— PD AAA 355 —
85546

PROJECT PAPER

MATERNAL CHILD HEALTH/
CHILD SURVIVAL II
Project No. 631-0090

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete) — Amendment Number: — DOCUMENT CODE: 3

COUNTRY/ENTITY: CAMEROON

3. PROJECT NUMBER: 631-0090

4. BUREAU/OFFICE: AFR

5. PROJECT TITLE (maximum 40 characters): MATERNAL CHILD HEALTH/CHILD SURVIVAL - II

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 12 DD 31 YY 97

7. ESTIMATED DATE OF OBLIGATION (Under 'B.' below, enter 1, 2, 3, or 4)
A. Initial FY 93 B. Quarter C. Final FY 97

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY 1993 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(3,400)	(1,600)	(5,000)	(10,200)	(7,800)	(18,000)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1.						
Other U.S. 2.						
Host Country		2,180	2,180		12,000	12,000
Other Donor(s)		1,240	1,240		10,300	10,300
TOTALS	3,400	5,020	8,420	10,200	30,100	40,300

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1)	533	510				5,000		18,000	
(2)									
(3)									
(4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 530 | bww | 544 | 551 | 653 | 11. SECONDARY PURPOSE CODE: 583

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)
A. Code
B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

TO INCREASE ACCESSIBILITY AND UTILIZATION OF FINANCIALLY SUSTAINABLE, EFFECTIVE AND EFFICIENT PRIMARY HEALTH CARE IN HEALTH DISTRICTS OF SOUTH AND ADAMAOUA PROVINCES AND IN FOUR DIVISIONS OF FAR NORTH PROVINCE.

14. SCHEDULED EVALUATIONS: Interim MM YY; MM 02 YY 96; Final MM 11 YY 97

15. SOURCE/ORIGIN OF GOODS AND SERVICES: ☐ 000 ☐ 941 ☐ Local ☒ Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ____ page PP Amendment.)

USAID CONTROLLER APPROVAL OF METHODS OF IMPLEMENTATION AND FINANCING

ROBERT P. JACOBS

17. APPROVED BY
Signature: [signature]
Title: DIRECTOR, USAID/CAMEROON
Date Signed: MM 04 DD 30 YY 93

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

PROJECT PAPER
MATERNAL CHILD HEALTH/CHILD SURVIVAL II (MCH/CS II)

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ACRONYMS AND ABBREVIATIONS

AD LUCEM	Catholic Health Services Foundation
A.I.D	U.S. Agency for International Development
AIDS	Acquired Immune Deficiency Syndrome
AIDSTECH	AIDS Technical Support (AID/W project)
AID/W	Agency for International Development/Washington
ARI	Acute Respiratory Infections
BCG	Vaccine for Tuberculosis
CAPP	Provincial Pharmaceutical Supply Center
CDD	Control of Diarrheal Diseases
CDSS	Country Development Strategy Statement
CIAME	Center for the Procurement of Essential Medicines
CIM	Belgian Primary Health Care Project
CMR	Child Mortality Rate
COGE	Management Committee
COSA	Health Committee
COSADI	Health District Committee
CSM	Cameroon Social Marketing Program
CS	Health Center
CUSS	Cameroon University Center for Health Sciences
DFA	Development Fund for Africa
DFMH	Directorate of Family and Mental Health
DHS	Demographic and Health Surveys (R&D/POP Project)
DMPR	Directorate of Preventive Medicine and Rural Health
DPT	Diphtheria, Pertussis, and Tetanus Immunization
EC	European Community
EHRD	Education and Human Resources Development Office of USAID
FAA	Foreign Assistance Act
FCFA	Franc de la Cooperation Financière en Afrique Centrale (Cameroon currency)
FEMEC	Federation of Evangelical Missions in Cameroon
FSPS	Provincial Health Fund
GDP	Gross Domestic Product
GRC	Government of the Republic of Cameroon
GTZ	German Technical Cooperation
HA	Health Area
HCRP	Health Constraints to Rural Production Project
HIV	Human Immuno-Deficiency Virus
HMIS	Health Management Information System
HP	Health and Population (office in USAID)

IEC	Information, Education, and Communication
IEE	Initial Environmental Examination
IMF	International Monetary Fund
LOP	Life of Project Funding
MAR	Monthly Activity Report
MCH	Maternal Child Health
MCH/CS	Maternal Child Health/Child Survival Project
MCH/CS II	Maternal Child Health/Child Survival II Project
MOPH	Ministry of Public Health
NACS	National AIDS Control Service
NFHP	National Family Health Project
NGO	Non-Governmental Organization
ONAPHARM	National Office of Pharmaceuticals
OR	Operations Research
ORT	Oral Rehydration Therapy
PACD	Project Assistance Completion Date
PCV	Peace Corps Volunteer
PHC	Primary Health Care
PHD	Provincial Health Delegate
PID	Project Identification Document
PP	Project Paper
PRITECH	AID/W Primary Health Care Technology Project
PVO	Private Voluntary Organization
R&D/POP	Office of Population, AID/W
R&D/HEALTH	Office of Health, AID/W
RHDS	Reform of the Health Delivery System Project
RPHC	MOPH Reorientation of Primary Health Care Policy
SAP	Structural Adjustment Program
SAVE	Save the Children
TA	Technical Assistance
TAACS	Technical Advisor in AIDS and Child Survival
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development Mission to Cameroon, also abbreviated as USAID/Cameroon
USG	United States Government
WHO	World Health Organization

ACTION MEMORANDUM FOR THE DIRECTOR

DATE: April 30, 1993

FROM: Richard Greene, Chief, Office of Health and Population

SUBJECT: Maternal Child Health/Child Survival (MCH/CS) II Project

I. PROBLEM:

You are requested to approve and authorize a grant of $18 million from the Development Fund for Africa account for the four-year Maternal Child Health/Child Survival II Project. The planned obligation for FY 1993 is $5,000,000.

II. DISCUSSION:

A. Background

This project is a continuation and expansion of the $11.5 million Maternal Child Health/Child Survival (MCH/CS) Project which was authorized in 1987 with a PACD of 1993. The MCH/CS I Project was designed to strengthen Cameroon's existing health system and to improve health services to women and children in the South and Adamaoua Provinces. The project's strategy was based on the centrally-managed, vertical delivery of five key MCH/CS interventions - immunizations, diarrheal disease control, nutrition promotion/growth monitoring, child spacing and malaria treatment. A revolving drug fund was to be established to assure a regular supply of drugs. Management, logistics, and supervision systems funded by the budget of the Ministry of Public Health (MOPH) were to be developed to support delivery of the interventions.

Beginning in the late 1980s, the Cameroonian economy experienced a sharp downturn that resulted in a government-wide budget crisis and a 50 percent cut in allocations for rural health care, rendering the top down implementation method difficult to sustain. Already low health center utilization worsened to the point that primary health care (PHC) and rural health services ceased to function in a coordinated, effective fashion.

An assessment by the MOPH of the efficacy of this vertical, centrally-managed, service delivery approach concluded that a decentralized, integrated strategy focused on improvement of health systems and

community involvement in the financing and management of health care was needed. As a result, in 1989, the MOPH devised a new PHC strategy called the "Reorientation of Primary Health Care" (RPHC). The major features are:

- the development of functional health districts to coordinate and supervise the provision of effective, efficient, and comprehensive PHC services in health facilities;

- initiation of cost recovery programs at all district health facilities to finance the maintenance of a stock of essential medicines and the recurrent costs (other than salaries of MOPH personnel) of the delivery of PHC; and

- greater and improved interaction of health facility officials with local communities to ensure the acceptance by the community of cost recovery and to initiate outreach activities from health facilities (e.g., vaccination, health education).

Based on the new RPHC policy, USAID and the MOPH reformulated the MCH/CS I Project in 1989. Two years after adoption of the RPHC strategy, a major external evaluation of the MCH/CS I Project was conducted. The evaluation team found that progress had been made in organizing and training community health and management committees and establishing cost recovery, logistics, supervision, and health information systems. As a result, curative, preventive, and to a lesser extent, promotive services are being provided under the new system. However, weaknesses in management, supervision, and information collection have resulted in operational problems in the cost recovery system. Major conclusions were that (1) the operational problems encountered could be rectified through improved health systems management, and (2) decentralization of health services and community co-management and co-financing of health care are appropriate mechanisms for delivering health services. Finally, the team recommended that USAID provide follow-on assistance to the MOPH for continuation and expansion of its new PHC program.

The RPHC policy has been initiated with the help of foreign donors in a number of provinces, but efforts, including USAID's, are relatively new and are reaching only a small proportion of the population. The MCH/CS II Project is needed to upgrade health management systems in place and to extend community co-managed and co-financed PHC to under-served areas. In addition to the Adamaoua and South Provinces, the MCH/CS II Project will include four divisions in the Far North Province where USAID has been providing support to develop child survival activities through the Reform of the Health Delivery System Project (631-0072).

B. Project Goal and Purpose

The **goal** of the MCH/CS II Project is to contribute to the improvement of the health status of the people of Cameroon, particularly women and children. The **purpose** is to increase the accessibility and utilization of financially sustainable, effective and efficient primary health care

in health districts of the South and Adamaoua Provinces and in four divisions of the Far North Province.

The project's major components are summarized below. Together they will contribute to the achievement of the project's purpose.

- **Health districts** and health areas will be organized to effectively manage and coordinate the delivery of high quality curative, preventive, and promotive PHC through their community co-managed and co-financed health facilities.

- A new **provincial medical supply logistics system** will be established and made fully operational in the Far North Province. The medical supply logistics systems in the Adamaoua and South Provinces will be strengthened to provide health facilities with access to essential medicines on a sustainable basis.

- The **sustainability** of PHC will be increased through community financing of health services and improved MOPH management of the budgetary resources allocated to primary health care.

- **Health management information systems** (HMIS) will be strengthened to permit health workers to effectively utilize information on the health status of the population, physical and financial resources, skills of personnel, and health center service statistics.

- **Information, education, and communication (IEC)** activities will be significantly expanded, with emphasis on providing pre-natal, pre-school and vaccination interventions.

- **Community development** activities will be initiated to promote the active participation of local populations, in particular women, in the planning, managing and financing of health initiatives at the health center level.

- Provincial Health Delegations and health districts will have improved PHC management and quality of services through **operations research.**

Conditions which are expected at the end of the project include:

- 180 health centers in 27 health districts will be providing comprehensive PHC services, thereby increasing the health coverage from 34 to 70 percent in the project-assisted areas;

- Utilization of health centers will increase from less than 15 to at least 20 percent as expressed by the number of new cases per year as a proportion of the catchment population of assisted health center areas;

- There will be 60 percent vaccination coverage for measles and DPT III vaccines for children in targeted health center areas;

- All project-assisted health districts will have delimited health areas, functional district health and management committees, and written action plans;

- No more that 20 percent of health centers will be reporting supply outages of any of the five most frequently used medicines in a one year period.

C. Financial Summary

Total MCH/CS II life-of-project funding is $40,330,000 of which AID is providing $18,000,000, the GRC $12,012,000, and local communities $10,318,000 from cost recovery contributions. USAID/Cameroon's contribution is as follows:

USAID/Cameroon Contribution to MCH/CS II
($000)

1.	Technical Assistance	6,413.0
2.	Commodities	5,707.0
3.	Training	1,530.0
4.	Administration	2,787.0
5.	Research	620.0
6.	Evaluations	170.0
7.	Audits	60.0
8.	Contingencies	713.0
	TOTAL	18,000.0

D. Socio-Economic and Technical Considerations

AID/W PID Review Issues

AID/W guidance for the development of the MCH/CS II Project Paper (PP) as set forth in 1992 STATE 358064 (see Annex A) focuses on 4 areas. A brief explanation of how each area is addressed in the PP follows:

1) Health Care Financing and Financial Sustainability: AID/W recommended that the PP should (a) broaden the discussion of financial sustainability as part of a comprehensive economic/financial analysis, including a discussion of options for long-term financing of health sector activities and (b) provide more detail on the importance of internationally competitive procurement of drugs and how it relates to financial sustainability in the health sector.

(a) Over 50 pages of the PP are devoted to financial and economic analyses and their impact on the financial sustainability of the MCH/CS II Project. The financial analysis presents an overview of proposed project activities and a budget summary as a backdrop for a more detailed exposition of the financial aspects of the project. Site development costs are estimated for each type of facility. These

estimates are used in conjunction with the development schedule to estimate annual development costs. The financial analysis also outlines a model for the provincial drug distribution and cost recovery system which provides the framework for examining the financial feasibility and sustainability of the system at different fixed cost levels and utilization rates. The results of this analysis are used to estimate annual recurrent costs and project generated revenues. The final section examines a number of factors affecting the viability and sustainability of the system.

In sum, the analysis is detailed and comprehensive and fully conforms to the broadened discussion that is called for in the guidance.

(b) With regard to the procurement of pharmaceuticals, the project will procure the bulk of its drugs through the Center for the Procurement of Essential Medicines (CIAME). CIAME, located in the port city of Limbe, is a German-supported drug wholesaler which bulk orders essential medicines for many of the PHC programs in Cameroon. CIAME is well run, furnishes drugs at reasonable prices, and is considered a reliable long-term supplier. Further discussions of the project's drug procurement and distribution systems are found in the administrative and financial analysis sections of the PP.

2) Institutional Analysis: The PP should include a comprehensive institutional analysis of MOPH implementing bodies in order to assess their capacity to implement the proposed activities.

The Administrative Analysis (Annex M of the PP) describes the legal, financial, organizational, and managerial environment in which the project will operate; gauges the extent to which the institutions involved are capable of carrying out their assigned roles during the life of the project; and determines what capacities may need to be developed so they will be better able to assume, after project completion, their long-term roles envisaged in the project purpose.

3) Other Donor Activities: The PP should provide details on how the proposed World Bank Health Sector Loan will complement and enhance the project.

In September 1992, the World Bank suspended disbursements to Cameroon under its Social Dimensions of Structural Adjustment loan because of arrears in the GRC's payments to the IMF and the World Bank. Although this suspension has now been lifted, it is possible that ongoing conditions will cause its reinstatement in the future. The proposed World Bank Health Sector Loan would have provided funds for health infrastructure improvements in Cameroon. While this investment would complement the activities of the MCH/CS II Project, the cancellation of the loan will not impede attaining the objectives of the project.

4) Procurement of Vehicles: The mission is strongly encouraged to buy American vehicles.

Under this project, two types of vehicles will be procured: 4X4 vehicles and motorcycles. It is recommended that a mission justification be approved to permit the procurement of Toyota 4x4 vehicles from Japan. There are compelling reasons for this. First, because there is a lack of servicing and spare parts available for U.S. vehicles, USAID/Cameroon has standardized on Toyota 4X4 vehicles. Second, Cameroonian personnel are already trained for vital maintenance of these vehicles. For project-funded motorcycles, it is recommended that a determination be made to procure these in Japan because motorcycles of the size needed are not manufactured in the U.S. Only service and spare parts for Japanese cycles are available in Cameroon.

E. Program Feasibility

Various analyses conducted for the design of the MCH/CS II Project concluded that the project approach was technically sound, institutionally feasible, appropriate and responsive to the socio-cultural context of Cameroon. The same analyses have concluded that the project is financially sustainable.

F. Section 611 (a) of the FAA

The USAID/Cameroon Project Review Committee has reviewed all the documentation prepared for this project and determined that, based on the assurances provided by the conditions and covenants included in the Project Agreement, the GRC has the capability and the financial and human resources to effectively maintain and utilize this project. Substantial technical and financial planning has been carried out, and reasonable, firm estimates of the costs to the United States Government have been completed.

G. Implementation Arrangements

The GRC MOPH, Directorate of Preventive and Rural Health will be the project's implementing agency. A contract will be negotiated with a U.S. institution to provide technical assistance to the MOPH and to manage the provision of the bulk of the AID-financed resources.

H. Conditions

In addition to the standard condition precedent (specimen signatures and designation of authorized officials), three major conditions and four covenants are included to facilitate implementation of the project in accordance with the project logical framework and the implementation schedule. The conditions are as follows:

1. Prior to any disbursements under the grant to support health district hospitals or health district offices, the Grantee will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and

in substance, satisfactory to A.I.D., evidence that:

(i) The delimitation of health districts for the entire project-assisted area has been completed and has been approved by the MOPH; and

(ii) District hospitals in project-assisted areas have been granted special authorization to retain 50% of the fees which they generate from the provision of services at the hospitals.

2. Prior to the distribution of project-purchased commodities to a specific health district office, the Grantee shall provide the minimum designated personnel to staff the health district office based on standards developed by the Grantee for a functional health district team.

I. Initial Environmental Examination (IEE)

An IEE which was submitted as part of the approved Project Identification Document recommended a categorical exclusion for the project.

H. Congressional Notification

A Congressional Notification was sent to the Hill _____ and expired____ without objection.

III. RECOMMENDATION: That you sign the attached Project Authorization and thereby approve life-of-project funding of $18,000,000 in grant funds.

Attachments:

Project Authorization
Project Paper
Annexes

CLEARANCES
DDIR:RHarvey_____ Date 4/17/93
PMPD:TCrawford_____ Date 4/2/93
EHRD:RGreene_____ Date 3/2/93
CONT:RJacobs_____ Date 4/6/93
RCO:JMay_____ Date 4/2/93
RLA:JKnott_____ Date Jan 1993

PROJECT AUTHORIZATION

Name of Country:	Cameroon
Name of Project:	Maternal Child Health/Child Survival II
Project Number:	631-0090

1. Pursuant to Sections 496 and 497 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Maternal Child Health/Child Survival II Project ("the Project") for the Republic of Cameroon. The Project will involve planned obligations not to exceed Eighteen Million United States Dollars (U.S. $18,000,000) in grant funds ("the Grant") from the date of initial obligation to the Project Assistance Completion Date (PACD), subject to the availability of funds, and in accordance with the A.I.D. operating year budget and allowance process. The Grant will be used to help finance foreign exchange and local currency costs for the Project. Except as A.I.D. may otherwise agree in writing, the planned life of the Project is four years from the date of initial obligation.

2. The purpose of the Project is to increase the accessibility and utilization of financially sustainable, effective, and efficient primary health care in health districts of the South and Adamaoua Provinces and four divisions of the Far North Province. The Project will finance technical assistance, training, facilities and programs improvement, operations research, and purchase of necessary commodities.

3. The Project Agreement, which may be executed and negotiated by the officer(s) to whom such authority is delegated in accordance with A.I.D. delegations of authority, shall be subject to the following essential terms, covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate and agree to in writing:

A. Source and Origin of Commodities, Nationality of Suppliers

(1) Commodities financed by A.I.D. under the Project shall have as their source and origin countries included in A.I.D. Geographic Code 935, except as A.I.D. may otherwise agree in writing;

(2) The suppliers of commodities and services, including ocean shipping, financed by A.I.D. under the Project shall have countries included in A.I.D. Geographic code 935 as their place of nationality, except as A.I.D. may otherwise agree in writing.

B. Conditions

1. Prior to any disbursements under the grant to support health district

hospitals or health district offices, the Grantee will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and in substance, satisfactory to A.I.D., evidence that:

(i) The delimitation of health districts for the entire project-assisted area has been completed and has been approved by the Ministry of Public Health (MOPH); and

(ii) District hospitals in project-assisted areas have been granted special authorization to retain 50% of the fees which they generate from the provision of services at the hospitals.

2. Prior to the distribution of project-purchased commodities to a specific health district office, the Grantee shall provide the minimum designated personnel to staff the health district office based on standards developed by the Grantee for a functional health district team.

C. Implementation Covenants

Unless the Parties agree otherwise in writing, the Grantee covenants to:

(1) Negotiate at least one agreement with a non-governmental organization (NGO) for the collaborative management of a health district, and at least one agreement with an NGO for the collaborative management of a health center zone in the project-assisted area;

(2) Approve the statutes and periodic review process for the organization and administration of community managed provincial health funds;

(3) Assure that during the life of the project the project-assisted provinces shall maintain their authority to competitively procure low-cost, generic medicines through either domestic or international sources;

(4) Make funds available from MOPH budgetary credits to procure vaccines in amount equal to the total provided by USAID funds ($235,000).

Peter Benedict
Director, USAID/Cameroon

APR 30 1993
Date

Clearances Appear on Action Memorandum

PROJECT PAPER TEAM MEMBERS/PROJECT REVIEW COMMITTEE

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Team leader, PHC expert, Technical Analysis

James L. Roush, MS
PP expert, Social Soundness, WID Analysis

John P. Raleigh, MS, MBA
Administrative Analysis

Arthur Lagace, MHA, PhD
Economic and Financial Analysis

Etoa Nkoa Benoit, Chief of Community Health Service
MOPH representative

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Derek Singer, EHRD

Dawn Thomas, PDO/REDSO

Beth McDavid, HPN

Regina Nana, HPN

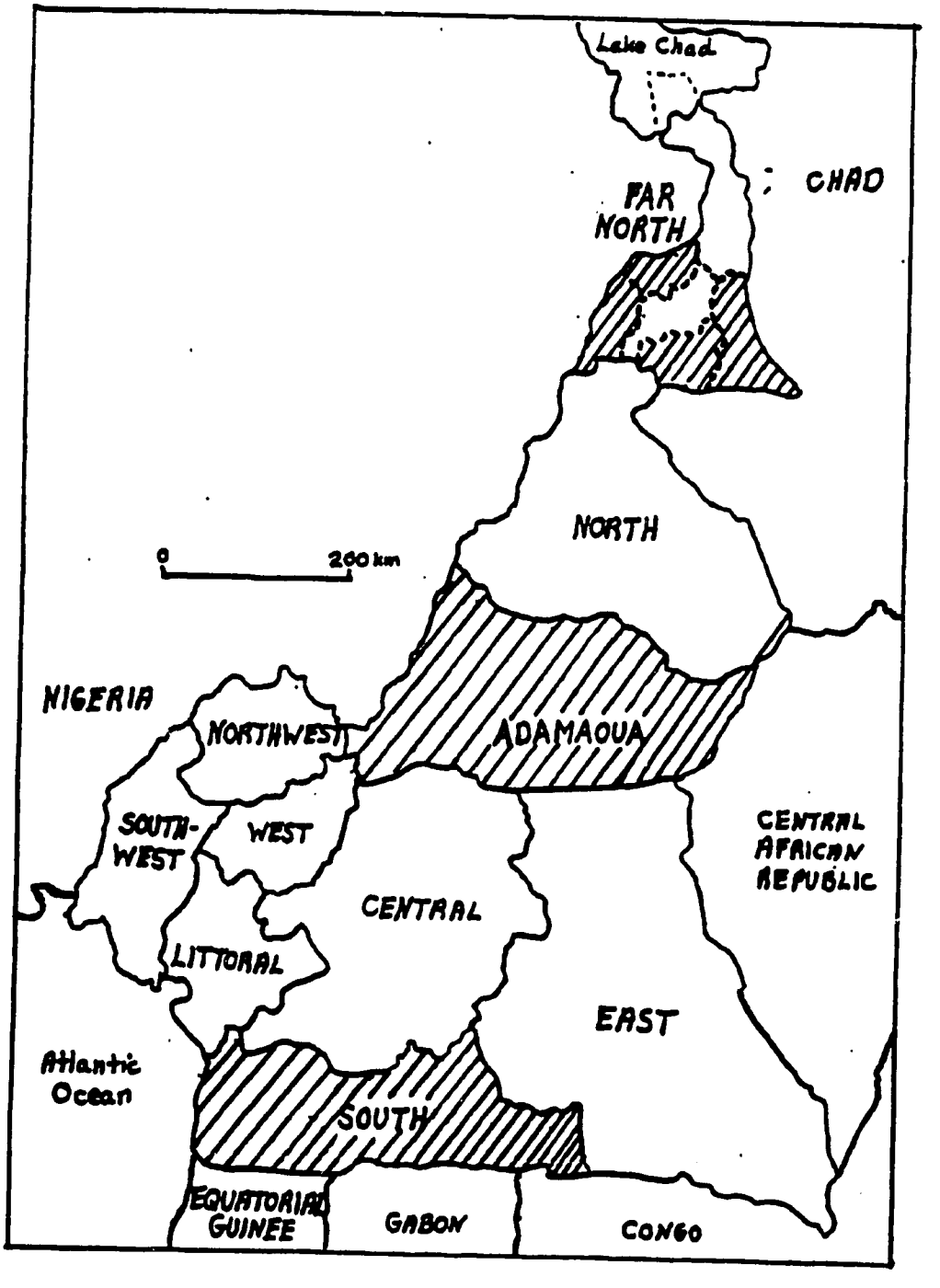
Jean Bangob, HPN

Tom Crawford, PDO, WID

John May, RCO

Ann Burkey, CONT

MAP OF CAMEROON



/// MCH/CS II PROJECT AREAS

I. BACKGROUND

A. MACRO-ECONOMIC ENVIRONMENT

1. Current Status

A nation of 12 million people, Cameroon is endowed with rich natural resources and a well-educated and bilingual work force. For nearly two decades following independence in 1960, the country enjoyed stable economic growth fueled by earnings from agricultural products, principally coffee and cocoa. During this period, the gross domestic product (GDP) increased at an average annual rate of 5.2 percent from 320 billion FCFA in 1970/1971 to 1,800 billion FCFA in 1980/1981. The substantial expansion of oil production beginning in 1978 further accelerated the growth of the GDP to 8 percent annually from 1980/81 to 1985/86, with per capita income reaching the equivalent of $800.

Since 1986, Cameroon has endured an economic recession which has resulted in an estimated 24 percent decline in the GDP. The decline in the world price of oil (approximately 40%), which began in 1986, and the subsequent steep reduction in the world prices of cocoa and coffee (approximately 54% and 39% respectively), which began in 1987 and continue to the present, have cut export earnings by almost one-third. This drastic reduction in export earnings has plunged Cameroon's economy into a deep recession and liquidity crisis. This has been exacerbated by political instability, as pressures have built for greater democracy.

A major structural adjustment reform, a resurgence in the world economy, and improved political stability will be needed before the economy will be able to resume levels of growth of earlier decades. According to USAID Cameroon's Action Plan 1990-1992, "there is little cause for optimism regarding the Cameroonian development environment. This environment is an extremely difficult one in which maintaining zero growth should be viewed as a very significant accomplishment."

2. Cameroonian Approach to Structural Adjustment of the Economy

Beginning in early 1988, the Government of the Republic of Cameroon (GRC) began discussions with both the International Monetary Fund (IMF) and the World Bank regarding the stabilization and structural adjustment of its economy. With the support of two IMF Stand-by Agreements approved in 1988 and 1991, and a World Bank Structural Adjustment Loan approved in July 1989, the GRC began to undertake actions aimed at 1) curtailing the growth of public expenditures; 2) strengthening and broadening revenue collection; 3) reforming the civil service; 4) liberalizing the trade regime; 5) liquidating, privatizing, and restructuring the parastatal sector; and 6) restructuring the commercial banking sector.

Although some progress has been achieved in certain areas, such as banking reform and privatization of parastatals, the overall performance of the structural adjustment program has been poor. In September 1992, the World Bank blocked disbursement of the third tranche of the Structural Adjustment Loan because of arrears in the GRC's payments to the IMF and the World Bank. However, in January 1993, the GRC received a new loan from France,

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allowing Cameroon to clear its arrears with the World Bank.

3. USAID Support for Structural Adjustment Program

During this period of sustained economic crisis, USAID/Cameroon has focused its program on supporting the ongoing structural adjustment program (SAP). The mission's approach emphasizes addressing the dysfunctional institutional arrangements that underlie existing economic problems, supporting private sector activity and investment, and increasing the efficiency of the public sector. The present USAID program in support of structural adjustment includes: the Program of Reform in the Agricultural Marketing Sector, which aims to remove the marketing impediments and pricing constraints in the arabica coffee subsector; the Fertilizer Subsector Reform Program, which aims to eliminate the subsidies on fertilizer and to privatize the marketing of fertilizer; and the Maternal Child Health/Child Survival Project, which supports improved health management systems and community co-financed and co-managed primary health care (PHC) services.

B. HEALTH SECTOR ENVIRONMENT

1. Demographic Trends

According to official demographic projections based on the 1987 National Population Census, the total population of Cameroon reached 12 million in mid-1991, compared to 7.7 million registered in the 1976 census. With an average annual growth rate of 2.9 percent, Cameroon's population will exceed 15.5 million in the year 2000. Cameroon has a total fertility rate of 5.8 live births per woman which has remained fairly steady since the 1976 census. The crude birth rate is estimated to be between 42 and 45 births per 1000 population, a high rate even by African standards.

2. Health Indicators

Since 1950, dramatic improvements have occurred in the health status of the Cameroonian population. The crude death rate has declined from 27 deaths per 1000 population to 14 per 1000 according to the 1987 National Population Census. During the same period, life expectancy at birth rose from 35 to 54 years. Infant mortality has similarly declined from 170 deaths per 1,000 live births to approximately 90 per 1,000, and child mortality from over 250 deaths per 1,000 children under age five to approximately 160 per 1,000.

Despite important declines in child and infant mortality rates over the past 40 years, evidence indicates that infant and under five mortality rates are reaching a plateau (the annual rate of decrease being almost halved from that of the previous decade). In addition, present infant and child mortality rates are comparable to those in African countries that are much less developed than Cameroon.

According to the 1991 Cameroon Demographic and Health Survey (DHS), a relatively high proportion of births (63.8%) takes place with the assistance of a health professional, mainly with the assistance of a midwife or a nurse (55%). In addition, approximately 80% of pregnant women receive at least one prenatal consultation with a health professional. Nevertheless, maternal mortality is high at an estimated 420 per 100,000 live births. A 1990

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UNICEF study found that approximately 40 percent of births are protected against tetanus by means of injections received by the mother during pregnancy.

Disease-related morbidity and mortality among infants and children in Cameroon are largely preventable and generally caused by illnesses whose early diagnosis and treatment could substantially reduce mortality. The most important among these are malaria, measles, tetanus, diarrhea, pneumonia, meningitis, and malnutrition. According to a Ministry of Public Health (MOPH) study, 2,153 deaths were recorded during the first six months of 1990 among both children and adults. The principal causes were as follows:

1. Malaria
2. Measles
3. Meningitis
4. Pneumonia
5. Anemia
6. Diarrhea
7. Broncho-pneumonia
8. Malnutrition
9. Hypertension
10. Tetanus

In addition to these principal causes of death, the MOPH reports the following other important endemic diseases: tuberculosis, leprosy, filariasis (including onchocerciasis), schistosomiasis, cholera, and AIDS. The national prevalence of human immuno-deficiency virus (HIV) infection in the adult population is estimated at less than one percent but is increasing. Childhood vaccination coverage is low by African standards: 38% vaccinated against measles and only 27% completely vaccinated. Only an estimated 5 percent of childhood diarrheas are treated at home with oral rehydration salts. The overall oral rehydration therapy use rate is approximately 20 percent.

Nutrition in Cameroon may be deteriorating. In 1985, 13% of babies were born with low birth weights. Daily food intake, an average of 2028 calories per day, is slightly lower than found in 1965. The daily diet of most Cameroonians shows a deficiency of protein. In addition, there are pockets of iodine and vitamin A deficiencies among the populations of northern Cameroon.

3. Recent Trends

Cameroon's ongoing economic recession has affected social services, particularly the delivery of health care. The MOPH budget has registered a sharp decline since 1986, dropping from a high of 26.75 billion FCFA in 1986/87 to 22.76 billion FCFA in 1990/91. Prior to the economic crisis, over 30 percent of the health budget was allocated to rural health services (sub-divisional hospitals, health centers, and village health posts). In 1988, because of the worsening economic crisis, the budget for rural health care was cut by 50 percent and health facilities lost most of their operating budgets. The supply of medications to rural facilities, already inadequate, virtually ceased.

These financial problems, which have continued, are exacerbated by inefficient health budgeting, planning, and resource allocation practices. MOPH personnel, like other Cameroonian public servants, have outdated job descriptions; work in a system without incentives or sanctions to encourage accountability; and lack the resources to perform their jobs properly. Health center utilization, which was already low, has worsened. As a result, primary health care and rural health services have ceased to function in a coordinated,

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effective fashion.

C. MOPH REORIENTATION OF PRIMARY HEALTH CARE PROGRAM

The Ministry's first step in confronting the deterioration of the national health care system was to improve primary health care (PHC) -- the most basic level of health services. In 1989, the MOPH conducted a national assessment of the existing PHC program and developed a revised PHC strategy. This strategy, entitled "The Reorientation of Primary Health Care" (RPHC), follows closely both UNICEF's Bamako Initiative and WHO's strategy of delivering PHC in three phases. According to the strategy, the national health system will be reorganized so that local communities will take greater responsibility for their health care. Each province will be organized into health districts which will supervise and support health areas. The health areas will encompass health centers and village health posts. Health areas and centers will be co-managed by community health committees. Each health center will have a pharmacy and cost recovery mechanism which will permit the funding of important recurrent costs of the PHC program. The new health strategy is discussed more fully in the Technical Analysis (Annex J).

The RPHC is based on the premise that the GRC does not presently have, nor will it have in the near future, sufficient budgetary resources to finance health care services. The strategy's cost recovery approach divides the costs of health care between the government and the population. The government must continue to fund health workers' salaries, pre-service training, and other inputs which are currently provided despite the economic recession. The community will fund the key non-salaried recurrent costs associated with the delivery of PHC services. In addition, the health system will be made less costly and more efficient by stressing the full integration of health management systems and health services. See the Financial Analysis (Annex N) for a discussion of the cost recovery program.

With its emphasis on cost recovery, integration of PHC services, and community pharmacies, the RPHC directly addresses the main health policy objectives of Cameroon's structural adjustment program. The RPHC is the cornerstone of the MOPH's overall health sector strategy and it will be an important element of the GRC's upcoming five-year national development plan.

1. Legal and Administrative Framework for the RPHC

Several GRC legislative decrees and actions provide the legal framework for the RPHC:

- A ministerial decree in 1964 authorized all health facilities to charge fees for services. The funds generated would be returned to the treasury except for a percentage which could be retained by consulting physicians as incentive payments.

- The MOPH was restructured by ministerial decree 89/011 in January 1989. This created six central directorates and organized the provincial health system to reflect the administrative divisions of the country.

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- In June 1990, the Minister of Public Health signed a lettre circulaire which authorized the creation of community health and management committees at the village, health center, and sub-divisional levels.

- The GRC legalized the operation of revolving fund pharmacies at public health facilities in December 1990 (GRC law 90/062).

- In December 1990, the GRC issued a law to simplify the creation of private associations.

- In an official letter signed in 1992, the Minister of Public Health instructed all individual community health committees to obtain official authorization for their existence by petitioning the administrator of their division.

- In a lettre circulaire entitled "Declaration de Politique Nationale de Mise en Oeuvre de la Reorientation des Soins de Santé Primaires (Declaration of National Policy for the Implementation of the RPHC)," the GRC declared the RPHC as Cameroon's official PHC policy in March 1992.

- In July 1992, the GRC authorized selected hospitals to retain 50% of fee-generated revenues. This law, in combination with the 1990 drug financing legislation, should significantly increase resources available to meet operating expenses, thereby enhancing the effectiveness of public hospitals.

2. Operational and Policy Constraints

The RPHC strategy is being implemented in large areas in all ten provinces with plans underway to implement the program in every division in the country. The three evaluations conducted to date of the strategy (by the German Technical Cooperation, USAID, and the Belgian Cooperation) have been positive toward the overall policy, but they indicate that there are important constraints to the effective implementation of this program nationwide. These constraints are summarized below:

- Medical supply logistics, supervision, and financial systems need improvement.

- There is a lack of funding for the renovation and construction of health facilities.

- Progress is needed to persuade religious and other private health facilities to fully participate in the program.

- A national health management information system (HMIS) should be designed and implemented.

- There is no decree of application for the law 90/062 authorizing the operation of "revolving-fund" pharmacies at public health facilities.

- A decree of application is needed for the Hospital Financing Law of 1992 which authorizes selected hospitals to retain 50% of fee-generated revenues.

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- Existing incentive payments to physicians need to be extended to other health workers and linked to performance.

- The responsibilities of community health committees and management committees and their relations with MOPH authorities need to be better defined.

D. MCH/CS I PROJECT

1. Background

The on-going $11.5 million MCH/CS I Project was authorized in 1987, with a PACD of 1993. Its objective is to assist the MOPH in strengthening Cameroon's existing health system and improving health services to women and children in the South and Adamaoua Provinces. The MOPH selected these provinces because they represented two different regions in the country that were not receiving other donor support. The project's strategy was based on the centrally-managed delivery of five key maternal child health and child survival interventions -- immunizations, diarrheal disease control, nutrition promotion/growth monitoring, child spacing and malaria treatment. A revolving drug fund was to be established to assure regular supplies of drugs. Management, logistics, and supervision systems (funded by the MOPH budget) were to be developed to support the delivery of interventions.

2. Project Redesign

In 1989, the MOPH and USAID reached the conclusion that the problems identified as impeding the national health program were also adversely affecting the implementation of the MCH/CS I Project. The population's lack of confidence in the health system and the resulting low utilization of MOPH health facilities severely undermined the successful implementation of the key child survival interventions planned under the project. Specifically, the project's centralized, vertical approach needed to be replaced by a de-centralized, integrated strategy focused on improvement of health systems and community involvement in the management of health care. In addition, the lack of national budgetary funds available for rural health meant that the cost recovery component of the project needed to be significantly expanded beyond the resupply of drugs to include the funding of some of the variable recurrent costs associated with the delivery of PHC services.

Based on this assessment and the reviews of other donor-funded PHC projects, the MOPH devised a new PHC strategy, called the RPHC, which emphasizes decentralized health planning, community co-management of health facilities, and community co-financing of health services to supplement GRC health expenditures. As a result, USAID and the MOPH reformulated the MCH/CS I Project in late 1989 to reflect this new PHC strategy.

3. Summary of Findings from Project Evaluation

A major external evaluation of the MCH/CS I Project was conducted in November 1991 by a team of experts. Their report indicated that progress has been achieved in: identifying health areas; designing training manuals; organizing and training community health and management communities; and establishing cost recovery, logistics, supervision, and health

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information systems. As a result, curative, preventive and, to a lesser extent, promotive services are being provided under the new system. However, weaknesses in management, supervision, and information collection have resulted in operational problems in the cost recovery system. These include drug outages at health centers, the unauthorized sale of drugs on credit, and the incomplete filling out of control forms.

The team further stated in the report that, while health personnel and the public generally accept the new system, they have difficulty understanding the new administrative procedures. In addition, authorities need to clarify the legal basis for community health committees and their relation to MOPH structures. Major conclusions were that (1) the operational problems encountered can be rectified through improved health systems management and (2) decentralization of health services and the community co-management and co-financing of health care are appropriate mechanisms for delivering health services.

Major recommendations accepted for implementation include: on-the-job training for health personnel in supervision, health information, and management; international (rather than local) drug procurement; the creation of buffer drug stocks at existing depots; simplification of accounting procedures; the study of the legal status of health committees and their relationship to the MOPH; and a series of steps to follow prior to adding new health facilities to the system.

The design team finds that actions taken in response to these recommendations, plus other MOPH initiatives, justify the provision of follow-on assistance to the MOPH for continuation, expansion, and further improvement of the re-oriented PHC program.

E. OTHER USAID HEALTH INITIATIVES

1. PHC in the Far North Province

The Reform of Health Delivery System (RHDS) Project (PACD July 1993, LOP $2,600,000) was authorized in late 1990 to assist the MOPH in implementing its RPHC program in four divisions in the Far North Province. The implementing organization is Save the Children (SAVE), an American private voluntary organization which has traditionally worked in this region. Progress has been achieved in designing drug logistics, financial management, supervision, and health information systems. Since inception, the RHDS Project personnel have worked closely with personnel implementing the MCH/CS I Project, utilizing the latter's training modules and operational guidelines. The first group of community co-managed and co-financed health centers under the project opened in September 1992.

2. Endemic Disease Control

2.1 Health Constraints to Rural Production (HCRP) Project (Phase II)

Phase II of the HCRP Project (PACD August 1993, LOP $650,000) assists the MOPH in developing an affordable model for the control of schistosomiasis in areas where it is endemic and prevalence rates are high. The chief output of this project will be clear guidance on the procedures and the costs of integrating schistosomiasis control into a

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community co-financed and co-managed health district.

2.2 Pilot Project for the Control of Onchocerciasis in the South Province

The purpose of the Pilot Project for the Control of Onchocerciasis in the South Province (PACD September 1994, LOP $423,000) is to develop a sustainable strategy to distribute ivermectin, a highly effective onchocerciasis control drug, to high risk populations. This project aims at integrating onchocerciasis control into the MOPH's RPHC program by utilizing a clinic-based approach to ivermectin distribution, by providing ivermectin at community pharmacies, and by amending PHC supervision and information systems to include data on onchocerciasis.

2.3 Support to the National Control of Diarrheal Diseases Program

Since 1988, USAID through the R&D/Health PRITECH Project has supported the National Control of Diarrheal Diseases (CDD) Program (yearly funding of $250,000). In conjunction with the MCH/CS I Project, PRITECH has developed a CDD curriculum for service providers working in community co-financed and co-managed health facilities. PRITECH personnel have also worked closely with personnel from the MCH/CS I and other PHC projects to design supervision protocols and health information indicators to be used in integrated PHC supervision and health information systems.

3. Other USAID Health Projects in Cameroon

3.1 National Family Health Project (NFHP)

The NFHP (PACD December 1996, LOP $8,050,000) supports the integration of family planning and maternal health services in community co-financed and co-managed health facilities and in private sector clinics and hospitals. As such, the NFHP directly supports and complements the MOPH's RPHC program. Project strategies include integration of contraceptives into community pharmacies; training of service providers; information, education, and communication programs; and expansion of PHC supervision and information systems to permit monitoring of family planning and maternal health interventions.

3.2 Support to the National AIDS Control Service (NACS)

Under the R&D/Health AIDSTECH Project (yearly funding of $ 250,000), USAID provides support to the NACS in the areas of HIV surveillance, AIDS counseling, education and condom promotion for high risk groups, and quality assurance for HIV screening. In addition, USAID promotes condom use by AIDS high risk groups and the general population through its assistance to the Cameroonian Social Marketing (CSM) Program which is the main supplier of condoms for all of the re-oriented PHC programs in Cameroon. USAID plans to merge this activity with the National Family Health Project by 1995.

3.3 Cameroon Technical Advisor in AIDS and Child Survival (TAACS)

The R&D/Health TAACS Project (PACD February 1994, LOP $500,000) provides the MOPH with a long-term epidemiologist to assist in the design of a national health

management information system (HMIS) which will synthesize key field-tested elements from PHC projects (including MCH/CS I and II). This system will include data on health administration, budgeting, and tertiary care. The TAACS Project will also help develop the data management, analysis, and dissemination capabilities of the central MOPH.

Integration of important activities from the endemic disease control and HMIS support projects will be integrated into MCH/CS II as the foregoing projects reach their planned termination dates. The NFHP will continue as a complementary, MCH-focused companion project to the MCH/CS II Project.

F. OTHER DONOR PROGRAMS AND ASSISTANCE

Other donors involved in the implementation of the MOPH's RPHC program include the German Technical Cooperation (GTZ) in the Littoral, Northwest, and Southwest Provinces; UNICEF in parts of the East, West, and Center Provinces; the Swiss Cooperation in one division in the Center Province; the Belgian Cooperation in one division in the Far North Province; and the French Cooperation in the North Province. In addition, the European Community (EC) has expressed an interest in funding the RPHC in divisions not presently supported by other donors.

Although these projects differ to some degree in response to local circumstances and the development strategies of individual donors, they all follow the principles and implementation steps of the RPHC policy of the MOPH. There is a high degree of coordination among the donor-funded PHC projects.

The World Bank is presently funding a series of studies on the health sector which are intended to lead to the design of a major health sector policy loan program in 1993. It is not clear whether this will take place, since the Bank suspended disbursement of the Structural Adjustment Loan in 1992 and then lifted the suspension in January 1993. The findings of the World Bank's studies will provide information to help refine national policies on health infrastructure, pharmaceuticals, human resources management, and financial administration.

Disbursements from the World Bank Health Sector Loan would probably be used for renovation, construction, purchase of major equipment and long-term training. While these investments would nicely complement the activities of the MCH/CS II Project, and are certainly desirable, a cancellation of the proposed World Bank Loan would not seriously impede attaining the objectives of USAID's new health initiative.

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II. PROJECT RATIONALE AND DESCRIPTION

A. PROJECT RATIONALE

1. Perceived Problem and Status of Actions to Deal with It

As indicated in Chapter I, health standards are low in Cameroon, particularly in relation to per capita income. Infant, child and maternal mortality rates are high, due primarily to low vaccination rates, low pre-natal and post-natal consultations, poor nutrition of mothers and children, inadequate coverage and acceptance of appropriate oral rehydration therapy, and lack of functioning health facilities which could deal with frequent causes of mortality and morbidity, e.g., malaria and pneumonia.

In the 1980's, the Ministry of Public Health (MOPH) attempted to improve this situation by giving greater emphasis to primary health care (PHC). In particular, it initiated a number of child survival vertical interventions during that period. This top-down implementation method would have become difficult to sustain even if some economic growth had been maintained. However, the deterioration of the economic situation which began in the late 1980's resulted in a government-wide budget crisis which led to a 50 percent cut in allocations for rural health care. Already low health center utilization worsened to the point that primary health care and rural health services ceased to function in a coordinated, effective fashion.

