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**COST RECOVERY IN CENTRAL AFRICAN REPUBLIC:
RESULTS FROM TWO PRELIMINARY SURVEYS
AND SELECTED INTERVIEWS**

USAID/Bangui
September 26 to October 17, 1987

**Resources for
Child Health
Project**

REACH



John Snow, Inc.
1100 Wilson Boulevard, 9th Floor
Arlington, VA
22209 USA
Telex: 272896 JSIW UR
Telephone: (703) 528-7474

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**Ann Levin, MA, MPH
Consultant**

**Marcia Weaver, PhD
Abt Associates Inc.**

**September 26 to October 17, 1987
Central African Republic**

The team shared responsibilities as much as possible and therefore randomly chose the order of authorship.

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Remaining errors and omissions in this report are the responsibility of the team.

LIST OF ACRONYMS

CAR	Central African Republic
CCCD	Combatting Childhood Communicable Diseases
CDC	Centers for Disease Control
DDC	Community Development Directorate
DMPGE	Directorate of Preventive Medicine and Endemic Diseases
EPI	Expanded Program on Immunization
FCFA	Currency unit in CAR (Approximate exchange rate in October, 1987: 300 FCFA = US \$1)
GOCAR	Government of the Central African Republic
IMF	International Monetary Fund
MOPHSA	Ministry of Public Health and Social Affairs
ORS	Oral Rehydration Salts
SOCADA	Societe Centrale Africaine de Developpement Agricole (national parastatal for the purchase and sale of agricultural products; mostly cotton)
USAID	United States Agency for International Development
UNDP	United Nations Development Program
UNICEF	United Nations Children's Emergency Fund
WHO	World Health Organization

I. EXECUTIVE SUMMARY

INTRODUCTION

GOCAR has agreed to contribute to a study of self financing the recurrent costs of the CCCD project, and to consider recovering the costs of some health services as a means of financing those recurrent costs. In support of this agreement, the objective of the consultancy was to explore potential activities that promote cost recovery. The three potential activities explored were: an expenditure survey, a pilot project on management of a cost recovery program, and a seminar/round-table discussion for policy makers. An additional objective is to propose two activities based on information obtained during the consultancy.

The project was requested by the CCCD program in CAR and USAID Liaison Office in CAR. It was authorized by the International Health Program Office of the Centers for Disease Control and the Health Office of the Bureau of Science and Technology of USAID.

The consultancy consisted of four tasks: interviews with policy makers in CAR, a preliminary survey of managers of health care facilities, a preliminary survey of health care facility users about their expenditures for health care, and interviews with the managers of two village pharmacy programs. The surveys were conducted at four health care facilities: two private facilities with cost recovery programs (Yaloke Hospital and the Foyer of Charity), one public facility with a cost recovery program (Castors Maternity), and as a comparison, one public facility with no financial responsibilities (Mamadou M'Baiki).

FINDINGS

1. Interviews with Policy Makers. Policy makers were unanimously receptive to the idea of cost recovery. This reception is in marked contrast to last year when consultant Dr. Florence Pasnik interviewed a different set of policy makers and found they were unaware of cost recovery. In fact this year, Dr. Mamadou Kpoussa, the Director General of Public Health, stated that cost recovery is inevitable. Other evidence of support is that the pilot program of cost recovery at Castors Maternity has now been extended to four additional public maternities in Bangui: Ouango, Bimbo, Begoua and Boy Rabe. Also, the Peace Corps village pharmacy program is in the process of being officially integrated into the MOPHSA, and the DDC/UNDP village pharmacies are currently administered in the Department of Community Development.

Policy makers were less clear about how cost recovery might be implemented for the CCCD project, nor were they aware of the range of options for cost recovery. Unfortunately, cost recovery for CCCD does not have an organized constituency within the government to work at clarifying a program. In addition, cost recovery for the CCCD project is not a priority for any of the existing cost recovery programs. For example, the Peace Corps village pharmacy program is being redirected to health education rather than health financing, and the DDC/UNDP village pharmacy program is concerned primarily with community development rather than health financing.

2. Survey of Managers. Yaloke Hospital and Castors Maternity provide models for cost recovery programs that can be used to discuss the options for cost recovery programs with policy makers in CAR. Yaloke Hospital is a model of a financially self-sufficient facility with financial responsibility for salaries of personnel and all pharmaceuticals, as well as maintenance and supplies. Castors Maternity is a model of mixed financing where facility revenues are used primarily for maintenance and supplies; financial responsibility for salaries of personnel continues to be primarily with MOPHSA, and the financial responsibility for pharmaceuticals is shared by the facility, MOPHSA, and patients.

The survey showed that managers in these facilities with cost recovery programs are readily dealing with issues such as pricing policies, providing care to poor people, and ordering supplies. For example, the Yaloke Hospital established prepayment plans for maternity and children's health care. The facilities also provided care to poor people by either charging reduced prices and/or allowing payments over time. In contrast, the director of the public facility that does not charge fees lacked experience with these issues.

3. Survey of Health Care Facility Users. The responses to the questionnaire on health expenditures indicated how much the Central Africans are already paying for health care. The health expenditures that the users are making range from fees for consultations to fees for laboratory exams and pharmaceuticals. The average expenditures of the respondents at four health facilities were 10,848 FCFA for consultations, pharmaceuticals, surgery and hospitalization at Yaloke Hospital, 1,178 FCFA for prenatal and maternity care at Castor's Maternity plus 9196 FCFA for users who received prescriptions and purchased drugs at pharmacies, 493 FCFA for consultations and pharmaceuticals at the Foyer of Charity, and 0 FCFA at Mamadou M'Baiki, plus 2,687 FCFA for users who received prescriptions and purchased drugs at pharmacies (300 FCFA = US \$1).

To assess the financial burden consider the share of annual health expenditures in national income. As a basis of comparison, note that in the United States health expenditures are roughly 10 percent of national income. In CAR, the ratio of average expenditures to the average annual per capita income was 12 percent at Yaloke Hospital, 1 percent for care plus 9 percent for pharmaceuticals for women who received prescriptions at Castors Maternity, one-half percent at the Foyer of Charity, and 3 percent for pharmaceuticals for users who received prescriptions at Mamadou M'Baiki. The national average is probably close to 3 percent because the majority of health care facilities are like Mamadou M'Baiki and do not charge fees. The national average will differ somewhat from 3 percent because it represents expenditures on only one episode of illness, and the population may on average have more or less than one episode of illness for which they seek care per year.

When asked their opinions on financing health care at government facilities, over 75 percent of the respondents replied that they would be prepared to pay for health care at a government facility. The majority also responded favorably (75 percent or more) when asked whether they would pay for pharmaceuticals in government facilities if assured a sufficient supply.

Another finding was that the respondents indicated that they were attracted to each of the four facilities for different reasons. The reason most often cited at private facilities with cost recovery programs was the quality of care. The general sense obtained was that these facilities are cleaner and better equipped than the public facility that does not charge fees. On the other hand, the reason most often cited for using the public facilities was the proximity to their homes.

4. Village Pharmacies. The village pharmacies present another example that Central Africans are prepared to pay for health care, especially for pharmaceuticals. Numerous villages have solicited loans in order to construct pharmacies. These villages are contributing over 50 percent of the costs of the projects and are eventually able to repay the loans from the profits obtained from the sale of the pharmaceuticals. In one village pharmacy in the Bossangoa area, the profits from the pharmaceutical sales are sufficient to pay the village pharmacist to work full-time. These projects show that the population is prepared to pay at least small sums of money for necessary pharmaceuticals.

RECOMMENDATIONS

Of the three potential cost recovery activities, the team recommends the seminar/round table discussion for policy makers and a pilot project. The seminar/round table discussion would inform policy makers of the range of options for cost recovery and help create a constituency for cost recovery for CCCD. A pilot project would provide opportunities to work on management issues for cost recovery such as how to make the transition to cost recovery in public facilities and train personnel to take on financial responsibilities.

The expenditure survey has a lower priority than the other activities, because the results of the preliminary survey of health care facility users already demonstrate that users pay for health care. Future data on expenditures can be collected in the context of the pilot project to provide baseline data and data after the intervention that can be used to evaluate the project. If the CCCD project were to decide to conduct an expenditure survey, however, MOPHSA has trained interviewers and now a questionnaire that has been pretested, with which to conduct it.

Specific recommendations are:

1. A seminar/round table discussion should be held within the next four to eight months to acquaint policy makers in CAR with options available to the MOPHSA for recovering costs in government health facilities. This seminar/round table discussion would be held over a period of three to five days and utilize REACH technical assistance to present the options and the successful cost recovery projects in African countries (for example, Senegal, Benin and Zaire). In addition, it would cover criteria for the selection of a site for the pilot project, such as regional economic differences, and it would allow the policy makers to reach a consensus on the pilot project they prefer.

One possible agenda is:

- I. Review Results of Preliminary Surveys of Managers and Health Care Facility Users
- II. Advantages and Disadvantages of Cost Recovery Options
 - A. Prepayment
 - B. Fee-for-Service
 1. Payment for Consultations
 2. Payments for Pharmaceuticals
 3. Payments for Consultations and Pharmaceuticals

- C. Simple vs. Complex Fee Structures
- D. Cross Subsidization
- III. Training and Management Issues in Cost Recovery
- IV. Discussion of Experiences in Other African Countries
(Use of slide show and speakers from ongoing projects if possible.)
 - A. Benin
 - B. Zaire
 - C. Senegal
- V. Criteria for Selection of a Site
- VI. Round table Discussion by Participants

Additional seminar/round table discussions may be appropriate over time to discuss interim and final results of the pilot project and other policy issues.

2. The seminar/round table discussion on cost recovery options should create a team to collaborate on the specifics of a cost recovery pilot project. The team would be coordinated by the Director of Preventive Medicine and Endemic Diseases and CCCD project. The implementation team should include members from outside of the Directorate of Preventive Medicine and Endemic Diseases. The implementation team should design a pilot project to include innovative management practices, and identify an appropriate site for the project with existing facilities and personnel to staff the project. The site selected should provide a sample that is representative of users at all levels of income with which to assess the financial burden of health care expenditures resulting from the pilot cost recovery program.

The implementation team would also manage the collection of baseline data on consumer health expenditures and recurrent and fixed costs in health centers at the site. After the collection of baseline data the team should reassess the feasibility of successfully implementing a pilot project, and the potential financial burden of the health care expenditures resulting from the cost recovery program. Another possible activity for the implementation team would be to visit cost recovery projects in other African countries.

3. After these two recommendations have been undertaken, the pilot project should be initiated in government health facilities in the selected zone. The project should include data collection to determine average consumer expenditures and health facility costs. Personnel should be trained in finance and accounting since the current health facility directors and personnel do not have experience in these areas. The project should be evaluated and results disseminated so that the cost recovery can be expanded to other health facilities.

II. PURPOSE OF VISIT

A. Scope of Work. In July 1987, a scope of work that requested a longitudinal expenditure survey initiated the consultancy. At the briefing session, REACH staff and the USAID project officer advised the team to revise the initial scope of work with the CCCD staff in CAR, because it was considered to be too ambitious given the time frame and budget. A longitudinal expenditure study could take years to complete, and the consultancy was scheduled to last three weeks. In addition, the estimates of the cost of a longitudinal expenditure survey were twice the total amount REACH budgeted for all cost recovery activities in CAR. The initial scope of work is in Appendix A.

A revised scope of work was developed during the first week of the consultancy. The revisions took into consideration the limited time and budget for the consultancy as well as the interests of the new director and technical advisor who joined the CCCD staff in CAR after the consultancy was initiated. The new staff wanted to explore several cost recovery activities before making a commitment to any one activity. Therefore the revised scope of work requests an exploration of potential cost recovery activities, such as an expenditure survey and a pilot project. A seminar/round table discussion for policy makers was added as a cost recovery activity at the end of the consultancy. The revised scope of work is in Appendix B.

B. Objectives. The consultancy consisted of four tasks: interviews with policy makers in CAR, a preliminary survey of managers of health care facilities, a preliminary survey of health care facility users about their expenditures for health care and, interviews with the managers of two village pharmacy programs. The objectives for each task are described below.

1. Interviews with Policy Makers. The team had structured interviews with policy makers to assess the policy environment. The objective of the interviews was to learn policy makers' awareness of the current state of health care financing, interest in cost recovery, and suggestions for managing a cost recovery programs. An additional objective was to prepare an interview guide with questions that can be used for similar interviews in the future.

