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**SUSTAINABILITY ASSESSMENT OF THE
AFRICA CHILD SURVIVAL INITIATIVE
(ACSI) COMBATING CHILDHOOD
COMMUNICABLE DISEASES (CCCD)
PROJECT
GUINEA, 1993**

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	i
TABLE OF CONTENTS	ii
LIST OF TABLES AND FIGURES	iv
GLOSSARY OF TERMS	v
EXECUTIVE SUMMARY	vii
I. INTRODUCTION	1-1
II. BACKGROUND	2-1
A. Important CCCD/Guinea Project Dates	2-2
B. Basic Population and Health Indicators for Guinea	2-2
III. METHODOLOGY	3-1
IV. FINDINGS	4-1
A. Non-Project-Related (External) Factors Affecting Sustainability	4-1
B. Project-Related Factors Affecting Sustainability	4-2
C. Disease Interventions and Support Strategies	4-7
Vaccinations (EPI)	4-7
Diarrheal Disease Control (CDD)	4-11
Malaria	4-13
Training	4-15
Health Education	4-17
Management	4-20
Operations Research	4-23
V. CONCLUSIONS	5-1
VI. LESSONS LEARNED	6-1
VII. RECOMMENDATIONS	7-1
VIII. RECOMMENDATIONS FOR FUTURE SUSTAINABILITY STUDIES	8-1

APPENDICES

Appendix A: Scope of Work

Appendix B: Persons and Places Visited

Appendix C: Documents Reviewed

Appendix D: Detailed Reports Supporting This Study

Appendix E: Map of Guinea

LIST OF TABLES AND FIGURES

	Page
Figure 1: Causes of Morbidity (Estimated) Children Under 5 Years	1-2
Figure 2: Causes of Mortality (Estimated) Children 0-4 Years	1-2
Figure 3: Evolution of Diarrheal Disease Mortality	4-13
Table 1: Sustainability Table	4-8
Table 2: Evolution of Reported Cases of Childhood Diseases	4-9
Table 3: Evolution of Morbidity Rates for Childhood Diseases	4-9

GLOSSARY OF TERMS

ACSI	Africa Child Survival Initiative
AFVP	French Voluntary Association for Progress
A.I.D.	Agency for International Development
BAD	African Development Bank (French)
CCCD	Combating Childhood Communicable Diseases
CDC	Centers for Disease Control and Prevention
CDD	Control of Diarrheal Diseases
DHD	District Health Director
DPS	Directorate Prefectoral de la Sante (same as DHD)
DRM	Directorate of Rural Medicine
ED	Essential Drugs
EPI	Expanded Program on Immunization
GDP	Gross Domestic Product
GOG	Government of Guinea
GTZ	Gesellschaft fur Technische Zusammenarbeit
HD	Hospital Director
HEU	Health Education Unit
HIS	Health Information System
HMIS	Health Management Information System
IDRC	International Development and Research Center
IEC	Information, Education, Communication
IM	Infant Mortality
KAP	Knowledge, Attitude and Practices
LOP	Life of Project
MOHSA	Ministry of Health and Social Affairs
MSF	Medicins Sans Frontiers (Doctors Without Borders)
NGO	Non-governmental Organization

NMCP	National Malaria Control Program
OR	Operations Research
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
OSPR	Office of Studies, Planning, and Research (French BEPR)
PACD	Project Assistance Completion Date
PASA	Participating Agency Service Agreement
PDSS	Health Systems Development Project (World Bank)
PHC	Primary Health Care
PSI	Population Services International
TO	Technical Officer

EXECUTIVE SUMMARY

Sixteen months after the project assistance completion date (PACD) of ACSI-CCCD/Guinea (African Child Survival Initiative -- Combatting Childhood Communicable Diseases), a team of four expatriates and one host-country national conducted a three-week study to determine the sustainability (or the degree of sustainability) of project activities. Sustainability, for the purposes of the study in Guinea, was judged by determining to what degree services and support activities continued after PACD.

The purpose of the project was to improve the health status of children under five years of age by supporting and strengthening Guinea's efforts to prevent and/or treat the most common childhood diseases. The project targeted diarrheal diseases, malaria, and six vaccine preventable diseases -- measles, tetanus, poliomyelitis, pertussis, tuberculosis, and diphtheria. The four strategies selected to support Guinea's objective of reducing infant and childhood mortality were training and supervision, health information systems, health education, and operational research. Infant mortality (IM) at the beginning of the project in 1985 was estimated to be 155 deaths per 1,000 live births. CCCD's objective to reduce IM by 25 percent by the project completion date, though difficult to measure and depending on whose figures are used, was 11 percent shy (133/100 1991 -- OSPR).

The original 30-month project agreement was signed on June 22, 1985, and ended December 31, 1987. Results of a CCCD evaluation in June 1987 were sufficiently positive to prompt a recommendation that the "CCCD project be extended for a period of five (sic) years beginning January 1, 1988, and ending on December 31, 1993." After considerable delay (more than 18 months), the project extension was signed on July 21, 1989, with a PACD date of September 30, 1991.

Though the project ended on a less than favorable note (USAID/Conakry discontinued bilateral funding of CCCD after a financial management review conducted by a private firm substantiated USAID's concerns of financial and material mismanagement of the project), the team's sustainability study of the project found that the number of positive factors contributing to sustainability of project services and support strategies outweighed the negative ones.

Thanks to the national primary health care (PHC) program which provides curative and preventive services, the three CCCD interventions -- vaccinations, diarrheal disease control, and malaria treatment and/or chemoprophylaxis -- are not only being continued but are being expanded annually to increase the target population's access to services.

Though CCCD was not integrated into the PHC program (to the disappointment of many), it collaborated closely with the program. Toward the end of the project, the CCCD-assisted health centers were gradually integrated into the national PHC program. Of the original 48 CCCD-assisted health centers in the Prefectures of Conakry, Kindia, and Téliimélé, approximately half have been

integrated into the national program. Integrated centers provide more comprehensive services because they have an essential drug supply and consequently serve more people than the non-integrated ones; this was true also when the project was operational. However, it should be noted that the project made a substantial contribution to health service sustainability. The CCCD project:

- provided the core of trainers for launching the national PHC program's initial effort in training of trainers,
- provided senior, mid-level, and peripheral PHC training for more than 600 MOHSA personnel,
- helped establish MOHSA policies and plans for immunizations, diarrheal disease control, and malaria treatment/prophylaxis,
- provided experienced members to PHC's technical review committee,
- provided consultants to assist with development of an integrated health information system (substantial technical and financial assistance is still needed for improvement), and
- contributed to the establishment of an integrated and greatly improved (but still struggling) health education service.

Adapting the ACSI-CCCD project Sustainability Strategy criteria and non-project (external) factors influencing sustainability of CCCD activities in Guinea, the team reviewed over 50 indicators to judge the effects of the following criteria:

1. Perceived project effectiveness
2. Integration of project services/activities
3. Host country financing and community participation (fee-for-service)
4. Strong training component
5. Constituency building through mutually respectful negotiations (nationals participating in project design, development, modification, etc.)
6. Ownership (host country's project with AID assistance)
7. External factors: economic, resource, political, socio-cultural, and environmental

Project activities were scored as follows: 0 = not sustainable; 1 = permanent activities but decline in quality; 2 = permanent activities with maintenance of quality; 3 = permanent activities with improved quality. These scores are based on the extent to which important project-related activities were judged to be sustained. Overall scoring of the criteria indicators showed a relatively high degree of sustainability for vaccination services, diarrheal disease control, and malaria treatment.

Support strategies did not fare as well. Though training, health education, and the health management information system will most likely continue to function as long as PHC services are provided, the quality of these activities may erode without expert assistance. Among the support strategies, training requires the least amount of external technical assistance. The fourth support strategy, operational research (OR), never really got off the ground. Meetings were held and an international OR seminar was attended by the head of the OR section of the Office of Studies, Planning, and Research (OSPR). However, no Research Review Committee was established to approve research protocols and no organized, systematic OR, as defined by the CCCD Project, was ever funded. However, this does not exclude future operational research in Guinea. As a matter of fact, the MOHSA is presently discussing the need for OR to improve the quality of the HMIS.

The major external factor influencing sustainability of project services and support strategies is the Government of Guinea's political commitment at the highest levels to primary health care including cost recovery, access to essential drugs, opening of the private sector, and decentralization of services.

However, it would be a mistake to interpret the positive findings in this report as a guarantee that PHC services are secure. Guinea, rebuilding its infrastructure for the past ten years while under the constraints of an imposing structural adjustment program, remains economically vulnerable (double-digit inflation rate) and infrastructurally weak (telecommunications, banking system, roads, etc.). Should, for example, the GOG not be able to fund or find funding sources through UNICEF and other donors for the ten million dollars needed for maintenance and expansion of PHC services during the next five years, the results could be devastating. PHC's resources are already being strained with the integration of the previously CCCD-assisted health centers, especially in Conakry. Due to the heavy consumption of drugs in Conakry, replacement drugs for the rural areas are in jeopardy. If and when the drug supply system (the supporting pillar of PHC) falters, a "meltdown" of the PHC system could result.

Key Lessons Learned

- 1. Political commitment and leadership provided at the highest levels of government authority are indispensable for the success and continuity of health projects and programs. This political will must be proclaimed by the authorities and felt by the public. This is best manifested by the government assuming its role and responsibility for planning, coordinating, and follow-up health services, as well as providing substantial funding.**
- 2. Possessing appropriate management skills specific to one's job assignment is a major factor leading to project success and positively influences project sustainability. USAID/Conakry seldom, if ever, had an experienced health project officer to manage the project; and CCCD/Guinea never had a project coordinator or technical officer (TO) experienced in USAID administration (the TO learned by trail and error). As a result, and as documented in the three external CCCD/Guinea evaluations, CCCD project management suffered.**
- 3. Sustainability must be considered by all concerned at the very conception and throughout the length of a project. At conception one must ascertain not only the present but the future financial and material resource needs and the durability of those resources.**
- 4. Development of support structures such as OSPR (Office of Studies, Planning, and Research) must keep pace with the development of projects or programs such as CCCD or the National Primary Health Care program to better assure their sustainability. OSPR, charged with providing training, research, and statistical support to health projects/programs, does not demonstrate the same dynamic force or aggressiveness as do the programs. This may be a problem of its position in the health structure hierarchy, a problem of resources, of mandate, or of leadership.**

Key Recommendations

- 1. It is imperative that the GOG find the means to pay for vaccines or operating costs, given that UNICEF plans to phase out its support for EPI.**
- 2. Make the OSPR fully operational and capable of furnishing to the health system all support as expected such as planning, research, training, training implementation, and management of information, by clarifying its mandate and providing the necessary resources.**
- 3. To reinforce sustainability, the MOHSA needs to accelerate decentralization of national PHC program management to the prefectural and sub-prefectural levels. This includes responsibility for budget, human resources, logistics, training, and responsibility.**
- 4. Phasing out of a project should be a coordinated effort among MOHSA, the lead donor, and other donors long before the PACD so that all parties concerned are aware and prepared for what could otherwise be a traumatic project ending.**

I. INTRODUCTION

Guinea became the twelfth African country to benefit from the regional project known at the time as CCCD; later to be known as ACSI-CCCD (The Africa Child Survival Initiative-- Combatting Childhood Communicable Diseases), hereafter referred to in this document simply as CCCD. CCCD's goal is to strengthen the ability of African nations to prevent and control major causes of childhood morbidity and mortality. As a regional project in Africa, CCCD was implemented, in collaboration with the Ministries of Health of participating countries, by the Centers for Disease Control and Prevention (CDC) .

In the early years of the CCCD Project, some people close to the project thought that countries with a weak or non-existent infrastructure should not be included in the project. The reasoning used was that sustainability of CCCD activities with local resources was not possible in the least developed countries. Guinea was considered one of the poorest countries at the time in Africa. However, the CCCD Project Agreement between the Government of Guinea (GOG) and the United States was signed on June 22, 1985. This agreement committed \$885,000 USAID funding and the equivalent of \$650,000 (including \$190,000 PL-480 funds) GOG funding over a 30-month period. The project agreement put forth the following long-term objectives:

- 1) to reduce by 33-50 percent, morbidity and mortality due to neo-natal tetanus, measles, and poliomyelitis;¹
- 2) to reduce by 33-50 percent, mortality due to diarrheal diseases, and
- 3) to reduce by 33-50 percent, mortality due to malaria in children less than five years old and to reduce fetal wastage and low birthweight infants by an unspecified percentage.

CCCD/Guinea's short-term objectives included increasing immunization coverage; increasing access to, and use of, oral rehydration therapy, and increasing access to, and use of, malaria chemotherapy (children) and chemoprophylaxis (pregnant women). These objectives applied to the target populations of Conakry city, Kindia province, and Téliimélé province, comprising approximately 25 percent of Guinea's total population.

CCCD/Guinea, like every other CCCD country, provided assistance in three technical areas/interventions: vaccinations (EPI), diarrheal disease control (CDD), and malaria treatment/prophylaxis, and in four support strategies: training, health education, health information systems, and operations research.

¹See next page for graphs depicting causes of morbidity and mortality in Guinea in 1986.

Figure 1
Causes of Morbidity (Estimated) Children
Under 5 Years of Age -- 1986*

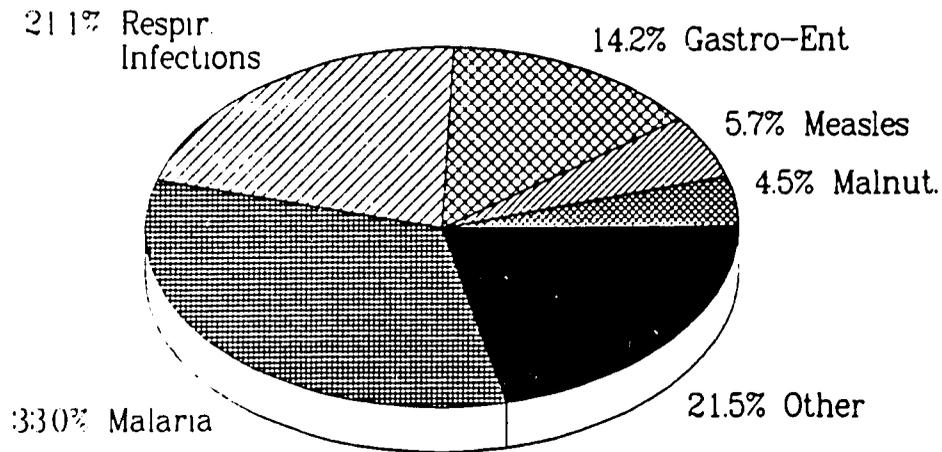
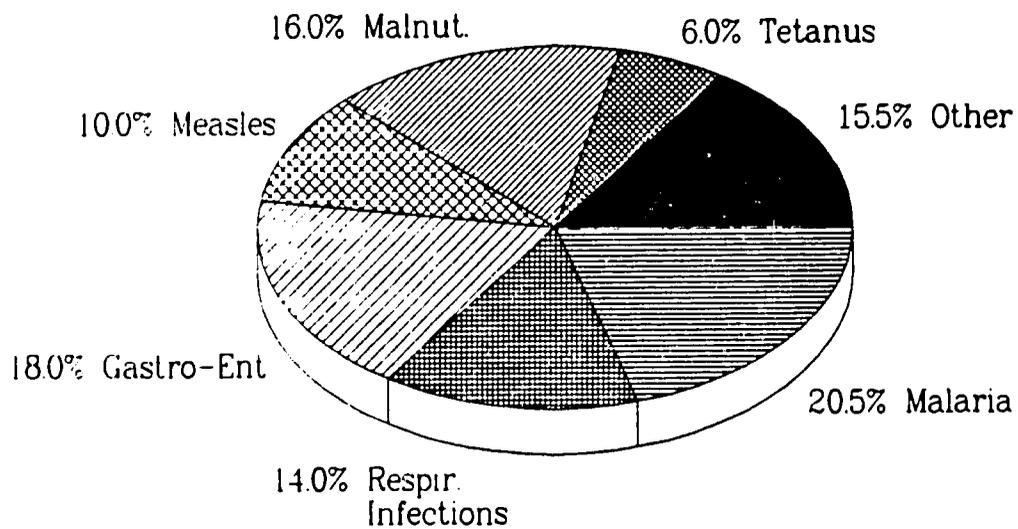


Figure 2
Causes of Mortality (Estimated) Children
0-4 Years of Age -- 1986**



* Source: Final Evaluation of ACSI-CCCD, 1991, pg. A-30.

** Source: Final Evaluation of ACSI-CCCD, 1991, pg.

The project continued past the December 31, 1987 completion date until an amendment to the original agreement was signed July 21, 1989, extending the project until September 30, 1991. USAID funding was increased by \$645,000 to \$1,530,000 while GOG funding was increased to \$1,542,000. (These amounts do not include salaries of the TO and consultants nor the sub-allocations from USAID's Africa Regional Program, all of which probably surpassed \$500,000.)

The Ministry of Health and Social Affairs (MOHSA) will be mentioned often in this report and will be referred to simply as MOHSA. Likewise, the National Expanded Program on Immunizations/Primary Health Care/Essential Drugs Program (EPI/PHC/ED) will be referred to as the PHC program or the national program.

A further clarification: two types of health centers are referred to in this report -- integrated and unintegrated. While both belong to the national PHC program, the notion of integration refers to those health centers that were formerly just supported by the CCCD Project and unintegrated, but that have since been integrated into the national program. A health center becomes integrated when it is inducted into the national PHC system (fashioned after the Bamako Initiative) where the personnel are trained to manage a self-financing, curative, and preventive health care center. The health center is provided with essential drugs, and a cost-recovery system is initiated whereby clients are expected to pay fees for services. Community members play an active role in the management of integrated health centers.

II. BACKGROUND

The Republic of Guinea, with an area of 95,000 square miles, is about the size of Oregon. Guinea's estimated population of 6.5 million consists of three major ethnic groups (Peuls, Mandingos, Soussous) and numerous smaller groups. About 85 percent of the people are Muslims, 10 percent Christians, and five percent Animist. The country is divided administratively into four regions and 36 prefectures (districts). Many local languages and dialects are spoken in Guinea, but French is the official language.

There are about 360 health centers throughout the country, of which 236 (66 percent) have been integrated into the national Primary Health Care program. The PHC program provides comprehensive curative and preventive services and charges fees for services to help pay for recurrent costs.

Though the CCCD project was not integrated into the PHC program, it collaborated closely with the program by:

- providing the core of trainers for launching the national PHC program's initial effort in training of trainers;
- providing senior, mid-level, and peripheral PHC training for more than 600 MOHSA personnel;
- helping to establish MOHSA policies and plans for immunizations, diarrheal disease control, and malaria treatment/prophylaxis;
- providing experienced members to PHC's technical review committee;
- providing consultants to assist with development of an integrated health management information system (substantial technical and financial assistance is still needed for improvement), and
- contributing to the establishment of an integrated and greatly improved (but still struggling) health education service.

Toward the end of the project, the CCCD-assisted health centers were gradually integrated into the national PHC program. Of the original 48 CCCD-assisted health centers in the Prefectures of Conakry, Kindia, and Téliimélé, approximately half (25) have been integrated into the national program.

A. Important CCCD/Guinea Project Dates

Project Agreement Signed	June 22, 1985
End of Original Project Agreement	December 31, 1987
Project Extension Signed	July 21, 1989
First Project Internal Review	April 1986
First External Evaluation	May 1987
Project Redesign	January 1988
Second External Evaluation	July 1989
Second Project Internal Review	January 1991
Final External Evaluation	August 1991
Scheduled End of Project	September 30, 1991

B. Basic Population and Health Indicators for Guinea²

Population	6.5 million
Annual Growth Rate	2.6 percent
Birth Rate	4.5 percent
Crude Death Rate	1.9 percent
Infant Mortality Rate	13.3 percent
Life Expectancy at Birth	44 years

²Extrapolated from 1990 World Bank estimates.

III. METHODOLOGY

This Sustainability Assessment in Guinea is one of several undertaken in selected former ACSI-CCCD countries. The objectives of the assessment series are to:

- a) Assess the sustainability of child survival activities and benefits since the completion of the ACSI-CCCD project in four countries (Guinea, Lesotho, Malawi, and Rwanda);*
- b) Assess the progress made toward sustainability in one country where ACSI-CCCD is ongoing (Nigeria);*
- c) Identify the contributing factors and/or constraints to sustainability, and*
- d) Identify lessons learned about sustainability within and across the countries that may have application to similar development efforts.*

For the purposes of this Guinea assessment, sustainability is defined as the continuation of activities and benefits beyond the PACD, whether financed by the host country government or by outside donors.