To deal with this situation the MOPH developed the Reorientation of Primary Health Care (RPHC) policy in 1989--formally adopted in March 1992. The new policy calls for:

- the development of functional health districts to coordinate and supervise the provision of effective, efficient, and comprehensive PHC services in health facilities;

- initiation of cost recovery programs at all district health facilities to finance the maintenance of a stock of essential medicines and the recurrent costs (other than salaries of MOPH personnel) of the delivery of PHC; and

- greater and improved inter-action of health facility officials with local communities to ensure the acceptance by the community of cost recovery and to initiate outreach activities of the health facilities (e.g., vaccination, health education).

The RPHC policy has been initiated with the help of foreign donors in a number of provinces, but efforts (including USAID's) are relatively new and, so far, reach only a small proportion of the population. The Government of the Republic of Cameroon (GRC), therefore, is anxious to see an increase in donor assistance to help the MOPH rapidly expand the population coverage under the new RPHC policy.

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2. Relationship to USAID CDSS

The MCH/CS II Project conforms to the Development Fund for Africa's Action Plan for fiscal year 1989-1991, Target 1.3, which emphasizes the need for cost recovery mechanisms in the health sector and calls for the integration of child survival services in PHC programs.

In a draft Program Concept Paper developed in December 1992, USAID adopted two subgoals to promote sustainable, broad-based economic development in Cameroon: developing the potential for long-term increases in productivity and strengthening competitive markets to provide a conducive environment for private sector led growth.

Corresponding to these subgoals, the mission developed the following strategic objective on health: increase access to and use of financially sustainable, effective and efficient primary health care.

The purpose of the MCH/CS II Project is identical to this strategic objective, and this project is the main vehicle for attaining it. The project will:

- increase financial sustainability in the health sector by implementing comprehensive cost recovery measures;

- improve health system efficiency by delivering integrated preventive, promotive and curative services; strengthening the link between primary and reference care; improving supervision and health information management; and assuring better coordination between public and private sector health facilities;

- improve the effectiveness of health services by assuring local availability of essential medicines and delivery of key maternal child health/family planning services in every health center and hospital in the country.

B. PROJECT DESCRIPTION

The Project **Goal** is:

> "to contribute to the improvement of the health status of the people of Cameroon, particularly women and children."

The Project **Purpose** is:

> "to increase the accessibility and utilization of financially sustainable, effective, and efficient primary health care in health districts of the South and Adamaoua Provinces and four divisions of the Far North Province."

Increased accessibility will be achieved by expanding the scope and performance of services provided at health centers. 180 health centers in 27 health districts will be providing PHC services, thereby increasing the health coverage from 34 to 70 percent. Maintaining a dependable pharmaceutical supply line and responsible management of the revenues,

including co-management by the community, are also elements contributing to accessibility.

Improved effectiveness and efficiency of primary health care will be achieved by increasing the technical and managerial capability of health personnel; improving health facilities through minor renovations; and ensuring a secure supply of essential medicines. See point 2. above for definitions of effective and efficient PHC.

The utilization of health facilities will depend on the availability, price, and quality of health services; the attitude of the health providers; people's willingness and ability to pay; and the level of understanding by the population of health problems and disease prevention. "Utilization," which will be measured by the number of new cases per year as a proportion of the catchment population of a health facility, is expected to reach an average of 20% in the project-assisted areas. Other indicators of increased utilization include at least 60% vaccination coverage for measles and DPT III vaccines for children; 50% of pregnant women with at least three pre-natal consultations during a pregnancy; at least 50% vaccination coverage for tetanus toxoid for women of reproductive age; and at least 80% of children presented for treatment of diarrhea receiving appropriate rehydration therapy.

Financially sustainable means that a cost recovery system will be functioning and will be financing the resupply of essential medicines and other high priority recurrent costs of the PHC system - other than salary costs of MOPH personnel.

C. END OF PROJECT STATUS

The conditions which are expected to exist at the end of MCH/CS II are:

- 180 health centers in 27 health districts will be providing comprehensive PHC services, thereby increasing the health coverage from 34 to 70 percent in the project-assisted areas.

- Utilization of health centers will be increased from less than 15 to at least 20 per cent as expressed by the number of new cases per year as a proportion of the catchment population of assisted health center areas.

- There will be at least 60% vaccination coverage for measles and DPT III vaccines for children in targeted health center areas.

- At least 50% of pregnant women will be making a minimum of 3 pre-natal consultations during their pregnancy.

- There will be at least 50% vaccination coverage for tetanus toxoid for women of reproductive age in targeted health center areas.

- At least 80% of children presented for treatment of diarrhea at targeted health centers will be treated according to the guidelines of the national CDD program.

- All project-assisted health districts will have delimited health areas, functional district health and management committees, and written action plans.

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- No more than 20 percent of health centers will be reporting outages of any of the five most frequently used medicines in a one year period.

- Cost recovery revenues will be covering recurrent costs (other than GRC salaries) in at least 75 percent of health centers.

- Collaboration between existing Cameroonian non-governmental organizations (NGOs) will be effective with at least four districts managed by an NGO and at least health areas per province based on an NGO facility.

D. PROJECT BENEFICIARIES

The direct beneficiaries of the project are twofold: a) approximately 900 MOPH personnel who will be receiving training and technical support from the project; and b) approximately 1.7 million inhabitants of local communities who will have access to curative and preventive services, including the purchase of essential medicines from health facilities. In addition, local communities will also be indirect beneficiaries because they will be able to receive services from MOPH health facilities that were not previously available. They will also have the opportunity to participate in the management of local health facilities and to conduct health projects of their own.

Within the local community, the primary beneficiaries will be women and children. They are the most vulnerable to health problems; they are the most frequent visitors to health centers; and they will gain the most from more extensive and effective outreach programs.

E. PROJECT COMPONENTS

1. Health Districts and Provincial Structures

1.1 Policy

The MOPH RPHC policy (March 1992) establishes several objectives concerning the decentralization and reorganization of health services:

- Reorganize health services at all levels in order to assure a real decentralization of decision making and to permit efficient management.

- Establish legislation and rules favoring the management and mobilization of financial resources and permitting a decentralized management of funds generated by health facilities.

- Improve the efficacy and efficiency of the health system by the rationalization and decentralization of management and by improved planning at all levels.

These objectives call for greater responsibility for planning, managing, and financing of health care to be delegated to provincial and district health officials and to local communities. To implement the policy, each province is to be organized into health districts and health areas (each with its own health center) to provide curative, preventive and promotive PHC services.

1.2 Current Status

The MOPH attempted to decentralize PHC management to community co-financed and co-managed health centers and to health districts at the sub-divisional level. This is cumbersome since numerous health districts have catchment populations of less than 10,000 people. The development costs to establish and maintain a reference hospital and health district office can not be justified for such a small population. During implementation of the MCH/CS I Project, the MOPH also encountered problems in the local management of drugs and pharmacies.

In response to the findings of the 1991 evaluation, the MCH/CS I Project centralized the pharmaceutical distribution system at the provincial level by following a model used by the GTZ in the Northwest Province. Supervision, collection of revenues, training and HMIS are now carried out directly from the provincial to the health center level.

In July 1992, members of a PHC seminar in Bertoua proposed the delimitation of 123 health districts for Cameroon, each consisting of one or more sub-divisions. A health district is a well-defined geographical area comprising a referral hospital, satellite health centers, and community groups. Boundaries of health districts were determined by taking population, existing medical infrastructure, supervision capacity as well as ethnic and/or geographical factors rather than solely administrative boundaries into consideration.

Under the MCH/CS II Project, the current preliminary delimitation of health districts and health areas translates to an average district with 84,000 persons served by 10 health centers. There is considerable variation, however, between the Far North Province which has 15,000 people per health center area and the South Province with 4,200 people per health area (see Table 2.1). It may be difficult to achieve cost recovery when catchment populations are less than 4,000 (see Financial Analysis, Annex N).

Table 2.1
CATCHMENT POPULATIONS FOR MCH/CS I HEALTH AREAS

Project Provinces	Estimated Total Population	No. of Health Areas Currently Proposed	Average Catchment Population for MCH/CS I Health Areas
SOUTH	464,658	111	4,186
ADAMAOUA	397,013	76	5,224
FAR NORTH	1,401,000	90	15,567
	2,262,671	277	8,168

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Some private hospitals of indigenous churches or other nonprofit, non-governmental organizations (NGOs) have been proposed as reference hospitals around which to organize health districts. The mechanism for MOPH collaboration with these Cameroonian NGOs in health district management has yet to be determined.

Donor coordination is facilitated by identifying which donors are to assist which health districts, or which type of assistance one donor might provide across all health districts. The health district concept also permits the definition by the MOPH of an assistance package for international donor assistance. The MOPH of Cameroon is successfully applying this strategy by assigning donors to work in designated provinces or in specific health districts within a province.

Cameroon lacks a well functioning model for health districts. Health centers are generally provided essential medicines and financial supervision directly from the province. The respective roles of the province, health district, division, sub-division, health center, and community need better definition. The Provincial Health Delegations (provincial medical inspections) and CAPPs (provincial drug supply centers) are, in fact, just now becoming operational. MCH/CS I, and eventually MCH/CS II, must consolidate the functioning health centers into health districts with district teams trained and empowered to carry out many of the functions which are now being done by provincial staff.

From a technical point of view the health district, as the operational unit for decentralized planning and management of PHC, has numerous advantages over a provincial system (see Technical Analysis, Annex J). Hence, in the long run, decentralization of management structures to the health district will be well worth the effort.

1.3 Proposed Project Activities

1.3.1 Decentralization and Structural Reforms

Under the RPHC Program, ongoing decentralization of the MOPH involves de-concentration of previously centralized functions to the provincial level (e.g., planning/budgeting, medical supply management, and training/supervision); the administrative delegation of authority and resources to the provincial and health district levels to implement the functions transferred; and devolution through the creation of semi-autonomous provincial, district and community committees responsible for the fiduciary integrity of cost-recovery funds. Decentralization through privatization is also called for through MOPH agreements with Cameroonian NGOs for management of health districts and health centers.

These various types of decentralization will be reflected in management structures for the MCH/CS II Project. Improved management of resources and personnel by the Provincial Health Delegations and district health teams will decrease the MOPH burden, while increasing efficiency to resolve problems. Personnel at all levels (provincial, district, and health area) will be trained to exercise these increased responsibilities. They will also be instructed to actively use information to identify problems, to assess alternative solutions to problems, and to accept responsibility for solution implementation and evaluation.

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1.3.2 Benefits to Central MOPH Directorates

The central directorates of the MOPH will benefit from the MCH/CS II Project because the national policy of decentralization will relieve pressure on their limited budgets to provide technical support to field facilities. It will also create opportunities for improving national data bases and testing national policies, norms, and standards.

- Directorate of Preventive and Rural Health (DMPR): As the directorate responsible for the supervision of RPHC, the DMPR will benefit the most from the MCH/CS II Project by increasing its capability for strategic policy planning and implementation. In addition, the project will assist the DMPR to improve its execution of preventive health programs in project-assisted provinces and promote the integration of preventive and curative health services in all health facilities.

- Directorate of Pharmacy: Health district supervision of diagnostic and treatment protocols, including the rational use of drugs, will reinforce the monitoring capability of the Pharmacy Directorate. The MCH/CS II Project will assure that routine HMIS reporting and special operations research studies provide the directorate with information that clarifies the current supply and demand for pharmaceuticals, tests the effectiveness of current diagnostic and treatment protocols, and monitors compliance with policies and protocols. This will permit the directorate to revise the official list of essential medicines and refine national policies, norms, and standards for rational drug use.

- Directorate of Research, Planning, and Statistics (DEPS): The MCH/CS II Project will provide the DEPS with timely and accurate information regarding the health status of the populations served; the utilization and quality of services provided; and the management of resources. The HMIS and operations research studies will provide DEPS with information to test and improve national information systems and planning methods.

- Directorate of General Administration (DAG): The MCH/CS II Project will provide the DAG with information on the status of health facilities including buildings, land, equipment, vehicles, and staffing patterns. This data will permit the DAG to better determine the need for repairs and/or investment budgeting. Provincial reports will provide geographic, demographic, and epidemiologic data that can be used in rationalizing MOPH budgetary allocations.

- Directorate of Hospitals: The Hospitals Directorate will benefit from the upgrading of district and provincial hospitals which depend on it for technical and/or financial resources. Therefore, the directorate will be able to concentrate its efforts on refining national policies, norms, and standards for the support role of secondary and tertiary hospitals.

- Directorate of Family and Mental Health (DFMH): As the directorate managing the Cameroon National Family Health Project (NFHP), the DFMH will benefit from the enhanced capacity of the project-assisted provinces to promote and support family planning. This will include the distribution of contraceptives and family planning IEC materials to health districts and health centers through the CAPP, rather than directly from the DFMH. The coordination of the MCH/CS II and the NFHP, such as training activities and supervision, will be assured by the provincial delegate.

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1.3.3 Provincial Structures

- The Provincial Health Delegation: The MCH/CS II Project will provide a long-term technical advisor to each Provincial Health Delegation to assist in health planning, implementation and evaluation. This will include help in establishing or reviewing policies, strategies, standards, procedures, and performance targets for PHC services.

- CAPP: Technical assistance will help the provincial drug supply centers (CAPPs) to strengthen systems for procuring, stocking, and distributing essential medical supplies down to the health center level. (See Section 3 on Pharmaceutical Supply and Distribution System for more details).

- FSPS: The MCH/CS II Project will also help refine and implement draft statutes to establish provincial health funds (FSPSs) to co-manage the CAPPs. These statutes include the formation of a provincial general assembly for the FSPS and community health and management committees (COSA and COGE) to manage surplus revenues generated by the cost recovery system. Annual general assembly meetings will review and approve health investment projects to be financed from the surpluses generated from the CAPP.

Special emphasis will be placed on enhancing community participation in the management of surplus funds. The intent of the statutes is for each level to retain and manage the surplus revenues generated from cost recovery. Procedures will be established to assure that surplus funds from health facilities are placed in accounts controlled by the health facility itself (see Section 4.0 on Cost Recovery for details).

1.3.4 Health Districts and Health Areas Structures

Given the problems encountered in organizing health districts at the sub-divisional level, justifiably, the focus of the MCH/CS I Project was on temporarily establishing a two-tier province to health center system. MCH/CS II will build upon this system while consolidating management and supervision at the health district level. Thus, the previous four-tier system of province, division, sub-division (health district), health center will be reduced to a more efficient three tier system of province, health district, health center. (See Annex O for organizational charts illustrating the expansion of health areas coverage expected during the MCH/CS II Project.)

The MCH/CS II Project will train and empower district health committees (COSADIs) and health district staff with greater control over the allocation of resources generated by the district hospital and health centers through decentralized planning, budgeting, and management. This will include interpreting financial reports and providing advice and oversight on the collection and use of revenues. (See Section 7, "Community Participation," for more details).

2. Health Coverage and Services Expansion

2.1 Policy

Disease-related morbidity and mortality in Cameroon are largely preventable and generally

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caused by illnesses whose early diagnosis and treatment could substantially reduce mortality. The emphasis on a primary health care strategy for the MCH/CS II Project is therefore entirely justified.

Primary health care, as defined at Alma-Ata in 1978 and adopted by Cameroon's RPHC strategy, includes eight essential components: maternal child health (including family planning), immunizations, nutrition, water and sanitation, endemic disease control, health education, curative medicine and essential medicines. These components have been demonstrated to be technically feasible and appropriate for developing primary health care in most African countries.

2.2 Current Status

The MCH/CS I Project took a leading role in the promotion and development of health centers and health districts in the South and Adamaoua Provinces. Save the Children (SAVE) and CARE followed the MCH/CS I Project's lead in the Far North. The emphasis has been on organizing community co-financed, co-managed health centers and assuring secure supply lines of essential medicines at the provincial level. By October 1993 these efforts will have resulted in 80 functional health centers serving a population of nearly 760,000 people. This represents a population coverage of 34% (see Table 2.2).

Table 2.2
PHC COVERAGE IN MCH/CS I

Project Provinces	Health Areas Planned	Estimated Total Population	Expected Functional Health Areas MCH/CS	%	Expected Population Coverage in 1993	%
SOUTH	111	464,658	24	22%	146,212	31%
ADAMAOUA	76	397,013	25	33%	138,189	35%
FAR NORTH	90	1,401,000	31	34%	474,517	34%
	277	2,262,671	80	29%	758,918	34%

2.3 Proposed Project Activities

The emphasis during the MCH/CS II Project will not be in developing or testing new technologies in PHC, but rather in establishing a sustainable health care delivery system to make dependable PHC techniques accessible to an increased portion of the population.

2.3.1 Health District Management

The MCH/CS II Project logical framework is based on the premise that the delimitation of new health districts for the three project-assisted provinces/divisions will have been completed and approved prior to the start of the project. The MOPH's delimitation of health districts in July 1992 is still considered preliminary. Further refinement of boundaries between health districts will be done by the health district teams in conjunction with the province. Since the MCH/CS II budget is based on 27 health districts, it will not be possible

to accommodate any significant increase in the number of health districts within the project.

The establishment of written action plans and functional management committees for the 27 health districts assisted by the MCH/CS II Project will be the responsibility of the health district teams supervised by provincial authorities. Training in PHC planning and management, including the nine project component areas, will be provided to health district teams using the national health district planning modules established in cooperation with the World Health Organization (WHO), and a health district operational manual to be developed by the MCH/CS II Project. In order to avoid training which might lead to a monopoly of power by the health district medical chief and result in a "rubber-stamping" or non-functional district health committee (COSADI), the MCH/CS II Project will pay special attention to training health district teams, rather than individuals. The fact that the proposed COSADI statutes provide for a president who is not the health district medical chief will provide a useful balance.

Every health district plan must be discussed and approved by the COSADI before it receives project assistance. Each district health plan should include a delimitation of health areas, a long term proposal for developing health areas, and a strategy for each project component including specific targets. The map of the health district, with appropriate graphs, should be displayed in the offices at the reference hospital to help the COSADI visualize the COSADI plan and to plot the progress of its implementation.

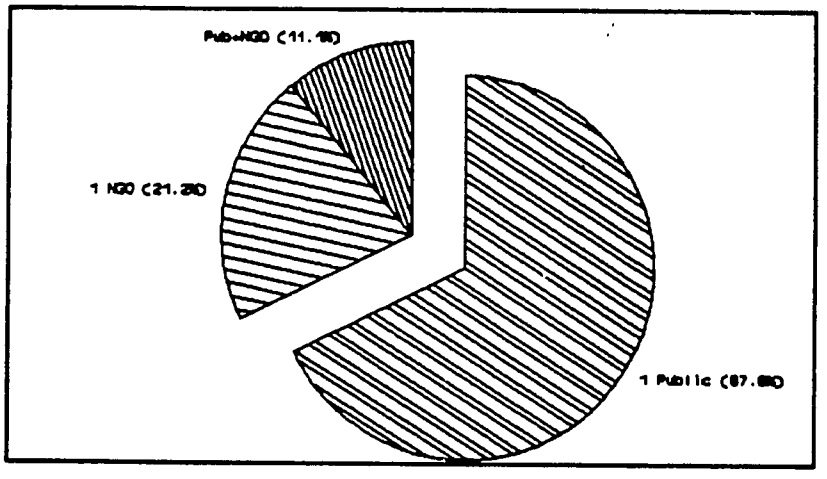
2.3.2 Collaboration with NGOs

Non-Governmental Organizations (NGOs) can play an important role in the development and management of Cameroon's decentralized health districts and health centers. Within the 27 health districts proposed for project assistance, there are at least six health districts and 67 health areas (32%) in which NGO collaboration would be possible. These hospitals and health centers are owned and managed by churches such as the Presbyterian Church of Cameroon (EPC), the Norwegian Lutheran Church of Cameroon, the Adventists, the Catholics, or by the Ad Lucem (Catholic related) Foundation (see Table 2.3 and Figure 2.1).

Table 2.3
MCH/CS II HEALTH AREAS WITH PUBLIC OR NGO HEALTH CENTERS (HC)

	Health Areas Planned	Public HC	NGO HC	Pub+NGO HCs	No HC
SOUTH	111	58	17	10	26
ADAMAOUA	76	36	6	5	29
FAR NORTH	90	47	21	8	14
	277	141	44	23	69

FIGURE 2.1 MCH/CS HEALTH AREAS WITH HEALTH CENTERS BY TYPE OF MANAGEMENT (N=208)



The medical work and infrastructure of local NGOs has a well established credibility with the population to provide quality care. It is estimated that approximately 50% of curative services are currently provided through NGO facilities. The existing NGO infrastructure could provide services that would be expensive for the MOPH to establish and manage, for example a maintenance garage. NGO personnel are generally recognized for being more motivated and can serve as good models for MOPH health district teams.

The MCH/CS II Project has established an objective to involve Cameroonian NGOs in the management in a total of four health districts and at least two health centers per province. Discussions with the national leaders and hospital directors have demonstrated that the NGOs are eager for such collaboration and want to begin during the final year of MCH/CS I. NGO management of health districts in each province should be encouraged sooner rather than later.

The mechanism for GRC and Cameroonian NGO collaboration in the management of health districts needs to be worked out individually with each NGO. The project should avoid attempting to establish one agreement for all NGOs at the national level, but rather allow provinces to creatively develop working partnerships with their respective NGOs. It might be that an NGO will be able to supply the salaries of the health district personnel, but that it may require start-up funding from revenues generated at the CAPP to support the district office operating costs and supervision of health centers. In general, NGO hospitals would also like to see an agreement with the GRC that permits newly graduated medical doctors to work off their obligation to the GRC in church hospitals. In return the NGOs would need to accept provincial technical and administrative supervision and involve communities in the management of health centers.

2.3.3 Expanded health center coverage

The health center is the basic unit of expansion to increase the accessibility of PHC services. However, since all facilities, systems, and staff skills targeted for improvement under the project cannot be upgraded immediately, options for phasing-in health center expansion must be considered. This raises the possibility of temporary inequities created between those receiving benefits first, and those who must wait. Such inequities, even if temporary, can cause social and political problems, especially in a project seeking to develop collaborative relationships with the population. For the MCH/CS II Project, several options merit careful consideration.

One option is integration by health center, i.e., assistance is provided when the health district and health center meet certain conditions. The district health teams would assure that:

- the health center catchment area is identified and mapped;
- the population is involved and agrees with the new system;
- community health and management committees are organized;
- health center personnel are trained in sufficient number;
- the health center renovation project, if needed, has begun;
- essential health center equipment is available;
- a revolving fund pharmacy is established; and
- a pharmacy manager is selected and trained.

Under this option, the first project year would probably be needed to develop the functional roles of the district teams. Thus, MCH/CS II Project assisted health centers would not be upgraded until their health district becomes functional. Such a plan would have the benefit of providing a strong motivation and foundation for organizational restructuring and institutional capacity development. On the negative side, it might create social tension in health areas not immediately benefitting from access to essential medicines.

A second option is integration by PHC component. The project would upgrade basic curative services and access to essential medicines more or less simultaneously in all MCH/CS II assisted health centers. Additional PHC components would be phased-in over time. However, a health center would not be considered functional until at least five PHC

components[1] are operational. The benefit of this approach would be to satisfy the felt need of the population for curative care. On the negative side, the basic functions to be developed are not isolated, vertical interventions. They are inter-related, and the establishment of one function without other necessary supporting activities may doom it to failure. For example, setting up pharmacies at every health facility, prior to assuring that the health center staffs have been trained in the rational use of drugs and before establishing community associations for co-management, may be inviting disaster. This approach, in the absence of a functional health district, would also reinforce curative care as a provincial vertical activity and impede the development of preventive services.

A third option is limited integration, i.e., a compromise integration by functional health center and by PHC component. Under this option, each health facility would be expected to meet certain criteria, less strenuous than those for integration by health center.[2] Each health facility would then receive a reduced start-up supply of essential medicines, probably procured from non-project funds, i.e., medicines purchased with cost recovery funds and/or from another donor such as the Japanese. This assistance would partially satisfy the felt need of the population for limited curative care, while the health district teams become capable of upgrading each facility to the status of a functional health center.

The option chosen will depend, in part, on whether the MCH/CS I Project is able to create some functional health districts. If so, it might be possible to proceed with integration by health center in functional health districts while using a limited integration in health districts which are not yet functional. The MCH/CS II Project should be perceived as a project of 27 health district projects. Each health district team works according to an individualized district health plan and at a pace in line with its management capability. The MCH/CS II Project need not consist of "waves," with health areas brought on line simultaneously across all health districts. Rather, the project should work at the pace of the health districts and reinforce decentralization at this level.

The MCH/CS II Project provides for 100 additional project-assisted health centers, which would bring the total under MCH/CS I & II to 180 functional health centers. This is sufficient to cover all 141 health areas with an existing MOPH health center as well as 60% of the health areas which have existing NGO or NGO+MOPH health centers. Given the need for flexibility in revising health area development plans in relation to health district development, Table 2.4 indicates a proposed plan to increase health coverage to 74% during the MCH/CS II Project.

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[1] The five PHC components suggested for defining a functional health center are IEC/health education, basic curative care, access to essential medicines, immunizations, and maternal child health (pre-natal and under-five care).

[2] Suggested criteria are a functional health district team (medical chief and nurse supervisor), the establishment of a COSA, the co-financial management of the health center revenues by the COSA treasurer and health center nurse and satisfactory completion by the health center nurse of a training course in drug prescription and financial management.

Table 2.4
HEALTH CENTER COVERAGE FOR MCH/CS II

Project Provinces	Health Areas Planned	Estimated Total Population	Expected Functional Health Areas for: MCH I	MCH II	MCH I+II	Expected Population Coverage in 1997	%
SOUTH	111	464,658	24	44	68	351,521	76%
ADAMAOUA	76	397,013	25	22	47	278,076	70%
FAR NORTH	90	1,401,000	31	34	65	1,038,350	74%
	277	2,262,671	80	100	180	1,667,947	74%

2.3.4. Improved Quality of Care

- Renovation and Equipment

The perception of quality of care by clients who are paying for services relates to the quality of the environment where services are provided. Therefore, the MCH/CS II Project includes provision of priority equipment and materials for minor renovations and repairs of health facilities.

The physical structure of health centers and hospitals is generally good, but minor repairs and general rehabilitation are needed. The project will not finance any new construction or major reconstruction of existing facilities. In many facilities, this may be limited simply to a good cleaning and repainting. In others, it may extend to replacing part of a ceiling, re-plastering a wall or replacing a window. Special attention will be given to making the pharmacy secure. In reference hospitals, project funding will be limited to services such as maternity, operating room, pharmacy and laboratory.

This type of rehabilitation does not necessitate building contractors and usually can be done by health personnel in collaboration with the community. The MCH/CS II Project will seek innovative ways to use project resources not simply to refurbish buildings, but also to motivate health personnel to take a pride in their working conditions and to involve the community in taking "ownership" responsibilities for their health center by contributing materials and labor. One possibility would be for funds to be allocated to a health facility on a matching basis (up to a certain limit).

While the project budget suggests amounts for each type of facility, these should be taken as general guidelines rather than as rigid limits. The amount estimated for renovation of a typical health district office is $5,000, a typical reference hospital is $10,000, and a typical health center is $5,000. Health district teams should complete an inventory of the physical conditions of such facilities and make a plan to prioritize renovation projects. They should be encouraged to seek additional funding from the GRC, local community, local businesses and/or NGOs to co-finance larger renovation projects.

Suggested lists of equipment for each level of service are included in Annex G. Before ordering, these lists should be reviewed for possible revision by provincial and health district personnel and the central directorate responsible for the facility (e.g. Directorate of Hospitals

for hospital equipment) for further revision before ordering. It is not possible to completely fund the equipment needed in district and provincial hospitals. Therefore, only small equipment and materials for the maternity, laboratory and operating room have been included in the lists.

■ Guidelines for technical standards

Manuals for technical standards have already been established by the MOPH for family planning, control of diarrheal disease, health center operations, and supervision of health districts. Provincial supervisors and project evaluators will assess the effectiveness of these manuals. The MCH/CS II Project will prepare additional guidelines in the areas of acute respiratory infections, provincial-to-district supervision, curative care strategies, a manual of operations for health districts, and standards for district hospitals. Quality of care will receive special attention through:

- simple and clear standards for curative care;
- supervision guidelines for preventive, promotive and curative care to identify problems and address weaknesses;
- monitoring community perception of health services through sentinel data collection; and
- validity checks on HMIS data and assessment of its use in decision making.

2.3.5 Endemic Disease Control

In order to promote the development of a fully integrated PHC system, the MCH/CS II Project will introduce intervention measures to control important endemic diseases. These interventions will target acute respiratory infections in all health centers and diseases, such as schistosomiasis, onchocerciasis, meningitis and cholera, in health areas where these problems are important. The interventions introduced will be limited to those which can be integrated simply and at low-cost into the existing clinic-based service delivery system. Community health committees will be key players in all health education efforts.

■ Schistosomiasis/Onchocerciasis

The project will build upon the results of the USAID-funded Health Constraints to Rural Production Project and the Pilot Project for the Control of Onchocerciasis in the South Province to integrate control measures for schistosomiasis and onchocerciasis into the health services of highly affected areas. Control measures will include the following:

- Identifying highly endemic areas from disease surveillance data or rapid assessment surveys;
- Assuring regular supplies of WHO approved pharmaceuticals (praziquantal for schistosomiasis and ivermectin for onchocerciasis);
- Assuring a regular supply of reagents at health facilities for the laboratory diagnosis of schistosomiasis;
- Incorporating diagnosis and treatment procedures into the PHC curative care manual and amending quality of care supervision protocols accordingly;

- Distributing existing health education materials to health facilities and including these topics in community IEC discussions;
- Continuing community based distribution of ivermectin in villages where it has already been established and is feasible to continue; and
- Incorporating indicators on schistosomiasis and onchocerciasis into the provincial HMISs.

■ Acute Respiratory Infections (ARI)

The MCH/CS II Project will improve the diagnosis and treatment of ARI in all health centers by assuring regular supplies of WHO-approved ARI first-line drugs at health center and second-line drugs at reference hospitals. The curative care manual, supervision protocols and HMIS will be revised to reflect WHO recommendations for the diagnosis and treatment of ARI and will be used for in-service training of service providers. The MOPH will design health education materials to improve home treatment of ARI and promote the early detection of pneumonia cases, which will be used as part of the project's IEC program.

■ Meningitis and Cholera

These diseases are endemic, and sometimes epidemic, in certain health districts of the Far North Province. Curative care manuals, supervision protocols and the HMIS should take these problems into consideration. The Provincial Health Delegation should have preparedness plans for meningitis and cholera to deal with epidemics when they arise. The project will help develop such plans and contribute to epidemic control measures, if required.

2.3.6 Utilization of Services

The level of utilization of health services will depend on their availability, price, quality, the attitude of the health providers, people's ability to pay, and the level of understanding by the population of health problems and disease prevention. The targets that the project will employ to measure utilization of curative and preventive services at project-assisted health centers include:

- 20% curative care utilization, as expressed by the number of new cases per year as a proportion of the catchment population;
- 60% vaccination coverage for measles and DPT III for children;
- 50% of pregnant women attending at least 3 pre-natal consultations;
- 50% vaccination coverage for tetanus for women of reproductive age;
- 80% of children treated for diarrhea receiving appropriate rehydration therapy.

2.3.7 Strengthening of the Reference Level

The project will provide support to district and provincial hospitals to strengthen reference level facilities for health centers to assure continuity of care and comprehensive services for target populations. The project will:

- Help define the staffing norms and standards for district and provincial hospitals;
- Develop referral and counter-referral guidelines for hospitals and health centers;
- Provide an initial stock of essential drugs for secondary care to improve the range of care provided at reference hospitals;
- Provide training and supervision to strengthen laboratory services;
- Procure complementary medical equipment and establish programs to assure equipment maintenance; and
- Assist in improving the management of personnel, revenues from fees for service, and the administration of health services.

Other hospitals, which are not district reference hospitals, exist in some sub-divisions and generally have one medical doctor. These hospitals could be assisted by the project if they serve as a "health center" for one of the district health areas. They would receive the same assistance as provided to other health centers.

3. Pharmaceutical Supply and Distribution System

3.1 Policy

Prior to the RPHC policy, pharmaceuticals were imported for MOPH facilities through a state-owned monopoly called the Office Nationale de Pharmaceutique (ONAPHARM). When the MOPH could not pay its bills to ONAPHARM, the public turned to private sources of pharmaceuticals, where available.

A 1990 Cameroonian law permits MOPH facilities to "recover the costs related to the sale of generic medicines." The law includes special authorization for establishing "a decentralized management system likely to assure the health facilities a routine supply of medical products and small medical equipment." Under this law the MOPH is to establish provincial drug supply centers (CAPPs) in the South and Adamaoua Provinces before the end of the MCH/CS I Project. Each CAPP is to serve as the primary pharmaceutical wholesaler for MOPH retail sales of generic essential drugs and medical supplies.

According to plans developed under the MCH/CS I Project, each CAPP will contribute surplus revenues to a provincial health fund (FSPS) to finance special health projects within the province. Draft statutes for the FSPS create a legal framework for establishing interlocking non-profit associations at the provincial, district, and health area levels which will have responsibility for managing the surplus funds. The draft statutes do not provide specific guidance or a formula to explain what:

- expenditures constitute essential recurrent costs;
- rules or restrictions may apply to how "margins" are calculated and collected at each level;
- constitutes a surplus over recurrent cost requirements;
- rules or restrictions may apply to how "surplus" funds are used at the district or health area levels; and,
- rules or restrictions apply to how the provincial general assemblies may use funds contributed to the FSPS.

3.2 Current Status

3.2.1 Pharmaceutical Procurement and Storage

At present, the primary source of imported pharmaceuticals is the Center for the Procurement of Essential Medicines (CIAME). CIAME is located in the port city of Limbe. It is a GTZ-supported drug wholesaler which orders essential medicines in bulk for many of the PHC programs in Cameroon. CIAME is well run, furnishes drugs at reasonable prices, and is considered a reliable long-term supplier.

Under the MCH/CS I Project, the Adamaoua and South Provinces originally procured essential medicines through local pharmaceutical wholesalers. However, problems were encountered in the availability and cost of drugs. As a result, the MCH/CS I Project evaluation team recommended procurement of drugs internationally. In addition to having access to CIAME, the Adamaoua and South Provincial Health Delegations have been trained to directly procure drugs internationally.

Before the end of the MCH/CS I Project, adequate warehouse and office space is expected to be established for the CAPPs in the Adamaoua and South Provinces. Distribution is limited to prepackaged drugs, based on requisitions from health centers. The Adamaoua and South CAPPs include offices for general management, field supervisors, accounting and financial management, and storeroom space for essential drugs. Consideration has been given to adequate temperature control, lighting, shelving, and physical security. There is no compounding, local production, nor dispensing done at the CAPP. Prepackaged drugs are sold by item, and no tailored kits are being procured or assembled on site. No refrigeration for a cold-chain is required, and the nature and volume of the activities are currently such that palleting loading docks are not involved, though they may be required for the increased volumes expected under MCH/CS II.

Current operations are still in the start-up phase, and both the manual and computerized systems require refinement. Computerized systems are limited to health center service records (including an indicator of inventory and fund balances) and are not yet applied to central warehouse management. The volume of operations is still quite low. Increases in volume under MCH/CS II may require increased warehouse facilities.

3.2.2 Distribution and Financial Management

The South and Adamaoua CAPPs each have a light pickup truck with enclosed cargo beds for distributing shipments, planned for every two months, to targeted health facilities in each province. The delivery of goods is in response to orders initiated by the health centers, using procurement request forms and price lists provided by the CAPP. The request forms for procurement of medical supplies also serve as the shipping and receiving invoices. The delivery at each facility also serves as an opportunity to review and approve overall health center budgets for the next two-month period.

The MCH/CS I Project's long-term advisors have estimated the direct and indirect recurrent costs of operating the drug supply system at the health center, district, and CAPP levels. These estimates have been used to propose margins for marking up the price of goods sold

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in order to fund the drug supply and cost recovery systems (see Annex N, Financial Analysis).

The CAPP field supervisors serve as delivery agents and also collect any funds generated since the last visit in excess of budgetary allotments approved for the upcoming period. The surplus funds are returned by the field supervisors to the CAPP accountant at the provincial center and deposited in a CAPP bank account. The CAPP retains records which separate the balances in retained earnings by health facility. Although effective control rests with the CAPP, each health area is said to have "ownership" of the accumulated surplus funds.

3.3 Proposed Project Activities

3.3.1 Policies and Procedures Manual

The MCH/CS II Project will help develop a procedures manual for management of essential medicines by the health district to complement the CAPP and health center manuals which have been prepared under MCH/CS I. This manual should describe the functions, authority, and responsibilities of each level in the procurement, price setting, storing, record keeping, quality assurance, distribution, and sale of essential medicines.

3.3.2 Procurement of Pharmaceuticals

Except for start-up supplies of drugs for new health centers which will be procured by USAID, project-assisted provinces will procure all drugs through CIAME. As described above, CIAME will be providing drugs to most of the PHC projects in Cameroon. Alternatives to CIAME, if necessary, include procurement through UNICEF or through direct international tender.

3.3.3 Provincial Pharmaceutical Depots

The MCH/CS II Project will establish a fully operational CAPP in support of project supported health areas in the Far North Province. The CAPPs in all three provinces will receive technical assistance to (a) increase the volume of operations, (b) assure continuity of supplies, (c) reduce the costs of operations, and (d) explore opportunities for increasing revenues through expanding the product line.

Assuring continuity of supply may involve improving the HMIS to record consumption patterns and developing a computer model to predict fluctuations in demand. Reducing costs may involve exploring opportunities for bulk and pooled procurement, more efficient use of warehouse space, and improved routing and distribution schedules. Increasing revenues may involve exploring opportunities for local production, or compounding of pharmaceuticals and medicines, as well as adding laboratory, radiological, surgical, dental, ophthalmic, and other specialized medical supplies to the product line. Consideration will also be given to stocking and selling spare parts for provincial vehicles and supplies for the maintenance of equipment and facilities.

The HMIS initiated under MCH/CS I will be revised and expanded to include both manual and automated systems to support medical supply management, establish improved

procurement and inventory models, track costs, recalculate margins, provide information for pricing strategies, track receipt vouchers and tally cards, update inventory control cards, generate standard requisition forms and issuance notes, and maintain individual health facilities accounts.

3.3.4 Training

The MCH/CS II Project will develop pre- and in-service training in medical supply management for all levels of the health system. Special consideration will be given to developing the administrative, logistical, and financial management skills to complement the medical/pharmaceutical technical skills already in evidence among the staff of the CAPPs.

4. Cost Recovery and other Sustainability Measures

4.1. Policy

The GRC is aware of the constraints adversely affecting health services delivery and has recently issued a draft policy for health sector reform which addresses the rationalization of the health infrastructure, human resources management, improved drug distribution and prescriptive practices, as well as health care financing. Moreover, the GRC has expressed a commitment to increase the health share of the national budget to 10%, as advocated by WHO, over the next ten years.

The Drug Financing Law of 1990 authorizes public health care facilities to establish community-managed revolving funds through which drug sale revenues can be retained locally. Based on pilot programs carried out by the Belgian Cooperation, the GTZ and USAID, this legislation provides the legal basis for the development and operation of drug supply and cost recovery systems, thereby permitting USAID and other donors to assist in the establishment of revolving fund pharmacies which can ultimately be self-sustaining and which may be able to support certain activities previously financed by the MOPH.

Community participation, which is a major component of the RPHC has been facilitated by: 1) a 1990 MOPH issuance authorizing the establishment of community health committees, 2) the enactment of a law in December 1990 which simplifies the legal establishment of private associations and 3) the issuance of an MOPH letter instructing all health committees to obtain association designation. The formalization of health committees provides the legal basis for their involvement with the MOPH in the co-management and co-financing of health services.

The Hospital Financing Law of 1992 authorizes selected hospitals to retain 50% of fee-generated revenues. Formerly, hospitals were required to remit all receipts not earmarked for physician "profit-sharing" directly to the national treasury. Funds returned to the treasury frequently exceeded the hospital's budgetary allowance for non-personnel operating costs. This law, in combination with the 1990 drug financing legislation, should significantly increase resources available to meet operating expenses, thereby enhancing the effectiveness of public hospitals. Successful implementation of these measures could foster the revision of the law, permitting hospitals to retain more than 50% of fee-generated revenues.

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In summary, the environment for health financing policy reform is very positive and the need for more fundamental changes in the health infrastructure has been officially acknowledged.

4.2 Current Status

According to the World Bank, the inadequacy of resources available to the health sector in Cameroon is compounded by the irrational distribution of these resources. While there are competing facilities in some areas, large segments of the population do not have access to care. Similar problems exist in the distribution of health personnel, with a serious mis-allocation in favor of urban areas and poor distribution, relative to the population, within rural areas.

Health providers are poorly utilized since they lack the equipment, supplies and drugs needed to provide adequate health services. Operations research studies conducted by the MCH/CS I Project revealed that public health center personnel spent nearly 75% of their time in non-productive activities. In recent years, the effectiveness of the MOPH health delivery system has been seriously eroded, resulting in a decline in health services utilization.

The effectiveness and sustainability of health services delivery depends upon the allocation of adequate resources to the health sector, the appropriate distribution of these resources within the sector, the efficient use of these resources in producing health services, and the equitable distribution of the services among the population.

USAID has actively supported the RPHC through the MCH/CS I Project and through a grant to Save the Children and CARE. MCH/CS I is setting up cost recovery in 49 health centers and 12 hospitals in the Adamaoua and South Provinces. Save the Children and CARE are setting up 31 centers in four Far North divisions. The first seven of these centers in the Far North Province became operational in late September 1992. The opening of these facilities was delayed several months because of difficulties in obtaining drugs.

The mid-term evaluation of the MCH/CS I Project revealed serious flaws in the design and implementation of the drug distribution and cost recovery system, necessitating major restructuring. As a consequence, the project has had to delay extending its activities into additional health centers until it has installed the revised system into currently co-financed facilities.

4.3 Proposed Project Activities

The MCH/CS II Project will refine and expand the cost recovery systems already established in the Adamaoua and South Provinces. Accomplishment of this goal will be measured by cost recovery revenues covering recurrent costs (other than GRC salaries) in 75% of health centers.

By 1997, the systems will include 116 health centers, 12 district hospitals and the two provincial hospitals. Similarly, under the project, the cost recovery program in the Far North Province will be extended to include 64 health centers, 15 district hospitals and the provincial hospital.

More specifically, the project will adapt and modify present cost recovery systems based on their performance during the next year. In light of implementation problems, lower than expected utilization, and resulting revenue shortfalls experienced by some community co-financed and co-managed health facilities, the project will test different approaches to cost recovery designed to enhance the viability of the system in an uncertain economic environment. Cost recovery is a subject to be addressed by operations research.

The operations research will include prioritizing activities to be covered through cost recovery. For example, in health centers serving small or scattered populations with resulting low utilization, it may be possible to eliminate the drug clerk or to use this employee on a part time basis. Other attempts will be made to reduce the fixed cost burden to be financed through consultation fee revenues and drug sales. The project will also explore the cost-effectiveness of district-based drug distribution and cost recovery systems in health districts where provincial to health center distribution is not practical or cost-effective.

Funds generated through consultation fees and drug sales will be utilized to replenish drug stocks, to finance the operation of the drug distribution system and to cover PHC operating costs exclusive of GRC personnel salaries. These costs cover salaries and benefits for drug clerks, maintenance of equipment and buildings, depreciation, fuel and supplies, per diem and related expenses. The mark-up at the health center is also intended to cover the cost of outreach activities. All health facilities will be able to use surplus funds for health-related activities in accordance with health area and health district plans. The mark-up at the CAPP will cover drug distribution costs and will finance the cost of supervision at both the provincial and district levels.

The operation of a RPHC system is illustrated in the following example. In South Province a fully operational system of 69 health centers, 6 district hospitals and one provincial hospital would require drug purchases of about 85 million FCFA per year. Assuming fixed costs equivalent to the medium cost option used in the breakeven analysis (see Annex N), total system costs would be about 254 million FCFA per year. At a utilization rate of 0.25, the health centers would generate over 22 million FCFA in fee revenues. This covers less than 10% of total system costs. Financing the operation of the health centers and hospitals plus the CAPP, provincial and district offices exclusive of GRC personnel costs would still require a mark-up of 272% on the CAPP purchase price of the drugs. If fee revenues were not applied toward meeting system costs, the required mark-up would be 298%. In other words, drugs would have to be sold at three times the price paid by the CAPP. Distribution of the total required markup (298%), expressed as a percentage of the drug purchase cost, is shown in Table 2.5.

Table 2.5
PHARMACEUTICAL MARK-UP MARGINS REQUIRED FOR BREAKEVEN COST RECOVERY IN SOUTH PROVINCE

FACILITY/ACTIVITY	COST (FCFA)	MARK-UP REQUIRED TO COVER COSTS
Drug Replacement	85,100,000	100%
CAPP	51,800,000	61%
Provincial Office	5,500,000	6%
District Offices	33,000,000	39%
Provincial Hospital	2,500,000	3%
District Hospitals	11,100,000	13%
Health Centers	65,000,000	76%
TOTAL	254,000,000	298%

The RPHC also provides for the establishment of a provincial health fund (FSPS) to be financed through CAPP surpluses. This fund is intended to function as a "solidarity mechanism" through which smaller health areas could receive support from larger areas which have a greater income-generating capacity. The governing body of the CAPP would award funds to health areas based on health plans submitted to and approved by the district health committee. District health plans would be reviewed and funded in similar fashion. The project logframe specifies that the provincial health fund (FSPS) in each project-supported province will generate a surplus to contribute to the implementation of these district plans of action.