2. Survey of Managers. The objectives of this survey were to describe models of how cost recovery programs currently operate in CAR as a basis for discussing pilot projects, and to learn about important management issues to be considered in the design of a pilot project. To describe the programs, the facility questionnaire for a study of cost recovery in health zones in Zaire by Bitran and Munkatu, et al., was revised for individual facilities in CAR, and used to collect preliminary data.

3. Survey of Health Care Facility Users. The objectives of this survey were to: prepare a questionnaire for health care facility users, collect preliminary data at facilities with cost recovery programs, and assess survey capabilities. The questionnaire was to be based on the questionnaires for a household demand study in Rwanda by Shepard, et al., and revised to be appropriate for expenditures, sources of income, local culture, and policy issues in CAR. The preliminary data collected were to include health care expenditures, income and other household resources, reasons for choosing a health care facility, and attitudes towards government policies for financing health care. The survey capabilities to be assessed were: training and supervision of interviewers and accuracy of the data.

4. Village Pharmacies. The objectives of the interviews with managers of village pharmacy programs were to learn the status of the DDC/UNDP and Peace Corps programs and to learn management practices that lead to self-financing of village pharmacies. With specific reference to the CCCD project, the objective was to learn whether village pharmacies carry CCCD drugs, and what their policies are for CCCD drugs relative to other pharmaceuticals. For these interviews, a questionnaire was to be developed for interviews on the management of village pharmacies in the future.

A final objective of the consultancy was to propose two cost recovery activities for CAR based on the information collected during the consultancy. In making the recommendations, the team also considered the interests of the CCCD staff.

III. BACKGROUND

Geography. The Central African Republic is located almost exactly in the center of the continent of Africa. It is landlocked and is surrounded by Chad to the north, Cameroon to the west, Congo and Zaire to the south, and Sudan on the east. Two major water systems run through the country, one flowing into the Chari Basin and into Lake Chad while the other drains to the south into the Oubangui/Congo River. Only the Oubangui is navigational commercially.

The climatic zones vary from equatorial in the south to subsaharan in the north. The rainfall is generally adequate in the country (although the country experienced a drought in 1983) and the CAR is largely self-sufficient in agricultural production.

Population Characteristics. The country is sparsely populated, having only a predicted 2.7 million inhabitants (the last census was taken in 1975) in its 242,000 square mile area (622,984 square kilometers). The majority of the population live in the south-western and central zones of the country. See Table 1 for a breakdown of the predicted population by province in 1983/84.

Over 70 percent of the population lives in rural areas. Although there are over 80 ethnic groups within the country, the national language, Songo, is spoken by a majority of the people. Literacy is low and was estimated to be at 18 percent in 1980.

The population structure of the CAR is similar to that of other African countries with 60 percent of the population under the age of 20 and 45 percent under the age of fifteen (UNICEF figures). The annual rate of growth is estimated to be 2.8 percent and the crude birth rate is 45 per thousand. Less than four percent of the population is over the age of sixty and the life expectancy at birth within the country is forty-seven years; forty-five for men and forty-nine for women.

According to a recent UNICEF report (1987), the infant mortality rate for the country is 140 per thousand, a significant improvement from the much higher rate of 190 in 1960 and 185 in 1975. However, this rate is higher than the average of 125 for the subsaharan African countries. Also, there is considerable regional variation in this rate; some prefectures having rates over 250 and the Bangui urban zone lower than 135.

The high rates of infant mortality are indicative of the significant health problems of the population. Because of the country's climate, the population suffers from many tropical diseases. The GOCAR's five year plan (1986-1990) lists health problems in order of priority: malarial and diarrheal diseases, intestinal parasites, sexually transmitted

TABLE 1
POPULATION BY PROVINCE, 1983/84
(using 1975 figures x growth rate)

Province (Prefecture)	Population
1. Southwestern States	
Ombella M'Poko	127,886
Haut Sangha	233,144
Ouham	269,265
Ouham Pende	242,142
Lobaye	160,698
Nana Markere	197,595
Sangha	59,571
2. Central States	
Ouaka	216,164
Kemo Gribingui	78,629
Basse Kotto	187,156
Mbomou	132,880
3. Northern and Eastern States	
Gribingui Economique	85,749
Haut Kotto	52,225
Haut Mbomou	37,421
Baningui Gangoran	29,401
Vakaga	24,243
Bangui (capital)	473,817
Total	2,607,626

Source: National Statistical Office of CAR

diseases, viral hepatitis, measles, polio, tuberculosis, leprosy, onchocerciasis and schistosomiasis.

Economy. The per capita income of the CAR is \$310 (State Department figure), making it one of the lowest income countries in the world. The vast majority of the population (85 percent) is engaged in subsistence farming. Agricultural products grown for export that are important to the country's economy include cotton and coffee. See Table 2 for agricultural production of selected crops by province in 1983/84. The country also has a number of natural resources including diamonds, uranium, timber, gold and oil, the most important being diamonds. Significant regional economic differences are evident in the country due to differences in agricultural production and mining between provinces.

The industrial capacity of the country is limited and includes only light industry found mostly in the Bangui area such as cigars, cigarettes, textiles, beer, diamond cutting and moped assembly. The major constraints to economic development in the CAR include the poor infrastructure throughout the country and the weak internal and international marketing systems.

The economy has suffered some difficult years recently between the declining real GNP from 1979 to 1981, the drought in 1983 and trade and budget deficits. The GOCAR has signed loan agreements with both the IMF and the World Bank. The loan agreements have required the government to reduce the percentage of the national budget devoted to personnel salaries and the MOPSHA is severely restricted in its ability to hire new personnel.

Health Care Delivery in CAR. The MOPSHA has divided the country into five health zones, each supervised by a Regional Physician Director. However, the health care facilities are maldistributed throughout the country and some 44 percent of the health centers are found in Region I, the region where Bangui is located. Only 40 percent of the population has access to fixed vaccination centers. The government has as one of its goals to have health centers and subcenters with a range of services in all of the provinces.

The MOPSHA has made a decision to concentrate its EPI efforts on the eight provinces with the highest population density (with 79.7 percent of the population) due to limited resources and its low level of full vaccination coverage (only 18 percent in 1986).

CCCD Project. In 1983 a CCCD country assessment of the CAR was made and the decision was made to begin a CCCD program. The Project Grant Agreement was signed

TABLE 2
1983/84 AGRICULTURAL PRODUCTION OF SELECTED CROPS
(metric tons)

Province	Manioc	Manioc Per Capita	Peanuts	Cotton	Coffee	
					Commercial	Family
Sangha Econ.	2183	0.0366	7651		298	660
Haute Sangha	14924	0.0640	10762		411	1876
Lobaye	7339	0.0457	3461		1649	3790
Ombella Mpoko	16096	0.1259	9655		302	730
Nana Mambere	14636	0.0741	3198			
Ouham Pende	47466	0.1960	24215	10139		
Ouham	47810	0.1776	21518	7419		
Kemo Gribingui	8064	0.1026	4973	3622		
Ouaka	36696	0.1700	12834	7497	374	963
Basse Kotto	18143	0.0968	6761	2465	891	1629
M'Bomou	6397	0.0481	6119		930	3052
Baningui Bangoran	1228	0.0418	776			
Vakaga	782	0.0322	576			
Haute M'Bomou	667	0.0178	655			
Haute Kotto	2650	0.0507	187			
Gribingui Econ	10410	0.1214	5634	3059		

Source: National Statistical Office of CAR

on May 25, 1984 for funding for a four year project with a budget of \$691,000 from USAID and a government contribution of \$217,065. The activities of the project were to focus on diarrheal control, malaria control and EPI through strengthening of programs at the central, regional and peripheral levels. In addition, the program was to expand on these programs through training, health education, improved health information systems, and operations research. In January 1986 a full-time person was assigned to the project in the CAR and the project was extended until May 1989. As part of the Project Agreement, the government made a commitment to study means of self-financing recurrent costs of the CCCD project.

As part of this mandate, a consultant was sent through REACH in September 1986 to assess the feasibility of recovering recurrent costs of CCCD. The activities of Dr. Florence Pasnik included discussions with policymakers, an informal group interview with health facility users and an evaluation of existing cost recovery experiences in the CAR. An important outcome of the consultancy was that Dr. Pasnik was able to introduce the subject of cost recovery and start a dialogue among decision makers. She was also able to identify constraints to the implementation of cost recovery efforts in the public health delivery system and the need for data on how much people were spending on health care in the CAR. These constraints included (1) a finance law that requires all government organizations to return their earnings to the treasury, (2) a percentage of the population too impoverished to pay for health care, (3) the seasonality of income of much of the population, (4) the precedent set for free care at public health facilities, (5) a negative experience with the purchase of health cards in 1974 when the revenues collected were mismanaged, (6) an existing system of commissions and unofficial honorariums for doctors that makes them unlikely to favor change in the system of payment, (7) the possibility that the government would decrease the budget for MOPHSA if generating revenue internally, and (8) the loan agreement with the World Bank that restricts hiring new personnel.

Pasnik's recommendations for the next step in cost recovery were to set up a fee-for-service system in the public health system through first only charging for chloroquine and ORS and later to charge fees for all treatments and medications. She also recommended that an official of the CCCD project be appointed to coordinate the pilot projects and that a Management Committee be established within the MOPHSA. The latter committee would act as a review board for the design of the cost recovery system and propose necessary preliminary studies and institutional reforms for the CAR.

The feasibility of cost recovery was also examined by the health economist of the midterm evaluation team, Joyce Huber, in October and November 1986. Huber's activities included meetings with officials associated with the project and a field trip to visit health facilities in the field. Although she did not collect data, she concluded generally that people were already paying for health care since they buy pharmaceuticals outside of the public health facilities due to insufficient stocks. Her recommendations were (1) find the mechanisms necessary to allow health facilities to manage part of the revenue obtained through charging fees, (2) improve the information on recurrent costs in health facilities, (3) implement charges for pharmaceuticals in hospitals, and (4) utilize the improved cost information to design a fee-for-services system in hospitals and other health facilities.

Although these two sets of recommendations were made in late 1986, no further progress has been made on cost recovery. The present consultancy was requested by the previous CCCD Technical Officer, in order to have data collected on consumer expenditures in both public and private facilities. The data would be used to demonstrate to policymakers how much consumers were already paying for health care.

IV. TRIP ACTIVITIES

The trip activities are divided into four categories corresponding roughly to the four tasks of the consultancy and described below.

1. Interviews with Policy Makers. Interviews were conducted at offices in Bangui. See Places and Persons Visited for more information.

2. Surveys of Managers and Health Care Facility Users. These surveys were conducted at four health care facilities: two private facilities with cost recovery programs (Yaloke Hospital and the Foyer of Charity), one public facility with a cost recovery program (Castors Maternity), and as a comparison one public facility that does not charge fees (Mamadou M'Baiki). The team conducted interviews for the survey of managers, and six Central African interviewers employed by the Directorate of Preventive Medicine and Endemic Diseases conducted interviews for the survey of health care facility users. The team and the interviewers visited each site for one day, with the exception of the visit to Yaloke that required a longer trip.

3. Survey of Health Care Facility Users Continued. The survey of health care facility users required several additional activities. The team met with Joe Naimoli, and Drs. ROUNGOU, Gbadjamo, and Somse to revise the questionnaires by Shepard, *et al.*, as a facility questionnaire for CAR. In addition, the team conducted one all-day training session for the interviewers to introduce them to cost recovery for the CCCD project and the questionnaire. After the training session, the interviewers conducted a pretest of the questionnaire at Malimaka, a public health center in Bangui that does not charge fees. Although it would have been preferable to do the pretest at a health facility with a cost recovery program, none were available for the pretest. The team met with the interviewers to answer questions and establish consistent interpretations of the questionnaire after the pretest and after the interviews at the first facility. The interviewers were supervised by on-site observation and by reviewing the data each day after they were collected.

4. Village Pharmacies. Village pharmacy activities included interviews in Bangui with administrators of the DDC/UNDP and Peace Corps programs. Among these administrators, John Lamoreaux of the Peace Corps had just been a volunteer at a village pharmacy program in Boquila. The team also visited a village pharmacy in Bondongofio and interviewed the manager, as well as administrators and a volunteer with the UNDP village pharmacy program in Bossangoa.

V. METHODOLOGY

Of the four tasks of the consultancy only the survey of health care facility users requires an explanation of its methodology. The following describes the methodology of the survey of health care facility users and then some of the limitations to it. For reference to the other tasks, see the questionnaire for managers in Appendix C, and the questionnaire for village pharmacies in Appendix E. The interviews for policy makers were structured around the following two questions: Are patients in CAR currently paying for health care? and, What management issues do you think are important to the design of a pilot project for cost recovery? An interview guide with additional questions is in Appendix F.