In this assessment, the team was guided by the Sustainability Strategy developed in December 1990 by ACSI-CCCD and the University Research Corporation. This strategy grew out of a Sustainability Study Series led by Tom Bossert and conducted by A.I.D. that examined the sustainability of 49 A.I.D.-sponsored health and sanitation projects in five countries. This series proposed several conditions or criteria that, when met, are thought to promote sustainable projects. Later, when the strategy was developed, indicators were added for each of the criteria in order to provide a more concrete sense of sustainability. These assessments are an initial undertaking which test Bossert's sustainability hypothesis.

The evaluation team, engaged by Atlantic Resources Corporation, included:

Alain Lefevre, M.D., MPH, Health Economics/Finance and EPI Specialist

Aissatou Lo, MPA, Health Education and Training Specialist

Kandjoura Drame, M.D., MPH, Cost Recovery Specialist

Harry Godfrey, Public Health Specialist/Team Leader

All team members had considerable experience in Guinea working on different aspects of PHC prior to this assignment.

A CDC assignee to A.I.D./Washington, Kathleen McDavid, accompanied the team as a resource person. Before joining the team in Guinea, she was briefed at CDC/Atlanta by Marc LaPointe, who backstopped CCCD/Guinea operations from Atlanta during the last four years of the project.

The team met as a group for the first time in Conakry, Guinea on January 18, 1993, to prepare its work plan and to define sustainability in the context of CCCD/Guinea, 16 months after the project assistance completion date (PACD). The team held in-depth meetings with the MOHSA, USAID, UNICEF, WHO, Ministry of Plan and Finance, Ministry of Decentralization, and administration officials before going to health centers in Conakry, Kindia, and Téliélé to observe the status of each of the three CCCD technical interventions (vaccinations, diarrheal diseases, and malaria). The team sought to determine whether the interventions were being continued and, if continued, to what degree. The support strategies (training, health education, health management information system, and operations research) were looked at in the same manner.

In this study, as in the study in Nigeria, the assessment team felt it necessary to add Ownership as a sixth project-related criterion influencing sustainability of project activities. Guineans feel that to own a project means to manage and implement it as well as to contribute financially to its operation. To assess Ownership the team added an additional indicator, "perception of project need at all levels," to the four previously proposed by the Nigerian team.

The team also added two other indicators: "public perception of project effectiveness" to the first criterion of Perceived Effectiveness; and "procedures for ending CCCD project assistance" to the fifth criterion of Constituency Building Through a Process of Mutually Respectful Negotiations.

The team planned to look at the project benefits and activities for each intervention and determine the extent to which these are now being sustained. EPI coverage data, ORS utilization rates, and other CDD and malaria data were unavailable to the team; therefore the team was not able to determine the extent to which benefits are being sustained. However, information about project-related activities and the extent to which they are being sustained was readily available, so the team chose to examine the extent to which the project activities (many of which are also indicators) for each of the seven interventions and support strategies are being sustained.

The six project-related criteria with over 30 indicators were used to determine the degree, if any, of sustainability of the interventions and support strategies. Five non-project-related (external) factors with more than 20 indicators influencing sustainability of project activities were also examined (see IV.A.).

Each indicator was examined and judged by the team as + (positive influence on sustainability); - (negative influence on sustainability), or N/A (non-applicable). Based on the extent to which indicators were met or not met, each intervention and support strategy was scored as follows: 0 = not sustainable; 1 = permanent activities but decline in quality; 2 = permanent

activities with maintenance of quality; 3 = permanent activities with improved quality. The indicators were not weighted for value, therefore the + or - status of the indicators were not totaled to determine the degree to which criteria were met. Team consensus determined the degree of sustainability of each intervention and support strategy.

After debriefings with field staff and administration officials, the team provided a written summary of its findings to the Ministry of Health and the USAID Mission in advance of its final debriefings.

Finally, on a practical level, this assignment, like other similar field assignments where time is so important, demonstrated the need to be able to produce written report material quickly and efficiently. For this, adequate computer equipment, facility, and support is critical to producing a quality report in a timely fashion.

IV. FINDINGS

A. Non-Project-Related (External) Factors Affecting Sustainability

Economic Factors

Guinea's economy grew 3.1 percent in 1987, 6.0 percent in 1988, 4.1 percent in 1989, and 4.3 percent in 1990. The fiscal deficit as a percentage of GDP declined from 8.0 percent in 1988 to 5.6 percent in 1990. Inflation declined from 72 percent in 1986 to 22 percent in 1990. Nevertheless, Guinea, under the constraints of an imposing structural adjustment program, remains economically and infrastructurally fragile. The recent increasing differential between the official and parallel exchange rate of the Guinea franc threatens to escalate the inflation rate.

The MOHSA budget is less than five percent of the national budget. Approximately 80 percent of the health budget is spent on salaries, leaving very little for operations.

Resource Factors

Well over a year ago the GOG doubled the salaries of the civil servants. Still, salaries of public sector personnel are several times lower than those in Ghana, for example, thus causing frequent changes in personnel and contributing to widespread corruption.

Far less than half of the population is literate, and less than 30 percent of the age-eligible population is enrolled in primary school. School dropout rates are among the highest in sub-Saharan Africa. Higher education in Guinea is limited to the one university in Conakry which has a medical school.

Only one percent of Guinea's hydropower potential has been developed. Less than two percent of the people have access to electrical power.

Only 1,300 of 12,000 kilometers of roads in Guinea are paved, and 6,500 kilometers (as well as many bridges) are impassable during the rainy season. MOHSA vehicles are very short-lived when based in the country's interior.

Political Factors

The major external factor influencing sustainability of project services and support strategies is the Government of Guinea's political commitment at the highest levels to primary health care, cost recovery, access to essential drugs, opening of the private sector, and decentralization of services.

The second republic is a military government and is viewed by some as a unifying force and a bulwark against inter-ethnic warfare because the army incorporates people from all of Guinea's ethnic groups. Establishment of political parties as part of Guinea's democratization process may well lead to further divisions among the major ethnic groups.

The overcentralized command structures, which are legacies from the colonial days as well as from the repressive First Republic, discourage initiative among the lower level civil servants. This, however, is changing with the struggle to allow more responsibility at the prefectural or district level. This is encouraging, especially for the health sector.

Socio-cultural Factors

Social tension between different ethnic groups is a constraint to development and therefore a limiting factor in providing optimal health services. Voting patterns in municipal elections illustrate the prominence of ethnic division. People are hasty to interpret government decisions, such as selection of ministers or awarding of scholarships for overseas study, as favoring one ethnic group over another. There are indications, though, that the ethnic divisions in society are lessening.

Environmental Factors

Large numbers of refugees enter Guinea from Liberia due to the civil war and from Sierra Leone due to political instability, thus taxing the health service resources, especially in the border areas. Outbreaks in the past of meningitis, cholera, and measles have also taxed the health service system.

A factor which played a very significant role both during and after the project is the environment in Guinea. Given the situation in Guinea at the time, there was no indication that even a TO with strong management and administrative skills would have made a major impact due to the barriers which were beyond the immediate control of a TO. These barriers included the lack of infrastructure in Guinea, poor or non-existent telecommunications systems (telegraph and postal systems not reliable), lack of a viable banking system, and lack of good roads (now much improved).

B. Project-Related Factors Affecting Sustainability

Before reviewing each of the CCCD/Guinea disease interventions and support strategies, it is useful to review the project-related criteria and indicators whose results were the same or nearly the same for all interventions and support strategies.

Staffing

Staffing is satisfactory in the integrated centers because national policy requires at least four qualified health staff be available in order to open a PHC center. Trained personnel from non-integrated centers are often assigned to integrated centers to meet the minimum personnel requirements. This is a more productive use of trained staff because of the improved working conditions, including availability of drugs, monitoring and feedback, rewards for performance, etc. However, no studies have been done to measure perception of the public's satisfaction regarding staff competence at health centers.

Although staffing was found to be satisfactory in integrated health centers, distribution of health personnel is still a limiting factor in providing quality health service. Spouses of female nurses are, more often than not, located in the capital city; and rather than separating the family, the nurses are employed in the city health centers far in excess of the numbers needed. Consequently, rural areas, which often have fewer integrated health centers, suffer from a lack of personnel.

Public Perception

The public's perception of the disease interventions is favorable judging by the acceptance today of vaccinations compared to the time when it was not uncommon for villagers to take flight at the sight of vaccination teams. A 1990 vaccination coverage survey reported 50 percent of one-year-olds in the CCCD target prefectures received measles vaccine and three doses of polio vaccine. Eighty percent of the children surveyed received BCG vaccine.

Oral rehydration is understood, practiced, and appreciated according to KAP studies as recently as 1992 (see CDD annex). Less than 10 years ago the ORS packets were not accepted in Guinea by a large percentage of medical professionals.

Malaria treatment has always been accepted, and today treatment with oral anti-malarials is the norm as opposed to injectables which was the norm prior to the CCCD Project.

Supervision

There is an elaborate and effective supervision system that uses detailed guidelines, which are found in the national PHC program, and that benefits integrated CCCD centers. Supervision was started by the national PHC program to assure execution of activities according to defined standards, to ensure continued training of health care personnel, to identify operational problems at centers, and to help find solutions. The strategy for supervision is described in the workplan of the national PHC program. Supervision is an educational process and is carried out quarterly from the national and regional levels, monthly at the prefectural level, and weekly or as needed at the health center level. The national team consists of four physicians who supervise 20 percent of the PHC centers every three months, choosing target centers based on information provided by the monitoring system, fiscal evaluations, and DHDs (District Health Directors).

The final CCCD evaluation considered supervision to be weak due to a weak management and training approach and due to a poor level of decentralization to the level of prefectural teams, particularly in Conakry. The final evaluation therefore recommended:

- 1) institutional, technical, and financial reinforcement of OSPR (Office of Studies, Planning, and Research) to make the management of training more effective at the national level;
- 2) reinforcement of the capabilities of the DHD in management, training, communication, supervision, HIS, and operations research, and
- 3) decentralization of training to the DHD level.

Since that final evaluation, much has been done to decentralize supervisory activity. In the CCCD project areas, supervision was also decentralized to the prefectural level, including the prefecture in Conakry. Supervisory visits included distribution of commodities to health centers.

Integrated centers in Kindia were poorly supervised during 1992, and non-integrated centers were not supervised at all. This was mainly due to lack of supervisory personnel since the DHD was alone in this activity. Former CCCD project supervisors were assigned to other jobs. Supervision is also hampered by frequent vehicle downtime and insufficient national budgetary provisions to repair vehicles.

Semi-annual monitoring of the PHC centers indicates successes and problems as well as causes but does not allow the identification of specific training needs. Nor is there an effective system for evaluating the competency of personnel for identifying training needs or for defining a continuing education strategy on a national scale. Until now, monitoring and supervision have been considered to be mechanisms used to assess training needs for health personnel. Although very useful, these activities identify general problems at the service delivery level but do not adequately diagnose specific training needs for each personnel category working at health centers and at the prefectural level.

Integration of Services

Vaccinations, oral rehydration, malaria treatment, and health education were all provided in the health centers during the CCCD Project and continue to be integrated in the PHC centers. These components are also integrated at the national level into the existing MOHSA structure.

Training

Training is integrated at the service delivery level, especially in the national PHC program, where health center directors and selected staff are brought to the district for training. The health center director ensures follow-up training of all health center personnel after launching

integrated services. The DHD is responsible for planning training activities and locating funds to carry them out. In the absence of funding, he/she often conducts training at the health centers.

Reliance on National Technical Expertise

Units responsible for CCCD technical interventions have adequate in-country technical expertise to sustain the project activities. OSPR, on the contrary, has expressed a need for outside technical assistance to help with the organization of a national training plan. OSPR also needs help with its health management information system. The Health Education Unit already has an expatriate technical assistant.

Continuing Health Education

National PHC program managers, with the exception of the EPI manager, have failed to develop a Continuing Education policy. The need is recognized though by OSPR in its upcoming study of the development of a training policy. The need for such a policy becomes even more important because, as a result of constraints from the Structural Adjustment Plan, health personnel trained in basic schools cannot be employed until three to four years after the end of their studies and consequently lose part of their knowledge.

Health staff at integrated PHC centers benefit, to a certain degree, from continuing education during supervisory and monitoring visits. This is not the case with staff at non-integrated centers previously assisted by CCCD, where supervision is lacking.

Facility Training Needs Assessment

With the exception of supervisory visits and semi-annual monitoring of health systems, no specific instrument or policy exists to identify training needs for personnel in the health facilities. Training activities are not offered by the private sector.

Participation of Nationals in Project Design/Modifications

The participation of nationals in country assessments, project development, and project modifications is considered a priority by national program managers. Guineans actively participated in the country assessment and even requested (during the project development stages) that the CDD program be included in CCCD project activities. The project was clearly viewed by the host country as a priority.

Relevant Partners Participate in Project Workshops

According to feedback the team received, interested partners (WHO, UNICEF, etc.) were aware of project workshops and training sessions, and CCCD activities were well coordinated among the partners.

MOHSA Considers Local Concerns in National Plans

Health centers are managed by a committee of three members chosen from the community and the director of the center. Their role is to represent local concerns, promote better use of the center, keep the population informed about cost recovery activities, and manage the center finances. The community participates in the decision-making process. For example, some communities have changed the hours of operation of health centers or even the days of operations from Mondays to Sundays to better meet the needs of the people.

Procedures for Ending CCCD Project Assistance

The project ended on a less than favorable note. USAID/Conakry discontinued bilateral funding of CCCD after a financial management review conducted by a private firm substantiated USAID's concerns of financial and material mismanagement of the project. Had A.I.D. had confidence in project management, the remaining funds could have been used to help purchase badly needed commodities for the PHC program, which was taking over previously assisted CCCD health centers. It should be noted that no procedures existed as to how to hand over the project to the Guineans. Many Guineans felt a sense of abandonment as the project was ending. There was no transition period per se where assistance was provided to Guineans in ways to continue project activities.

Perception of Project Need and Ownership

Throughout this assessment, there did not seem to be any question of the need for the project services. It seemed to be well recognized that CCCD was a Guinea project with A.I.D. assistance and that the PHC program, though heavily influenced by the Bamako Initiative and strongly supported by UNICEF and numerous other donors, is also a Guinea program with high-level commitment to its success.

Increasing Assumption of Project Costs/Management by Community

The cost recovery concept was introduced in Guinea by the CCCD Project in 1985 through CCCD-funded cost recovery studies. It became a reality with the launching of the national PHC program in 1987. CCCD Project cost recovery did not occur in the field until near the project's end and was very limited in scope (no essential drugs) compared to the PHC system. CCCD health centers did not include the community in the management of the funds generated. With the integration of CCCD-assisted health centers into the PHC program, all this changed. The community continues to assume more responsibility for health center costs and management. For example, at the beginning of the CCCD Project ORS packets were free; in 1988 a packet cost 25 Guinea francs (FG); in 1993, due to inflation an ORS packet costs 100 FG. Prices for other essential drugs have gone up at a similar rate. With increased decentralization of the PHC program, there will be increased assumption of project costs and management by the community.

Indicators and topics mentioned above have results which were the same or nearly the same and therefore warranted mentioning. Indicators and topics not mentioned above have results which are not similar enough to comment about in great detail (see individual sections in Appendix D on interventions and support strategies for details).

RECOMMENDATION

To support sustainability during the current critical phase of PHC program expansion and integration of CCCD assisted health centers, it is strongly recommended that USAID and the MOHSA explore the possibility of obtaining PL-480 funds to help finance health care services available to the people of Guinea.

C. Disease Interventions and Support Strategies

As mentioned in Chapter III (Methodology), the status of "favorable," "unfavorable," or "non-applicable" was applied to the indicators for measuring criteria affecting sustainability of CCCD/Guinea's three technical interventions and four support strategies. After reviewing the six criteria, the team endeavored to determine the degree of sustainability ranging from 0, or unsustainable, to 3, or sustainable -- with permanent and increasing quality of activities. (See Table 1, Sustainability Table on following page.)

The following section provides a detailed explanation of the table. This section looks at each intervention and support strategy in relation to the sustainability criteria and indicators. An even more in-depth explanation of each may be found in Appendix D.

Vaccinations (EPI)

A national EPI policy, in accordance with WHO guidelines, has been in existence for a number of years. Workplans are produced at the national and peripheral (DHD) levels, but not at the health center level. The immunization program is well integrated at the national level with virtually all other programs. It is a unit in the Division of Preventive Medicine, which falls under the National Health Directorate. Outreach services are provided from most of the PHC centers but are limited due to personnel and transportation constraints. Vaccination coverage and other health services could be significantly expanded if more people living in excess of five kilometers from the health centers could receive services.

The Vaccine Preventable Disease Tables 2 and 3 show the evolution of certain diseases in children under five years of age. Assuming the reporting system improved with the introduction of the CCCD Project and the National PHC program, a significant impact is seen on measles and an even greater impact on pertussis. The tables also show that neo-natal tetanus is now being tracked thanks to the influence of CCCD.

Table 1: Sustainability Table

CCCD/GUINEA

PROJECT RELATED CRITERIA AFFECTING SUSTAINABILITY AND THEIR INDICATORS

1. **Perceived Effectiveness**
 - A. Development of workplans and policy statements at national, district, and local levels.
 - B. Implementation of HMIS or special surveys to measure project impact.
 - C. Completion of operations research and special studies to assess program quality and develop solutions.
 - D. Use of data to make decisions, identify problems, develop solutions, and to confirm project's importance at health sector community meetings.
 - E. Adequate staffing and resources at the service delivery level.
 - *F. Public perception of project effectiveness.
2. **Integration and Institution Strengthening**
 - A. Effective supervisory system (using checklists) which decentralizes technical and managerial responsibility to the peripheral level.
 - B. Integration of service delivery at delivery sites.
 - C. Integration at national level into existing MOH structures.
 - D. Support activities operational and integrated at national level.
 - E. Competency-based assessments of worker performance.
 - F. Reliance on host country technical expertise
3. **Local Financing, Community Participation, and Private Sector Provision of Services**
 - A. Assumption of project costs by government.
 - B. Implementation of fee-for-service/cost recovery.
 - C. Private provision of project services.
 - D. Donor complementarity and coordination.
4. **Strong Training Component**
 - A. Training strategy developed and implemented.
 - B. Continuing health education policy developed and implemented.
 - C. Implementation of supervisory system.
 - D. Completion of facility training needs assessments.
 - E. Trainers trained in how to train.
 - F. Project training activities integrated into existing MOH training structures.
5. **Constituency Building Through a Process of Mutually Respectful Negotiation**
 - A. Nationals participate in country assessment, project development, and project modification and clearly view the project as a priority.
 - B. Partners participate in project workshops.
 - C. MOH procedures facilitate the inclusion of local concerns and decisions within national level plans.
 - *D. Procedure for ending CCCD Project assistance.
6. **Ownership**
 - *A. Perception of project need at all levels.
 - B. Perception of project ownership at all levels.
 - C. Project-related decisions are made by organizations/bodies which represent local constituencies.
 - D. Project development and modifications originate with nationals.
 - E. Continuously increasing assumption of the project (costs, management, etc.) by community members who are the beneficiaries.

*Added by the Guinea team.

Favorable (+) or unfavorable (-) status of indicators for sustainability of project services and support systems.