Pricing will be based on a system of differential mark-ups and cross-subsidies, with larger mark-ups on the less expensive and less critical medications and lower mark-ups on more expensive and more vital drugs. The MOPH is providing guidelines to the health committees regarding health care for indigents. Each committee is expected to formulate a policy dealing with the provision of health services to those who cannot pay.

The economic crisis confronting Cameroon presents a harsh climate in which to implement cost recovery programs and minimizes the margin of error consistent with program success. Effective cost recovery is impossible without a reliable drug distribution system. The drug supply problems which continue to plague the MCH/CS I Project and its Far North counterpart underscore the need for sound project planning and close monitoring, especially during early operational phases. The project must prioritize activities to be financed through cost recovery since actual revenues may be insufficient to cover all planned activities. It is also essential that monthly reports be reviewed on a regular basis and that project personnel initiate appropriate corrective action when financial performance is less than expected. Management and accounting systems must be as simple as possible, consistent with sound administrative practices. Finally, project staff must function as facilitators, assisting MOPH personnel in implementing the cost recovery program and not supplanting them. Even though this is more difficult in the short run, it is only through promoting institutional capability that the activities initiated under the project can become truly sustainable.

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5. Health Management Information System

5.1 Policy

The draft MOPH Health Sector Policy states the need for a national information system oriented to the management of health services. To be effective, such a system must include more than service statistics. A true health management information system (HMIS) also includes elements of personnel management, budget management, and quality of services.

Staff assignments to specific posts are prepared annually by the Provincial Delegate and approved by the central Ministry. These are used by the Public Service Ministry to track civil servants and by the Finance Ministry to prepare annual salary budgets and monthly payrolls. The facilities to which personnel are assigned are identified along with their rank in grade, educational degrees, and years of service. Managers at the provincial and health district levels do not have information available on employee skills or performance profiles or on in-service training received.

Provincial Delegates and hospital managers receive letters of credit pre-allocated for specific expenditures. The funds are drawn down by submitting pro-forma invoices to justify each line item to the accountant of the Provincial Governor. The allocations are not based upon budgets submitted by the Provincial Delegates. The amounts of the allocations vary across provinces; the allocation formula used is not known outside the central Ministry.

The MOPH's clinic record form calls for health center staff to be able to identify illnesses. Health center staffs do not uniformly have the skills and the diagnostic equipment sufficient to accurately identify or analyze the public health implications of the full range of diseases specified.

A National Annual Health Statistics Report has not been published in two years. A Demographic and Health Survey (DHS) was done in 1991, but has yet to be officially distributed. While there is some question as to whether the survey methodology used to determine certain rates was appropriate, the repeat of this survey in 1996 using the same methodology will provide some basis for comparison useful to MCH/CS II.

5.2 Current Status

5.2.1 Health Center Management Information System

The MCH/CS I Project has made impressive steps in establishing an HMIS at the health center level. The MCH/CS I Project has developed a health center manual used both for training and for on-the-job reference and guidance. It integrates medical technical reference materials on policies and protocols with guidance on management and administrative forms and procedures. Special attention is given to managing the health center pharmacy and recording and interpreting clinic service data.

The MCH/CS I HMIS has replaced the MOPH clinic record keeping system with a simplified system which emphasizes maternal and child health, and child survival diseases and interventions. The health center staffs have begun to be trained in its use, as well as

completion of monthly activities reports. A portion of the data is computerized at the provincial level, with feedback in the form of line charts provided to health centers to compare actual data to a predetermined norm. This includes information on inventory and cost-recovery accounting information about the value of drugs sold and the balance of retained earnings.

5.2.2 Health District Planning and Supervision

Health district action plans are currently being produced primarily in support of a few interventions (e.g., vaccinations and pre-natal care). Budget management is limited to the letters of credit. Planning and budgeting systems do not yet tie into the HMIS, except to gauge progress on a few selected outreach targets.

Supervisory protocols have been developed for the health district teams to supervise health centers and for provincial teams to supervise health districts. Training in the use of the protocols was also conducted. These are currently in the testing phase and are expected to be revised.

Currently, the HMIS reporting system tends to bypass the districts. The district health teams are presumed to be the primary supervisors of the health center staffs. Yet, the CAPP field supervisors (a) resupply the pharmacies at the health centers, (b) collect and control their surplus revenues, and (c) review and approve the health centers' bi-monthly budgets. The health centers' monthly activities reports are forwarded for analysis and entry into the provincial HMIS computerized data base. While a copy is also sent to the health district, it is the provincial team which analyzes and provides feedback directly to the health center in the form of written supervisory guidance.

5.3 Proposed Project Activities

5.3.1 HMIS at the Provincial level

The MCH/CS II Project will assist the MOPH in defining the roles of the provincial and health district teams to provide a flexible framework for greater decision making at the district and health center levels. This assistance will enhance provincial and district capacities to manage the revenues generated under new cost recovery programs. Assistance will be provided to:

- reorient provincial management;
- reinforce district management;
- enhance systems and staff skills in planning and budgeting;
- improve systems and staff skills in accounting and financial management.

By shifting its focus from direct exchanges with health centers to that of monitoring and strengthening the performance of district health teams, the project will reinforce provincial capability in health planning and supervision of health districts. Operations research by the province will promote and monitor the testing of various management strategies at the health district level to improve, for example, management, supervision and motivation of personnel (for more details, see section 8, Operations Research). The analysis of data collected through

the HMIS and feedback to the health district during supervision visits will also be improved during MCH/CS II. The HMIS software will be made more user friendly and adapted to make the data base compatible with Lotus 1-2-3 software. The provincial teams will be able to draw data from the HMIS into a Lotus spreadsheet to do non-routine special analyses not available in the HMIS report format.

Provincial supervision protocols will be refined to provide information on skill deficits and to focus on performance improvements. This will provide a structured basis for planning and conducting on-the-job training. Supervisors will receive training in the use of supervisory regimes which emphasize team work, improved quality of care, and non-monetary motivation of personnel. Supervisory reports should include specific information on actions planned and implemented to upgrade team performance at health facilities.

The Provincial Health Delegations will further develop uniform instruments for planning, budgeting, and routine reporting on activities and financial management. These will be used to train and supervise the district health teams. MCH/CS II technical advisors will also assist provincial teams to upgrade accounting and financial management systems.

5.3.2 HMIS at the Health District and Health Center Levels

The MCH/CS II Project will expand the HMIS initiated by the MCH/CS I Project, and make it operational in each health district and health area the year it first receives project assistance. The project will improve health district planning and management of activities and resources. The health district team will be the primary technical advisor, on-the-job trainer, and supervisor for health centers. Health centers will send HMIS reports both to the health district and to the province to facilitate data entry. The health district will analyze reports and send observations and recommendations to the Provincial Health Delegation. Feedback on the HMIS documents will be provided to health centers by the district team and to health districts by the Provincial Health Delegation.

A district team member will accompany the CAPP field supervisors to the health centers when medical supplies are replenished. The district team member will review and approve the health center bimonthly budgets at that time. The CAPP supervisors will focus their efforts on the maintenance of the medical supplies.

The district teams will continue to develop district action plans and operating budgets in consultation with health centers. These plans will improve as a result of enhanced: (a) guidance from Provincial Health Delegations, (b) quality of the data produced by the HMIS, and (c) new revenues generated from cost-recovery sales.

Baseline data will be collected by the health district for all health areas and facilities. This will include assessment of catchment populations as a basis for establishing long- and short-term priorities; an inventory of the location and state of repair, of all facilities, vehicles, and equipment; and an assessment of human resources. The baseline will be used to establish medical and managerial priorities, create health district action plans and budgets, establish training plans, and re-examine performance targets set during the MCH/CS I Project.

Health district work plans and budgets will be tied to the priorities identified in the baseline

assessments. In addition to the current health center monthly activity report, a semiannual health district report will be instituted to compare actual activities and expenditures to those that were planned and budgeted, analyze the variances, and measure progress towards the targets.

6. Information, Education, and Communication (IEC)

6.1 Policy

It has been MOPH policy to promote PHC through training and IEC programs.

6.2. Current Status

A series of focus group discussions were undertaken in the Adamaoua and South Provinces in late 1991 to learn about community and service provider perceptions of the RPHC policy, preferences in health care, and thoughts on community participation. The information gathered was used as a basis for the later development in a workshop of provincial IEC action plans and messages. A follow-up workshop is planned for March 1993, in which provincial teams can share accomplishments, discuss lessons learned, assess their strategies, and modify action plans and objectives accordingly.

A logo has been created to identify the RPHC policy and program; it is to be disseminated in a number of ways: on a PHC brochure, stickers, badges, wall murals in health centers, etc. A 20-minute promotional and educational video on RPHC services has been developed to show health personnel. Audio-cassettes have been prepared for use by health personnel in sensitization meetings with communities about co-financing, co-managing, and other community participation in the RPHC program.

More aggressive implementation of provincial IEC plans has been delayed by the necessity to revise the guidance on co-financing and co-management procedures in response to evaluation and audit findings and to re-orient health personnel and community participants in their revised roles.

6.3. Proposed Project Activities

The MCH/CS II Project will increase the level of IEC activities in project-supported provinces by building on and utilizing: a) the accomplishments of the MCH/CS I Project; b) data from operations research, particularly at the district and provincial levels; c) improved information from the HMIS and better and more consistent analysis of the HMIS data; and d) analysis of community health problems and attitudes which have been found by Save the Children and CARE in the Far North Province.

Additional educational audio-cassettes will be developed to standardize health messages to the community and to animate health education sessions on topics such as breastfeeding, diarrheal disease, vaccinations, family planning, the wise use of drugs, and other primary health care matters.

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To improve community participation in the RPHC program, the project will target local leaders at community co-financed and co-managed health facilities to:

- re-emphasize the importance of community participation;
- clarify the roles that the COSA and COGE are expected to play;
- inform them about the importance of vaccination to the health of the mother and and the importance of the mother's health to that of the new born;
- search for ways of ensuring a role for women in the decision-making process concerning the functioning of the health facility;
- discuss how a health inventory might be carried out; and
- seek their ideas for how a stronger partnership could be built between the health facility and the community(ies) that utilize it.

IEC activities motivate health center personnel to work more closely with local communities; to take more pride in and responsibility for their work; and to demonstrate a friendlier attitude toward those coming to the health facility for care. Activities will include workshops, developing posters, and finding ways to publicize award programs and other activities designed to recognize exemplary performance.

The project will train health district teams in the principles of IEC and community participation and provide them with the tools that they need to implement effective IEC. The project will also provide each health center, health district and provincial office with a resource library on PHC and IEC. A basic IEC kit will be prepared for general distribution to health personnel and will be updated with topic-specific, continuing education courses.

The MCH/CS II Project will seek innovative ways to popularize the concept of primary health care and to increase its stature within the medical and political community. A project-supported publication on PHC activities in Cameroon will give recognition to highly-motivated MOPH personnel and community leaders. Interviews with health personnel about their work, services available at their facility, planned outreach activities, etc. will be broadcast on national radio. Interviews will also be arranged with community participants who have promoted better health practices or developed and/or carried out community health-related projects.

Concurrently, the project will re-examine the issue of community participation in more depth in preparation for contact with community leaders in health areas that will be included in future waves of re-oriented health facilities. This will involve an analysis of the responses to the IEC activity proposed above plus organizing special focus group discussions on the health facility-community partnership. There will be separate focus groups with community leaders and with women, because women are generally reluctant to speak out in the presence of leaders. Follow-on meetings with leaders might be appropriate, depending upon the results of the women's focus groups.

Although present procedures call for COSAs to undertake an inventory of health problems in their health area, this generally has not been done. The project will find ways of encouraging and supporting this effort and then assure analysis of the data generated. This will help make the health team more effective in health center operations and provide information to improve IEC strategies, action plans, and implementation activities.

The MCH/CS II implementation team should consider changing the present prccedure for preparing communities for their participation in the new RPHC program. Rather than requiring that a COSA do the community health inventory, the health team could involve itself with the community in carrying out the inventory during the period before the re-oriented program is initiated, i.e., before the pharmacy is opened in the health center. This is discussed further in section 7, under Community Participation. If this suggestion were to be adopted, some IEC activity would be needed to ensure a good response from the health team and the community.

Peace Corps Volunteers (PCVs) have been very effective in other countries (e.g., Togo) in supporting IEC programs. It is suggested that the MOPH and project officials consider using them as IEC trainers of trainers (health center personnel) who will be responsible for the promotion of IEC at the community level.

7. Community Participation

7.1 Policy

The goal of the draft MOPH Health Sector Policy is to "render quality primary health care accessible to all of the population." This statement is followed directly by the first stated objective to "institutionalize community participation at all stages of planning, implementation and evaluation of health programs."

7.2 Current Status

The RPHC calls for community participation in the planning, managing, and financing of health care. Re-oriented health facilities are to charge for services and to have a pharmacy stocked with essential medicines which will be sold by prescription to the community. The health centers are to be "co-managed" by health committees (COSAs) composed of local health officials and representatives of the community (or communities in the case of district committees--COSADIs). Each COSA or COSADI is to have a subordinate management committee (COGE) which will monitor the management of essential drugs and the security and utilization of cost recovery funds.

COSAs are also expected to undertake an inventory of the health problems of the community and develop a plan for dealing with the problems. COSA members are also expected to promote community participation in vaccination programs and other health outreach and disease prevention activities.

Health officials held sensitization meetings with communities in the health areas chosen to be in the first wave of the re-oriented PHC program. COSAs and COGEs were established. Some community members of COSAs thought they would have influence over the selection and pricing of medicines in the pharmacy. When their ideas were not immediately accepted, or they did not get certain perquisites for their service, a number resigned from the COSAs; others just stopped participating in meetings.

Under the initial procedures, the treasurer of the COSA (also a member of the COGE) had

responsibility for safeguarding the daily earnings of the pharmacy and accounting for its use. As a result of failures in this system, a revised procedure was established whereby daily earnings are deposited in a safe in the pharmacy by the commis (pharmacy manager). This transaction is checked by the director of the health center; the treasurer is no longer involved. As a result, a number of treasurers resigned and some of those who did not resign are not participating in the remaining duties they have.

Under the current procedure, the members of the COGE review the stock records (receipts and sales) monthly and check them against an inventory that they make. Some health centers report that no COGE members are showing up to perform this task. The treasurer and other members of the COGE are present bi-monthly when the provincial supervisor comes to deliver a new supply of medicines and takes the money from the safe to deposit it in a special account at provincial headquarters. They also prepare a bi-monthly budget which is funded by the provincial supervisor from the funds in the safe. Some treasurers and COGE members have not been showing up for these activities, either.

There are only a few instances where COSA members have been involved in outreach activities. Women, the principal targets of the project, are rarely represented on the COSAs. Even when represented, they generally have not taken an active part in discussions, in part reflecting local socio-cultural values and prejudices.

An institutional analysis is planned for early 1993. An important part of the study will deal with problems of community participation, including the role of women.

7.3. Proposed Project Activity

Since the success of the project will depend to a considerable extent on the participation of the community, especially women, it will be a major task of project implementers to re-orient project implementation in such a way as to obtain a greater and more effective participation in the communities, particularly of women and women's groups. Hopefully, the proposed institutional analysis will offer proposals on how to achieve this. The institutional analysis team should review the methods utilized by Save the Children and CARE in the Far North Province, since community participation there seems to have been more extensive and more effective.

Operational research will be undertaken to test alternatives to the present procedures for community development. One alternative will be to conduct a health inventory with the community as the first step in community development, rather than expecting the COSA to do so after the health center receives project assistance. This approach will be tried out in health areas in the South and Adamaoua Provinces. It should be carried out jointly by the health team and the community; Peace Corps Volunteers (PCVs), if available, would be helpful. A fuller discussion of the possible benefits of this approach is to be found in Section II.C. of Annex K.

It is possible that the foregoing approach could result in the community wanting to organize itself to carry out health improvement in a manner different from the COSA. The Ministry should welcome this result if it seems likely that an alternative approach would lead to more fruitful community participation. To obtain meaningful women's participation is clearly

going to call for a different kind of structure than the present health committee.

The MCH/CS II Project will encourage community development by co-financing small projects of the COSA or of a community action group. Funds will be made available from the provincial health fund (FSPS) and/or from project funds. The project budget includes $100,000 for approximately 100-200 community development projects. Criteria for evaluating proposals from communities will be established, with priority given to projects which are developed and managed by women.

PCVs have been used to train and help supervise the work of the pharmacy, including verifying the money collected by the commis (community pharmacy manager) and turned over to the treasurer. The training role was appropriate; the auditing role was not. It has been terminated. PCVs have been very effective in other countries working in health education, vaccination programs, and health-related community development (animation) activities. They could be expected to play such a role in Cameroon to the benefit of the project and the communities.

8. Operations Research

8.1 Policy

The MOPH draft Health Sector Policy (July 1992) is "to improve the research capacity of supervision and evaluation" by increasing activities in operations research (OR) and developing a health system research methodology. Specific objectives are to:

- Establish a local structure for OR/health system research;
- Organize a training of trainers capacity in OR/health system research;
- Train health district teams in OR/health system research;
- Train health personnel in supervision and planning.

Operations research as defined and developed by PRICOR (Primary Health Care in Operations Research) involves a three-step process of problem analysis, solution development and solution validation. It is distinguished from other types of research by placing as much or more emphasis on the research process as on the research results. While valid OR may be carried out at and by any level within the health system, ideally it is best conducted by the health personnel involved in the actual operations of the system or by the immediate supervisors of the operations. For example, OR to test strategies to improve prenatal clinic patient flow can be initiated by the health center nurse or by the health district supervisor. In this situation, OR is as much of a learning and management tool as it is a research tool. In fact, the steps in the learning/health education process, the health planning/management process and operations research are quite similar (see comparative table in Annex J).

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8.2. Current Status

The MCH/CS I Project has conducted a study on the effect of co-financing on health center utilization. It has scheduled an institutional analysis of the administrative and social aspects of health district decentralization and community participation for 1992-1993. Both studies use national and international experts to conduct the assessments in collaboration with health district personnel. Training in OR at the health district level, as proposed by WHO, has not yet been initiated.

8.3. Proposed Project Activities

The MCH/CS II Project will organize OR studies to improve the performance of health workers and community health communities in implementing PHC. All health district teams will be trained in management, supervision, IEC, and operations research. Annual work plans for operations research will be prepared and implemented for such topics as technical standards, community participation, management issues (e.g., health worker performance and motivation, utility of the HMIS, etc.).

Operations research for the project will not be conducted in isolation, but rather it will be promoted as a contributing factor to improved IEC and management at all levels in the health care system. The promotion of community empowerment to discuss, propose and implement solutions to local health problems, for example, should be seen as a valid form of operations research even though it may be organized as an IEC or community participation activity.

Given the RPHC policy to develop health district capacity for management of primary health care, the project should promote the development of operations research capacities at the national, provincial and health district levels. The health district should not be seen as a mechanism for the decentralized implementation of management instructions received from the national or provincial level, but rather as a laboratory to test and refine approaches for improved promotion and management of PHC. The concept of OR as a management and IEC tool should be part of the training of the health district team members. The project should encourage health districts to take the initiative in integrating operations research into their action plans. Unless the health district prepares a protocol to request supplemental funding, this need not require additional funding or supervision from the provincial level.

Empowering health districts to conduct operations research could become an important non-monetary motivational factor for health districts. Experience from other countries has shown that district medical officers can become highly motivated operations researchers when they realize that they are conducting valid research that may receive national recognition. The MCH/CS II Project will use the following approach for operations research:

1) Provincial conferences and/or seminars are organized to discuss and establish priorities for issues meriting operations research.

2) As part of their initial training, the health district team receives an orientation to operations research as a management and IEC tool, and team members are encouraged to propose operations research in their action plans to resolve problems specific to their health districts.

3) Health districts are encouraged to submit concept paper protocols to the provincial level for OR, and may receive funding for small OR projects (i.e., < $2,000) through the FSPS or MCH/CS II. These projects are supervised as part of the regular provincial supervision. Each health district which receives funding is expected to submit the conclusions and recommendations of its OR research as its final product. The project would provide funding for 20 such projects with a total funding of $40,000.

4) OR projects proposed by health districts or a province which require more funding and a more structured protocol are referred to a national committee, which includes provincial representatives and project staff.

   a) OR projects that do not require any special technical assistance may be approved for funding by MCH/CS II, up to a limit of $10,000. These projects will be closely supervised, both technically and financially, by the province. MCH/CS II will provide funding for three such projects by each province, totalling $90,000.

   b) OR project protocols which require special technical assistance and/or coordination at the national level will be approved by a national committee and contracted for execution to an appropriate institution (e.g., Provincial Health Delegation). Funding, provision of technical assistance, and supervision will be provided by the national MCH/CS II team in collaboration with the executing agency. Financial and technical reports will be provided to the national committee and to MCH/CS II for review and acceptance. Three major OR projects are budgeted at $95,000 each ($50,000 for in-country implementational costs + $45,000 for short-term technical assistance).

5) All OR researchers will be invited to share their results at a national conference, to be organized by the project or the MOPH, to promote the exchange of lessons learned between health districts and provinces. The conference would also permit a forum for the discussion of future priority topics for OR. Summaries of the OR results will also be published in the MOPH Health Journal and distributed by the project to the health districts.

The following issues merit the attention of the project:

- Improving quality of care: Testing supervision protocols and comprehensive on-the-job training to improve the effectiveness and efficiency of PHC interventions.

- Rationalizing drug prescriptions: Examining strategies to promote a supportive balance of curative, preventive and promotive activities and to prevent the over-prescription of drugs.

- The role of sub-divisional hospitals: Examining whether sub-divisional hospitals can also function as "health centers" and/or as sub-districts for decentralized supervision.

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- GRC and NGO collaboration: Comparing the effectiveness of health districts managed by NGOs with those managed by the MOPH.

- Attitudes of husbands/fathers: Examining how IEC could change the attitudes of men in determining health-seeking behavior and in favoring increased PHC utilization.

- MOPH profit sharing system: Testing strategies to extend the present profit sharing system for physicians to all health workers while linking such a system to increased accountability of health workers.

- Rewards and sanctions for health workers: Testing various means to improve health worker performance and accountability with non-monetary incentives.

- Responsibility of community health committees: Examining ways to improve the accountability of community health management committees and promote partnerships between communities and the public health services.

- Health district management: Testing whether district health teams can effectively allocate budget credits and assign staff in their districts as part of a more decentralized provincial management structure.

9. Training

9.1 Training Needs

Training and continuing education of health workers promote quality care and motivate personnel. Since curriculum revision for pre-service training can take years, retraining existing health care providers must be a priority activity for primary health care programs.

The MCH/CS II Project will help define the size and skills mix of health district teams and provide training for the entire team. Provincial training plans will include in-service training, as well as on-the-job training as an integral part of supervision. Training plans will also include medical and management training of health center staffs by district health teams and development of training and supervision methodologies of district health teams by provincial health delegations.

The MCH/CS II Project must provide training of 100 health committees, 100 health centers, and 27 health district teams. Table 2.6 estimates that about 900 persons will require some type of training.

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Table 2.6
TRAINING NEEDS OF A TYPICAL HEALTH DISTRICT

Health District Office (MD + 2 nurses + 2 other)=	5 persons
4 Health Centers x (3 nurses + 1 commis)=	16 persons
4 Health Committees (Pres, VP, treasurer)=	12 persons
	==========
Total of 891 persons for 27 health districts	33 persons

9.2 Types of Training

The types and levels of training which will be required during the project include:

- Training of health committees and health management committees
- Training health center, health district and provincial teams
- Supervision of health centers and districts as on-the-job training
- Participation in provincial and national conferences
- Visits between health centers, health districts and provinces
- Short-term out-of-country participant training

Formal training sessions represent only one type of training. The project will expand the concept of training to include on-the-job training during supervision and outreach visits. Priority for short-term training will be given to in-country training institutes such as the Pan-African Institute for Development. As the need arises, a limited number of short-term out-of-country training sessions will be financed by the project.

9.3 Training Strategy

The training of trainers approach generally includes the training of a national team, which trains a provincial team, which trains a health district team, which trains the health center team. While this strategy seems logical, experience has shown that at each layer of training there is often a "dilution factor" which decreases the quality of training. At the same time, it is neither feasible nor desirable for all training to be done at the national or provincial levels. Experience has also shown that the quality of training decreases with the distance between the training site and the work site, and that the trainer should also be the supervisor.

The approach recommended for the project is for national level trainers to focus on training three provincial teams and to serve as resource persons during the training of health district teams. Each province/division would be responsible for training 6-7 health district teams and for serving as a resource for the training sessions for health centers. Each health district would be responsible for the initial training of four new health center teams and for the continuing education of three MCH/CS I health centers. When seen in this manner, the load of training is not unreasonable, but it will require an effective training of trainers approach.

A rough estimate of staff time required includes one national trainer who would need to devote 20% of his or her time to training provincial teams; three provincial trainers who would spend 30% of their time in health district and health center training; and three health district team trainers who would spend 5-15% of their time in health center and community health committee training (see Technical Analysis, Annex J).

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The general principle, therefore, is that training be organized and conducted by the supervisor. For example, training of nurses in health areas should be conducted by the health district team. Training facilitators and/or technical resource persons from the provincial level, however, should be called upon by the health district to conduct health area training programs. Training should primarily be done on site, i.e., at the health center for health area training and at the health district for health district team training. Optimally, certain training activities could be combined as part of regular supervision visits. This would help to reinforce supervision as a positive learning experience, rather than as a negative evaluation.

Taking operations research as an example, the basic principles of operations research could be explained to the health district team during a several hour session as part of a supervision trip by a provincial supervisor. The focus would be on understanding the problem identification, solution development and solution testing components of OR. Examples of problems and possible solutions would be drawn from the results of the current supervision trip. The health district team would be left with "homework" to complete the solution development discussion and to test one or more solutions, before the next supervision visit. This same approach could be applied during health district supervision of health centers and health center outreach visits to communities.

III. COST ESTIMATES AND FINANCIAL PLAN

A. THE PROJECT BUDGET: SUMMARY OF MAJOR ACTIVITIES

The project will assist the MOPH in the implementation of its RPHC policy by providing technical and financial support for the development and initial operation of primary health care delivery systems, which include health centers, district hospitals, district supervision teams, provincial hospitals, provincial drug distribution and cost recovery systems, and the Provincial Health Delegation. The project will be managed through an institutional contract.

Systems development will require: minor renovation of facilities to ensure physical integrity and to provide a more appropriate environment for health services delivery; the provision of clinical and office equipment, vehicles and initial drug supplies; and training and technical assistance for new management systems and clinical interventions.

Recurrent costs associated with the operation of the PHC system include: drug purchases; GRC and non-GRC personnel salaries and allowances; maintenance and depreciation; supplies and fuel; travel and periodic training. During the last two years of the project, the GRC and the cost recovery system are to finance all these costs. As indicated in the logframe, it is assumed that the GRC will continue to provide sufficient personnel to carry out the RPHC program in project areas.

Table 3.1 summarizes project costs disaggregated by major project input or activity, funding source and type, i.e., foreign exchange or local currency. Projected expenditures are further disaggregated to show the breakdown of the USAID contribution into direct USAID funding, the proposed institutional contract, and PVO grants.

The projected annual expenditures shown in Table 3.2 reflect a gradual decline over the life of the project. Technical assistance and systems development are concentrated during the first two years. USAID financing of recurrent costs, such as transport, vehicle maintenance and in-service training, is limited to the early operational phases of the PHC system during the first two years of the project. No USAID funds will be used to pay for GRC salaries. While recurrent costs increase over the LOP as the PHC system is expanded and more facilities become operational, the projection of utilization, costs, and revenues contained in Annex N shows that funds generated through cost recovery will be sufficient to cover the operating costs of the PHC system.

TABLE 3.1a
BUDGET OF USAID AND HOST COUNTRY CONTRIBUTIONS TO MCH/CS II PROJECT
(US$ 000)

SOURCE	USAID FX	USAID LC	HOST COUNTRY GRC	HOST COUNTRY COST RECOVERY	TOTAL
TECHNICAL ASSISTANCE	3357				3357
PROJECT OFFICES		2588			2588
OPERATIONS RESEARCH		280			280
TRAINING/IEC		1530		523	2053
ESSENTIAL DRUGS	1528			6330	7858
VEHICLES/MOTOS	1195				1195
EQUIPMENT	891				891
RENOVATION		657	328		985
COMMUNITY DEVELOPMENT		340	170		510
FUEL/SUPPLIES/MAINTENANCE		1201	785	315	2301
PERSONNEL BY GRC/PER DIEMS		201	9755	2026	11982
DEPRECIATION			739	739	1478
VACCINES	235		235		470
EMIS/OTHER				385	385
EVALUATIONS	170				170
AUDITS	60				60
OVERHEAD	2545	511			3056
INFLATION/CONTINGENCY	185	526			711
TOTAL	10166	7834	12012	10318	40330
TOTAL USAID FUNDING >>>>>>>>>>>>>>	18,000				

TABLE 3.1b
BREAKOUT SHOWING FUNDS TO BE EXPENDED DIRECTLY BY USAID, THE INSTITUTIONAL CONTRACTOR, AND THROUGH PVO GRANT(S)

	TOTAL USAID FX	TOTAL USAID LC	USAID FX	INST. CONTRACT FX	INST. CONTRACT LC	PVO LC
TECHNICAL ASSISTANCE	3357		515	2842		
PROJ. OFFICES		2588			1553	1035
OP. RESEARCH		280			224	56
TRAINING/IEC		1530			1275	255
ESSENTIAL DRUGS	1528		1528			
VEHICLES/MOTOS	1195		1195			
EQUIPMENT	891			891		
RENOVATION		657			438	219
COMMUNITY DEVELOPMENT		340			227	113
FUEL/SUPPL/MAINT		1201			833	368
PERS/PER DIEMS		201			201	
VACCINES	235		235			
EVALUATIONS	170		170			
AUDITS	60		60			
OVERHEAD	2545	511		2545		511
INFLATION/CONTINGENCY	185	526	185		424	103
TOTAL	10166	7834	3888	6278	5175	2660
TOTAL USAID FUNDING >>>>>> 18,000						

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TABLE 3.2
BUDGET OF EXPENDITURES ($000) BY FISCAL YEAR

FISCAL YEAR	TOTAL USAID	USAID INST.	USAID AID-DIRECT	USAID PVOS	HOST COUNTRY GRC	HOST COUNTRY COST RECOVERY	TOTAL
1994							
TECH ASST	1020	870	150				1020
IN-COUNTRY	773	490		283			773
SYS DEV	4170	1922	1849	399	338		4508
RECUR COST	652	427	58	167	1839	1343	3734
TOTAL	6615	3709	2057	849	2177	1243	10035
1995							
TECH ASST	1110	870	240				1110
IN-COUNTRY	775	491		284			775
SYS DEV	1479	682	656	141	120		1599
RECUR COST	767	508	59	200	2684	2292	5743
TOTAL	4131	2551	955	625	2804	2292	9227
1996							
TECH ASST	832	682	150				832
IN-COUNTRY	731	462		269			731
SYS DEV	492	227	218	47	40		532
RECUR COST	59		59		3411	3254	6724
TOTAL	2114	1371	427	316	3451	3254	8819
1997							
TECH ASST	625	420	205				625
IN-COUNTRY	689	434		255			689
SYS DEV	0						0
RECUR COST	59		59		3580	3529	7168
TOTAL	1373	854	264	255	3580	3529	8482
LOP TOTAL							
TECH ASST	3587	2842	745				3587
IN-COUNTRY	2968	1877		1091			2968
SYS DEV	6141	2831	2723	587	498		6639
RECUR COST	1537	935	235	367	11514	10318	23369
TOTAL	14233	8485	3703	2045	12012	10318	36563
OVERHEAD							
INST-30%	2545	2545					2545
PVO -25%	511			511			511
CONT.-5%	711	424	185	102			711
TOTAL	18000	11454	3888	2658	12012	10318	40330

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B. HEALTH SYSTEM COSTS

1. Development Costs

The estimates of project development costs below are based on information provided by the MCH/CS I Project for each type of facility.

1.1 Estimates of Unit Development Costs:

Health Center. MCH/CS II health centers will need: 1) minor renovation to improve security for drugs, equipment and cash, as well as to enhance the patient care environment; 2) basic equipment and IEC materials (see Annex H); 3) a light motorcycle; and 4) an initial drug supply of $10,000 for the center and to increase the CAPP inventory. This amount, a one-year supply, is based on an average health area population of 10,000; a utilization rate of 0.25; and a drug cost of $4 (1000 FCFA) per case. Training and IEC materials will be provided for health center staff and health committee members (COSA, COGE). Matching funds for a limited number of community development projects involving women will be provided. MCH/CS I and Save the Children/CARE health centers will need minor upgrading.

District Hospital. Facilities designated as district hospitals serve as secondary reference centers. Many hospitals function poorly because of inadequate equipment and supplies. Upgrading these facilities will require minor renovation (especially in the pharmacies, laboratories and surgical areas), as well as basic clinic and surgical equipment (see Annex H). The cost of initial drug stocks for the pharmacy and to increase the CAPP inventory in a corresponding fashion is estimated at $16,000. Staff training is also planned to improve management and clinical skills.

District Office. The district supervisory teams will be provided with a 4X4 vehicle and three light motorcycles for supervisory visits to the health centers. Office renovation and basic equipment will also be provided. The MCH/CS II Project will train district teams in management, supervision and quality assurance, as well as members of district health committees (COSADIs) in the RPHC program.

Provincial Hospital. The project will upgrade the functioning of the provincial hospital, which serves as the referral facility for secondary level care. Project-funded activities are similar to, but more extensive than, those required at the district hospital.

Provincial Office. As was originally done in the Adamaoua and South Provinces under the MCH/CS I Project, the provincial office in the Far North Province will require upgrading. Activities and associated costs are similar to those described for the district office. Minor upgrading is also programmed for the provincial offices in the Adamaoua and South Provinces.

CAPP. Establishing a CAPP in the Far North Province will require the renovation of space for drug storage and offices, the provision of office equipment, including a computer, two 4X4 vehicles for drug distribution, and training of staff and co-management committees. Minor upgrading is also planned for the CAPPs in the Adamaoua and South Provinces.

1.2 Projected Development Costs by Type of Facility and Cost Category

Unit and total development costs for each type of facility are summarized in Table 3.3. The site development schedule and an estimate of total development costs disaggregated by province, year and type of facility are shown in the financial analysis (Annex N).

TABLE 3.3
SITE DEVELOPMENT UNIT COSTS ($000)

MCH/CS II FACILITIES

	NUMBER	RENOV	EQUIP	VEHIC	DRUGS	TRNG	OTHER	TOTAL
H. CENTER	100	5	3	3	10	5	2	28
D. HOSP	27	10	10	0	16	10	2	48
D. OFFICE	27	5	3	29	0	20	2	59
P. HOSP	3	20	20	0	32	10	4	86
P. OFFICE	1	10	6	26	0	15	2	59
CAPP	1	10	6	40	0	15	2	73

UPGRADING MCH/CS I FACILITIES

	NUMBER	RENOV	EQUIP	VEHIC	DRUGS	TRNG	OTHER	TOTAL
H. CENTER	80	0	2	0	0	2	2	6
P. OFFICE	2	0	4	23	0	0	3	30
CAPP	2	0	0	0	0	0	10	10

SITE DEVELOPMENT COSTS

MCH/CS II FACILITIES

	NUMBER	RENOV	EQUIP	VEHIC	DRUGS	TRNG	OTHER	TOTAL
H. CENTER	100	500	300	300	1000	500	200	2800
D. HOSP	27	270	270	0	432	270	54	1296
D. OFFICE	27	135	81	783	0	540	54	1593
P. HOSP	3	60	60	0	96	30	12	258
P. OFFICE	1	10	6	26	0	15	2	59
CAPP	1	10	6	40	0	15	2	73
TOTAL		985	723	1149	1528	1370	324	6079

UPGRADING MCH/CS I FACILITIES

	NUMBER	RENOV	EQUIP	VEHIC	DRUGS	TRNG	OTHER	TOTAL
H. CENTER	80	0	160	0	0	160	160	480
P. OFFICE	2	0	8	46	0	0	6	60
CAPP	2	0	0	0	0	0	20	20
TOTAL		0	168	46	0	160	186	560
TOT DEV COSTS		985	891	1195	1528	1530	510	6639

NUMBER OF VEHICLES AND MOTOS TO BE PURCHASED

	BY MCH/CS II FACILITIES			TOTAL	
	NUMBER	4X4	MOTO	4X4	MOTO
H. CENTER	100		1		100
D. OFFICE	27	1	3	27	81
P. OFFICE	1	1	2	1	2
CAPP	1	2		2	
MCH/CS I P. OFFICE	2	1	1	2	2
TOTAL				32	185

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2. Recurrent Costs

Estimates of unit recurrent costs based on MCH/CS I Project data have been made for each type of facility in the PHC system. Three cost configurations have been estimated; the high cost option, which is the most financially conservative, is used for projecting recurrent costs.

2.1 Estimate of Unit Recurrent Costs

The recurrent costs for the facilities in the PHC system are based on data contained in the MCH/CS I Project document cited above entitled DETERMINATION DE LA TARIFICATION... These data have been disaggregated by type of facility for ease of understanding. The most significant departure from the MCH/CS data has been the more consistent treatment of depreciation in the high cost option.

Personnel. Drug clerks in each of the pharmacies receive 25,000 FCFA ($100) per month. CAPP staff include an accountant ($7200/year), a secretary ($960/year), and a guard ($720/year). MOPH personnel in the system are paid by the government.

Performance bonuses are currently being considered by the MOPH and the MCH/CS I Project. Bonuses have been programmed in the high and medium cost options, but excluded from the low cost option. Bonuses would be paid exclusively from funds generated through cost recovery.

Maintenance costs for vehicles are estimated at 10% of the purchase price. An additional amount has been included for building and equipment maintenance.

Depreciation has been estimated based on a useful vehicle and equipment life of five years. Full depreciation is included only in the high cost option. A reduced level has been programmed in the medium cost option, while depreciation has been excluded from the low cost option.

Fuel and Per Diem costs relate primarily to the travel for supervision and drug delivery. While the estimates used were developed for a fully operational program in the Adamaoua Province, these costs approximate those for the other two provinces. For facilities not yet operational, comparable travel will be required for site development.

Other major costs relate to the annual FSPS meeting and the operation of the HMIS.

2.2 Projected Recurrent Costs by Type of Facility and Cost Category

Table 3.4 lists unit and total recurrent costs for each type of facility. Drug costs have been estimated based on projections found in Table N.7. A list of operational sites by project year and an annual estimate of recurrent costs by province and facility type may be found in Annex N.

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TABLE 3.4a
ANNUAL UNIT RECURRENT COSTS BY CATEGORY
(FCFA 000)

CATEGORY	H.CENT	D.HOSP	D.OFFICE	P.HOSP	P.OFFICE	CAPP
PERSONNEL	540	540	0	1080	0	5000
MAINT.	150	150	1000	300	950	2500
DEPREC.	220	150	1800	300	1900	2500
SUPPLIES	120	120	300	240	600	3500
FUEL	80	0	1000	0	400	600
PER DIEM	0	0	1000	0	800	8100
TRNG/MTG	150	100	250	100	250	1000
EMIS	0	0	0	0	1500	0
OTHER	40	40	400	80	350	800
TOTAL	1300	1100	5750	2100	6750	24000
TOTAL ($)	5200	4400	23000	2400	27000	96000

TABLE 3.4b
LIFE OF PROJECT RECURRENT COSTS BY CATEGORY
(FCFA 000)

CATEGORY	H.CENT	D.HOSP	D.OFFICE	P.HOSP	P.OFFICE	CAPP	TOTAL ($000)
FACILITY YEARS	544	88	103	9	11	11	
PERSONNEL	293760	47520	0	9720	0	55000	1624
MAINT.	81600	13200	103000	2700	10450	27500	954
DEPREC.	119680	13200	185400	2700	20900	27500	1478
SUPPLIES	65280	10560	30900	2160	6600	38500	616
FUEL	43520	0	103000	0	4400	6600	630
PER DIEM	0	0	103000	0	8800	89100	804
TRNG/MTG	81600	8800	25750	900	2750	11000	523
EMIS	0	0	0	0	16500	0	66
OTHER	21760	3520	41200	720	3850	8800	319
TOTAL	707200	96800	592250	18900	74250	264000	7014
TOT($000)	2829	387	2369	76	297	1056	7014

PLUS CAPP DRUG PURCHASES, INCL. SHPG & LOSS ALLOWANCES	6330
TOTAL FIXED AND VARIABLE RECURRENT COSTS	13344

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C. COST RECOVERY POTENTIAL

The ability of a drug distribution system to generate revenues has never been at issue. The MCH/CS I and other projects in Cameroon, as well as others throughout the Third World, have clearly demonstrated that revenues generated through drug sales and consultation fees can cover the cost of the replacement drugs and drug distribution. What is at issue is the extent to which such revenues can cover the operating costs of the PHC system (exclusive of GRC personnel salaries).

The current economic situation has resulted in a decline in disposable income and a consequent reduction in health services utilization. This trend has been observed not only in MCH/CS I sites, but throughout the health sector, including church-affiliated facilities and private for-profit clinics. For this reason, it is essential that cost recovery targets be flexible and that project management respond to revenue shortfalls by prioritizing activities to be financed through cost recovery.

The projection of revenues to be realized over the LOP is conservatively based on a health center use rate ranging from 150 to 200 cases per 1000 inhabitants. This is consistent with MCH/CS I utilization but more conservative than MCH/CS I projections. It is estimated that the PHC system will generate gross revenues of over $10 million over the life of the project. About $6.3 million of these revenues will be used to replenish drug stocks. These expenses include the cost of drugs, shipping and handling, as well as allowances for loss, pilferage and expiration.

About one third of the amount remaining after drug-related expenses will consist of facility surpluses to cover other recurrent costs. As shown in Table 3.2, cost recovery revenues increase as more project facilities become operational.

D. SUSTAINABILITY

It is planned that, at the end of the MCH/CS II Project, the project-assisted health facilities will be providing high quality, integrated services and will be collecting sufficient revenues from cost recovery efforts to fund the resupply of drugs and the key recurrent costs of delivering care. In addition, health management systems will be functioning in the three target provinces with the recurrent costs of these systems also financed through cost recovery efforts. Future donor assistance could be used to develop and implement measures to deliver services to the remaining 30 percent of the populations of the three provinces which will not be covered under MCH/CS II. These persons live in areas without adequate health structures, or in sparsely populated areas, where it will be difficult to support the costs of revolving-fund pharmacies and integrated services.

E. HOST COUNTRY CONTRIBUTION

The Government of the Republic of Cameroon (GRC) will make an in-kind contribution of approximately $12 million over the LOP, equivalent to two-thirds of the USAID contribution. Most of this amount is allocated for personnel salaries. The GRC in-kind contribution also partially covers the cost of facility renovation, vaccines, fuel and supplies, maintenance, depreciation, IEC and community participation, as well as per diems for staff travel. See Table 3.1a for a line item description of the host country contribution, including cost recovery.

IV. IMPLEMENTATION PLAN

A. IMPLEMENTING AGENCIES AND ARRANGEMENTS

1. MOPH units

The MOPH's Directorate of Preventive and Rural Health (DMPR) will be the project's implementing agency in conformity with its role as coordinator of the national PHC program. The DMPR has gained considerable experience implementing the RPHC since its inception in 1989. In addition to USAID's MCH/CS I Project, the DMPR is implementing important PHC programs supported by UNICEF, GTZ, and the French aid agency.

The Director of the DMPR will serve as MOPH Project Director. Other Directorates will be consulted when appropriate. For example, the Director of Family and Mental Health, who is the director of the USAID National Family Health Project (NFHP), will ensure that medical standards for maternal child health are respected in project-assisted health centers. The Director of Hospital Medicine will need to be consulted about improvements (equipment and small physical improvements) that will be made to district and provincial hospitals. Activities related to the development of the project HMIS will need to be coordinated with the Directorate of Research, Planning & Statistics, which is working on a national HMIS. The project will need to be in touch with the Directorate of Pharmacy to keep informed of changes in national policies and procedures related to the procurement, distribution, and prescription of pharmaceuticals and essential medicines.

If important policy or implementation issues arise, which involve a number of directorates, it is likely that they will be of importance to other donors as well. In that case, the MOPH's PHC monitoring committee should be convoked. This committee consists of the directors of the six MOPH central directorates, representatives of the PHC donors, and other organizations involved in PHC in Cameroon. It meets about once a quarter to facilitate the coordination of PHC projects in Cameroon.

PHC activities in the field will be the direct responsibility of each Provincial Health Delegate. He is assisted by representatives of each of the MOPH's six directorates (the five mentioned above plus the Directorate of General Affairs--administration and finance). It is important to note that the RPHC is a decentralized system where provincial personnel are actively involved in the design and revision of all aspects of the system. Thus, the main action of the MCH/CS II Project will be in the provinces rather than in Yaounde.

The roles of each of the MOPH's administrative levels in implementing the project are described below. These are essentially the same as under the MCH/CS I Project. However, health districts have been recently re-defined by the MOPH and are expected to be given more authority than was possible under the previous structure.

