive evidence to demonstrate the need to extend the project for a substantial period of time (i. e. five years).

The Minister of Health and Social Affairs specifically asked that the CCCD project be extended as long as feasible and agreed on two areas for the CCCD project to concentrate on (in addition to continuing its present geographical involvement in EPI). They are Control of Diarrheal Diseases (CDD) and Control of Malaria. For the various program and technical reasons detailed in sections 4.6, 4.7, and 4.8 below, and considering the areas of emphasis of other donors, the team supports fully MOHSA's emphasis on CDD and Control of Malaria as priorities in the proposed extension of the CCCD project. Support for HIS (Health Information Systems and Health Education) would also be continued and strengthened under the project extension.

The team noted that more work is needed on the strategy and implementation plans for the urban areas. Thus far multi year planning and preparation of annual work plans have been done mainly in terms of helping the rural areas of Guinea with little attention to the specific social and management needs in the urban areas. A strategy for the urban areas, especially Conakry, needs to be thought through by the MOHSA.

The team noted that considerable work had been done on decentralization and endorses the concept of a phased implementation of the the up-grading of the government's Primary Health Care program which includes all CCCD priority activities.

If the extension of the project is approved as proposed below, it would be highly desirable for CDC/A and AID/W to send a two person team out in late August for about three weeks to work out plans for the project extension, and draft the amendment to the Project Agreement.

4.3.5 Recommendations

a. The CCCD project should be extended for five years beginning January 1, 1988 and ending on December 31, 1993 to assist the GOG in meeting its primary health care (PHC) objectives which give a high priority to the control of childhood communicable diseases.

b. The CCCD project strategy should be reoriented in keeping the recent developments in the health sector to focus on the strengthening of strong national programs in the areas of control of diarrheal disease (CDD) and malaria.

c. Planning and execution of these activities should take into account the markedly different strategies needed for work in the urban areas like Conakry, and rural areas.

d. The project should continue to support a phased approach to the implementation of the national programs including CDD, Malaria and EPI.

e. Activities in the CCCD designated geographic areas should be enhanced so that these areas can become demonstration sites. Any additional geographic coverage should be carefully integrated into the national primary health care initiative that is scheduled to begin in October, 1987.

f. If the project extension is approved, CDC/A and AID/W should send a team of two persons to Guinea for three weeks in late summer or early fall to prepare the detailed plans and budget for the major components of the extension as well as drafting an appropriate amendment to the existing project agreement.

g. The project agreement extension should include a condition precedent (CP) that no U. S. dollar funds will be dispersed prior to the assignment of a national coordinator for the Control of Diarrheal Diseases (CDD)

4.4 Management and Administration

4.4.1 Delivery System Structure and Coverage

The MOHSA is in final stages of reorganization. Figure 2 gives the most recent organigram for the Ministry which is currently under review. Under this organization all of the major CCCD activities are located in the Division of Preventive and Primary Health Care. The CCCD national coordinator reports directly to the Director of the Preventive and Primary Health Care Division.

The government is moving to decentralize the management of its primary health care program to the field. Much needs to be done, and the infrastructure is generally in a state of disrepair. The World Bank will be helping the MOHSA in refurbishing health facilities in the geographical areas assigned to it. At present most hospitals and health centers in the rural areas are short of medicines, vaccination materials, equipment, etc. Steps are being taken with the help of major donors such as UNICEF, WHO, USAID/CCCD, to help supply the basic medical supplies.

Table 2 which follows describes the Health Service infrastructure in the CCCD geographic areas (Conakry, Kindia, Telimele, and Forecariah). All areas except Forecariah are prefectures assigned to the current CCCD project areas. If the project is extended, and CDD accepted as a principal priority under the continuation, Forecariah would be added as an additional area since it has been one of the principal entry points for the cholera epidemics in recent years.

4.4.2 Staffing Distribution, Control of Funds and Supplies

Supervisory skills, and project accounting systems are not well developed as yet. Most projects are encountering difficulty in the day to day management, particularly as it concerns documenting and keeping appropriate records of decisions taken by the responsible officers. While there are some highly trained and very competent professionals in the MOHSA, in general, the level of training is highly variable.

However, much of this problem can be remedied by selective technical assistance and Primary Health Care training and refresher courses concentrating on CCCD priority activities: EPI, CDD, and Control of Malaria, Health Information Systems, and Health Education /Communications. Table 3 sets out the total numbers of health personnel by discipline and posts occupied in Conakry, Telimele, Kindia, and Forecariah.

4.4.3 Management and GOG/USAID Support

The CCCD project has already played an important roll in supporting the MOHSA in such things as: starting up CDD activities, training for the joint vaccination campaign in Conakry, participating in the preparation of national EPI program, etc.

The USAID has been able to provide only limited administrative support, and the TO has been called upon to prepare a significant amount of AID documentation (PILs, PIO/Cs, etc). On the other hand, the USAID has been very supportive in helping work out major administrative roadblocks in the Finance ministry which were holding up release of local currency funds which in turn was delaying project implementation. (See also section 7.0 Finance and Costs). CDC/Atlanta has provided some help in the administrative area (e.g. Harry Godfrey's TDY in the Fall of 1987 [23]).

The MOHSA/GOG has been very supportive of the project, and assigned a well qualified public health trained doctor as a full time CCCD coordinator. In addition the CCCD office has three health technicians to help with the monitoring and supervisory work as well as administrative support personnel such as secretaries, chauffeurs, etc. Doctors have been named as national coordinators of the EPI and Malaria control programs, and the team was assured by Cabinet director that the Minister of Health and Social Affairs would name a national Coordinator for CDD in the very near future. While the governments contribution is substantial (more than required by the project agreement), there have been some delays in the release of the agreed upon local currency funds. This latter problem is discussed under section 7.0 below entitled Financing and Costs.

Another positive factor, from a management standpoint is that the all of the recommendations set forth in the nine month internal project review done by CDC/A and AID/W in late April 1986 have been carried out.

While the general picture is very positive as described above, the team feels that it is vitally important to assure that adequate management and technical support is made available as the

TABLE 2

HEALTH SERVICE INFRASTRUCTURE IN CONAKRY, KINDIA, TELEMELE, FORECARIAH

PREFECTURE	HOSPITALS	PREVENTIVE SERVICES	PHARMACIES	MCH CLINICS	HEALTH CENTERS	HEALTH POSTS AND DISPENSARIES
CONAKRY	2	1	18	3	13	3
KINDIA	1	1	1	1	9	4
TELEMELE	1	2	-	1	13	9
FORECARIAH	1	1	-	-	7	-
TOTAL	5	5	19	5	42	16

SOURCE: Agma Prince, CDD Program Activities Report, Guinea, 4/16/87

commodities and equipment ordered arrive this summer, and the CCCD project becomes fully operational in the fall. Refresher courses and retraining are needed for the CCCD unit in Conakry so that they can better carryout their planning and supervisory functions. Similar help should be provided for the national coordinators in charge of the priority programs of CDD, EPI and control of Malaria.

Additional assistance is also needed in computer applications, data processing and analysis. Last but not least, technical assistance will be needed to help with the development of the program for the Control of Diarrheal Diseases, related training, and its implementation.

4.4.4 Extent CCCD activities integrated into Primary Health Care System

Conceptually the MOHSA sees only national programs for EPI/MCH, CDD, Malaria. While donors participate in decision making and are assigned specific geographical areas to work in, the GOG expects all of their activities to follow the national policy, protocols, technical notes, etc, and to be integrated into the national health plans. In the vaccination area, standardization of needles, syringes, refrigerators and other equipment using WHO/UNICEF standards is being tried. GOG contributions of local currency for these development activities are included in the national Investment plan. A problem facing the government and the donors is to provide adequate coordination of the joint activities.

CCCD activities are designed so that they fit within the governments primary health care framework and as such are already substantially integrated into the government

4.4.5 Donor Coordination

Donor coordination has not been a significant problem in Guinea. Informal coordination between the CCCD TO and UNICEF, the World Bank, WHO, ADB,--and PVOs, and government has worked well to date. However, the government is in the process of setting up commissions under the Minister of Health and Social Faires to facilitate coordination both within and outside the government. One of the Commissions deals with technical coordination. It is expected that donors working in the field of public health/ child survival will be invited to participate in meetings of the technical commission. There is also an interministeral committee which meets to discuss health matters. It played an important role in inter departmental coordination within the government when preparing and executing the very successful Conakry Joint Vaccination Campaign (JVC) which took place in late 1986/early 1987.

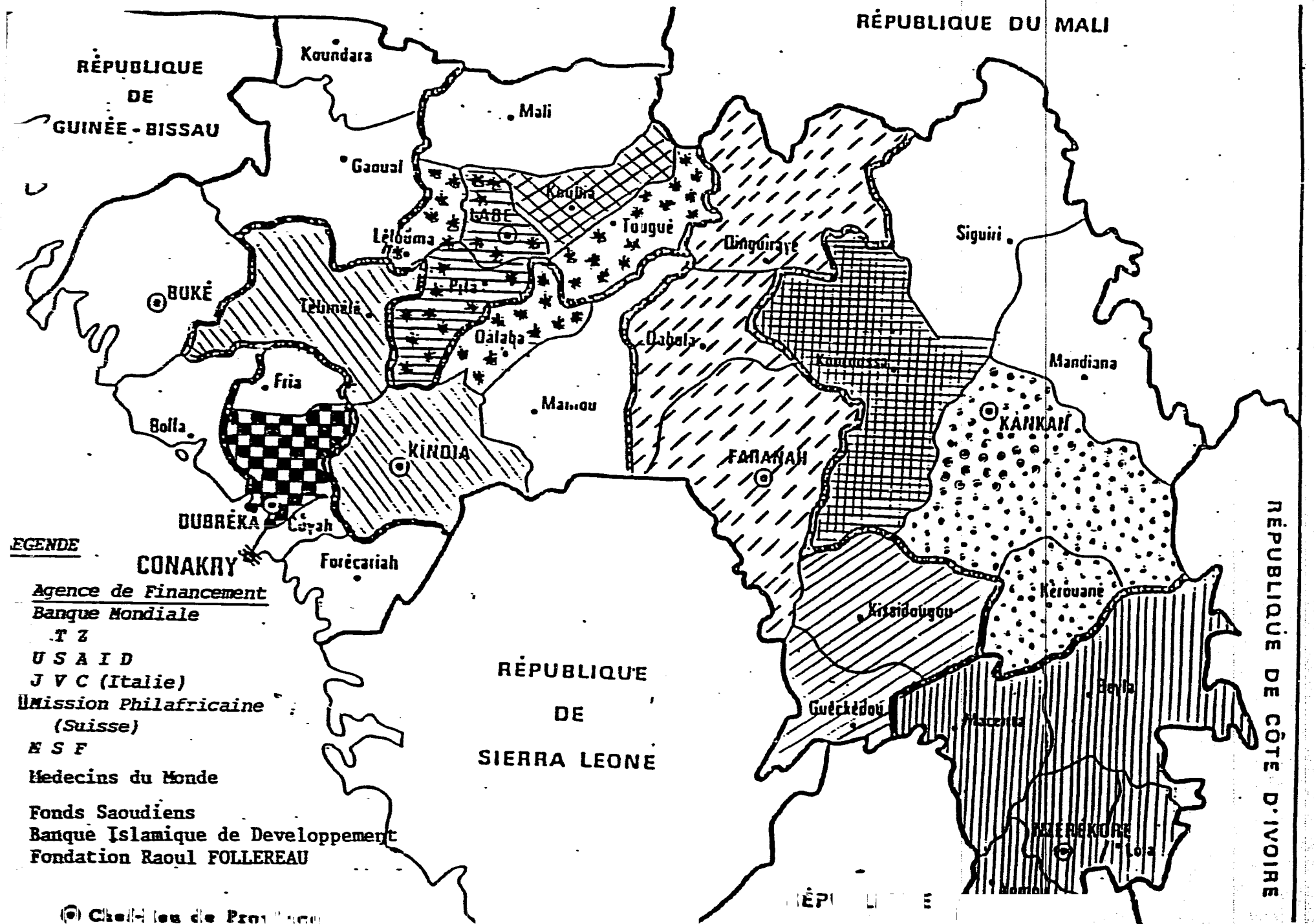
Figure 3 is a map of Guinea showing the geographical areas assigned to bilateral, multilateral and PVO donors by the government. The loan from the African Development Bank to the Health Sector is not shown on the map since its support is not limited to a specific geographic area.