Sample. The survey of health care facility users focused on women and children because pregnant women and children are the target population for the CCCD project. The interviews were conducted by interviewing women who were either users or the mothers of users as they were leaving the facility. In a few cases fathers or other family members who accompanied children who were users of the facility were interviewed. All responses referred to the visit that was just completed. The visit to the facility could be for curative care, preventive care, or a maternity. Therefore, the sample includes women who received curative care, who are not part of the target population for the CCCD project.

Sample Size. Thirty people were interviewed at each facility. The main criteria for selecting the sample size was the number of people who could be interviewed in one day, because the time and budget for the consultancy limited the team and interviewers to spending one day at each facility.

Each of three pairs of interviewers were able to complete ten interviews for a total of 30 per day. Several factors limited the number of interviews per day. Facilities are open from 7:30 am to around 11:00 am, so health care facility users were available for four or fewer hours per day. The interviewers worked in pairs with one person posing the questions and the other recording responses. With male interviewers, the team was advised that the women being interviewed would be more at ease talking to two men rather than being alone with one man. Although each interview was faster and more accurate when conducted by a pair of interviewers, they may not have been twice as fast as when conducted by one interviewer. Finally the interviewers translated the questions from French into Songo (the national language) as necessary. During the pretest, time required for the interviews ranged from 15 minutes for women who spoke French to up to 45 minutes for a women who spoke Songo and had difficulty understanding the questions.

The data from the preliminary survey can also be used to calculate the standard deviations of some variables for determining the appropriate sample size for a more formal survey. See Table 7 of the Results.

Sites. The facilities selected as sites for the surveys included three facilities with cost recovery programs to focus on finances, and learn what attracts people to pay for services when public facilities that do not charge for services are available as an alternative. The fourth site was selected as a comparison site. Focussing on facilities with cost recovery programs was also the fastest and least expensive method to collect data from people who were paying for health care and to gain experience with questions addressing expenditures on health care. Alternative surveys such as a household survey require a larger sample to find the same number of people who had recently used a health care facility with a cost recovery program. The time and budget for this consultancy were too limited to consider such a larger sample.

Limitations. The most obvious limitations are those by design; the sample is women who seek care for themselves or their children or other family members who seek care for children at the exclusion of those who do not seek care. The issue is that users of facilities with cost recovery programs may have higher income on average than people who use facilities that do not charge fees or who do not seek care. Although data were not available for people who do not seek care, a comparison of the incomes of users of facilities with cost recovery programs and users of facilities that do not charge fees suggests that this is not the case. See the results in Section VI.

Another limitation is that facilities were selected because of their cost recovery programs and not because their ranges of services were comparable. Yaloke Hospital has a broad range of services including surgery, while the Mamadou M'Baiki is a health center with a narrower range of services, the Foyer of Charity specializes in malnutrition and Castors Maternity specializes in maternity care. Consequently the severity of illness of patients was not the same across facilities, and differences in expenditures may reflect differences in the severity of illness rather than differences in efficiency across facilities that affect the cost of providing care for the same illness.

Note also that two cases were omitted from the sample at Castor's Maternity because the users were children at the nearby Castors Dispensary that does not have a cost recovery program. This may also have been the case with the 7 other cases (25 percent of the sample) who had preventive or curative visits (see Table 7), but these cases were not omitted because the preventive or curative care may have been related to a pregnancy.

Another potential limitation is somewhat more subtle, and concerns the religious affiliation of the facilities with cost recovery programs; the two private facilities are missionary facilities. The concern is that experiences at these facilities may not be representative of potential cost recovery programs because people are attracted to them with the expectation that they would have a charitable motive in financing care, and thus provide care at zero or minimal prices. As explained in the results on the survey of managers, Yaloke Hospital did not provide care at zero or minimal prices with the exception of some cases that probably involved catastrophic illnesses. There probably was a charitable component to the care at the Foyer of Charity, but unfortunately they did not provide information on their financing. Thus this potential limitation is relevant to at most one of three facilities with cost recovery programs.

If religious messages are combined with the delivery of health care, it is also possible that users at missionary facilities may represent only people whose religion is the same as the facility's religious affiliation. People of some religions may be more (or less) predisposed to use western medicine than others. In fact, in Bangui, the religions of users in the facilities with cost recovery programs are no different from the public facility that does not charge fees. At Yaloke Hospital, a high percentage of users are Muslims, and a lower percentage are Catholics, but this reflects local cultural differences rather than the religious affiliation of the facility. See Table 8 and the results in Section VI for more information.

The final limitation concerns the questions on attitudes towards government policies for financing health care. Many of these questions concerned alternative ways to finance health care that may have been unfamiliar to the respondents. In these cases, the interviewers explained the alternatives, but it was not clear that the respondents understood them. This appeared to be particularly true for the users at Mamadou M'Baiki, who had no experience with cost recovery programs. (See Table 10 of the results in Section VI for more information.) Therefore the responses to these questions only are limited by the respondents' familiarity with alternative policies.

Despite these limitations, it can be argued that the facilities sampled are particularly relevant sites because they operate in CAR. They demonstrate what can be done within the income, policy, and geographic limitations of the country. Furthermore, they can be readily observed by policy makers and others who are interested in cost recovery or policy changes.

VI. RESULTS AND CONCLUSIONS

This section describes the results and conclusions of the four tasks. The survey instruments used in each task are in Appendices C through F.

1. Policy Environment. Interviews with policy makers show that they are aware that patients are currently paying for their health care at public facilities as well as private facilities, although they did not know exact amounts. For example, a policy introduced in 1986 requires people with higher incomes such as diplomatic corps, private sector managers, merchants, industrialists, plantation owners and diamond merchants to pay hospital fees at the National Teaching Hospital. Other official payments at public facilities include payments for health certificates, and laboratory exams at the National Teaching Hospital, as well as for drugs at public pharmacies. Patients also pay for drugs at private pharmacies. Unofficial payments at public facilities include payments in kind such as with gasoline or soap at hospitals with critical shortages of supplies, or honorariums to physicians and nurses.

Policy makers were unanimously receptive to the idea of cost recovery. This reception is in marked contrast to last year when consultant Dr. Florence Pasnik interviewed a different set of policy makers and found they were unaware of cost recovery. In fact this year, Dr. Mamadou Kpossa, the Director General of Public Health, stated that cost recovery is inevitable. Other evidence of support is that the pilot program of cost recovery at Castors Maternity has now been extended to four additional public maternities in Bangui: Ouango, Bimbo, Begoua and Boy Rabe. Also, the Peace Corps village pharmacy program is in the process of being officially integrated into the MOPHSA, and the DDC/UNDP village pharmacies are currently administered in the Department of Community Development.

Policy makers were less clear about how cost recovery might be implemented for the CCCD project, nor were they aware of the range of options for cost recovery. Unfortunately, cost recovery for CCCD does not have an organized constituency within the government to work at clarifying a program. In addition, cost recovery for the CCCD project is not a priority for any of the existing cost recovery programs. For example, the Peace Corps village pharmacy program is being redirected to health education rather than health financing, and the DDC/UNDP village pharmacy program is concerned primarily with community development rather than health financing.

2. Survey of Managers. The team was able to conduct interviews with the managers at Yaloke Hospital and Castors Maternity. The third facility with a cost recovery program, the Foyer of Charity, provided limited information on their pricing policies, but did not complete the questionnaire. As a comparison, the team also conducted an interview with the Chief of Mamadou M'Baiki Health Center, a public facility that does not charge fees, although much of the questionnaire was not relevant to their experiences.

The interviews provide models of facility finances. Yaloke Hospital is a financially self-sufficient facility, Castors Maternity is a mixed facility that is financed partially with revenues from patient fees and partially by MOPHSA, and Mamadou M'Baiki Health Center is financed entirely by MOPHSA. Following an introduction to the facilities, these models are described below with results on the expenses, revenues and decision-making structure of the three facilities.

As an introduction to the facilities, Yaloke Hospital and Mamadou M'Baiki Health Center provide several types of care. At both facilities, 67 or 68 percent of the users use curative care and about another 20 percent use maternity care. Castors Maternity has only maternity care.

The majority of users at Yaloke Hospital and Castors Maternity pay fees, as shown in Table 3, although the percentage of users paying fees for curative care at Yaloke Hospital is lower than for other types of visits. Only 80 percent of users with surgery or hospitalizations pay fees at Yaloke Hospital, because the hospital accepts some urgent cases even when the users do not pay for their care. Table 3 also shows users at Mamadou M'Baiki pay fees for health certificates. These certificates are to verify good health and are required for several activities such as obtaining a driver's license. The certificates cost 1000 FCFA for adults and 250 FCFA for students. (Note that 300 FCFA are approximately equal to US \$1.)

Yaloke Hospital has five sources of revenue with pharmaceuticals as the largest source, as shown in Table 4. Yaloke Hospital has developed sophisticated pricing policies with a fee-for-service system for curative care, and prepayment systems for maternity care and children's primary care. The prepayment system for pregnant women has a smaller fee for women who enter the program sooner (4500 FCFA) rather than later (5000 FCFA) because the delivery is more likely to be complicated for the latter. The prepayment system for children has a smaller fee for younger children (1500 FCFA) than older children (2000 FCFA).

TABLE 3
TYPE OF CARE AND PERCENTAGE OF USERS WHO PAY FEES

Type of Care	Yaloke Hospital ^a		Castors Maternity ^a		Mamadou M'Baiki ^b	
	Percentage of Users at Facility	Percentage Who Pay Fees	Percentage of Users at Facility	Percentage Who Pay Fees	Percentage of Users at Facility	Percentage Who Pay Fees
Curative Care	67 %	80 ^c %			68 ^d %	0 %
Maternity Care						
Prenatal	8	97 ^e	n/a	n/a	7	0
Miscarriages	6	n/a	3 %	88 ^f %	n/a	n/a
Deliveries	6	97 ^e	97	88 ^f	8	0
Postnatal		97 ^e	n/a	n/a	2	0
Children's Primary Care						
0-2 years	8 ^g	97			7	0
2-5 years	4 ^g	97			1	0
Health Certificates					h	100 %
Health Education					6	0

a. 1986 annual data.

b. Time period for data unknown.

c. Yaloke Hospital staff stated that 80 percent of their patients who are hospitalized or receive surgery do pay for care. This percentage may understate the percentage for all curative care because less than half of the receipts for curative care are from surgery and hospitalizations.

d. Data are supplied as the number of new patients and number of old patients. These totals include only new patients and assume complete overlap of categories (i.e. a patient is counted once as a new patient and would be counted again as an old patient when they return for a second visit).

e. Yaloke Hospital staff estimate that only 2 to 3 percent of their patients do not pay for maternity care and consultations because they are related to a staff member. This percentage assumes all maternity care and children's primary care are included in these categories.

f. Percentage is calculated from September 1987 data.

g. Number of patients does not include fewer than ten children who were treated in small facilities outside the hospital.

h. All users pay for health certificates at Mamadou M'Baiki, but the number of users is not known.

TABLE 4
REVENUE OF FACILITIES BY TYPE OF CARE
AS A PERCENTAGE OF TOTAL REVENUE

Type of Care	Yaloke Hospital ^a	Castors Maternity ^a
Curative Care		
Surgery ^b	18 %	
Medicine	50	
Hospital Beds and Consultations	18	
Maternity Care ^b	9	100 %
Children's Primary Care	5	

a. Percentages are based on data available from the authors.

b. Caesarians are counted as revenue from surgery rather than revenue from maternity care.

Castors Maternity has a fee-for-service-system for maternity care with two classes of care. Women who share a bed at the maternity pay 1000 FCFA, and women who have a bed to themselves in a less crowded room pay 3000 FCFA.

Given these sources of revenue, the models of facility finances depend on how much of the facility's costs are recovered. One measure of cost recovery is whether the facilities pay for personnel and pharmaceuticals. Looking at the number of employees, Yaloke Hospital appears to be more self-sufficient because it pays for a higher percentage of its personnel from facility revenues. As shown in Table 5 Yaloke Hospital pays for 90 percent of its personnel from facility revenues, whereas Castors Maternity pays for only 19 percent. If it were possible to calculate the percentage of personnel costs rather than the number of employees, Castors Maternity would appear less self-sufficient because the employees paid from its facility revenues have relatively low-paying occupations. In addition, Yaloke Hospital pays for all of its pharmaceuticals from facility revenues, whereas Castors Maternity pays for 70 percent. The remaining 30 percent of pharmaceuticals at Castors Maternity are supplied by MOPHSA or purchased by patients at public and private pharmacies.