Directorate of Preventive and Rural Health: The DMPR will have overall responsibility for project implementation. Its specific responsibilities will include:

- providing input into the national HMIS;

- providing technical oversight for the design and revision of supervision protocols;
- issuing technical and policy guidance for improving PHC cost recovery, management, and medical logistics systems;
- assuring that key administrative and policy issues are addressed by the MOPH and the GRC;
- assuring the design of in-service training manuals;
- providing policy guidance on PHC activities and programs to the Provincial Health Delegations; and
- facilitating contact of project personnel and coordinating activities with other MOPH directorates, as appropriate, to ensure effective implementation of project activities.

Provincial Health Delegations: The Provincial Health Delegations will be responsible for the implementation of PHC activities and programs in their provinces. Their specific roles will include:

- integrating and distributing NFHP commodities through the CAPP;
- coordinating NFHP and MCH/CS II Project training activities;
- providing input in the expansion of the project HMIS and using it to improve management of the health care system in the province;
- designing and revising supervision protocols (in collaboration with district health supervisors);
- improving the PHC cost recovery system;
- strengthening the PHC medical supply system;
- assuring procurement, from international sources if necessary, of essential drugs and distribution of the drugs on a timely basis to the re-oriented health facilities in the province;
- extending community co-financed and co-managed PHC services to additional sites;
- coordinating provincial IEC activities;
- coordinating the integration of programs to control ARI, schistosomiasis, and onchocerciasis into the PHC services of highly affected areas;
- conducting operations research activities (in collaboration with district supervisors and PHC service providers);
- conducting on-the-job training and supervision of district health teams;
- working with the general assembly of the provincial health fund (FSPS) to budget funds generated by cost recovery efforts; and
- providing leadership for the FSPS management committee.

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District Health Teams: District health teams will plan, coordinate, and supervise all health activities in their districts. They will:

- participate in designing supervision protocols;
- prepare for and launch community co-financed and co-managed health facilities;
- ensure that the supply and distribution system for essential medicines is functioning properly;
- monitor and recommend improvements in the financial management of cost recovery funds;
- conduct operations research;
- provide on-the-job training and directly supervise community co-financed and co-managed health facilities in their district;
- develop and carry out IEC programs in their district, as well as monitor and evaluate IEC programs administered by other levels of the MOPH structure;
- plan and budget their activities in consultation with their district health committees and area health center staffs; and
- receive and analyze HMIS reports and provide feedback to health centers and the province.

Health Center Teams: Health center teams will conduct preventive, curative, and promotive health activities; supervise village health posts in their health areas; conduct PHC outreach activities; conduct IEC activities; and participate, as appropriate, in operations research. The health center teams will plan and budget their activities in consultation with their community health committees.

2. USAID-Funded Assistance

2.1 Technical Assistance Contractor

USAID will contract with a U.S. institution to provide technical assistance to the MOPH implementing teams and to manage the provision of other AID-financed resources to the project. Following development of a detailed scope of work, USAID will determine whether to use a level of effort or completion type contract. The technical assistance (TA) team is expected to include:

- a chief of party (4-year assignment) who will advise the MOPH on policy and implementation issues involved in carrying out co-financed, co-managed PHC programs; coordinate project activities with the directorates of the MOPH and with other AID-financed health projects; coordinate the provision of AID-funded resources to the project; and supervise the TA team;

- an IEC/operations research/training specialist (3 1/2-year assignment) who will work with MOPH central directorates as well as the three Provincial Health Delegations in IEC, OR and the design of training activities; and

- an advisor (2 1/2-year assignment) who will work with each of the three Provincial Health Delegations (South, Adamaoua and Far North Provinces) and coordinate the provision of AID-funded resources in their respective provinces.

The technical assistance contractor will also be responsible for: a) procuring medical equipment and supplies for health centers and reference hospitals; b) facilitating and supporting the preparation of training materials and technical and managerial protocols; c) facilitating the organization of workshops, conferences and training programs (both in-country and abroad); d) recruiting and supporting specialists to provide short-term technical assistance; e) maintaining liaison with, and supporting as necessary, MOPH personnel studying in or undertaking visits to the U.S.; f) facilitating periodic reviews of project progress and cooperating with MOPH or USAID evaluation or audit teams; and g) procuring items needed to support its TA team.

The technical assistance contractor will be required to sub-contract at least 10 percent of the value of the total contract to a Gray Amendment firm or institution. USAID will establish the evaluation criteria to encourage an even higher percentage of sub-contracting to a Gray Amendment entity.

2.2 USAID Grantees

USAID's support to the RPHC program in the Far North Province is currently being carried out by Save the Children Foundation and CARE. Following an external evaluation in April 1993, six months after the launching of the community co-managed and co-financed systems, USAID will determine whether to continue the support in the Far North Province through the use of one or more grants or whether to increase the responsibility of the TA contractor to include this province. For budget purposes, it has been assumed that new grants will be made to the two PVO's now operating there.

2.3 USAID

The USAID mission will procure vehicles and essential medicines to cover the initial supply for health facilities which enter into the RPHC program. USAID will also arrange, when appropriate, for specialized technical assistance available from AID/Washington centrally-funded contracts.

The organization chart on the following page shows the relationship between USAID, the TA contractor and grantees (if they should be used).

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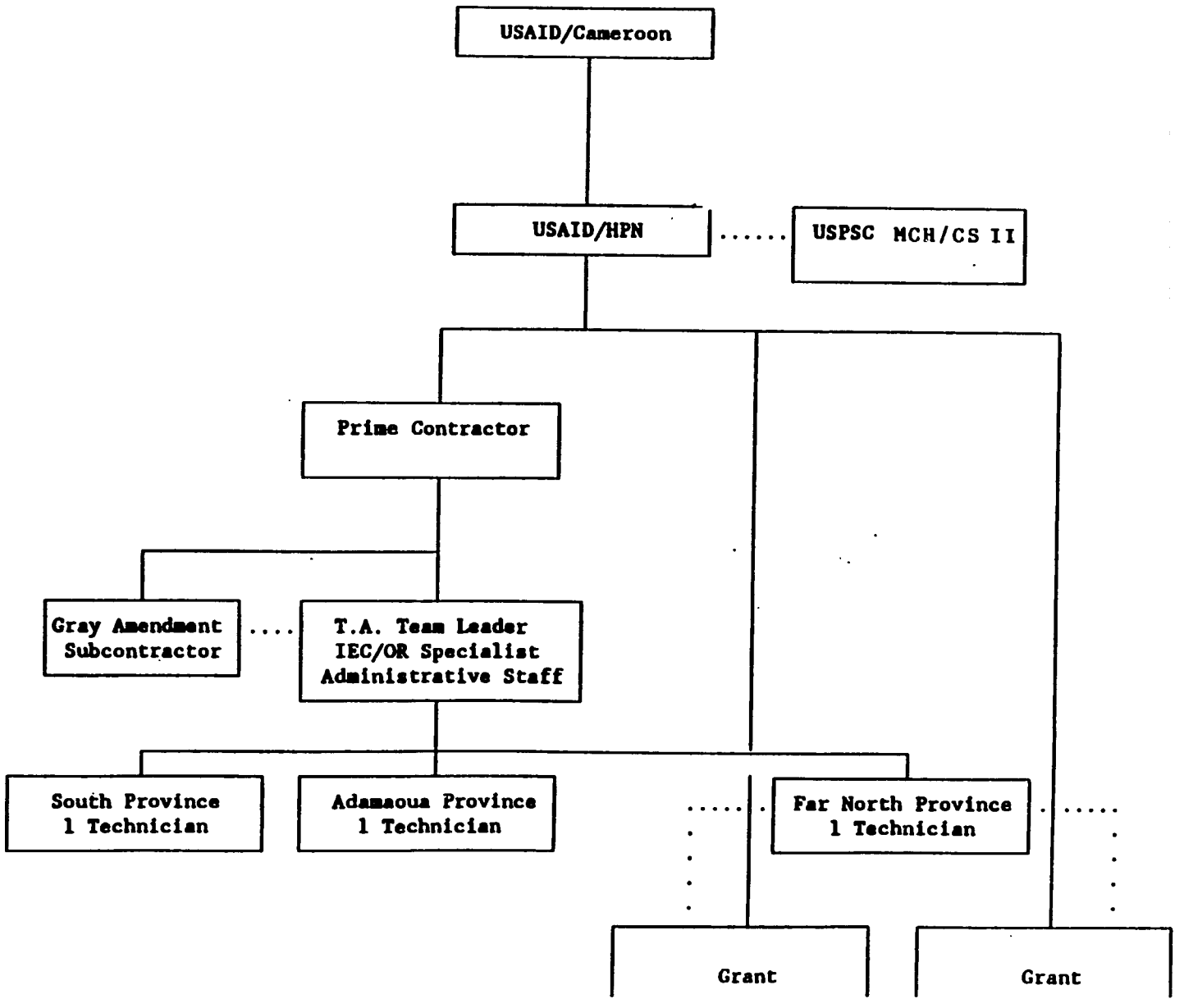
CONTRACTING ARRANGEMENTS



B. IMPLEMENTATION PLAN

A tentative implementation schedule follows. It is based on the assumption that the Project Agreement, Implementation Letter No. 1, and an unfunded PIO/T for procuring the services of a TA contractor will all be in final form and ready for issuance upon signature of the Project Authorization.

The implementation schedule is followed by a review of the implementation process for adding new health centers to the re-oriented PHC program.

1. Implementation Schedule

Month # 1
- Authorize Project Paper
- Sign Project Agreement
- Issue PIL # 1
- Unfunded PIO/T for TA Contractor delivered to Contract Office
- Contract Office issues Request for Proposals (RFPs) for TA services
- Grantee(s) submit applications for implementation of the re-oriented PHC program in four divisions of the Far North Province
- First PIO/Cs for pharmaceuticals & vehicles delivered to Contract Office

Month # 2
- GRC meets standard Conditions Precedent on representation
- PIO/C issued for pharmaceuticals
- PIO/C issued for vehicles

Month # 3
- Grant(s) signed with PVO grantees for implementation of RPHC program in the Far North Province
- Proposals received for TA contractor

Month # 4
- PIO/T delivered to Contract Officer for recruitment of Personal Services Contractor
- Technical Evaluation Committee completes its review of proposals for TA contractor and submits a report of its review to the Contract Officer
- Offerors for TA contractor which are in the competitive range are requested to submit best and final proposals

Month # 6
- TA contractor selected

Month # 7
- Contract signed with TA contractor
- Contract signed with PSC

Month # 8
- TA Contractor's Chief of Party arrives in country

Month # 9
- Rest of Contractor's team arrives
- CPs on health district delimitation and hospital authorization to retain 50% of fees for service fulfilled
- Vehicles arrive

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Month #10 Contractor orders equipment and materials for reference hospitals and next group of re-oriented health centers

Month #11 Pharmaceuticals arrive

Month #16 Equipment/materials arrive for reference hospitals and for health centers being integrated into PHC program in late 1994 to mid-1995

Month #20 First health centers become operational under MCH/CS II Project
Second PIO/Cs for pharmaceuticals & vehicles delivered to Contract Office

Month #22 Contractor orders equipment/materials for rest of health centers to be integrated into re-oriented PHC program during MCH/CS II

Month #28 Equipment/materials arrive

Month #29 Additional health centers become operational under MCH/CS II Project as they become ready i.e., on a staggered basis

Month #32 External interim evaluation

Month #39 Contract provincial advisors complete assignments

Month #49 PSC completes assignment

Month #52 IEC/OR/Training specialist completes assignment

Month #55 Final evaluation carried out

Month #56 Contractor's Chief of Party completes assignment; contract terminates

Month #56 Project Assistance Completion Date (PACD)

2. Implementation Process for Integrating Health Centers into the RPHC Program

There are three elements in the process of integrating health centers into the RPHC program:

a) meetings with local communities to: i) discuss with them the meaning and importance of co-management and co-financing; and ii) help them to understand the nature of their principal health problems, how the health facility can alleviate some of these problems, and what the community itself can do to prevent or deal with them (e.g., promoting vaccinations of mothers and children, ensuring that the water supply is potable, and improving sanitation);

b) prepare for the receipt of a supply of essential medicines at the health facility (e.g., secure quarters, institute stock records and re-ordering procedures) and to safeguard

the funds that will be generated from the sale of the medicines (e.g., installation of a safe, establishment of financial records, instituting the process for accounting for and utilizing the funds); and

c) improve the quality of services provided at the health facility by: i) providing technical training to the health personnel and establishing regular, improved supervision visits; and, ii) in some cases, ordering equipment and materials and/or physical refurbishing of the health facility.

Prior to integrating new health center areas into the RPHC program, the MCH/CS II Project will have undertaken the following steps: a) the MOPH, Provincial Health Delegates, and district team leaders will have agreed on the district boundaries; b) the districts will have prepared action plans on how they will implement the three elements of the process listed above, i.e., on what schedule and with what level of support from the province, the project, and Yaounde; and c) the health district manual will have been completed, so that it can be used for training district personnel prior to launching the new activity.

Present plans call for districts in the Far North Province to integrate, on the average, one new health area per year, and for those in the South and Adamaoua Provinces to integrate two per year. While this has been accepted for planning purposes, the design team recommends against visualizing the process as proceeding in "waves." Districts should prepare their action plans as soon as feasible and should be allowed to proceed at their own pace, taking into account the number and capability of district personnel and the receptivity of local communities to participate.

To carry out their expansion plans, as well as reinforce the supervision of health areas already integrated into the RPHC program, the district teams will probably need the following personnel: health district medical chief, administrator/accountant, nurse supervisor, IEC coordinator, and a secretary.

C. METHODS OF IMPLEMENTATION AND FINANCING

All contracting under the project will be by USAID, AID/W or the TA contractor. The anticipated procurement is set forth in table 4.1 below.

Table 4.1
MCH/CS II PROCUREMENT PLAN

Type of Procurement	Procurement Agent	Schedule	Payment Mechanism
TA Contractor (11/93-11/97) - (Incl. Equipment, Services & in-country training) $11.4 million	USAID	RFP to be issued in Month #1; contract to be awarded in Month #7	Direct Payment or possibly Letter of Credit (if U.S. PVO or university)
Cooperative Agreements with PVOs $2.7 million	USAID	Applications received in Month #2; grants signed in Month #3	Letters of Credit
Vehicle procurement $1.2 million	USAID	PIO/C to be issued in Month #2	Direct Payment
Essential Medicines $1.5 million	AID/W (possibly from UNICEF)	PIO/Cs to be issued in Month #2	Direct Payment
Locally hired U.S. Personal Services Contractor: $0.2 million	USAID	Advertisement issued Month #5	Direct Payment
Other Proj. Equipment & Contingency $1.0 million	TA Contractor	Contractor to initiate procurement by Month #10	Direct Reimbursement

V. MONITORING PLAN

A. PROJECT MANAGEMENT AT USAID

USAID management and monitoring of the MCH/CS II Project will be handled by the Health and Population (HP) office. The USAID Health and Population Development Officer (HPDO) will serve as the project officer, assisted by a locally-hired personal services contractor (PSC). The HPDO will provide technical and administrative guidance to the project and assure that the mission's other bilateral HP activities remain fully consistent with the MCH/CS II Project's community co-financed and integrated PHC approach. The locally-hired PSC will be responsible for the procurement of selected commodities (medicines and vehicles), short-term consultants obtained through centrally funded projects, supervision of PVO grants (if provided) and will assist with project monitoring. The USAID Program Management and Project Development, Contracting, and Controller offices will support HP's project management.

Beginning in the 1980's, USAID/Cameroon developed a health/population portfolio which emphasized the introduction and institutionalization of key preventive health interventions in public health delivery systems. These interventions included:

- Schistosomiasis control (through the Health Constraints to Rural Production Project - LOP $8.133 million, 1983 - 1993);
- Family planning (through the Family Health Initiatives Project - LOP $1.2 million, 1988 - 1992);
- Diarrheal disease control (through the PRITECH Project - LOP $1.117 million, 1988 - 1993);
- AIDS control (through the AIDSTECH Project - LOP $1 million, 1988 - 1992);
- Onchocerciasis control (through the Pilot Project for the Control of Onchocerciasis in the South Province - LOP $423,000, 1991 -1994).

In addition, USAID designed two broader child survival projects to implement a package of five priority interventions in MOPH health facilities: the MCH/CS Project in 1987 (LOP $11.5 million); and the Reform of the Health Delivery System (RHDS) Project (LOP $2.6 million).

In 1989, the MOPH conducted an assessment of the PHC system and concluded that Cameroon's economic crisis was hampering the ability of health facilities to implement preventive and curative services. This led to the development of the RPHC Program with its emphasis on the integration of services, community participation, and cost recovery. In response to this new PHC policy, USAID took the following steps to reformulate its health/population portfolio:

- In 1991, the MCH/CS and RHDS Projects were redesigned to emphasize the

development of community co-financed and co-managed primary health care; and

- In 1991, the National Family Health Project was designed to combine USAID's assistance for family planning and maternal health into one unified program and to integrate these services into the community co-financed and co-managed health facilities, as well as private sector delivery systems.

The MCH/CS II Project represents a further integration of the USAID health/population portfolio by:

- Merging the MCH/CS and the RHDS Projects into one management unit (i.e., the MCH/CS II Project);

- Integrating USAID assistance for schistosomiasis and onchocerciasis control into the MCH/CS II Project; and

- Reinforcing the link between the MCH/CS II and the National Family Health Projects.

As a result of these changes, USAID has developed a more focused and consolidated health/population portfolio. In addition, these changes will permit USAID to reduce considerably its management burden from a total of 8 projects in 1992 to two projects by 1996.

B. PROJECT MONITORING SYSTEMS

Monitoring is an essential management tool for tracking project implementation to ensure the efficient coordination of inputs, the accountability of project resources, and the timely, effective execution of project activities.

1. Project Benchmarks

Progress toward the achievement of project targets will be monitored at the end of each year. Since the development of functional health centers and health districts is the focus around which other project activities are oriented, the planned and actual establishment of health centers and health districts will be the basic benchmark against which other outputs will be measured. The table below indicates the percentage of the 180 (100 new + 80 existing) health centers to be assisted by the MCH/CS II Project that are expected to be functional at the end of each project year.

Table 5.1
BENCHMARKS TO MONITOR HEALTH DISTRICTS (HD)
AND HEALTH CENTERS (HC)

	HEALTH DISTRICTS			HEALTH CENTERS		
PROJECT YEAR	NEW HD'S	CUMUL HD'S	%	NEW HC'S	CUMUL HC'S	%
1994	22	22	81%	80	80	44%
1995	5	27	100%	43	123	68%
1996	0	27	100%	38	161	89%
1997	0	27	100%	19	180	100%
1998	0	27	100%	0	180	100%

The objectively verifiable indicators (OVIs) that are in the project logical framework provide additional indicators to monitor progress in achieving project outputs. Selected indicators will be included in the project implementation review.

2. HMIS

The MCH/CS I Project's Health Management Information System (HMIS) will supply a strong foundation for project monitoring during implementation of the MCH/CS II Project. The HMIS will ensure collection and reporting of statistics on populations living within the catchment areas of established health centers, i.e., having access to services. In addition, the service statistics will indicate utilization of PHC services, i.e., coverage. With these indicators, the project staff will be able to assess the need for programmatic changes that would increase accessibility and utilization.

3. Project Implementation Reviews

Project implementation reviews (PIRs) will be conducted on a semiannual basis by USAID in rhythm with the USG fiscal year. MCH/CS II Project staff will provide USAID a semiannual report summarizing the activities of the previous six months, i.e. Oct-Mar or Apr.-Sept.). The report will include service statistics and project benchmarks obtained from the province for the period of Jan-June or July-Dec, thus providing the project with a three month period to obtain information from the provincial level. The report will also include a current report of activities accomplished during the previous six months, activities planned for the next six months, major problems encountered, recommendations for problem resolution, and action agents to carry out all recommendations.

VI. EVALUATION PLAN

A. INTERNAL EVALUATION

Internal evaluations will be an integral part of the MCH/CS II Project. On an annual basis, the project staff will assess project organization, management and implementation so that adjustments can be made during the project to increase the effectiveness of project activities. These internal annual evaluations will be carried out using data from the health management information system (HMIS), the findings of operations research projects, other special studies and from observations and analyses of project staff. The results will be used by the project staff to recommend modifications or to strengthen project activities. A major objective of internal evaluation activities will be to improve evaluation capabilities at the provincial level.

Evaluations will examine and report on each of the major project areas:

- Decentralization to provincial and district levels
- Expansion of health coverage and services
- Pharmaceutical supply and distribution
- Cost recovery and other sustainability measures
- Health management information
- Information, education, communication (IEC)
- Community participation
- Operations research
- Training

These evaluations will also provide sex-disaggregated data about participants and beneficiaries. For example, the number and percentage of:

- health center and health district personnel who are women
- health committees and management committees that include women
- short-term training participants who are women
- community development projects financed by the project which involve women

An annual internal evaluation review will be held with the participation of the MOPH, USAID, project staff and grantees (if applicable). Ideally, this review should be preceded by field visits by USAID, MOPH, and project staff. An annual project report, drafted by the contractor, will provide information on progress made toward attaining project objectives and identify proposed activities and targets for the next year. Information from the HMIS, as well as health districts plans of action, will also be included in the report.

B. MID-TERM EVALUATION AND AUDIT

A mid-term evaluation will be conducted by an independent team of consultants at the end of the second year of the project. The evaluation team, engaged by USAID, will reassess the project strategy, accomplishments, failures and lessons learned in each of the major project areas. This evaluation should require approximately four to six weeks and include a team with combined expertise in all of the major project areas as listed above. USAID and

project staff will serve as resource personnel during the evaluation. The team will also make recommendations about future USAID/GRC collaboration in the health sector. Preceding the mid-term evaluation, cluster sampling to determine vaccination coverage will be conducted in selected project-assisted health areas.

An audit will be conducted of MCH/CS II approximately two years into project implementation.

C. FINAL EVALUATION AND AUDIT

The final evaluation will be a comprehensive assessment of project achievements compared with expected outputs and of the project's contribution toward the overall goal and purpose. The team will identify lessons learned that will be useful to future primary health care programs in Cameroon and other countries. A final audit will also be conducted.

Nb

VII. SUMMARIES OF ANALYSES

A. TECHNICAL

Several issues have been raised as to whether the means selected and methods proposed to implement project elements are technically feasible.

1. Should MCH/CS II focus on the development of health districts ?

The health district, rather than the province, represents a level where communities and health centers can become actively involved in the planning and management of PHC. The health district structure offers the best system for providing quality technical and administrative supervision to health facilities.

The health district can improve coordination by identifying donors to assist each health district, or what type of assistance one donor might provide across all health districts. A recent World Bank study concludes that district-based health care featuring a district hospital, a network of health centers, and prominent community involvement in multi-sectoral interventions (such as water and sanitation) is the most cost-effective package of services for Africa.

2. Should MCH/CS II encourage NGO management of health districts?

The inclusion of non-governmental organizations in the management of health districts can make cost-effective use of existing infrastructures, relieve some financial and administrative burden from the MOPH, improve community participation and resource management, and encourage international health assistance directed at NGO's and PVO's.

3. What interventions should comprise the MCH/CS II PHC package?

Disease-related morbidity and mortality in Cameroon are largely preventable and generally caused by illnesses whose early diagnosis and treatment could substantially reduce mortality. The emphasis on primary health care interventions is therefore justified. The MCH/CS II Project will not focus on developing new technologies in PHC, but, instead, is designed to assist Cameroonians to establish a sustainable health care delivery system providing dependable PHC services to an increased portion of the population.

The broadened definition of PHC and its many components does not mean that MCH/CS II should be involved in all activities. The MCH/CS II Project need not, for example, establish a technical capacity for water and sanitation activities, but if a community decides that water is a priority problem, the response from the project should facilitate the identification of another partner agency or technical source for information.

4. Will drugs & cost recovery reduce preventive & promotive care?

So much emphasis has been placed on drug sales and cost recovery that health center personnel may minimize the importance of the preventive and promotive activities which are

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less time consuming and less profitable financially. The MCH/CS II Project should emphasize that profit-sharing begins within the health center when the "surplus" generated from curative sales subsidizes the "costs" of preventive and promotive activities.

Promotive, preventive and curative measures all contribute to disease reduction by blocking disease transmission at specific points. While the relative importance of interventions will vary from disease to disease, it is important to consider all options before deciding on a plan of action. Health district teams, health center personnel and communities need to discuss and plan their own strategies rather than simply implementing decisions from above. However, the MCH/CS II Project cannot and should not implement complex interventions in environmental or vector control. The focus of the project should be on interventions which can be managed at the health center and/or during community outreach visits. Other interventions should be left to community-initiated efforts, which MCH/CS II should encourage but not direct or manage.

5. <u>What is the appropriate strategy for operations research?</u>

Operations research includes the steps of problem analysis, solution development and solution validation. It places as much emphasis on the research process as on the research results. Ideally, it is best conducted by the health personnel involved in the actual operations of the system or by the immediate supervisors of the operations. The steps in the learning/health education process, the health planning/management process and operations research are quite similar.

Operations research for the MCH/CS II Project should not be conducted in isolation, but rather promoted as a contributing factor to improved IEC and management at all levels in the health care system. The project should include operations research at the national, provincial and health district levels. Empowering health district personnel to conduct operations research could become an extremely important, non-monetary motivational factor for health districts. Experience from other countries has shown that district medical officers can become highly motivated operations researchers when they realize that they are conducting valid research that may receive national recognition.

6. <u>What should be the project training strategy?</u>

The MCH/CS II Project must provide for training of more than 900 people drawn from 100 health committees, 100 health centers, 27 health districts and 3 provinces. Obviously then, the training strategy must depend on a decentralized training system.

MCH/CS II training should be organized at the level from which supervision takes place. Training of nurses in health areas should be conducted by the health district team with technical resource persons from the provincial level if required. Training should be done primarily on site, i.e., at the health center for health area training and at the health district for health district team training. Optimally, certain training activities could be combined as part of regular supervision visits. This would help to reinforce supervision as a positive learning experience rather than as a negative evaluation.

7. Are MCH/CS II objectives too ambitious or too broad?

While the scope of MCH/CS II is broader than MCH/CS I, the level of technical assistance proposed should be adequate, as MCH/CS II proceeds to build on the momentum of MCH/CS I. MCH/CS II assistance should become more indirect by providing health district teams with the required resources to adequately perform their functions. Too much technical assistance can get in the way of the empowering process. It should be possible to hire long-term technical assistance with expertise in most project areas. Areas where major expertise is not available can be reasonably supplemented with short-term consultants, or through a buy-in to an AID centrally funded project. The MCH/CS II Project will be able to prioritize the level of effort needed for each major component.

The RPHC program and the new delimitation of health districts should permit rapid progress if MCH/CS II is able to empower and motivate health district teams for the development of health centers and community involvement. If this cannot be accomplished, then doubling or tripling the number of technical experts will not prevent the failure of the system.

In conclusion, the MCH/CS II Project is technically sound as designed because it:

- is based on a time-proven package of PHC interventions;
- will balance curative, preventive and promotive care;
- uses health centers and health districts as the operational units for PHC delivery;
- encourages the involvement of communities and NGO's in PHC management; and
- applies practical approaches to operations research and training.

B. FINANCIAL

As a backdrop for a more detailed exposition of the financial aspects of the project, the Financial Analysis (Annex N) presents an overview of proposed project activities and a budget summary. Site development costs are estimated for each type of facility and used, in conjunction with the development schedule, to estimate annual development costs.

The document next outlines a financial model of the provincial drug distribution and cost recovery system. This provides the framework for examining the financial feasibility and sustainability of the system at different fixed-cost levels and utilization rates.

The results of this analysis are used to estimate annual recurrent costs, project-generated revenues and to calculate the operational subsidy required over the life of the project. The final section examines a number of factors affecting the sustainability of the system.

By utilizing estimates of fixed and variable costs and revenues, the breakeven analysis of the PHC system examines the conditions under which the co-financed PHC system is financially feasible. It looks at the performance of a fully operational PHC system at the low, medium and high cost options for annual health center utilization levels of 0.15 and 0.25 cases/person.

Based on the analysis, the high cost option, with fully-funded depreciation, does not appear

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to be feasible in either the South or Adamaoua Provinces, but could be used in the Far North Province with its higher population density. Under the medium cost option, PHC system financial performance is more satisfactory: as a group, the health centers incur a deficit of 17 million FCFA at a utilization rate of 0.15; they achieve breakeven at about 0.23 cases/person. At the low cost option (which does not include cost recovery funds for depreciation), the system can breakeven at a utilization rate of approximately 0.15 cases/person. Given the current economic situation, it is probably best to use cost and revenue projections which assume that utilization will increase from the current level of about 0.15 in the South and Adamaoua Provinces to 0.20 over the life of the project.

There are a number of important factors that affect the viability of a primary health care system like this, partially financed through cost recovery. These include:

Availability of Drugs. Ensuring the reliability of the drug supply and distribution system is critical to the success of the co-financed PHC system. The unavailability of drugs is a primary reason for the low utilization of MOPH health centers. Drug supply problems during MCH/CS I have delayed project implementation, reduced revenues and undermined public confidence in the re-oriented PHC system. While supply problems appear to have been corrected, distribution problems persist. Unless these are effectively resolved, they could threaten the survival of the new system.

Pricing Policy. Cost recovery objectives are extremely ambitious. Drug sale revenues must cover not only the cost of drug distribution, but also most of the non-GRC personnel costs of the PHC system. Even at the lowest procurement prices, the mark-up necessary to cover these costs could affect the competitive position of the co-financed health centers. If their prices are higher than those of alternative sources, patients may choose to purchase their drugs elsewhere.

Differential pricing, through which larger mark-ups are placed on less expensive and less critical products, can be used to promote a more cost-effective use of drugs. However, this, per se, will not necessarily enhance the viability of the system.

It is the policy of the MOPH that no one be denied access to health care because of inability to pay. One method proposed for financing the care of the indigent is to earmark a portion of the drug mark-up or of surplus revenues for this purpose. While this approach has merit, it also raises some equity concerns, since the burden of indigent care would be borne by the sick rather than by the population as a whole.

Utilization of Health Services. A major assumption underlying the operation of the PHC system is that utilization will be high enough to cover the costs of the system. While MCH/CS II revenue and cost projections have been based on an annual use rate of 0.25 cases/person, actual 1992 utilization in MCH/CS I co-financed health centers has been closer to 0.15. Moreover, utilization of health centers with small and/or scattered populations may be insufficient to cover the fixed costs of these centers, requiring subsidies from the provincial health fund (FSPS). It is essential, therefore, that management be responsive enough to reduce fixed costs to accommodate lower revenue levels.

The Economy. There is general consensus that the FCFA is overvalued and there is a real

possibility of currency devaluation in the foreseeable future. This would increase the price of imported drugs and this cost would have to be passed on to the users of co-financed health facilities. The resulting decline in utilization would have an adverse impact on system survival.

The current and ongoing economic crisis has resulted in a drop in disposable income and in a decline in health services utilization. This situation has serious implications for the viability of the PHC system.

Nonetheless, even with these concerns, the project is financially feasible because:

- it is based on cost recovery measures to finance recurrent costs of PHC;
- the GRC has legislation supporting decentralized management and cost recovery;
- it is based on realistic utilization rates increasing from 15% to 20%;
- it builds on existing structures for securing the drug supply; and
- it does not presume increased GRC funding of PHC

C. ECONOMIC

This analysis examines the current economic environment within which the Cameroonian health care delivery system must function, describes trends in GRC funding, and discusses the implications of the current policy environment for health care financing reform. The potential of cost recovery is also presented including a discussion of equity issues. The project benefits versus costs is also discussed.

■ Current Economic Status

USAID, in its November 1992 Country Program Concept Paper Analytical Study, estimates Cameroon's per capita income at $860, placing Cameroon in the "low-middle income" group of countries by World Bank standards. The rapid economic growth from independence through the mid-1980s has resulted in only minor movement along the path of social and economic progress and transformation. Per capita income levels mask the fact that Cameroon remains very much a dual economy, with a relatively small formal sector and a significant portion of the population at subsistence level.

The current economic downturn, has resulted in public investment in health that is less than 1% of the total GRC investment budget. Of this, 80+% is allocated to personnel, with less than 20% of the budget currently available for non-personnel operating costs. The inability of the MOPH to spend more than 60% of its non-personnel budget allocation (due to lack of liquidity of provincial treasuries) has further exacerbated this problem.

To its credit, the GRC is aware of the constraints affecting health and has issued a draft health sector policy which addresses the rationalization of the health infrastructure, human resources management, improved drug distribution and prescriptive practices, as well as health care financing. Moreover, the GRC has promised to increase the health share of the national budget to 10%, as advocated by WHO, over the next ten years.

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The environment for health financing policy reform is, in fact, very positive and the need for more fundamental changes in the health infrastructure has been officially acknowledged. However, rationalizing the distribution of health resources is politically difficult and it remains to be seen how successful the MOPH will be in effecting these changes. The cost recovery program is intended to complement and not replace MOPH funding for PHC, so the ultimate success of the PHC program is contingent upon continued financial commitment by the GRC.

- **Cost Recovery Issues**

Cost recovery issues include the health consumers' ability and willingness to pay; the pricing of drugs and health services; the financing of indigent care; and provincial revenue-sharing.

Studies have shown that the demand for health care is both price- and income-inelastic. In other words, an increase in the price of a given health service will result in a less than proportionate decline in the quantity demanded, whereas an increase (decrease) in income will result in a less than proportionate increase in the quantity demanded at any given price.

Enhancing the perceived quality of health services by improving the availability of drugs (with no change in the price charged for these services) will result in an increase in demand. Conversely, introducing a cost recovery system in which prices are increased with no change in quality will result in decreased utilization.

In a study in the Adamaoua Province, a simultaneous improvement in health services quality and the introduction of a charge for health services and drugs in project-supported co-financed health centers, resulted in a marked increase in utilization of and expenditures for health services in co-financed facilities. Thus, the positive effect of improved quality more than offset the negative impact on utilization caused by the introduction of fees.

An offsetting circumstance is the dramatic decline in overall health services utilization in Cameroon in recent years. It is assumed that a major part of this drop is attributable to the economic crisis which has persisted since 1986. People have less disposable income and are consequently spending less on health care. Public health centers are seeing fewer than half of the patients they saw a few years ago. Both of the country's major missionary health networks, the Federation of Evangelical Missions in Cameroon (FEMEC) and the Catholic Health Services Foundation (Ad Lucem), are having serious financial difficulties.

While MCH/CS I co-financed health facilities have experienced an initial rise in utilization, this increase was less than anticipated. A review of 12 health centers conducted during the mid-term evaluation showed an average 1991 utilization rate of 0.18 new cases per capita, about 25% below projected levels. This was accompanied by lower than expected revenues per new case, resulting in a nearly 50% shortfall in projected revenues. In 1992 at these sites, there was an increase in revenue per new case to the originally projected level of about 2500 FCFA, but the average utilization rate dropped to 0.14 new cases per capita.

In summary, while there is strong evidence that the population is willing to pay for health services, economic constraints faced by the GRC and private households may necessitate a revision of cost recovery targets and a prioritization of activities to be financed through cost

recovery, because revenues may be inadequate to cover all activities currently planned.

- **Equity Issues of Cost Recovery**

There are equity issues associated with the proposed use of cost recovery funds to purchase vaccines which are administered free, because this practice is tantamount to a tax imposed upon the sick to finance a service for the entire population. Ideally, vaccine costs should be shared by the entire population both sick and healthy.

It is the policy of the MOPH that no one be denied access to health services because of inability to pay. Accordingly, each co-financed facility has been provided guidelines for the formulation of its own policy on indigent care. It is anticipated that each health committee (COSA) will identify individuals within its community who really cannot afford to pay for health care and will earmark a percentage of cost recovery revenues or set up another mechanism to finance the care provided to this segment of the population.

The provincial health fund (FSPS) is a mechanism to promote "solidarity" involving drug sales and cost recovery, through which a portion of the "surplus" generated by the drug distribution system is earmarked for redistribution to health districts and health centers. Decisions regarding the award of funds would be made by the CAPP board of directors (general assembly) at its annual meeting based on an evaluation of action plans submitted by districts and health areas applying for such funds. This solidarity mechanism is seen as a way to fund health activities which could not otherwise be implemented.

- **Cost Benefit Analysis**

For most development projects, the economic analysis would involve the use of standard cost-benefit methods, but for several reasons such an analysis is inappropriate for MCH/CS II. First, many of the project interventions will lead to changes in the health system, not just improvements in service delivery. These benefits from the project are difficult to quantify and nearly impossible to fit into a pre-determined timeline.

Second, although the cost side of cost-benefit analysis is relatively easy to address, the benefits are indirect and difficult to measure. When illnesses are averted, the savings in cost of treatment could be quantified, but the pure utility values of reduced morbidity, and mortality, and the value of improved performance in school or on the job cannot be realistically determined.

The primary objective of the project is to improve the PHC system and to ensure sustainability of these improvements by instituting community participation, cost recovery activities, and effective management and supervision systems. Some of the major outputs will be community co-financed and co-managed health centers organized into health districts.

The creation of the health center pharmacy with competitively priced generic drugs means that quality curative services will be economically and geographically more accessible, leading to a significant increase in consumer welfare. In addition to reduced morbidity through more effective curative care, increased utilization of health centers will also increase contacts for preventive and promotive services. Increased utilization of PHC will reduce the

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unnecessary use of more costly referral facilities at the provincial level. Growth in national health expenditures can be reduced to the extent that future services are delivered at more appropriate and lower cost sites.

The profits generated by the health centers and the introduction of user fees for services will result in an increased flow of financial resources to meet the recurrent costs of the health system. This will significantly improve the productivity of the health sector's existing physical and human resources.

The approach taken in this project to provide a comprehensive package of primary health care interventions is fairly standard for development agencies financing PHC projects. Quantitative analysis of these projects is always problematic. However, there is at least general evidence from a variety of sources that implementation of selected PHC interventions is a cost-effective strategy. "A Review of 21 Primary Care Projects" (Wilcox, et al 1984) found that ORT, growth monitoring, health education, immunizations, family planning and nutritional counseling show consistently positive results in reducing morbidity and mortality. A study of mortality (WHO, "Interventions for Reducing Diarrhea Morbidity and Mortality", 1984) classifies nutrition promotion, measles vaccination, and health education as clearly effective and known to be feasible and affordable.

The operations research and policy aspects of the project are expected to lead to improved quality and efficiency of services and more effective cost recovery strategies. These improvements are expected to increase financial autonomy and long-term viability of the whole PHC system.

In conclusion, MCH/CS II is economically worthwhile because it:

- proposes PHC interventions which are well recognized to be cost effective;
- builds on an economic environment which favors health financing policy reform;
- improves quality of care while introducing fees for service;
- is based on evidence that populations are willing to pay for health services;
- promotes redistribution mechanisms to resolve problems of equity;
- uses well paid health personnel (in comparison with other African countries); and
- develops access to essential medicines to fund cost recovery.

D. SOCIAL SOUNDNESS

The population of Cameroon, estimated at 12 million in 1991, is very unevenly distributed over the territory. Although the average density is about 22 persons per square kilometer, variations among provinces range from 4.7 in the East Province to 95.8 in the West Province. The table below shows the population and density for the three provinces included in the MCH/CS II Project.

Table 7.1
Population and Density (1987)

Provinces	Population	Density (persons/Km2)
Adamaoua	491,000	7.9
South	337,000	8.0
Far North (4 divisions)	1.410,000	54.9

There are approximately 200 distinct ethnic groups in Cameroon, each with its own language. According to a UNICEF study, there are 7 major groups in the Center and South Provinces, 5 in the Adamaoua and North Provinces, and 6 in the Far North Province. There is no overlap among these groups between the three provinces in which the project will be working. Ethnic diversity complicates project operations since health committees at the health center, health district, and provincial levels each need to reach consensuses on important planning and budgeting issues.

The RPHC policy decentralizes to provincial and district health officials the responsibility for planning, funding (from cost recovery funds), and delivering primary health care.

The RPHC also calls for community participation in co-managing local health facilities and in safeguarding and utilizing cost recovery funds generated at the facility. This type of partnership is new to Cameroon and is not yet working well in the re-oriented PHC facilities supported under USAID's MCH/CS I Project. This situation reflects the difficulty in changing the top-down management orientation of the MOPH personnel and the general suspicion and/or cynicism of local communities (based on past experience).

Corruption, particularly in relation to the use of GRC budgetary funds, is reported to have become endemic in recent years--more the norm than the exception. This is a serious socio-cultural factor with which the project implementers must cope. It will affect the level of MOPH budgetary support which actually reaches the project-supported facilities; potentially, it could undermine the cost recovery system.

Cameroonian efforts to improve health standards are also hindered by the level of education in the country. Fifty percent of women and 30 percent of men do not know how to read and write. Studies the world over have shown a direct correlation between the level of girls' education (beyond the first few years of primary school) and fertility rates, rates of infant mortality, the health and nutritional status of children, and family planning acceptance. In Cameroon, only 37 percent of women have been to primary school (9 percent to secondary school). Further, one-third of the children in primary school abandon it before completion; the drop-out rate is higher for girls.

The health of mothers and children is highly dependent on the status of women. The present situation in Cameroon, especially in rural areas where women have a heavy burden of domestic duties, must work in the fields and are prone to numerous offspring at short intervals, is not favorable to the improvement of the health of women. Maternal mortality

is very high (420 per 100,000 live births), especially from malaria, goiter, and complications of pregnancy, delivery, and sterility. Abortions (which are illegal) are also a source of maternal mortality.

Infant mortality, estimated at 90 per thousand, is responsible for 30 percent of the deaths in the country. Maternal malnutrition is responsible for low birth weight (under 2.5 kg) of 11 percent of all children and their general weakness and susceptibility to diseases later in childhood. (UNICEF, 1990)

Socio-cultural Feasibility Issues

The crucial elements affecting the success of the project which have socio-cultural elements are the cost recovery program and the motivation of MOPH personnel. Socio-cultural factors can affect the cost recovery program through their impact on the community's utilization of the health facilities and on the community's role in the management of the revenues generated from fees for services and sales of medicines (cost recovery funds).

The level of utilization of the health center will be a function of: its accessibility/availability; the price and quality of its services; and the level of understanding of the target populations of the causes of health problems and the feasibility of disease prevention. The latter affects people's decisions about whether to go to the health center or to a traditional healer, and whether to participate in vaccination and other preventive medicine programs. People's attitudes about health issues, health providers, and cost recovery are discussed in Annex K.

The RPHC strategy, which provides for community co-financing of health services, also calls for community co-management of health facilities. This could help ensure that prices are kept realistic and that high quality services are maintained. Some of the issues involved in the cost recovery proposals are discussed in Annex K. Annex K also includes recommendations for future work with communities before the RPHC program is begun in their areas, plus proposals for operations research in areas already in the program.

The French word "motivation" is used in Cameroon health circles (including COSAs and COGEs) to mean financial payments in addition to one's salary or wages. Such payments seem to be seen as something to which one is entitled regardless of one's performance--just for doing what one should be doing for one's salary. This seems to reflect two unfortunate circumstances: 1) many donors have paid salary supplements ("primes" or generous per diems) to get good people to work well on "their" projects, so that donors could show greater project progress; and 2) the pervasiveness of corruption (or at least a perception of such a situation) in the utilization of the MOPH's own resources seems to have led to a widespread feeling that every employee is entitled to get as much as possible from any activity, especially if it is financed from the MOPH budget or from a foreign donor.

The foregoing situation is further complicated by the inability (or at least the perceived inability) to discipline non-performers with financial disincentives (i.e., to terminate their employment or reduce their salary for days of unauthorized absences from their work).

In Annex K, a number of non-salary financial and non-financial incentives, including a series of awards for performance are proposed to deal with the issue of motivating MOPH

personnel.

Sustainability of project activities will depend upon socio-cultural and other factors. Perhaps the most fundamental factor is the success of the cost recovery program. In summary, sustainability will come down to the motivation and capability of MOPH personnel and the quality of their relationship with the community.

The direct beneficiaries of the project are twofold: a) 900 MOPH personnel, who will be receiving training and technical support from the project; and b) 1.4 million inhabitants of local communities, who will have access to curative and preventive services, including the purchase of essential medicines from health facilities. In addition, local communities will also be indirect beneficiaries, because they will be able to receive services from MOPH health facilities that were not previously available. They will also have the opportunity to participate in the management of local health facilities and to carry out health projects of their own.

Within the local community, the primary beneficiaries will be women and children. They are the most vulnerable to health problems, and they are the most frequent visitors to health centers. Hence, women and children should gain the most from more extensive and effective outreach programs.

The equity challenge for project implementers will be to ensure that: 1) women have a voice in the planning and implementation of the facility-based and outreach programs in the re-oriented health facilities; 2) the project-supported facilities deliver a higher level of health care to women and children; and 3) women and children are able to avail themselves of the care provided.

All in all, in spite of such challenges and problems, the MCH/CS II Project is socially sound as designed because it:

- is based on curative, preventive and promotive PHC;
- helps meet the felt need of the population for access to medicines;
- will increase access to PHC to 70% percent of the population;
- is based on community co-management and co-financing;
- promotes community development and the role of women;
- promotes non-monetary motivation of health personnel; and
- establishes health services with respect to ethnic variables.

E. ADMINISTRATIVE

The Administrative Analysis (Annex M): (a) describes the legal, financial, organizational, and managerial environment in which the project will operate; (b) gauges the extent to which the institutions involved are capable of playing their assigned roles during the life of the project; and (c) determines the capacities that may need to be developed so the institutions will be better able to assume, after project completion, their long-term roles (as envisaged in the project goal and purpose).

The implementing agencies involved in MCH/CS II will be the MOPH and a number of semi-autonomous, non-profit community associations which will be developed in three provinces (Far North, South, and Adamaoua) at the provincial, district, and health area levels.