4.4.6 Conclusions

The MOHSA is highly motivated and highly receptive to advice on how to manage effectively its programs in the health field. In a number of areas it still needs to set up effective systems to carry out these programs. Its' phased approach to tackling these problems (e. g. during 1987 it will try to equip, supply and train staff in only 72 of the 360 sub perfectural level health facilities) is very sound. Once this phase is mastered, it will move on to additional health facilities.

Republique of Guinea: Reparti lon of International assistance in publ lc health activities (prevention) per prefectures, October 1986.

FIGURE 3



On the other hand the GOG has need of substantial additional technical help in order to avoid program and implementation difficulties, and to train their own personnel to handle these programs efficiently in the coming years.

(It should be mentioned that the government is also very interested in encouraging the participation of the population in the financing of primary health care services. This subject is discussed in section 7.0 below, Financing and Costs.)

4.4.7 Recommendations

a. Technical assistance should be substantially increased to meet immediate needs. Short term consultants should be provided in several areas most notably in computer applications, data processing and analysis, and in the implementation of CDD programs.

b. Longer term technical assistance is also needed in the areas of epidemiology, data processing and analysis, and research methods. (This need was spontaneously voiced by most government and donor representatives contacted during the evaluation).

c. Qualifications of the CCCD Technical Officer appointed for the extension of the project should include epidemiology, knowledge of health information systems, organizing training programs, plus substantial experience working at the national level. Complete professional fluency in French is essential.

d. Supervisory and administrative support of the CCCD project should be increased substantially. Supervisory visits from CDC to project sites should be more frequent until project management mechanisms are satisfactory. Additional training should be provided CCCD personnel and MOHSA personnel supervising EPI, CDD and malaria programs.

e. The CCCD project should follow-up earlier plans to hire a full-time administrative assistant to assure that project activities (including USAID procedures) are properly documented and recorded. This will help free up the national CCCD Project Coordinator and TO to concentrate more heavily on policy and technical issues.

f. AID/Washington should take action to expedite the commodities and equipment ordered last fall. Their absence is holding up important CCCD project activities. They should arrive no later than August 30, 1987.

4.5 Health Information Systems (HIS)

4.5.1 Current Status of Information System

A basic morbidity reporting system has existed in Guinea since the colonial period. Quarterly reports are produced at the prefectorial level for health centers and hospitals and they are sent on to various directions at the central level. Although the instruction given at all levels is to classify morbidity in a scheme that includes more than 300 morbidity categories (consistent with WHO's ICD), most DPS's report on approximately 30 diseases that are most commonly encountered by their health personnel. These thirty diseases include CCCD target diseases. In addition, a rudimentary hospital morbidity and mortality reporting system exists.

There are many problems with the existing system. At the middle and peripheral levels personnel are not given forms for reporting. In fact, the team found health personnel at these levels to be quite resourceful in finding paper to recycle. Because of the lack of standardized forms and protocols at the middle and peripheral levels, a certain amount of inconsistency in classification exists. However most of the CCCD target diseases can be tracked using the currently followed classification schemes.

The absence of a clear reporting network is another problem with the current system. Most health facilities are supposed to send different reports to various central level services including Preventive Services, EPI, MCH, and the Planning and Statistics Service. Neither the flow of data or the format of reports has been standardized. For this reason, limited data is available at the central level. On the average, less than two-thirds of the Prefectorial level reports are submitted for any given quarter. Because the reports are summaries for health facilities throughout the Prefectures and there is no indication of the number of facilities reporting during any given period, interpretation is difficult even when reports are submitted.

Related to these reporting difficulties is the complete absence of a feedback system. Reports generated at various levels in the system are not systemmatically fed back to the lower levels. The team did find, however, that several prefectoral level health authorities had developed rudimentary analysis capabilities with the assistance of the CCCD project. The team found these authorities to be enthusiastic and well informed about the use of information for health planning.

Finally, the lack of analytic capability is a major problem. Annual health statistics reports have not been produced since 1983. There is as yet no computing capability in any of the central level services. The planning and statistics unit is grossly understaffed.

Despite lack of standardization in data collection and reporting procedures, the data currently collected might be used to monitor trends in attended cases of diarrhea, malaria, pertussis, measles and other communicable diseases in selected health facilities where data have historically been well collected and maintained. Investigations should begin with the Prefectoral capitals and sub-Prefectoral levels. Selected health centers in Conakry as well as the records kept at Donka should be reviewed. To date, no systemmatic assessment of the accuracy of existing data has been undertaken. In part this is due to the unavailability of data at the central level. Also, researchers have perhaps been discouraged by the quality of aggregated data available at the central level.

4.5.2 Current Plans for the Development of National Health and Management Information Systems (HMIS)

Both the African Development Bank and the World Bank have committed resources to strengthening the planning capacity of the MOHSA. Restructuring of the MOHSA is currently underway. An emergent Planning, Evaluation and Training Division is envisioned to be a well staffed central unit with adequate data analysis and production capabilities. All reporting of health information from the DPS level will flow through this unit.

Major emphasis is being placed on the design and implementation of a new health and management information system. A draft design of the system has been completed and is expected to be approved shortly. The CCCD field epidemiologist played a key role in designing the system, assuring the utility of the new system for CCCD program planning, management and evaluation purposes.

Unfortunately, however, given the lack of adequate numbers of trained personnel in the health planning unit (the central locus of the HIS) and the paucity of technical assistance planned for the next year, it is unlikely that this system will be operational before next spring.

Another important potential source of useful health related data is the World Bank assisted Regional Living Standards Measurement Survey (LSMS) Program that might be formally started as early as July of this year with a first round of data collection to begin as early as December of this year. The LSMS program intends to collect longitudinal population based sample survey data that will allow policy makers to evaluate the impact of macro policy formulation on micro-level quality of life indicators including health and nutritional status. The program also intends to build the host government's survey collection and analysis capabilities.

The population-based data to be collected by the LSMS in Guinea could be invaluable for CCCD impact evaluation. The survey instruments and sampling design have not yet been determined and the program supports a certain amount of flexibility. For example certain intermediate KAP (Knowledge, Attitudes and Practices) and outcome health indicators might be included as part of the data collection strategy. In addition, the CCCD project areas might be oversampled such that adequate samples from project areas would be assured. The LSMS could make invaluable contributions to CCCD program evaluation components in Guinea and elsewhere. The program is currently operating in 13 African countries and has resources to expand to others upon request of the government.

4.5.3 CCCD Contributions to HMIS activities

The CCCD project has to date made perhaps the greatest contribution of all donor supported projects towards the development of a national health information system. Dr. Roisin was one of the major architects of the new draft HIS. Stepped up surveillance of major health problems such as cholera and neonatal tetanus was strengthened by project activities.

The CCCD project also has assisted the government in undertaking three major population-based surveys that have provided valuable estimates of vaccination coverage, morbidity patterns and health care practices in Conakry.

A major obstacle to making this information available for project and program decision-making is the lack of data processing and analysis capability both among the CCCD staff and within the MOHSA. Final reports are not yet available for any of the three sample surveys undertaken with the assistance of the CCCD project. Substantial data bases are available even in Conakry but have not yet been analyzed.

Project training of mid-level health professionals last year has resulted in major improvements in the analysis of data at the DPS level. In both Kindia and Telimele the DPS's and program coordinators were producing reports including graphs that they were using for health planning and evaluation purposes. The team was very impressed with the enthusiasm shown for HIS activities by Prefectoral level health authorities.

On the other hand, data collection and reporting procedures have not yet been adequately strengthened in health facilities. Also the project has not provided simple standardized forms that could serve as interim forms until the new national system has been approved.

4.5.4 Impact Evaluation and the HMIS

Because of delays in project start up activities and because initial objectives were unrealistic, projected levels of immunization, and reductions in morbidity and mortality have not been reached. However, demonstrable progress has been made in immunization coverage in Conakry. The JVC was a highly successful campaign reaching over 50% of the target population. This improved coverage is reflected by the frequency in attended cases of measles, tetanus, polio, and pertussis. Preliminary reports for the first trimester of 1987 show marked reductions in the reported frequency of these illnesses compared with last year.

By comparing summaries of current management to those determined by the KAP and health facilities survey, demonstrable improvement in hospital management of diarrheal disease and dehydration is evident. It is felt, however, that reporting procedures in the ORT demonstration centers in Conakry and Telimele must be strengthened. The impact of improved management on hospital case fatality rates can be determined. However at the time of the team visit, data were not available due to data processing difficulties experienced by the project as well as lack of historical summary data in Kindia.

In order to assess project impact the team suggests a combination of a sentinel health facilities surveillance system and sample surveys. Patterns of attended morbidity for the more severe illnesses such as polio, diptheria, and measles will probably reflect trends in the target communities. Trends in the severity of presenting cases diarrheal disease will probably reflect trends (not estimates) of community mortality experience.

There are certain important issues which should be addressed when using the facility-based data. First, it is expected that utilization rates of health facilities will change dramatically over the next several months as medicines and supplies become available and as the community becomes increasingly sensitized to health care issues. Monitoring the profile of users of the system should be built-in to project data collection activities so that facility trends in the frequency of target diseases can be interpreted.