Castors Maternity is a model of a mixed facility because it is financed partially by revenues from patient fees and partially by MOPHSA. As a public facility Castors Maternity was financed entirely by MOPHSA until May 1984 when the Director of Castors Maternity asked the Minister of MOPHSA to allow her to conduct a pilot cost recovery program. The MOPHSA continues to have financial responsibility for 79 percent of the facility's personnel. Revenues from the cost recovery program pay for supplementary items such as supplies, maintenance, some pharmaceuticals, and additional personnel.

An overview of facility expenses demonstrates the supplementary nature of expenditures at Castor's Maternity relative to Yaloke Hospital. As shown in Table 6, Castors Maternity spends 18 percent of its revenue on personnel compared to 22 percent at Yaloke Hospital. Castors Maternity spends 15 percent of its revenue on pharmaceuticals compared to 37 percent at Yaloke Hospital. Castors Maternity also spends 55 percent of its revenue in the other category that includes maintenance, electricity and other supplies compared to 41 percent at Yaloke Hospital.

Although Yaloke Hospital spends only 37 percent of its revenue on pharmaceuticals, it is interesting to note that it receives 50 percent of its revenues from pharmaceuticals (see Table 4). The fee-for-service system at Yaloke Hospital has a low price for consultations and a mark up for pharmaceuticals to cover personnel costs. The team was

TABLE 5
FACILITY PERSONNEL AND BUDGET FOR SALARY OF PERSONNEL
(Figures Represent Number Of People)

Occupation	Yaloke Hospital ^a		Castors Maternity ^a			Mamadou M'Baiki ^b
	Facility Revenues	External Donor	Facility Revenues	External Donor	MOPHSA	MOPHSA
Physicians		2				1
Supervisors						1
Registered Nurses		1				4
Other Nurses	5					8
Student Nurses	7					
Nurses' Aides	2*				1	
Midwives	1				13	3
Aides to Midwives	1				14	3
First Aid				1		1
Technical Agent						2
Social Workers						9
Bookkeeper					1	
Secretary			2			
Chauffeur			1		1	
Manual Labor	5		3			
Chambermaids & Boys	5		1		7	3
Guards, Washerwomen			2			1
Subtotal	26	3	9	1	37	35
Percentage of Total Personnel	90%	10%	19%	2%	79%	100%

*The nurses' aides were students at Yaloke Hospital.

TABLE 6
EXPENSES OF FACILITIES BY CATEGORY OF EXPENSE
AS A PERCENTAGE OF REVENUE

	Yaloke Hospital	Castors Maternity
Personnel ^a	22 %	18 %
Drugs	37 ^b	15 ^c
Ambulance	n/a	12 ^d
Other ^e	41	55

a. Annual expenses are monthly expenses for salaries, social security and retirement paid by the health care facility multiplied by 12.

b. The staff of Yaloke Hospital reported that they allocate 37% of their budget to purchases of drugs.

c. Drug expenses are annual expenditures on drugs for 1986.

d. Annual ambulance expenses are the September 1987 expenses multiplied by 12.

e. This category includes maintenance, electricity and other medical supplies such as gauze, syringes and alcohol.

advised that this fee-for-service system was about to be revised to a higher fee for consultations and lower drug prices because of competition from local pharmacies.

The structure of decision-making also reflects more self-sufficiency at Yaloke Hospital. Yaloke Hospital is part of a system of several missionary hospitals in CAR. Most of the financial and managerial decisions are made by a three-person team of mostly Central Africans, consisting of a director, a treasurer, and a technician (usually a physician or a nurse), who oversee the entire system, with the concurrence of a Board of Directors. The Director makes regular visits to Yaloke Hospital, but local decisions are made by the Chief Nurse of Yaloke Hospital, who is a Central African.

In contrast, Castors Maternity has not yet developed a corporate decision-making structure. It is managed by a single director who is an expatriate, although this decision-making structure may change as their cost recovery program develops. For example, a Central African is currently assuming some of the responsibilities of the director and may replace her when she retires.

The decision-making structure does not appear to affect how the facilities handle several management issues. The survey showed that at both of the facilities with cost recovery programs, managers are readily dealing with issues such as pricing policies, providing care to poor people, and ordering supplies. For example, the facilities established prepayment plans and fee-for-service plans as necessary. The facilities also provided care to poor people by either charging reduced prices and/or allowing payments over time. In contrast, the director of the public facility that does not charge fees lacked experience with these issues.

In addition, the managers at both Yaloke Hospital and Castors Maternity identified motivation of personnel as a key management issue in a successful cost recovery program. In a cost recovery program, personnel have additional responsibilities, especially financial responsibilities. These additional responsibilities would exacerbate problems such as poor work habits, thefts and employees who take salary advances. Although the problems are far from solved, managers of facilities with cost recovery programs provided examples of solutions they found viable. For example, poor work habits have been improved with motivational payments for extra work. Workers can be hired on a temporary basis during a probationary period. Thefts have been controlled by making employees financially responsible for the materials that they supervise.

Conclusions. In summary, Yaloke Hospital and Castors Maternity provide models for cost recovery programs. Yaloke Hospital is a self-sufficient model with responsi-

bility for salaries of personnel and all pharmaceuticals, as well as maintenance and supplies. Castors Maternity is a model of mixed financing where facility revenues are used primarily for maintenance and supplies; financial responsibility for salaries of personnel continues to be primarily with MOPHSA, and the financial responsibility for pharmaceuticals is shared by the facility, MOPHSA, and patients.

3. Survey of Health Facility Users. Some preliminary comments about the data need to be made before discussing the results. The data on individual health expenditures turned out to be more reliable than expected because Central Africans carry small notebooks that detail all their recent health expenditures. Thus, the interviewers were able to utilize the individual notebooks of the interviewees to gather far more accurate data than could be easily recalled by the respondents. In addition, although several questions were asked regarding the amount of family income such as monthly income of the head of household, monthly income of the woman herself, and the amount received by the wife from her husband for food the previous month, the latter question produced the best data. The reason for this was that in most cases the respondents were women who were unaware of their husbands' income but were able to indicate how much they had received from their husband the previous month.

Other questions regarded the cost of transport and time required to travel to the health facility. Although the costs were considerable in some cases, the results were not included because of some difficulty in interpreting whether the responses included the costs of one way or round trip transport.

As noted above, thirty interviews were undertaken at each of four health facilities. The results of the questions on health care expenditures indicate that people are paying for health care at all types of health facilities, if one includes what they are paying outside as well as inside the health facilities. That is, when the respondents had not paid for consultations or pharmaceuticals at the health facility, they often paid for pharmaceuticals and laboratory exams outside of the facility at pharmacies and laboratories. As shown in Table 7, health facility users at Yaloke Hospital spent an average of 10,848 FCFA for consultations, pharmaceuticals, surgery and hospitalization. At Castors Maternity the users spent on average 1,178 FCFA for prenatal and maternity care at the facility and 9196 FCFA for users who received prescriptions and purchased drugs at pharmacies. At the Foyer of Charity, the average expenditures were 493 FCFA for consultations and pharmaceuticals. The expenditures are lower here since this facility receives considerable donor assistance. Finally, at Mamadou M'Baiki, the health center that does not charge fees, the average expenditures were 0 FCFA at the health center

TABLE 7
HEALTH EXPENDITURES OF HEALTH CARE FACILITY USERS

	YALOKE HOSPITAL	CASTORS MATERNITY	FOYER DE CHARITE	MAMADOU M'BAIKI
	Reason for Visit			
Curative	60 %	7 %	100 %	70 %
Preventive	30	18		30
Maternity	10	75		
	Sum Paid at Facility (in FCFA) ^b			
Average	10848	1178	493	0
Standard Deviation	12313	1037	106	0
Number of Respondents	29	28	30	30
	Sum Paid at Pharmacy for Prescription Given at Facility (in FCFA) ^a			
Average	0	5790	0	1297
Standard Deviation	0	11403	0	1770
Number of Respondents	29	27	30	29
	Sum Paid at Pharmacy for Prescription Given at Facility For Users Who Received Prescriptions (in FCFA) ^a			
Average	0	9196	0	2687
Standard Deviation	0	13236	0	1660
Number with Prescriptions	0	17	0	14
	Percent of Users Who Had Been to Other Facilities			
Yes	13 %	29 %	50 %	3 %
Number of Respondents	30	28	30	30
	Total Paid Outside of Facility for Illness (in FCFA) ^a			
0	92 %	21 %	63 %	53 %
1-5000	0	32	10	40
5001-10000	0	32	10	7
10001-20000	0	11	3	0
20000 +	7	4	14	0
Number of Respondents	27	28	30	30

^a Approximate exchange rate for October, 1987: 300FCFA = US \$1.

for consultations and drugs when available and 2,687 FCFA for users who received prescriptions and purchased drugs at pharmacies.

A large difference was found in the availability of pharmaceuticals between the facilities charging and not charging fees. As shown in Table 8, of the persons interviewed, 87 percent received all pharmaceuticals that they required at Yaloke Hospital and 100 percent received all pharmaceuticals required at the Foyer of Charity. However, at Castors Maternity only 50 percent received some and 28 percent received all of the drugs prescribed. At Mamadou M'Baiki, only 30 percent received some and 17 percent all pharmaceuticals prescribed. It appears that the private facilities had pharmaceuticals available most of the time, Castors Maternity some of the time and Mamadou M'Baiki did not have the pharmaceuticals it needed most of the time.

The responses to the question on what attracted respondents to specific health facilities indicate that there are differences in why services are sought at one rather than another. The interviewees were given a choice of six reasons for using a particular health center: (1) welcome or reception, (2) quality of care, (3) quantity of pharmaceuticals, (4) religious reasons, (5) proximity to the health center, and (6) length of waiting time. The three responses most often mentioned for any one facility are included in Table 8. The quality of care was mentioned as a reason 80 percent of the time in the Yaloke Hospital, 77 percent of the time at the Foyer of Charity, 41 percent of the time at the Castors Maternity and 23 percent of the time at Mamadou M'Baiki. These responses demonstrate that a higher quality of care is associated with facilities charging fees. Because of the similarity between the responses on the quality of care and the responses on the availability of pharmaceuticals, there is some possibility that quality of care is associated with the availability of pharmaceuticals in a facility.

On the other hand, proximity to the health facility was mentioned as a reason for using the facility in only 27 percent of the cases at Yaloke Hospital and 10 percent at the Foyer of Charity but was a response 63 and 60 percent of the time at Castors Maternity and Mamadou M'Baiki respectively. This finding suggests that the use of public facilities is often associated with convenience.

The results of the questionnaire also reveal that many of the respondents were using more than one type of health care facility for their illness. As shown in Table 7, some 20 percent of the respondents indicated that they were at the second or third health care facility. However, these results were not evenly distributed among facilities. While only one respondent at Mamadou M'Baiki indicated that they had been to another facility, 50 percent of the respondents at the Foyer of Charity indicated that

TABLE 8
QUALITY OF CARE AT HEALTH FACILITY

	YALoke HOSPITAL	CASTORS MATERNITY	FOYER DE CHARITE	MAMADOU M'BAIKI
Reason Center Chosen				
Welcome	30 %	48 %	37 %	13 %
Quality	80	41	77	23
Proximity	27	63	10	60
Medicines			33	
Number of Respondents	30	27	30	30
Percent Who Stated Religion was a Reason Center Chosen				
	7 %	0	3 %	0
Number of Respondents	30	28	30	30
Availability of Drugs				
None	4 %	21 %	0 %	52 %
Some	8	50	0	30
All	87	28	100	17
Number of Respondents	23	14	16	23

they had been to other facilities before coming to this one for their illness. Some 29 percent and 13 percent were at their second or third facility at Castors Maternity and Yaloke Hospital, respectively. These results may be an indication that health care users seek care first at the most convenient facility and then if they do not obtain satisfaction, will pay (transportation and consultation fees) to obtain care at a facility that is further away and/or may be perceived as being higher in quality.

Another reason often cited for using a specific facility was the reception or welcome received in these facilities. This factor was mentioned in 48 percent of the responses in Castors Maternity, 37 percent of the responses at the Foyer of Charity, 30 percent of the responses at Yaloke Hospital and only 13 percent of the responses at Mamadou M'Baiki.

Interestingly enough, although it was initially felt that people who attended missionary facilities might be there for religious reasons, this was not the case. The response that religion was a reason for attending a particular health facility only occurred 7 percent of the time for the Yaloke Hospital and 3 percent of the time at the Foyer of Charity. Because religious reasons for using a missionary facility were rarely mentioned while the quality of care was cited in a majority of cases, this finding provides some evidence that religious reasons do not play a major role in the decision to use these facilities. In addition, the distribution of religions among users was similar in the three facilities in Bangui, as shown in Table 9.