Criteria	EPI	CDD	Malaria	Training	H. ED	HMIS	Op.	Res.
A	+	+	+	-	-	+	.	.
B	+	+	+	+	.	+	.	.
C	+	-	-	-	+	-	.	.
D	+	+	+	+	+	+	.	.
E	+	-	+	+	-	+	.	.
F	+	+	+	-	+	N A	.	.
A	+	+	+	+	-	-	.	.
B	+	+	+	N A	+	+	.	.
C	+	+	+	+	+	+	.	.
D	+	+	+	-	-	+	.	.
E	-	-	-	-	-	-	.	.
F	+	+	+	+	-	-	.	.
A	-	-	-	+	-	+	.	.
B	+	+	+	-	-	-	.	.
C	+	-	+	-	N / A	-	.	.
D	+	+	+	+	+	+	.	.
A	+	+	+	+	-	+	.	.
B	+	-	-	-	-	-	.	.
C	+	+	+	+	-	-	.	.
D	+	-	-	-	-	-	.	.
E	+	+	+	+	+	+	.	.
F	-	-	-	-	-	-	.	.
A	+	+	+	+	+	+	.	.
B	+	+	-	+	+	+	.	.
C	+	+	+	+	+	+	.	.
D	-	-	-	-	-	-	.	.
A	+	+	+	+	+	+	.	.
B	+	+	+	+	+	+	.	.
C	+	+	+	+	+	N A	.	.
D	+	+	+	+	+	+	.	.
E	+	+	+	+	+	+	.	.
SCORE	3	2	2	2	1	1	0	0

Score:

0 = Not sustainable, 1 = Permanent activity but decline in quality, 2 = Permanent activity and maintenance of quality, 3 = Permanent activity with improved quality, NA = Non Applicable, * = Not yet developed

TABLE 2: EVOLUTION OF REPORTED CASES OF CHILDHOOD DISEASES³

Year	Total Pop	< 5 years	Measles	Polio	Pertussis	Neo-Natal Tetanus
1980	4841164	919821	8552	32	2315	--
1981	4975503	945346	11397	42	4141	--
1982	5113570	971578	15038	74	4589	--
1983	5255467	998539	578	62	3504	--
1984	5397365	1025499	764	49	2420	--
1985	5543094	1053188	731	37	1335	--
1986	5692757	1081624	1749	24	250	--
1987	5846462	1110828	1885	12	83	32
1988	6004316	1140820	4503	172	272	85
1989	6166433	1171622	4499	93	339	189
1990	6332926	1203256	2523	58	99	153

TABLE 3: EVOLUTION OF MORBIDITY RATES FOR CHILDHOOD DISEASES⁴

Year	Measles	Polio	Pertussis	Neo-Natal Tetanus
1980	9	3	25	-
1981	12	4	44	-
1982	15	8	47	-
1983	1	6	35	-
1984	1	5	24	-
1985	1	3	13	-
1986	2	2	2	-
1987	2	1	1	2
1988	4	15	2	4
1989	4	8	3	9
1990	2	5	1	7

Measles = cases per 1,000 children < 5 years of age
 Polio = cases per 100,000 children < 5 years of age
 Pertussis = cases per 10,000 children < 5 years of age
 Neonatal Tetanus = cases per 1,000 children < 1 month

³Source: Final Evaluation of ACSI-CCCD, 1991, pg. A-39.

⁴Source: Final Evaluation of ACSI-CCCD, 1991, pg. A-39.

There is a real perception for the need of immunization at all levels. In one of the village health centers the team visited, for example, the population voiced its concern because the refrigerator at the center has been inoperable for some months. The community was afraid of a measles outbreak.

The national information system allows for the assessment of EPI activities and impact through data collected on a monthly basis. In 1993, a revision of the data collection system was made which now permits the prefecture level to analyze the information from the health centers and prepare summary sheets for the national level. Prior to this the health centers submitted their reports directly to the national level. It was observed that the timeliness and completeness of the data was not very good and therefore analysis and use of data was not possible. Immunization coverage surveys have also been performed. The last national survey was conducted at the end of 1990, and another is planned for the third quarter of 1993. Nationals have participated routinely in these surveys.

Monitoring and supervisory visits allow for assessment of immunization coverage. These visits also check cold chain maintenance and adherence to sterile techniques. The team did not observe any breaches of sterile technical or cold chain failures during its five days of health center visits.

Training needs of health center staff are also assessed during the semi-annual monitoring visits. This assessment could be improved by being more systematic and better integrated into an overall training plan.

Training is an important component of the EPI program. A technical committee for "training and supervision" produces and updates material necessary for training in the program. A large number of personnel receive training in EPI, although there is not a written strategy.

EPI differs from other project components in that it has developed, in conjunction with donors, a continuing education plan. Many of the health personnel have been retrained, some several times. There is no specific document, however, defining a continuing education policy. Continuing education in EPI is handled by prefectural and regional teams and deals with vaccination techniques, reporting procedures, logistics, etc.

The most crucial factor for EPI sustainability is to control the cost of immunizations. If the donor supply of vaccines ceases, the EPI will no longer function. This factor alone determines the survival of vaccination services. UNICEF has, until now, covered almost all of the vaccine supply and is suggesting it will phase out progressively. MOHSA does not think it will have to take over vaccine purchases in the near future.

In addition to vaccines, sizable expenses have been incurred in purchasing vehicles and refrigerators and in repairing generators. The power supply in the town of Conakry is not viable and the generator that supplies power to the central refrigeration rooms required repairs of \$9,000 in 1992. The government is not able to assume all these costs in the near future without foreign assistance.

Many donor agencies contribute to EPI as well as to other components of the PHC program. This includes both international and cooperative agencies (WHO, FNUAP, GTZ, World Bank) as well as such international NGOs as MSF France and Belgium, AFVP, GVC, and others.

There are some private offices offering immunization services. The annual statistical report of the Ministry of Health in 1990 mentioned that close to 90 percent of private medical offices are located in the Guinean capital. However, even though not assessed in this study, the role of the private sector in immunization is insignificant and applies mainly to the city of Conakry.

Based on this information, and the scoring found in the accompanying table, EPI has been the most sustained of all of the CCCD Project interventions and support strategies. On a scale of 0 to 3, EPI scored a 3. The team concluded that EPI activities are considered permanent and that their quality has improved since the end of the CCCD Project.

RECOMMENDATION

It is imperative that the GOG find the means to pay for vaccines or operating costs, given that UNICEF plans to phase out its support for EPI.

Diarrheal Disease Control (CDD)

In early 1986, when the CCCD Project began, no structured national CDD program existed in Guinea. However, a cholera epidemic later that year focused attention on diarrheal diseases and provided an impetus to the start of a national program.

Between 1986 and 1991 the CCCD Project greatly assisted in the formulation of program policy statements and, along with other donors (especially WHO), helped train a variety of health personnel from senior administrators to district workers. Probably the most notable achievement was a change in standard diarrheal treatment protocols away from antibiotics to the use of oral rehydration salts (ORS) packets.

The 1991 national health policy, as well as workplans at the national, district, and health center levels, emphasize the use of ORS, thus demonstrating the progress CDD has made since inception. The CDD program relies on local sources for technical expertise, which has positive implications for sustainability.

CDD-related data have been integrated into the national health information system and plans exist to include additional CDD information into the monitoring system. Integrated centers appear to make greater and more effective use of monthly CDD reports and are unquestionably superior overall to non-integrated centers. This is well recognized by government officials, health workers, and the public in general. A special survey in Conakry in 1992 showed increased utilization of ORS packets and high recognition by mothers and health workers of the effectiveness and need for ORT.

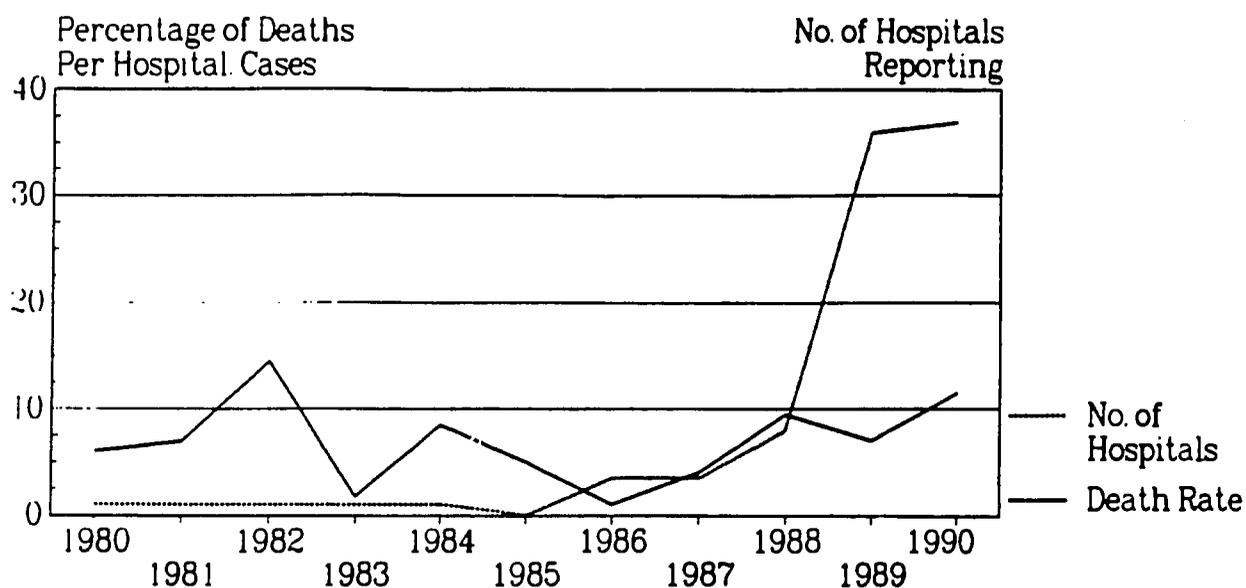
ORS packets provided by CCCD are still available through the CDD program, but the distribution system has deteriorated. Some non-integrated health centers are promoting non-ORS packets for diarrheal disease control, which claim also to have nutritional value. These factors do not favor CDD sustainability because they operate outside of the national system and do not promote a coordinated strategy to ORS distribution.

The national CDD training strategy developed for all of Guinea since the project's end has been well defined and includes "Training of Trainers" as well as health worker training. The strategy is realistic and achievable. For example, the CDD program trained 268 trainers in Guinea in 1992 on WHO's new CDD treatment recommendations. These activities were financed by multiple donors and lenders such as WHO, GTZ, MSF Belgium, Swiss PhilAfricaine, UNICEF, as well as MOHSA.

With the exception of training, the CCCD Project's support activities for CDD are weak: operations research is weakest with virtually no studies done; health education activities are inadequate, and HIS collection of CDD data needs improvement.

The CDD graph (Figure 3) shows that the percentage of hospitalized diarrheal disease deaths in children under five years of age increased from one percent in 1986 (start of CDD intervention and surveillance) to 11 percent in 1990. The number of reporting hospitals increased from three to 37 during the same time period. Both increases reflect more comprehensive and probably more accurate reporting.

Figure 3
Evolution of Diarrheal Disease Mortality
Hospitalized Childrer Under 5 Years⁵



Based on this information and the scoring in Table 1, CDD activities have been found to be less sustained than the EPI activities but more sustained than the health education and health information systems activities. On a scale of 0 to 3, CDD scored a 2. The team concluded that CDD activities are considered permanent, however they have experienced no improvement in their quality since the end of the CCCD Project.

RECOMMENDATION

It is necessary, in order to ensure complete integration of ORS distribution, that the balance of stock of oral rehydration salts (ORS) remaining from the CCCD Project, currently held at the national CDD manager's office, be turned over to the Essential Drug Section of the national PHC program where a functional distribution system exists and records of distribution are maintained.

Malaria

Guinea's National Malaria Control Program (NMCP) has been in existence since the time of the First Regime. NMCP provides laboratory services at the central level and serves as the national reference laboratory for diagnosis and treatment of malaria. With the launching of

⁵Source: Final Evaluation of ACSI-CCCD, 1991, pg. A-42.

- 21 -

CCCD it was natural that the malaria component be integrated into the national program and that the head of the program be designated as the national coordinator for malaria treatment and chemoprophylaxis.

CCCD's reinforcement of the National Malaria Control Program helped to establish a national malaria control policy, annual national workplans, collection of treatment data in PHC centers, annual malaria program reports, inventory reports, and drug resistance studies. Although malaria is still severely under-reported and national policy treatment schedules are often ignored, improvement occurs each year with the expansion of PHC centers.

Malaria accounts for about one-third of all morbidity in children under five years of age and about 20 percent of the mortality.

National chloroquine resistance studies have been negative so far in spite of individual cases of resistance. National malaria personnel have noted an increase in the cases of chloroquine-resistant malaria. Before the PACD, the NMCP changed its chloroquine treatment policy from 10mg/kg to 25mg/kg, given over three days. Presently, the malaria program is doing insecticide/vector resistance studies in Conakry.

Chloroquine is available in the previously CCCD-assisted health centers that have been integrated into PHC centers (25) but is not available in the non-integrated centers (23) except where the health center staff take the initiative to purchase from private sources for resale to their patients. Chloroquine tablets are also readily available in private pharmacies and in the local markets. The percentage of health centers treating malaria correctly is not known, but treating malaria and presumptive fevers with oral chloroquine is now the norm as opposed to pre-CCCD days when treating malaria with injectables was the norm. It is also not known what percentage of fever cases are treated correctly in the home.

Although it is difficult to estimate what CCCD-supported malaria costs have been assumed by the government, it is certain that the community continues to help with recurrent costs through the cost recovery system that has been implemented in the PHC centers. UNICEF and other donors continue to contribute to the purchase of essential drugs including chloroquine.

Retraining of personnel in malaria treatment and prophylaxis occurs when health centers are integrated into the PHC system. On-the-job training is provided in the PHC health centers as needed. However, there is no evaluation of performance after training. However, in addition to supervision provided from the regional and prefectural levels, there is a semi-annual monitoring system in place whereby all PHC centers are visited and activities observed, including malaria treatment and prophylaxis (prophylaxis for pregnant women only), and corrective measures taken when indicated.

Thus, with national participation in the initial preparation of the project and with the routine in-depth monitoring of the PHC centers which are taking over the CCCD-assisted centers, plus the on-going decentralization of malaria control, the team considers the malaria component of CCCD to have been sustained and to be sustainable indefinitely.

RECOMMENDATIONS

1. After four years of PHC services, a KAP study is recommended to determine to what extent the population uses anti-malarial drugs correctly (private and public drug sources), and the extent to which public and private providers take corrective measures. Do the vendors of these private sources of chloroquine provide appropriate treatment schedule advice? What percentage of the consumers know the correct treatment schedules? These questions need to be answered.
2. With increasing threats of chloroquine-resistant malaria in Guinea, a policy on second line drugs should be established.

Training

Training objectives of the CCCD/Guinea project agreement amended in 1988 were to develop a national training plan and define strategies to assure that 90 percent of health personnel operating in the project area receive training in management and CCCD technical intervention activities.

Training was one of the most dynamic components of the project. As early as 1987, the first external assessment of the project indicated that 70 percent of targeted personnel had been trained in project interventions. The evaluation of 1989 reported total achievement of training targets. From 1989 until the end of the project, training activities were concentrated on retraining health care personnel in the different project interventions, as well as training in health education, statistics, and research. This strategy attempted to ensure the polyvalence of health facility personnel.

At the time of the final project evaluation in May 1991, the project had surpassed its training targets of 90 percent as stated in the project agreement. Training activities had produced a distinct improvement in the performance of health care personnel at service levels. Training, however, of prefectural (district) health directors (DHD) and supervisors in management, communication, operations research, and HIS was considered insufficient, even weak. At the end of the project, coordinators of different programs felt a strong need to reinforce their competence in computer applications for project management.

No training workplans existed at the national level. Training until 1989 had been handled by the Directorate of Administrative and Financial Affairs (DAAF), which was more concerned with personnel management than personnel performance at service levels. With the development of a national primary health care policy, management of training was transferred to the Office

of Studies, Planning and Research (OSPR). OSPR, however, has not had the capacity to develop a national training policy because of lack of human and financial resources, and lack of a clear definition of its mandate within a system where almost all training is conducted by the different projects and programs, and pre-employment training is done by the national Ministry of Education.

In the CCCD Project, training activities were developed and performed by each of the different program coordinators or managers, while in the PHC program, training activities are developed and performed by a committee in charge of training. CCCD project coordinators were also members of this training committee and, as a result, assured training for all components of the national program.

There has been minimal OSPR association with influence or control over any training activities. Project training activities were not integrated at the national level because of the absence of training coordination by OSPR and also because of the desire by the projects to be independent in their training programs. During the last year there has been a tendency for decentralization toward the prefectural health teams, a trend that warrants increased government support.

OSPR has planned a national study to look at health sector training including the performance level of all categories of health personnel. This study is to take place in 1993, and financing will be obtained from the PDSS project. OSPR has already defined the terms of reference as well as the need for technical assistance to identify existing and needed personnel resources, the establishment of a national training policy, and institutional reorganization.

Training of trainers, an active component in the previously CCCD-assisted centers, is now integrated into the national program. This training occurs in four phases: 1) the prefectural health team (DHD, DH, DMR) is trained for three weeks by the national training committee on the activities of launching health centers. 2) In turn, this team trains health center directors for three weeks on preventive and curative services, diagnostic aids, and the health information system (HIS). 3) Next, the team trains health center staff in specific program components for one week. 4) Finally, it supervises and participates in a one-week training course, given by the director of the center, to all personnel upon the launching of the PHC program. Six-day training of community management committees is also performed by the prefectural team. The prefectural health team uses 12 training modules based on the Bamako Initiative and adapted for the Guinea PHC program. These modules are being reviewed based on experience acquired over the years. The modules also contain training instructions for family planning, nutrition, etc.

Only the CDD component of CCCD Project services continues to find funding to plan and execute training activities thanks to its dynamic coordinator. National PHC program training plans are included in the annual workplan.

Financing costs for training are absorbed by the national PHC program in the integrated centers. Part of the training costs (amounts undetermined) have been taken over by MOHSA through funds and loans from the World Bank and the African Development Bank. Non-integrated centers do not get any budgetary support for training. Funds for training health center directors and treasurers of health committees are expected to come from the cost recovery system of the national PHC program, but currently there is no consensus to implement this plan.

There is strong complimentary participation of donors for all activities in the national PHC program. The CCCD Project contributed greatly to national program training activities through its coordinators and through the staff already trained at health center levels. UNICEF is currently providing basic financing for the national program and is assisted by multiple donors and lenders including international organizations (WHO, World Bank, BAD), bilateral agencies (GTZ), and NGOs (MSF France, MSF Belgium, AFVP, EMI, and CESTAS). MOHSA established a coordinating mechanism for all national PHC program donors and lenders.

RECOMMENDATIONS

1. Make the OSPR fully operational and capable of furnishing to the health system all support as expected, such as planning, research, training, and management of information, by clarifying its mandate and providing the necessary resources.
2. Decentralize all training and supervisory activities by placing responsibility on prefectoral health teams for the identification of their needs in training, training implementation, and evaluation of personnel performance.
3. Elaborate a national training policy to include a system for identifying training needs, and develop and institutionalize a system of continued education for all health personnel.

Health Education

The 1987 and 1989 evaluations of the CCCD Project found the health education component to be one of the project's weakest elements. However, the 1991 project evaluation team noted progress in a number of areas, chief among them sensitizing policy makers on the need to establish a national health education policy.

The CCCD Project contributed to the strengthening of the Health Education Unit (HEU) by furnishing:

- technical assistance to prepare educational messages, to train trainers, and to develop educational messages, and
- equipment and financial support necessary for the development of unit activities.

The Peace Corps has supported the HEU by training three volunteers and by assigning them to the three prefectures of Kindia, Téliimélé, and Conakry as trainers/supervisors.

Health education is integrated into the daily delivery of health services through interpersonal communications with mothers and home visits to identify children needing vaccinations. This latter activity was more regular under the CCCD Project. Interpersonal communication is more effective in the case of the CDD than EPI, especially in Conakry where the vaccination dropout rate is still of concern.

Health education activities, although integrated with other activities at the national level, lack effectiveness. The Health Education Unit is located in the Health Promotion Division, which also includes hygiene, environment, and school and university health sections. The Health Education Unit has staff at the level of different MOHSA preventive programs (family planning, AIDS, tuberculosis, etc.).

The health education component has used a strategy of training of trainers, especially in the Kindia and Téliimélé prefectures. In Conakry, the prefectural level was not involved in training. Since the end of the project, no training strategy has been developed or implemented by the national health education service. At Kindia and Téliimélé, supervisors who were taught health education during the life of the project are now busy with other tasks, and thus no one is in charge of health education on the prefectural health team.

The national health education service has offered two sessions of training of trainers. The first was for prefectural health teams and included the CCCD Project geographical areas. The second consisted of the production of audio-visual material for technicians. These training exercises were financed by the national PHC program.

The credibility HEU has established has resulted in requests for its services from various donors and divisions of the MOHSA. However, this credibility has not yet led to the elaboration of a national health education policy in spite of the need observed by the MOHSA. Progress in this area is slow, but it is anticipated that the programmed visit of a WHO-supported consultant will assist in the achievement of this goal.