Because of the lack of baseline data, baseline KAP surveys should probably be undertaken in all geographic areas covered by the project and follow-up surveys (perhaps less ambitious in size) should be undertaken after an adequate period of time. Monitoring intermediate behavioral indicators is crucial to understanding the appropriateness of project strategies.

4.5.5 Recommendations

a. Training in data processing and analysis and computer applications should be provided to the CCCD coordinator and key governmental technicians as soon as possible.

b. Analysis of existing data should be undertaken/completed as soon as possible. All methodologies should be well documented. This might be expedited by a short term consultant who could also provide on site training in computer applications and data analysis as well. A consultancy of at least 3 months is recommended.

c. The data collection, analysis and reporting systems in project areas should be assessed and standardized as soon as possible.

d. HMIS supervision should be included as part of the CCCD technicians' activities.

e. The World Bank LSMS coordinator should be contacted by CDC/A as soon as possible so that a collaborative relationship can be established with this program.

4.6 Expanded Program of Immunization (EPI)

4.6.1 National Programs and Policies

The Expanded Program of Immunization (EPI), was launched in 1980. It was based on the use of mobile teams offering DPT, polio and tetanus vaccines. Unrealistic targets were set, and no evaluation mechanisms were built in. The planning and management of the original program was very weak resulting in donor skepticism regarding requested supplies needed.

In 1986, a new national 5 year program to achieve high levels of vaccination coverage was developed by the MOHSA with the assistance of WHO, UNICEF, and CCCD. The vaccination initiative is part of a larger primary health care program being undertaken by the MOHSA and heavily supported by UNICEF. The program targets 80% full immunization of infants under 1 year nation-wide by the year 1990, and 80% coverage of pregnant women. Operational objectives include:

- Establishment of a reliable logistic system through which to replenish supplies;
- Establishment of an in-service training system to train local personnel in vaccination techniques and other PHC elements, and 150 in supervisory and 10 in maintenance. skills;
- Development of simple standardized systems for recording, reporting and feedback of epidemiologic and service delivery statistics;
- Reinforcement of EPI central management capacity, by expanding senior management staff, introducing improved organizational chart and job descriptions, and increasing budget allocations;
- Identification of strategies and techniques for the utilization of multisectoral communications channels for education and information programs, and
- Institution of a more effective system for evaluation and monitoring.

The major strategy of the EPI program is immunization through fixed health centers with outreach activities in neighboring communities. The program is based on integration of immunization activities into PHC services that cater to the needs of mother and children including basic drugs, CDD, and anti-malarial programs.

A phased expansion of the program has been planned progressing from the central to peripheral levels. During the first year, emphasis has been placed on development of detailed operational plans and initiating activities in Conakry. Beginning in October 1987, 72 health centers-two in each of the 36 prefectures will be revitalized and will subsequently initiate vaccination activities. Year by year additional health care centers will be phased in to the program so that by 1989 all 337 sub-prefectures will be covered by the program. Among the initial 72 centers to be included are 36 sub-prefectoral capitals because these will be distribution centers for

the sub-prefecture. Detailed operational plans for accomplishment of program objectives have been developed including the specification of inputs, timelines, and organizations/individuals responsible.

Training activities have begun at all levels. Five MOHSA staff attended WHO senior-level training courses in 1982-1983. Of these, four are still involved in EPI activities. Since 1982, 47 EPI personnel received mid-level EPI training organized by the MOHSA. The recent mass joint vaccination campaign (JVC) in Conakry resulted in the development of training protocols for intermediate and lower level personnel. However, finalization of these protocols is not being systemmatically undertaken.

The establishment of central level cold chain, supply and logistic policies and procedures is far advanced. An excellent central level cold store was installed in Conakry recently. The cold room is 15 cubic meters and operating procedures are adequate and well maintained. Freezer capacity is 3 cubic meters. Both freezer and cold room have back-up diesel generators. Maintenance systems are excellent. Adequate management systems for supplies also have developed. On the otherhand, supervisory schemes and tools are still inadequate and a reliable cold chain system has not been installed for the interior.

4.6.2 Status of EPI in CCCD Project Areas

The CCCD project has the responsibility of assuring equipment, supplies, and technical support for vaccination activities in the three project areas Conakry, Kindia, and Telimele. Project activities have been greatly delayed because of the lack of commodities expected to arrive in late Summer 1987.

Because of this, upgrading of vaccination procedures has largely taken place in Conakry. The CCCD assisted in the implementation of the JVC, taking responsibility for manpower recruitment and training. More than 300 vaccinators and supervisors were trained. This campaign was highly successful (see below).

The ten health centers in Conakry that are being revitalized by the CCCD project are all currently operating upgraded vaccination programs. UNICEF-funded equipment and supplies have been in place since early May. Fifteen senior level personnel were trained in Conakry. Health center personnel have been trained in vaccination techniques and procedures. And a supervisory system has been established using three CCCD technicians. Eight of the 10 centers have modified vaccination schedules to provide daily vaccination clinics. All 10 indicated the policy of vaccinating ill children.

After reviewing procedures in three of the 10 centers, the team noted the following problems:

- Cold chain maintenance and techniques remain a problem. Refrigerators are not being maintained in the acceptable temperature range and maintenance of vaccine temperatures during clinic vaccination sessions is still inadequate. These problems appear to be due to inadequate training of personnel;

- Supply system is still inadequately understood by personnel in clinics. For this reason equipment and vaccine ruptures are occurring;

- Adequate practices relating to the reuse of syringes were not being followed. Syringes (not needles) were being used on more than one child. Again, the problem appears to be inadequate training;

- Sterilization procedures were partly understood; however, personnel did not maintain sterile handling of equipment after sterilization;

- Standard data recording procedures were not being followed;

- Several problems exist related to the three CCCD technicians. Their job descriptions are not well defined. Because they are public health technicians but not physicians, they cannot easily fill a supervisory role. They do not follow standard well defined protocols that could be reviewed and acted upon by the TO and/or the CCCD National project coordinator. Their technical knowledge of vaccination procedure was not adequate; and

- Social mobilization/health education strategies for post mass campaign EPI activities have not been developed. Therefore, maintenance of immunization coverage obtained during the JVC is not likely.

Far less project activity has taken place in Kindia and Telimele. Twenty six middle level managers from Kindia and Telimele were trained in Telimele in May 1986. These individuals have upgraded vaccination procedures to some extent on their own initiative.

EPI activities have been taking place during the past few years in both Kindia and Telimele. Kindia maintains a fixed facility only approach, whereas, in Telimele the DPS is conducting outreach activities.

In both areas, several aspects of the EPI program showed significant problems:

- Cold chain is very poorly maintained at all levels. This is due to a combination of inadequate equipment, inadequate knowledge, and inadequate supervision. The team was especially concerned by the provincial cold room in Kindia. This cold room is in the Institute for Tropical Research. When the team arrived the temperature of this room was greater than $8^{0}C$, although a thermometer was not readily accessible for verification. Because this storeroom is the depot for the entire province this is a critical problem;

- Sterilization procedures were not adequate because of both insufficient knowledge and lack of equipment; and

- Correct vaccination procedures were not being followed.

In short, although health personnel were extremely enthusiastic and dedicated, vaccination activities are being compromised by lack of supplies, inadequate training and supervision.

4.6.3 Vaccination Coverage

Vaccination coverage in Conakry has been dramatically improved in Conakry since the JVC (November,1986-February,1987). Table 4 shows the results of pre and post campaign surveys undertaken by the MOHSA with CCCD assistance.

These results suggest that vaccination coverage has been remarkably improved as a result of the campaign. The rate of complete vaccination coverage obtained indicates that this campaign was very successful.

TABLE 4: VACCINATION COVERAGE CONAKRY BEFORE AND AFTER JVC

	NO. OF CHILDREN	%BCG	%DPT1	%DPT2	%DPT3	%MEASLES	%COMPLETELY
Conakry May, 1986 (0-4 years)	2046	18	16	14	4	13	2
Conakry March, 1987 (0-3 years)	210		92		59	79	52

On the other hand, a review of incomplete recent records from fixed facilities indicates that these rates will not be maintained or augmented if program strategy is not changed. During the month of April, preliminary data suggest that only about 1500 children were vaccinated at least for first doses of DPT and Polio. Approximately 3000 children are born per month in Conakry. Therefore partial coverage would be less than 50% even if all prior cohorts had been vaccinated. All clinics visited experienced difficulty in obtaining complete coverage of children.

4.6.4 Special Problem: Neonatal Tetanus in Conakry

4.6.4.1 Current status

Between May 1986 and February 1987, 108 cases of neonatal tetanus were admitted to the university hospital in Conakry. More than half of these infants were delivered in a maternity and a similar percentage attended MCH services at least twice during their pregnancy.

Although these findings constitute a public health emergency, little has been done to address the problem.

4.6.4.2 Neonatal Tetanus Recommendation

The government should take official and prompt action to prevent neonatal tetanus in Conakry and elsewhere. Actions should include aggressive vaccination strategies to immunize women of child bearing age, assurance of proper obstetrical procedures, and education of mothers about hygenic postnatal care of infants.

4.6.5 Recommendations:

a. The CCCD project maintain an advisory role in the national EPI program assisting in the development of national plans, training protocols, supervisory

protocols, etc. Active field involvement and the provision of commodities should remain limited to geographic areas already designated as project areas. The team feels that more emphasis should be placed on treating project areas as "pilot zones" where strategies for EPI are tested and protocols for implementation, training, management, supervision, evaluation and community motivation are developed.

b. The CCCD project assist the government to develop detailed operational plans for maintaining vaccination coverage in Conakry.

c. A systemmatic assessment of vaccination practices should be undertaken in all project areas and that remedial training programs be conducted.

d. A more systemmatic supervisory system be developed in the project areas to assure maintenance of the cold chain, proper sterilization procedures and proper vaccination practices.

e. The target population should be protected against tetanus and coverage be expanded to include all women of child-bearing age.

4.7 Control of Diarrheal Diseases (CDD)

4.7.1 Introduction

As indicated in the first section of this report, development of a strong national program in diarrheal disease control is recommended by the team to be the major thrust of the CCCD activities in Guinea. For this reason the following section of the evaluation report has been developed in more detail than the sections addressing other CCCD programmatic components.

4.7.2 Background:

As is the case for most countries in the region, diarrheal disease is among the three major causes of moderate and severe morbidity in Guinea and has recently experienced important cholera epidemics. The recent KAP study undertaken in Conakry (May, June 1986) by the MOHSA with the assistance of CCCD results in estimates of three to four episodes of diarrhea per child under five per year. Extrapolating this estimate nationally, there are an estimated 3.5-4.8 million cases of diarrhea per year in Guinea. Assuming a 10% incidence of moderate to severe dehydration among all diarrheal episodes (a conservative estimate), at least 360,000 children would be in need of some form of rehydration therapy each year (Prins reports, [39]).