An additional attraction of missionary facilities suggested was that people visited them to receive care at zero or minimal prices, or a charitable contribution. While no question was posed in the questionnaire on this, note that 3 respondents at the Foyer of Charity cited nutritional assistance as a reason for attending the facility. However, since it was necessary to pay for health care at Yaloke Hospital, and free care was probably only for catastrophic cases, it is unlikely that charity was an attraction at this facility.

People seeking health care at private facilities had lower incomes on average than those people going to public facilities. If the amount received by the wife for food the previous month is used as an indicator of income, the average monthly food allotments in Table 9 were 29091 FCFA at the Yaloke Hospital and 22243 FCFA at the Foyer of Charity as opposed to the higher allotments of 35190 FCFA and 37423 FCFA at Castors Maternity and Mamadou M'Baiki, respectively. This result is indicative that these people clearly perceive some benefit associated with facilities with cost recovery programs that attracted them, possibly the greater availability of pharmaceuticals.

TABLE 9
INCOME AND RELIGION OF HEALTH CARE FACILITY USERS

	YALOKE HOSPITAL	CASTORS MATERNITY	FOYER DE CHARITE	MAMADOU M'BAIKI
Monthly Income (in FCFA)*				
0-15000	71 %	13 %	33 %	22 %
15001-30000	14	0	22	22
30001-45000	0	7	11	0
45001-60000	7	20	22	11
60001-100000	7	47	0	11
100000 +	0	13	11	33
Number of Respondents	14	15	9	9
Wife's Monthly Food Allocation (in FCFA)*				
Average	29091	35190	22243	37423
Standard Deviation	33813	37316	20625	42197
Number of Respondents	22	21	22	26
Religion				
Catholic	7 %	44 %	53 %	40 %
Protestant	53	41	37	40
Muslim	40	15	10	17
Animist	0	0	0	3
Number of Respondents	30	27	30	30

* 300FCFA are approximately equal to US \$1.

The responses to questions about opinions on financing government health care facilities indicated that the population is prepared to pay for health care in public facilities. These results are reported in Table 10. When asked their opinions on financing public facilities, a majority of the interviewees (over 75 percent) were prepared to pay for consultations. In addition, when asked whether they were prepared to pay for pharmaceuticals at a public facility, 75 percent or more also indicated that they were.

Other questions concentrated on the opinions of interviewees on what types of cost recovery would be preferable and how they should be managed. These results are less easy to interpret and may indicate that the respondents did not understand the questions very well. For example, when asked about whether they would prefer a prepayment system or fee-for-service system, the majority of respondents indicated that they would prefer the prepayment system. In addition, when asked whether they would like the revenues from fees collected at health care facilities to be managed by the National Treasury, health facility personnel or a local committee, the majority of respondents selected the National Treasury except at Yaloke Hospital where the responses were mixed between the Treasury (30 percent) and health care facility personnel (33 percent). The replies were unexpected in light of the negative prepayment experience in 1974 when the population was forced to buy health cards and none of the revenues were returned to the public health system from the Treasury. The responses may be attributable to a lack of experience with locally managed funds by the population, especially since the responses of interviewees differed in Yaloke Hospital where funds are locally managed.

Survey Capabilities. The team found that there are adequate survey capabilities in the CAR. Trained interviewers were available from the Directorate of Preventive Medicine and Endemic Diseases and a minimum of training was therefore required for the interviewers. However, it was fairly important to supervise the interviewers and carefully check over the responses each day. The answers to questions not only varied considerably for each facility where interviews were being held but were interpreted differently by individual interviewers.

In addition, the analysis of the results of the health facility users' survey demonstrated that some questions could be changed to make them more applicable to health facilities in the CAR. For example, the questionnaires on expenditures could be broken down into more categories and should include, for example, a category on expenditures for laboratory exams. In addition, a question on the identity of the head of household should be included since there was some difficulty in ascertaining who the head of house-

TABLE 10
ATTITUDES TOWARDS GOVERNMENT POLICIES
FOR FINANCING HEALTH CARE

	YALOKE HOSPITAL	CASTORS MATERNITY	FOYER DE CHARITY	MAMADOU M'BAIKI
Prepared to Pay for Consultations at Public Facility				
Yes	87 %	82 %	82 %	77 %
No	13	18	18	23
Number of Respondents	30	28	30	28
Prepared to Pay for Medicine at Public Facility				
Yes	93 %	81 %	75 %	89 %
No	7	19	25	11
Number of Respondents	30	26	24	27
Health Cards vs Payment with Treatment				
Health Cards	80 %	71 %	60 %	67 %
Treatment	10	14	26	13
Do Not Know	10	14	13	20
Number of Respondents	30	28	30	30
Level of Financial Responsibility				
Treasury	30 %	45 %	53 %	50 %
Local Committee	17	17	10	0
Facility	33	25	23	13
Do Not Know	7	33	13	11
Number of Respondents	26	24	30	30

hold was for respondents such as single or divorced women. Other changes that could be made include specifying round-trip costs when asking transport costs, simplifying the questions on attitudes, and rewording questions on the use of traditional medicine since the present questions obtained only limited responses.

Conclusions. The conclusion that can be reached from the results of the health facility users survey is that people are already paying for health care. People had expenditures for health care at every health facility, and were spending as much as 10 percent of the average per capita income for an episode of illness. The responses to questions on opinions on whether people would be prepared to pay in public facilities were overwhelmingly affirmative. It is also clear, however, that people are making choices between the health care services available to them. Because of this, any successful cost recovery to be implemented in public facilities will require careful preliminary research in order to determine the type of fees to charge, what prices to charge and what management system to use.

4. Village Pharmacies. Village pharmacies were studied since they are an existing example of cost recovery and the management issues involved in operating community financed operations, and they demonstrate that people are prepared to pay for health care. An important component to these projects is that they allow easy access to basic health care in areas where none was previously available. Two village pharmacy programs were examined: UNDP/DDC and Peace Corps. In both cases, the projects have been recently initiated and the ultimate success of them over the long term is not yet clear. In addition, some information was available on the village pharmacy program of the Department of Community Development (DDC) in the Fifth Health Zone (provinces of Basse Kotto, Mbomou and Haut Mbomou).

DDC/UNDP Pharmacies. The DDC/UNDP project offers loans for self-initiated village projects in order to promote community development. The organization places teams of one UNDP volunteer and five nationals in project zones in order to handle the loan requests and offer management training to village committees. The organization operates in regions with the coordination of the DDC. The stipulation of the loans is that they are to be paid back within one year or interest will be charged.

In the Bossangoa area, there are two village pharmacy projects. In each case, credits of the amount of 50 percent of the stocks of pharmaceuticals were loaned to the villages one year before the project started. The villages put up the rest of the money to construct the pharmacy and health post, to buy the rest of the initial stock of pharma-

ceuticals and pay the expenses of the village health worker during his six months of training. In the case of the village of Bondongofio, the other half of the funds came from SOCADA, the government cotton monopoly.

In Bondongofio, the health post and pharmacy have been constructed adjacent to each other. Some control over what pharmaceuticals are purchased and utilized by the villagers is maintained by having the village health worker initially diagnose illnesses and prescribe specific treatments. The pharmacy manager then sells the drugs prescribed to the villagers at prices fixed according to public prices in Bangui. The persons who manage the finances of the pharmacy include the manager of the pharmacy, a treasurer and the village management committee consisting of an accountant, controller, secretary and president. All were trained by the UNDP team. The records are checked once a week by the controller and the funds are turned over to the treasurer. This system of management provides some checks and balances to the operation. The UNDP team is supervising the project once every three weeks but their eventual goal is to turn over complete control to the villagers.

The list of pharmaceuticals sold in the pharmacy must be approved by the Regional Medical Office. See Table 11 for list of drugs and prices in Bondongofio pharmacy. However, despite this supervision, the pharmaceuticals found in the Bondongofio pharmacy are somewhat controversial. For example, while no ORS is available in the pharmacy since it is distributed by the village health worker at no cost when available, other treatments for diarrhea such as Imodium were available for sale. In addition, Fansidar and Quinimax (injectable and in tablet form) were being sold along with Nivaquine.

In Bondongofio, the pharmacy is open in the early morning and late afternoon since these are the times when the pharmacy manager is not occupied with working in his fields. He is paid 3000 FCFA (\$10) per month from the profits for his services. In the larger pharmacy of Bowoye, the pharmacy manager is being paid 12000 FCFA (\$40) per month for his services. However, the manager in Bowoye works full-time in the pharmacy and has given up his other activities.

Total expenditures for drugs in the pharmacy for the first six months of 1987 were 565,490 FCFA (\$1,885) and the net profit after expenses were paid was 82,743 FCFA (\$275). See Table 12 for the balance sheet of the pharmacy. The ability to generate profits and repay the initial loans is evidence that people are prepared and able to pay at least small amounts for health care. Further evidence is provided by the fact that several other villages have solicited loans from DDC/UNDP to start up their own village pharmacies.

TABLE 11
PHARMACEUTICALS SOLD IN THE BONDONGOFIO PHARMACY (DDC/UNDP)

Medicine	Price*
aspirin	10 FCFA/comp.
aureomycine (antibiotic ointment)	650 FCFA
cotton	315 FCFA/sachet
permanganat	5 FCFA/comp.
penicillin	250 FCFA/flacon
nivaquine	10 FCFA/comp
Fansidar	305 FCFA/3 comp.
Fansidar injectable	770 FCFA/2 ampoules
Quinimax 040	120 FCFA
Quinimax 020	85 FCFA
Quinimax	50 FCFA/comp
Flagentyl	2900 FCFA
Imodium (antidiarrheal)	100 FCFA/comp
Sulfagandine	10 FCFA/comp
Spasmaverine	970 FCFA
Topieril (cough syrup)	1400 FCFA
Piexil gel	25 FCFA
Therapen	300 FCFA
Valium 05	25 FCFA/comp
Valium	15 FCFA/comp
Vogalene (antivomit)	1290 FCFA
bandage	200 FCFA
Cutisan	829 FCFA
Ektogan	615 FCFA
Extencilline	600 FCFA

* 300 FCFA are approximately equal to US \$1.

TABLE 12

Bondongofio Pharmacy Balance Sheet*

January 1 - July 10, 1987

I. A. CAPITAL OF JANUARY 1

Value of Stock	225,419 FCFA
Equipment	10,410 FCFA
Money in Cashbox	99,665 FCFA
Total of Capital	335,494 FCFA

B. ACTUAL CAPITAL

Value of Stock	230,126 FCFA
Equipment	10,410 FCFA
Money in Cashbox	128,715 FCFA
Debts of Debtors	49,040 FCFA
Total of Actual Capital	418,291 FCFA

C. INCREASE IN CAPITAL 82,797 FCFA (\$276)

II. PROFITS

A. TOTAL PROFITS January 1
to July 10, 1987 181,023 FCFA

B. EXPENSES

Operational Expenses	10,300 FCFA
Salaries	61,500 FCFA
Roof Repair	16,855 FCFA
Report of Theft	7,520 FCFA

C. TOTAL EXPENSES 96,175 FCFA

Deficit 2,105 FCFA

D. TOTAL EXPENSES & DEFICIT 98,280 FCFA

E. NET PROFITS 82,743 FCFA (\$276)

* 300 FCFA are approxiamtely equal to US \$1.

DDC/UNDP administrators noted that these projects would be less successful in parts of the country that did not benefit from the sale of export crops such as cotton or coffee or have diamond mining within their region. The problem lies in the fact that the population in these regions is not well integrated into the monetary economy and therefore does not have easy access to cash. The administrators added that they were considering the possibility of taking payments in kind rather than cash in order to repay loans in places such as Bouca that had difficulty making contributions in cash.

The project is facing some financial mismanagement problems that have not yet been resolved. For example, personal "loans" have been taken from the profits of the Bondongofio pharmacy (although the capital has not been touched). The outcome of these management problems and how best to deal with them is not yet clear.

Peace Corps Pharmacy Program. The Peace Corps pharmacy program has been in effect since 1981 and differs in several ways from the DDC/UNDP program. Some different models have been tried during the evolution of the program. These include: (1) the cooperative model, and (2) the village community model. The latter is considered to be more successful.