Since the community health committees (COSAs) have not yet been registered as associations, the analysis in Annex M is primarily that of the MOPH, especially at the provincial level and below. There is also some discussion of the draft by-laws developed as a basis for establishing and managing the associations.

A greater delegation of authority to the Provincial Health Delegations, especially for resource and personnel management, decreases the burden upon the central MOPH to resolve problems in these areas. Further decentralization of responsibilities to the health district level will coincide with the increased responsibility for programming and utilizing cost-recovery revenues.

Laws have been enacted to permit community participation in the co-management of cost recovery funds. In addition, the MOPH is working on a legal framework for creating inter-locking non-profit associations at the provincial, district, and health area levels which have responsibility for managing the funds. Under the current system, the CAPP collects surplus revenues from each center when drugs are delivered and deposits them in a CAPP-managed bank account. The Provincial Delegations have an interest in retaining control over funds. Unless the funds are turned over to community managed associations as described in the bylaws, the associations may not function as intended.

Financial Status

GRC support is provided in the form of buildings, land, salaries, and by modest investment and operating budgets. Most of the resources are consumed in salaries, with the rest going to other operating costs. Allocations are through letters of credit to Provincial Delegations and hospitals. Centralized, non-participatory budget development and management are an obstacle to improving public services. Decentralizing accounting and financial management will require that appropriate systems be developed and staff trained to operate them. Audit risks may increase, and monitoring and oversight capacities will need to be increased.

Each province operates a provincial drug supply center (CAPP), which allocates a fixed proportion of its markup to the improvement of health services. Once the health associations are established, they will have the responsibility for managing funds for the benefit of the community. Particular attention will need to be paid to (a) making the drug pricing model more dynamic; (b) expanding the CAPP to include lab supplies and equipment spare parts; and (c) limiting budgets to the revenues (minus depreciation) already generated in previous years.

Pattern of Organization

Within each province, the Provincial Health Delegations are responsible for revising and implementing policies, strategies, standards, procedures, and performance targets for the delivery of public health services. In the future, provinces will make recommendations to

the FSPS general assemblies concerning (a) public health priorities, (b) population coverage by facility, (c) personnel staffing patterns, and (d) annual planning and budget development parameters.

Management

During the reorganization of the divisions and sub-divisions into health districts, there is a temporary vacuum in mid-level health management. Provincial and district workplans and budgets are not yet tied to priorities and performance targets. Reports should compare actual activities and expenditures to those planned and budgeted and measure progress towards the targets. Additional information on facilities, durable equipment, and staffing should be collected and included in the annual report as a basis for investment decisions and to develop plans for hiring, training, and/or retraining staff.

Provincial teams need to shift away from direct exchanges with health centers to a role of monitoring and strengthening the performance of the district teams. A strategy for composition of district health teams needs to be defined, including guidance on how they should plan and manage their activities and provide technical guidance to health center staff through on-the-job training and supervision.

Supervisory protocols should be developed for the Provincial Health Delegations. Those for the district teams should provide a structured basis for monitoring services at the health centers and a firm basis for measuring staff skills and performance. Supervisors should receive training in the use of revised supervisory regimes which emphasize teamwork and improved quality of care.

In conclusion, MCH/CS II is administratively feasible because it:

- encourages (and the MOPH accepts) decentralized management of PHC;
- provides a legal framework to facilitate community co-management of PHC;
- is based on health centers and health districts as operational units for PHC;
- builds on the administrative mechanisms established by MCH/CS I; and
- strengthens planning, budgeting and management of PHC.

F. WOMEN IN DEVELOPMENT

Women and children are intended to be the primary beneficiaries from the MCH/CS II Project. Annex L looks at the role of women in the design and expected implementation of the project; the constraints to women benefitting from the project; the opportunities for increasing women's involvement in and benefits from the project; and the availability of sex-disaggregated data to measure the impact of the project on women.

Women have been involved only indirectly in the design of the project. They will be involved in its implementation as: 1) beneficiaries; 2) members (potentially at least) of the community groups participating in the co-management of the health facilities in the RPHC program; 3) MOPH health providers; 4) members of the technical assistance team working on the project; and 5) female PCVs. The degree of involvement of the different groups is

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discussed in Annex L.

The constraints to women benefitting from the project include: 1) very low family incomes, the use of which is usually controlled by their husbands; 2) low educational levels; 3) extremely long hours of hard work which makes it difficult to go to health facilities when health services are being provided; and 4) lack of information about vaccination programs and other outreach activities of health facilities. Some amelioration of the foregoing might be accomplished if there were more women health providers and more significant women's involvement in the co-management of the health facilities. The former does not seem likely during the project. The latter is discussed further below.

Women, in their focus group discussions, have noted that they often cannot go to health centers for their own or children's care without the approval of the husband. Sometimes men have objected to vaccinations. Men, in their focus group discussions, complain that their wives are not sufficiently sensitive to the costs of health care.

It would be unrealistic to expect a husband and wife consensus at all times on health issues. Nevertheless, there appears to be a need for considerable IEC work on preventive health care, particularly with husbands/fathers about maternal and child health. Some operational research may also be needed on what type of message and what method of conveying the message is most likely to be effective in achieving positive support from husbands/fathers on critical health issues such as vaccinations for mothers and infants.

It may well be that a re-structuring of the pricing for services and medicines could eliminate disincentives for undertaking preventive health care, e.g., waiving the charge for visits to health centers for weighing new born babies. This in turn might help overcome some of the financial concerns expressed by the fathers.

It seems likely that a significant involvement of women in the co-management of the local health facilities could result in those facilities becoming more responsive to women's and children's needs, and in women being better informed about activities of the facilities in which they could participate. However, few women are involved in the community's participation in the co-management of health facilities. In most of the cultural settings in Cameroon, joint men-women groups or meetings are the exception.

Given the foregoing, it seems likely that a mechanism other than the COSA must be found to permit community women to make an input into decision-making regarding the functioning of the local health facility. Some ideas follow on how to achieve greater women's involvement:

- forming a women's health advisory committee in addition to the COSA;
- encouraging the formation of a women's health club, to which health personnel could be invited to discuss current health activities and respond to the women's questions;
- arranging for women's focus group discussions on a periodic basis and providing reports thereon to COSAs and to health officers at local, district, and provincial

levels. (These discussions might provide ideas for operational research activities, as well as the need for immediate action by health personnel.);

- establishing criteria for project- and FSPS-funded development grants to health committees which give priority to projects which are developed and managed by women;

- assuring that both internal and external project evaluations assess the role of women in the co-management of health services.

In addition to the above, it is possible that the local community could come up with better ideas for ways of involving women and/or meeting their health needs. To do this, however, the community may need more information about its health problems, particularly those of mothers and children, and about measures for dealing with them. The community also needs a more complete understanding of how the local physical environment may be effecting some of the health problems. It is for that reason that the design team has suggested that the process of integrating new health facilities into the RPHC program start with a health inventory of the community. The project's annual reviews and external evaluations will gauge progress in achieving greater women's involvement in the RPHC program.

The participation of female Peace Corps Volunteers in MCH/CS II, particularly in outreach activities, could also help ensure that the project activities would be more responsive to women's needs. At the least, the women would have another channel for communicating their needs or concerns to health officials. Volunteers might also have time for secondary activities such as promoting literacy, providing information on nutrition or gardening, or encouraging and facilitating small income-generating activities.

Information is maintained at the health center level on the sex of patients seen. Although this information generally is not reported to, or compiled at higher levels, this is not considered a serious drawback for ascertaining whether women are benefitting from or participating in the project. More important data relating to the achievement of project purposes are the rates of vaccination (maternal and child), and these data are included as a part of the health management information system (HMIS).

If not included in the HMIS, it will be important to have the TA contractor obtain information on and report about the involvement of women in the co-management of local health programs.

In conclusion, the MCH/CS II Project promotes women in development because it:

- proposes involvement of women on health management committees;
- encourages community self-help initiatives involving women;
- provides for focus groups with women to generate ideas for promoting PHC; and
- emphasizes PHC services to increase the health of women and children.

(4)

VIII. CONDITIONS PRECEDENT AND COVENANTS

To facilitate implementation of the project in accordance with the project logical framework and the implementation schedule, the following conditions and covenants will be included in the grant agreement with the Ministry of Public Health.

A. CONDITIONS PRECEDENT:

1. Prior to any disbursements under the grant to support health district hospitals or health district offices, the Grantee will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and in substance, satisfactory to A.I.D., evidence that:

(i) The delimitation of health districts for the entire project-assisted area has been completed and has been approved by the MOPH; and

(ii) District hospitals in project-assisted areas have been granted special authorization to retain 50% of the fees which they generate from the provision of services at the hospitals.

2. Prior to the distribution of project-purchased commodities to a specific health district office, the Grantee shall provide the minimum designated personnel to staff the health district office based on standards developed by the Grantee for a functional health district team.

B. COVENANTS:

Unless the Parties agree otherwise in writing, the Grantee covenants to:

(1) Negotiate at least one agreement with a non-governmental organization (NGO) for the collaborative management of a health district, and at least one agreement with an NGO for the collaborative management of a health center zone in the project-assisted area;

(2) Approve the statutes and periodic review process for the organization and administration of community managed provincial health funds;

(3) Assure that during the life of the project the project-assisted provinces shall maintain their authority to competitively procure low-cost, generic medicines through either domestic or international sources;

(4) Make funding available from MOPH budgetary credits to procure vaccines in amount equal to the total provided by USAID funds ($235,000).

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ANNEX A

- PID APPROVAL CABLE

ACTION: REDSO-1
INFO: ECON-1

DISTRIBUTION: AID
CHARGE: AID

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ACTION PDE
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DUE DATE 11/09
CHANGE ACTION TO:
ACTION TAKEN

AIDAC

E.O. 12356: N/A
TAGS:
SUBJECT: MCH II PF GUIDANCE AND DELEGATION OF AUTHORITY

REF: A) STATE 342410
B) STATE 345066

SUMMARY. PURSUANT TO REF A, THIS CABLE PROVIDES GUIDANCE FOR DEVELOPMENT OF PP AND DELEGATION OF AUTHORITY TO THE FIELD FOR PROJECT APPROVAL. FYI FORMER IS BASED ON INTERNAL REVIEW OF PID HELD IN JUNE PRIOR TO ABS MEETINGS. REGARDING AIDS FUNDING CITED REF B, WE ARE AWARE THAT MISSION HAS ALREADY INCREASED PLANNED FY 93 AIDS FUNDING IN CONJUNCTION WITH MCH II PROJECT. END SUMMARY.

A. HEALTH CARE FINANCING AND FINANCIAL SUSTAINABILITY. THE PID DIRECTLY ADDRESSES THE ISSUES OF HEALTH CARE FINANCING AND FINANCIAL SUSTAINABILITY, INCLUDING THE LINKAGE BETWEEN THE MACROECONOMIC ENVIRONMENT AND FINANCING IN THE HEALTH SECTOR, THE COST OF DELIVERING INTEGRATED HEALTH SERVICES, AND THE RESPONSIBILITIES FOR FINANCING THE RECURRENT COSTS OF THE HEALTH SYSTEM. THE MISSION SHOULD BROADEN ITS DISCUSSION ON FINANCIAL SUSTAINABILITY, BUILDING ON THE DISCUSSION ALREADY INCLUDED IN THE PID. THE PP SHOULD EXPAND AND BROADEN

THESE DISCUSSIONS AS PART OF A COMPREHENSIVE ECONOMIC/FINANCIAL ANALYSIS, INCLUDING A DISCUSSION OF OPTIONS FOR LONG-TERM FINANCING OF HEALTH SECTOR ACTIVITIES AND HEALTH CARE IN CAMEROON. THE PP SHOULD ALSO INCLUDE MORE DETAIL ON THE IMPORTANCE OF INTERNATIONALLY COMPETITIVE PROCUREMENT OF DRUGS AND HOW IT RELATES TO FINANCIAL SUSTAINABILITY IN THE HEALTH SECTOR.

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B. INSTITUTIONAL ANALYSIS. THE PID PROVIDES A DETAILED DISCUSSION OF HOW THE HEALTH MINISTRY IS STRUCTURED ORGANIZATIONALLY. THE PID IDENTIFIES THREE MAIN IMPLEMENTING BODIES FOR THE PRIMARY HEALTH CARE PROGRAM. THE PP SHOULD INCLUDE A MORE COMFREHENSIVE INSTITUTIONAL ANALYSIS OF THESE BODIES IN ORDER TO MORE FULLY UNDERSTAND THEIR CAPACITY TO IMPLEMENT THE PROPOSED ACTIVITIES.

C. OTHER DONOR ACTIVITY. THE PID INCLUDES A GOOD DISCUSSION OF OTHER DONOR INPUTS INTO THE HEALTH SECTOR. THE PP SHOULD PROVIDE ADDITIONAL DETAILS ON HOW THE PROPOSED WORLD BANK HEALTH SECTOR LOAN WILL COMPLEMENT AND ENHANCE THE MCH/CS II AND OTHER DONOR FROGRAMS IN FRIMARY HEALTH CARE. THE MISSION IS ENCOURAGED TO DRAFT A MATRIX OF OTHER DONOR ACTIVITIES AND HOW THEY RELATE TO AND PROVIDE SYNERGY TO THE ACHIEVEMENT OF THE OVERALL OBJECTIVES OF THE PROJECT.

D. SUPPLY OF PHARMACEUTICALS. ONE OF THE EXPECTED ACHIEVEMENTS OF THE MCH/CS II FROJECT IS TO UFGRADE THE PROVINCIAL MEDICAL SUPPLY/LOGISTICS SYSTEMS WHICH PROCURE COMMODITIES INTERNATIONALLY. THE PP SHOULD EXPLAIN HOW PHARMACEUTICALS ARE PROCURED IN GENERAL AND WHAT THEY ARE HOPING TO ACCOMPLISH BY THE ABOVE MECHANISM.

E. PROCUREMENT OF PROJECT MOTOR VEHICLES. PER RECENT GUIDANCE, THE MISSION IS STRONGLY ENCOURAGED TO BUY AMERICAN VEHICLES.

F. IN ACCORDANCE WITH DOA 551, MISSION HAS THE AUTHORITY TO APPROVE THE PP IN THE FIELD, SUBJECT TO THE ABOVE GUIDANCE.

G. PLEASE FORWARD COPIES OF APPROVED PP TO AFR/CCWA AND AFR/ONI/TPPI. KANTER
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ANNEX B

- LOGICAL FRAMEWORK

ANNEX B
MCH/CS II LOGICAL FRAMEWORK

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
I. GOAL:			
Contribute to the improvement of the health status of the people of Cameroon, particularly women and children under 5 years of age.	Contribute to an overall reduction of infant, child, maternal and general mortality rates.	DHS survey, 1996	Economic and political variables are stabilized to avoid negative impact on the delivery of health services.
II. PURPOSE:			
To increase the accessibility and utilization of financially sustainable, effective, and efficient primary health care in health districts of South and Adamaoua Provinces and four divisions of Far North Province.	180 health centers in 27 health districts are providing comprehensive PHC services, thereby increasing the health coverage from 34 to 70%.	HMIS, Supervision and evaluation reports	That the MOPH remains dedicated to a reorientation of PHC based on the health district and provides sufficient personnel to carry out the re-orientation in the project areas.
	Utilization of health centers increases to 20% as expressed by the number of new cases per year as a proportion of the catchment population of assisted health areas.	HMIS, Supervision visits and evaluation reports	Personnel trained by the project will remain in a project-assisted province for at least three years.
	60% vaccination coverage for measles and DPT III for children in targeted health areas.	HMIS, Cluster sampling	The population will have enough disposable income to pay fees for health services and purchase drugs.
	50% of pregnant women make at least 3 pre-natal consultations during a pregnancy.	HMIS, Studies	The MOPH will be able to meet its payroll expenses.
	50% vaccination coverage for tetanus toxoid for women of reproductive age in targeted health areas.	HMIS, Supervision and evaluation reports	
	80% of children presented for treatment of diarrhea at targeted health centers will be treated according to the guidelines of the national CDD program.	Supervision and surveys	

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
III. EXPECTED OUTPUTS:			
A. HEALTH DISTRICTS: Health districts which are supported by the project are effectively managing and coordinating the delivery of quality PHC through community co-managed and co-financed health facilities.	Guidelines for management of health districts and technical standards for individual PHC components and interventions have been approved by the MOPH and are available and being used in health districts.	HMIS, supervision reports, site visits	Delimitation of health districts for the 3 project-assisted provinces/ divisions will have been completed and approved prior to the start of the project.
	All project assisted health districts have delimited health areas, functional district health and management committees and written action plans.	HMIS, Supervision reports, Site visits	
	100 project assisted health areas become functional and increase PHC coverage to 70% of the population.	HMIS, Supervision reports, Site visits	
	Collaboration between existing Cameroonian NGOs and the MOPH in the management of health districts is effective, with four districts managed with an NGO and at least 2 health areas per province based on an NGO facility.	HMIS data base reports, Site visits	
	90% of targeted health centers and reference hospitals possess the priority equipment and materials to provide PHC & referral services.	Distribution and Supervision reports	
	Management strategies for ARI are integrated in all health centers and for schistosomiasis and onchocerciasis where these problems are highly endemic.	Supervision visits	
B. CAPP: The provincial drug supply centers (CAPPs) provide health facilities with access to essential medicines.	No more than 20% of health centers reporting any of the five most frequently used medicines as out of stock during the year.	HMIS, Supervision visits, Site visits	MOPH will ensure that the provinces have the needed authority and support to maintain a stock of medicines adequate to serve all provincial health facilities
	No health center reports any of the five most frequently used medicines out of stock for more than 30 cumulative days per year.	HMIS, Supervision visits, Site visits	The provincial medical supply systems will work effectively and drug outages will be rare.

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
C. COST RECOVERY: Sustainability of PHC will be increased through community financing of health services and improved MOPH management of the budgetary resources allocated to primary health care	Cost recovery revenues are covering recurrent costs (other than GRC salaries) in 75% of health centers.	HMIS, Financial reports	
	District hospitals and the provincial health fund (FSPS) in each project-assisted province generate surpluses to contribute to the implementation of health district plans of action.	FSPS reports and records	
	The general assembly of the FSPS meets annually, or as needed, to approve plans, budgets and operations of the FSPS and CAFP.	FSPS reports and records	
	Within general MOPH allocations, and in relation to their respective health plans, provincial and district health teams develop detailed budgets and manage available funds.	Site visits, Evaluations	
D. HMIS: Health management information systems will be functional at all health system levels providing information on health status of the population, physical and financial resources, skills of personnel, and service statistics.	Staffing norms for health districts have been established and efforts are made to implement them.	Textes d'Affectation de Personnel, Site visits	MOPH and the NGOs will be able to negotiate an agreement for collaborative management of health districts.
	80% of planned supervision visits are made within the time period planned.	HMIS, Supervision reports	Cost recovery and GRC budgets are adequate to finance and maintain regular supervision by the third project year.
	85% of monthly Health Management Information System (HMIS) reports are received at district and provincial levels with no more than a month delay.	Review number of HMIS reports received by the province	
	Provincial analysis of HMIS reports compare service statistics, drug use data, population coverage and quality of service to the health district work plans and to national and provincial norms or standards.	Provincial HMIS computer generated reports	

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	Baseline inventories for each facility are conducted, before providing assistance, on the status of the health of the population, of buildings, transport and equipment, and of staff skills.	Baseline inventory documents	Baseline data is updated approximately every five year
	Annual work plans and budgets state the most recent available data on the health status of the targeted population, identify priority issues, and set quantitative and qualitative performance targets.	Annual workplans and budgets	Health status data drawn fro clinic records and supplemented by surveys & O studies as necessary.
E. IEC: Information, Education and Communication activities by project-assisted health districts have been significantly expanded, with emphasis on empowering local communities to deal with their health problems and providing pre-natal, pre-school and vaccinations.	All health centers in the project area have district-approved plans and are reaching 70% of their targets.	HMIS, Supervision visits	
	75% of planned outreach visits from health centers to communities are being conducted.	HMIS, Supervision visits	
F. COMMUNITY DEVELOPMENT: Communities, and particularly women, are participating in the planning, managing and financing of health initiatives at the community and health center level.	90% of the community health planning committees (COSAs) have developed and implemented health area action plans.	Supervision visits	
	90% of health center management committees (COGEs) are fulfilling their obligations under the COSA statutes to ensure proper management of the funds generated at their health centers.	Supervision visits	
	80% of the health areas have active participation of women in the planning and implementation of health activities, e.g., through women's active participation in COSAs or by working with women's groups.	Supervision visits, Special studies	

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
G. OPERATIONS RESEARCH: Provincial Delegations and Health Districts will improve PHC management and quality of services through operations research.	100% of targeted health districts have a health team trained in management, supervision, IEC, and operations research.	Training reports	
	Annual operations research plans are being prepared in important areas such as technical standards, community participation, health worker utilization and motivation, and utility of the HMIS.	Annual Report of OR Activities, Review of individual OR reports	

ANNEX C

- STATUTORY CHECKLIST

ANNEX C

COUNTRY CHECKLIST

Listed below are statutory criteria applicable to: (A) FAA Funds generally and (B) Development Assistance Funds; or (C) Economic Support Funds.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FY 1990 Appropriations Act Sec. 569(b). Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully? No

2. FAA Sec. 481(h); FY 1990 Appropriations Act Sec. 568(b). (These provisions apply to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, narcotics education and awareness, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government): (a) Does the country have in place a bilateral narcotics agreement with the United States, or a NA

multilateral narcotics agreement? and (b) Has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (1) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals agreed to in a bilateral narcotics agreement with the United States or in a multilateral agreement, to prevent illicit drugs produced or processed in or transported through such country from being transported into the United States, to prevent and punish drug profit laundering in the country, and to prevent and punish bribery and other forms of public corruption which facilitate production or shipment of illicit drugs or discourage prosecution of such acts, or that (2) the vital national interest of the United States require the provision of such assistance? NA

3. 1986 Drug Act Sec. 2013. (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug producing country" or "major drug-transit country" (as defined for the purpose of FAA Sec 481(h), has the President submitted a report to Congress listing such country as one: (a) which, as a matter or government policy, encourages or facilitates the production or distribution of illicit drugs; (b) in which any senior official of the government engages in, encourages, or facilitates the production or distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails NA

to provide reasonable cooperation to lawful activities of U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

4. FAA Sec. 620(c). If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity? No

5. FAA Sec. 620(e)(I). If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No

6. FAA Secs. 620(a), 620(f) 620D; FY 1990 Appropriations Act Secs. 512, 548. Is recipient country a Communist country? If so, has the President: (a) determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism, or (b) removed a country from applicable restrictions on assistance to communist countries upon a determination and report to Congress that such action is important to the national interest of the United States? Will assistance be provided either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, South Yemen, Iran or Syria? Will assistance be provided to No

Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan?

7. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property? — No

8. FAA Sec. 620(l). Has the country failed to enter into an investment guaranty agreement with OPIC? — No

9. FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5. Has the country seized, or imposed any penalty or sanction against any U.S. fishing vessel because of fishing activities in international waters? (b) If so, has any deduction required by the Fisherman's Protective Act been made? — (a) No

10. FAA Sec. 620(g): FY 1992 Appropriations Act Sec. 518(a) Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1992 Appropriations Act appropriates funds? — (b) No

11. FAA Sec. 620(s). If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.) — NA

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12. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?		No
13. FAA Sec. 610(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the "Taking into Consideration" memo.)		Not in Arrears
14. FAA Sec. 620A. Has the President determined that the recipient country grants sanctuary from prosecution to any individual or group which has committed an act of international terrorism or otherwise supports international terrorism?		No
15. FY 1990 Appropriations Act Sec. 564. Has the country been determined by the President to: (a) grant sanctuary from prosecution to any individual or group which has committed an act of international terrorism, or (b) otherwise support international terrorism, unless the President has waived this restriction on grounds of national security or for humanitarian reasons?	(a) (b)	No No
16. ISDCA of 1985 Sec. 552(b). Has the Secretary of States determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?		No
17. FAA Sec. 666(b). Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under FAA?		No

18. <u>FAA Secs. 669, 670</u>. Has the country after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)	No
19. <u>FAA Sec. 670</u>. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device?	No
20. <u>ISDCA of 1981 Sec. 720</u>. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the "Taking into Consideration" memo.)	No
21. <u>FY 1990 Appropriations Act Sec. 513</u>. Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance?	No
22. <u>FY 1990 Appropriations Act Sec. 539</u>. Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin?	Yes

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B. 1. ELIGIBILITY CRITERIA FOR DEVELOPMENT ASSISTANCE.

1. FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy? — No

2. FY 1990 Appropriations Act Sec. 535. Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? — No

C. ELIGIBILITY CRITERIA FOR ECONOMIC SUPPORT FUNDS.

1. FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest? — No

2. FY 1990 Appropriations Act Sec. 569(d). Has this country met its drug eradication targets or otherwise taken significant steps to halt illicit drug production or trafficking? — No

PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects, and Part B applies to projects funded with Development Assistance.

A. GENERAL CRITERIA FOR PROJECTS

1. FY 1990 Appropriations Act Sec. 523; FAA Sec. 634A. If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified? — NA

2. FAA Sec. 611(a). Prior to an obligation in excess of $500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonable firm estimate of the cost to the U.S. of the assistance? — (a) Yes; (b) Yes

3. FAA Sec. 611(a)(2). If legislative action is required within recipient country with respect to an obligation in excess of $500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance? — NA

4. FAA Sec. 611(b); FY 1990 Appropriations Act Sec. 501. If project is for water or water-related land resource construction, has benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guideline.) — NA

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively? — NA

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6.	FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.		No
7.	FAA Sec. 601(a). Information and conclusion on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives; credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	(a) (b) (c) (d) (e) (f)	NA Yes No Yes NA No
8.	FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).		NA
9.	FAA Secs. 612(b). 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.		NA
10.	FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?		NA
11.	FY 1990 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?		No

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12. <u>FY 1990 Appropriations Act Sec. 547</u>. Will the assistance (except for programs in Caribbean Basin Initiative Countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel? — No

13. <u>FAA Sec. 119(g)(4)-(6) & (10)</u>. Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?

(a)	No
(b)	No
(c)	No
(d)	No

14. <u>FAA Sec. 121(d)</u>. If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)? — NA

15. <u>FY 1990 Appropriations Act, Title II, under heading "Agency for International Development."</u> If assistance is to be made to a United Sates PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? — Yes

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16. <u>FY 1990 Appropriations Act Sec. 537</u>. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?	Yes Yes
17. <u>FY 1990 Appropriations Act Sec. 514</u>. If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?	NA
18. <u>State Authorization Sec. 139</u> (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).	Confirmation of the date of signing, and full text of project agreement will be transmitted to AID/W following signature.
19. <u>Trade Act Sec. 5164</u> (as interpreted by conference report), <u>amending Metric Conversion Act of 1975 Sec. 2</u>. Does the project use the metric system of measurement in its procurement, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in matrix units when economically available and technically adequate?	Yes
20. <u>FY 1990 Appropriations Act, Title II. under headling "Women in Development.</u> Will assistance be designed so that the percentage of women participants will be demonstratably increased.	Yes

21. FY 1990 Appropriations Act Sec. 592(a). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies, has A.I.D. (a) required that local currencies, be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account? NA

Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purpose of the DA or ESF chapters of the FAA (depending) on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to be the recipient government and the United States Government?

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FY 1990 Appropriations Act Sec. 546 (as interpreted by conference report for original enactment). If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United

(1) NA

(2) NA

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States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?

b. FAA Sec. 107. Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small business, and small incomes of the poor)?

Yes

c. FAA Sec. 281(b). Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in government and political processes essential to self-government and political processes essential to self-government.

The project will address primary health care needs of 15% of the population, targeting women and children; will train Cameroonians to manage primary health care services; will utilize local technical expertise in project implementation; and will support development of community drug systems and local health committees.

d. FAA Sec. 101(a) Does the activity given reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes

e. FAA Secs. 102(b), 111, 113, 281(a). Describe extent to which activity will: (1) effectively involve the poor in development by extending access to the economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural

(1) Project will encourage decentralized planning and development of community financed and managed drug supply systems and expand health services in rural areas.

(2) Project will encourage development of community-financed and managed drug supply systems.

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	and urban poor to help themselves toward a better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help effort of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries.	(3) Activity directly supports Cameroon's Structural Adjustment Program, especially the Social Dimensions of Adjustment program. (4) Program is aimed directly at improving the health of women and skills of female health workers. (5) Project will utilize technical assistance experts from other African countries.
f.	FAA Secs. 103, 103A, 104, 105, 106 120-21; FY 1990 Appropriations Act, Title II, under headling "Sub-Saharan Africa, Da." Does the project fit the criteria for the source of funds (functional account) being used?	Yes
g.	FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA." Have local currencies generated by the sale of imports or foreign exchange by the government of a country in Sub-Saharan Africa from funds appropriated under Sub-Saharan Africa, DA been deposited in a special account established by that government, and are these local currencies available only for use, in accordance with an agreement with policy directions of Section 102 of the FAA and for necessary administrative requirement of the U.S. Government?	NA
h.	FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor(?	Yes
i.	FAA Secs. 110, 124(d). Will the recipient country provide at least 25% percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for "relatively least developed" country)?	Yes

j.	FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?	Yes
k.	FY 1990 Appropriations Act, under heading "Population, DA," and Sec. 535. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?	No
	Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?	No
	Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?	No
	Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services.	Yes
	In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning?	NA
	Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?	No

l.	FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	Yes
m.	FY 1990 Appropriations Act Sec. 579. What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, hispanic Americans, or native Americans, or who are economically or socially disadvantaged (including women)?	Some technical assistance will involve firms owned by economically or socially disadvantaged persons.
n.	FAA Sec. 118(c). Does the assistance of comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests; and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to	NA

expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; and (11) utilize the resources and abilities of all relevant U.S. government agencies?

o. FAA Sec. 118(c)(13). If the assistance will support a program or project significantly affecting tropical forests (including projects involving the planting of exotic plant species), will the program or project: (1) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (2) take full account of the environmental impacts of the proposed activities on biological diversity? — No

p. FAA Sec. 118(c)(14). Will assistance be used for: (1) procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas? — (1) No; (2) No

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q. FAA Sec. 118(c)(5). Will assistance be used for: (1) activities which would result in the conversion of forest lands to the rearing of livestock; (2) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (3) the colonization of forest lands; or (4) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

(1) No
(2) No
(3) No
(4) No

r. FY 1990 Appropriations Act Sec. 534(a). If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry?

NA

s. FY 1990 Appropriations Act Sec 534(b). If assistance relates to energy, will such assistance focus on improved energy efficiency, increased use of renewable energy resources, and national energy plans (such as least-cost energy plans) which include investment in end-use efficiency and renewable energy resources.

NA

Describe and give conclusions as to how such assistance will: (1) increase the energy expertise of A.I.D. staff, (2) help to develop analyses of energy-sector actions to minimize emissions of greenhouse gases at least cost, (3) develop energy-sector plans that employ end-use analysis and other techniques to identify cost-effective actions to minimize reliance on fossil fuels, (4) help to analyze fully environmental impacts (including impact on global warming), (5) improve efficiency in production, transmission, distribution.

and use of energy, (6) assist in exploiting nonconventional renewable energy resources, including wind, solar, small-hydro, geo-thermal, and advanced biomass systems, (7) expand efforts to meet the energy needs of the rural poor, (8) encourage host countries to sponsor meeting with United States energy efficiency experts to discuss the use of least-cost planning techniques, (9) help to develop a cadre of United States experts capable of providing technical assistance to developing countries on energy issues, and (10) strengthen cooperation on energy issues with the Department of Energy, EPA, World Bank, and Development Assistance Committee of the OECD.

t. <u>FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA".</u> (as interpreted by conference report upon original enactment). If assistance will come from the Sub-Saharan Africa DA account, is it: (1) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (2) being provided in according with the policies contained in section 102 of the FAA; (3) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (4) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups;

(1) Yes
(2) Yes
(3) Yes
(4) Yes

(5) being used to increase agricultural production in ways that protest and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?	(5)	Yes
u. <u>International Development Act Sec. 711, FAA Sec. 463</u>. If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (1) the world's oceans and atmosphere, (2) animal and plant species, and (3) parks and reserves; or describe how the exchange will promote: (4) natural resource management (5) local conservation program, (6) conservation training programs, (7) public commitment to conservation, (8) land and ecosystem management, and (9) regenerative approaches in farming, forestry, fishing, and watershed management.		NA
v. <u>FY 1990 Appropriations Act Sec. 515</u>. If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?		NA

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2. Development Assistance Project Criteria) (Loan Only) NA

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

c. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

3. Economic Support Fund Project Criteria NA

a. FAA Sec. 531(a). Will this assistance promote economic and political stability? to the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part 1 of the FAA?

b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purpose?

c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. PROCUREMENT

1.	FAA Sec. 602(a). Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?	The project will compete all contracts to procure needed goods and services. Small business will be eligible to apply.
2.	FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him?	Yes
3.	FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?	NA
4.	FAA Sec. 604(e). If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)	NA
5.	FAA Sec. 604(g). Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)	NA

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6. FAA Sec. 603. Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1986, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates? — No

7. FAA Sec. 621(a). If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitively with private enterprise, and made available without undue interference with domestic programs? — Yes

8. International Air Transportation Fair Competitive Practices Act. 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available. — Yes

9. FY 1990 Appropriations Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? — Yes

10. FY 1990 Appropriations Act Sec. 524. If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)? — Yes

11. Trade Act Sec. 5164 (as interpreted by conference report), amending Metric Conversion Act of 1975 Sec. 2. Does the project use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause

significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? — Yes — Yes

12. FAA Secs. 612(b), 636(h); FY 1990 Appropriations Act Sec. 507, 509. Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services — NA

13. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? — NO

14. FAA Sec. 601(e). Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? — Yes

B. CONSTRUCTION

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services be used? — NA

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? — NA

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the CP), or does assistance have the express approval of Congress? — NA

C. OTHER RESTRICTIONS

1. FAA Sec. 122(b). If development loans are repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter? — NA

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2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Controller General have audit rights?		NA
3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?		Yes
4. Will arrangements preclude use of financing:		
a. FAA Sec. 104(f); FY 1990 Appropriations Act under heading "Population, DA," and Secs. 525, 535. (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; or (4) to lobby for abortion?	(1) (2)	Yes Yes
b. FAA Sec. 483. To make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated?		Yes
c. FAA Sec. 620(g). To compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President?		Yes
d. FAA Sec. 660. To provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs?		Yes
e. FAA Sec. 662. For CIA activities?		Yes
f. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange, or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained?		Yes

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g. FY 1990 Appropriations Act Sec. 503
To pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes

h. FY 1990 Appropriations Act Sec. 505.
To pay U.N. assessments, arrearages or dues? Yes

i. FY 1990 Appropriations Act Sec. 506
To carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes

j. FY 1990 Appropriations Act Sec. 510.
To finance the export of nuclear equipment, fuel, or technology? Yes

K. FY 1990 Appropriations Act Sec. 511.
For the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes

l. FY 1990 Appropriations Act Sec. 516: State Authorization Sec. 109. To be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? Yes

5. FY 1990 Appropriations Act Sec. 574.
Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring the U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? Yes

6. FY 1990 Appropriation Act Sec. 582.
Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law? No

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ANNEX D

- B/G REQUEST FOR ASSISTANCE

MINISTERE DE LA SANTE PUBLIQUE
MINISTRY OF PUBLIC HEALTH

REPUBLIQUE DU CAMEROUN
Paix — Travail — Patrie

REPUBLIC OF CAMEROON
Peace — Work — Fatherland

N° E 9 /L/MSP/SG/DMPR.-

Yaoundé, le 08 DEC. 1992 19
the

Réf. :
Ref.

Le Ministre de la Santé Publique
The Minister of Public Health

Objet : Financement du projet
Subject Santé de l'Enfant du
Sud et Adamaoua(SESA)
2e phase.-

à M onsieur le Directeur de l'USAID
to

- YAOUNDE -

Monsieur le Directeur,

Depuis Novembre 1987, le Gouvernement du Cameroun à travers le Ministère de la Santé Publique et le Gouvernement des Etats-Unis d'Amérique à travers USAID/CAMEROUN, ont convenu de la mise en oeuvre du projet Santé de l'Enfant du Sud et de l'Adamaoua (SESA). L'Evaluation de l'Exécution dudit projet en 1991 a révélé que celle-ci se déroulait bien et a recommandé non seulement la consolidation de ce qui est déjà opérationnel mais aussi l'extension de la couverture des 2 provinces en matière de Réorientation des Soins de Santé Primaires.

SESA I prenant fin en Octobre 1993, j'ai l'honneur de solliciter le financement et la mise en oeuvre de SESA II conformément aux recommandations de l'Evaluation.

Pour la planification de cette 2e phase, mon département ministériel est disposé à collaborer avec l'équipe que USAID voudra bien désigne

Veuillez agréer, Monsieur le Directeur, l'expression de ma franche collaboration./-

Pr. Joseph MBEDE

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ANNEX E

PLANNED PROCUREMENT JUSTIFICATIONS

ANNEX E

PLANNED PROCUREMENT JUSTIFICATIONS

The following procurement justifications are anticipated under the MCH/CS II Project:

1. Commodity: 4x4 vehicles
   Quantity: 32
   Approximate Value: $895,000
   Probable Source/Origin: Japan

2. Commodity: Motorcycles
   Quantity: 185
   Approximate Value: $300,000
   Probable Source/origin: Japan

3. Commodity: Medical Equipment
   Quantity: Sets for 100 health centers, 27 district hospitals and 3 provincial hospitals
   Approximate Value: $891,000
   Probable Source/Origin: U.S. (70%)/Japan (30%)

4. Commodity: Essential Drugs
   Quantity: Start-up supplies for 100 health centers, 27 district hospitals, and 3 provincial hospitals
   Approximate Value: $1,528,000
   Probable Source/Origin: U.S. (50%)/UNICEF (50%)

ANNEX F

- POTENTIAL ROLE FOR PEACE CORPS IN MCH/CS

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ANNEX F: POTENTIAL ROLE FOR PEACE CORPS IN MCH/CS II PROJECT

Experience of Peace Corps Volunteers (PCVs) in MCH/CS I:

In mid-1992, 16 Peace Corps Volunteers (PCVs) were assigned to work with the Ministry of Public Health (MOPH), 7 each in the South and Adamaoua Provinces and 2 in the Far North Province. Most of the PCVs were involved in activities of USAID's Maternal Child Health/Child Survival (MCH/CS I) Project.

Some PCVs have had good experiences; others feel that they have not been able to utilize their potential because of restrictions from their supervisor or lack of cooperation from their counterpart. From the MOPH perspective, some health officials have appreciated having the volunteers assigned to them, others have not been enthusiastic. There has also been some confusion about why the PCVs are assigned, some MOPH personnel feeling that the volunteers have been assigned to the project by USAID as watchdogs. This has resulted primarily because some volunteers were assigned to participate in the training and supervision of the pharmacy managers (commis) and to oversee the operations of the new pharmacies.

In five cases, community development volunteers were co-located with health volunteers. This offers the possibility for facilitating the promotion of community-developed and managed health projects; however, this generally has not taken place, apparently because the health teams have not had an interest in promoting such activity.

Potential Role of PCVs in MCH/CS II:

There would appear to be clear advantages to the MOPH and the MCH/CS II if PCVs were to participate and if well defined job descriptions were to emphasize working through counterparts, rather than directly with the population. Some of the possibilities for their use include the following:

Provincial Health Delegation

1) help develop and deliver Information, Education, Communications (IEC) messages and materials;

2) assist in the expansion of the health management information system (HMIS) and help train the Provincial Health Delegation to analyze and utilize the information generated by the HMIS;

3) assist in the management of the provincial pharmaceutical procurement and distribution process (CAPP), particularly in automating inventory records and financial accounts and planning for the expansion of procurement and distribution that will occur as new health facilities are added to the program; and

4) help plan and carry out operations research (OR) activities; analyze the results of OR activities; and help plan and carry out follow-on activities, e.g., prepare new or revised guidance or design follow-on OR activities.

District health team

1) help develop and deliver IEC messages and materials or be involved in OR activities as indicated in 4) above;

2) help plan and implement vaccination and other outreach programs, including the development of community health-related projects such as improving water sources and sanitation;

3) assist in the planning and carrying out of health inventories in communities in the health areas that will be brought into the RPHC program (the inventories are discussed further in Annex K, section II.C.);

4) help train health center personnel in providing data to and utilizing the output of the HMIS; and

5) help train the new pharmacy managers and assist in resolving management problems that subsequently arise.

As part of the program to focus the project more on the district level, it is suggested that district health officers be made aware of the availability of PCVs and the possible roles they might play and given the option of deciding whether they want PCVs assigned to their district team. Since the volunteers are a potentially valuable personnel resource, particularly during a period of expansion of activity, their use should be monitored by provincial authorities during supervision visits to districts.

Consideration should be given to inquiring whether there were PCVs completing two years of service at the district level who would be willing to extend for a third year and work at the provincial level. They would bring to their job an understanding of the project and of the conditions at the district and below; this should increase their usefulness to the Provincial Health Delegation.

The project would do well to encourage MOPH personnel to work with representatives of services of other ministries, e.g., vaccination teams of the Ministry of Livestock which may be better endowed with transport and cold chain facilities than the MOPH, with community development people from the Ministry of Agriculture who could facilitate community involvement in health activities, and the Ministry of Education personnel who could help facilitate the spreading of health education messages through the schools. Since PCVs are also assigned to all of these ministries, the volunteers could, in some cases, facilitate this cooperation.

One of the problems in ensuring that women benefit from the MCH/CS II Project is the lack of communication channels for women to the health team regarding women and children's

needs and from health teams to women regarding services available. This could be somewhat alleviated if there were more women health providers in health centers (there are very few at present), but that is not likely to change significantly. Therefore, having women PCVs on the health district teams could provide an additional channel of communication that could strengthen the program.

ANNEX G

- COVERAGE AND COST CALCULATIONS

Table G.1

COVERAGE ESTIMATES FOR MCH/CS II

(100 new Health Centers + 80 existing Health Ctrs.)