Hospital data from 1983 (the last year for which annual statistics were produced) indicate that non-bloody diarrhea accounted for 21% of hospital mortality. Thus, again extrapolating nationally, an estimated 33,000 deaths per year may be attributed to diarrheal disease in years when no cholera outbreaks are reported.

The KAP survey also revealed inappropriate case management by both mothers and health professionals. Thirty percent of all children having recent episodes of diarrhea received no treatment. At health centers, ORT was advised only 4% of the time. Antibiotics and sulfanimides were most often recommended at health facilities. Only about 15% of the affected children received some form of rehydration therapy.

In addition, Guinea has experienced three major cholera epidemics in the last several years and is suspected to have important endemic reservoirs of vibrio cholera. The last epidemic began

in January, 1986 and lasted through September in persistent foci (Conakry and Forecariah prefecture). During the peak of the epidemic, case loads in Donka hospitals were up to 600 cases per month and at times the case fatality rate was reported to be 40%.

4.7.3 Current Status of National Policies and Programs

Guinea does not yet have a national diarrheal disease control program. However, all Ministry officials expressed the commitment to the establishment of such a program and have requested that CCCD take the lead in assisting the government to develop and implement the program. The two year national health plan includes a national CDD program among its national programs. Emphasis is to be placed on the promotion of ORT (Plan D'action Sanitaire, 1987-1989, [31]).

The CCCD project has assisted the government in laying substantial groundwork towards the establishment of a strong national program. ORT demonstration centers have been set up in Donka hospital in Conakry and the prefectoral hospital of Kindia. Both of these centers were reviewed by the team and found to be functioning well. More than 3000 cases have been treated in the Donka units since opening in October. In the first trimester of 1987, 523 children were treated in Kindia including 230 children on plan B and 13 on plan C (detailed discussion of these two centers follows in next section). The project has ordered 1,200,000 sachets (an 18 month supply for the project geographic areas.) These commodities are expected to arrive in July, 1987.

In January 1987, a PRITECH consultant brought in as a part of CCCD activities assisted the MOHSA in developing a summary five year plan for the development of a national CDD program. This summary plan touched on all major considerations for development of such a program including institutionalization, training of health personnel and their collaborators, supply and distribution of ORT-related materials, institutionalization of ORT in health facilities, communications/health education/social mobilization, research and evaluation, and integration of CDD with other programs.

The resulting draft plan included a timeline for 1987. By May of this year, an official national plan was to have been developed, a national coordinator and staff were to be named, a health personnel KAP study was to have been completed, ORT centers were to have been established in the regional hospitals/MCH centers in Forecariah and Telimele, and development of training materials was to have begun. Aside from the completion of the data collection phase of the health personnel KAP survey, the other activities have been impeded because a national coordinator and staff have not been named. The MOHSA needs to take immediate action to put the program back on schedule.

The project also assisted the development in controlling the last cholera epidemic and in developing a cholera surveillance system. Three consultants from CDC Atlanta were sent to Guinea for one month in August 1986 during the height of the cholera outbreak. They trained personnel in the use of ORT and other methods of rehydration. They also provided the necessary materials and training to the national laboratory of the service of prevention for identification of Vibrio Cholera and drug sensitivity testing. Finally, recommendations for environmental and behavioral interventions were made.

Recommendations of these consultants have not been followed up because there was no single person at the national level responsible for implementation. At present, though the country is approaching the season when diarrheal disease transmission is at its peak, no preparedness for cholera is evident.

Other donors also have supported CDD activities of the MOHSA. UNICEF has supplied 40,000 ORS packets to the national direction of preventive services. The WHO assisted the government in developing an official essential medicines program that will include ORS sachets as a part of medicine kits distributed to the peripheral levels of the health care system.

A major limitation to the realization of a successful diarrheal disease control program (i.e. demonstrable impact on the severity of disease among the target population) is the lack of human and material resources in the MOHSA health education/communications program. This point will be addressed in section 4.9 below.

4.7.4 Oral Rehydration Therapy (ORT) Practices

Aside from health services assisted by GTZ, MSF, and Medecins du Monde appropriate treatment of diarrheal disease was uncommon in Guinea. As mentioned earlier, in the household KAP survey, only 4% of the cases of recent diarrhea were reportedly treated with ORT. A health facilities survey undertaken by the project in June 1986 suggested that virtually all cases of diarrhea were treated with antibiotics or antiseptics and some form of rehydration therapy was suggested in only 39% of the cases.

Due to recent experience with the use of ORT in the management of the latest cholera epidemic, health professionals are enthusiastic about the use of ORT in diarrheal disease management. The CCCD was instrumental in setting up an ORT program in the Donka national university hospital which currently treats about 25 children a day. In Kindia and Telimele, pediatricians have taken the initiative to set up ORT programs that are currently functional. Current attitudes of health professionals towards ORT were measured in project areas by a recent survey (n=57). Virtually all reported a favorable attitude towards its use (preliminary results of health professionals' survey not yet published).

The team visited and assessed ORT programs in the three project sites,summarizing findings as follows;

- All three sites have shown a marked improvement in the management of diarrheal disease and enthusiasm towards ORT was expressed by all health professionals;
- The center at Kindia was the closest to being a model center;
- All centers were experiencing space problems for comfortable treatment of patients and counselling;
- The centers at Donka still have organizational problems. Patient referral patterns from the triage area where mild cases of diarrhea are treated to the pediatric service where moderate and severe case are treated are still not well established. Patients are not kept at the center for an adequate length of time. The educational component, that is, demonstration and counselling is still inadequate. Finally, record keeping and reporting is extremely weak. Individual patient forms are not always filled out properly and summary reports are currently not being generated;
- The center at Kindia is very well run. The education and counselling component, however, should be strengthened. The reporting system is both well maintained and used at the prefectoral level for decision-making; (see Annex IV for the most recent quarterly Diarrhea Control report from Kinda Hospital);

- The center at Telimele has major organizational, administrative and technical problems. Immediate action should be taken so that health professionals and clients do not develop a negative attitude towards ORT;

- The pediatric service in Kindia reported approximately a 5% mortality rate among children treated for diarrhea and dehydration. All deaths occurred among children with severe dehydration who were treated under plan C (see annex Kindia report);

- Mothers are most often not given sachets to take home. This appears to be due to a problem of sachet supply at the health center level;

- There is a major national level problem with the distribution system for ORT sachets. Both Kindia and Donka have experienced ruptures of stock since the centers have opened. The team feels that a simple supply scheme should be worked out as soon as possible; and

- Personnel in project areas do not have consistent practices with respect to sugar/salt solution (SSS). Given the newness of the ORT concept, the overall low literacy rate and the abundance of ORS sachets available nationally, it is highly recommended that SSS not be included as part of education strategies.

4.7.5 Conclusions

The team feels that substantial progress has been made to improve diarrheal disease management in Guinea. The CCCD has been instrumental to this change. Both attitudes and practices of health professionals have improved in the short time since CDD activities have been initiated.

However, important problems must be resolved to ensure continued progress. First, of greatest importance is the lack of a national program: i.e., appointment of a national coordinator and staff, and development of national program plans. Secondly, the centers that have been set up in the CCCD project areas require substantial refinement before they can become demonstration/teaching centers. The organization, training management and supervision of the units (especially in Conakry and Telimele) were assessed to be inadequate. In addition, the national system of distribution of ORS packets is problemmatic. Of critical immediate importance is the lack of cholera preparedness in Guinea.

4.7.6 Recommendations:

a. A national coordinator and assistant coordinator should be named to head up a national diarrheal disease program as soon as possible (MOHSA).

b. A national diarrheal disease control program plan and budget should be developed and adopted (MOHSA/CCCD)

c. Immediate action should be taken to prepare the country for a possible cholera epidemic including effective surveillance and adequate supplies in areas prone to epidemics (MOHSA/CCCD).

d. Short term technical assistance should be provided to assist in the refinement of the ORT demonstration centers and development of the national plan (CDC/Atlanta).

e. Immediate action should be taken to assure an adequate supply of ORT packets to ORT centers (MOHSA).

4.8 Malaria Control

4.8.1 Background and Current Practices

Presumptive malaria is the leading cause for the use of curative health services among both children and adults. This appears to be true in most areas of the country. A sample of statistics collected from health facilities in the project area collected by the evaluation team for the last 18 months confirmed this to be true for project areas even though antimalarial drugs are still not available in health centers.

The KAP survey of May, June 1986 in Conakry showed that 24% of the children under 5 reportedly had a fever during the two week period prior to the survey, although only 5% had parasitemia at the time of the interview. The survey also showed that most children were promptly treated with antimalarial drugs. Eighty percent were treated at home, the majority of whom used chloroquine, the drug of choice. About one half were taken to health centers.

A recent study of malaria during pregnancy undertaken by the national malaria program (n=907) showed an overall parasitemia rate of 7%. However, rate varied by age and parity. Young primiparous women had the greatest infection rates (approximately 10%).

Practices related to the treatment and prevention of malaria during pregnancy are much poorer than those found for young children. This study showed that less than half of the women reporting a recent fever took antimalarial drugs. The KAP survey showed that only 16% of the mothers interviewed reported taking chemoprophylaxis regularly during their last pregnancy.

Finally, both of the above studies as well as the health facility studies suggest that health professionals overuse injectibles, do not use standard treatment protocols, and do not recommend use of chemoprophylaxis during pregnancy. These findings were consistent with impressions gained by the evaluation team during site visits.

4.8.2 Current Policies and National Programs

A national malaria control program has existed for more than 10 years in Guinea. This program was originally funded by WHO and had a vector control orientation. The infrastructure includes a national malaria Director, three biologists and approximately 20 laboratory technicians. The direction has three divisions: parasitologic studies, entymology, and drug sensitivity surveillance.

National five year plans have been developed recently by the program director. These plans are complete and include task analyses, timelines resources required, and process and impact indicators. Appropriate standard treatment protocols have been developed, chemoprophylaxis during pregnancy has been adopted as standard procedure, in vivo falciparum resistance surveillance is to be undertaken, and several areas for operational research have been identified.

One area that has not been adequately addressed by the plan is a strategy for health education. Compliance in the area of chemoprophylaxis during pregnancy is likely to be particularly problemmatic to the realization of program objectives.

4.8.3 Operational Aspects

The CCCD program has assisted the MOHSA to revitalize the malaria control program. The CCCD staff assisted the Director in developing the new national strategy and plans. Also the project has upgraded laboratory equipment and supplies. Finally, an adequate chloroquine supply has been ordered to stock health facilities in project areas for 18 months (8000 bottles of 1000 tablets). An adequate supply of drugs to implement the national plan in areas other than CCCD project areas has been programmed by other donors for the next five years. In addition, the CCCD has trained 4 technicians in the techniques of in vivo sensitivity surveillance. Although this training took place in September it is likely that a short refresher course is necessary.