The Boguila pharmacy project was originally a cooperative of seven village pharmacies with the drug stocks and revenues stored in Boguila. The original capital came from a village contribution and a grant from the U.S. Embassy Self-Help Fund. The village health workers were trained by Peace Corps Volunteers and perform both functions of diagnosing and selling pharmaceuticals in the villages. The workers were originally paid 1000 FCFA per month but later were allowed to keep the profits from their sales in addition as an incentive. Because the revenues of the drug sales were controlled centrally in Boguila and the control over the money by the villagers was minimal, some financial mismanagement in the form of thefts occurred. Currently, only three out of the seven village pharmacies are functioning in Boguila.

Because of the problems encountered in the cooperative project in Boguila, the Peace Corps is now implementing pharmacy projects on the village community model. These projects are more similar to the DDC/UNDP program where a village health committee is formed to manage the revenues from the drug sales. When the project is begun in the village, each family in the village is asked to contribute to the initial capital requirement. The participating families have individual cards kept for them and receive small discounts at the pharmacy.

The individual villages determine the prices to be charged in the pharmacies. See Table 13 for one list of prices in the Bria Peace Corps pharmacies. In the project in Bria, the agents are on a six-month probationary basis and have not yet been paid. This new system is illustrative of some of the innovative management techniques the program is trying in order to produce better results.

Although the project has fewer controversial pharmaceuticals sold in the individual pharmacies than those of the DDC/UNDP, some treatments are sold and promoted that are against MOPHSA policy. For example, Flavoquine is often sold although current government policy prohibits the sale of this drug. In addition, homemade solutions of ORS are continuing to be taught although the government's official policy is to use the packets rather than the homemade solutions.

The Peace Corps program has, in the past, had relatively little collaboration with the CAR government in the implementation of its projects. The goal of the program now is to allow itself to be integrated into the MOPHSA structure. In addition, it has been criticized internally (Steinwand, 1987) for its emphasis on technical aspects in the implementation of these projects and is now changing its focus to health education and community organization.

Peace Corps representatives mentioned that, similarly to DDC/UNDP, they had found their projects to be more successful in zones where the population was involved in an export market and integrated into the monetary economy. They noted, for example, that the pharmacy project in Ndele had been unsuccessful because the population simply did not have the money to pay for drugs.

DDC Village Pharmacies in the Fifth Health Zone. In the fifth health zone in the CAR, the DDC is assisting villages in initiating village pharmacy projects. A report on a meeting held in July, 1987, indicated that 9 village pharmacies have been formed in the Health Zone, 8 in the subprefecture of Bangassou (M'Bomou Province) and one in Mobaye (Basse Kotto Province). However, these pharmacies are encountering a number of difficulties in maintaining their projects. Since these projects are not receiving any donor funding unlike those of the DDC/UNDP and Peace Corps programs, they lack resources such as credit as well as personnel and fuel to conduct trainings and supervise the operations. In addition, the transport costs of acquiring the drugs are high because of the distant location of the pharmacies from Bangui where the drugs are purchased.

One possible project that would decrease some of the transport costs involved in restocking drugs and increasing access to drugs is the construction of intermediate

TABLE 13

PHARMACEUTICALS SOLD IN BRIA PHARMACY (PEACE CORPS)

Medicine	Price*
Aspirin	10 FCFA/comp
Nivaquine or Flavoquine	15 FCFA/comp
Vermos (worm treatment)	110 FCFA
Flagyl	120? FCFA
Bactrim	60 FCFA
Aureomycin (3% topical)	20 FCFA/treatment
(1% eye)	30 FCFA/treatment
Heliofer	
Alvityl (multivitamin)	100 FCFA/comp
Tigal (antiscabbies,etc)	30 FCFA/treatment
Compresses	50 FCFA
Alcohol	40 FCFA/treatment
Phenobarbital	
Valium	
Biltricide (antischistosomiasis)	
Razor blades	10 FCFA
Soap (antimicrobial)	
Sugar	3 FCFA
Bandages, large	120 FCFA
small	80 FCFA

* 300 FCFA are equal to approximately US \$1.

depots where drugs can be bought within the interior regions. Although several persons mentioned the utility of such structures and one physician had even applied for funding for such a project, it is not clear whether any of these depots have been built or whether funding is available for them.

Conclusions. The village pharmacies are another example that the population is already paying and is prepared to pay for health care services. For example, the expenditures for drugs in the Bondongofio pharmacy for the six months of January until July alone was 565,490 FCFA (\$1885). In addition, the pharmacy has been able to pay back its initial loan and generate profits.

The experience of village pharmacies in the CAR implies that some conditions are necessary for these projects to succeed: (1) local management of the funds, (2) adequate training and supervision, particularly during the beginning of the projects, and (3) financial management systems that minimize the potential for mismanagement of revenues. In addition, cost recovery programs are more likely to be successful in regions that are involved in an export market and have access to cash.

One of the objectives of examining village pharmacies was to determine the feasibility of selling CCCD antimalarial and antidiarrheal treatments. Although the sale of Chloroquine appears to be feasible since the population is already accustomed to purchasing similar pharmaceuticals such as Nivaquine and Flavoquine, the ability to sell ORS packets is less certain. The reason for this is that the ORS packets are not currently being sold at the village pharmacy level and the people are still being educated on the efficacy of this treatment over others for diarrhea. Whether or not people are willing to pay for this product is uncertain.

The feasibility of selling ORS packets in public health facilities is even less certain since other pharmaceuticals are not currently being sold in these facilities. A more feasible solution probably would be to introduce the sale of all pharmaceuticals in public health centers in order to recover the costs of ORS packets and either to give out free or charge a minimal price for this treatment.

VII. RECOMMENDATIONS

Of the three potential cost recovery activities, the team recommends the seminar/round table discussion for policy makers and a cost recovery pilot project to be held in a government health facility. The seminar/round table discussion will inform policy makers of the range of cost recovery options and create a constituency for cost recovery for the CCCD project. The pilot project will provide opportunities to resolve some of the management issues of cost recovery, such as how to make the transition to cost recovery in public facilities and train personnel to take on financial responsibilities.

The expenditure survey has a lower priority than the other activities, because the results of the preliminary survey of health care facility users already demonstrate that users pay for health care. Future data on expenditures can be collected in the context of the pilot project to provide baseline data and data after the intervention that can be used to evaluate the project. If the CCCD project were to decide to conduct an expenditure survey, however, MOPHSA has trained interviewers and now a questionnaire that has been pretested with which to conduct it.

Specific recommendations are:

1. A seminar/round table discussion should be held within the next four to eight months to acquaint policy makers in CAR with options available to the MOPHSA for recovering costs in government health facilities. This seminar/round table discussion would be held over a period of three to five days and utilize REACH technical assistance to present the options and the successful cost recovery projects in African countries (for example, Senegal, Benin and Zaire). In addition, it would cover criteria for the selection of a site for the pilot project, such as regional economic differences, and it would allow the policy makers to reach a consensus on the pilot project they prefer.

One possible agenda is:

- I. Review Results of Preliminary Surveys of Managers and Health Care Facility Users
- II. Advantages and Disadvantages of Cost Recovery Options
 - A. Prepayment
 - B. Fee-for-Service
 1. Payment for Consultations
 2. Payments for Pharmaceuticals
 3. Payments for Consultations and Pharmaceuticals

- C. Simple vs. Complex Fee Structures
- D. Cross Subsidization
- III. Training and Management Issues in Cost Recovery
- IV. Discussion of Experiences in Other African Countries
(Use of slide show and speakers from ongoing projects if possible.)
 - A. Benin
 - B. Zaire
 - C. Senegal
- V. Criteria for Selection of a Site
- VI. Round table Discussion by Participants

Additional seminar/round table discussions may be appropriate overtime to discuss interim and final results of the pilot project and other policy issues.

2. The seminar/round table discussion on cost recovery options should create a team to collaborate on the specifics of a cost recovery pilot project. The team would be coordinated by the Director of Preventive Medicine and Endemic Diseases and CCCD project. The implementation team should include members from outside of the Directorate of Preventive Medicine and Endemic Diseases as necessary. The implementation team should design a pilot project to include innovative management practices, and identify an appropriate site for the project with existing facilities and personnel to staff the project. The site selected should provide a representative sample with which to assess the financial burden of health care expenditures resulting from the pilot cost recovery program to users at all levels of income.

The implementation team would also manage the collection of baseline data on consumer health expenditures and recurrent and fixed costs in health centers at the site. After the collection of baseline data the team should reassess the feasibility of success fully implementing a pilot project, and the potential financial burden of the cost recovery program. Another possible activity for the implementation team would be to visit cost recovery projects in other African countries.

3. After these two recommendations have been undertaken, the pilot project should be initiated in government health facilities in the selected zone. The project should include data collection to determine average consumer expenditures and health facility costs. Personnel should be trained in finance and accounting since the current health facility directors and personnel do not have experience in these areas. The project should be evaluated and results disseminated so that the cost recovery can be expanded to other health facilities.

VIII. FOLLOW-UP ACTION REQUIRED

The CCCD staff in CAR have tentatively agreed to hold the seminar/round table discussion for policy makers in the first or second quarter of 1988. REACH staff should work with the CCCD staff in CAR to organize the seminar/round table discussion. The organization will require, among other things, making a list of participants and extending invitations to them, finalizing an agenda and preparing texts, visual aids and lectures for the seminar. If possible, arrangements should be made for experts from African countries on cost recovery programs in their countries to attend.

APPENDIX A

INITIAL SCOPE OF WORK

1. In 1987 the GOCAR provided the first government contribution to the CAR CCCD project, 26 million FCFA or approximately \$86,000. The money comes from a special project counterpart fund funneled through the Ministry of Plan. Although it indicates the government's good faith in executing the project agreement, it does not really address the issue of recurrent project costs because once the project ends the counterpart funds will end unless the GOCAR can be convinced to reallocate a similar amount directly to the Ministry of Health.

2. The problem of autofinancing is a difficult one in the CAR especially since the population has had several bad experiences in the past with making contributions but never receiving the services. Although many officials acknowledge the need for some sort of autofinancing system in the health sector, there is a reluctance among politicians to institute a system which would permit a single ministry to earn money for fear of setting a precedent which would result in user fees being charged by the ministries of education, water, roads, etc., in short, a taxing of the public beyond its means.

3. Nevertheless the population is already paying substantial sums of money for health care, albeit in an archaic fashion in private health clinics, pharmacies, traditional healers, etc. The government needs to be convinced that this money could be channeled more effectively into an organized system through the public health sector.

4. The CCCD strategy for starting an autofinancing scheme, therefore, is to gather data on the amount of money actually spent by the population for its health care and then to devise a plan whereby an autofinancing scheme would be started on a trial basis and presumably expanded once it proved effective. It is essential that the concept of autofinancing be talked about at the highest levels of government for the ultimate decision of whether to go ahead with it will be made there, not within a single direction of the Ministry of Health.

5. The autofinancing study conducted by REACH consultant Florence Pasnik was an excellent start in the process of sensitizing the GOCAR to the importance of instituting a self-financing system. CAR CCCD would now like to have a consultant come to do a longitudinal study to determine how much the public pays on health care, both in the public and private sectors. This information is essential if officials are to be convinced

that the public is willing to pay for health services in public facilities. With that information, a trial plan would be devised for raising revenue in one or two centers. That plan would have to take into account the management of funds aspect which in the CAR is a major element in the success or failure of such a scheme.

APPENDIX B

SCOPE OF WORK

October 1, 1987

The objective of the mission is to explore the economic, managerial and political issues to be considered in the design of a cost-recovery study, albeit, a demand survey and/or a self-financing pilot project.

In addition the team will assess survey capabilities, including testing questionnaires for a subsequent cost-recovery survey. To this end, the REACH team will:

1. Interview policy makers in the Ministry of Public Health and Social Affairs and in other relevant ministries as well as other donors for their perspectives on implementing and managing a cost-recovery program and specific management issues to be addressed in a pilot program.
2. Analyze past and existing efforts to recover the costs of health services by:
 - a) Collecting financial and management data from health facilities with cost recovery programs, such as public and private hospitals, health centers and village pharmacies.
 - b) Interviewing patients who do pay for services by administering a questionnaire to a sample of users at health facilities with a cost recovery program.
3. Present options for two potential following-on activities in the CAR: a cost-recovery pilot project and a demand survey. The team will discuss the attributes of each project with host country decision-makers.