No survey of health education activities impact was conducted at the end of the CCCD Project. The existence of this baseline data would have allowed a better measurement of the impact of training activities in follow-up surveys. This is not because of lack of competence because the unit performed other KAP surveys (including one for CDD) in 1992 in conjunction with the PDSS project.

Monitoring of the health centers has served as a means of determining health education needs and has led to a request for assistance from the HEU. However, this unit is handicapped by the lack of adequate staff at all levels, and in particular the prefectoral level. It should be noted that the HEU's greatest handicap is its lack of vision concerning its new responsibilities in the development of a community-oriented approach and in the strengthening of educational capacities of health personnel at the national level.

Health education could benefit from additional staff at the national level. There are presently three persons in the Health Education Unit and one in each of the prevention programs. But there are very few DHDs who use health education specialists on their staff at this critical level. In health centers, health education activities are part of the health worker's tasks.

The public's perception of health education has improved if judged by the increase in consultations at health centers, after the introduction of health education by the CCCD Project. However, supervision has not been effective in health education. The unit does not have a vehicle for supervision, and the supervisor, trained under the CCCD Project, has been assigned to a health center that runs a pilot Family Planning project. In addition, health education unit staff are not part of the supervisory PHC teams.

As in training, the health education-related competence of health workers is considered insufficient. The use of monitoring as a competence assessment means is insufficient. The supervisory guidelines, which include a communication component, are ineffective in measuring personnel competence in the health education field.

The Health Education Unit still needs technical support to assist in improving program planning, decentralizing activities to the prefectoral level, carrying out training, and conducting impact surveys.

The Health Education Unit does not have its own budget at MOHSA for activity development. It has an operating budget allotted to the health promotion division, but health education activities are financed directly by the different projects (PHC, PDSS) funds. At the end of the CCCD Project, it was no longer possible to finance health education activities begun by this project, because when the PACD arrived, government counterpart funds were discontinued. However, the integration of CCCD health centers into the national PHC program has enabled the continuation of health education activities; still these centers have not received any additional funds to permit these additional activities.

Donor collaboration is effective in health education. Along with CCCD, activities are supported mainly by the World Bank, WHO, and UNICEF.

RECOMMENDATIONS

1. Plan, develop, and integrate health education activities into the national program beginning with an impact study of previous activities.
2. Reinforce personnel at the national Health Education Unit and provide the prefectoral teams with health educators.

Management

Management, as one of the prime factors contributing toward project sustainability, is viewed in this study from both the day-to-day management of the project and from the management support strategy provided by the national health information system.

Project Management

CCCD/Guinea was managed during its six-plus years by four different coordinators assisted by two different technical officers (TOs). One coordinator and one TO managed the project for approximately four of those six years. Though all the coordinators were highly trained health experts, none was trained in management. The TOs likewise were health professionals but with very limited training in management. Furthermore, there were considerable constraints to effective project management in the general conditions prevailing in Guinea at the time, namely unreliable telephone, telegraph, and postal systems, a weak and flawed banking system, and poor roads.

Tenacity and trial and error on the part of most of the TOs and coordinators made up for what they lacked in experience. As a result, they were able to overcome two major obstacles: figuring out and complying with USAID procedures for acquiring project commodities (vehicles and malaria drugs arrived more than two years after orders were initiated), and procuring PL-480 funds allocated to the project that were nearly impossible to access during the first three years of the project. The PL-480 funds were used as the MOH counterpart funds. Except for personnel costs there was no direct GOG funding of the CCCD Project. Although the funds were available, the real battle came in spending the funds. For example, in 1987 the CCCD Project had about \$200,000 in PL-480 funds but was only able to actually spend about \$16,000. Part of the problem had to do with getting the necessary clearances and authorizations from the Ministries of Finance and of Economic Development.

USAID, on the other hand, as a small mission never had sufficient staff to play a major role in managing and overseeing the administrative or other aspects of the project. USAID rarely, if ever, had an experienced public health officer on its staff during the time of the project. In addition, during the three year period 1987-1990, the USAID mission in Guinea was being reorganized constantly and the office was moved at least twice during the period.

An audit shortly before the PACD substantiated USAID's concern of material and financial mismanagement of the project. Consequently, USAID, lacking confidence in project management, declined to obligate to the project unencumbered USAID funds (approximately \$150,000) which remained in the project's final months. Depending on USAID regulations, this money could have been used to purchase essential drugs to help absorb the costs of integrating CCCD-assisted health centers into the national PHC system. The outcome was a disappointment to many of the parties involved in PHC.

Phasing out of a project may be just as important, perhaps even more important, than the actual conduct of the project when considering the issue of sustainability of services. Ill feelings generated among the partners during the closeout may mask the good that was accomplished during the project.

Therefore a more concerted effort needs to be made throughout a project, but especially near its end, to ensure a smooth transition and adequate comprehension of respective project management and administration responsibilities.

Health Information System (HIS)

Disease reporting has existed in Guinea since colonial times. In 1988 the MOHSA, with assistance from the African Development Bank, established a national health information system under the direction of the Office of Studies, Planning, and Operations Research (OSPR). OSPR's national health information system (HIS) policy is to furnish data to decision makers in the health system on the state of health of the population and activities of the different health services. The purpose is to facilitate planning for the different health programs as well as serving as a tool for monitoring and evaluation.

HIS objectives as stated in OSPR's 1992-1994 workplan are to reinforce data collection and analysis capacity by improving collection methods and by decentralizing data compilation and analyses.

CCCD/Guinea established its own HIS in order to track the following:

- number of vaccinations given by age, antigen, series, and location;
- number of children given ORT by age, severity of dehydration, amount of ORS administered, and location;
- number of children treated presumptively for malaria by age, dosage, and location, and
- number of pregnant women receiving malaria chemoprophylaxis by location.

This information was shared with the national PHC program and/or the national HIS. The CCCD Project staff used project data on personnel. Budgetary data by facility was not maintained.

CCCD/Guinea's contributions to HIS activities were substantial. External CCCD consultants assisted with the development of the information system. They helped with population-based surveys on vaccination coverage, morbidity patterns, and health care practices. CCCD also provided assistance to the statistical and epidemiological sections through short-term training in Conakry and Kinshasa. The trainees were introduced to several computer programs including Epi-Info, Dbase III Plus, and Harvard Graphics.

Monthly reports arrive from over half of the health facilities in Guinea as they become integrated into the system (over 90 percent of expected reports are received). The reports consist of morbidity and mortality data as well as information concerning personnel, equipment, and buildings. Budgetary data is not included.

Most of the statistical analyses at the central level are still done manually because of limited computer capacity. The 1991 health statistics report is not completed. The 1992 annual report may not be completed before the end of 1993. This may still be considered progress given that the last annual statistics report produced before CCCD/Guinea's 1987 external evaluation was for 1983.

Though the HIS has come a long way, including recognizing that the decentralization process is a must, it still needs major financial, technical, and personnel support in order to maintain the quality of its activities.

Given the difficulties encountered in the management of the project as documented in the three external evaluations, and the difficulties experienced by the HIS to keep up with the needs of the project, this study views HIS and management in general to be one of the weakest CCCD components in the sustainability study.

Cost Recovery

The cost recovery concept was introduced in Guinea with the CCCD Project in 1985, but it only became a reality in the field with the launching of the national PHC program in 1987. One of the main regional factors for sustainability of primary health care (PHC) activities is the assurance of the availability of local operations funds. This concern led MOHSA to establish a cost recovery mechanism at the health center level. This minimizes risks linked to ministry budgetary constraints which have occurred during the last few years.

Cost recovery receipts are collected weekly, or more frequently, and accumulated in interest-bearing savings accounts for extended periods, even years. Severe inflation rates can be devastating to even high interest bearing savings accounts. Therefore, cost recovery receipts should be expended for replenishment of drugs and other appropriate purchases without delay.

Community participation was not an essential component of the CCCD Project. Even with the initiation of a cost recovery system toward the end of the project in 1990, the very limited number of essential drugs (chloroquine and ORS), supplies (immunization cards), and the lack of community involvement were negative factors for sustainability. The non-integrated health centers and posts are now less used by the community, and even health workers themselves look for more interesting work. Some centers have even shut down.

Weaknesses in social mobilization in the national PHC program can probably be explained by the lack of promotion programs. Management committees sometimes interact more closely with health center personnel and directors than with the community members. These factors, if not addressed and corrected soon, risk becoming limiting factors for the sustainability of the national PHC program itself.

The PHC program constitutes a fortuitous perspective for the sustainability of CCCD Project activities. Thanks to this program, CCCD Project interventions have continued and even have improved in the integrated health centers.

RECOMMENDATIONS

1. The consequences of inflation on accumulating PHC cost recovery funds need to be monitored if savings accounts are going to continue as a useful funding source.
2. To enhance better relations, eliminate avoidable delays, and avoid frustration, donors and the Government of Guinea should communicate their respective administrative procedures (accounting, purchasing, regulating, procuring, etc.) to each other and assure that the procedures are understood.
3. Lines of authority and responsibilities between USAID missions and PASA partners should be well defined before the commencement of new projects.
4. To reinforce sustainability, the MOHSA needs to accelerate decentralization of national PHC program management to the prefectural and sub-prefectural levels. This includes responsibility for budget, human resources, logistics, training, and responsibility.
5. Phasing out of a project should be a coordinated effort among MOHSA, the lead donor, and other donors long before the PACD so that all parties concerned are aware and prepared for what could otherwise be a traumatic project ending.

Operations Research

As a support strategy in the CCCD Project, operations research (OR) never got off the ground, though it always had a CCCD budget line. Several meetings were held and an international OR seminar was attended by the head of the OR section of the Office of Studies,

Planning, and Research (OSPR). In May 1989 a workshop was organized by the project and the International Development Research Center (IDRC). At the end of the workshop 23 research topics had been identified and four research protocols had been drafted.

Unfortunately, as stated in the final CCCD/Guinea evaluation dated August 1991, the introduction to research methodology has not produced any palpable results to date because of lack of follow-up. Two research proposals (one on mosquito nets impregnated with insecticide and one on essential drugs) were submitted to USAID through the CCCD Project but were not funded. No Research Review Committee was established to approve research protocols and no organized, systematic OR, as defined by the CCCD Project, was ever funded. There was some disagreement between Guinean nationals and CDC technical people as to where emphasis should have been placed in operations research, on protocol or on the actual work. However, this does not exclude operations research from being done in Guinea in the future. As a matter of fact, MOHSA is presently discussing the need for OR to improve the quality of HMIS. Since operations research in the context of CCCD/Guinea's support strategy did not occur, the question of sustainability, other than as described above, is not addressed here.

V. CONCLUSIONS

It would be a mistake to interpret the positive findings in this report as a guarantee that PHC services are secure. Should, for example, the GOG not be able to fund or find funding sources through UNICEF and other donors for the ten million dollars needed for maintenance and expansion of PHC services during the next five years, the results could be devastating.

PHC's resources are already being strained with the integration of the previously CCCD-assisted health centers, especially in Conakry. Due to the heavy consumption of drugs in Conakry, replacement drugs for the rural areas are in jeopardy. If and when the drug supply system (the pillar power of PHC) falters, a "meltdown" of the PHC system could result.

VI. LESSONS LEARNED

- 1. Political commitment and leadership provided at the highest levels of government authority are indispensable for the success and continuity of health projects and programs. This political will must be proclaimed by the authorities and felt by the public. This is best manifested by the government assuming its role and responsibility for planning, coordinating, and follow-up of health services, as well as providing substantial funding.**
- 2. Possessing management skills specific to one's job assignment is a major factor leading to project success and positively influences project sustainability. USAID/Conakry seldom, if ever, had an experienced health project officer to manage the project; CCCD/Guinea never had a project coordinator or technical officer (TO) experienced in USAID administration (the TO learned by trial and error). As a result, and as documented in the three external CCCD/Guinea evaluations, CCCD Project management suffered.**
- 3. Sustainability must be considered by all concerned at the very conception and throughout the length of a project. At conception one must ascertain not only the present but the future financial and material resource needs and the durability of those resources.**
- 4. Credibility of the health system has been turned around because of availability and reliability of services. This is demonstrated by the increased attendance at health facilities, willingness of the people to pay for services, and unsolicited gifts or donations from private organizations.**
- 5. Project sustainability is everyone's responsibility, but rarely is it considered as such. To assure project sustainability, roles and responsibilities for attaining sustainability criteria must be clearly defined and understood by all concerned parties: government, administrators, health workers at all levels, communities that benefit from the project, donors, and all other parties associated with the project.**
- 6. A centrally funded project might be a good example of one of the criteria for sustainability -- "Ownership." USAID Missions may accept a centrally funded project, but may never develop a sense of proprietorship and therefore not consider it a priority.**
- 7. USAID Missions who do not have staff with a public health background are less likely to accord the same priority to a health project as they would, for example, to an agricultural project.**

8. **Gaining new skills, controlling resources, gaining prestige, and other benefits engender a certain degree of interest in acquiring power among project or program managers. Consequently, the notion of integrating and/or decentralizing health services or activities may be perceived as a threat to a project manager's power base, thus influencing his/her decision or willingness to do what would be in the best interest of the project and therefore the public.**
9. **Failure to adapt regional CCCD Project goals and objectives to specific country situations can lead to unrealistic expectations. Guinea, seen as less developed than most other CCCD countries, took on the same regional goal and objectives (33-50 percent morbidity/mortality reduction of target diseases) as did the other 12 CCCD countries. Absence of reliable data make it difficult to know, but most would say that these objectives were not achieved -- not as a fault of the project but rather due to unrealistic objectives.**
10. **Leadership is an important factor contributing to sustainability. Clearly, the programs, projects, or components thereof which are functioning well are those which are managed by strong, capable leaders. Leaders have the credibility, desire, and vision to make programs work and to motivate personnel at all levels. Some leaders of the CCCD Project in Guinea have, in the absence of adequate national funding, taken the initiative to seek out donors to fund activities already planned -- thus assuring the continuation of program activities.**
11. **In the absence of decentralization, management of health services is less efficient and provision of health services is not optimal.**
12. **Decentralization of power and responsibilities to the prefectural and sub-prefectural levels without providing resources, guidance, and support is not true decentralization.**
13. **Failure to involve communities in project activities is a factor which limits sustainability.**
14. **Development of support structures such as OSPR (Office of Studies, Planning and Research) must keep pace with the development of projects or programs such as CCCD or the national Primary Health Care program to better assure their sustainability. OSPR, charged with providing training, research, and statistical support to health projects/programs, does not demonstrate the same dynamic force or aggressiveness as do the programs. This may be a problem of its position in the health structure hierarchy, a problem of resources, mandate, or of leadership.**
15. **Health services are enhanced, and thus more sustainable, when health projects are integrated into a viable national health service delivery system.**

16. Personnel from previously CCCD-assisted centers have been assigned to integrated PHC centers to meet personnel needs and benefit from better equipment, supervision, monitoring, recycling, as well as performance bonuses paid to personnel by management committees.
17. To gain maximum benefit, the development of support services must be just as dynamic as the development of project interventions. Health education activities were not developed until the last two years of the project, and consequently there was not enough time to study the impact of these activities.
18. In reviewing sustainability, phasing out of a project may be just as important, perhaps even more important, than the actual conduct of the project. Ill feelings generated among the partners during the closeout may mask the good that was accomplished during the project.

VII. RECOMMENDATIONS

1. To support sustainability during the current critical phase of PHC program expansion and integration of CCCD assisted health centers, it is strongly recommended that USAID and the MOHSA explore the possibility of obtaining PL-480 funds to help finance health care services available to the people of Guinea.
2. It is imperative that the GOG find the means to pay for vaccines or operating costs, given that UNICEF plans to phase out its support for EPI.
3. It is necessary, in order to ensure complete integration of ORS distribution, that the balance of stock of oral rehydration salts (ORS) remaining from the CCCD Project, currently held at the national CDD manager's office, be turned over to the Essential Drug Section of the national PHC program where a functional distribution system exists and records of distribution are maintained.
4. After four years of PHC services, a KAP study is recommended to determine to what extent the population uses anti-malarial drugs correctly (private and public drug sources), and the extent to which public and private providers take corrective measures. Do the vendors of these private sources of chloroquine provide appropriate treatment schedule advice? What percentage of the consumers know the correct treatment schedules? These questions need to be answered.
5. With increasing threats of chloroquine-resistant malaria in Guinea, a policy on second line drugs should be established.
6. Make the OSPR fully operational and capable of furnishing to the health system all support as expected such as planning, research, training, and management of information, by clarifying its mandate and providing the necessary resources.
7. Decentralize all training and supervisory activities by placing responsibility on prefectural health teams for the identification of their needs in training, training implementation, and evaluation of personnel performance.
8. Elaborate a national training policy to include a system for identifying training needs, and develop and institutionalize a system of continued education for all health personnel.
9. Plan, develop, and integrate health education activities into the national program beginning with an impact study of previous activities.
10. Reinforce personnel at the national Health Education Unit and provide the prefectural teams with health educators.

11. **The consequences of inflation on accumulating PHC cost recovery funds need to be monitored if savings accounts are going to continue as a useful funding source.**
12. **To enhance better relations, eliminate avoidable delays, and avoid frustration, donors and the Government of Guinea should communicate their respective administrative procedures (accounting, purchasing, regulating, procuring, etc.) to each other and assure that the procedures are understood.**
13. **Lines of authority and responsibilities between USAID missions and PASA partners should be well defined before the commencement of new projects.**
14. **To reinforce sustainability, the MOHSA needs to accelerate decentralization of national PHC program management to the prefectoral and sub-prefectoral levels. This includes responsibility for budget, human resources, logistics, training, and responsibility.**
15. **Phasing out of a project should be a coordinated effort among MOHSA, the lead donor, and other donors long before the PACD so that all parties concerned are aware and prepared for what could otherwise be a traumatic project ending.**

VIII. RECOMMENDATIONS FOR FUTURE SUSTAINABILITY STUDIES

1. The present criteria and indicators are appropriate (with minor revisions) for studying sustainability of CCCD technical interventions (vaccinations, diarrheal diseases, and malaria), but separate criteria and indicators need to be established for the CCCD support strategies (training, health education, HMIS, and operations research). Or one needs to determine if it is appropriate to evaluate sustainability of support strategies as they are themselves often indicators and criteria for enhancing sustainability of project interventions.
2. The team recommends that, in order to further refine criteria and indicators, future sustainability studies amend the following criteria and indicators to read:
 3. Local Financing, Community Participation and Private Sector Provision of Services
 - A. Continuously increasing assumption of project costs by government and community members.
 - B. Implementation of fee-for-service/cost recovery systems which decentralize project responsibilities (financial, managerial, etc.) to the community level.
 6. Ownership
 - E. delete.

APPENDIX A
SCOPE OF WORK

SCOPE OF WORK

OBJECTIVE OF THE CONTRACT

(1) Using the ACSI-CCCD Sustainability Strategy (which is incorporated into this contract in Attachment I), the contractor shall execute a series of sustainability assessments in former ACSI-CCCD countries, including Guinea, Lesotho, Malawi, Nigeria and Rwanda. The objectives of the assessment series are to:

- a) Assess the sustainability of child survival activities and benefits since the completion of the ACSI-CCCD project in four countries.
- b) Assess the progress made towards sustainability in one country where ACSI-CCCD project is ongoing.
- c) Identify the contributing factors and/or constraints to sustainability.
- d) Identify lessons learned about sustainability within and across the countries that may have application to similar development efforts.

BACKGROUND

The ACSI-CCCD Project is the Agency's primary child survival project for Africa. The goal of the project is to strengthen the ability of African countries to prevent and control major causes of childhood mortality and morbidity in Africa. Technical interventions include immunization and the control of malaria and diarrheal diseases. In Lesotho, the project also focused on the control of acute respiratory infections. Support strategies developed through the project include training and supervision, health information systems, health education and operations research.

Sustainability has been an increasing concern of project managers and implementors since the mid-1980's. With the 1988 amendment to the ACSI-CCCD project, the development of sustainable systems became formalized as a critical project objective. With expert technical assistance, an ACSI-CCCD sustainability strategy was developed and revised and is now ready for use as an assessment tool for country projects. This strategy identifies five key elements of sustainability and provides an array of indicators to be used in assessing the sustainability of ACSI-CCCD projects (see Attachment 1).