The CCCD project has assisted the malaria division in undertaking a study of the effects of malaria during pregnancy. The data have been collected. The division will require assistance in data processing and analysis.

4.8.4 Conclusions

National plans for malaria control are adequate and well developed. In addition, donor resources have been committed for the realization of program objectives. However, progress has been hindered by the lack of current availability of drugs and reagents. Neither UNICEF nor CCCD chloroquine supplies have arrived.

Given the adequacy of trained personnel at the national level, the Division of Malaria control could serve as an important research locus for addressing operational problems related to malaria control. Central staff will, however, require upgrading in applied research methodology including data processing and analysis.

Like other directions in the MOHSA, the Division of Malaria control is weak in the area of management. Management control mechanisms for program resources and activities were not found to be adequate. The health education component of the national strategy is notably absent.

4.8.5 Recommendations:

a. The CCCD project should assist the MOHSA to develop a training program for mid and peripheral level health workers in the treatment of malaria and the use of prophylaxis during pregnancy. The training program should include a built in evaluation. A health education strategy should also be developed.

b. The project should assist the government in developing control and monitoring systems for malaria control activities. There is an immediate need for chloroquine and laboratory supplies for the project.

c. A supervisory visit by the CDC malaria supervisor should be made as soon as project laboratory supplies have arrived. The objectives of the consultancy are to finalize protocols for drug sensitivity surveillance, review laboratory testing and control procedures, assist in the development of protocols for applied research activities, and assess needs for applied research training.

4.9 Health Education/Communications

4.9.1 Current Status of National Policies and Programs

The national health education/communications program (EPS-Education pour la Sante) is currently one of the weakest programs in the MOSHA. It consists of a Director, a specialist in didactic materials, a person responsible for liaison with the press, a person responsible for liaison with the radio and television, and two individuals responsible for relations with schools. There is virtually no operating budget outside these personnel for this unit.

The MOHSA, however, with the assistance of several donors- most notably the World Bank, BAD, and UNICEF, is undertaking a major project to revitalize the health education/communications program as part of its strategy to meet primary health care objectives.

Beginning in October of 1987, major resources will be available for technical assistance, extensive training in all aspects of health education/communications, materials development, and operating costs. UNICEF also plans to maintain a resident education/communications specialist in the UNICEF mission.

The new strategy for health education/communications will have three major thrusts: development of locally adapted social mobilization mechanisms, experimentation with different educational techniques, and integration of health education messages into various socio-economic sectors.

The GOG has already placed considerable emphasis on improving communications infrastructure throughout the country. This continues to be a development priority. However, the health sector has not yet taken full advantage of these channels. Currently, very limited health messages are communicated via the national radio and television network. A recent evaluation of health education activities in Guinea suggested that the messages were poorly developed (Dr. Fathi Zaki Botros, Project de Sante Rurale-PSR (Composante d'education pour la Sante IEC), MOHSA/WB July, 1986).

On the other hand, the recent population participation in the JVC reflected the ability of the MOHSA to undertake successful health education/communications campaigns in coordination with other sectors. The Ministries of Interior and Decentralization, Information and Culture, Plan and Cooperation, Defense, and Education were all actively involved. Several indigenous NGO's were very active in the campaign motivation as well. The Armed Forces provided logistic support and local administrative authorities (Prefets, Sous Prefets and Conseils de Quartier) were key to community participation.

4.9.2 CCCD Support to Health Education/Communications

The CCCD has undertaken few support activities in the Education, Information, Communications (EIC) area. This was a deliberate choice based on the existing weak infrastructure and the intentions of other donors.

The project has, however, assisted the MOHSA to undertake assessment activities that establish baseline KAP in Conakry and provide information that will guide the development of health education strategies. Three population-based surveys, two of which assess maternal health-related KAP have been undertaken since the CCCD project began. Similarly, more qualitative assessments of attitudes related to diarrheal disease were outlined by the last two consultants working on the CDD component and are scheduled to begin this summer.

4.9.3 Conclusions

The KAP survey undertaken in May, June 1986 was the most extensive effort to provide useful baseline information for EIC planning purposes. Although the final analysis of this survey is not yet completed, certain information currently available is very useful for EIC planning. Of primary importance is the finding that neither the population served nor health care providers used ORT as an approach to diarrheal disease management.

Secondly, most mothers obtained and treated their children with chloroquin when they diagnosed their children to be suffering an episode of malaria. But neither mothers nor health care personnel used correct dosages. Health care providers used injectable quinine more often than indicated. Chemoprophylaxis during pregnancy was neither recommended nor appropriately followed by the majority of mothers during their most recent pregnancy.

Other important information learned included the high rate of media exposure that most women reported (60% and 46% of the mothers reported hearing health education spots on the radio and television respectively). In addition, the vast majority of women reportedly visited a health facility during their last pregnancy. In Conakry 90% of the women reported visiting an MCH center for prenatal care and a similar percentage delivered their last child in a maternity.

The last immunization survey undertaken in Conakry included questions that address maternal attitudes towards immunizations. These questions will provide important information about reasons mothers do not take their children for vaccination. Unfortunately these data have not yet been analyzed.

Interpersonal education techniques are used in the ORT demonstration centers to teach mothers about home treatment of diarrhea and dehydration. During field visits, the team found the education component to be the weakest of the ORT activities. Messages given to mothers about the use of SSS were not appropriate. That is, personnel were teaching and encouraging SSS use at home. Another problem was the lack of one on one counselling and inappropriate scheduling of group seances. Health workers also needed training in the area of health education techniques.

The team felt that the project was somewhat behind schedule in development of educational strategies for the three CCCD components.

4.9.4 Recommendations

a. An education strategy be developed immediately for maintaining immunization coverage in Conakry. The CCCD should provide necessary technical assistance and supplies for the undertaking of this activity.

b. Education/communications strategies for each of the 3 project components should be developed and tested in the pilot areas. Technical assistance will be required to develop strategies and materials.

5.0 Training/Continuing Education

5.1. Background

There is a significant health infrastructure, and trained health personnel are already in place. There are adequate numbers of health professionals (i.e. doctors, nurses and health technicians educated and trained in Guinea). However, the quality is variable and in urgent need of upgrading and training.

Apart from training needs there are also important logistic, technical and management requirements. These activities include repair of health facilities which are often inadequate, lacking in equipment and medical supplies. Measures are under way to solve some of the logistical and supply problems in a phased manner working in specific geographical areas assigned to donors by the government. These activities include repair of health facilities, provision of equipment, medicine and medical supplies obtained from donors such as the World Bank, the African Development Bank (BAD), UNICEF, USAID/CCCD, PVOs and other groups. However, these material inputs will only be effective if adequate training in their utilization and care is furnished in a timely and consistent manner.

The CCCD project has provided training for 351 Guineans, out of a life of project goal of 500. Initially, in May 1986, fifteen senior level health officials were trained. This training provided a basis for establishing a national nucleus group of trainers which could be made available as needed. This seminar was followed by a 10 day mid level managers course for Health Agents in the Telimele prefecture also attended by similar personnel from the Kindia prefecture. In addition, ten health professionals were trained in ORT practices in Conakry. Another important training activity was for the Joint Vaccination Campaign (JVC) in Conakry (11/86 to 1/87) which was very successful. Some 300 health agents were trained in vaccination strategy, techniques, implementation, record keeping and follow-up. Additional training is planned in CCCD activities through the balance of the calendar year 1987.

UNICEF, WHO, World Bank, and the African Development Bank (BAD), Private Voluntary Agencies such as Medicins sans Frontieres, and GTZ (Germany), have also been training Guinean health personnel in their assigned geographical areas emphasizing child survival activities (EPI, CDD, Malaria, HIS and HE, etc.). Increased training is planned in these areas over the next several years.

5.2. Conclusions

Increased training that is well coordinated, and focused is a high priority under the proposed CCCD project extension. Training in the various areas of CCCD concern (CDD, EPI, Malaria Control, HIS, and HE) will be intensified. With the various donors doing training in primary health care (stressing assistance to mothers and children) in their specifically assigned geographical areas. There is a great need to assure that this training is well coordinated and carried out within the framework of the government's national primary health care program which gives priority to EPI, CDD, Malaria Control programs and maternal child health programs. MOHSA's policy is that all training will be done within the framework of the government's national EPI/PHC, and Malaria programs, and its CDD program when the plan is done.

The government and donors will have to work hard together to assure that the training procedures, accountability, quality control, monitoring and evaluation are compatible. Since health

ministry personnel are rotated from time to time, it is vital that they be able to utilize their training effectively no matter which donor is active in the new area to which they are transferred.

Flexibility will have to be maintained as the government and donors work out this common approach, standardizing where possible. It is important to realize that conditions will vary between the urban and rural areas as well as between prefectures. Given the importance and complexity of this national training effort, there may well be a need for a training unit in the MOHSA which can help coordinate, monitor and evaluate the various training programs and help work out solutions to training needs as they arise.

5.3 Recommendations:

a. Development by the MOHSA of a multi-year national training plan and budget, including retraining and refresher courses for its primary health care program in close cooperation with other government departments and bilateral and multilateral donors, public and private.

b. Appointment of a national training coordinator who would be charged with the responsibility for developing the national training program and assuring proper coordination with donors in order to maintain consistent, compatible, training standards, quality, etc. within the framework of its priority programs in EPI, CDD, Malaria, and maternal child health.

c. Exploration of the need for a two or three person national training unit to assist the national coordinator in carrying out the mandate described in two above.

d. Special efforts should be made by the donors to facilitate the governments efforts to coordinate and assure compatibility of training so that when health personnel are transferred to other geographical areas they will be equally effective.

6.0 Applied Research

6.1 Current status

Due to the unusual history of Guinea during the last 25 years, the health problems of the country and their solutions are poorly understood. Although malaria and diarrheal disease (including cholera) appear to be highly endemic and the rate of low birthweight high, acute malnutrition rates among young children seem to be very low. Due to the poor environmental conditions it is suspected that Conakry appears to have a different pattern of health problems than are found in most rural areas. For example, last year 108 cases of neonatal tetanus were reported in Conakry largely among women delivering in maternities.

Unlike many African countries in the region, Guinea has a relatively large number of physicians, particularly in Conakry. These professionals could serve as a valuable resource for undertaking special studies if practical applied research training is provided.

6.2 Recommendation

The project should strengthen the capacity of the MOHSA to carry out applied research. A steering committee should be formed, priority areas for research should be identified, and training in research methods should be provided as a part of the project assistance.