SUMMARY TOTALS	POP	HAs	MCH/CS I 1993	100 HC |--MCH/CS II--| 1995/1996		1997	TOT HC	NON COV	1997 POP COV
SOUTH	464658	111	24	16	18	10	68	43	351521
ADAMAOUA	397013	76	25	13	6	3	47	29	278076
FAR NORTH/SAVE	690000	46	17	7	7	2	33	13	532383
FAR NORTH/CARE	716000	44	14	7	7	4	32	12	505967
TOTAL	2267671	277	80	43	38	19	180	97	1667947
									9266/CS

DETAILS BY PROVINCE SOUTH	POP	HAs	MCH/CS I 1993	|--MCH/CS II--| 1995/1996		1997	TOT CS	NON COV	POP COV
AMBAM	47317	19	4	2	2	1	9	10	33854
EBOLOWA	138132	29	5	3	5	3	16	13	107827
KRIBI	66183	14	4	3	2	1	10	4	48578
LOLODORF	56859	10	3	2	2	0	7	3	39175
SANGMELIMA	77546	19	4	3	4	2	13	6	60488
ZOETELE	78621	20	4	3	3	3	13	7	61600
SOUTH TOTAL	464658	111	24	16	18	10	68	43	351521
									5169/CS

ADAMAOUA	POP	HAs	1993	1995/1996		1997	TOTCS	NC	POPCV
BANYO	34256	6	2	3	1		6	0	34256
DJOHONG	20968	6	2	0	1		3	3	15105
MEIGANGA	106703	13	4	3	1	1	9	4	83152
NGOUNDERE	142416	23	10	2	1	1	14	9	77162
TIBATI	45956	12	4	2	1		7	5	37364
TIGNERE	46714	16	3	3	1	1	8	8	31037
ADAMAOUA TOTALS	397013	76	25	13	6	3	47	29	278076
									5917/CS

FAR NORTH/SAVE	POP	HAs	1993	1995/1996		1997	TOTCS	NC	POP
KAELE/MOUTOURWA	101000	13	4	1	2	2	9	4	71157
GUIDIGUIS	82000	5	2	1	1		4	1	66839
MINDIF/MOULVOUDA	84000	8	3		2		5	3	69337
MAGA	125000	4	1	1	1		3	1	93750
YAGOUA	101000	5	1	2	1		4	1	80800
GUERE/WINA	93000	6	1	2			3	3	46500
DOUKOULA/KALFOU	104000	5	5				5	0	104000
FAR NORTH/SAVE	690000	46	17	7	7	2	33	13	532383
									16133/CS

FAR NORTH/CARE	POP	HAs	1993	1995/1996		1997	TOTCS	NC	POP
MOKOLO	177000	9	3	1	1	1	6	3	118000
MINA	50000	4	2	1	0		3	1	37500
BOURRHA	42000	5	1	1	1	1	4	1	33600
KOZA	120000	5	1	1	1		3	2	72000
MOGODE	70000	3	1	0	1	0	2	1	46667
MORA	120000	8	4	1	1	1	7	1	105000
TOKOMBERE	82000	5	1	1	1		3	2	49200
KOLOFATA	55000	5	1	1	1	1	4	1	44000
FAR NORTH/CARE	716000	44	14	7	7	4	32	12	505967
									15811/CS

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Table G.2

DEVELOPMENT COSTS FOR MCH/CS II ($000)

TOTALS	DEVELOPMENT COSTS NEW FACILITIES			DEVELOPMENT COSTS MCH/CS I CONTINUED			DEVLP COSTS
	UNIT COST	No. UNITS	TOTAL COST	UNIT COST	No. UNITS	TOTAL COST	TOTAL COST
Health Center	28	100	2800	6	80	480	3280
District Hosp.	48	27	1296	0	0	0	1296
District Offic	59	27	1593	0	0	0	1593
Prov. Hosp	86	3	258	0	0	0	258
Prov. Office	59	1	59	30	2	60	119
CAPP	73	1	73	10	2	20	93
			6079			560	6639

	DEVELOPMENT COSTS NEW FACILITIES			DEVELOPMENT COSTS MCH/CS I CONTINUED			DEVLP COSTS
	UNIT COST	No. UNITS	TOTAL COST	UNIT COST	No. UNITS	TOTAL COST	TOTAL COST
SOUTH PROVINCE							
Health Center	28	44	1232	6	24	144	1376
District Hosp.	48	6	288	0	0	0	288
District Offic	59	6	354	0	0	0	354
Prov. Hosp	86	1	86	0	0	0	86
Prov. Office	59	0	0	30	1	30	30
CAPP	73	0	0	10	1	10	10
			1960			184	2144
ADAMAOUA							
Health Center	28	22	616	6	25	150	766
District Hosp.	48	6	288	0	0	0	288
District Offic	59	6	354	0	0	0	354
Prov. Hosp	86	1	86	0	0	0	86
Prov. Office	59	0	0	30	1	30	30
CAPP	73	0	0	10	1	10	10
			1344			190	1534
FAR NORTH							
Health Center	28	34	952	6	31	186	1138
District Hosp.	48	15	720	0	0	0	720
District Offic	59	15	885	0	0	0	885
Prov. Hosp	86	1	86	0	0	0	86
Prov. Office	59	1	59	30	0	0	59
CAPP	73	1	73	10	0	0	73
			2775			186	2961

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Table G.2 (continued)
DEVELOPMENT COSTS FOR MCH/CS II

UNIT DEVELOPMENT COSTS MCH/CS II FACILITIES

UNIT COSTS ($ 000)	TOT	RENV	EQP	VEH	DRG	TR/IEC	OTH/CP
Health Center	28	5	3	3	10	5	2
District Hosp.	48	10	10	0	16	10	2
District Offic	59	5	3	29	0	20	2
Prov. Hosp	86	20	20	0	32	10	4
Prov. Office	59	10	6	26	0	15	2
CAPP	73	10	6	40	0	15	2

UNIT DEVELOPMENT COSTS MCH/CS I FACILITIES

UNIT COSTS ($ 000)	TOT	RENV	EQP	VEH	DRG	TR/IEC	OTH/CP
Health Center	6	0	2	0	0	2	2
District Hosp.	0	0	0	0	0	0	0
District Offic	0	0	0	0	0	0	0
Prov. Hosp	0	0	0	0	0	0	0
Prov. Office	30	0	4	23	0	0	3
CAPP	10	0	0	0	0	0	10

TOTAL COSTS BY CATEGORY

UNIT COSTS	TOT	RENV	EQP	VEH	DRG	TRN	OTH	TOTAL
Health Center	100	500	300	300	1000	500	200	2800
District Hosp.	27	270	270	0	432	270	54	1296
District Offic	27	135	81	783	0	540	54	1593
Prov. Hosp	3	60	60	0	96	30	12	258
Prov. Office	1	10	6	26	0	15	2	59
CAPP	1	10	6	40	0	15	2	73
MCH/CS I CS	80	0	160	0	0	160	160	480
MCH/CS I DH	0	0	0	0	0	0	0	0
MCH/CS I DO	0	0	0	0	0	0	0	0
MCH/CS I PH	0	0	0	0	0	0	0	0
MCH/CS I PO	2	0	8	46	0	0	6	60
MCH/CS I CAPP	2	0	0	0	0	0	20	20
		985	891	1195	1528	1530	510	6639

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Table G.3
ESTIMATED RECURRENT COSTS FOR MCH/CS II ($000)

CUMULATIVE NUMBER OF FUNCTIONAL UNITS BY PROJECT YEAR

SUMMARY TOTALS	UNIT COST	1994	1995	1996	1997	TOTAL UNIT YEARS	TOTAL COST
Health Center	5	80	123	161	180	544	2829
District Hosp.	4	12	22	27	27	88	387
District Offic	23	22	27	27	27	103	2369
Prov. Hosp	8	0	3	3	3	9	76
Prov. Office	27	2	3	3	3	11	297
CAPP	96	2	3	3	3	11	1056
		118	181	224	243		7014

SOUTH PROVINCE	UNIT COST	1994	1995	1996	1997	UNIT YEARS	COST $1000
Health Center	5	24	40	58	68	190	988
District Hosp.	4	6	6	6	6	24	106
District Offic	23	6	6	6	6	24	552
Prov. Hosp	8	0	1	1	1	3	25
Prov. Office	27	1	1	1	1	4	108
CAPP	96	1	1	1	1	4	384
							2163

ADAMAOUA	UNIT COST	1994	1995	1996	1997		
Health Center	5	25	38	44	47	154	801
District Hosp.	4	6	6	6	6	24	106
District Offic	23	6	6	6	6	24	552
Prov. Hosp	8	0	1	1	1	3	25
Prov. Office	27	1	1	1	1	4	108
CAPP	96	1	1	1	1	4	384
							1976

FAR NORTH	UNIT COST	1994	1995	1996	1997		
Health Center	5	31	45	59	65	200	1040
District Hosp.	4	0	10	15	15	40	176
District Offic	23	10	15	15	15	55	1265
Prov. Hosp	8	0	1	1	1	3	25
Prov. Office	27	0	1	1	1	3	81
CAPP	96	0	1	1	1	3	288
							2875

UNIT RECURRENT COSTS

		PER	MAN	DEP	SUP	FUEL	PD	TRN	OTH
Health Center	5.20	2.2	0.6	0.9	0.5	0.3	0.0	0.6	0.2
District Hosp.	4.40	2.2	0.6	0.6	0.5	0.0	0.0	0.4	0.2
District Offic	23.00	0.0	4.0	7.2	1.2	4.0	4.0	1.0	1.6
Prov. Hosp	8.40	4.3	1.2	1.2	1.0	0.0	0.0	0.4	0.3
Prov. Office	27.00	0.0	3.8	7.6	2.4	1.6	3.2	1.0	7.4
CAPP	96.00	20.0	10.0	10.0	14.0	2.4	32.4	4.0	3.2

TOTALS PER CATEGORY OF RECURRENT COST

TOTALS	TOTAL	PER	MAINT	DEPREC	FURN	FUEL	PERDIEM	FORM	OTHER
Health Center	2829	1175	326	479	261	174	0	326	87
District Hosp.	387	190	53	53	42	0	0	35	14
District Offic	2369	0	412	742	124	412	412	103	165
Prov. Hosp	76	39	11	11	9	0	0	4	3
Prov. Office	297	0	42	84	26	18	35	11	81
CAPP	1056	220	110	110	154	26	356	44	35
	7014	1624	954	1478	616	630	804	523	385
	100%	23%	14%	21%	9%	9%	11%	7%	5%

Table G.4
ESTIMATED BUDGET FOR MCH/CS II ($000)

	UNIT COST /YEAR	NBR PERS	NBR YRS	TOTAL COST	INST.	USAID	PVOS	GRC	RE
LONGTERM T.A.									
CHIEF OF PARTY	175	1	4	700	700				
IEC	150	1	3.5	525	525				
PROV COORD	125	3	2.5	938	938				
PSC AT USAID	70	1	3.5	245		245			
U.S. BACKSTOP									
INST PROJ OFFC	65	1	4	260	260				
INST ADM ASST	45	1	4	180	180				
INST OPERATIONS	25	1	4	100	100				
SHORTTERM T.A.									
ST TA (OR)	40		4	160		160			
ST TA (MGT)	25		4	100	50	50			
ST TA (other)	40		4	160	80	80			
EVALUATION/AUDIT	115		2	230		230			
IN-COUNTRY PROJECT EXPENSES									
TRAVEL TO PROVIN	9	9	4	326	326				
TRAVEL TO YAOUND	14	6	2.5	212	141		71		
CENTRAL OFFICE	24	1	4	96	96				
PROV OFFICES	12	3	4	144	8		136		
CENT HCN STAFF	15	6	4	360	360				
PROV HCN STAFF	15	9	4	540	360		180		
PVO STAFF	15	8	4	480			480		
PVO OPERATIONS	15	2	4	120			120		
CENTRAL VEHICLES	12	1	4	48	48				
PROV VEHICLES	12	3	4	144	96		48		
OPER. RESEARCH	70		4	280	224		56		
TRAINING: ST	45		4	180	180				
COMPUTER MAINT.	2	4	4	38	38				
DEVELOPMENT COSTS FOR 100 NEW HEALTH AREAS									
TRAINING/IEC MATERIALS				1,530	1,275		255		
ESSENTIAL MEDICINES				1,528		1,528			6,3
VEHICLES/MOTOS				1,195		1,195			
EQUIPMENT				891	891				
RENOVATION				985	438		219	328	
OTHER/COMM PARTIC				510	227		113	170	
RECURRENT COSTS									
TRAINING				523					5
FUEL				630	210		105		3
SUPPLIES				616	205		103	308	
MAINTENANCE				954	318		159	477	
NON GRC PERS				1,624					1,6
GRC PERSONNEL				9,554				9,554	
SUPERV PER DIEMSMS				804	201			201	4
HMIS/OTHER				385					3
VACCINES				470		235		235	
DEPRECIATION				1,478				739	7
				40,330	8,475	3,723	2,044	12,012	10,3
	INST	PVO							
OVERHEAD	30%	25%			2,542		511		
CONTINGENCY/INFLATION		5%			419	184	101		
TOTAL FOR USAID PORTION			>>>>>>>	18,000	11,436	3,907	2,657		
PERCENTAGE BREAKDOWN:									
TA/USAID/INST/PVOS			37%	6,651	5,375	765	511		
PHC HEALTH SYSTEMS			59%	10,645	5,642	2,958	2,044		
CONTINGENCY/INFLATION			4%	704	419	184	101		
			100%	18,000	11,436	3,907	2,657		

ANNEX H

- COMMODITY PROCUREMENT LISTS

ANNEX H: COMMODITY LISTS

HEALTH CENTER EQUIPMENT[1]	KIT NUMBER	QT	EST COST UNIPAC	NBR KITS	TOTAL COST
MCH CENTER BASIC EQUIPMENT	9902401	68	429	1	429
MIDWIFERY-KIT TYPE 3	9902101	39	70	1	70
SYRINGE KIT C	9907200	9	132	1	132
MICROSCOPE BINOCULAR	957104	1	442	1	442
ASSORTED LAB EQUIPMENT		30	268	1	268
REFRIGERATOR 220V/KEROSENE	1121480	1	564	1	564
SPARES CHIMNEYS & WICKS		6	40	1	40
REFRIGERATOR REPAIR KIT	1152000	9	23	1	23
VACCINE CARRIER + ICE PACKS	1185000	1	34	1	34
					$2,004

HOSPITAL EQUIPMENT[1]	KIT NUMBER	QT	EST COST UNIPAC	NBR KITS	TOTAL COST
DILATION & CURRETAGE KIT	9950010	25	158	2	316
IUD-INSERTION KIT	9950025	17	105	2	211
TUBAL LIGATION KIT	9950050	26	130	2	259
SURGICAL INSTRUMENT KIT MAJOR	9962000	65	736	3	2,209
SURGICAL INSTRUMENT KIT MINOR	9962005	28	89	4	356
STERILIZATION KIT FOR SURGERY	9960000	5	254	2	507
WHO EMERGENCY KIT C	9906200	155	3,390	1	3,390
SYRINGE KIT C	9907200	9	132	3	397
PHYSICIAN'S KIT	9902700	62	195	4	780
MICROSCOPE BINOCULAR	957104	1	442	2	885
ASSORTED LAB EQUIPMENT		30	536	1	536
REFRIGERATOR 220V/KEROSENE	1121610	1	810	1	810
SPARE CHIMNEYS & WICKS		10	43	1	43
VACCINE CARRIER + ICE PACKS	1185000	2	34	1	34
					$10,732

REFERENCE LIBRARY FOR HEALTH CENTER[1]	EST COST	NBR	TOTAL
LA OU IL N'Y A PAS DE DOCTEUR	15	1	15
COMMENT BATIR LA SANTE	20	1	20
LA CONSULTATION DE CONTRACEPTION EN AFRIQUE	15	1	15
HELPING HEALTH WORKERS LEARN	15	1	15
MATERNITE ET SANTE	15	1	15
L'ENFANT ET SANTE	15	1	15
FLANNOGRAPH CPS	15	1	15
INFIRMIER COMMENT TRAITER VOTRE MALADE	15	1	15
IPPF FAMILY PLANNING FLIPCHART	15	1	15
COMMENT BATIR LA VIE	15	1	15
ASSORTED FLIPCHARTS, ETC	15	3	45
			$200

Lists are illustrative to provide a general idea of possible types of commodities. Definitive lists will be prepared by the MOPH and USAID.

ANNEX I

- ENVIRONMENTAL IMPACT STATEMENT

ENVIRONMENTAL EXAMINATION

The Initial Environmental Examination Statement submitted as part of the PID determined that this project met the criteria for Categorical Exclusion in accordance with Section 216.2(I)i and (viii) and is excluded from further review. The inputs of the project are technical assistance, training and commodities. The commodities to be distributed will follow established and standard guidelines. There will be no construction under this project.

G. INITIAL ENVIRONMENTAL EXAMINATION

Recommended Environmental Threshold Decision

Project Country: Cameroon

Project Title: Maternal Child Health/Child Survival Project (631-0056)

Funding: DFA FYs 93 - 97 US$ 15 Million

Environmental Action Recommended: Categorical Exclusion

Summary of Findings:

A categorical exclusion of A.I.D. Environmental procedures is recommended on the basis that this project consists of "programs involving nutrition, health care or population a family planning services," under 22 CFR Part 216.2 (c) (viii) of A.I.D.'s Environmental Procedures (A.I.D. HB 3 Appendix 2D). The project does not anticipate any activities "directly affecting the environment (such as construction of facilities, water supply system, waste wat treatment, etc.)."

Clearance:

Mission Director: DATE: 5/26/92

Concurrence:

APPROVED: _____

Bureau Environmental Officer

DISAPPROVED: _____

DATE: _____

ANNEX J

TECHNICAL ANALYSIS

ANNEX J: TECHNICAL ANALYSIS

During the design phase of MCH/CS II several important issues have been raised that require a technical analysis to assess whether the means selected and methods proposed to implement project elements are technically suitable. These questions are as follows:

1. Given the difficulty in organizing health districts at the sub-divisional level, should MCH/CS II still focus on the development of health districts?

2. Should MCH/CS II include a specific objective for GRC collaboration with NGO hospitals in the management of health districts?

3. What interventions should comprise the MCH/CS II PHC package?

4. Might the emphasis on curative medicine, drug sales and cost recovery detract from preventive and promotive care?

5. What is the appropriate strategy for operations research?

6. What training strategy can accommodate the large numbers of persons who require training and continuing education?

7. Are the objectives of MCH/CS II too ambitious or too broad to achieve with the planned technical and human resources?

1. THE HEALTH DISTRICT CONCEPT

MCH/CS I decentralized PHC management to health centers co-financed and co-managed by community health committees (COSA) and to health districts at the sub-divisional level. This proved cumbersome since numerous health districts had catchment populations of less than 10,000 people. The development costs to establish and maintain a reference hospital and health district office could not be justified for such a small population. MCH/CS I also encountered problems in the decentralized management of pharmacies and finances.

Subsequently, MCH/CS I centralized pharmaceutical distribution system at the provincial level following a model used by the Germans in the Northwest Province. Supervision, collection of revenues, training and HMIS are carried out directly from the provincial to the health center level. Currently functional health districts do not exist, but there is one provincial system.

In July 1992, the Bertoua seminar organized by the MOPH proposed the delimitation of 123 health districts consisting of one or more sub-divisions and whenever possible conforming to divisional boundaries. The average MCH/CS II health district will include a population of

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84,000 and 10 health centers. Many health districts have delineated health areas and a designated district reference hospital. However, the respective roles of the province, health district, division, sub-division, health center, and community are not yet well delineated. The Provincial Health Delegations and CAPPs are just now becoming operational and have yet to demonstrate their effectiveness. Cameroon lacks a well functioning model health district and Provincial Delegation. The challenge to MCH/CS I and MCH/CS II will be to consolidate existing health centers into health districts with district teams trained and empowered to perform many of the functions which are now being done by the provincial level.

In the long run, however, decentralization to the health district will be well worth the effort. From a technical point of view the health district as the operational unit for decentralized planning and management of PHC has numerous advantages over a provincial system.

The health district, not the province, represents a level where communities and health centers can become actively involved in the planning and management of PHC. The health district provides uniformity of supervision and statistical reporting of all medical activities within a defined geographical area. A health management information system can be effectively created for health centers and health districts which provide the essential denominators for monitoring and evaluation of health activities.

The health district also permits the MOPH to define a sizable assistance package for international donor assistance and project proposal development. Improved coordination of governmental, non-governmental, and international organizations can be improved by identifying which donors are to assist which health districts or which assistance one donor might provide across all health districts.

The inclusion of non-governmental organizations, such as church hospitals, in the management of health districts and health centers can make cost-effective use of existing infrastructures, relieve some financial and administrative burden from the MOPH, improve community participation and resource management and encourage international health assistance directed at NGOs and PVOs.

A World Bank study[1] which made an extensive analysis of strategies for implementation of health programs in Africa concluded that:

> "The experience of several African countries suggests that a cost-effective "package" of services - comprising curative, preventive and promotive care - can be extended to rural, peri-urban and even urban residents in the form of district-based health care, featuring a district hospital, a network of health centers, and prominent community involvement in multi-sectoral interventions such as water and sanitation.

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1 LAMBORAY JL, ELMENDORF AE, et al. Better Health in Africa (draft document), World Bank, Oct. 1992.

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African health systems will have their greatest impact in terms of efficiency, equity and sustainability -- if they are community-based and organized to provide a basic package of health care services in a limited number of levels, often in health districts."

The organization of health districts is not without its problems. Some of the problems encountered in ten years of developing health districts in Zaire[2] may help facilitate the task in Cameroon:

- Training of a health district medical officer can lead to a power monopoly and result in a "rubber-stamping" or non-functional district health committee (COSADI) and mismanagement of health district resources. MCH/CS II should train health district teams, rather than individuals. The fact that the proposed COSADI statutes provide for a president who is not the health district medical chief should prove to be helpful.

- Conflicts of co-management (State vs NGO) could develop if the MOPH tries to impose one management model on all health districts or sends in GRC salaried personnel, over which the NGO has little control, as the health district team. It may be advisable to have an NGO provide the staff for the health district team and allow considerable flexibility in the administrative structure of NGO managed health centers.

- MOPH unilateral decisions to transfer well trained health district personnel from functional health zones to regional offices or other health districts could severely disrupt a primary health care program. MCH/CS II includes an assumption that the MOPH will leave trained personnel in place for three years. The emphasis on training a health district should also help ensure continuity when a transfer does occur.

The concept of the health district is a technically sound and appropriate strategy for Cameroon. The development of functional health districts by MCH/CS II could provide the GRC with models on which to build a sustainable, effective, and efficient national primary health care system.

2. POTENTIAL FOR GRC AND NGO COLLABORATION

A key to successful management of a health district is that the reference hospital organizes a health district office to supervise all health centers. The mechanism for this to take place at reference hospitals affiliated with churches or other nonprofit, non-governmental organizations has yet to be determined.

Non-governmental organizations (NGOs) can play an important role in the development and

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2 BAER PC. SANRU: Lessons Learned (1981-1991) (report commissioned by USAID), April 1992.

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management of Cameroon's decentralized health districts and health centers. Within the 27 health districts proposed for MCH/CS II assistance, approximately 20% of facilities destined to become health centers or reference hospitals are owned and managed by churches such as the Presbyterian Church of Cameroon (EPC), the Norwegian Lutheran Church of Cameroon or by the Catholic Health Services Foundation (Ad Lucem). The strengths of NGO involvement in PHC include:

- In doing medical work and infrastructure providing health care, local NGOs have established a reputation for providing quality care to the local population.

- Existing NGO infrastructure can provide services that would be expensive for the MOPH to establish and manage, e.g., maintenance garage.

- NGOs are often more motivated and innovative than government employees in developing and trying new initiatives.

- Church NGOs are often more effective than government employees in promoting a more holistic view of health of families and communities.

- Health facilities managed by NGOs demonstrate significantly higher utilization of services, as demonstrated by utilization and occupancy rates far greater than most GRC facilities.

- NGO collaboration with national and international partner organizations can provide some long-term financial support for health districts and primary health care.

- Indigenous NGOs and their overseas counterpart agencies contribute to long-term sustainability as a permanent resource that will continue after international health assistance is withdrawn.

One of the objectives of the MCH/CS II Project is to involve NGOs in the management in a total of four health districts and at least two health centers per province. Discussions with national leaders and hospital directors have demonstrated that the NGOs are eager for such collaboration and want to begin during the final year of MCH/CS I. Given the lack of model health districts within the current system and a strong emphasis on monetary motivation by GRC employees, NGO management of a health district in each province should be encouraged sooner rather than later.

The mechanism for GRC/NGO collaboration in the management of a health district needs to be worked out individually with each NGO. MCH/CS II should avoid attempting to establish one agreement for all NGOs at the national level, but rather allow provinces to creatively develop working partnerships with their respective NGOs. It is probable that the NGO will be able to pay the salaries of the health district personnel, but that they may require support from a

percentage of the revenues generated from the purchase of medicines at the CAPP for operating costs and the supervision of health centers. NGO hospitals would also like to an agreement with the GRC that newly graduated medical doctors could work off their obligation to the GRC in church hospitals.

3. THE PRIMARY HEALTH CARE PACKAGE OF INTERVENTIONS

According to an MOPH study, 2,153 deaths were recorded during the first six months of 1990 among both children and adults. The principle causes were as follows:

1. Malaria
2. Measles
3. Meningitis
4. Pneumonia
5. Anemia
6. Diarrhea
7. Broncho-pneumonia
8. Malnutrition
9. Hypertension
10. Tetanus

The MOPH also reported the following important endemic diseases: tuberculosis, leprosy, filariasis (including onchocerciasis), schistosomiasis, cholera, and AIDS. The national prevalence of human immuno-deficiency virus (HIV) infection in the adult population is estimated at 1 percent but is increasing. Childhood vaccination coverage is low by African standards: 38% vaccinated against measles and only 27% completely vaccinated. Only an estimated 5 percent of childhood diarrheas are treated at home with oral rehydration salts. The overall oral rehydration therapy use rate is approximately 20%.

Nutrition in Cameroon may be deteriorating. In 1985, 13% of babies were born with low birth weights. Daily food intake, on average 2028 calories per day, is slightly lower than found in 1965. The daily diet of most Cameroonians shows a deficiency of protein. In addition, there is evidence of iodine and vitamin A deficiencies among the populations in northern Cameroon.

From the above information it may be seen that the diseases which cause morbidity and mortality in Cameroon are largely preventable. Their early diagnosis and treatment could substantially reduce mortality. The emphasis on a primary health care strategy to address these problems is therefore justified.

Primary health care as defined by the 1978 Declaration of Alma-Ata consists of 8 essential components (see Table J-1). USAID projects which were designed in the late 1970's or early 1980's generally designed projects inclusive of all components. The debate between comprehensive and selective primary health care which developed during the early 1980's resulted, however, in the development of USAID's child survival and UNICEF's GOBI strategies for project development. Most USAID projects designed between 1985-1990, like MCH/CS I, were based on a selective PHC approach which was seen as a cost-effective interim strategy which would facilitate the development of a comprehensive PHC program.

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Table J.1.
PRIMARY HEALTH CARE COMPONENT ACTIVITIES IN CAMEROON

MATERNAL CHILD HEALTH

Growth Monitoring/Under-5's Clinic
Pre-Natal Care & TBA referral
Safe Deliveries (Maternity or Home)
Birth Spacing & Family Planning
Home Visits and Family Health

WATER AND SANITATION

Community Involvement Entry Point
Village Sanitation & VIP Latrines
Access to Clean Source of Water
Capping Springs
Water Systems (Wells, Adductions)

LOCAL CONTROL OF ENDEMIC DISEASES

Oral Rehydration Therapy
Diagnosis/Treatment of TBC & Leprosy
Dx/Rx of Schistosomiasis
Ivermectin Distribution for Oncho

HEALTH EDUCATION

P Perception of Problems
I Information Acquisition
C Comprehension of Information
C Confidence in Possible Solutions
A Application of Solutions

IMMUNIZATIONS

Measles
DTP (Diphtheria,Tetanus,Pertussis)
Polio
BCG (Tuberculosis)
Tetanus Toxoid for Women

NUTRITION

Promotion of Breastfeeding
Improved Feeding Practices
Supplemental Feeding
Vit. A, Iodine, Iron Supplement
Community Nutrition Rehabilitation

BASIC CURATIVE CARE

ARI (Acute Respiratory Infections)
Malaria
Meningitis
Basic Laboratory Testing

ESSENTIAL MEDICINES

Generic Drug Importation
Provincial Pharmacy Depot (CAPP)
User Fees Cost Recovery for Meds
Maintaining a Secure Supply Line
Diagnosis/Prescription Flowcharts

Adapted from BAER, FC. Alma Ata: A Primer for Primary Health Care., 1989.

Primary health care component activities of MCH/CS I & II have been demonstrated to be technically feasible and appropriate for developing a primary health care network of health centers. The emphasis during MCH/CS II will not be in developing or testing new technologies in PHC, but rather in establishing a sustainable health care delivery system to make dependable PHC techniques accessible to an increased portion of the population.

The broadened definition of primary health care and the numerous component interventions does not mean that MCH/CS II must deliver all of these activities in every health area. It is not the intention of MCH/CS II, for example, to establish a technical capacity for water and sanitation activities. At the same time, it is important to not exclude water and sanitation from the concept of PHC. If a community decides that water is a priority problem, the response from MCH/CS II should not be "that's not within the scope of our project", but rather to facilitate the identification of another partner agency or technical source for information.

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4. BALANCING CURATIVE, PREVENTIVE AND PROMOTIVE ACTIVITIES

The emphasis which MCH/CS I has given cost recovery and the sale of essential medicine may be placing too much emphasis on curative care and not enough on preventive and promotive care. Achieving a visible balance between curative, preventive and promotive care will be important to MCH/CS II. These components may be defined as follows:

Curative care is treating of persons after they become sick.

Preventive care is treating people before they become sick. Vaccinations, drug prophylaxis, water purification and personal hygiene are preventive techniques which directly protect individuals or families against disease. Preventive interventions do not usually eliminate pathogens from the environment.

Promotive care strives to change environmental conditions and health habits to decrease the pathogen from the environment. Health education and community actions to control disease carrying vectors are concepts basic to promotive care.

Promotive, preventive and curative measures all contribute to disease reduction by blocking movement of a pathogen from ENTRY to INCUBATION to EXIT to TRANSMISSION. While the relative importance of interventions will vary from disease to disease, it is important to consider all options before deciding on a plan of action. Diagramming possible interventions for a specific disease is an effective way to discuss options, priorities and budgets for health districts and health centers. Figure J.1. illustrates the cycle for the control of Schistosomiasis.

Figure J.1.
Primary Health Care Interventions
for Schistosomiasis Control

```
                    /\ > > > > > ENTRY > > > > > \/
                    /\                            \/
PREVENTIVE MED.     /\                            \/    PREVENTIVE MED.
  Protective clothing                           vaccinations ??
  Prohibit entering infected water              chemo-prophylactics ??
  Purification of drinking water                \/
                    /\                          \/
                    /\                          \/
                    /\                          \/
               TRANSMISSION                   INCUBATION
                    /\                          \/
PROMOTIVE MED.      /\                          \/     CURATIVE MED.
  Proper disposal of feces and urine            Treatment of infected persons
  Improved irrigation practices                 \/
  Snail eradication program                     \/
  Protection of water sources                   \/
                    /\                          \/
                    /\ < < < < < EXIT < < < < < \/
```

Understanding the disease transmission cycle and the respective effectiveness of promotive, preventive and curative services is an important step in health planning in order to assure a

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balanced approach that optimizes the utilization of limited resources. It is also an empowerment tool to get health district teams, health center personnel and communities to discussing and planning their own strategies rather than simply implementing decisions from above. A discussion with a health district team based on this diagram would probably decide to deal with schistosomiasis by:

- Incorporating procedures for the diagnosis and treatment of schistosomiasis into the PHC curative care manual and amending supervision protocols on curative care accordingly.

- Distributing existing health education materials on schistosomiasis to health facilities and including these topics in IEC discussions with infected communities.

- Facilitating community discussion and initiative for community-wide actions which could help prevent schistosomiasis.

MCH/CS II can not and should not attempt to implement or coordinate complex interventions in environmental or vector control. The focus of MCH/CS II is on interventions which can be managed at the health center and or during outreach community visits. Other interventions should be left to community-initiated efforts, which MCH/CS II should encourage but not direct or manage.

Despite the logic of integrated PHC the allocation of resources has usually favored curative care. This has certainly been the case of MCH/CS I with the emphasis on establishing access to essential medicines and a cost recovery capacity based primarily on utilization of curative care at health centers. Understanding why promotive and preventive efforts generally take a back seat to curative care is important in developing a balanced primary health care program. The following table summarizes how curative, preventive and promotive activities compare with respect to several health service variables.

Table J.2.
COMPARISON OF CURATIVE, PREVENTIVE AND PROMOTIVE CARE

Degree to which each activity...	Curative	Preventive	Promotive
responds to felt needs	+++	++	+
creates willingness to pay	+++	++	+
results in program visibility	+++	++	+
requires community involvement	+	++	+++
requires community based activities	+	++	+++
contributes to disease eradication	+	++	+++

It's easy to see that curative care possesses nearly all the advantages. Curative work responds to the urgently felt need of people to treat the sick and is able to generate a ready willingness to pay for services. Curative care does not require a high degree of community involvement nor is it dependent on time consuming community based activities. Yet curative care also results in donor visible programs attractive to political and financial support.

Promotive and preventive care must work much harder to create and respond to felt needs and to generate a responsibility within the community to get organized and involved in village based activities. Even so the results are usually community programs lacking in visibility.

Curative care is able to exist as a stand alone program, but its contribution to disease eradication is limited. While preventive and promotive care are more effective in producing long-term community health improvement, they do not "stand alone" very well. An integration of these three primary health care services to allocate money, time, materials and personnel rationally is fundamental to developing an effective PHC program.

So much emphasis has been placed on access to medicines and cost recovery during MCH/CS I that health center personnel may minimize the importance of the preventive and promotive activities which are more time consuming and less profitable financially. This could result in a situation where people begin to rationalize that it is more important to stay in the health center to treat the sick (and generate more income) than it is to stress preventive and promotive activities at the community level. MCH/CS II should emphasize that the most important level of profit-sharing is not between health centers, but between these three PHC components, such that the "surplus" generated from curative sales subsidizes the "costs" of preventive and promotive activities.

5. OPERATIONS RESEARCH

Operations research, as defined and developed by the Primary Health Care in Operations Research Project (PRICOR), includes a three-step process of problem analysis, solution development and solution validation. It is distinguished from other types of research by placing as much or more emphasis on the research process as on the research results. While valid OR may be carried out at and by any level within the health system, ideally OR is best conducted by the health personnel involved in the actual operations of the system or by the immediate supervisors of the operations. For example, OR to test strategies to improve prenatal clinic patient flow can be initiated by the health center nurse or by the health district supervisor. In this situation OR is as much of a learning and management tool as it is a research tool. In fact the steps in the learning/health education process, the health planning/management process and operations research are quite similar (see comparative table below).

Table J.3.
COMPARISON OF OPERATIONS RESEARCH WITH
HEALTH EDUCATION, AND HEALTH PLANNING & MANAGEMENT

HEALTH EDUCATION	OPERATIONS RESEARCH	HEALTH PLANNING & MANAGEMENT
PROBLEM PERCEPTION	PROBLEM ANALYSIS	IDENTIFY PROBLEMS
INFORMATION EXCHANGE		
INFORMATION COMPREHENSION	SOLUTION DEVELOPMENT	SELECT ALTERNATIVES
CONVICTION & SOLUTIONS		PRIORITIZE
APPLYING SOLUTIONS	SOLUTION VALIDATION	IMPLEMENT
		EVALUATE

Source: BAER FC. Creative Management: Learning to Think Creatively about Management. BeerTracks, 1992.

Because of the current popularity of the term operations research it is not unusual to find very different kinds of research justifying themselves under the banner of operations research. What starts out as a good intention to promote operations research for problem solving and solution testing at the service delivery level can easily end up strangled at a national committee level. For example, operations research was proposed in one African country to test two different payment schemes to facilitate cost-recovery in rural health districts. A national committee set up to prepare the protocol for the study diligently worked, reworked and expanded the study protocol for two years until the massive documentation became more of a hinderance rather than a guide to conducting the study. To avoid this sort of problem it is advisable to diversify the levels, implementers and project sizes for operations research in MCH/CS II.

Operations research for MCH/CS II should not be conducted in isolation, but rather promoted as a contributing factor to improved IEC and management at all levels in the health care system. The promotion of community empowerment to discuss, propose and implement solutions to local health problems, for example, should be seen as a valid form of operations research even though it may be organized as an IEC or community participation activity.

Given the RPHC policy to develop health district capacity for management of primary health care, MCH/CS II should promote the development of an operations research capacity at the national, provincial and health district levels. The health district should not be seen as a mechanism for the decentralized implementation of management instructions received from the national or provincial level, but rather as a laboratory to test and refine approaches for improved promotion and management of PHC. The concept of OR as a management and IEC tool should be part of the training of the health district team members. MCH/CS II should encourage health districts to take the initiative in integrating operations research into their action plans. This need not require additional funding or supervision from the provincial level unless the health district prepares a protocol to request supplemental funding.

Empowering health district personnel to conduct operations research could become an extremely important non-monetary motivational factor for health districts. Experience from other countries has shown that district medical officers can become highly motivated operations researchers when they realize that they are conducting valid research that may receive national recognition. The following approach is suggested for operations research for MCH/CS II:

1) Provincial conferences and/or seminars discuss and establish priorities for issues meriting operations research.

2) Health district teams receive an orientation to operations research as a management and IEC tool during a supervision visit or their initial training and are encouraged to propose operations research in their action plans to resolve problems specific to their health districts.

3) Health districts are encouraged to submit concept paper protocols to the provincial level for OR and may receive funding for small OR projects through the provincial health fund or MCH/CS II.

4) OR projects proposed by health districts or a province which require more funding and a more structured protocol are referred to a national committee which includes provincial representatives and MCH/CS II staff.

   a) OR projects that do not require any special technical assistance may be approved for funding by MCH/CS II. These projects will be implemented with close supervision by the province for financial and technical reports.

   b) OR project protocols requiring technical assistance and/or coordination from the national level will be approved by a national committee and contracted for execution to an appropriate institution (i.e., Provincial Health Delegation).

5) All OR researchers should be invited to share their results at a national conference organized by MCH/CS II or the MOPH to promote the exchange of lessons learned. The conference would also permit a forum for the discussion of future priority topics for OR. Summaries of the OR results could be published and distributed to health districts.

6. TRAINING

Training and continuing education of health workers promotes quality care and motivates personnel. Since curriculum revision for pre-service training can take years, retraining existing health care providers must be a priority activity for primary health care programs. MCH/CS II must provide for training of 100 health committees, 100 health centers, 27 health districts and

3 provinces. Table J.4 shows a conservative estimate of the level of effort required:

Table J.4
TRAINING NEEDS OF A TYPICAL HEALTH DISTRICT

Health District Office (MD + 2 nurses + 2 other)=	5 persons
4 Health Centers x (3 nurses + 1 drug clerk)=	16 persons
4 Health Committees (Pres, VP, treasurer)=	12 persons
	==========
Total of 891 persons for 27 health districts	33 persons

Examples of some of the various types and levels of training which may be required during MCH/CS II are as follows:

- Training of health committees and health management committees
- Training of health center, health district and provincial teams
- Supervision of health centers and districts as on-the-job training
- Participation in provincial and national conferences
- Visits between health centers, health district and provinces
- Short-term out-of-country participant training

Formal training sessions represent only one type of training. MCH/CS II will expand the concept of training to include on-the-job training during supervision and outreach visits. Priority for short-term training will be given to in-country training institutes such as the Pan-African Institute for Development. As the need arises, a limited number of short-term, out-of-country training sessions may be financed by MCH/CS II.

The training-of-trainers approach generally includes the training of a national team which trains a provincial team which trains a health district team which trains the health center team. While this strategy may be logical, experience has shown that at each layer of training there is often a "dilution factor" which decreases the quality of training. At the same time it is not feasible, nor desirable, that all training be done at the national or provincial levels. Experience has also shown that the quality of training decreases with the distance between the training site and the work site, and that the trainer should also be the supervisor.

The approach recommended for MCH/CS II is for of the national level to focus on training three provincial teams and serve as resource persons during the training of health district teams. Each province/division would be responsible for training 6-7 health district teams and serving as a resource for the training sessions for health centers. Each health district would be responsible for the initial training of four new health center teams and continuing education for three MCH/CS I health centers. When seen in this manner the load of training is not unreasonable, but it will require an effective training of trainers approach.

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A rough estimate of staff time required is that one national trainer would need to devote 20% of his or her time to training provincial teams, 3 provincial trainers would spend 30% time in health district and health center training, and three health district team trainers would spend 5-15% of their time in health center and community health committee training.

Table J.5.
TIME ESTIMATES FOR MCH/CS II TRAINERS

	POSSIBLE TRAINING STRATEGY	PERCENT TIME
COSA: President, Vice-President, Treasurer, drug clerk:		TD=training days
	5 training days per trainer	TR=trainer
	1 trainer from district (Superv)	CS=health center
	1 trainer from Province (PEC)	4% x 7HD = 28%
	2 health centers per health district	
	5TD/TR x 2CS= 10TD/TR/yr= 4%	
COGE: Treasurer, Commis		
	5 training days per trainer	
	1 trainer from district (Admin)	4%
	1 trainer from Province (CAPP)	4% x 7HD = 28%
	2 health centers per health district	
	5TD/TR x 2CS=1020TD/TR/yr= 4%	
HEALTH CENTER: Head Nurse, Nurse Midwife, Nurse Aid		
	10 training days per trainer	
	3 trainers from district	8%
	1 trainer from Province X 50% time	4% x 7HD = 28%
	2 health centers per health district	
	10TD/TR x 2CS= 20TD/TR/yr= 8%	
DISTRICT OFFICE: Medical Chief, Administrator, Supervisor, IEC specialist		
	10 training days per trainer	
	3 trainers from province	12%
	1 trainer from National x 50% time	6% x 3Prov = 18%
	7 health districts	
	10TD/TR x 3sessions= 30TD/TR/yr= 12%	

The general principle, therefore, is that training be organized and conducted by the level from which supervision takes place. For example training of nurses in health areas should be conducted by the health district team. Training facilitators and/or technical resource persons from the provincial level, however, should be called upon by the health district to conduct health area training programs. Training should primarily be done on site, i.e., at the health center for health area training, at the health district for training health district team. Optimally certain training activities could be combined as part of regular supervision visits. This would help to reinforce supervision as a positive learning experience rather than as a negative evaluation.

Taking operations research as an example, the basic principles of operations research could be explained to the health district team during a several hour session as part of a supervision trip

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by a provincial supervisor. The focus would be on understanding the problem identification, solution development and solution testing components of OR. Examples of problems and possible solutions would be drawn from the results of the current supervision trip. The health district team would be left with the "homework" to complete the solution development discussion and test one or more solutions before the next supervision visit. This same approach could be applied during health district supervision of health centers and health centers outreach visits to communities.

7. PROJECT SCOPE AND REQUIRED LEVEL OF EFFORT

The scope of MCH/CS II is considerably broader than that of MCH/CS I. Not only are the major project components more extensive than in MCH/CS I, but the emphasis on the health district and community levels in addition to the health center and provincial levels will also require an increased level of effort. Since the number of long term technical advisors will not be increased during MCH/CS II, one can justifiably wonder whether too much is being attempted. The design team feels that the level of technical assistance is adequate for the several reasons.

MCH/CS II will build on the momentum that now exists with MCH/CS I. MCH/CS II is primarily an effort of continuation and broadening of activities rather than initiation of new activities. The broadened scope of MCH/CS II may well increase a synergism that facilitates rather than burdens the project.

MCH/CS I was a project. MCH/CS II should be perceived as a more complex project including 27 health district components. The role of MCH/CS II should become more indirect (facilitation rather than implementation) by providing health district teams with the resources (training, financial, material) that they require to establish functional health centers and community programs. Too much technical assistance can impede the empowering process.

It is possible to identify combined expertise in one technical advisor. MCH/CS I demonstrates that it is not unreasonable to find a Chief of Party whose principal expertise includes decentralization, management, and primary health care and who is also knowledgeable about pharmaceuticals and cost recovery. An IEC/training expert who is interested in operations research and community participation can probably be recruited. Expertise not readily available can be reasonably obtained with short term consultants or a buy-in to a centrally funded project.

MCH/CS II will be able to prioritize the level of effort for each major component and level. MCH/CS II will be expected to apply considerable more effort into developing health districts, which are essential to the success of MCH/CS II, than in operations research which is less essential. Budget lines items for community based activities will provide project flexibility to respond to requests when and if they develop.

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The current RPHC and the new delimitation should permit rapid progress, if technical experts of MCH/CS II are able to empower and motivate health district teams for the development of health centers and community involvement. If this can not be accomplished, then doubling or tripling the number of technical experts will not prevent the failure of the system.

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ANNEX K

- SOCIAL SOUNDNESS ANALYSIS

ANNEX K: SOCIAL SOUNDNESS ANALYSIS

I. THE SOCIO-CULTURAL SETTING

Cameroon is situated in Central Africa and is bordered by the Atlantic Ocean, Nigeria, Chad, Central African Republic, Congo, Gabon, and Equatorial Guinea. There is considerable movement of goods and people across Cameroon's numerous borders. Cameroonian territory covers 475,000 square kilometers, ranging from a sahelian ecosystem in the far north to central and southern plateaus to western highlands and coastal plans. Thus, the pattern of disease and health problems varies considerably between the provinces of Cameroon.

The 1987 census was released in February 1991. Compared to the 1978 census, it revealed that:

- fertility is high and remaining stable;
- mortality is slowly declining, especially among infants and children;
- the average age of the population is getting younger; and
- there are important migratory movements.

The population of Cameroon, estimated at 12 million in 1991, is very unevenly distributed over the territory. Although the average density is 22 person per square kilometer, variations among provinces range from 4.7 in the East province to 95.8 in the West Province. The table below shows the population and density for the three provinces included in the MCH/CS II Project.

Population and Density (1987)

Provinces	Population	Density (persons/Km2)
Adamaoua	491,000	7.9
South	337,000	8.0
Far North	1.881,000	54.9

Cameroon has a long history of migrations: nomadic herders in search of pasture, displacement of peoples by religious and ethnic strife, movement of traders for economic reasons, labor migrations to agro-industrial zones, and most recently, exodus from rural to urban areas. The Far North is one of the regions with significant migrant outflow; the under-populated rural zones of the Adamaoua Province are one of the areas attracting migrants.

The social organization of Cameroon is characterized by its diversity, a legacy of the history of its peoples and the geographic and climatic conditions which determine the way of life of its peoples.

Cameroon has been described as Africa in microcosm; indeed, its diversity is astounding--ethnically, culturally, economically, and geographically.

There are approximately 200 distinct ethnic groups in Cameroon, each with its own language. According to a UNICEF study, there are 7 major groups in the Center and South Provinces, 5 in the Adamaoua and North Provinces, and 6 in the Far North Province; there is no overlap of these groups between the three provinces in which the project will be working.

There are three main religious groups in Cameroon: Animists (39% of the population); Christians (40%); and Muslims (21%). The groups have differing views about some health problems. Conflicting religious views can also complicate efforts on a national scale to organize community participation in health activities.

Over the years, the politico-administrative structure in Cameroon has become increasingly centralized and autocratic. The RPHC attempts to reverse this tendency in the health sector. The MOPH has given to provincial and district health officials the responsibility for planning, funding (from cost recovery funds), and delivering primary health care (PHC). However, the MOPH has not delegated all the authorities needed to carry out the de-centralized responsibilities, e.g., the management of personnel resources and the planning and management of the utilization of MOPH budgetary resources allocated to provinces.

Because of this and past patterns of management, provincial authorities are often reluctant to take significant initiatives for fear of being undercut by national MOPH authorities in Yaounde. Furthermore, supervisory personnel at the provincial and district levels are not in the habit of using participatory management techniques important in de-centralized programs.

The RPHC also calls for community participation in co-managing local health facilities and the safeguarding and utilization of cost recovery funds generated at the facility. This type of partnership is new to Cameroon and is not yet working well in the RPHC facilities supported under USAID's MCH/CS I Project. This reflects the difficulty in changing the top-down management orientation of the MOPH personnel and the general suspicion and sometimes cynicism of local communities. The latter have been the recipients of previous donor and GRC programs that were not sustainable or, at least, were not sustained by the community because the community was never convinced of the need for the activity or else that the cost of the maintenance of the activity was not equal to the benefits to be derived from it.