ACSI-CCCD projects have been implemented in 13 countries since 1981. Malawi and Rwanda closed out their ACSI-CCCD projects in 1988. During 1991, Guinea and Lesotho closed out their

ACSI-CCCD projects. Nigeria's ACSI-CCCD project is ongoing. As defined in the sustainability strategy, sustainability is the continuation of activities and benefits achieved during the life of a project, at least three years after project funding stops. According to this definition, sustainability of the ACSI-CCCD project can be assessed in Malawi and Rwanda. In Guinea and Lesotho, the potential for and early evidence of project sustainability will be sought. In Nigeria progress towards sustainability will be measured.

STATEMENT OF WORK

This is a completion type contract and the end product of this contract will be a sustainability report series. The series will include five country reports and one summary report on sustainability of child survival activities and benefits resulting from the ACSI-CCCD project. The individual country reports will be based on project sustainability assessments undertaken in Nigeria, Malawi, Rwanda, Lesotho and Guinea. The summary report will synthesize the findings and conclusions of the five country studies, extracting major lessons learned. To accomplish these tasks, the contractor shall provide or recruit and manage one project manager and three three-member assessment teams as described below.

The Project Manager

The contractor shall provide or recruit and manage one Project Manager to oversee the five country sustainability assessments and prepare the overall summary report. The project manager will:

- 1) Assist in the selection of the assessment team members,
- 2) Prepare for and participate in all assessment team briefings and debriefings,
- 3) Guide the teams in the development of specific country workplans
- 4) Oversee the coordination of all assessment team logistics,
- 5) Edit and finalize each country report,
- 6) Prepare a summary report synthesizing key lessons learned and providing guidance to African governments, USAIDs and other collaborating agencies on project sustainability.
- 7) Provide a debriefing session for AFR and other A.I.D. offices on the sustainability series and summary report.

Assessment Teams

The contractor shall recruit and manage three teams to conduct the five country-level sustainability assessments. One team will visit the Francophone countries, Guinea and Rwanda. A second team will visit the Anglophone countries, Lesotho and Malawi. A third team will visit Nigeria.

For each country assessment, the team will:

- 1) Review the project agreement, previous evaluation reports and other pertinent project documents,
- 2) Review the ACSI-CCCD sustainability strategy, the A.I.D./CDIE study entitled "Factors Influencing the sustainability of U.S. Foreign Assistance in Health 1942-1989: A Six Country Synthesis", Dec. 1990 and other related journal articles.
- 3) From the ACSI-CCCD sustainability strategy, select the specific indicators to be used for each country and define measurement strategies for each of the indicators selected,
- 4) Develop a workplan for activities to be conducted in-country, including information collection at the national level and visits to at least one district outside of the capital city,
- 5) Interview central level Ministry of Health (MOH) and collaborating officials, health workers at various levels of the system, observe health facilities and health worker performance and interview project beneficiaries,
- 6) Using the selected indicators from the ACSI-CCCD sustainability strategy and available data, assess and describe the extent to which project activities and achievements have been sustained. This includes technical effects as well as institutional effects. Findings can be summarized in table form using Attachment 1, Annex C as a guide.
- 7) Based on document review and country visit, address the following questions:
 - a) Did the project meet the five criteria identified in the ACSI-CCCD sustainability strategy as listed below?
 - Perceived technical effectiveness
 - Integration into the Ministry of Health at all levels
 - Budget levels born by local entities (e.g., MOH, communities)
 - Strong training program
 - Project negotiations conducted in an atmosphere of mutual respect

- b) How did these factors contribute to project sustainability?
 - c) Are there other important project-related criteria necessary to achieve sustainability of project activities and benefits?
 - d) Are there contextual factors (i.e., factors beyond project control) that have facilitated or constrained sustainability? If so, what are they and how have they influenced sustainability?
 - e) Is sustainability of donor projects in these countries a realistic goal? Why or why not?
- 8) Identify and document lessons learned about sustainability that may have relevance for other projects/countries, and
 - 9) After the country visits, provide a debriefing session for AFR/ONI and AFR/ARTS in Washington.

METHODS AND PROCEDURES

A preliminary outline of the Contractor and assessment team's procedures and estimated level of effort for the assessments is set forth below. Within twenty working days from the effective date of this contract, the Contractor and project manager will develop in collaboration with A.I.D. a definitive work plan for approval by the AFR/ONI/TPPI Project Officer and AFR/ARTS/HHR. The approved workplan will include a detailed schedule of the Contractor's activities, assessment dates and dates for delivery of final reports.

Timing for the Sustainability Assessments

Two teams will visit two countries and one team will visit one country. In country, the team will spend time in the capital city meeting and interviewing key officials. The team will also work in the districts visiting facilities and interviewing health workers in preparation for composing the draft report.

Current planning calls for the first team to visit Nigeria in the fall of 1992, the second team to visit Rwanda and Guinea in early 1993 and the third team to visit Lesotho and Malawi in Spring 1993. The final report will be completed by May 31, 1993.

TEAM COMPOSITION

Three-person assessment teams will be required to incorporate the necessary professional skills in (a) management and health finance, (b) epidemiology, (c) childhood communicable diseases, (d) health education and training, (e) health information systems and (f) team leadership.

French fluency will be required of the team visiting Guinea and Rwanda.

The project manager will be a senior public health official with broad experience in health policy and program development, working familiarity with the sustainability literature, excellent writing skills and fluency in spoken and written French and English.

REPORTING REQUIREMENTS

The assessment teams will provide one copy of the draft report to the USAID mission in each country two days prior to departure for review and discussion. The draft report shall include an executive summary.

The project manager with technical assistance from team members will edit and produce the final draft of the five country reports. The contractor will have 12 working days (unless otherwise authorized by AFR/ONI) following the return of each assessment team to produce final edited draft of the country reports for AFR/ONI and ARTS approval. Three copies of each report will be submitted to AFR/ONI. AFR/ONI and ARTS will review, make final editing and substantive recommendations and return the approved drafts to the Contractor within 10 working days. Upon re-editing, the Contractor will have five working days (unless otherwise authorized by AFR/ONI) to submit 10 copies of each final country report to AFR/ONI.

Task

Location

Home Office: Technical and operational guidelines agreed to and work plan finalized with the contractor; assessment teams recruited; communication with missions and the Africa Bureau preparation for the team planning meeting; logistics planning; preparation and finalization of the country and summary reports and translations if required. Washington

Assessment Team: Review project documents, participate in team planning meetings Washington

Attend briefings by and interview regional-level project implementors at the Centers for Disease Control Atlanta

Interview national, USAID and other donor officials, visit field sites, review available data, prepare draft report and debrief the USAIDs Countries

Debrief AID/Washington Washington

The suggested format for the country reports is as follows:

- Executive Summary
- Table of Contents
- Body of the report - this should incorporate elements of the scope of work, including:
 - * purpose of assessment
 - * methodology
 - * findings with respect to sustainability of project activities and benefits,
 - * discussion of the sustainability questions posed earlier in the SOW
 - * broad lessons learned
- Appendices

The body of the country reports should be no longer than 40 pages. Detailed discussions of methodological or technical issues should be placed in appendices. The lessons learned should incorporate guidance for similar development efforts.

Drawing from the country reports, the project manager will prepare the draft summary report within 45 working days (unless otherwise authorized by AFR/ONI) of the approval of the last country report. The contractor will provide three copies of the draft report to AFR/ONI. AFR/ONI and ARTS will review, make final editing and substantive recommendations and return the approved draft to the Contractor within 10 working days. Upon re-editing, the Contractor will have 5 working days (unless otherwise authorized by AFR/ONI) to submit 20 copies of the final summary report to AFR/ONI.

The suggested format for the summary report is as follows:

- Executive Summary
- Table of Contents
- Body of the Report - including purpose of the assessment series, major lessons learned and overall guidance for similar development efforts
- Appendices

The body of the summary report should be no longer than 20 pages. Guidance for similar development efforts should be directed to African governments (policy makers and program managers), USAIDs and other donor colleagues. This document should be less technically oriented than the country reports with a focus on policy and programming issues.

APPENDIX B

PERSONS AND PLACES VISITED

LIST OF PERSONS MET AND PLACES VISITED

MINISTRY OF HEALTH AND SOCIAL AFFAIRS

Professor Madigbe Fofana
Professor Mandy Kader Conde
Mr. Kourouma

Dr. Yero Boye Camara
Mr. Jean Robert Tolno
Dr. Mamady Conde
Dr. Moussa Keita
Dr. Austin Johana
Dr. Boubaear Dieng
Dr. Mahi Barry
Mme Fatoumata Binta Diallo
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Chief, SMI Section
Chief, Operations Research
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Pediatrics Surveillance Center, Kindia
Director, Health Center, Kolente
Head, CPN, Health Center, Kolente
Head, EPI, Kolente
Subprefect, Kolente
Adjunct Subprefect, Kolente
President, Management Committee, Kolente
Vice President, Management Committee,
Kolente
Treasurer, Management Committee, Kolente
Head, Public Hygiene, DPSAS, Kindia
Head, Logistics DPSAS, Kindia
Matron, Health Post, Gberiakhory, Kindia
Orderly, Health Post, Gberiakhory, Kindia

Prefect, Telimele
Secretary General, Decentralized Collective,
Telimele
Mayor, Urban Commune, Telimele
DPS Prefecture, Telimele
Director, Health Center, Telimele
Director, Health Center, Sarekaly
Subprefect, Sarekaly
Medical Director, Hospital, Telimele
Director, Health Center, Ggougoudjie
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APPENDIX C

DOCUMENTS REVIEWED

LIST OF GUINEA DOCUMENTS REVIEWED

1. **Combatting Childhood Communicable Diseases - Guinea People's Revolutionary Republic of Guinea, United States of America, Federal Republic of Germany, May-June 1983 (English)**
2. **Project No. 698.0421.75 Amendment No. 1 July 21, 1989 (French and English)**
3. **Project Grant Agreement between Republic of Guinea and the United States of America June 18, 1985 (French and English)**
4. **Accord de Subvention Pour Un Projet entre la Republique de Guinee et les Etats-Unis d'Amerique, le 22 juin, 1985 (French of #3)**
5. **Memorandum, Peace Corps, Nanette Hegamin, Revised Copy of Health and Water/Sanitation Project Plan July 19, 1990 (English)**
6. **Progress Report July - December 1987 Italian Government Funded EPI/PHC Report 9 January 1988 (English)**
7. **Mission Pritech en Guinee January 19-30, 1987 (French) (Pritech Mission in Guinea, January 19-30, 1987)**
8. **Nine Month Combatting Childhood Communicable Disease Project Review (no date) (English)**
9. **Project CCCD Country Report Guinea 1985 (English)**
10. **Project CCCD Country Report Guinea 1986 (English)**
11. **ACSI-CCCD Guinea 1987 Annual Management Information System Report (English)**
12. **ACSI-CCCD Guinea 1988 Annual Management Information System Report (English)**
13. **ACSI-CCCD Guinea 1990 Annual Management Information System Report (English)**
14. **Evaluation of ACSI-CCCD Project Guinea, May 14-June 4, 1987 University Research Corporation (English)**
15. **Evaluation du projet ACSI-CCCD Republique de Guinee 14 Mai - 4 Juin 1987 University Research Corporation (French of #14)**

16. **Recouvrement des Coûts des Activités de Soins du projet CCCD en République de Guinée, Etude de Faisabilité, REACH, Avril 1989 (French) (English: Cost Recovery in the CCCD in the Republic of Guinea: Feasibility Study, REACH, April 1989)**
17. **Project Evaluation Summary Sheet, Combatting Childhood Communicable Diseases, Dated 12/5 86 (English)**
18. **Evaluation of the Africa Child Survival Initiative-Combatting Childhood Communicable Diseases, Atlantic Resources Corporation and Birch & Davis, Intl. August 1989 (English)**
19. **Evaluation of the Africa Child Survival Initiative-Combatting Childhood Communicable Diseases, Atlantic Resources Corporation and Birch & Davis, Intl. August 1991 (English)**
20. **"Visite technique à la République de Guinée, dans le cadre de l'établissement d'une Unité de Production de Sels de rehydratation Orale (SRO) au sein de Deux Entreprises Pharmaceutiques Locales" PRITECH, July, 1989, Juarez Hygino (Technical Visit to Guinea for the Establishment of a ORS Production Unit, PRITECH)**
21. **USAID/GUINEA Country Program Strategy Plan FY 1992-1996**
22. **ACSI-CCCD Sustainability Strategy, Dec. 1990, URC**
23. **GUINEA Economic & Social Profile, USAID/GUINEA**
24. **Sustainability in Africa: A.I.D. Health Projects in Zaire, Senegal and Tanzania, Tom Bossert, URC, 1989.**
25. **Revue des SSP. Kindia 92. Qualité des soins (Review of Primary Health Care, Kindia 1992. Quality of Care)**
26. **Rapport de la Coordination du PEV/SSP (Report of Coordination of EPI/PHC)**
27. **Revue Nationale des SSP. Kindia Nov. 92 (National Review of PHC, Kindia. Nov. 1992)**
28. **L'initiative de BKO. Guinée, Juin 1991 (Bamako Initiative, Guinea, June 1991)**
29. **Plan Quinquennal de Coopération. UNICEF 1990 (Five Year Cooperation Plan, UNICEF, 1990)**
30. **Rapport de synthèse de l'atelier de programmation du PEV/SSP (Syntheses Report of Workshop on EPI/PHC Program)**
31. **Presentation du SIAC (Presentation of SIAC)**

32. Programme National de Lutte contre les maladies Diarrheiques, Ministere de la Sante Publique et de Population, Republique de Guinee, Aout 1991 (National Program for Control of Diarrheal Diseases, Ministry of Public Health and Population, Republic of Guinea, August 1991)
33. LMD Plan d'action National 1992 (CDD Plan of Action 1992)
34. LMD Plan d'action pour la formation 1992-93 (CDD Plan of Action for Training, 1992-93)
35. Amplified Project Description (for extension period December 31, 1987 through September 30, 1991) (English)

APPENDIX D

**DETAILED REPORTS
SUPPORTING THIS STUDY**

EXTERNAL FACTORS

Non-Project Related Criteria Affecting Sustainability

Political/Financial factors

The current government of Guinea came into power in April 1984, succeeding a decades-long state-run regime and initiating a change in economic policy. A program of economic and financial reform (PREF) has been under way since 1986, and two phases have already been completed (1986-1988, 1989-1991). This economic upheaval, along with adverse external circumstances and a drop in prices of the country's raw materials, has had a major negative impact on the health sector. One effect has been the spiraling cost of medications sold in the private sector. This highlights the importance of supplying essential and affordable drugs to the population available only at comprehensive (integrated) health centers.

The government budgets little to health and in recent years the trend has been to commit even fewer funds to this sector. Before 1985 at least five percent of the government budget went to health but since then the allocation has dropped to just three percent. As the government has undertaken the enormous task of reconstruction throughout the nation's economy, it has given priority to such sectors as agriculture and infrastructure rather than to health.

In 1992, nominal health costs were 12 times greater than they were in 1985. However, much of this increase was attributable to the loss in value of the Guinea Franc so in real terms the increase in costs was not as high. High inflation rates - annual increases from 20 to 70 percent between 1986 and 1991 - were a major factor contributing to the Franc's weakness.

Currently the government spends much of its health bill on the wages and salaries of its health workers. Budget percentages allocated to salaries jumped from 60 percent in 1989 to close to 88 percent in 1992. This increase is due to the massive hiring of health professionals (about 1,000 in 1991) and the doubling of health worker salaries in 1991. Taking account of this situation, the government froze hiring by the Ministry in 1992.

As a consequence of the increase in the wage bill, other current health expenses have decreased during the same period, affecting government allocations to maintenance, material, and pharmaceutical products.

The geographical distribution of health personnel is very uneven. Rural areas have few health workers while urban areas have high concentrations of health professionals. This pattern, found in many developing countries, stems from the reluctance of health workers to leave the services and conveniences of cities for the starker landscape of the countryside. In Guinea, this is complicated by the custom of keeping families together. Many of the workers in Conakry, for instance, are nurses and midwives. They are mostly unwilling to leave other family members for a rural posting. This has led to a situation where, in order to accommodate the large numbers

of health workers, shifts have been instituted at some health centers in order to accommodate them all. Thus, the staff distribution problem continues.

The curtailment of government resources for the supply of medications combined with the increased cost of pharmaceutical products marketed by private entities, which has reduced public access to medication because of financial reasons, are important external circumstances to the project. This warrants the establishment of a supply system of essential drugs in health centers, with cost recovery, along with decentralized management at the health center level. The private sector was asked to participate in the supply of essential drugs but has refused to import products of common international denomination DCI (ICAs).

The health sector receives many different fund allocations from international organizations including WHO, UNICEF, UNDP, and the World Bank; from bilateral agencies such as USAID and GTZ; and from such NGOs as MSF, GVC, AFVP, and PSI. Even though coordination of field activities may exist, it is difficult to obtain precise information about the amount of financing allotted by each of the above entities.

EXPANDED PROGRAM OF IMMUNIZATION

Background

A national program EPI/PHC/ED (Expanded Program of Immunization/Primary Health Care/Essential Drugs) was established during the years of CCCD project implementation. Planning took place in 1986, and in 1987, funding resources for implementation were obtained. The program began in 93 health centers, in 1988. A little over two-thirds of centers benefitted from UNICEF funds and the balance from other international organization funding. A first large-scale expansion of the program took place in 1990, with program implementation in 70 additional health centers; the second expansion was in 1992, with 38 health centers added. Some other centers were opened during the years in between, bringing the total number of health centers covered at the end of 1992, to 236. A total potential of about 360 health centers exists in Guinea.

The progressive implementation was justified because of the role of logistical problems and follow-up in a venture of this magnitude. The roughly hundred centers opened during 1988 and 1989 are now financially autonomous as a result of the cost recovery system established within this program.

This impact gives rise today, to a double status of centers that were included in the CCCD project: at the time of the assessment team's visit (January 1993), some centers had already been taken over by the national EPI/PHC/ED program and others were not. The Guinean EPI/PHC/ED program is considered an example of success, not only in Guinea, but also throughout the entire African continent.

CCCD health centers integrated (hereafter simply called integrated health centers) in the national program during the project period or later, are very efficient, in contrast to health centers that have not yet been integrated (hereafter called non-integrated health centers.)

Two additional preliminary remarks must be made:

- During the last years of the CCCD project, directors or interested observers of the project, insisted on the need to integrate CCCD health centers as quickly as possible into the national EPI/PHC/ED program to assure project sustainability (Final Evaluation Report of August 1991.)

- Integration of all of the country's health centers into the EPI/PHC/ED program is projected for 1995. UNICEF requests that a concerted effort be made to achieve this goal during 1993.

Methodology

Methodology defined by results from the sustainability study of the CCCD project in Guinea has been applied to immunization activities. In addition, a complementary study was performed by analyzing data to assess immunization activity sustainability.

The goal of this study was to:

- determine if there was a change in activity of health centers supported by the CCCD project after the end of the project, and if so, how activities changed.
- determine if there was a difference in development at health centers that had been integrated toward the end of the project and those which had not.
- determine if there was a difference in development between rural prefectural health centers in Kindia and in Téliimélé.

Data from the last four years for each health center in the Kindia and Téliimélé prefectures were used to complete the study. Since the situation of health centers in the town of Conakry is very different to the two prefectures and much more complex, data was not analyzed in this case. For example, the fact that there is a choice of a number of different health centers (integrated health centers) in the same town that provide essential drugs, seemed to have considerable impact on attendance at non-integrated health centers of Conakry, and would require a more detailed study.

The two rural prefectures are in a comparable situation, with the notable exception of their Prefectural Health Directors (DHD), whose mission is to support PHC programs and plan, coordinate, and supervise prefecture health activities. The DHD of Téliimélé has been in charge for five years. He is dynamic, knows the CCCD project and has consistently supported centers in his prefecture during and after the project. On the other hand, the DHD of Kindia has changed a number of times and the support of health centers by the prefectural level is less intense. This is why it seemed timely to analyze if there was a difference in development between health centers of these two prefectures.

Required data for this study and for each health center consisted of:

- the population under one year of age in the health center target area,
- number of consultations per year,
- number of BCG, DTC1, DTC3, and measles immunizations per year, and
- number of measles and neonatal tetanus cases per year.