7.0 Financing and Costs

7.1 General Situation / Resource Constraints

The government is in very difficult financial straits, and local currency financing is limited with priority going to support economic restructuring activities. Considerable belt tightening has already been necessary as rice prices have quadrupled and gasoline prices have gone up by at least as much. Therefore, preventive health care programs need to be run as efficiently and effectively as possible with participation from those benefiting from the health services in paying for them.

Some observers the team talked to noted the political value to the government in its provision of effective primary health care/ child survival services for mothers and children during a time of stringent economic measures. The reaction of the population to the Joint Vaccination Campaign for Conakry was cited as having a positive effect as the people realized in concrete terms the value of the government efforts to help it save lives of mothers and children.

The government's CCCD contribution comes from counterpart funds generated by PL 480 food imports and other counterpart generating economic support programs financed by USAID. The fact that the government has already included local currency financing for the CCCD project over the next several years in its public investment budget (line item 4105, document 29) is a very positive sign of the priority the government gives to the CCCD project.

7.2 Sustainability and Government Self Help Efforts

The GOG continues to show great commitment in its efforts to charge for primary health care services. While the World Bank and UNICEF have been playing a major role in assisting the government in this area, the CCCD project has also been helpful. CCCD furnished a very experienced health economist in early 1987 who outlined several self financing options open to the government and their relative merits. Dr. Marty Makinen and Steven Block were brought out in December 1986 under the Resources for Child Health Project (REACH), and prepared a study entitled "Pricing for Cost Recovery in Primary Health Care in Guinea." The evaluation team was told by the MOHSA that this analysis was very helpful, and helped form the basis for the selection of three pilot self-help activities which will be undertaken in the fall under MOHSA's EPI/PHC program.

7.3 CCCD Project Financing

7.3.1 Current Status

Generally speaking the project finances are satisfactory. Table 5 shows that to date, 22 months into the project, $514,795 (58%) has been committed (sub obligated) out of a total dollar project funding of $885,000. $370,205 remain to be committed (sub obligated). Expenditure rate is very low ($32,885 or about 4%). However expenditures should increase significantly within the next 60 to 90 days as PIO commodities are shipped and local construction expenditures incurred. While this represents a delay in terms of the Project Agreement -- 30 month total life of project, this rate of sub obligation is about average for other CCCD bilateral projects at this stage of development.

Table 5

CCCD/Guinea Obligations/Subobligations
(As of 6/1/87)

	Item	Pro Ag 5/22/85	Pro Ag. Revised 6/1/87	Commit* 6/1/87	Expen 6/1/87	Balance Uncommit 6/1/87
		$	$	$	$	$
1.	Vehicle	242,000	242,000	102,910		139,090
2.	Cold Chaine	45,000	85,000	71,000		14,000
3.	Office Equip & Supplies	26,000	46,000	31,885	31,885	14,115
4.	Vaccination Supplies	8,000	51,000	21,000		30,000
5.	Hea Educ Materials	23,000	23,000			23,000
6.	Training Materials	5,000	5,000			5,000
7.	Operat. Research	6,000	6,000			6,000
8.	ORS Packets	210,000	210,000	210,000		0
9.	Chloroquine	260,000	160,000	63,000		97,000
10.	Gasoline Spares	60,000	17,000			17,000
11.	Lab/Health Centers	0	40,000	15,000		25,000
	Total	885,000	885,000	514,795	31,885	370,205

Sources: ProAgs, PIO/Cs, CCCD/Guinea, REDSO/WCA printouts.

Regarding the local currency GOG counterpart contribution, the amounts provided have been more than satisfactory. The total GOG cash contribution as of May 1987 is the Guinean Franc equivalent of $354,844 or 87% more than the $190,000 equivalent in cash required under the Project Agreement. The value of other inputs from the government for CCCD activities in the form of office space, utilities, up-country housing, salaries and travel of MOH personnel, additional project personnel, in country training, etc. were not costed by the evaluation team. Table 6 indicates the local currency expenditures as of May 1987.

Table 6

MINISTRY OF HEALTH
AND SOCIAL AFFAIRS

NATIONAL DIRECTION
OF PREVENTIVE SERVICES

PROJECT C.C.C.D.

TABLE OF LOCAL CURRENCY EXPENDITURES - C.C.C.D.

JUNE 1985 - MAY 1987

NoD	LINE ITEM	1985	1986	1987	TOTAL
1.	OFFICE RENOVATION, MATERIALS	511.415	1.296.185	699.025	2.506.625
2.	SALARIES, IDEMNITIES	381.990	3.141.040	2.190.850	5.713.880
3.	FUEL, MAINTENANCE	90.000	466.000	5.869.460	6.425.460
	TOTAL	983.405	4.903.225	8.759.335	14.645.965

SUM : FOURTEEN MILLION SIX HUNDRED FORTY FIVE THOUSAND NINE HUNDRED AND SIXTY FIVE GUINEAN FRANCS

$1.00 U.S. = 25.056 until 1/86
$1.00 U.S. = 340 as of 12/86
$1.00 U.S. = 410 as of 3/87
$1.00 U.S. = 425 as of 5/31/87

However, the CCCD project has been delayed in the past, given the severe difficulties encountered in obtaining timely release of local currency funds to carry out CCCD project activities. While approval by the Ministry of Plan has been prompt, substantial delays have occurred in the processing by the Ministry of Finance.

7.3.2 Future Plans

While no detailed budget was prepared for the five year extension proposed for the project, discussions with the CCCD national coordinator and the CDC Technical Officer lead to a rough order of magnitude of $2,500,000 for the bilateral project with the usual CCCD support for the TO being financed from the CCCD regional budget. The value of the GOG contribution was estimated at two thirds of the dollar cost, but this was not costed out. It is expected that the CCCD National Coordinator assisted by the TO should be able to refine these rough orders of magnitude.

7.4 Conclusions

The government has shown its commitment to the CCCD project in the personnel, facilities and funds made available to the project. Its plans for pilot efforts for self-financing have strong support from the World Bank, the African Development Bank, and the CCCD project. The pilot activities planned for the fall should move this element of the project ahead. The team feels that any self-help plan(s) finally adopted should contain a provision for some percentage of the funds generated at the rural health facility level to remain there at the disposition of the Health Center or other health facility.

Regarding the difficulties encountered in obtaining release of the GOG's local currency (counterpart) contribution in a timely manner, the Ministry of Plan's Director for Public Investments assured the team that the government was well on its way to finding a workable solution to this problem. Since this problem is not yet fully resolved, the team has suggested that its resolution be made a condition precedent for any extension of the CCCD project.

7.5 Recommendations

a. The MOHSA, as part of its effort to decentralize primary health care, should consider favorably the possibility of leaving a substantial percentage of receipts earned by the peripheral facilities with these units, or at least at the Prefectural level under the control of the Director of Prefectoral Public Health (DPS).

b. If the MOHSA agrees to leave some of the funds generated from sales of CCCD project commodities (e.g. chloroquine tablets and ORS packets) at the health center or at the Prefectoral level, the CCCD project agreement provision (5.4) calling for these funds to be deposited in a separate escrow bank account will have to be amended accordingly.

c. No U.S. dollar funds should be released under the proposed extension (e.g. by including a condition precedent in the amendment to the Project Agreement) until an advance of at least 50% of the GOG's annual contribution (from PL480 counterpart) has been deposited in a special project bank account.

d. It is suggested that a fund release mechanism be set up along the lines agreed to under the recent GOG/World Bank loan. The arrangements might work as follows:

- Withdrawals from this account would be made on approval by the Ministry to Plan of an annual work plan submitted by the MOHSA and supported by a detailed quarterly budget. (The Ministry of Finance would be informed of the action taken as appropriate).

- Subsequent quarterly requests for the balance of the year would be justified by submitting expenditure receipts from the previous quarter, along with a quarterly budget for the next quarter.

- On completion of each year new annual plans would be submitted for the next year.

- Specific withdrawals would be carried out by checks drawn against the project bank account prepared by the National CCCD Coordinator (initialed by the CCCD Technical Officer (TO), and the MOH DG for Administration and Finance (DAF), and signed by the Minister of Health and Social Affairs (or the Chef de Cabinet in the Minister's absence).

The above procedure should permit release of project funds with a minimum delay while assuring adequate GOG control of releases and expenditures.

8.0 Program Monitoring/Evaluation

8.1 Current Status

Only limited capacity exists in the MOHSA at the present time to carry out assessments, monitoring and evaluation on a consistent and regular basis. Substantial training in these techniques is required to assure that these functions are carried out properly.

8.2 Conclusions

Even with current supervisory resources, steps can be taken to make their work more effective -- for example, by developing supervisory check lists, issuing technical notes detailing specific protocols to be followed which can then be monitored, scheduling more rigorously supervisory visits and seeing that they are adhered to. As indicated above, monitoring can be made more effective by providing adequate training in the specific areas of CCCD and PHC emphasis.

8.3. Recommendations

a. The CCCD project should adopt a more systematic approach to needs assessment, monitoring and evaluation of project activities (e.g. providing supervisors with appropriate check lists for monitoring, development of specific evaluation criteria, preparation of advance scheduling, and training supervisors in the use of these management skills).

b. This training should be carried out within the framework of the governments EPI/Primary Health Care (PEV/SSP) program so that when the assessment, monitoring and evaluation techniques have been demonstrated, revised and installed in the CCCD pilot areas they can be applied nationally.

ANNEX I

SCOPE OF WORK
FOR SECOND YEAR EXTERNAL EVALUATION

1. OBJECTIVES OF EVALUATION

a) To evaluate ASCI-CCCD activities in three countries through systematic collection and analysis of data on ASCI-CCCD management and operations at the central, regional and peripheral levels.

b) To measure the extent to which ASCI-CCCD activities have been integrated into the existing primary health care structure.

c) To offer a series of recommendations to impress the expansion and delivery of ASCI-CCCD services (including training, health education and health information system developments) and to accelerate their present resource constraints.

2. METHODS OF EVALUATION

Two teams comprised of epidemiologists, health educators and health economists, will be fielded to conduct an evaluation of the CCCD project. The team will work in the Francophone countries of Guinea and Ivory Coast.

a) Study relevant reference documents at central and regional levels.

b) Visit selected service delivery units and other health institutions in rural and urban areas of a representative number of regions of the countries.

c) Review survey data.

d) Interview relevant project implementing agents.

3. EVALUATION COMPONENTS

Project planning administration and management:

a) Review the development of plans of operation and the adequacy of those plans to govern and support field activities.

b) Describe and review the capacity of government management and administrative structures to manage and administer a program incorporating immunization, ORT and malaria treatment.

c) Review the AID and CDC administration and support to the project and adequacy of procedures established for project support.

d) Review country project executive management structure and functions with particular emphasis on relevant CCCD project and executive committees, as well as donor coordination activities.