Another element of de-centralization under the RPHC was the provision for co-management by MOPH health officials and community representatives of health facilities and the funds the facilities generated under the cost recovery program. This decision was based on two assumptions:

a) paying for services and medicines in MOPH facilities would be more acceptable to communities if the members of the communities were to be able to influence the use of the funds generated and the general management of the facility; and

b) because there had been mishandling by MOPH personnel of funds and medicines, members of many communities assumed that community co-management would prevent such actions in the future.

Assumption a) seems to be valid--although there have been some complaints about the pricing system (which are being dealt with), the principle of paying for services and medicines appears to have been accepted. Assumption b), however, has not been validated--at least not based on the evidence to date. A number of the community co-partners at the first centers with a cost recovery system mishandled and stole funds. This led to a changing of the system to guard against corruption.

Corruption, particularly in relation to the use of GRC budgetary funds, is reported to have become endemic--more the norm than the exception. This is a serious socio-cultural factor with which the project implementers must cope. Corruption will affect the level of MOPH budgetary support which actually reaches the project-supported facilities and it could undermine the cost recovery system.

Cameroonian efforts to improve health standards are also hindered by the level of education in the country. Fifty percent of women and 30 percent of men do not know how to read and write. Studies the world over have shown a direct correlation between the level of girls' education beyond the first few years of primary school and fertility rates, rates of infant mortality, health and nutritional status of children, and family planning acceptance. In Cameroon, only 37 percent of women have been to primary school (9 percent to secondary school). Further, one-third of the children in primary school abandon it before completion; the drop-out rate is higher for girls.

The health of mothers and children is highly dependent on the status of women. The present situation in Cameroon, especially in rural areas where women have a heavy burden of domestic duties, work in the fields, and are prone to numerous offspring at short intervals, is not favorable to the improvement of the health of women. Maternal mortality is very high (420 per 100,000 live births), especially from malaria, goiter, and complications of pregnancy, delivery, and sterility. Abortions, which are illegal, are also a source of maternal mortality.

Infant mortality, estimated at 90 per thousand, is responsible for 30 percent of the deaths in the country. The state of women's health, i.e., malnutrition, is responsible for low birth weight (under 2.5 kg) of 11 percent of all children and their general weakness and susceptibility to diseases later in childhood.[1]

II. SOCIO-CULTURAL FEASIBILITY ISSUES

The thrust of the MCH/CS II Project is to support the MOPH's efforts to improve significantly the quality of the health care it provides and to extend rapidly the availability of that care to, and its use by, Cameroonians--especially women and children. Further, the project is to support the establishment of a cost recovery program which is to ensure the sustainability of the NPHC program.

The crucial elements affecting the success of the project which have socio-cultural elements are the cost recovery program and the motivation of MOPH personnel (the latter is assumed to be an important element in improving the quality of health care). The cost recovery program is

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1 UNICEF, State of the World's Children, 1990.

dependent upon establishing a good pharmaceutical supply and distribution system requiring technical and management competence, a high level of utilization of the re-oriented MOPH facilities, and responsible management of the receipts for services and sales of medicines (cost recovery funds) at the levels of the province and the individual health facility.

The level of utilization of the health center will be a function of: (a) its accessibility and the price and quality of the newly-provided services; and (b) the level of understanding of the target populations of the causes of health problems and the feasibility of disease prevention. The latter affects people's decisions about whether to go to the health center or to a traditional healer and whether to participate in vaccination and other preventive medicine programs. People's health beliefs are discussed further below in Section II.D.

The pricing of the services and medicines has to balance two conflicting objectives:

a) maximize the earnings of the health facility so that a surplus can be generated to finance the re-stocking of essential medicines and pay other recurrent (non-personnel) costs; and

b) keep prices of medicines and services low enough to ensure their use by the community when needed, even by the poorest in the community.

The RPHC strategy, which provides for community co-financing of health services, also calls for community co-management of the health facilities. This could help ensure that prices are kept realistic and that quality services are maintained. Some of the issues in the cost recovery proposals are discussed below. Obtaining the appropriate community participation in decisions affecting their health care is another socio-cultural project feasibility issue which is discussed in Section II.C. below.

A. Paying for Health Services

The potential aversion to paying for medicines and services at MOPH facilities was offset by the fact that the theoretically free services and medicines in rural MOPH facilities were not available. Furthermore, it has been customary to pay for health commodities or services from non-governmental sources. For example, fees are paid, although sometimes in kind, to traditional healers and traditional birth attendants, the most readily accessible health care providers to most Cameroonians. People are also accustomed to paying for drugs at privately-run pharmacies and for services and drugs at health facilities run by the private sector agencies such as church and private voluntary agencies in rural areas. The latter have often been used because they are more accessible or reliable than MOPH health facilities.

Although willing to pay, many Cameroonians, particularly those outside of major towns, have been skeptical that the RPHC program would really benefit them. They have been struck by the deterioration in recent years of the quality of services and the absence of medicines in MOPH facilities.

In focus group discussions in communities in which the RPHC program has been initiated, the

following complaints have been raised: a) stock outages of medicines; b) prices of medicines higher than predicted; c) 200-franc charge before one can get medicines; d) no remuneration for serving on health committees (COSAs) or management committees (COGEs); e) COSAs really do not have any influence on health center operations and policies; f) sometimes treatment is not effective, but one still has to pay, in contrast with traditional healer who often does not charge until patient is better; and f) some people cannot afford to pay for needed care, e.g., indigents or emergency situations.

Some of these issues relate more to the efficiency of the system than to socio-cultural factors narrowly defined. Most of these issues, however, could have been easier to accept by the community if the community had been more involved in defining how the system might work at the local level rather than being faced with a fait accompli--a system worked out in advance by MOPH officials and presented to the community. Additional aspects of community participation are discussed in Section II.C. below.

MOPH officials have modified, or are trying to modify the Ministry's system to take into account some of the issues raised in the focus groups, e.g., prices of medicines, the 200 franc "prise en charge", and reducing the frequency and length of stock outages. Success in ameliorating these problems will go far towards ensuring that the community will be willing to pay for services and medicines at MOPH facilities--a condition precedent to a successful cost recovery program. The "inability to pay" problem has been given back to the communities--they have been asked to come up with their own solutions.

Other important requirements for ensuring the viability of the cost recovery program will be an improvement in the quality of care provided in the MOPH health facilities and better attitudes of health care providers. Both the improvement of care and the attitudes of health personnel will be a function of the training and supervision provided to health care providers and their motivation. The latter is discussed in Section II.B. below.

B. Motivating MOPH Health Care Personnel

The French word motivation is used in Cameroon health circles (including in COSAs and COGEs) to mean financial payments. Further, it seems to be seen as something to which one is entitled regardless of one's performance--just for doing what one should be doing for one's salary. This seems to reflect two unfortunate circumstances: 1) many donors have paid salary supplements (primes) or generous per diems to get good people to work well on "their" projects so that the donors could show greater project progress; and 2) the pervasiveness of corruption (or at least a perception of such a situation) in the utilization of the MOPH's own resources seems to have led to a widespread feeling that each individual is entitled to get as much as possible out of any activity, especially if it is financed from the MOPH budget or by a foreign donor.

The foregoing situation is further complicated by the inability, or at least the perceived inability, to discipline non-performers with financial dis-incentives (i.e., to terminate their employment or to reduce their salary for days of unauthorized absences from their work).

Possible ways to deal with the situation are discussed below: first, with non-financial incentives; then with financial incentives. The latter would be sustainable only if the cost recovery program is

successful or the MOPH were to change its personnel management policies.

1. Non-Financial Incentives

As part of the work to establish base-lines for MCH/CS I, a study was made of how nurses in a number of health facilities used their time. It was found that they spent over 70 percent of their day in nonproductive activity. This was cited as evidence of a poor level of motivation on the part of MOPH personnel. Participants in focus groups held at the beginning of the MCH/CS I Project cited poor attitudes of health providers as one reason for not going to MOPH facilities. Poor attitudes presumably reflect low motivation.

The general response of people contacted by the MCH/CS II design team is that improvement in motivation will only come from providing financial incentives. However, the particular conditions that have been existing in the health field in Cameroon suggest that there are non-financial factors that have been contributing to poor morale, and hence poor motivation, in the health service. Thus, it seems logical that dealing with some of these non-financial factors could also help motivate personnel.

With regard to the findings of excessive, non-productive time, the MCH/CS II design team has encountered significant numbers of excess personnel in some institutions. This seems to be particularly prevalent in facilities in provincial capitals, somewhat so in district hospitals. This situation could contribute to the rate of low productivity cited above. Furthermore, it obviously destroys morale when you know that you have nothing useful to do.

With regard to the attitudes of health providers in health centers, it should be remembered that at the time of the early focus group interviews, most health centers did not have a supply of medicines and the budgetary allocations for maintenance and investment had been drastically reduced. That situation deteriorates morale and motivation, even if you are well paid.

In the base-line study cited above, a number of factors were listed that have affected motivation of personnel in other countries: a) opportunities to participate in the making of decisions; b) recognition of their personal responsibility for desired results; c) opportunities for professional growth; d) an inner professional commitment; and e) expectations of financial security.

Of the foregoing, the first three are factors about which something could be done by MOPH provincial and district personnel, particularly with assistance from the project. With regard to participatory decision-making, divisional and sub-divisional health officials should be given the opportunity to comment on and offer suggestions for revising the tentative health district boundaries suggested by the Bertoua workshop in June 1992. If a program of financial incentives along the lines mentioned in the next sub-section were to be considered, they should be presented to all health teams for comments and for suggestions on how to implement the program. These are just two examples to illustrate the possibilities for involving lower echelons in decision-making.

Quality supervision visits could help subordinate officials recognize the importance of the responsibilities that they have. Improved contacts and more extensive collaboration with local communities can also help health officials to see the importance of their responsibilities. An improved standing with the local community should also lead to higher motivation.

Opportunities for professional growth should normally be part of any good personnel system. However, there are possibilities available within the provincial system even without a reform of the overall system. For example, there will be a number of possibilities for short-term training under the project. Good supervision visits can enhance the knowledge of lower level personnel. Providing additional equipment to health facilities may also lead to increased professional competence.

Carrying out provincial and district-level operations research (OR) programs can give extra responsibility and provide professional growth to lower-level health personnel, even those serving in relatively remote areas. An annual conference to discuss OR results could further promote capabilities and motivation.

A project-supported publication on PHC activities in Cameroon could also give recognition to highly-motivated personnel. Similarly, health personnel could be interviewed in the field about their work, services available at their facility, planned outreach activities, etc. and the interviews broadcast on national radio. This could promote improved performance if that were a criterion for the selection of people to be interviewed.

The project implementing team should be prepared to arrange for personnel management training for both provincial and district management teams. Workshops within a province involving personnel from all levels of the hierarchy could provide useful ideas for improving the system.

Multi-disciplinary workshops with personnel from various provinces can be used to improve motivation and performance. This type of activity has been carried out under the MCH/CS I Project to develop provincial and/or district strategies and action plans for information, education, communications (IEC), control of diarrheal diseases, and organizing and conducting pre-natal and under five consultations.

2. Financial Incentives

Some have suggested that the cost recovery system will be sufficiently successful to generate enough "surplus" to provide a salary supplement for health care providers. Even if sufficient funds were to be generated, it is doubtful that salary supplements that were not tied to performance would help motivation. Any financial incentives should be based on high levels of performance. Furthermore, people in all parts of the health network should have an opportunity to participate in the incentive program.

There follows below an illustrative list of performance awards that might be made, along with suggestions for criteria that might be taken into account in deciding to whom and for what the proposed financial incentives should be provided. It is suggested that these awards could be funded by MOPH budgetary funds until such time as regional cost recovery funds were available for allocation for that purpose.

Provision of these awards without a monetary component, particularly if they were reported in the media, could be morale-building and motivating; obviously, however, a small cash award would make the award more attractive. The awards [other than a) and h)] could be awarded annually; to get more publicity, part of the awards could be made at mid-year and the rest at the end of the

year. Award h) could be given at any time. The suggested list follows:

a) "Post Differential" -- for personnel assigned to remote health centers.

b) "Outreach Award" -- for health personnel who achieve truly significant vaccination or other outreach targets; for "animateurs" or others who encourage the development of community-managed health-related projects and/or help communities find financial support for such projects; or for health education (IEC) personnel who design and/or carry out a particularly effective IEC activity.

c) "High Motivation Award" -- for personnel who earn a reputation (from peers, community, and supervisors) of being highly motivated.

d) "Language Proficiency Award" -- for personnel working in outreach activities who are from other regions and who learn the principal local language, e.g., Fufulbe in the Adamaoua Province, Boulou in the South Province.

e) "Community Support Award" -- for members of COSAs who show high motivation by: i) participation in health planning exercises; ii) encouraging their community to participate in vaccination programs, health education sessions, and other health center outreach activities; iii) keeping the community informed of COSA and health center activities, problems and needs; and iv) involving women in the decision making process about the health center program, thereby ensuring that the health care provided is responsive to women and children's needs.

f) "Management Award" -- for heads of health centers or hospitals who demonstrate outstanding initiative and resourcefulness in the utilization of personnel and financial resources and physical facilities and equipment; for members of COGEs who are especially diligent in monitoring the management of pharmacy stocks and the funds generated therefrom; for pharmacy managers who are especially effective in maintaining their stock, keeping up stock records, handling cash properly, and demonstrating a good attitude toward pharmacy customers; for outstanding performance by personnel who are part of the management team for the provincial drug distribution program; or for members of the provincial and district management teams who demonstrate outstanding initiative and resourcefulness in the utilization of personnel and financial resources.

g) "Supervision Award" -- for the supervisor(s) who has an outstanding record of making supervision visits on schedule and who is applauded by those supervised as having been of significant assistance to them in improving their performance or their relations with the community.

h) "Health Team Award" -- this would be a larger award to be shared by the health team at a given facility or by an outreach team for: outstanding achievement in up-grading the quality of care provided; for extending the outreach program to an especially large or remote group; or for exemplary service during an epidemic or similar emergency health situation.

The foregoing are illustrative of the types of awards that could be related to improving health care or the relationship between the health providers and the community. Before establishing any system of awards, suggestions should be sought from health personnel all through the system, as well as COSA and COGE representatives, on the types of awards to be made and the system which will be used to decide who will get awards.

MCH/CS II could also encourage community development by co-financing small projects of the COSA or of a community action group. Funds could be made available from the provincial health fund (FSPS) and/or from MCH/CS II Project funds. The MCH/CS II budget should include $100,000 for approximately 100-200 community development projects. Criteria for evaluating proposals from communities would be established with priority given to projects which are developed and managed by women.

C. The Community's Role in the Health Care System

In part to encourage people to be willing to pay for services and medicines provided through a co-financing or cost recovery mechanism, the RPHC policy proposed that the community would also be involved in co-managing the system at local levels. This co-management meant that villagers were to be involved, through membership in a health committee (COSA), in planning the health activities and the use of resources made available to community health facilities, whether by the MOPH, donors, or via the cost recovery program. A management committee (COGE), a subsidiary of the COSA, was to safeguard and account for the cost recovery funds.

There appears to have been confusion on the part of community participants, and perhaps health providers as well, as to the appropriate role for the COSAs in particular. This has led to a withdrawal of a number of COSA members from participation. COGE members have been stripped of important duties and authorities because some of their members were mis-using or embezzling funds. This has led to reduced enthusiasm for participating in the COGE as well.

Given the foregoing, the MCH/CS II Project will initiate IEC activities to:

a) re-emphasize the importance of community participation;

b) clarify the roles that COSA and COGE personnel are expected to play;

c) search for ways to ensure that women play a significant role in the decision-making process about the functioning of the health facility;

d) inform community leaders about the importance of vaccination to the health of mothers and children and the importance of the mother's health to that of the new born;

e) discuss how a health inventory might be carried out; and

f) seek ideas of community leaders to strengthen the partnership between the health facilities and the members of the communities that utilize them.

Concurrently, the issue of community participation should be re-examined in more depth in

preparation for contact with community leaders in health areas to be included in the next group of re-oriented health facilities. This could involve an analysis of the responses to the IEC activity proposed above plus organizing special focus group discussions on the health facility-community partnership. The focus groups should be held separately with community leaders and with women because of the general reticence of women to speak out in the presence of male leaders. A follow on meeting with leaders might be appropriate, depending upon the results of the women's focus group.

In addition, an operations research activity could be undertaken to explore alternatives to, or modifications of, the present procedures for initiating the relationship with the community. One modification suggested for consideration is undertaking a health inventory with the community as the first step in development of the new relationship rather than having the COSA do it after the re-oriented program has already begun. This approach could be tried out in health areas in the South and Adamaoua Provinces.

The health team can establish a much more appropriate health coverage plan with detailed knowledge of the make-up of the community and the health environments in the facility's catchment area. With this, the local health team, with assistance from the district and possibly a Peace Corps Volunteer can conduct a mini-census of the population, a survey of health problems encountered by the community, and an assessment of the environmental factors affecting the health status of the community. This is what was referred to above as a community health inventory.

With the inventory in hand, the community, as well as the health team, will have a much better understanding of various options to improve local health standards. This can have a number of effects. First, the community may decide on an organizational structure to deal with health problems other than the COSA approach being pushed by the MOPH teams. For example, the community might decide to have a number of committees dealing with particular types of health problems--or they might set up sub-committees under the COSA.

The inventory would undoubtedly show that the primary health problems have a more significant impact on women and children than on men. This could facilitate the involvement of women in the planning and implementation of activities, something which is missing at present. It should also make it feasible for the women to meet with health officials to discuss the special needs of women and children. A special committee or sub-committee could be formed by the women to deal with the way care is provided at the health center and to interact with and support the center's outreach activities, which principally concern women and children. Additional ideas on women's participation in the project and a general discussion of the role of women in the MCH/CS II project is included in Annex L.

The inventory will also likely show that there were some things the community itself can do to improve the health environment, e.g., improve water and sanitation facilities. Having communities solve some of their own health problems is one of the objectives cited in the MOPH statement on the RPHC policy. Provision should be provided in the project for the initial funding of at least one small health-related community-run project in each health area being introduced into the RPHC program. This can provide immediate tangible benefits for the community from developing the inventory, while awaiting the establishment of the supply of medicines and other improvements that may be made in the physical facility of its health center. Funding sources other than the

MCH/CS II Project probably could be found to provide support to community-managed projects.

Where funds will be available under the project or from MOPH budgetary sources, the community should be involved in planning how those funds will be used--not a practice consistently followed at present, if at all. The women in particular should be consulted about possible changes in the physical lay-out of the health facility and about additional types of services that they would like at their facility (e.g., services that currently are available only at a considerable distance at another facility). The latter could have an impact on the type of equipment that might be ordered for the facility.

Community representatives should be made aware of the improvements needed at the center and advised of the funding available. The community might then decide that some of the improvements could be done by the community--or at least the community could provide labor so that the funding would only need to be used for materials (e.g., paint, lumber).

D. Health Beliefs and Attitudes towards Health Care Providers

As part of the operations research activities of the MCH/CS I Project, focus groups in three communities in the Adamaoua Province and three groups in the South Province discussed their beliefs about the best way of treating certain health problems and their preference for choice of health care provider. There were differences between the groups in the Adamaoua and in the South, and there were differences between women and the members of the COSA (all men in the groups interviewed).

The following points were made by the women in the two provinces:

South

"People prefer to go to the local health center, but for more serious illness they go to hospitals or to private [generally church-supported] health facilities because they have surer stocks of medicines and can provide more thorough examinations. Also, some of the private facilities offer credit to indigent patients. If it is not feasible to go to the health center or hospital, they would use traditional methods.

Traditional healers are used for problems caused by sorcery or witchcraft and for poisonings.

The women were aware of the existence of the COSA, but had little information about its activities. They felt the community should know more about what was taking place in the health center, know in advance about changes in the prices of medicines, and be able to have something to say about the kind of treatment provided at the health center."

Adamaoua

"The first choice is the health center, followed by the traditional healer. However, the latter is preferred for mental trouble, kwashiorkor, gynecological problems, paralysis,

hyperactive children and "mysterious" illnesses.

Merchants of medicines were also considered as sources of medical information. The trouble was that they could not provide much help for pregnant women. At the health centers, they get examined.

The women liked going to the center to weigh their babies. However, their husbands had to agree to obtaining care for the child and they would sometimes object to getting them vaccinated. A number said they did not take their children for vaccination because they had not been informed about the vaccinations.

The women generally knew practically nothing about the COSA and its leadership, except that from time to time the committee would collect money to pay for the care of someone who could not afford to pay. The women favored community participation in the activities of health center, suggesting the importance of having a women's club which would permit them to keep current on subjects concerning health."

III. SUSTAINABILITY AND REPLICABILITY

A. Sustainability of Project Activities

Sustainability of project activities will depend upon socio-cultural and other factors. Perhaps the most fundamental factor is the success of the cost recovery program, which over time is expected to finance virtually all of the recurrent costs of the RPHC program other than the salary costs of MOPH personnel. The success of the cost recovery program will depend upon the efficiency of the provincial distribution system for essential medicines and the rate of utilization of MOPH health facilities.

The rate of utilization of MOPH health facilities will be a function of the quality, price, and relevance of services provided and the attitude of the health care providers. The quality of health care provided will depend upon the technical capability and motivation of the health personnel. These in turn will be affected by the quality and quantity of training and supervision provided to health personnel. Motivation is discussed in Section II.B. above.

The MOPH personnel can maximize the chances that the prices of services and medicines and the relevance of services provided in their facilities will lead to a high level of utilization of MOPH facilities if they form a strong partnership with the local community. Forming this partnership is discussed in II.C. above.

In summary, social sustainability boils down to the motivation and capability of MOPH personnel and the quality of the relationship between the MOPH personnel and the community. Financial sustainability of the RPHC program is discussed in detail in Annex N, Financial Analysis.

B. Replicability of Project Activities

Successful cost recovery programs have been carried out in other countries. There seems to be no reason why such a program cannot be replicated here if MOPH personnel can be motivated to: a)

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want to see the program succeed; and b) overcome the tendencies of some in the system toward corruption.

Because of the wide diversity of ethnic groups and different religious beliefs in the country, it will be extremely important to allow provincial and district officials some flexibility in working out their partnership with communities. The current level of top-down administration needs to be reduced, and a conscious effort made by national officials to encourage initiative and experimentation at local levels on the methodology and speed of introducing the RPHC program. If this is done, it should be possible to replicate the program throughout the country.

IV. BENEFICIARIES AND EQUITY ISSUES

A. Beneficiaries

The direct beneficiaries of the project are twofold:

a) MOPH personnel who will be receiving training and technical support from the project (approximately 900); and

b) 1.7 million inhabitants of local communities who will have access to curative and preventive services, including the purchase of essential medicines from health facilities.

In addition, local communities will also be indirect beneficiaries because they will be able to receive services from MOPH health facilities that were not previously available. They will also have the opportunity to participate in the management of local health facilities and to carry out health projects of their own.

Within the local communities, the primary beneficiaries will be women and children. They are the most vulnerable to health problems; they are the most frequent visitors to health centers. They will gain the most from more extensive and effective outreach programs.

The principal communities benefitting from the project will be rural and semi-rural ones. The principal locations receiving essential medicines, some equipment, and minimal renovation assistance will be 100 rural health centers, the lowest rung on the MOPH health pyramid. Some support will also be provided to the next level up--27 reference hospitals in district centers-- and to the 3 provincial hospitals.

B. Equity Issues

As indicated in the previous section, rural communities will be the primary beneficiaries of this project. While health services in urban areas also need improvement, the services available to rural people are lower in quality and substantially less accessible. Thus, the project should reduce somewhat the existing inequity in accessibility and quality of health care between urban and rural areas.

It was also indicated above that women and children would be the principal recipients. They are

the most vulnerable to health problems and often, because of socio-cultural factors, they are the least able to do something about their situations. Thus, the project should improve equity in the availability of health care to women and children. It will be a challenge, however, for project implementers to ensure that women have a voice in the planning and implementation of the facility and outreach programs in the re-oriented health facilities and that the project-supported facilities deliver a badly-needed higher level of health care to women and children.

Some claim that cost recovery will result in an added burden on the poor. Studies in the Adamaoua Province have indicated, however, that the poor seemed to have benefitted more than the relatively well-to-do from the opening of re-oriented health centers. It seems that the poor had been forced to go longer distances to get care, and that they had to pay for the health care provided. Thus, the newly re-oriented centers permitted a significant net saving on the cost of transportation. This hypothesis should be tested further in other parts of the country.

The foregoing notwithstanding, there are instances when people do not have funds to pay for services (indigent--temporary or indefinite--or because of accidents). The MOPH has recently asked that COSAs come up with a system for dealing with these situations; as of November 1992, two COSAs of nine in the Adamaoua Province had established such policies.

ANNEX L

- THE ROLE OF WOMEN IN THE MCH II PROJECT

ANNEX L: THE ROLE OF WOMEN IN THE MCH/CS II PROJECT

> *The major finding of the evaluation [of over 100 projects] is that mainstream projects that ensure women's participation in proportion to their roles and responsibilities within the project's baseline situation are more likely to achieve their broader socioeconomic goals than are projects that do not (Carloni 1987).*

Because women and children are meant to benefit from the MCH/CS II Project, the above evaluation finding seems quite relevant to the planning and implementation of the MCH/CS II Project. Thus, this annex focuses on women's issues, even though the role of women in the project is discussed elsewhere in the Project Paper, particularly in Annex K.

This annex also deals with certain topics specifically mentioned in Handbook 3, particularly Appendix 3P thereof, which do not fall logically in other sections. The principal topics covered are: 1) women's involvement in the design of MCH/CS II; 2) women who will be involved in the implementation of the project; 3) constraints to women benefitting from the project; 4) opportunities to increase women's involvement in and benefits from the project; and 5) information on gender-disaggregated data.

A. Background

Studies the world over have shown a direct correlation between the level of girls' education beyond the first few years of primary school and fertility rates, rates of infant mortality, health and nutritional status of children, and family planning acceptance. In Cameroon, fifty percent of women do not know how to read and write. Only 37 percent of women have been to primary school and even fewer -- 9 percent have attended secondary school. Further, one-third of the children in primary school abandon it before completion; the drop-out rate is higher for girls than boys.

The health of mothers and children is highly dependent on the status of women. The present situation in Cameroon, especially in rural areas where women have a heavy burden of domestic duties, work in the fields and are prone to numerous offspring at short intervals, is not favorable to the improvement of the health of women. Maternal mortality is very high (420 per 100,000 live births), especially from malaria, goiter, and complications of pregnancy, delivery, and sterility. Abortions, which are illegal, are also a source of maternal mortality.

Infant mortality, estimated at 90 per thousand, are 30 percent of the deaths in the country. Malnutrition of pregnant women is responsible for low birth weight (under 2.5 kg) of 11 percent of all children and the infants' general weakness and susceptibility to diseases later in childhood. (UNICEF, 1990)

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B. Women's Involvement in the Design of the Project

In part, because of travel restrictions limiting their time in the field, and in part, because of the sensitivity in many areas to male strangers talking with local women, the design team did not have the opportunity to discuss the project with women in local communities who are participating in MCH/CS I or who should benefit from MCH/CS II. Discussions were held, however, with women who are involved in the implementation of MCH/CS I: a nurse in a health center and the IEC coordinator in the Adamaoua Province (both Cameroonians), two Peace Corps Volunteers (PCVs) working with the MCH/CS I Project in the Adamaoua Province, the expatriate Regional Coordinators for the project in the Adamaoua and South Provinces, the MCH/CS I Project IEC advisor in Yaounde, and the Assistant Peace Corps Director for Health in Yaounde.

The team also had access to the records of various write-ups of women's focus group meetings in the Adamaoua and South Provinces, part of which is reproduced in Annex K. Discussions were also held with the female USAID personal services contractor working on the Cameroon National Family Health Project and USAID personnel involved with Women In Development activities of USAID/Cameroon. One member of the design team was a member of the MCH/CS I evaluation team last year; that team was able to hold more extensive interviews.

C. Women Who Will Be Involved in the MCH/CS II Project

It is expected that women will be involved in the project as: 1) beneficiaries; 2) members of the community groups participating in the co-management of the health facilities in the RPHC program; 3) MOPH health providers; 4) members of the technical assistance team working on the project; and 5) female PCVs. The degree of involvement of the different groups is discussed below.

Women are the principal users of the MOPH health facilities, either for themselves or for their children. In addition, they are the principal family members utilizing outreach services of the health facilities, such as vaccinations.

Within the MOPH, there are very few women doctors, and somewhat more nurses and other paramedical personnel. Most of the women are posted to facilities in Yaounde or provincial capitals. The few who are posted to a more rural setting are there almost invariably because their husbands were assigned there. Thus, there will likely be few women health providers serving at health centers, sub-divisional hospitals, and reference district hospitals, the principal facilities supported by the MCH/CS II Project. In the Adamaoua Province women comprise less than 10 percent of personnel in health centers and about 14 in district hospitals. Even in the provincial hospital, women employees comprise only about 25 percent of the staff. These figures might be slightly under-stated, because no information was provided about women in Banyo district; even so, the percentages are probably accurate to within 1 or 2 percentage points.

Under the RPHC program, members of the community are supposed to participate in the co-management of health facilities. Given the importance of project activities to the health of women and children, one would assume that women would be selected for membership on the health committees (COSAs). This has been the exception under MCH/CS I. Efforts will be made in MCH/CS II to increase women's involvement in the community participation in the co-management of health facilities. This is discussed further under D. and E. below.

The MCH/CS I technical assistance (TA) contractor has three women as part of the TA team. The design team recommends that the TA contractor for MCH/CS II should include at least one woman on the team, and that other members should have a background indicating an understanding of women's health problems and experience in designing and/or implementing programs to meet women's needs.

A number of female PCVs have been working with the MOPH in MCH/CS I project areas, and it is assumed and proposed that they will continue to be involved with MCH/CS II activities.

D. Constraints to Women Benefitting from the Project

The constraints to women benefitting from the project include: 1) very low family incomes, the use of which is usually controlled by men; 2) low educational levels; 3) extremely long hours of hard work which makes it difficult to go to health facilities when health services are being provided; 4) lack of information about vaccination programs and other outreach activities of health facilities; and 5) lack of involvement in the planning and management of the health services to be provided. Some amelioration of the foregoing might be accomplished if there were more women health providers and more significant women's involvement in the co-management of the health facilities. The former does not seem likely during the project; the latter is discussed further below.

Women, in their focus group discussions, have noted that they often cannot go to health centers for their own care or for their children's care without the approval of the husband. Sometimes men have objected to vaccinations. Men, in their focus group discussions, complain that their wives are not sufficiently sensitive to the costs of health care. There were rumors circulating throughout Cameroon two years ago that vaccinations made the recipient sterile; this resulted in continued low coverage rates for vaccinations for children and for mothers-to-be.

Few women have been selected to participate in the co-management of health facilities. Even when selected to be a member of the COSA, the women generally have either not attended meetings or remained silent during the meetings. In most of the cultural settings in Cameroon, joint men-women groups or meetings are the exception.

Given the foregoing, a new approach is needed to involving community women in the decision-making regarding the functioning of the local health facility (see E. below).

While it is possible that the community health inventories mentioned in Annex K would reveal some health problems of women or children for which no service is currently being provided, this is believed unlikely. It is assumed that the principal health problems, and the appropriate treatments for them, are already known. Thus, for women to benefit from the project it must first: a) ensure that women and children can partake of the care available; and b) find a way to deliver quality care to deal with the problems already known.

Regarding a), see E. below. With regard to b), the technical inputs needed for preparing protocols and training materials for improving the quality of care to meet women's health problems will be financed in large part from USAID's Cameroon National Family Health Project. The MCH/CS II Project will focus particularly on the management aspects of the delivery system.

E. Opportunities for Increasing Women's Involvement in and Benefits from the MCH/CS II Project

As indicated in D. above, there are a number of factors which potentially can keep women from benefitting fully from the activities funded from the MCH/CS II Project.

It would be unrealistic to expect husband-wife consensus at all times on all issues. Nevertheless, there appears to be a need for considerable IEC work on preventive health care, particularly with husbands and fathers about maternal and child health. Some operations research may also be needed on what types of messages and what methods of conveying these messages are most likely to achieve positive support from husbands and fathers on critical health issues, such as vaccinations of mothers and infants.

It may well be that a re-structuring of the pricing for services and medicines can eliminate disincentives to undertaking preventive health care, e.g., eliminating the charge for visits to health centers for weighing new-born babies. This in turn might help overcome some of the financial concerns expressed by the fathers.

It seems likely that significant involvement of women in the co-management of the local health facilities may result in those facilities becoming more responsive to women's and children's needs. Following the design team's visit to the Adamaoua Province, the Provincial Health Delegation has developed a strategy to integrate women into health committees (COSAs) and to create sub-committees for women. The team hopes that this will provide the desired result of effective participation by women in the decision making about the health centers (and other facilities at other levels).

Recognizing the socio-cultural differences between the different provinces, it is possible that the Adamaoua approach may not be effective in other provinces--and it may not be successful even in Adamaoua. Therefore, some additional ideas are offered below on how to achieve greater women's involvement in the project.

a) Form a women's health advisory committee in addition to the COSA.

b) Encourage the formation of a women's health club, to which health personnel could be invited to discuss current health activities and respond to the women's questions.

c) Arrange for women's focus group discussions on a periodic basis and provide reports thereon to COSAs and to health officers at local, district, and provincial levels. The discussions could provide ideas for operations research, as well as the need for action by health personnel.

d) Have women participate as members of the planning group that prepares district action plans for implementing the RPHC policy.

e) Establish training programs in basic health for rural women and specialized training for traditional birth attendants (TBAs) and incorporate these in the outreach programs of health facilities.

f) Organize meetings with communities to discuss maternal and child health problems and ways of ensuring that women's views and concerns are brought into deliberations about how RPHC will be delivered.

g) Drawing on the results of f) and other information seeking activities, organize a workshop with the Provincial Health Delegation, district team leaders, and selected women participants (both health professionals and private individuals) on the role of women in the RPHC program. Workshop topics should include: 1) the importance of the RPHC health program to women and children; 2) the actual and potential constraints to women and children receiving the quality care needed and available; 3) means of overcoming the constraints; and 4) a strategy for ensuring women's participation in the RPHC program.

h) Ensure that women are participants and spokespersons in various IEC activities related to maternal and child health.

i) Establish criteria for project and FSPS-funded development grants to health committees which give priority to projects which are developed and managed by women.

j) Assure that both internal and external project evaluations assess the role of women in the co-management of health services.

It is possible that the local community could come up with good ideas for ways of involving women and/or meeting their health needs, and meetings with communities have been suggested in f) above. It may be that such meetings will demonstrate that the community needs more information about its health problems, particularly those of mothers and children,

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and about measures for dealing with them. The community may also need a more complete understanding of how the local physical environment may be having an impact on some of the health problems. It is for that reason that the design team has suggested that the RPHC process start with a health inventory of each community.

MCH/CS II could also encourage community development by co-financing small projects of the COSA or of a community action group. Funds could be made available from the provincial health fund (FSPS) and/or from MCH/CS II Project funds. The MCH/CS II budget should include $100,000 for approximately 100-200 community development projects. Criteria for evaluating proposals from communities would be established with priority given to projects which are developed and managed by women.

The participation of female Peace Corps Volunteers in MCH/CS II, particularly in outreach activities, could also help ensure that the project activities would be more responsive to women's needs. At the least, the women would have another channel for communicating their needs or concerns to health officials. Volunteers might also have time for secondary activities such as promoting literacy, providing information on nutrition or gardening, or encouraging and facilitating small income-generating activities.

F. Gender Disaggregated Data

Information is obtained at health facilities on the gender of patients seen. Although this information is reported to higher levels, there appears to be no use being made of this information. A small operations research activity would be useful to review these data at either the district or provincial level to determine whether there are any health centers with exceptionally small or large participation by women. Also useful would be an analysis of the principal causes of visits, particularly in those with high participation levels. Such analyses could be useful as a basis for further research at individual health centers.

Important information relating to the achievement of the project purpose is the rates of vaccination (maternal and child); this information is included as a part of the health management information system (HMIS). A review of gender-disaggregated data on children vaccinated could indicate whether there is a bias towards one sex more than the other.

Information is not included in the HMIS on the gender of members of the COSAs, or their subordinate COGEs. The MCH/CS II Project should provide for this information--or an appropriate substitute -- if the activities proposed in the previous section result in more effective means of obtaining women's participation in the project.

It is recognized that being a member of the COSA does not ensure meaningful participation in decision making about the RPHC program. It will be important, therefore, to ensure that the TA contractor obtain information on the involvement of women in the co-management of local health programs, in whatever form it may take, and other interaction with the health care providers that results in greater participation, or benefits, for women.

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ANNEX M

ADMINISTRATIVE ANALYSIS

ANNEX M: ADMINISTRATIVE ANALYSIS

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- 2.1.1 National Policy on Reorientation of Primary Health Care
- 2.1.2 Laws and Decrees Supporting Cost-recovery Program
- 2.1.3 Inter-locking Autonomous Non-Profit Associations for Greater Decentralization of Management and Community Participation

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- 2.2.3 Buffer Funds in Planning, Management, and System Sustainability.

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1.0 Introduction

The purpose of this administrative analysis is to: (a) describe the legal, financial, organizational, and managerial environment in which MCH/CS II will operate, (b) gauge the capability of the institutions to perform their respective roles, and (c) determine what institutional and administrative capacities need to be reinforced to favor sustainability.

The implementing agencies for MCH/CS II will be the Ministry of Public Health in the Republic of Cameroon, and a number of semi-autonomous non-profit associations which will be developed in three provinces (Far North, South, and Adamaoua) at the provincial, district, and health area levels. Since the associations of health committees have not formed, this analysis is primarily that of the Ministry of Public Health, especially at the provincial level and below. Draft bylaws for forming and managing the associations are also discussed.

2.0 Organization

2.1 Legal Status

2.1.1 National Policy on Reorientation of Primary Health Care (RPHC)

The RPHC and national policy for decentralization of the MOPH has implications for policy making, planning and resource allocation, management, inter-agency collaboration, and revenue raising. This involves deconcentration of centralized functions to the provincial level (e.g., planning/budgeting, medical supply management, and training/supervision), the administrative delegation of authority to the provincial and district levels to implement the functions transferred, and devolution through the creation of semi-autonomous, inter-locking, non-profit associations at the provincial, district and health area levels to manage cost-recovery funds. Another form of decentralization, privatization, is also called for through MOPH/NGO partnerships for extending health services in selected under-served areas.

A greater delegation of authority to the Provincial Health Delegations decreases the burden upon the central MOPH. It has yet to be determined, however, to what extent the Provincial Delegations are prepared to continue the delegation of authority and resources down to the health district and health area levels.

2.1.2 Laws and Decrees Supporting Cost-recovery Program

A drug financing law (no. 90/062) was signed in December 1990 establishing the authority of MOPH facilities to: "recover the costs related to the sale of generic medicines". The law included special authorization for establishing "a decentralized management which will enable health facilities to replenish their stocks and purchase minor medical equipment". The law states that texts will be developed "specifying essential drugs and their prices, as well as the arrangements for managing the funds generated through the sale of drugs inside health facilities". These texts have been developed by MCH/CS I and are being implemented under the authority

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of the Provincial Delegate in each province, but are expected to come under the authority of the General Assembly of the provincial health funds (FSPS).[1]

2.1.3 Inter-locking Autonomous Non-Profit Associations

A foundation for community participation in the co-management of cost recovery funds was laid by: (a) a 1990 law which simplifies the legal procedures for the establishment of private associations, (b) a 1990 MOPH decree authorizing the establishment of community health committees, and (c) the issuance of MOPH endorsement to health committees to obtain association designation. This will increase the communities' awareness of public health issues, and establish checks and balances to safeguard the collection and use of funds.

Draft bylaws have been developed to create a legal framework for the establishment of inter-locking, non-profit associations at the provincial, district, and health area levels, which have responsibility for managing the funds. The General Assemblies and Management Committees (COGEs) of each association, once functional, will establish the operational arrangements explaining how funds will be raised, managed, and spent.

<u>Legal and Management Issues related to the Associations</u>

Once having received the visa of the Minister of Public Health, the bylaws would be implemented by registering each new association with the local authorities at each level. The drafts are based on field activities tested by other donors in Cameroon. They have been under considerable discussion for four years at the central and provincial levels. These reviews and discussions suggest some crucial differences between the intentions as expressed by central MOPH policy makers on the one hand and the way the field personnel, whose duty it would be to implement the statutes, interpret them and intend to implement them.

The central MOPH emphasizes the importance of empowering the communities to co-manage cost recovery funds. This is key, first, to sustained community involvement in raising public health consciousness, and second, to establishing checks and balances on the use of cost-recovery funds. All three bylaws provide for a treasurer and management committee to open bank, or postal, accounts to retain and manage the funds generated from sales. It is presumed that each management committee, at the provincial, district, and health area levels will retain and control the use of surplus revenues.

In the current system CAPP field supervisors collect surplus revenues from each health center every two months when drugs are delivered and take them to be deposited in a CAPP-managed bank account in the provincial capital. The author of the bylaws describes this as a temporary

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[1] It may be necessary, or at least advisable, for the essential drugs list, price lists, and other arrangements for managing the cost-recovery program initiated under MCH/CS I to be submitted to the General Assemblies in each province for their approval, once they are functioning.

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arrangement due to the lack of bank accounts in rural areas and previous mismanagement of funds at lower levels. It is proposed that the funds thus collected by the CAPP be turned over to the COSA or COSADI when there is a local bank account and adequate local management.

2.2 Financial Status

2.2.1 Current Funding Mechanisms

This section describes the sources of revenues available to the MOPH, and how the funding mechanisms function. Annex N - Financial Analysis - provides information on funding levels, and their implications for MCH/CS II. The primary focus, here, is on how resources are provided to MCH/CS II teams and facilities at the provincial level and below.

MOPH facilities receive support from the Government of Cameroon through several mechanisms: (a) the use of buildings and land deeded to the Ministry of Public Works (Travaux Publiques), (b) salaries for workers enrolled as civil servants (with the Ministere de Fonctions Publiques) paid by the Finance Ministry (MOF), and (c) investment and operating budget support provided by the MOPH. In theory, the MOPH budget is developed annually along with an annual workplan based upon the GRC five year plan. The MOF informs the MOPH of what its budgetary allocation is likely to be in the coming year. The MOPH submits an annual budget to the Ministry of Finance, based upon what the central Ministry believes are the needs within the established budgetary constraints. The central MOPH directorates generally presume that provincial participation in drafting annual budgets is unnecessary because the estimates from the field would undoubtedly exceed the MOF allocations and the central MOPH decision makers are conducting what is essentially a process of rationing limited resources.

80 to 85% of the MOPH recurrent cost budget is consumed in salaries with the rest going to other operating costs such as medicines, uniforms, repairs and maintenance, and medical supplies. Letters of credit (avis de credit) are issued twice a year to Provincial Delegates and the directors of provincial, divisional and sub-divisional hospitals.[2] A different letter of credit is issued twice a year to each team for each of a series of specific line items (e.g., medicine, uniforms, maintenance, supplies, meals for patients, and miscellaneous operating costs). The credits are drawn down by submitting a pro forma vendor invoice to the accountant in the Provincial Governor's office, who approves the availability of funds, and subsequently pays the bill.

This system, typical across Francophone Africa, is often criticized as being excessively bureaucratic and burdensome. It provides the health manager no input into the initial formulation of the budget allocations and no flexibility in shifting resources between line items. It was originally established to avoid having to staff separate accounting, financial management, and auditing functions within each government ministry. It was, decades ago when the bureaucracy was smaller, praised as an example of efficient shared services.

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[2] These are in the process of being reorganized into districts.

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This system is considered by many to be an obstacle to efficiency of public services. Decentralizing accounting and financial management would bring, however, added costs. Decentralization would require more MOPH field staff, new staff training, and appropriate systems development. It should also be expected that the audit risks would increase with decentralization, and the monitoring and oversight capacities would need to be increased.

However, the primary source of the resources under decentralization is not expected to come from GRC/MOPH allocations but from community cost-recovery programs (drugs sales and fees for service). This has influenced the way the MOPH has chosen to increase the institutional capacity for monitoring and oversight. Rather than relying on letters of credit, or increasing central MOPH auditing and inspection capacities, the MOPH has chosen to develop community participation in co-management. (See: "Cost-recovery Program" for details on the experience to date with community management of revenues from drug sales).

The MOPH coordinates donor projects to support a full range of health services by geographic areas rather than by nationwide vertical intervention. USAID along with GTZ (Germany), CIM (Belgium), UNICEF, and others, provides training, commodities, and long- and short-term technical assistance in support of the national RPHC. The USAID assistance under MCH/CS I does not include direct transfers of funds to the GRC either in the form of advances or reimbursement for expenditures. Local currency expenditures are managed by an institutional contractor and/or a NGO grantee.

2.2.2 Planned Funding Mechanisms and Financial Management

The non-profit associations to be established at the provincial (FSPS), health district (COSADI), and health area (COSA) levels are to vote on management arrangements drafted for them by their management committees (COGE). Such arrangements, at the provincial level, should include systems and procedures for procurement, inventory control, cost accounting, and pricing strategies. A clear policy is needed regarding covering deficits at specific facilities due to economic conditions or poor management. The CAPP should also expand its inventory to non-medical items, such as laboratory, radiological, and dental supplies; and spare parts for health facility vehicles.

2.2.3 Buffer Funds

The COSADI and COSA could use surplus revenues as buffer funds for planning and budgeting and to assure sustainable services. The rules and regulations developed by the management committees (COGEs) and passed by the General Assemblies at each level should require budgets to be constrained to the revenues (minus depreciation and contingency) already generated in previous years. No annual budget should be approved which plans the expenditure of revenues from future sales. This should also preclude borrowing to cover operating expenditures.