Indicators used to analyze basic data were:

- visits to the health center (attraction of the population),
- trend in the number of immunizations per antigen (center service delivery quantity).
- trend in immunization coverage rates per antigen (center service delivery quality)
- dropout rate between DTC1 and DTC3 (center quality performance)
- trend in measles and neonatal tetanus cases (efficiency of center performance)

Unfortunately, it was not possible to complete this study during the few days of the assessment. On one hand, data was difficult to find and what was found was too incomplete to allow for an acceptable analysis without a marked bias. On the other hand, the analysis of data from different levels (health centers, prefectures, national EPI service, central system of health information) has often shown significant disparities. It was not possible to ascertain the reason for these disparities, nor to determine which source of information should be used. These factors led us to forego the analysis of data that we had planned to conduct, to avoid arriving at false conclusions.

Project-Related Criteria Affecting Sustainability

The criteria developed by this study were analyzed by asking the following question:

"Has each one of these criteria been a contributing factor to the sustainability of the project?"

1. Perceived Effectiveness

A. Development of workplans and policy statements at national, district, and local levels.

YES.

A national policy concerning EPI, in accordance with WHO guidelines, has been in existence for a number of years. Work plans are established at the national and peripheral levels, but there is a deficiency at the intermediary prefectural level.

B. Implementation of HIS or special surveys to measure project impact.

YES.

The national information system allows for the assessment of EPI activities and impact through certain data collected monthly, such as the number of immunizations or the number of EPI target diseases, such as measles and neonatal tetanus. Among others, improvements could be made in the speed and availability of data. Surveys on immunization coverage have also been performed. The last national survey was at the end of 1990, and another is planned for the third quarter of 1993.

C. Completion of operations research and special studies to assess program quality and develop solutions.

YES (special studies), NO (operations research).

Monitoring, as done in Guinea, is an operational research activity to improve quality; it is a systematic process for managers that uses information to resolve problems and improve program efficiency and efficacy. The monitoring manual is continuously improved with observations made by its regular users. This tool, which provides a number of follow-up functions to EPI activities, is part of the quality assessment of service delivery. Every six months, after use of the manual to examine the progress of the program by persons in charge and responsible for its implementation, the manual is modified based on the observations of its users, to make it more efficient and to increase its potential to help improve program quality.

D. Use of data to make decisions, identify problems, and develop solutions.

YES.

Data is used at the national level and at the health center level for decision making, however the compilation of data is slow. At the beginning of the project, OSPR and National Health Information System (SNIS) had set up an information system to compile all the data from health centers at the national level (OSPR), which would then break it down by prefecture. No data analysis was planned for the prefectural level. After December 1993, decentralization of data collection is planned: health center records will be compiled and analyzed at the prefectural level. Only the summary will be sent to OSPR.

This is the reason that when the team visited the country's interior, it was not able to obtain data on the activities of each project health center, at the level of rural prefectures, targeted by the project. Research at the central level, at the EPI Directorate, as well as at OSPR has been difficult. Only data already collected by prefectures was easily accessible. Data for each center existed but could only be obtained by searching the files.

E. Adequate staffing and resources at the service delivery level.

YES.

There are sufficient staff and resources, although a better distribution of effective personnel is warranted.

F. Public perception of project effectiveness.

YES.

Public opinion about the program is very good according to a study in 1991, covering certain health centers.¹ Several EPI target diseases are perceived by the population as being practically eradicated including measles, polio, and neonatal tetanus.

2. Integration and Institution Strengthening

A. Effective supervisory system (using checklist) which decentralizes technical and managerial responsibility to the peripheral level

YES.

There is a supervisory system in place at various levels. Health center directors supervise health posts in their area. Prefectoral Health Directors (DHD) supervise health centers. Finally, a national team handles problems identified by the DHDs during their monitoring visits to health centers. Until now, only the Prefectoral Health Director supervised at the level of the prefecture. Based on the last PHC review, the plan has been to increase the prefectoral team to include the Prefectoral Health Director, the hospital director, and the medical director for rural areas.

B. Integration of service delivery at delivery sites.

YES.

The delivery of immunizations is totally integrated into the health center services.

C. Integration at the national level into existing MOHSA structures

YES.

The immunization program (EPI) is a section in the Prevention Division of the Health Ministry. This Division is subordinate to the National Health Directorate.

¹Bamako Initiative, Republic of Guinea. External Assessment: Preliminary Report June 1991.

D. Support activities, operational and integrated (Health Education, Training, HIS, Operational Research) at the national level.

YES.

The health information system, personnel training and health education, as related to the immunization program, are integrated into the MOHSA. Health training continues to be a weak link in the program.

E. Competency based assessments of worker performance.

NO.

There is no systematic evaluation of health worker performance in this component of the project or any other.

F. Reliance on host country technical expertise.

YES.

Many high-level professionals have been educated in the context of the program. For several years early on, however, foreign technical assistants and consultants were necessary. Today, the program rarely requires outside assistance because it finds the necessary resources locally.

3. Local Financing, Community Participation, and Private Sector Provision of Services

A. Assumption of project costs by the government.

NO.

Significant expenses have been incurred by the acquisition of heavy equipment, such as vehicles and refrigerators. A recent study with data from the logistics office of the program has shown that "\$55,000 had been spent over a period of six months not counting the \$20,000 that UNICEF spent directly for local purchase of vehicles that average \$3,000 per vehicle." The government will not be able to assume all new costs in the near future without foreign assistance. The replacement of certain investments is vital to the program. Since power supply in the town of Conakry is not reliable, the old power arrangement of the central refrigeration chamber required repairs of \$9,000 in 1992. Program directors are concerned about the possible effects to the national stock of vaccines in view of this precarious power situation.

The most crucial factor for project sustainability is to control the cost of immunization. If the supply of vaccines ceases, the EPI program will no longer exist. This factor alone determines the survival of the project. UNICEF has, until now, covered almost all of the vaccine supply and is suggesting that it will phase-out progressively. The responsible parties in the country do not seem to believe that they will have to take over vaccine purchases any time in the near future.

B. Implementation of cost recovery/fee-for-service

YES.

Cost recovery at the health center level is based on the sale of essential drugs. Cost recovery at health centers amazes even those who conceived the idea because the rate of recovery is such that community financing provides the impetus for the program. Integrated health centers can usually recover all of their operational costs, except for state personnel salaries, and sometimes even contribute to the cost of prefectural supervision. In November of 1992, the national account receiving deposits from the sale of services and drugs

At certain autonomous health centers had a credit balance of over \$100,000. This account represents only part of revenues earned by health entities, that amount to a total of \$170,000. An important problem arises because of the depreciation of local currency in relation to a strong currency, which is used to purchase essential drugs, which are indispensable to cost recovery at health centers.

The team found that at project health centers that were not yet integrated, a kind of "wild" cost recovery was taking place. Under the terms of the CCCD project, these health centers are ruthlessly deprived of covering their operating costs (fuel, supplies, paper products, etc.) To deal with this situation, directors have decided to charge for certain services provided by the health unit. In contrast to integrated health centers however, which enjoy a strict management system, there is no financial control whatsoever in non-integrated centers. In one of them, income was reported to the team as a sum that corresponds to 25 percent of the theoretical estimate (i.e., number of consultations x price of consultation.)

C. Private provision of project services.

YES.

There are a certain amount of private offices offering immunization services. Nevertheless, even though not exactly assessed, the role of the private sector in immunization is insignificant (and was at the time of the CCCD project as well). Where the role of the private sector is significant is solely in the capital, Conakry. The 1990 MOHSA annual statistical report mentioned that close to 90 percent of private medical offices are located in the Guinean capital.

D. Donor complementarily and coordination.

Donor agency contributions are complementary in the EPI/PHC/ED program. This includes both, international and cooperative agencies (WHO, FNUAP, GTZ, World Bank) as well as NGOs (MSF France and Belgium, AFVP, GVC). The CCCD project stood apart in this respect as it did not during LOP integrate its operations with those of the national program in its project area.

4. Strong Training Component

A. Training strategy developed and implemented.

YES.

Training is an important component of this project. A technical committee of "training and supervision" produces and updates material necessary for training in the program. A large number of personnel receive their training in EPI, although one cannot speak of a well-established strategy. Training, however, is a strong component of this program.

Training received by health workers who work in non-integrated health centers are often recruited by integrated health centers. This movement of workers, however, has only increased the imbalance between integrated health centers and non-integrated health centers.

B. Continuing health education policy developed and implemented.

YES.

In contrast to other project components, the EPI does have a developed strategy for continuing education. Many health personnel have been retrained and some several times. There is no specific document, however, defining a continuing education policy.

Continuing education is handled by prefectoral and regional teams. Sessions cover EPI topics as well as CDD, HIS and health training resource management.

C. Implementation of supervisory system.

YES.

Conscious of the fact that the success of the EPI/PHC/ED program depends, in large part, on the follow-up of its activities, a supervisory system with bi-annual supervision of health centers has been established by nationals in charge of the program. This supervision allows the assessment of immunization coverage levels as well as quality of care and assists with micro-planning and budgeting of center activities.

The technical committee on "training and supervision" implements and assures the follow-up of the national supervision plan.

D. Completion of facility training needs assessment.

YES.

The needs of health facilities are estimated during bi-annual supervisory visits. This assessment could be improved by being more systematic and better integrated into an overall facility plan. This would assist in improving the quality of service provided by the EPI.

E. Trainers trained in how to train.

YES.

This is also a basic strategy of the EPI program; trainers receive training in how to train others. There are two groups of trainers for the EPI: one in charge of management and immunization techniques, and the other in charge of teaching matters relating to the cold-chain.

F. Project training activities integrated into existing MOHSA training structures.

NO.

There is an operating training-research division in the OSPR, but training is performed in each of the Ministry divisions. The OSPR registers field training, but does not integrate it. The actual training activities are not integrated into the OSPR.

Lessons Learned

1. Discussions about sustainability should begin at the inception of a project and continue throughout its execution.

At the time of inception of a project, the choice of operational means, the kind of execution, the question of sustainability of activities implemented in the scope of the project, should all be examined carefully and understood by all concerned parties.

The choice of the type of vehicle to be used in the project, for example, should not only depend on purchase price. From the point of view of sustainability, it will be less efficient to have saved a little money in purchasing a less expensive vehicle, if the chosen model is different from those used in other ventures of the same kind in the country. Among the major problems arising with this short-sighted point of view, is that of fixing a broken vehicle with spare parts taken from another ("cannibalization"), the difficulty in obtaining spare parts, and sometimes the lack of know-how for repair and maintenance of uncommon vehicles. Twice, the project has been in this predicament: in the beginning, Toyota Land Cruisers were used in the CCCD project.

To streamline the car pool, the national EPI service replaced them, after some time, with Hi-Lux vehicles. Toward the end of the project CCCD once again purchased a special type of vehicle (Mitsubishi), perpetrating this problem.

Thus, from the inception of a project one must stop and think about how it can continue to exist once the flow of foreign financing comes to an end. This reflection should also continue throughout the life of the project. A project should be adaptable during its evolution. For example, if this question were raised at the beginning, and especially while the CCCD project was under way, undoubtedly the conclusions would have been reached that more cost recovery was necessary and not limited solely to ORS and chloroquine. Taking sustainability more seriously would perhaps have resulted in a more manageable attitude by A.I.D. in relation to the supply of drugs in project health centers, and would have established the implementation of cost recovery for these drugs.

2. It is important to assure a project phase-out that allows the decision makers and those involved to prepare for perspectives favoring sustainability

The abrupt halting of a project, without any explanation about the means for phasing out, and for which there is no transitional substitution process, draws attention to the sustainability of activities undertaken in the scope of the project.

Directors of health units, that were included in the CCCD project but not integrated into the EPI/PHC/ED project, from one day to the next, found themselves without any foreign financing to cover their daily operations (fuel, paper, goods) and have had to "disentangle" themselves to find funds to continue their daily tasks. This is why some have established cost recovery mechanisms at their health centers. These cost recovery systems, however, are not accompanied by the implementation of a management and control system. These systems are apparently organized by someone in charge of health workers at the center, yet neither the public nor the Ministry is involved in their management. It so happens that these systems do not contribute to the exclusive profits of the health center but contribute just as much to the profit of the collectors of these funds. In such cases the establishment, eventually, of a cost recovery system will clash with persons in charge of executing it because they will lose their personal profit. This situation could have been avoided if thought had been given to the subject of cost recovery systems before phasing out the project.

The absence of information about the end of the project in the minds of informed high level health authorities in Guinea, has led many of them to believe that the CCCD project was still running. Thus, many believed that the assessment team was to examine ways for an eventual implementation of phase II, after the first phase was completed. This misunderstanding of project execution, because of its precipitous phase-out, and without any real publication of information about its cessation, has not moved those in charge in the government to undertake any actions to assure sustainability.

Equally, the absence of the establishment of a project phase-out had led certain directors, at the level of health units, who knew of the end of the project, to believe that this conclusion meant the end of everything that was done within the scope of the project. Consequently, a number of center directors did not request resources, such as ORS packets, available in large quantities at the CDD national headquarters. For them, the stoppage of the project was synonymous with the halting of all facets inherent in the project.

3. Current levels of service provision and their quality has reinforced credibility of the health system.

While some years ago health units were deserted by the population, the population is once again attracted to centers where the EPI/PHC/ED program is operational. As soon as a health center is integrated into this program, it experiences a considerable increase in attendance. This reversal seems to be essentially linked to the availability of essential drugs in health units. A person with a disease is more inclined to go to a health center when he/she knows that not only will he/she receive treatment upon diagnosis of the disease, but he/she has access to the necessary treatment, at an affordable price. This renewal of credibility of health units is initially based on curative aspects of the center. Nevertheless, it also benefits prevention activities by increasing contact between health personnel and the population, as long as an increase in work for this personnel does not cause the staff to forget its principal role of prevention.

The involvement of the population in management committees and in the management of funds generated from cost recovery, is also a factor favoring health education.

Recommendation

Expand the planned sustainability study of the current PHC program to include the contribution made by the CCCD project.

CONTROL OF DIARRHEAL DISEASES

Background

When the CCCD project was launched in 1986, there was no Guinea national program for the control of diarrheal diseases (CDD). Nor had one been developed by mid-1986 when an epidemic of cholera broke out in Guinea. However, because of this epidemic, diarrheal diseases took on greater importance in the primary health care community in Guinea. During the epidemic, CDC (Centers for Disease Control and Prevention) epidemiologists assisted with cholera surveys; the Oral Rehydration Unit at Donka was soon opened and the national program began to take shape.

Between 1986 and 1991, the CCCD project greatly assisted in the formulation of the national program and policy statements. Subsequently, with the help of WHO and the coordination of other donors and lenders, the CCCD project has helped to train health administrators, health workers and trainers at all levels; and even some committees at the district level. Perhaps the greatest CDD program accomplishment from 1986 to 1991 was the improvement of diarrheal treatment techniques. In a very short time, treatment practice changed from relying mainly on antibiotics, such as sulfa guanidine (Ganidan) and Ampicillin, to use of oral rehydration salts (ORS). Fortunately for CDD, national decision makers were agreeable to making changes in these established treatment practices. The turning point for the CDD program was the improvement of diarrheal treatment techniques.

Before the CCCD project ended, the national health program began integrating CCCD-supported health centers, dispensaries, and health posts (48 total) into the national Primary Health Care program (PHC). Today, emphasis is placed on integrating the remaining (approximately 20) CCCD-supported centers into the PHC program. This section will analyze the degree to which the benefits and activities started under the CCCD project have been continued and used by Guineans since the end of the project.

Project-related Criteria Affecting Sustainability

1. Perceived Effectiveness

- A. Development of workplans and national policy statements at national, district and local levels.

A national CDD policy statement was signed by the Minister of Health in February 1991 but a national program existed before this date. The policy declares that treatment and prevention of diarrhea begins in the home of the sick person. It also clearly explains the steps to follow in the case of diarrhea, emphasizing the use of ORS. During health center visits, the team rarely saw the sale of anti-diarrheal drugs in health centers, but the team did visit one center in Conakry, where Diargal and Farigallia packets were distributed as often as ORS packets.

At the national level, the CCCD program developed a workplan, with its own budget and activities to be performed each year. This workplan is followed very closely. At the district level, the District Health Director (DHD) develops a workplan and, at the health center level, the center director develops his/her micro-plan. In general, these plans are developed on a regular basis and seem to be followed to the extent the limited operating budget allows.

B. Implementation of HIS or special surveys to measure project impact.

Since the end of the project, the national CDD Director planned and found financing for a special survey to study the impact of the national CDD program in Conakry. The survey was performed at the end of 1992 and the final report is not yet complete.

CDD-related data have been integrated into the national health information system that performs epidemiological surveillance. The system is adequately decentralized. At the end of every month, health center directors issue their reports and send them to the office of the DHD, which forwards them to OSPR, the body responsible for data analysis at the national level. Annual national reports are then shared with the national CDD director.

Plans exist to integrate CDD into the existing monitoring system. This system calls for biannual report reviews by a team consisting of the DHD, the health center director, and members of the local PHC management committee. Problems which exist are related to health centers not integrated into the PHC program. The team visited at least one center where staff have ceased to fill out or submit monthly reports because of their confusion over the perceived importance of these reports.

C. Completion of operational research and special surveys to assess program quality and develop solutions.

The team found evidence neither of program quality surveys nor a written operational research plan.

D. Use of data to make decisions, identify problems and develop solutions.

The data collected monthly is shared and reviewed by management committees, the DHD, and the health center director. Implementation and other problems as well as progress are discussed during review meetings. The DHD writes periodic reports, based on available data, to the center directors suggesting how to improve services. A copy of the DHD's report is sent to each local government head. At the national level, data are reviewed each year to identify problems and develop solutions. Decisions made are based on available data.

- E. Adequate staffing and adequate resources to keep the staff in place at the service delivery level.

At each level, national, district and local, health workers regularly receive their salaries. In health centers integrated into the PHC program, however, workers also receive a bonus, budget permitting. Integrated centers have enough resources/materials and essential drugs to continue their work. Stock ruptures are rarely observed but when they do occur they are associated with delays in the supply system. Ensuring a supply of essential drugs at the integrated centers keeps clients coming back for continued services. If receipts reach a designated level, health workers at integrated centers receive cash bonuses. Therefore, the service demand is met and conditions are favorable enough to keep the health staff in place at integrated centers. In non-integrated centers, however, staff are often scarce (because the staff prefer to work in the integrated, benefit-rich health centers) and stock ruptures are more prevalent.

- F. Public perception of project effectiveness

At all levels, - local, district, regional, and national - the public, politicians, health workers, and service directors perceive the CDD program to be very effective. A special study, conducted at the end of 1992 supports this perception by showing an increase in the use of ORS packets in both the home and in health centers by both mothers and health workers.

2. Integration and Institution Strengthening

- A. Effective supervisory system (using checklist) which decentralizes technical and managerial responsibility to the peripheral level.

A supervisory system is in place, is followed regularly but does not include a checklist. There is, however, a supervision guide but it is quite lengthy and serves only as a reference text for supervisors. The supervisory system is perceived as effective by health workers and supervisors. Generally, the system proposes a supervisory visit to a health center every week; every 15 days at the district level facility, and every three months at the national level. Actually, though, district supervision takes place every 15 to 30 days. These visits may be more or less frequent according to perceived need. Most supervisory visits are conducted by the health center director or someone from the regional level. Supervisory visits from national level personnel are rare mainly because of the lack of adequate resources. Thus, the supervisory system appears to be decentralized and, in general, runs smoothly, in spite of the lack of adequate resources to provide checklists and other materials to the supervisors.

B. Integration of service delivery at delivery sites.

It is evident from the team's visits that at integrated health centers, health services such as EPI, CDD and Malaria control are well integrated. At integrated health centers specific areas have been designated such as check-in, ORT corners, EPI, prenatal care, delivery, and medicine sales. Sometimes one finds a center where all the workers are trained in these various areas. One such health center the team visited is in Sinta (Télimélé) where the health workers are polyvalent. That is, health workers have been trained in the service delivery of several key interventions, as opposed to just one intervention such as EPI. The goal of the PHC program is to have four polyvalent workers in each PHC center. In non-integrated centers, however, one or two workers perform all tasks because of the lack of sufficient staff numbers, not because of a planned strategy (as in integrated centers).

C. Integration at the national level into existing MOH structures.

Since the end of the CCCD project, the CDD program has been well integrated into existing structures at the national level. CDD is placed in the communicable disease section of the primary health care division. All CDD program components, practiced in both integrated and non-integrated centers, are managed by the national CDD director. The integration of the CDD program into the national PHC program has been achieved through the training of personnel, the availability of ORS packets, and epidemiological surveillance by the national health information system.