4. PROJECT SUPPORT

a) Review epidemiologic and health services statistics in order to determine if the CCCD project has exerted an influence on lowering morbidity or increasing the availability of quality of primary health care services in the respective country.

b) Review the adequacy of information systems current and planned to provide data necessary to determine project impact.

5. PROGRAM OPERATION

Review the delivery system (current and proposed) to be utilized to deliver CCCD services, (supervision, logistics and supply, communications, personnel coverage, control of funds and supplies).

6. EPI PROGRAM COMPONENTS

a) Review immunization policies and schedules.

b) Review coverage of immunizations and review immunization practices with special emphasis on sterilization of equipment, immunization of ill children and frequency of immunization clinics.

7. ORT PROGRAM COMPONENTS

a) Review national ORT policy.

b) Review population coverage of ORT.

c) Review ORT practices with special emphasis on continuing use of I.V., adequacy and frequency of use of ORS and adequacy of public information regarding ORS.

8. MALARIA

a) Review national malaria treatment and antimalarial chemoprophylaxis policies.

b) Review population coverage of malaria treatments; and

c) Review salaries treatment and chemoprophylaxis practices with particular emphasis on availability of chloroquine, adherence to national policies, and frequency of antimalarial chemoprophylaxis in pregnant women.

9. TRAINING

a) Review types and magnitude of training provided.

b) Review training materials developed.

c) Review numbers and types of personnel trained and evaluation of their performance; and

d) Review training plan for remainder of project.

10. HEALTH EDUCATION

a) Review the current health education structure, plan of execution and activities to date.

b) Review staffing and institutional capacity for delivering health education services, and

c) Review the adequacy of technical assistance provided for support to health education activities.

11. FINANCING

a) Review sources and amount of funding for current program activities.

b) Review governments normal budget, and auto-financing.

c) Review USAID bilateral funds, regional funds, and counterpart funds.

d) Review future financing of recurrent cost estimates, and country project ability to finance recurrent costs in 1987, 88 and 89 from government; and

e) Review country fee-for service systems.

ANNEX II

LIST OF CONTACTS

MINISTRY OF HEALTH AND SOCIAL AFFAIRS

Dr. Mamadou Pathe Diallo -	Minister
Dr. Namory Keita -	Director General
Dr. Mohamed Sylla -	Cabinet Director
Dr. Mohamed Kader -	Advisor to Minister
Dr. Morissanda Kouyate -	Director for External Relations
Dr. Hadiatou Sylla -	Advisor to Minister
Dr. Yaya Diallo -	National Director of Preventive Services
Dr. Kandjoura Drame -	Associate Director of Preventive Services and National Director of Primary Health Care
Dr. Mamadi Conde	National Director for MCH
Dr. Boubacar Deing -	National Director of E.P.I.
Dr. Moussa Keita -	Program Director of Malaria
Dr. Fassou Haba -	National Director of Health Education
Dr. Souleymane Diallo -	Co-ordinator of C.C.C.D.
Dr. Malifa Balde -	Prefectoral Director of Health Services, Conakry I.
Dr. Mahi Barry -	Prefectoral Director of Health Services, Conakry II.
Dr. Faly Keita -	Prefectoral Director of Health Services, Conakry III.
Dr. Sekou Donzo -	Director of Finance
Dr. Antoinette Hellal -	Physician, Preventive Services
Dr. Hady Diallo -	Physician, Assistant E.P.I.
Dr. Alice Dore -	Physician in charge of Matam MCH Center, Conakry III
Mme Fatoumata Camara -	Biologist, Malaria Program
Mr. Souleymane Souare -	Technician/Supervisor, C.C.C.D.
Mr. Saikou Diallo -	Technician/Supervisor, C.C.C.D.
Mr. Kassia Tolnaud -	Technician/Supervisor, C.C.C.D.
Mr. Mamadou Gare -	Accountant, C.C.C.D.
Mr. Jean Robert Tolnaud -	Statistician, Division of Planning and Statistics
Mr. Mamadou Diolde Balde -	Economist, Health Projects

DONKA HOSPITAL, CONAKRY

Dr. Saliou Diallo -	Associate Director
Dr. Deinabou Kasse -	Chief of Pediatrics
Dr. Mariame Hann -	Physician in charge of ORT Outpatient Center
Dr. Younoussa Diallo -	Physician in charge of ORT Inpatient Center

MINISTRY OF PLAN AND CO-OPERATION

Mr. Kabine Komara -	Director of Public Investments
Dr. Oumar Kouyate -	Director of Social Affairs Division
Mr. Bano Diallo -	Chief of Health and Social Affairs Sector
Mme Kanny -	Assistant, Social Affairs Division

MINISTRY OF ECONOMY AND FINANCE

Mr. Abdoulaye Barry -	Director General of Budget
Mr. Fode Mohamed Diaby -	Deputy Director of Budget
Mr. Ahamadou Lamarana Bah -	Director of Investments and Budget

KINDIA

Dr. Ibrahima Dabo -	Prefectoral Director of Public Health Services
Dr. Richard Dramou -	Chief of Pediatrics and Director of ORT Center
Dr. Mamadou Malal Diallo	Chief of MCH Center
Capt. Tidjiane Sylla -	Prefect of Kindia
Mr. Diallo -	Secretary General of Administrative Affairs
Dr. Diallo -	Veterinarian, Institute of Applied Biological Research
Dr. Sou -	Division of Vaccines, IABR

TELEMELE

Dr. Ahmadou Balde -	Prefectoral Director of Public . Health Services
Dr. Mamdou Mara -	Hospital Director
Dr. Sekou Keita -	Director of Maternity
Capt. Mamadou Halimou Balde -	Prefet

INTERNATIONAL ORGANIZATIONS

World Health Organization

Dr. Celestin Gantin -	Resident Administrator
Dr. Mamadou Cisse -	Public Health Physician

U.N.I.C.E.F.

Mr. Ian Hopwood -	Representative
Maria Calivis -	Advisor E.P.I.
Boubacar Saibou -	Special Programs

World Bank - Guinea

Mr. Magassouba -	Project Director (Health Sector)
Irene Whalen Hopwood	Assistant for Operations, Resident World Bank Mission

African Development Bank

Dr. Francis Capet -	Epidemiologist for Health Statistics Program

P.V.O.'S

Medecins Sans Frontieres

Mr. Sylvain Charbonneau -	Administrator

USAID/GUINEA

Mr. Mark Wentling -	Director
Mr. Craig Noren -	Program Development Officer
Teddy Wood-Stervinou -	Project Officer
Mr. Robert Hellyer -	Agricultural Project Officer
Dianna Gerski -	Technical Officer, C.C.C.D.

AID/WASHINGTON

Wendy Roseberry -	C.C.C.D. Project Director

CDC/ATLANTA

Mr. Andy Agle -	C.C.C.D. Project Co-ordinator, IHPO
Mr. Jean Roy -	Deputy Co-ordinator
Dr. Ron Waldman -	Staff Epidemiologist, CDD Program
Dr. Joel Bremen -	Director for IHPO Malaria Branch
Mr. Russell Charter -	Public Health Advisor

ANNEX III

LIST OF DOCUMENTS CONSULTED

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15. Russ Charter, CDC Atlanta, Wendy Roseberry, Aid-Washington, "Nine Month CCCD Project Review" April 1986

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ANNEX IV

QUARTERLY REPORT OF DIARRHEA CONTROL

LOCATION: Hospital of Kindia YEAR: 1987

ADDRESS: ORT Section, Hospital Pediatrics

PERIOD: January 1st - May 31st

AGE	FROM 0 TO 1		FROM 1 TO 4		5 AND MORE		ISSUE	
PLAN	M	F	M	F	M	F	RECOVERED	DIED
A	50	72	70	70	10	8	280	0
B	46	32	69	61	8	14	230	0
C	0	0	8	5	3	2	13	5
TOTAL	96	104	147	136	21	24	523	5

NUMBER OF ORT PACKETS USED: 869

INTRAVENOUS REHYDRATATION: 18000ml

THE OFFICER OF SERVICES
Dr. Richard DRAMOU

THE HEALTH AGENT
Lancine CAMARA

Kindia, June 1st, 1987

ANNEX V

CONTRIBUTION OF THE GOVERNMENT OF GUINEA (GOG) TO THE CCCD PROJECT AS OF MAY/1987

1. The Project Agreement signed June 22, 1987 (30 months life of project) provides for:

   - U.S. contribution: $885,000
   - GOG Financial Inputs: Contribution directed exclusively to the implementation of the CCCD project (U.S. $ equivalent)* of $650,000 of which $190,000 U.S. will be from PL 480 counterpart funds to cover local currency costs. The remaining amount will be "in-kind" or funded from the regular MOH budget.

2. The MOH contribution due in Francs Guineens (FG): $190,000 x 25.056 = 4,760,640 FG

Amount made available and expended as of 12/85:		983,405 FG
Amount made available as of 12/85 but not expended:		3,265,495 FG
A. Total made available by GOG as of 12/85:	4,248,500 FG	($169,576.15)
Total amount due from Government under rate of 25.056 = $1.00:	4,760,640 FG	($190,000.00)
Less amount made available 12/85:	(-) 4,248,500 FG	($169,576.15)
Remaining amount due as of 12/85:	511,740 FG	($20,423.85)
GOG contribution 12/86:	2,040,000 FG	($6,000) (340 FG = $1.00)
GOG contribution 3/87:	73,500,000 FG	($179,268.29) (410 FG = $1.00)
B. Total Contribution 1986/87:	75,540,000 FG	($185,268.29)
A. GOG Contribution 12/85:		$169,576.15
B. GOG Contribution 1986/87:		$185,268.29
Total GOG cash contribution as of May 1987:		$354,844.44

*Official rates: $1.00 U.S. = 25.056 until 1/86
" " " = 340 as of 12/86
" " " = 410 as of 3/87

3. COMMENT: As of May 1987 the GOG cash contribution of $354,844.44 is 87% more than the $190,000 required by the project agreement. Other inputs from the government for CCCD activities in the form of office space, utilities, up-country housing, salaries and travel of MOH personnel., additional project personnel, in-country training, etc. were not costed by the evaluation team. However, in the judgment of the team they already amount to substantially more than the $295,155.56 remaining to meet the total estimated GOG financial input of $650,000 during the life of project which ends on December 21, 1987. Therefore, the GOG has clearly met the minimal requirements of its financial contribution under the CCCD project. However, the efforts to obtain the above-mentioned funds were long and painful, and sometimes delayed execution of CCCD project activities in a timely fashion.

4. Project Extension -- Condition Precedent. Should the project be extended, prior agreement on a viable solution to this problem is essential (e.g. a condition precedent to the release of U.S. dollars). There appears to be no statutory reason why there should be extraordinary delays in the release of funds promised by the GOG in the signing of the Project Agreement once they have been justified by the Ministry of Health.