APPENDIX C

QUESTIONNAIRE FOR MANAGERS OF FACILITIES*

DETAIL DES DEPENSES

LIBELLE	NOMBRE	COUT UNITAIRE (MOYEN/MOIS)	COUT TOTAL/AN	OBSERVATIONS
I.- REMUNERATIONS				
- Medecin Chef de Service	1			
- Medecin Chef	1			
- Medecin Specialiste	1			
- Medecin	1			
- superviseurs	1			
- infirmiers Diplomes et a	1			
Assistants	1			
Aides Soignants	1			
Secouristes	1			
- Accoucheuses	1			
- Kinesitherapeutes	1			
- Laborantins	1			
- Anesthesistes	1			
- Pharmaciens	1			
- Nutritionnistes	1			
- Administrateurs Gestionnaires	1			
- Comptables	1			
- Secretaires	1			
- Planton/Sentinelle/Lavandiers	1			
- Chauffeurs/Cuisiniers/Commis	1			
- Autres	1			
- Frais de Mission	1			
- Soins Medicaux	1			
- Charges Sociales **	1			
SOUS TOTAL I	1			

*This questionnaire was copied from Bitran and Munkatu et.al with revisions.

RECETTES

RECETTES: GENERALITES

A. METHODES DE PAYMENT

	PRIX 1986	% DES GENS QUI PAIENT	SERVICES INCLUS DANS LE PAIEMENT	SERVICES EXCLUS DANS LE PAIEMENT	QUAND ET COMMENT SE FAIT LE PAIEMENT
CONSULTATION NOUVEAU CAS	1	1	1	1	1
CONSULTATION ANCIEN CAS	1	1	1	1	1
CONSULTATION MALADIE CHRONIQUE	1	1	1	1	1
ACCOCHEMENTS	1	1	1	1	1
EXAMENS DE LABORATOIRE	1	1	1	1	1
Certificats de Sante	1	1	1	1	1
EXAMENS DE RAYON X	1	1	1	1	1
JOURNEE D'HOSPITALIZATION	1	1	1	1	1
INTERVENTIONS CHIRURGICALES	1	1	1	1	1
Regles	1	1	1	1	1
Simple	1	1	1	1	1
Complex	1	1	1	1	1
Urgence	1	1	1	1	1
Simple	1	1	1	1	1
Complex	1	1	1	1	1
CONSULTATION PRE-SCOLAIRE	1	1	1	1	1
CONSULTATION PRE-NATALE	1	1	1	1	1
CONSULTATION NAISSANCE DESIRABLE	1	1	1	1	1
MEDICAMENTS	1	1	1	1	1
VACCINATIONS	1	1	1	1	1

D. QUELS SONT LES PROBLEMES OU AVANTAGES ASSOCIES A VOTRE SYSTEME DE PAIEMENTS EN CE QUI CONCERNE:

(a) L'equilibre de vos finances _____

(b) Le controle des recettes _____

(c) L'accessibilite economique de la population aux soins de sante (indigents) _____

(d) La frequentation des services _____

(e) Autre _____

INFORMATION SUR L'ORGANISATION DE LA GESTION

(1) QUI UTILISE LES DOCUMENTS COMPTABLES SUIVANTS:

DOCUMENTS	MEDecin CHEF DE Zone	MEDecin ADMINISTRATEUR GESTIONNAIRE	SUPERVISEUR	INFIRMIER TITULAIRE	COMPTABLE	SECRETARE	AUTRE
LIVRE DE CAISSE							
LIVRE DE BANQUE							
FICHE BUDGETAIRE							
BON DE DEPENSE							
BON DE CAISSE							
RECUS OU QUITTANCE							
CHEQUES							
ORDRES DE PAIEMENT							

(2) ELABOREZ VOUS UN PLAN DE DEPENSES?
 SI OUI, AVEC QUELLE PERIODICITE?

OUI NON

- (a) Chaque mois
- (b) Chaque trimestre
- (c) Chaque semestre
- (d) Chaque année
- (e) Autre (à préciser) _____

(3) ELABOREZ VOUS UN RAPPORT FINANCIER?
 SI OUI, AVEC QUELLE PERIODICITE?

OUI NON

- (a) Chaque mois
- (b) Chaque trimestre
- (c) Chaque semestre
- (d) Chaque année
- (e) Autre (à préciser) _____

(4) EST-CE-QUE VOTRE INSTITUTION A UN COMPTE PROPRE EN BANQUE OU AILLEURS?
 SI OUI, QUI LE GERE:

OUI NON

- (a) Medecin Chef de Zone
- (b) Medecin Directeur
- (c) Administrateur Gestionnaire
- (d) Superviseur
- (e) Infirmier Chef
- (f) Comptable
- (g) Secretaire
- (h) Autre (à préciser) _____

INFORMATION SUR L'ORGANISATION DE LA GESTION

(5) QUELLE EST LA PERSONNE QUI PREND LA DECISION D'ENGAGER LES DEPENSES?

(6) COMMENT SE FAIT L'APPROVISIONNEMENT DE VOTRE INSTITUTION EN MEDICAMENTS ET FOURNITURES:

MEDICAMENTS _____

AUTRES FOURNITURES _____

(7) COMMENT RECEVEZ VOUS VOS MEDICAMENTS ET AUTRES FOURNITURES?

MEDICAMENTS _____

AUTRES FOURNITURES _____

(8) COMMENT FIXEZ VOUS LES PRIX DES:

LIBELLE	COST	CONCURRENCE	POUVOIR D'ACHAT	OBSERVATIONS
(a) Medicaments	?	?	?	
(b) Accouchements	?	?	?	
(c) Interventions chirurgicales	?	?	?	
(d) Consultations	?	?	?	
(e) Examens de laboratoire	?	?	?	
(g) Examens de R.X	?	?	?	
(h) Hospitalisations	?	?	?	

DEPENSES, RECETTES ET INVENTAIRE DES MEDICAMENTS

LIBELLE	QUANTITE PAR AN	COUT UNITAIRE AU MARCHÉ	COUT TOTAL	PRIX DE VENTE UNITAIRE	PRIX DE VENTE TOTAL	INVENTAIRE MOYEN QUANTITE
1.- Peni. Procaine						
2.- Chloroquine a 100 mg.						
3.- Aspirine a 500 mg.						
4.- BRO						
5.- Chloramphenicol caps. 250 mg.						
6.- Fer a 300 mg.						
7.- Levamisole a 50 mg.						
8.- Paracetamol a 500 mg.						
9.- Levamisole a 150 mg.						
10.- Chloramphenicol ogt.						
11.- Didyrene amp. 1 mg.						
12.- Tetracycline caps. 250 mg.						
13.- Ampicilline						
14.- Papaverine amp.						
15.- Mebendazole						
16.-						
17.-						
18.-						
19.-						
20.-						
TOTAL		////////////////		////////////////		////////////////

APPENDIX D

NOM DE L'ENQUETEUR _____
NOM DE LA FORMATION _____

DATE _____

QUESTIONNAIRE INDIVIDUEL

1. IDENTIFICATION DU SUJET

1.1. Qui est la personne pour qui la fiche est-elle remplie?

1. une femme,
2. un enfant,
3. autre (Ne pas continuer l'enquete.)

1.2. Quel est l'age de la personne pour qui la fiche est remplie?

1. Enfant en-dessous de 1 an
2. Enfant de 1 a 4 ans
3. Enfant de 5 a 19
4. Adulte de 20 a 34
5. Adulte de 35 a 49
6. Adulte de 50 et plus.

1.3. Qui est la personne qui repond au questionnaire?

1. elle-meme, (Allez a la question 2.1)
2. la mere,
3. le pere,
4. autre membre de la famille
5. autre membre du menage (Ne pas continuer le questionnaire.)

1.4. Quel est l'age de la personne qui respond pour l'individu?

1. 5 a 19 ans
2. 20 a 34 ans
3. 35 a 49 ans
4. 50 et plus.

2. DESCRIPTION DE LA MALADIE

2.1. Etes-vous venue a l'hopital pour des soins curatifs, des soins preventifs ou un accouchement?

1. les soins curatifs, (Continuez.)
2. les soins preventifs, (Allez a la question 3.0.)
3. un accouchement (Allez a la question 3.0.).

2.2. Quelle est la maladie?

1. Paludisme ___ 2. Diarrhee ___ 3. Rougeole ___ 4. Pneumonia ___
5. Infection respiratoire ___ 6. Coqueluche 7. Gonorrhée ___
8. Vermineuses ___ 9. Accident ___ 10. Rhumatisme 11. Autres
(Specifiez)___

2.3. Quand la maladie a-t-elle debute?

1. depuis plus d'un mois
2. un mois ou moins (Allez au calendrier.)

ENQUETEUR: Encerclez la date sur le calendrier ci-dessous.

Souligner la date d'aujourd'hui.

	DI	LU	MA	ME	JE	VE	SA
SEPT	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	1	2	3
OCT	4	5	6	7	8	9	10
	11	12	13	14			

2.4. La maladie a-t-elle empeche la personne ou la famille d'exercer les activites productrices du revenu? 1.Oui 2. Non

3. REVENUS DU MENAGE

3.1 Combien de membres du menage sont-ils remunere pour le travail?

3.2 Quelle est la profession du chef du menage?

1. fonctionnaire bas 2.fonctionnaire moyen 3. fonctionnaire superieur 4. fonctionnaire niveau inconnu 5. petit commercant 6. grand commercant 7. eleve ou etudiant 8. cultivateur 9.autres (specifiez)

3.3 Quelle a ete le revenu mensuel total du chef du menage le mois dernier?

1. 0 a 15,000 FCFA
2. 15,001 a 30,000 FCFA
3. 30,001 a 45,000 FCFA
4. 45,001 a 60,000 FCFA
5. 60,001 a 100,000 FCFA
6. plus de 100,000 FCFA
7. ne sait pas

3.4 Combien le chef du menage a-t-il donne le mois dernier pour la nourriture a la femme qui repond au questionnaire ou la mere de l'enfant? 1. en espee (precisez le montant) 2. en natur

3.5 Est-ce qu'il y a des mois ou le chef du menage ne recoit pas d'argent?

1. oui
2. non (Allez a la question 3.7.)

3.6 Il y a combien de mois l'annee derniere qu'il n'a pas recu d'argent?

3.7 Quelle est la profession de la femme ou la mere de l'enfant qui repond au questionnaire?

1. fonctionnaire bas 2. fonctionnaire moyen 3. fonctionnaire superieur 4. fonctionnaire niveau inconnu 5. petit commercant 6. grand commercant 7. eleve ou etudiante 8. cultivateur 9. menagere seulement 10. autres (specifiez)

3.8 Quelle a ete le revenu mensuel total de la femme le mois dernier?

1. 0 a 15,000 FCFA
2. 15,001 a 30,000 FCFA
3. 30,001 a 45,000 FCFA
4. 45,001 a 60,000 FCFA
5. 60,001 a 100,000 FCFA
6. plus de 100,000 FCFA
7. ne sait pas

3.9 Est-ce qu'il y a des mois ou elle ne recoit pas d'argent?

1. Oui
2. Non (passez a la question 4.1)

3.10 Il y a combien de mois l'année dernière qu'elle n'a pas reçu d'argent?

4 REVENUS AGRICOLES

4.1 Est-ce que la famille a des activités agricoles?

1. Oui
2. Non (Allez à la question 5.)

4.2 Quel est le revenu annuel ou mensuel provenant des activités agricoles suivantes? (Spécifiez annuel ou mensuel)

1. Vente de manioc
2. Vente de bananes
3. Vente de roselles
4. Vente de mil
5. Vente des arachides
6. Vente des maïze
7. Vente des autres produits (Spécifiez)

5. PATRIMOINE DU MENAGE

5.1 Est-ce que la famille a des activités d'élevage?

1. Oui
2. Non (Allez à la question 5.8.)

5.2 Quelle est le nombre de bétail?

5.3 Quelle est le nombre de chèvres?

5.4 Quelle est le nombre de moutons?

5.5 Quelle est le nombre de porcs?

5.6 Quelle est le nombre de volailles?

5.7 Quelle est le nombre des autres animaux?

5.8 Les membres du ménage ont-ils un véhicule? ENQUÊTEUR:

Indiquez le plus valable: 1. Aucun 2. Bicyclette 3. Motocyclette

4. Voiture 5. Camion

6.0 ATTITUDES

6.1 Les tarifs pour les examens d'analyses vous empêchent-ils de demander des soins de santé?

1. Jamais
2. Parfois
3. Toujours

6.2 Les tarifs pour les ordonnances vous empêchent-ils de demander des soins de santé? 1. Jamais 2. Parfois 3. Toujours

6.3 Serriez-vous disposé à payer pour recevoir les soins de santé mise en place par le gouvernement? 1. Oui 2. Non

6.4 Quel système préférez-vous?

1. une carte d'abonnement
2. un paiement au moment des soins de santé

6.5 Preferez-vous qu'on verse l'argent au tresor ou a un comite local de gestion ou au responsable de la formation sanitaire?