The remaining CCCD project stock of ORS packets may pose a problem in the future. Normally former CCCD supported, non-integrated centers are supposed to request ORS packets at the national level, given that packets remain from the CCCD project. Since the end of the project, however, health workers have lacked adequate information about acquiring supplies and are therefore uncertain about where to obtain the packets. The result is that certain non-integrated centers purchase their ORS packets at pharmacies or from other health centers rather than obtaining them from the remaining CCCD stock at the national level (adequate for two years). If the CDD program integration into the PHC program could be total, this could resolve a number of problems (ORS packet-related, at least) at the health center level.

D. Support activities, operational and integrated (Health Education, Training, HIS, Operational Research) at the national level.

For the CDD program, the team found the four support activities to be weak. Operational research is the weakest and until now, there have been almost no studies. Health education is integrated into the CDD program but its activities are less than adequate for various reasons: mainly the lack of a well-defined policy and workplan. The HIS is well integrated in the CDD program but the collection of data is quite slow. One reason for this is the lack of a computer for the health information system's national office. Finally, the training office within OSPR is kept up to date on all CDD training activities. However, CDD personnel plan the training activities, train the workers, and at the national level the director herself asks for

assistance from donors and lenders to finance the training activities. The national training office within OSPR does not play an active role in the implementation or planning of CDD training activities.

E. Competency based assessments of worker performance.

Since the end of the project no competency-based evaluation of CDD workers' performance has been conducted (nor do plans exist for such evaluations).

F. Reliance on host country technical expertise.

Since the completion of the CCCD project, the CDD program has not received foreign technical assistance. The program relies on national expertise. This is an important step that has a positive influence on the sustainability of the national CDD program.

3. Local Financing, Community Participation, and Private Sector Provision of Services

A. Assumption of Project Costs by Government

Since the end of the project, the CDD component has continued its activities at almost the same level as during the project. The CDD director is very motivated and fortunately has found ways and the means to continue various activities such as training, and special studies. The Guinea government's assumption of project costs is not at all clear, though. At the end of the project, government counterpart funds which had been used for the CCCD project were not added to the MOHSA budget but instead were returned to the national treasury. Since the project's end, recurrent costs incurred by the CDD program have been covered by the regular operating budget of MOHSA. The team learned, however, that the MOHSA budget does not increase because project activities increase²; therefore its capacity to take over CCCD project-related costs is considerably limited.

B. Implementation of cost recovery/fee-for-service

At the beginning of the project, ORS packets were distributed for free in centers supported by the CCCD project. Before the project ended the government established a cost recovery system in the PHC program supported centers. The establishment of this system pushed even non-integrated centers into organizing some kind of cost recovery system. Now clients pay for ORS packets. The PHC program and its cost recovery system are some of the most important factors enhancing project sustainability. The system is explained, in detail, elsewhere in this appendix, under Cost Recovery.

²In fact, there has been a considerable reduction in the MOHSA budget in recent years.

C. Private provision of project services

In almost all Guinean districts, the only place to be treated for diarrheal diseases is in a public health center or hospital. The city of Conakry is an exception with its private pharmacies and active informal market. Unfortunately, Conakry based pharmacies and medical outlets almost only sell special anti-diarrheal medicines supplied by foreign laboratories, instead of selling ORS packets, that work more efficiently and are less expensive. The fact that the private sector follows a different treatment plan has posed several problems for the national program, particularly in Conakry. Because of these problems created by private sector services, one finds that this indicator may limit the sustainability of the CDD component.

D. Donor complimentary and coordination

In general, the CDD program benefits from good coordination with donor agencies. WHO, UNICEF, and the World Bank continue to assist with financing training activities. Once a year, two different groups (both consisting of Guineans and donors) meet to discuss CDD national workplans and their relation to existing donor plans. In addition, WHO sends biannual questionnaires (related to current and planned activities) to the CDD national director. Questionnaire feedback provides WHO with information about the progress of the national CDD program and facilitates the exchange of information.

4. Strong Training Component

A. Training Strategy developed and implemented

The national CDD training strategy, expanded for all of Guinea, since the end of the project, has been well defined and includes "Training of Trainers" as well as health worker training. The strategy explains that regional and district health teams are to train the health workers. Originally, all health worker CDD training was to take place at the Oral Rehydration Unit (ORU) located at the Donka Hospital in Conakry. This plan was not carried out, but instead the decision was made to decentralize the CDD training responsibilities to the regional level and to establish regional and district health teams to conduct the training. Presently a regional team is made up of seven instructors while the district team has a total of five. Both sets of instructors consist of physicians from the national hospital as well as health workers who have been trained extensively in CDD. Since the end of CCCD, the CDD program has already held one training session in July 1992, the second is scheduled for February 1993 (to train 202 workers). In addition, since the end of the project, the national CDD program director has trained members of the district committees in CDD-related issues. All three training sessions were financed by WHO. The training strategy is realistic and achievable.

B. Continuing Health Education policy developed and implemented

Since the end of the project, no continuing education policy has been developed at the national level. The team did visit some health centers where continuing education activities are being conducted, but the activities are in no way systematic. Also, the team found that where strong leadership existed in health centers, there also existed some form of continuing education/training.

C. Implementation of a supervisory system

The national CDD program supervisory system is well defined with responsibilities largely decentralized. Supervision is carried out by the director of each health center, the DHD, or by a national team, each week, month, or six months, respectively, as well as when deemed necessary. The system works very well and appears to be sustainable. (See 2. A.)

D. Completion of Facility Training Needs Assessments

These types of evaluations are solely to identify health worker training needs. As such, these specific evaluations have not been conducted since the end of the project.

E. Trainers trained in how to train

As in 4. A. above, "Training of Trainers" is included in the CDD program training strategy. "Training of trainers" is decentralized. The last training session was held in July 1992 and was financed by WHO.

F. Project training activities integrated into existing MOHSA training structure

Of the three programs and four support activities, the CDD program is the most well integrated into existing national training structure (OSPR). However, the CDD program, itself, searches for financing for its training activities, actually plans each training session, and even conducts the training. The OSPR is always informed about planned CDD training sessions and their progress. Unfortunately, though, there has been no real OSPR coordination with CDD training activities. A number of reasons could explain why the OSPR does not play a more important role in training; lack of financing, equipment, resources, or its unclear mandate, to mention a few. Thus, the lack of integration with the OSPR could be a factor limiting CDD program sustainability.

5. Constituency Building Through a Process of Mutually Respectful Negotiation

A. Participation of nationals in country assessments, project development, and project modifications and clearly consider the project a priority

Guineans actively participated in the country assessment concerning the CDD component and even requested (during the project development stages) that the CDD program be included in CCCD project activities. Guinea nationals discussed and recommended CDD's inclusion in the project. In addition, active discussions with donor agencies continue to play an important role in shaping national CDD policy. The CDD program is clearly considered a priority among Guineans.

B. Relevant agencies participate in project workshops

According to feedback the team received, interested agencies (WHO, UNICEF, etc.) are aware of CDD workshops and training sessions, and have participated in planning and conducting them since the end of the project. Interested agencies, such as WHO, UNICEF, and the World Bank, coordinate with each other when it comes to CDD activities.

C. MOHSA procedures facilitate the inclusion of local concerns and decisions within national level plans

The existence in centers integrated into the PHC program of health and management committees, that represent local concerns, indicates inclusion of the community in the decision-making process. Community members feel they have a say and are represented on local committees. For example, some community members have been able to change the hours of operation of health centers; or even the days of operation of services (from Monday to Sunday). Decision-making has been decentralized to a certain level, allowing the centers to operate more efficiently.

6. Ownership

Five indicators have been identified for ownership:

- A. Perception of project need at all levels**
- B. Perception of project ownership at all levels**
- C. Project-related decisions made by organizations/ committees representing local constituencies**
- D. Development and modifications of the project originate with nationals**
- E. Continuously increasing assumption of the project (costs, management, etc.) by community members who are beneficiaries**

Since the end of the project, especially for health centers integrated in the PHC program, the five ownership indicators are the strongest of all indicators the team assessed. The main report already addresses the issue of perception of need for the project. Perception of ownership is felt at all levels (by the population at large and within the health system) because Guineans manage the CDD program, because CDD is well integrated into MOHSA structure, and because Guineans themselves help finance CDD program activities (through the cost recovery system). This perception is not as strong for non-integrated centers that do not have a management committee or a well defined system of operation.

On the other hand, integrated centers (as explained throughout the report) are managed by committee, have a feedback system, etc., that work well. Often, the ownership of something depends on who manages and pays for it. In this case, community members, as they have in the past, continue to take responsibility for the management of project activities, as evident from an increase in the power and prevalence of management committees. An example of Guinean assumption of project costs is demonstrated by the case of ORS packets. In 1986, at the start of the CCCD project, ORS packets were free. Around 1988 a packet cost 25 Guinean Francs(FG). Now, in 1993, an ORS packet costs 100 FG. Prices for other essential drugs have gone up in a similar manner and clients continue to frequent health centers in record numbers. In addition, with increasing decentralization of the PHC program, there will be increased assumption of project responsibility by the community.

Recommendations

The team found that primary health care functions much better in centers integrated into the PHC program than in those that have not been integrated. These integrated centers have experienced fewer problems in attaining progress toward sustainability. The team therefore strongly recommends that CDD be totally integrated into the PHC program, as quickly as possible. Specifically, the team recommends the transfer of remaining CCCD project ORS packets in stock to the PHC depository for essential drugs.³

³This recommendation has already been discussed with the national CDD program director, who agrees with it and has already begun discussions with concerned parties.

TRAINING

Background

The training objectives of the CCCD project document amended in 1988 were:

- 1) to develop a national training plan based on plans and strategies, and
- 2) to assure the training of 90 percent of project area health personnel in management and preventive care techniques.

The training component has been one of the most dynamic components of the ASCI/CCCD project. As early as 1987, the first external assessment of the project indicated that 70 percent of targeted personnel had been educated about the project's interventions. The evaluation of 1989 reported total coverage of targets for training. From 1989 until the project's end, training activities exposed health care personnel to all of the project's components and included, more specifically, the areas of teaching health education, statistics, and research.

At the time of final project evaluation in August 1991, the project had surpassed its training targets. Training activities had produced a distinct improvement in the performance of workers at various service levels. The training, however, of prefectural (district) health directors (DPS) and supervisors in management, communication, operational research, and HIS was considered insufficient, even weak. At the project's end, coordinators of different programs expressed repeatedly the need for competence reinforcement in informatics as applied to project requirements.

The dynamics needed to ensure training were apparently not in the national training policy formulated by MOHSA. The formulation of this policy has suffered from MOHSA institutional problems. Actually, training until 1989, had been handled by the Directorate of Administrative and Financial Affairs which was more concerned with personnel management than personnel performance at service levels. With the development of a national policy of primary health care, management of training was transferred to OSPR, in particular to the Director of Operational Research. OSPR has not had the capacity to develop a national training policy and has been hampered by a lack of human and financial resources. Also, it lacked a clear definition of its role when most training is undertaken by different projects or program themselves. Further, pre-employment training is held by the National Ministry of Education.

The most significant training activities were in the internal organization of the ASCI/CCCD and EPI/PHC/ED projects. In the ASCI/CCCD project, training was generated and performed by different component coordinators, while in the EPI/PHC/ED program training is generated and performed by a committee in charge of training. CCCD project coordinators are

also members of this training committee and ensure that training in all components of both CCCD and the national program takes place. There has been, however, minimal OSPR association, influence, or control over different project training activities.

Supervision was considered weak because of the absence of a management and training approach and because of the lack of decentralization at the level of prefectural teams in Conakry. The final evaluation therefore recommended:

- 1) institutional, technical and financial strengthening of OSPR to make training management effective at the national level;
- 2) the reinforcement of district management, training, communication, supervision, HIS, and operational research capabilities and;
- 3) training decentralization at the district level.

Project-related Criteria Affecting Sustainability⁴

The team's approach consists of identifying the factors that favor sustainability and those that limit sustainability, and then systematically evaluating sustainability indicators defined by T. Bossert which have been improved by the Nigerian and Guinean teams.

1. Perceived Effectiveness

A. Although training efficiency has been observed at all levels, in particular at the service provider level, very little progress has been made in establishing a national training policy and coordinating training action plans for OSPR. Even though the person in charge at OSPR is better informed about training activity at the project level, OSPR does not always ensure coordination. Structural, financial, and human resource constraints at OSPR continue to be the same as those identified in the last evaluation. Meanwhile, OSPR plans a national study on the training and the performance level of all categories of health personnel. This study should take place in 1993 with financing from the World Bank's PDDS project. OSPR has already defined the terms of reference as well as the need for technical assistance through the identification of supply and demand in the realm of personnel, the establishment of a national training policy, and reorganization of the institutional context.

⁴See Table 1 Sustainability Table on page 4-8 of the Main Report for the indicators listed for each of the criteria. The discussion in this section under each of the letters (A-E...) corresponds to those indicators.

Annual training plans exist for a range of projects but among former CCCD activities, only CDD training continues to be planned, financed, and executed mainly because of its dynamic coordinator. In the case of the national EPI/PHC/ED program,⁵ planning for training is integrated in the annual program development plan. Sixty-two percent of health centers financed by the ASCI/CCCD project have been integrated into the national program, including 30 percent after the end of the ASCI/CCCD project.

B. Health centers integrated with the national EPI program collect data for the Health Information System on EPI, CDD and malaria control activities every six months. Since the completion of CCCD, only one survey has been undertaken among the former components: in 1992 an impact study of the CDD component among Conakry mothers. The HIS also maintains national level data on the incidence of diarrheal diseases.

C. No operational research or quality assessment surveys have been carried out by the national program.

D. The use of data for decision making has been instituted as a result of monitoring by centers integrated with the national program. This has permitted staff to rotate their personnel assignments and to undertake different tasks. Data management is ineffective in non-integrated centers which do not allow staff rotations.

E. At the national level there is sufficient staff competently trained to support effective training activities but not at the prefectural or district level where staff is less and there is limited competence in the areas of supervision, training, and management. The staffing level is satisfactory at the integrated centers level because they follow criteria established by the national program that at least four qualified health workers are required in order to open a center. Personnel trained by the ASCI/CCCD project assigned to non-integrated centers often attempt to leave to go to integrated centers, drawn by benefits of continuing education, monitoring and feedback, and rewards for performance that the non-integrated centers can not offer.

F. Training is perceived as an important factor for personnel motivation and progress at all levels yet no studies exist that measure the public's perception of training and competence among health center staff. Such perception is important as it has a bearing on the public's relative level of satisfaction with the services provided by the centers.

2. Integration and Institution Strengthening

A. As part of the national EPI program, an effective supervision system has been developed using detailed guidelines. Supervision is viewed by the national program as a primary activity that monitors the proper execution of activities according to defined standards, ensures continued training of workers, identifies operational problems at centers, and helps to find solutions. Supervision is educational and takes place at four levels: the national, regional, prefectural, and

⁵This program, The National EPI/PHC/ED program, is also referred to as simply the national program.

health center. It is carried out quarterly at the national and regional levels, monthly at the prefectural level, and weekly, and as needed, at the health center level. The national team consists of four physicians and supervises 20 percent of the EPI program health centers every three months. The team chooses targets according to DPS requirements, and provides monitoring data and financial evaluations.

In the ASCI/CCCD project areas, supervision is also decentralized at the DPS level and includes Conakry. Supervision in this case, however is more oriented toward activities of liaison and the provision of operational methods at health centers. There is a notable deficiency of supervision at Kindia, where integrated centers have been poorly supervised in 1992, and non-integrated centers have not had any supervision. This is mainly because of the lack of supervisory personnel as the DPS is the only one in charge of this activity. Former supervisors of the ACSI/CCCD projects have taken on other jobs.

A detailed supervision guide has been developed, that includes programming, training, managerial, and environmental aspects of health centers. The guide is used at all levels of supervision. Although very comprehensive, the guide is weighty, limiting its use as an on-the-job reference book allowing a quick analysis of problems and training needs. The guide is more useful as a means to diagnose needs at the health center level and should be used regularly by national and prefectural staffs to identify health personnel needs. Present and future supervisory problems will be linked to logistical methods. At Kindia and Téliimélé, vehicles and motorcycles used for supervision are too old or unsuitable for the terrain. Their frequent break-downs create problems and budgetary provisions are insufficient to repair them.

B. Training is integrated at the service level, especially in the national program, where the director of the center is trained at the prefectural level, as well as the workers in charge of different programs at health centers. The center director ensures the training of all personnel after activities are underway. The DPS is responsible for planning training and finding financing to implement center programs. It so happens that in the absence of financing, he decides to train workers at the health center level.

C. Training is not integrated at the national level into the MOHSA structure primarily because OSPR fails to provide leadership in training activities. Each project develops its own training activities. Members of the national program training committee are all responsible for national programs and come from the different services that develop the PHC, but because of the coordination provided by the national program, duplication in programs has been avoided.

D. This indicator is not applicable because training is inherently a support activity.

E. Evaluations of health worker competence are still insufficient. Monitoring is an activity introduced by national program leaders intended to provide some evaluation measure. Monitoring indicates successes and problems as well as causes but it does not allow the identification of

specific training needs. The current supervision guide is more adapted to evaluation of worker competency in the sense of providing a systematic review of work-related performance. In non-integrated centers personnel is not evaluated.

F. The need for technical assistance to manage training has only been expressed by OSPR. Capabilities needed for the production, execution, and evaluation of on-the-job personnel training are available in the country.

3. Local Financing, Community Participation and Private Sector Provision of Services

A. Financing costs for training are absorbed by the national program at the level of integrated centers. Those in charge of the national program have succeeded in impressing MOHSA about the need to take on the recurrent costs of training before the termination of foreign financing. This has currently developed into the take over of part of the training costs by MOHSA through counterpart funds and loans incurred by the PDSS (World Bank) and PRISCO (African Development Bank). The team was not able to determine the exact amount of this participation. It noted that non-integrated centers do not benefit from any budgetary support for their activities.

B. The financing of training by center directors and treasurers of health committees is foreseen in the scope of the cost recovery system of the national EPI/PHC/ED program but currently there is no consensus to implement this approach.

C. This indicator is not applicable because the country does not have a private sector offering training services.

D. There is strong supplementation by donors of all activities in the national program. The ASCI/CCCD project contributed heavily to national program training activities through its coordinators and workers already trained at health center levels. UNICEF is currently providing basic financing for the national program and is followed by multiple donors and lenders from the large multilateral agencies and banks to small NGOs. MOHSA has established a coordination mechanism for funds from all donors and lenders that support the national EPI/PHC/ED program.

4. Strong Training Component

A. The development of a training strategy and its implementation was sluggish under the ACSI/CCCD project in spite of reaching training targets at health center levels. This is explained by the inadequate transfer of training competence at the level of prefectural teams and by the lack of responsibility at that level. This inadequacy has been somewhat compensated by the national program, where training strategy is decentralized and where essential personnel must pass through a cycle of "training of trainers." It needs to be pointed out, however, that the level of decentralization continues to be weak because prefectural teams are only responsible for "training of trainers" at the time of launching new health centers. The basis for training is currently planned by the national training committee.

B. The need to develop a continuing education policy has eluded national program policy makers but the need has been noted by those in charge at OSPR who commissioned a study to look at the development of such a policy. The institution of such a policy becomes even more important because constraints imposed by the Structural Adjustment program, mean that health personnel trained in basic schools cannot be given support until three to four years after the end of their studies and therefore are in jeopardy of losing part of their qualifications. Also, with respect to continuing education, workers at integrated centers, unlike their counterparts at unintegrated centers, derive some continuing education benefits during their supervisory and monitoring activities.

C. This indicator has already been discussed.

D. The ministry still lacks an evaluation system for measuring health worker competencies. This system could also help identify the training needs of workers and as such should have some input into the definition of a national continuing education strategy. Until now, monitoring and supervision are considered to be mechanisms used to assess more generally the training needs of health personnel. Although very useful, these instruments indicate overall problems at service levels and would gain by the inclusion of a mechanism to diagnose specific training needs for each personnel category working at health centers and at the prefectural level.