One solution, patterned after arrangements agreed by the GOG with the World Bank which might be considered, is as follows:

a. Once the GOG local currency contribution is agreed and the Project Agreement signed by the two governments, no U.S. dollars would be released until the GOG had deposited the agreed amount in a special bank account opened for the CCCD project.

b. The two governments could further agree that the local currency contribution would be deposited by the Ministry of Finance (on request by the Ministry of Plan) in the special CCCD project bank account by tranche i.e. 50% initially with the second tranche deposited after 80% of the funds for the first tranche had been expended and justified with receipts.

c. Releases of local currency for project purposes from this special bank account for CCCD project purposes would only be made after a written/request/justification was prepared by the Project Director (CCCD Coordinator), cleared by TO and the MOH Director of Administration and Budget, and approved by the Chef due Cabinet of the Ministry of Health.

d. Once the above MOH approvals were obtained, the request would be forwarded to the Ministry of Finance for processing.

e. The Ministry of Finance would authorize release of the funds from the special bank account immediately on receipt of the approved documentation from MOH.

f. Once 80% of the first tranche of funds released was expended, the MOH would submit receipts justifying the 80% expenditures from the first tranche, and request the second tranche following the MOH approval process described in point #3 above.

COMMENT: The team feels that this procedure (or a similar one) will eliminate current inordinate delays, while preserving MOH and Ministry of Finance controls needed to assure that al CCCD project funds expended are properly accounted for.

ANNEX VI

LISTING OF REPORT RECOMMENDATIONS BY SUBJECT

		Page
4.3	Planning and Strategy Recommendations	
a.	The CCCD project should be extended for five years beginning January 1, 1988 and ending on December 31, 1993 to assist the GOG in meeting its primary health care (PHC) objectives which give a high priority to the control of childhood communicable diseases.	17
b.	The CCCD project strategy should be reoriented in keeping the recent developments in the health sector to focus on the strengthening of strong national programs in the areas of control of diarrheal disease (CDD) and malaria.	17
c.	Planning and execution of these activities should take into account the markedly different strategies needed for work in the urban areas like Conakry, and rural areas.	17
d.	The project should continue to support a phased approach to the implementation of the national programs including CDD, Malaria and EPI.	17
e.	Activities in the CCCD designated geographic areas should be enhanced so that these areas can become demonstration sites. Any additional geographic coverage should be carefully integrated into the national primary health care initiative that is scheduled to begin in October, 1987.	17
f.	If the project extension is approved, CDC/Atlanta and AID/Washington should send a team of two persons to Guinea for three weeks in late summer or early fall to prepare the detailed plans and budget for the major components of the extension as well as drafting an appropriate amendment to the existing project agreement.	17
g.	The project agreement extension should include a condition precedent (CP) that no U. S. dollar funds will be dispersed prior to the assignment of a national coordinator for the Control of Diarrheal Diseases (CDD).	17

4.4 Management and Administration

a. Technical assistance should be substantially increased to meet immediate needs. Short term consultants should be provided in several areas most notably in computer applications, data processing and analysis, and in the implementation of CDD programs. 20

b. Longer term technical assistance is also needed in the areas of epidemiology, data processing and analysis, and research methods. (This need was spontaneously voiced by most government and donor representatives contacted during the evaluation). 20

c. Qualifications of the CCCD Technical Officer appointed for the extension of the project should include epidemiology, knowledge of health information systems, organizing training programs, plus substantial experience working at the national level. Complete professional fluency in French is essential. 20

d. Supervisory and administrative support of the CCCD project should be increased substantially. Supervisory visits from CDC to project sites should be more frequent until project management mechanisms are satisfactory. Additional training should be provided CCCD personnel and MOHSA personnel supervising EPI, CDD and malaria programs. 20

e. The CCCD project should follow-up earlier plans to hire a full-time administrative assistant to assure that project activities (including USAID procedures) are properly documented and recorded. This will help free up the national CCCD Project Coordinator and TO to concentrate more heavily on policy and technical issues. 20

f. AID/Washington should take action to expedite the commodities and equipment ordered last fall. Their absence is holding up important CCCD project activities. They should arrive no later than August 30, 1987. 20

4.5 Health Information Systems (HIS)

a. Training in data processing and analysis and computer applications should be provided to the CCCD coordinator and key governmental technicians as soon as possible. 23

b. Analysis of existing data should be undertaken/completed as soon as possible. All methodologies should be well documented. This might be expedited by a short term consultant who could also provide on site training in computer applications and data analysis as well. A consultancy of at least 3 months is recommended. 23

c. The data collection, analysis and reporting systems in project areas should be assessed and standardized as soon as possible. 23

d. HMIS supervision should be included as part of the CCCD technicians' activities. 23

e. The World Bank LSMS coordinator should be contacted by CDC/Atlanta as soon as possible so that a collaborative relationship can be established with this program. 24

4.6 Expanded Program of Immunization (EPI)

a. The CCCD project maintain an advisory role in the national EPI program assisting in the development of national plans, training protocols,supervisory protocols,etc. Active field involvement and the provision of commodities should remain limited to geographic areas already designated as project areas. The team feels that more emphasis should be placed on treating project areas as "pilot zones" where strategies for EPI are tested and protocols for implementation, training, management, supervision, evaluation and community motivation are developed. 27

b. The CCCD project assist the government to develop detailed operational plans for maintaining vaccination coverage in Conakry. 28

c. A systemmatic assessment of vaccination practices should be undertaken in all project areas and that remedial training programs be conducted. 28

d. A more systemmatic supervisory system be developed in the project areas to assure maintenance of the cold chain, proper sterilization procedures and proper vaccination practices. 28

e. The target population should be protected against tetanus and coverage be expanded to include all women of child-bearing age. 28

4.7 Control of Diarrheal Diseases (CDD)

a. A national coordinator and assistant coordinator should be named to head up a national diarrheal disease program as soon as possible (MOHSA). 31

b. A national diarrheal disease control program plan and budget should be developed and adopted (MOHSA/CCCD) 31

c. Immediate action should be taken to prepare the country for a possible cholera epidemic including effective surveillance and adequate supplies in areas prone to epidemics (MOHSA/CCCD). 31

d. Short term technical assistance should be provided to assist in the refinement of the ORT demonstration centers and development of the national plan (CDC/Atlanta). 31

e. Immediate action should be taken to assure an adequate supply of ORT packets to ORT centers (MOHSA). 32

4.8 Malaria Control

a. The CCCD project should assist the MOHSA to develop a training program for mid and peripheral level health workers in the treatment of malaria and the use of prophylaxis during pregnancy. The training program should include a built in evaluation. A health education strategy should also be developed. 33

b. The project should assist the government in developing control and monitoring systems for malaria control activities. This is especially immediate for the project chloroquin and laboratory supplies. 33

c. A supervisory visit by the CDC malaria supervisor should be made as soon as project laboratory supplies have arrived. The objectives of the consultancy are to finalize protocols for drug sensitivity surveillance, review laboratory testing and control procedures, assist in the development of protocols for applied research activities, and assess needs for applied research training. 33

4.9 Health Education [communications] (HE)

a. An education strategy be developed immediately for maintaining immunization coverage in Conakry. The CCCD should provide necessary technical assistance and supplies for the undertaking of this activity. 35

b. Education/communications strategies for each of the 3 project components should be developed and tested in the pilot areas. Technical assistance will be required to develop strategies and materials. 35

5.0 Training/Continuing Education

a. Development by the MOHSA of a multi year national training plan and budget, including retraining and refresher courses for its primary health care program in close cooperation with other government departments and bilateral and multilateral donors, public and private. 37

b. Appointment of a national training coordinator who would be charged with the responsibility for developing the national training program and assuring proper coordination with donors in order to maintain consistent, compatible, training standards, quality, etc. within the framework of its priority programs in EPI, CDD, Malaria, and maternal child health. 37

c. Exploration of the need for a two or three person national training unit to assist the national coordinator in carrying out the mandate described in two above. 37

d. Special efforts should be made by the donors to facilitate the governments efforts to coordinate and assure compatibility of training so that when health personnel are transferred to other geographical areas they will be equally effective. 37

6.0 Applied Research

The project should strengthen the capacity of the MOHSA to carry out applied research. A steering committee should be formed, priority areas for research should be identified, and training in research methods should be provided ar a part of the project assistance. 38

7.0 Financing and Costs

a. The MOHSA, as part of its effort to decentralize primary health care, should consider favorably the possibility of leaving a substantial percentage of receipts earned by the peripheral facilities with these units, or at least at the Prefectural level under the control of the Director of Prefectoral Public Health (DPS). 42

b. If the MOHSA agrees to leave some of the funds generated from sales of CCCD project commodities (e.g. chloroquine tablets and ORS packets) at the health center or at the Prefectoral level, the CCCD project agreement provision (5.4) calling for these funds to be deposited in a separate escrow bank account will have to be amended accordingly. 42

c. No U.S. dollar funds should be released under the proposed extension (e.g. by including a condition precedent in the amendment to the Project Agreement) until an advance of at least 50% of the GOG's annual contribution (from PL480 counterpart) has been deposited in a special project bank account. 42

d. It is suggested that a fund release mechanism be set up along the lines agreed to under the recent GOG/World Bank loan. The arrangements might work as follows: 42

- Withdrawals from this account would be made on approval by the Ministry to Plan of an annual work plan submitted by the MOHSA and supported by a detailed quarterly budget. (The Ministry of Finance would be informed of the action taken as appropriate). 42

- Subsequent quarterly requests for the balance of the year would be justified by submitting expenditure receipts from the previous quarter, along with a quarterly budget for the next quarter. 42

- On completion of each year new annual plans would be submitted for the next year. 42

- Specific withdrawals would be carried out by checks drawn against the project bank account prepared by the National CCCD Coordinator (initialed by the CCCD Technical Officer (TO), and the MOH DG for Administration and Finance (DAF), and signed by the Minister of Health and Social Affairs (or the Chef de Cabinet in the Minister's absence). 42

The above procedure should permit release of project funds with a minimum delay while assuring adequate GOG control of releases and expenditures. 43

8.0 Program Monitoring/Evaluation

a. The CCCD project should adopt a more systematic approach to needs assessment, monitoring and evaluation of project activities (e.g. providing supervisors with appropriate check lists for monitoring, development of specific evaluation criteria, preparation of advance scheduling, and training supervisors in the use of these management skills). 44

b. This training should be carried out within the framework of the governments EPI/Primary Health Care (PEV/SSP) program so that when the assessment, monitoring and evaluation techniques have been demonstrated, revised and installed in the CCCD pilot areas they can be applied nationally. 44