1. le tresor
2. un comite local de gestion
3. un responsable de la formation sanitaire
4. ne sait pas

6.6 Voulez-vous en contribution paye a un prix modeste pour les medicaments si le gouvernement vous assure une provision suffisante?

1. Oui
2. Non

6.7 Pensez-vous qu'il faut payer les consultations a l'hopital ou aux centres de sante aussi?

1. les consultations a l'hopital seulement
2. les consultations aux centres de sante seulement
3. les consultations a l'hopital et aux centres de sante

6.8 Comment avez-vous obtenu l'argent pour payer les soins?

1. Epargnes de menage
2. Vente d'un animal
3. Vente de produit agricole
4. Donne par une personne en dehors du menage
5. Paiement en natur
6. Autre (specifiez)

7.0 SITUATION FAMILIALE

7.1 Quelle est votre situation matrimoniale?

1. Marie
2. Celibataire
3. Veuve
4. Divorce

7.2 Combien des femmes avez-vous ou votre mari?

7.3 Combien des enfants avez-vous?

7.4 Le chef du menage a-t-il ete scolarise?

1. pas d'ecole
2. ecole primaire
3. ecole secondaire
4. plus (specifiez)

7.5 La femme qui repond au questionnaire ou la mere de l'enfant a-t-elle ete scolarise?

1. pas d'ecole
2. ecole primaire
3. ecole secondaire
4. plus (specifiez)

7.6 Quelle est votre religion?

1. Catholique
2. Protestant
3. Musulman
4. Animiste
5. Autre

9. TRAITEMENT DANS UN CENTRE DE SANTE AGREE

9.1 Comment s'appelle cette formation?

9.2 Combien de temps vous faut-il pour vous y rendre a pieds?

9.3 Avez-vous reçu au centre tous les médicaments prescrits pour cette maladie?

1. Aucun médicament prescrits n'était disponible
2. Quelques médicaments étaient disponibles.
3. Tous les médicaments requis étaient disponibles.

9.4 Combien de visites avez-vous déjà effectuées dans ce centre pour cette maladie?

9.5 Combien de FCFA avez-vous payé pour les consultations, non compris les médicaments?

9.6 Si vous n'avez pas payé, comment avez-vous reçu une exemption?

1. Ayant droit
2. Indigent
3. Pas de quittancier
4. Assurance
5. Autre raison (Spécifiez)

9.7 Combien avez-vous payé pour les médicaments obtenus dans ce centre?

9.8 Quelle était la somme totale dépensée a ce centre pour le traitement de la maladie, y compris les médicaments?

Retournez a la question 8.13

10. TRAITEMENT CHEZ UN INDIVIDU EN DEHORS D'UNE FORMATION SANITAIRE PUBLIQUE

10.1 Quel type de personne?

1. Médecin privé
2. Assistant médical
3. Infirmier
4. Sage-femme
5. Guérisseur (Si oui, allez a la question 12)
6. Autre personne (précisez)

10.2 Combien de visites avez-vous déjà effectuées pour cet épisode de maladie?

10.3 Combien de FCFA avez-vous payé a cette personne pour le traitement de la maladie, y compris les médicaments?

Retournez a la question 8.13.

11. MEDICAMENTS DANS UNE PHARMACIE, BOUTIQUE OU MARCHÉ

11.1 Est-ce que vous êtes allé au pharmacie privée, au pharmacie villageoise ou au marché?

1. pharmacie privée
2. pharmacie villageoise
3. marché
4. autre (spécifiez)

11.2 Une personne qualifiée dans une formation d'état ou une formation agréée vous a-t-elle conseillé d'obtenir ces médicaments?

1. Formation d'état
2. Formation agréée
3. Personnellement

11.3 Quel etait le cout total des medicaments en FCFA pour cette maladie?

Retournez a la question 8.13.

12. TRAITEMENT AVEC LA MEDICINE TRADITIONNELLE

12.1 Avez-vous utilise vous-meme des medicaments traditionnels?

1. Oui 2. Non

12.2 Avez-vous donne quelque chose pour recevoir des medicaments traditionnels? 1. Oui 2. Non

12.3 Quel etait la valeur en FCFA du paiement en natur que vous avez donne?

12.4 Quel etait le paiement en espee en FCFA?

Retournez a la question 8.13.

13. TRAITEMENT A L'HOPITAL D'ETAT

13.1 Comment s'appelle l'hopital?

13.2 Quel etait le nombre de jours d'hospitalisation?

13.3 Avez-vous recu a l'hopital tous les medicaments necessaires?

1. Aucun medicament necessaire n'etait disponible a l'hopital
2. Quelques medicaments etaient disponibles
3. Tous les medicaments requis etaient disponibles

13.4 Quel etait le frais d' hospitalisation, en FCFA, non compris les medicaments?

13.5 Quel etait le frais de medicaments?

13.6 Quelle a ete la somme totale payee a l'hopital?

Retournez a la question 8.13.

14. TRAITEMENT A L'HOPITAL AGREE

14.1 Comment s'appelle l'hopital?

14.2 Quel etait le nombre de jours d'hospitalisation?

14.3 Avez-vous recu a l'hopital tous les medicaments necessaires?

1. Aucun medicament necessaire n'etait disponible a l'hopital
2. Quelques medicaments etaient disponibles
3. Tous les medicaments requis etaient disponibles

14.4 Quel etait le frais d'hospitalisation, en FCFA, non compris les medicaments?

14.5 Quel etait le frais de medicaments?

14.6 Quelle a ete la somme totale payee a l'hopital?

APPENDIX E

QUESTIONNAIRE ON VILLAGE PHARMACIES

Organization

1. How was the project initiated in the village?
2. How was the community involved in the organization of the pharmacy? Is there a village health committee and, if so, what role does it play?
3. How and from where are the drugs obtained to supply the pharmacy?

Costs

4. What are the transport costs involved in obtaining the pharmaceuticals?
5. What initial and recurrent costs were and are involved in operating the pharmacy?
6. How are the prices for the drugs sold in the pharmacy determined?
7. Are the prices compatible with private markets such as private pharmacies and mobile vendors?

Workers

8. When and how were the workers of the pharmacy trained? What kind of training and for what length of time were they trained?
9. Are the workers remunerated? How much and at what interval? Are they satisfied with this payment?

Supervision

10. Who supervises the workers? How often are the workers supervised and is the supply of fuel adequate for this supervision?
11. Are the workers able to do the necessary bookkeeping for accounting purposes? Have there been any mishandling of funds?

Services Provided

12. What hours is the pharmacy open and are these hours satisfactory for the clientele?
13. What pharmaceuticals are available in the pharmacy? and at what price?
14. Are ORS packets sold in the pharmacy? If so, for how much? Are other drugs available for the treatment of diarrhea?
15. What is the price of chloroquine or nivaquine? Is the supply adequate? What other drugs are being sold for the treatment of malaria?
16. Do the workers explain the proper dosages of the pharmaceuticals at the time of the sale?

Relationship with Other Sellers

17. Does the pharmacy have any competition with other sellers of pharmaceuticals in the area?

APPENDIX F

INTERVIEW GUIDELINES FOR POLICY MAKERS

Private Health Care Facilities

1. What are the private health care facilities in CAR?
2. Who is the medical staff in private facilities?
3. Do private facilities accept charity cases?
4. Are private facilities well managed?
5. What would you suggest to improve their management?

Public Health Care Facilities

6. Are people currently paying for health services in public facilities?
7. What kinds of payments do they make (e.g. honorariums to physicians and nurses, registration fees, or in kind)?
8. Do people who cannot afford to pay receive services?
9. Who pays for services (e.g. civil servants, businessmen, expatriots)?
10. Is the central government aware of these payments?
11. Are public facilities well managed?
12. What would you suggest to improve their management?

Pharmacies

13. How are pharmaceuticals sold in CAR?
14. Is there a problem with the distribution of pharmaceuticals?
15. Do you think that drug distribution is well managed?
16. Have village pharmacies helped with distribution problems?
17. What would you suggest to improve drug distribution?

CCCD Project

18. Are you aware of the CCCD project funded by GO CAR and USAID supplies gasoline, malaria drugs and ORS to CAR?
19. Are you aware that USAID funding is scheduled to end next year (1989) with a possible extension through 1990?
20. Would you like the program to continue?
21. If GOCAR were to continue the program with its own resources, which system would you prefer:
 - a. charge for pharmaceuticals in public facilities
 - b. charge for pharmaceuticals in village pharmacies
 - c. charge for pharmaceuticals with a markup to cover petroleum costs of transporting them
 - d. charge for consultations and include pharmaceuticals with consultation
 - e. charge for surgery or other hospital care to cross-subsidize primary care
 - f. other

Policy Changes

22. Why do you think that this system has not been implemented until now?
23. What information would be helpful to you in deciding between systems?
 - a. expenditure study to show willingness to pay and ability to pay for services
 - b. expenditure study to show how much people currently pay for public and private services
 - c. pilot study of village pharmacy
 - d. pilot study of charging for pharmaceuticals in public facilities
 - e. pilot study of charging for consultations and include pharmaceuticals with consultation
 - f. pilot study of charge for surgery or other hospital care to cross-subsidize primary care
 - g. pilot study focusing on management of a facility with a cost recovery program
24. Who will be most important peoples to convince to adopt a particular system?
 - a. MOPHSA policy makers
 - b. population
 - c. physicians
 - d. other
25. What information would be helpful to convince them to adopt a particular system?
 - a. expenditure study to show willingness to pay and ability to pay for services
 - b. expenditure study to show how much people currently pay for public and private services
 - c. pilot study of village pharmacy
 - d. pilot study of charging for pharmaceuticals in public facilities
 - e. pilot study of charging for consultation and include pharmaceuticals with consultation
 - f. pilot study of charging for surgery or other hospital care to cross-subsidize primary care
 - g. pilot study focusing on management of a facility with a cost recovery program

**PLACES AND PERSONS VISITED
(Chronological Order)**

USAID, Washington D.C.

Wendy Roseberry, Project Officer for CCCD project.

MOPHSA, Bangui

Joe Naimoli, Technical Advisor of CCCD Project

Dr. ROUNGOU, Director of Preventive Medicine and Endemic Diseases and Director of CCCD Project

Dr. Mamadou KPOSSA, Director General of Public Health

Dr. Pierrette SOKAMBI, Director of Maternal and Child Health and Family Planning, and Deputy Director of CCCD Project

Dr. Michel GBADJAMO, Head of Combatting Diarrheal Diseases Program of CCCD Project

Dr. Pierre SOMSE, Chief of Services of Sexually Transmitted Diseases of Pasteur Institute, Formerly Chief Physician of Basse Kotto and Health Zone Five

Interviewers:

Aime-Moise BOBY, Superior Technician

Nestor MADJI, Superior Technician

Gregoire MELEMOKO-NDIALA,

Bernard NDONAZI, Superior Technician

Laurent NOUTOUA, Medical Entomologist

Bertin RANGBA, Superior Technician

USAID, Bangui

Hugh SMITH, USAID Liaison Officer

United States Embassy, Bangui

David FIELDS, Ambassador

Fred LASOR, Deputy Chief of Mission

Peace Corps, Bangui

Paul OLSON, Director

Sharon RAYBALL, Leader

John LAMOREAUX, Administrative Assistant

World Health Organization, Bangui
Dr. Lekie Botte, Resident Representative

UNICEF, Bangui
Marie Toure Ngom, Representative

Yaloke Hospital, Yaloke
Mary Ann Habegger, Registered Nurse

Samuel Nambogoina, Chief Nurse of Yaloke Hospital

Gaston Tabio, Director of Medical Work of l'Eglise des Freres Evangeliques System of Hospitals

Community Development, Bossangoa
Georges Regonald, Regional Inspector of Social Action and Community Development of Ouham and Ouham Pende

Sylvester Ouassa, Sector Chief of Social Action and Community Development of North Bossangoa

Thomas Giossi, UNDP Project

Village Pharmacy, Bondogofio
Pharmacy Manager

Office of the Prefect, Bossangoa
Leon Kossianga, Prefect of Ouham Prefecture

Community Development Directorate, Bangui
Karl Cordes, UNDP Project

M. Vesely, UNDP Project

Castors Maternity, Langui
Sister Marie Julienne, Director

Foyer of Charity, Bangui
Michelin Quetier

Dr. Suzanne Chassignol, Physician

Mamadou M'baiki, Bangui
Celine Ganguenon, Chief of Health Center

Dr. Georges Georgy, Physician

World Bank, Bangui
Xuan Luong Nguyen, Conseiler Technique

UNDP, Bangui
Amadou Bocoum, Assistant Program Coordinator

Minister of Plan, Bangui
Minister of Plan

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