E. "Training of trainers" is an active component in the ACSI/CCCD centers integrated into the national program. It unfolds in four phases: 1) the prefectural health team (DPS, DH, DMR) is trained for three weeks by the national training committee on the activities of recently established health centers; 2) in turn, this team trains health center directors for three weeks on preventive and curative programs, 3) subsequently, the team trains health center workers in specific program components for one week; and 4) the team finally supervises and participates in a week's training by the center director, for all center personnel just prior to opening the center.

Training of management committees is also performed by the prefectural team and takes six days. The prefectural health team makes use of 12 training modules produced by WHO for Benin and Guinea designed for the Bamako Initiative and adjusted to the Guinean context. These modules are being reviewed based on experience acquired over the last several years. To complete training, there is additional instruction in family planning, nutrition, and other areas. In relation to the CDD program, financed by the ACSI/CCCD project, "training of trainers" training activities for the new WHO treatment procedure, have been important in 1992 and have covered 268 teachers throughout the country. These activities were financed by multiple donors and lenders such as WHO, GTZ, MSF Belgium, Swiss PhilAfricaine, and UNICEF.

Project training activities are not integrated at the national level because of the absence of coordination of training by OSPR but also because of the desire, by the projects, of being independent in their training programs. There is a tendency for decentralization, during the last year, toward the prefectural health teams but the degree of decentralization undertaken is insufficient with respect to local needs.

Contextual Factors Affecting Sustainability

Two principal contextual factors have affected the sustainability of the CCCD project.

The first is the development of an integrated PHC policy and its execution two years after the start of the CCCD project. It is good to see that in spite of the lack of integration of the ACSI/CCCD project into the national EPI/PHC/ED program in the past, the latter currently favors sustainability because centers established by the CCCD project, integrated in the national program, have resolved and/or differentiated their sustainability problems, while centers not yet integrated have seen their activities decrease because of lack of supervision, training, and financing.

Second is the imbalance in health resource distribution, which is expressed by an over abundance of personnel at Conakry and in other urban centers to the detriment of rural areas. On the other hand, the integration of health centers previously financed by the ACSI/CCCD project in the national PHC program has caused a flight of personnel from non-integrated centers to integrated ones because motivational elements are stronger in the latter. At Kindia, the team observed three non-integrated health centers which stopped operations because of lack of human, material, and financial resources. Although efforts were made to improve the distribution of human resources at the time of implementation of the national program at Conakry (when centers were decreased from one hundred to forty), much must be done to balance the allocation of human resources throughout the country. Unfortunately, the solution to this problem is affected by political and social constraints. Moreover, the health budget, is at least 80 percent allotted to salaries, to the detriment of operating costs.

Lessons Learned

In examining the sustainability of the ACSP/CCCD project in Guinea we have learned three valuable lessons:

1. The development of projects should be congruent with the development of systems that support them and that assure sustainability. In the case of Guinea, OSPR, in terms of structure, furnishing projects with support for training, research, HIS and the like, has not had the same dynamics as the structure created by PHC projects. Is this a problem of hierarchy and influence at MOHSA headquarters, a problem of resources, or a problem of mandate or leadership?

The OSPR is placed under the direction of the MOHSA General Secretariat, at the same level as DNS. It is supposed to support DNS, the department responsible for executing PHC programs, in the areas of training, research, and planning but in fact it extends little support. Experience has shown that the existence of these two departments at the same bureaucratic or administrative level at MOHSA requires strong cooperation, coordination and leadership by higher level officials. Officials at OSPR also need to take some initiative in the areas of

planning, training, and research offices and to convey their interest down through the system so that those at the user level become involved, leading eventually to an improvement in the provision of services.

It is clear that once cooperative relations are established and the mandate is well defined, then resources need to be made available to OSPR to enable it to carry out its role in planning, research, training, and management of the health information system.

2. Recognition of health worker performance is a motivating factor. Training alone is not sufficient to keep health workers in the health centers. It is clear that in the absence of supervision, medications, and equipment necessary to carry out their work, health workers cannot maintain or improve their performance. Conversely, the absence of motivation will affect their tenure at the health centers, especially those in the rural areas. This has been widely demonstrated in the Kindia and Téliimélé prefectures where the flight of personnel already trained under the ACSI/CCCD project has taken place from non-integrated centers to integrated centers because the latter offer a range of benefits the former do not have. As already noted these benefits may include equipment, supervision, monitoring, rotation, as well as performance bonuses paid to personnel by management committees.

The experience of the national EPI/PHC/ED program demonstrates that for a center to provide quality service and effective management a minimum of four well-qualified health workers is required.

3. The lack of community involvement in health projects limits their chances of sustainability. In contrast to the national EPI program, the community was not involved in the execution and support of the ACSI/CCCD project, although the community recognized the benefits. The lack of community participation in the ACSI/CCCD project resulted in an indifference of the population at the level of non-integrated centers. The community shows little concern for these centers because they have no role in solving problems be they a lack of essential drugs, fuel for the refrigerator, or repeated absences of personnel. Such is not the case with integrated centers where the community controls management of the center and refuses to pay performance bonuses to workers who do not deserve them.

Recommendations

1. Make the OSPR fully operational and capable of providing a health system with all the support, such as planning, research, training, and management of information that it requires. This can be done by clarifying its mandate and allocating to it the necessary resources, including technical assistance and training to strengthen worker capabilities.

2. **Decentralize, effectively, all training and supervisory activities by placing responsibility on prefectoral health teams for the identification of training needs, training implementation, and evaluation of personnel performance. To achieve this, training of prefectoral health teams must be strengthened in training techniques, methodologies and in management of health personnel, and they must have at their disposition practical tools for the execution of these tasks, such as revised training manuals, supervision checklists, and instruments to detect training needs.**

3. **Generate a national training policy that takes into account the provision of training services in relation to real needs, that rationalizes the identification system of training needs and that institutes a system of continued education for all health personnel.**

HEALTH EDUCATION

Background

Health education, considered one of the weakest components of the CCCD project by the 1987 and 1989 external evaluations, gained a stronger position by 1991 when the final assessment of CCCD noted the following progress:

- strengthening of the Health Education Unit (HEU) in the Division of Health Promotion, newly established by MOHSA;
- making the case for a national health education policy to the concerned national level policy makers,
- annual planning of health education activities based on needs and priorities,
- further training of five national level health education staff in planning, research, and production, and training 17 supervising teachers and Peace Corps volunteers, who will, in turn, teach 210 health workers,
- supplying the HEU with audio-visual and production material,
- carrying out decentralization procedures as well as regular supervisory visits at the Conakry, Kindia, and Téliimélé health centers, and
- using KAP surveys in determining mothers' needs and in the design of appropriate educational messages about CCCD interventions.

The ASCI/CCCD project contributed to strengthening the credibility and image of the Health Education Unit by providing:

- technical assistance for research on preparing educational messages and for training of trainers, and
- equipment and financial support for project health education activities.

The Peace Corps plans to contribute to health education efforts by educating three of its volunteers and placing them as teachers/supervisors in Kindia, Téliimélé, and Conakry.

Main recommendations from the 1991 assessment included:

- 1. The need to integrate health education activities into the national EPI/PHC/ED program through the Health Promotion Division.**
- 2. The need to supply this service with a four wheel drive vehicle in order to continue and improve, as needed, ongoing activities.**
- 3. The need to strengthen Peace Corps participation in the Guinean health education program.**

Project-Related Criteria Affecting Sustainability⁶

1. Perceived Effectiveness

A. The ASCI/CCCD project contributed greatly to the credibility and strengthening of health education services by providing technical assistance, training, and equipment. The perception of credibility is borne out by requests for health education services by various donors as well as by MOHSA itself. However, this has not yet given rise to the articulation of a national health policy though ministry officials acknowledge the need for such a policy. Even so efforts to develop a policy are proceeding apace with terms of reference drafted and forwarded to WHO which is expected to finance these efforts in 1993.

B. No surveys have been undertaken by the Health Education Unit to assess the impact of CCCD activities since the project's completion. This is unfortunate as health education efforts were undertaken with great difficulty especially the carrying out of KAP surveys that focused on mother respondents. Survey findings about health education would also have been of interest to at least two other project components, EPI and CDD. The existence of basic survey data would also permit better measurement of the impact of health education activities in subsequent follow-up surveys. That no CCCD-related surveys have been undertaken since the CCCD PACD is not a reflection of a lack of competence, however; the health education section performed other KAP surveys in 1992, for instance, within the scope of the PDDS/BM project for its malaria and CDD components.

C. There has been no operational research or surveys to assess program quality in the health education field.

⁶See Table 1 Sustainability Table on page 4-8 of the Main Report for the indicators listed for each of the criteria. The discussion in this section under each of the letters (A-E...) corresponds to those indicators.

D. Monitoring of health center activity has served to help identify health education needs and has given rise to a request for assistance from the national HEU, which lacks staff at all levels, especially the prefectoral. In the team's view the HEU's greatest handicap is its lack of vision and leadership in carrying out its new responsibilities to develop a community-oriented approach and to strengthen the training capacities of national level health personnel. Meanwhile, it began in 1992 to train district and regional level personnel (DPS and DH) in communications but this effort has been insufficient because these staff are already busy with multiple tasks and need full-time assistance from health educators.

E. There is a shortage of staff at the national level (three at the HEU level and one at the prevention program) but it is the prefectoral level that lacks personnel in charge of health education. In health centers, education activities are part of the health workers' tasks. The unit does not have enough resources to compensate for this lack of personnel but MOHSA should take these circumstances into consideration when reassigning personnel. The integration of health education activities into the national EPI/PHC/ED program should serve as a basis for the planning of allocations for human and financial resources and for the planning of training and decentralization with respect to health education.

F. Since CCCD introduced health education activities, the public's perception of health education has improved judging for the increase in consultations at health centers, especially those related to EPI and CCD.

2. Integration and Institution Strengthening

A. Supervision in health education has not been effective for two reasons: one, the lack of a vehicle to carry out supervision and two, the supervisor, trained under CCCD, has been assigned to another health center that runs a pilot Family Planning project. Also, no member of the Health Education Unit (HEU) takes part in the supervisory team of the national PHC program because its work is mostly technical.

B. Health education is integrated into daily provision of health services through interpersonal communication with mothers and home visits to detect children to be immunized. The latter activity took place more regularly during the CCCD project. Interpersonal communication is more effective in the case of CDD than in EPI, especially in Conakry where the dropout rate is still a concern.

C. Health education activities are integrated, at the national level, into MOHSA operations. The position of HEU within the Health Promotion Division is an adequate arrangement; this Division also includes, among others, hygiene and environment sections and school and university health sections. HEU also has workers on the staff of different MOHSA preventive programs such as family planning, AIDS, tuberculosis, and leprosy.

- D. This indicator is not applicable to health education which is, in itself, a support activity.
- E. For information purposes, the competence assessment of workers is considered insufficient. The use of monitoring as a competence assessment means is insufficient. In addition, the supervision guidelines, include a communication component - IEC - which is incomplete to evaluate personnel competence in the health education field.
- F. HEU still needs foreign technical assistance to organize better its planning function, to assist in decentralization at the prefectural level, in training, and in impact surveys.

3. Local Financing, Community Participation and Private Sector Provision of Services

A. HEU does not have its own budget at MOHSA. It has an operating budget allotted to the Health Promotion Division, but health education activities are financed directly by the different projects (CCCD, EPI/PHC/ED, PDSS) or by counterpart funds. At the end of the CCCD project, it was no longer possible to finance the project's health education activities because counterpart funds also ended. The integration of CCCD-assisted health centers into the national PHC program has enabled the continuation of health education activities but the program has not received any supplementary means to improve these activities.

B. The cost recovery system is not applicable to health education.

C. This indicator is not applicable to health education. There is no private sector entity offering services in this field.

D. Funding by other donors represents significant support for health education. Donors include the World Bank with its PDSS project, WHO, and UNICEF; the latter two for support of the national PHC program.

4. Strong Training Component

A. The health training component has used a strategy of training of trainers, especially in the Kindia and Téliimélé prefectures. In Conakry, the prefectural level was not involved in training but since the end of the project, no training strategy has been developed or implemented by the national Health Education Unit. At Kindia and Téliimélé, supervisors who were taught health education while the project was under way are busy with other tasks and there is no one in charge of health education on the prefectural health team.

B. The development of a continuing education policy in health is absent because no evaluation of training needs has been undertaken post-CCCD. Problems concerning health training are identified through monitoring, but this does not result in a system for continued training of workers.

92

C. Direct supervision by the national HEU is scarce; this apparently follows a pattern established during the project when supervision of other activities was given a higher priority. The prefectural supervision teams, however, consider health education training activities as falling under their supervision though what concrete steps they take to supervise is not clear.

D. This indicator has already been discussed above in paragraph 4/B.

E. The national health education service has offered two sessions for training of trainers. The first was for prefectural health teams and included CCCD project areas, and the second consisted in the production of audio-visual material for technicians. These training exercises were financed by the national PHC program.

F. Integration into the existing MOHSA structure is not effective. Educational activities are performed by the national health training service and there is no coordination with OSPR in this regard.

Contextual Factors Affecting Sustainability

Taking into account community participation in the national program implies health education and training requirements that address such issues as: community mobilization, research, and training of key performers in preventive measures, including the three components of the CCCD project. Other issues include water, hygiene, and nutrition, AIDS, and family planning. This suggests an important need for strengthening health education and training efforts to address these issues for which adequate human and financial resources will be required, as well as their decentralization, down to the sub-prefecture level.

Lessons Learned

As a support service, the development of health education activities has been less dynamic than the development of CCCD project interventions. Health training activities did not develop until the last two years of the project, which deprived the Health Education Unit of counterpart funds required for the impact study of its activities. This need had not been planned for by the national PHC program but had it been the national program could have benefitted CCCD project activities in health education.

Recommendations

- 1. Plan, develop, and integrate health education activities into the scope of the national program beginning with an impact study of previous activities. Such a study could focus on CDD and malaria activities and then use should be made of the data gathered to define new intervention strategies.**
- 2. Reinforce personnel at the Health Education Unit and complete the prefectoral team with a health educator to take on the important task of integrating health education requirements into the national program. The latter will be the assistant of DPS in health training matters and will supplement DMR activities in community motivation and training about different preventive components of the national program.**

COST RECOVERY

Background

One of the main factors for sustainability of primary health care (PHC) activities is to assure the availability of local operational funds. This led the Guinea Ministry of Health to establish, in 1987, a cost recovery system at the health center. This allows beneficiaries of health centers to participate directly and minimizes risks linked to Ministry budgetary constraints experienced in recent years.

This program is one of the rare examples of applying the Bamako Initiative nationwide. The Health Ministry's readiness to act for high-risk population groups (women and children under the age of 5) and political interest have given rise to the mobilization of all parties concerned (collectives, ministerial departments, donors and lenders, etc.)

Structure of the system

The cost recovery concept was introduced in Guinea during the CCCD project and in 1985 with pilot projects, but it only became effective in the field with the launching of the national EPI/PHC/Essential Drugs program in 1987. The cost recovery system management structure is somewhat similar to that of the PHC program, although other health projects also have a cost recovery component.

At the central level

National level organization is charged with daily program management. This includes administrative direction and technical services assisting with logistics, the EPI cold-chain, supervision, essential drugs, epidemiology and statistics. Public relations is supported by a team of administrators from the Ministry of the Interior and Security (Department of Decentralization.)

National coordination is supported by three technical committees in the following fields:

- Training/supervision
- Community supervision
- Health Information System and Monitoring and Evaluation.

These committees (whose members are chosen from program managers at the Ministry of Health and other related departments) are in charge of developing yearly plans of action for the program and to assist in the execution of these plans through technical, financial, or material support.

The technical coordination committee, presided by the General Secretary of the Ministry of Health, has ultimate authority over the program. In addition to Ministry of Health representatives, the committee has representatives from the Planning and Finance Ministry, Decentralization, and from international organizations and cooperative agencies active in the PHC program. The committee meets every three months. It executes its action plan and takes major decisions concerning the development of field activities, such as how to overcome deficiencies in health centers, how to use revenues for investments, etc.

An annual assessment of the PHC program will take place in December 1993 to evaluate activities relating to the EPI/PHC as well to other PHC programs and projects, that have cost recovery as a component, including vertical programs, such as leprosy, tuberculosis, and onchocerciasis.

At the intermediate level

Prefectures receive support from the regional office of health and social affairs. This support role, in reality, is not very effective because of major resource constraints (human, material, and financial) inherent at the four regional inspection regions. It seems increasingly necessary, considering the goal to decentralize, that a principal role must be conferred especially to those who perform these types of support activities, to establish a more equitable balance in the distribution of department personnel, and physical resources allocated to the interior of each region.

Prefectoral health and social affairs offices are the organizations responsible for management and follow-up of the program. In this, the prefectoral director is assisted by the hospital director, and by the rural areas director (representative of the communities) with whom he serves on the prefectoral health team. This team is in charge of planning and establishing the entire health program at the prefectoral level.

The team is specifically responsible for training and monthly supervision and may, upon request, respond to workers at health centers and to management committees. Initially, the strategy of the program had been to assure that these tasks were performed directly at the health center level to facilitate a practical transfer of skills by the prefectoral health director. In the current phase of the program where the number of health centers is so substantial (236) the intention is to decentralize these tasks entirely to the prefectoral level.

At the local level

The EPI/PHC program incorporates a cost recovery system with its activities which are operational at the health center level. The director of the center is responsible for training and supervision of center agents. Supervision takes place weekly, or as needed, when specific problems arise. Since there is a limited number of health workers and a high level of service integration, the polyvalence of agents has been thoroughly encouraged by those in charge at the national level, going so far as to set polyvalence as a goal in program planning.

The health center is managed by a management committee made up of three members chosen from the community and the center director. The committee's role is to promote better use of the health center and to provide information to the population about cost recovery principles based on the sale of essential drugs. It is also in charge of financial management of revenue at health centers. Each management committee opens a bank account in the name of the center. Through its treasurer, the committee collects the daily health center revenues from the director and in turn, deposits these into the bank account.

Every six months, upon completion of health center monitoring, a bi-annual budget is established on the basis of revenues received and needs identified by the health center director. An inter-ministerial decree of 1990 details the budgeting guidelines.

There are a variety of management tools at the different levels and, once a year, the central level conducts a financial evaluation of the health centers to ensure effective management of the system. Revenues received from the cost recovery system come in two forms (an example of a health center budget sheet):

- Obligatory expenses for activities essential to the center -medicines, management tools, fuel for cold chain equipment, sterilization, and advanced strategies (health education);
- Other expenses relating to personnel motivation and administrative support, necessary material, etc. It must be emphasized that even if health centers begin to execute their budget after a while, considerable profits (over a million FG, or approximately 1,070,664 USD) are being saved in the health center bank accounts; these savings will soon dwindle away due to the high rate of inflation that Guinea is currently experiencing.

Lessons learned

The EPI/PHC/ED program has had a favorable impact on the sustainability of CCCD project activities. Thanks to this program, CCCD interventions have been able to continue and have even slightly improved since being integrated into certain health centers. The non-integrated health centers and posts currently appear to be under-utilized by communities they serve. Health workers at non-integrated centers look for more interesting and fulfilling work at other health centers. As a result, a few of these centers have shut down and the remaining equipment is obsolete.

Community participation was not an essential component in the CCCD project. Even though a cost recovery system was being considered toward the end of the project in 1990, the very selective number of essential drugs (chloroquine and ORS), supplies (immunization cards) and the lack of community management to develop activities, negatively affected sustainability.

Weaknesses in community mobilization in the national program, can probably be explained by the approach taken in community participation. That is, substituting it with management committees (presently closer to health services than to the community) and the lack of coherent promotion programs. This influence, if not addressed and corrected today, risks becoming a limiting factor for the sustainability of the national program itself.

Recommendations

1. Accelerate the implementation of the national program in sub-prefectures not yet covered. For villages which benefitted from the support of the CCCD project but where the sub-prefecture seats still lack integrated health structure (the case, for example, of Gberikhory in the sub-prefecture of Damakania) study the possibility of following up CCCD activities by initiating support for a community managed village pharmacy.
2. Assess the consequences of inflation (or the loss in value) of the funds generated and saved by health centers and study appropriate mechanisms for protecting funds generated by the cost recovery system.
3. Produce a comprehensive strategy for decentralization to delegate management responsibility to each level. Further, establish fees in the system through a definition of alternatives and cost-sharing linked to support activities reinforced by decentralization.
4. Study the amount of recurrent costs, especially those of vaccines, presently covered by foreign aid.

APPENDIX E
MAP OF GUINEA

101