2.3 Pattern of Organization

2.3.1 Central MOPH Directorates

The central directorates (see Organizational Chart M-1) should define national policies, priorities, and strategies and specify norms and standards through diagnostic and treatment protocols, and through requirements for licensing professionals and accrediting facilities. The central directorates should monitor and enforce the implementation of policies, norms, and standards. The role of the MOPH directorates in management and funding has decreased due to lack of resources, resulting in reduced budgetary support to field facilities and lack of supervision from the national level.

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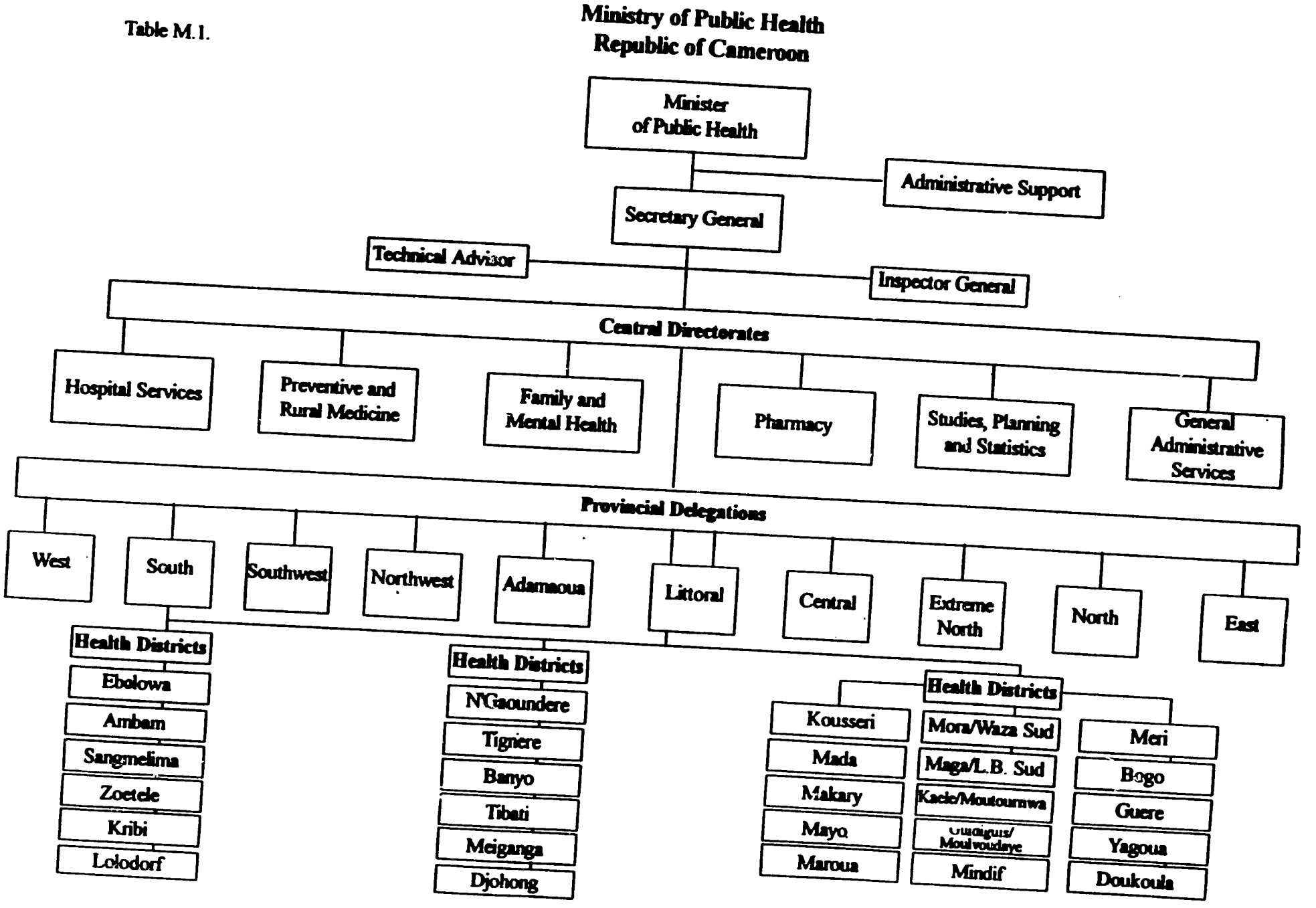
Table M.1.


Ministry of Public Health
Republic of Cameroon
Minister of Public Health
Administrative Support
Secretary General
Technical Advisor
Inspector General
Central Directorates
Hospital Services
Preventive and Rural Medicine
Family and Mental Health
Pharmacy
Studies, Planning and Statistics
General Administrative Services
Provincial Delegations
West
South
Southwest
Northwest
Adamaoua
Littoral
Central
Extreme North
North
East
Health Districts
Ebolowa
Ambam
Sangmelima
Zoetele
Kribi
Lolodorf
Health Districts
N'Gaoundere
Tignere
Banyo
Tibati
Meiganga
Djohong
Health Districts
Kousseri
Mada
Makary
Mayo
Maroua
Mora/Waza Sud
Maga/L.B. Sud
Kaele/Moutourwa
Guidiguis/ Moulvoudaye
Mindif
Meri
Bogo
Guere
Yagoua
Doukoula

The scope of MCH/CS I and II touches the purview of the Directorate of Preventive and Rural Health (DMPR), the Directorate of Hospitals, the Directorate of Pharmacy, the Directorate of General Administration (DAG), and the Directorate of Research, Planning, and Statistics (DEPS). Coordination at the national level has been delegated to the Director of DMPR who serves as the host country director for MCH/CS I. The Provincial Health Delegates also coordinate across the technical areas of all the directorates. Each delegate is considered the representative in the province of the director of each of the central directorates, and as such, serves as the principal manager of all MOPH facilities and activities in the province.

The **Directorate of Preventive and Rural Health** implements national policy on the RPHC. MCH/CS I assistance has made an essential contribution in helping DMPR develop training and supervisory programs in PHC.

The **Directorate of Hospitals** establishes norms and standards for the accreditation of secondary and tertiary care facilities in both the public and private sectors. There has not been sufficient technical and financial resources to completely inventory health facilities, revise establish norms and standards to emphasize quality of services or monitor compliance with national policies. The scope of MCH/CS II includes district and provincial hospitals, especially regarding referrals from health centers. In this regard, the Directorate of Hospitals will be routinely consulted during MCH/CS II regarding the planning and implementation at the level of secondary care institutions.

The **Directorate of Pharmacy** surveys the volume, variety, effectiveness, and appropriateness of the drugs sold or issued through public and private channels. It also establishes national policies, norms, and standards for the licensing of pharmacists, the accrediting of facilities, and the rational use of pharmaceuticals. Less than half the population has access to licensed pharmacists, who are primarily in urban and peri-urban areas. The Directorate of Pharmacies is routinely consulted and informed regarding the development of the CAPPs and the medical supply systems.

The **Directorate of Family and Mental Health** manages the USAID-funded National Family Health Project (NFHP). MCH/CS II and NFHP will collaborate in the distribution of contraceptives to health centers from the CAPP and to coordinate clinical training for health staff and village health teams.

The **Directorate of General Administration** oversees the management of the MOPH's personnel, budget, and facilities. DAG generally lacks the resources to do more than compile and submit an annual budget to the Ministry of Finance and monthly payroll requests to the Ministries of Finance and Civil Service (Fonctions Publiques).

The **Directorate of Research, Planning and Statistics** has responsibility for developing national health statistics and identifying priorities related to the national health status. The National Annual Health Statistics Report has not been published in two years. USAID/Cameroon has provided assistance to DEPS by providing a TAACS Advisor (AID/R&D/Health) to help develop

an expanded national MOPH HMIS to include financial, facilities, and personnel management.

2.3.2 Provincial Health Delegations

The Provincial Health Delegations (see Organizational Chart M-2) are responsible for implementing policies, strategies, standards, and performance targets for public health services. The Provincial Health Delegations will have responsibility for developing recommendations to the FSPS General Assemblies regarding: (a) public health priorities, (b) population coverage by facility, (c) personnel staffing patterns, and (d) annual planning and budget development parameters.

2.3.3 District Health Teams

Improved provincial and district management has been initiated by the MOPH RPHC for training and systems development provided under the MCH/CS I Project. This should reduce the number of administrative levels by replacing divisions and sub-divisions with districts.

Staff assignments are prepared annually by the Provincial Delegate and approved by the central Ministry. The lists serve to track civil service assignments, and for the Ministry of Finance to prepare salary budgets and monthly payrolls. The provincial lists indicates the facilities to which staff have been assigned, their rank, educational degrees, and years of service, but does not include skills/performance profiles or in-service training received.

Provincial Delegates and hospital managers receive letters of credit, pre-allocated to specific objects of expenditure. The funds can be drawn down by submitting pro-forma invoices justifying expenditures within the limits of the line item balances to the accountant in the office of the Provincial Governor. In practice, there have been problems in drawing down on the letters of credit because vendors have not felt confident they would be paid.

The allocations are not based upon budgets submitted by the Provincial Delegates and vary across provinces. The importance of central budgeting will decrease as operating costs are covered through cost-recovery revenue.

The MOPH has a clinic record form to identify illnesses, but health center staffs do not uniformly have the skills or the diagnostic equipment sufficient to accurately identify the full range of diseases listed or to analyze the public health implications of such a broad range of diseases.

2.3.4 Health and Health Management Committees at all Levels

MCH/CS II long-term technical assistance at the national and provincial levels will assist in the refinement and implementation of a draft statute establishing provincial health funds (see Organizational Chart M-3), including the formation of provincial General Assemblies and management committees. Special emphasis will be placed on enhancing community-based

financial management systems for generated revenues. MCH/CS II will assist the COSADIs, COSAs, COGEs, district health staffs, and health center staffs to improve management of services and control of allocated resources.

TABLE M- 2

CURRENT
ORGANIZATIONAL CHART
PROVINCIAL HEALTH TEAM

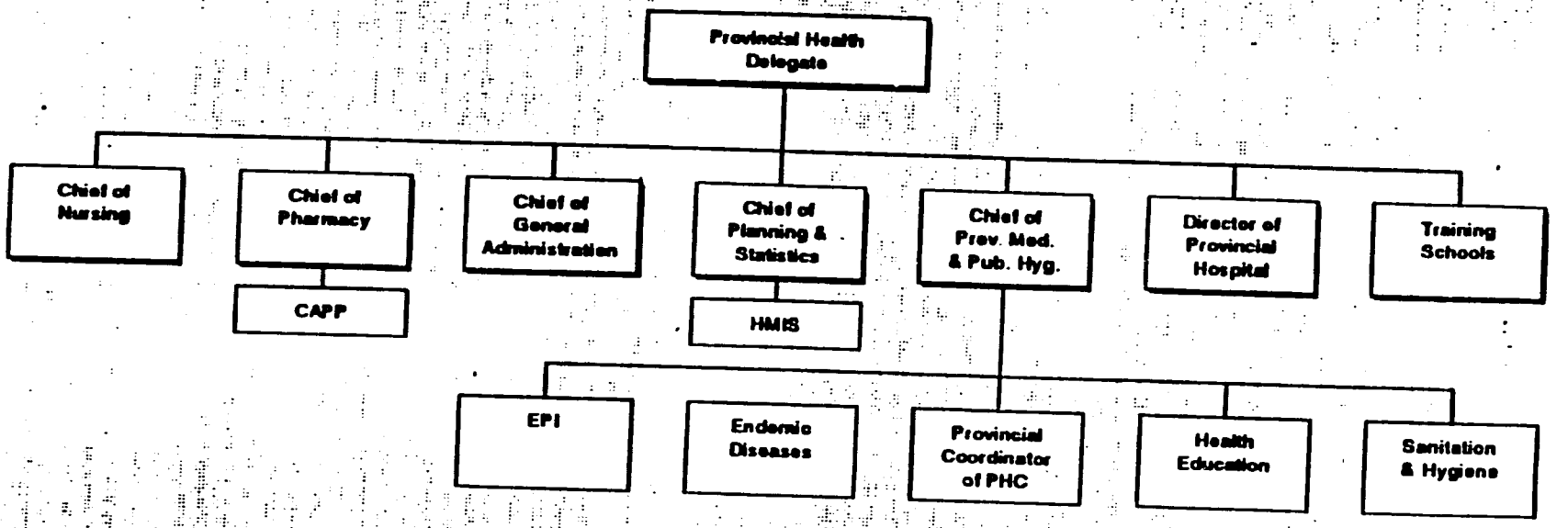
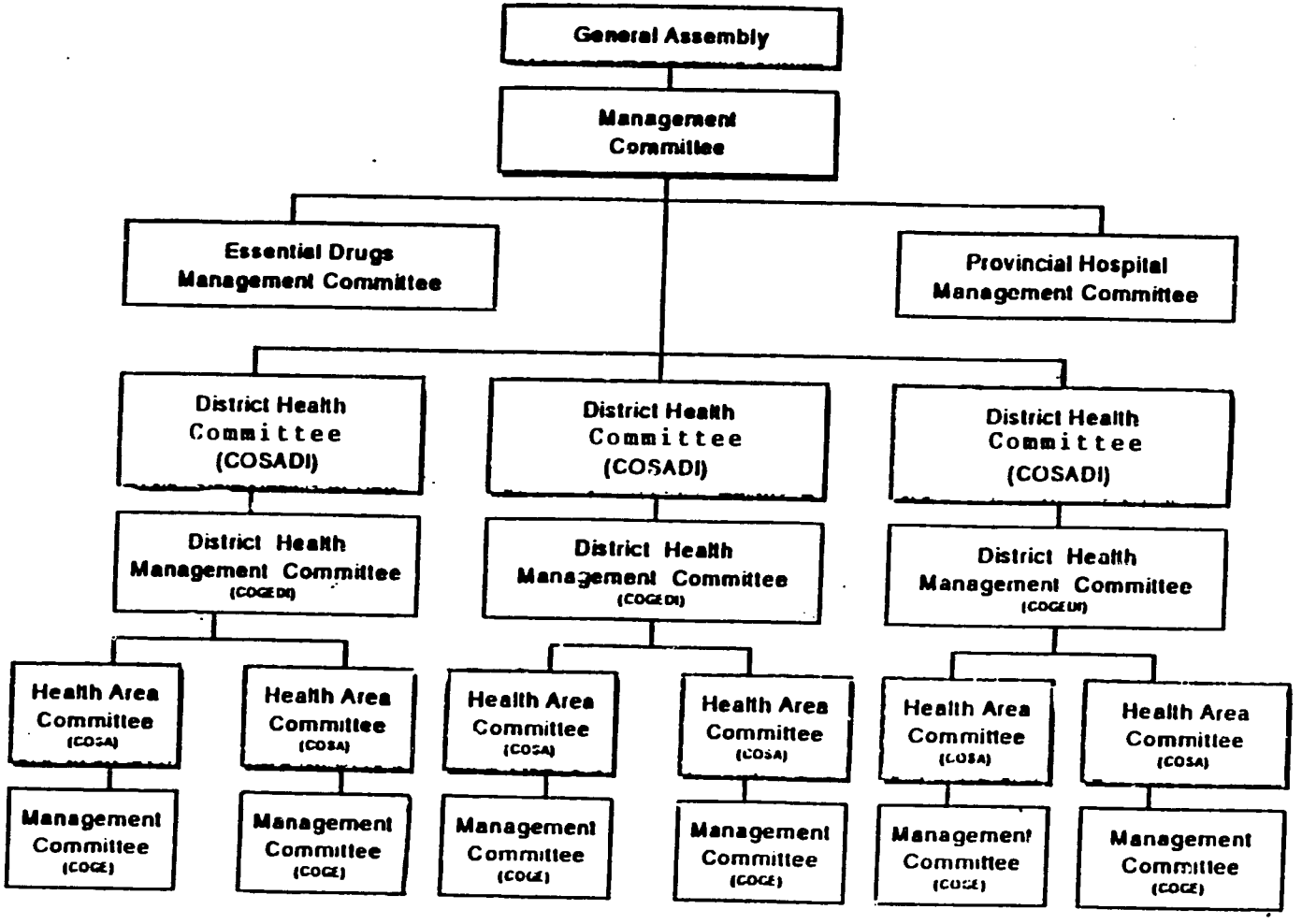


TABLE M-3

PROPOSED ORGANIZATIONAL CHART PROVINCIAL HEALTH FUND (FSPS)



2.3.5 Medical Supply Logistics and Supervision Systems

Until the recent RPHC policy was started, pharmaceuticals consumed and issued by MOPH facilities were procured, largely through importation, by a state owned monopoly called the Office Nationale de Pharmaceutique (ONAPHARM). Under this previous system, the MOPH offered free medicine; however, in practice, shrinking budgets meant they could provide little. This led to an estimated 85% of pharmaceuticals being bought from private retail pharmacies and pharmaceutical vendors.

Information from public health facilities suggests a wide unexplained variance in prescribing patterns for similar illnesses across facilities and an excessive volume of ethical drugs prescribed with respect to estimated norms based on demographic and epidemiological profiles. Even though treatment protocols and rational use guidelines associated with the list of essential drugs attempt to standardize prescriptive practices, staff training, distribution controls, information systems, and supervisory regimes still need to be improved.

Provincial drug supply centers (CAPPs) exist in the Adamaoua and South Provinces, and one is planned for the Far North. The design and implementation of self sufficient systems at the CAPPs for procuring, stocking, and distributing essential medical supplies is still in process. Management arrangements should include flexible formulas for identifying or defining:

- essential recurrent costs;
- rules to calculate and collect "margins" at each level;
- what constitutes a surplus over recurrent costs;
- rules for using "surplus" funds at each level; and
- rules for use of funds by the FSPS.

The drug pricing model developed under MCH/CS I calls for each CAPP to designate a portion of its mark-up for a provincial health fund (FSPS). Funds will be used to finance special proposals submitted to the assembly, as well as costs of operating the General Assembly. However, specific texts for managing the funds have not been issued.

The primary source of imported pharmaceuticals is the Center for the Procurement of Essential Medicines (CIAME). CIAME is located in the port city of Limbe and is a GTZ-supported drug wholesaler which bulk orders essential medicines for many of the PHC programs in Cameroon. CIAME is well run, furnishes drugs at reasonable prices, and is considered a reliable long-term supplier.

Under MCH/CS I, the Adamaoua and South Provinces originally procured essential medicines through local pharmaceutical wholesalers. However, problems were encountered in the availability and prices and drugs. As a result, the MCH/CS I Project evaluation recommended a mechanism to directly procure drugs through a system such as CIAME. In addition to CIAME, Adamaoua and South Provincial Health Delegations have been trained in direct international drug procurement.

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Adequate warehouse and office space is expected to be established for the CAPPs in the Adamaoua and South Provinces before the end of MCH/CS I. Distribution is limited to prepackaged drugs based on requisitions from health centers. The Adamaoua and South CAPPs include offices for general management, field supervisors, accounting and financial management, and storeroom space for essential drugs. Consideration has been given to adequate temperature control, lighting, shelving, and physical security. There is no compounding, local production, nor dispensing done at the CAPP. Prepackaged drugs are sold by item, and no tailored kits are being procured or assembled on site. No refrigeration for a cold-chain is required, and the nature and volume of the activities are currently such that palleting loading docks are not involved, though they may be required for the increased volumes expected under MCH/CS II.

Current operations are still in the start-up phase, and both the manual and computerized systems require refinement. Computerized systems are limited to health center service records (including an indicator of inventory and fund balances), and are not yet applied to central warehouse management. The volume of operations is still quite low, and increases in volume under MCH/CS II may require increased warehouse facilities.

The South and Adamaoua CAPPs each have a light pickup truck with enclosed cargo beds for distributing shipments, planned for every two months, to targeted health facilities in each province. The delivery of goods is in response to orders initiated by the health centers, using procurement request forms and price lists provided by the CAPP. Copies of the request forms for procurement of medical supplies also serve as the shipping and receiving invoices. The delivery at each facility also serves as an opportunity to review and approve overall health center budgets for the next two month period.

MCH/CS I has estimated the direct and indirect recurrent costs of operating the drug supply system and the supporting the health center, district, and CAPP levels. These estimates have been used to propose margins for marking up the price of goods sold in order to fund the system.[3] These margins will be approved by the FSPS COGEs and presented to the FSPS General Assemblies for approval.

The CAPP field supervisors serve as delivery agents and also collect funds generated since the last visit in excess of budgetary allotments approved for the upcoming period. The surplus funds are returned by the field supervisors to the CAPP accountant at the provincial center who deposits them into a CAPP bank account. The CAPP retains records which separate the balances in retained earnings by health facility. Each health area is said to have "ownership" of the accumulated surplus funds, though effective control rests with the CAPP.

The monthly health center reports include information on inventories and cost-recovery accounting information (the value of drugs sold and the balance of retained earnings). This information is included in the computerized HMIS; they are represented by line charts which

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[3] These have been used in the Financial Analysis and Cost Recovery sections of this paper.

compare actual data to a predetermined norm.

3.0 Management

3.1 Management Systems

The Provincial Health Delegations do not yet have uniform management systems for decision making at the provincial, district, and health center levels. Due to the reorganization of the divisions and sub-divisions into districts, there is currently a vacuum in mid-level health management, which, for the moment, is an obstacle to continued decentralization and creation of health districts.

Baseline data for all health areas and installations served by MCH/CS II in the targeted provinces is incomplete, especially as regards the health status of the population being served. The MOPH national health statistics are primarily based upon the following data collection instruments:

- Fiche d'Activités de Santé Publique;
- Tableau de Morbidité-Mortalité;
- Bulletin Hebdomadaire des Maladies Transmissible;
- Fiche OCEAC d'Activités de Surveillance Epidemiologique;
- Fiche de Surveillance de la Lepre et de la Tuberculose;
- Fiche de Surveillance de Trypanosomiase; and
- Fiche Mensuelle d'Activités Vaccinales.

A recent review of the MOPH health information system indicated that more than half (58%) of the health centers and hospitals were not reporting. Even the large hospitals in Yaounde and Douala do not participate. Data quality is poor and tends to be exaggerated or not related to the needs of the health workers.

MCH/CS I has established an HMIS in the Adamaoua and South Provinces. What is meant by the term HMIS needs to be clarified and expanded. It should not be limited simply to clinic and outreach services via a monthly activity report. However, it appears that the term HMIS is generally understood to refer to computer generated line charts produced at the provincial level, using several data points drawn from monthly reports.

While most African public health systems have health information systems, the move to call similar systems in Cameroon "Health Management Information Systems" suggests a broader vision. The HMIS developed by MCH/CS I does include information on revenues from cost recovery and the value of drugs in stock and sold. The definition of the scope of the HMIS should continue to be expanded to include reports, perhaps on a quarterly basis, for health districts and provincial hospitals. This could include such information as a description of the health problems of the targeted populations, an inventory of vehicles and equipment, and skills/performance of personnel.

More adequate baseline data would allow the health workers to establish clearer medical and managerial priorities. More effective use of supervisory protocols could allow for focussed on-the-job training, and team building aimed at achieving performance targets. Workplans and budgets are not clearly tied to identified priorities by establishing performance targets. They are not integrated into the HMIS in a way that periodic reports can compare the actual activities and expenditures to those that were planned and budgeted.

The current HMIS software is an improvement over previous MOPH systems, but still needs to be refined and made more user friendly. The strategy for future HMIS improvements needs to be written and better understood by health managers.

3.2 Delegations of Authority

3.2.1 Role of Provincial Delegate and Provincial Health Team

Currently the Provincial Health Delegations are largely unprepared to completely fill their role. They are not yet prepared to provide leadership to the district teams in how to conduct special surveys, operations research, or propose changes to routine data collection through the HMIS. They are currently preoccupied with training and supervising health center staff, a role which should be turned over to the district teams.

The Provincial Health Delegations should assure that the health workers of the province can identify the principal health problems, explore new service delivery opportunities, and establish priorities, norms, standards, and performance targets. The Provincial Health Delegations need to shift their focus away from direct exchanges with health centers to that of monitoring and strengthening the performance of the district health teams.

3.2.2 Role of District Health Officer and District Health Team

The Adamaoua and South Provinces are reorganizing divisions and sub-divisions into new "health districts", eliminating one level of bureaucracy to achieve greater efficiency. The MOPH has not yet defined what constitutes a district health team, nor how it should plan and manage activities and resources. Health centers currently send monthly health center activities reports to the province for review and feedback. While copies are sent to the district, the district team is currently out of the loop. MCH/CS I and II must focus on making the district health teams fully operational.

3.3 Experience and Capability of Managers

3.3.1 Planning, Budgeting, Financial Management, and Reporting

District action plans are produced primarily in support of a few interventions (e.g., EPI and pre-natal care). Budget management is limited to the letters of credit. Planning and budgeting systems tie into the HMIS to gauge progress on immunization, prenatal services, and selected

outreach targets. They need to be expanded to include resource and personnel management issues, reflecting the expanded responsibilities delegated under RPHC and the expanded scope of the HMIS.

The Provincial Health Delegations will refine uniform instruments for planning, budgeting, and routine data collection and reporting on activities and financial management. They will also train and supervise the district health teams in these procedures.

The district teams will continue to develop district action plans and operating budgets, in consultation with the health centers. Their efforts will be aided by guidance from the Provincial Health Delegations, the quality of the data produced by the HMIS, and new resources generated from cost-recovery sales.

Provincial Health Delegations need to upgrade accounting and financial management systems consistent with the increased breadth and level of responsibilities under the cost-recovery program. This may include helping restructure staffing patterns and job descriptions at the provincial, district, and health center levels and retraining existing staff to assure that new and expanded functions are implemented appropriately.

MCH/CS I has developed a health center manual used for training, reference and on-the-job guidance. It integrates medical technical reference materials on policies and protocols with guidance on management and administrative forms and procedures. Special attention is given to managing the health center pharmacy and recording and interpreting clinic service data.

3.3.2 Personnel Management, Training, and Supervision

The staff at all levels (provincial, district, and health area) need additional training and supervision to effectively use health information to identify problems, assess alternative solutions, and take responsibility for implementing them.

Supervisory protocols have been developed for the district teams to supervise health centers. Training in the use of the protocols has been conducted. New roles for the Provincial Health Delegations in setting supervisory priorities, in monitoring hospitals, and/or in monitoring the quality of supervision provided by the district teams have been established. However, a protocol developed for provincial supervision of districts has not yet been implemented.

Supervisory protocols specifically for the Provincial Health Delegations should be developed, similar to those initiated for district health teams under MCH/CS I. Those for the district teams provide a structured basis for monitoring services at the health centers, but do not yet provide a structured basis for planning and conducting on-the-job training and measuring skills and performance improvements in targeted interventions. Supervisors should receive training in the use of revised supervisory regimes which emphasize team work, improved quality of care, and improved personnel performance.

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3.3.3 Management of Facilities, Vehicles, and Equipment

Inventories of facilities, vehicles, and equipment were conducted under MCH/CS I. These served as a basis for distinguishing which facilities were functional and for estimating the costs of upgrading facilities under MCH/CS II. Routine information on the management of physical assets has not yet been built into the HMIS indicators and is not yet routinely considered in developing annual budgets. An annual physical assets report should be completed by health centers. The district teams should consolidate and analyze the data from these reports, preliminary to the development of annual workplans and budgets.

ANNEX N

- FINANCIAL ANALYSIS

ANNEX N: FINANCIAL ANALYSIS

1.0 Introduction

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3.1 Estimate of Unit Development Costs
3.1.1 Health Center
3.1.2 District Hospital
3.1.3 District Office
3.1.4 Provincial Hospital
3.1.5 Provincial Office
3.1.6 CAPP
3.2 Projected Annual Development Costs by Province

4.0 The Provincial Drug Distribution and Cost Recovery System
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5.4 The Potential for Cost Recovery

6.0 Factors Underlying PHC System Viability and Sustainability

1.0 Introduction

The Financial Analysis presents a brief overview of proposed project activities and a budget summary as a backdrop for a more detailed exposition of the financial aspects of the project. Site development costs are estimated for each type of facility, e.g., health center or district office, and these estimates are used in conjunction with the development schedule to project annual development costs.

In similar fashion, unit recurrent costs are estimated and used with the development schedule to project annual recurrent costs. The document next outlines a financial model of the provincial primary health care (PHC) system which provides the framework for examining the financial feasibility and sustainability of the system at different fixed cost levels and utilization rates.

The results of this analysis are used to estimate drug costs and project generated revenues over the life of the project. The final section examines a number of factors affecting the viability and sustainability of the system.

2.0 The Project Budget: Summary of Major Activities

The MCH/CS II Project will assist the Ministry of Public Health (MOPH) in the implementation of its RPHC policy by providing technical and financial support for the development and initial operation of primary health care delivery systems, which include health centers, district hospitals, district supervision teams, provincial hospitals, provincial drug distribution and cost recovery systems, and provincial supervision teams. The project will be managed through an institutional contract solicited with full and open competition.

By the PACD, it is anticipated that the PHC system will cover about 70% of the populations of the Adamaoua and South Provinces and of four divisions in the Far North Province supported by the project. Systems development will require minor renovation of facilities to ensure physical integrity and to provide a more appropriate environment for health services delivery; the provision of clinical and office equipment, vehicles and initial drug supplies; as well as training and technical assistance on new management systems and clinical interventions.

Recurrent costs associated with the operation of the PHC system include drug purchases; Government of the Republic of Cameroon (GRC) and non-GRC personnel salaries and allowances; maintenance and depreciation; supplies and fuel; travel; and periodic training. While most of these costs are covered by the GRC and the cost-recovery system, the project will cover some (non-salary) recurrent costs of the PHC system during its first two years of operation. The GRC and cost-recovery revenues will cover an increasing share of recurrent costs as more co-financed facilities become operational. The following table outlines the project budget.

5.1.4 PROVINCIAL HOSPITAL: Recurrent Cost Estimates (FCFA 000)

Fixed Costs:	HIGH	MEDIUM	LOW
1. -Personnel			
-Drug Clerk Bonuses	600	600	600
-Drug Clerk	120	60	
-Treasurer	120	60	
-Manager	240	120	
Total	1080	840	600
2. Maintenance			
-Building	150		
-Equipment	150		
Total	300	300	300
3. Depreciation			
-Equipment	300		
Total	300	150	0
4. Supplies	240	240	240
5. Fuel	0	0	0
6. Per Diem	0	0	0
7. Training	200	0	0
8. Other	80	70	60
9. TOTAL	2200	1600	1200
10. TOTAL ($)*	8800	6400	4800

5.1.5 PROVINCIAL OFFICE: Recurrent Cost Estimates (FCFA 000)

Fixed Costs:	HIGH MOPH	MEDIUM MOPH	LOW MOPH
1. -Personnel			
2. Maintenance			
-Building	50		
-Equipment	200		
-Vehicles	700		
Total	950	950	900
3. Depreciation			
-Equipment	500		
-Vehicles	1400		
Total	1900	900	0
4. Supplies	600	600	500
5. Fuel	400	400	400
6. Per Diem	800	800	600
7. Training	500	0	0
8. HMIS	1500	1500	1500
9. Other	350	350	100
10. TOTAL	7000	5500	4000
11. TOTAL ($)*	28000	22000	16000

* USD 1.00 = FCFA 250

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5.1.6 CAPP Recurrent Cost Estimates (FCFA 000)

Fixed Costs:	HIGH		MEDIUM	LOW
1. -Personnel				
-Accountant	1800			
-Drug Clerk	480			
-Secretary	240			
-Guard	180			
Total	2700		2700	2700
Withholding (30%)	800		800	800
Perf. Bonuses	1500		500	0
Total Personnel		5000	4000	3500
2. Maintenance				
-Building	500			
-Equipment	500			
-Vehicles	1500			
Total	2500		2000	2000
3. Depreciation				
-Equipment	500			
-Vehicles	2000			
Total	2500		1500	0
4. Supplies/Services		3500	3500	3500
5. Fuel	600		600	600
6. Per Diem	8100		8100	5000
7. Training/Annual Mtg		2000	2000	2000
8. Other	800		300	400
9. TOTAL	25000		22000	17000
10. TOTAL ($)*	100000		88000	68000

* USD 1.00 = FCFA 250

5.2 Projected Annual Recurrent Costs by Province, Facility Type & Cost Category

Table N.5.1 lists the number of operational facilities by year, province and type of facility based on the site development schedule displayed in Table N.2. The high cost option unit recurrent costs for each type of facility are presented in tabular form in Table N.5.2. These estimates are used to calculate total project recurrent costs by line item and to project annual recurrent costs by province and facility type as shown in Table N.5.3. The last two tables also include the costs of drugs required over the life of project based on the utilization projections made in Section 5.4 of this annex.

5.3 Breakeven Analysis of the Primary Health Care System

The breakeven analysis examines the conditions under which the co-financed PHC system is financially feasible. Tables N.6.1, N.6.2 and N.6.3 summarize the breakeven analysis of the PHC in each of the three project-assisted provinces utilizing the fixed and variable cost and revenue data discussed in Section 5.1.

The analysis examines the performance of a fully operational PHC system at the low, medium- and high-cost options for annual health center utilization levels of 0.15 and 0.25 cases/person. In accordance with MCH/CS I estimates, the analysis uses a district hospital utilization rate of 0.05 cases per year. Provincial hospital utilization has been set at 0.005 cases per person.

5.3.1 Breakeven Analysis Conclusions: South Province

Table N-6.1 reveals that the high-cost option, with fully-funded depreciation, does not appear to be feasible since health centers as a group incur a deficit of nearly FCFA 28 million even at a health center use rate of 0.25, and the PHC system incurs a loss of FCFA 23 million. At the current use rate of 0.15, the overall mark-up would have to be 393% to achieve health center breakeven.

PHC system financial performance under the medium cost option is more satisfactory. While the health centers as a group incur a deficit of FCFA 18 million at a utilization rate of 0.15, they achieve breakeven at about 0.23 cases/person. Breakeven for the group of 69 health centers should not be confused with individual health center breakeven. As was shown in Section 4.3, at a use rate of 0.25, a health center with a fixed cost of 800,000 FCFA/year has a breakeven population of 4640. Health centers serving a smaller population or with a lower use rate would incur a deficit unless they lower their fixed costs.

At a health center use rate of 0.25, CAPP revenues would cover 97% of the combined costs of the CAPP, the provincial and district offices. A CAPP mark-up of 106% would be required to fully cover these costs. The PHC system as a whole would achieve a surplus of nearly FCFA 24 million, but under current procedures this surplus would be retained by the facilities at which they were generated.

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MCH/CS II RECURRENT COSTS
NUMBER OF OPERATIONAL UNITS

TOTAL	1994	1995	1996	1997
H. CENTER	80	123	161	180
D. HOSP	12	22	27	27
D. OFFICE	22	27	27	27
P. HOSP	0	3	3	3
P. OFFICE	2	3	3	3
CAPP	2	3	3	3

SOUTH	1994	1995	1996	1997
H. CENTER	24	40	58	69
D. HOSP	6	6	6	6
D. OFFICE	6	6	6	6
P. HOSP	0	1	1	1
P. OFFICE	1	1	1	1
CAPP	1	1	1	1

ADAMAOUA	1994	1995	1996	1997
H. CENTER	25	38	46	47
D. HOSP	6	6	6	6
D. OFFICE	6	6	6	6
P. HOSP	0	1	1	1
P. OFFICE	1	1	1	1
CAPP	1	1	1	1

FAR NORTH	1994	1995	1996	1997
H. CENTER	31	45	57	64
D. HOSP	0	10	15	15
D. OFFICE	10	15	5	15
P. HOSP	0	1	1	1
P. OFFICE	0	1	1	1
CAPP	0	1	1	1

UNIT RECURRENT COSTS BY CATEGORY
(FCFA000)

CATEGORY	H. CENTER	D. HOSP	D. OFFICE	P. HOSP	P. OFFICE	CAPP
PERSONNEL	540	540	0	1080	0	5000
MAINTENANCE	150	150	1000	300	950	2500
DEPRECIATION	220	150	1800	300	1900	2500
SUPPLIES	120	120	300	240	600	3500
FUEL	80	0	1000	0	400	600
PER DIEM	0	0	1000	0	800	8100
TRNG/MTG	150	100	250	100	250	1000
HMIS	0	0	0	0	1500	0
OTHER	40	40	400	80	350	800
TOTAL	1300	1100	5750	2100	6750	24000
TOTAL ($)	5200	4400	23000	8400	27000	96000

RECURRENT COSTS BY CATEGORY
(FCFA000)

CATEGORY	H. CENTER	D. HOSP	D. OFFICE	P. HOSP	P. OFFICE	CAPP	TOTAL
FAC YRS	544	88	103	9	11	11	($)
PERSONNEL	293760	47520	0	1080	0	5000	1624000
MAINTENANCE	81600	13200	1000	300	950	2500	953800
DEPRECIATION	119680	13200	1800	300	1900	2500	1477520
SUPPLIES	65280	10560	300	240	600	3500	616000
FUEL	43520	0	1000	0	400	600	630080
PER DIEM	0	0	1000	0	800	8100	803600
TRNG/MTG	81600	8800	250	100	250	1000	523200
HMIS	0	0	0	0	1500	0	66000
OTHER	21760	3520	400	80	350	800	319400
TOTAL	707200	96800	5750	2100	6750	24000	7013600
TOTAL ($)	2828800	387200	23000	8400	27000	96000	7013600

TABLE N.5.3.
MCH/CS II RECURRENT COSTS

TOTAL	UNIT COST	1994	1995	1996	1997	TOTAL
H. CENTER	5200	416000	639600	837200	936000	2828800
D. HOSP	4400	52800	96800	118800	118800	387200
D. OFFICE	23000	506000	621000	621000	621000	2369000
P. HOSP	8400	0	25200	25200	25200	75600
P. OFFICE	27000	54000	81000	81000	81000	297000
CAPP	96000	192000	288000	288000	288000	1056000
TOTAL		1220800	1751600	1971200	2070000	7013600

SOUTH	UNIT COST	1994	1995	1996	1997	TOTAL
H. CENTER	5200	124800	208000	301600	358800	993200
D. HOSP	4400	26400	26400	26400	26400	105600
D. OFFICE	23000	138000	138000	138000	138000	552000
P. HOSP	8400	0	8400	8400	8400	25200
P. OFFICE	27000	27000	27000	27000	27000	108000
CAPP	96000	96000	96000	96000	96000	384000
TOTAL		412200	503800	597400	654600	2168000

ADAMAOUA	UNIT COST	1994	1995	1996	1997	TOTAL
H. CENTER	5200	130000	197600	239200	244400	811200
D. HOSP	4400	26400	26400	26400	26400	105600
D. OFFICE	23000	138000	138000	138000	138000	552000
P. HOSP	8400	0	8400	8400	8400	25200
P. OFFICE	27000	27000	27000	27000	27000	108000
CAPP	96000	96000	96000	96000	96000	384000
TOTAL		417400	493400	535000	540200	1986000

FAR NORTH	UNIT COST	1994	1995	1996	1997	TOTAL
H. CENTER	5200	161200	234000	296400	332800	1024400
D. HOSP	4400	0	44000	66000	66000	176000
D. OFFICE	23000	230000	345000	345000	345000	1265000
P. HOSP	8400	0	8400	8400	8400	25200
P. OFFICE	27000	0	27000	27000	27000	81000
CAPP	96000	0	96000	96000	96000	288000
TOTAL		391200	754400	838800	875200	2859600

BREAKEVEN ANALYSIS: SOUTH PROVINCE

	LOW COST OPTION (FCFA)		MEDIUM COST OPTION (FCFA)		HIGH COST OPTION (FCFA)	
H. CENTERS						
# OF HC'S	69	69	69	69	69	69
POP	357290	357290	357290	357290	357290	357290
USE RATE	0.15	0.25	0.15	0.25	0.15	0.25
HC CASES	53593.5	89322.5	53593.5	89322.5	53593.5	89322.5
REV/CASE	1900	1900	1900	1900	1900	1900
FEE REV	13398375	22330625	13398375	22330625	13398375	22330625
DRUG REV	88429275	147382125	88429275	147382125	88429275	147382125
TOTAL REV	101827650	169712750	101827650	169712750	101827650	169712750
F. COSTS	44850000	44850000	55200000	55200000	89700000	89700000
V.-DRUGS /CASE	1100	1100	1100	1100	1100	1100
TOTAL	58952850	98254750	58952850	98254750	58952850	98254750
10% LOSS	5895285	9825475	5895285	9825475	5895285	9825475
TOTAL COST	109698135	152930225	120048135	163280225	154548135	197780225
SURPLUS	-7870485	16782525	-18220485	6432525	-52720485	-28067475
DIST HOSP						
POP	6	6	6	6	6	6
USE RATE	464658	464658	464658	464658	464658	464658
DH CASES	0.05	0.05	0.05	0.05	0.05	0.05
REV/CASE	23232.9	23232.9	23232.9	23232.9	23232.9	23232.9
TOTAL REV	4050	4050	4050	4050	4050	4050
	94093245	94093245	94093245	94093245	94093245	94093245
F. COSTS	3600000	3600000	4800000	4800000	6600000	6600000
V.-DRUGS /CASE	2700	2700	2700	2700	2700	2700
TOTAL	62728830	62728830	62728830	62728830	62728830	62728830
10% LOSS	6272883	6272883	6272883	6272883	6272883	6272883
TOTAL COST	72601713	72601713	73801713	73801713	75601713	75601713
SURPLUS	21491532	21491532	20291532	20291532	18491532	18491532
PROV. HOSP						
POP	464658	464658	464658	464658	464658	464658
USE RATE	0.005	0.005	0.005	0.005	0.005	0.005
PH CASES	2323.29	2323.29	2323.29	2323.29	2323.29	2323.29
REV/CASE	6000	6000	6000	6000	6000	6000
TOTAL REV	13939740	13939740	13939740	13939740	13939740	13939740
F. COSTS	1200000	1200000	1600000	1600000	2100000	2100000
V.-DRUGS /CASE	4000	4000	4000	4000	4000	4000
TOTAL	9293160	9293160	9293160	9293160	9293160	9293160
10% LOSS	929316	929316	929316	929316	929316	929316
TOTAL COST	11422476	11422476	11422476	11422476	11422476	11422476
SURPLUS	2517264	2517264	2117264	2117264	1617264	1617264

TABLE N.6.1.
BREAKEVEN ANALYSIS. SOUTH PROVINCE

	LOW COST OPTION (FCFA)		MEDIUM COST OPTION (FCFA)		HIGH COST OPTION (FCFA)	
CAPP						
REVENUE						
HC	58952850	98254750	58952850	98254750	58952850	98254750
DH	62728830	62728830	62728830	62728830	62728830	62728830
PH	9293160	9293160	9293160	9293160	9293160	9293160
TOTAL REV	130974840	170276740	130974840	170276740	130974840	170276740
COSTS						
FIXED	17000000	17000000	22000000	22000000	24000000	24000000
VARIABLE						
DRUGS						
HC/CASE	550	550	550	550	550	550
HCENTER	29476425	49127375	29476425	49127375	29476425	49127375
DH/CASE	1350	1350	1350	1350	1350	1350
DHOSP	31364415	31364415	31364415	31364415	31364415	31364415
PH/CASE	2000	2000	2000	2000	2000	2000
PHOSP	4646580	4646580	4646580	4646580	4646580	4646580
TOTAL	65487420	85138370	65487420	85138370	65487420	85138370
SHPG (35%)	22920597	29798429.	22920597	29798429.	22920597	29798429.
TOTAL COST	105408017	131936799	110408017	136936799	112408017	138936799
CAPP SURPLUS	25566823	38339940.	20566823	33339940.	18566823	31339940.
P. OFFICE						
COSTS						
FIXED	4000000	4000000	5500000	5500000	6750000	
VARIABLE	0	0	0	0	0	
TOTAL COST	4000000	4000000	5500000	5500000	6750000	
D. OFFICE						
# D. OFFICE						
COSTS						
FIXED	21000000	21000000	33000000	33000000	34500000	34500000
VARIABLE	0	0	0	0	0	0
TOTAL COST	21000000	21000000	33000000	33000000	34500000	34500000
CAP + PO + DO						
COST	130408017	156936799	148908017	175436799	153658017	180186799
SURPLUS	566823	13339940.	-17933177	-5160059	-22683177	-9910059.
COST REC	209860635	277745735	209860635	277745735	209860635	277745735
SYST BAL	16705134	54131261.	-13744866	23681261.	-55294866	-17868738
HC BE MU	3.2670094	2.6583875	3.6181375	2.8690643	4.7885644	3.5713204
CAP BE MU	1.9913445	1.8433145	2.2738415	2.0606079	2.3463745	2.1163994
SYS BE MU	2.7449107	2.3641966	3.2098855	2.7218497	3.8443585	3.2098787

BREAKEVEN ANALYSIS: AD/ MAOUA PROVINCE

	LOW COST OPTION (FCFA)		MEDIUM COST OPTION (FCFA)		HIGH COST OPTION (FCFA)	
H. CENTERS						
# OF HC'S	47	47	47	47	47	47
POP	278070	278070	278070	278070	278070	278070
USE RATE	0.15	0.25	0.15	0.25	0.15	0.25
HC CASES	41710.5	69517.5	41710.5	69517.5	41710.5	69517.5
REV/CASE	1900	1900	1900	1900	1900	1900
FEE REV	10427625	17379375	10427625	17379375	10427625	17379375
DRUG REV	68822325	114703875	68822325	114703875	68822325	114703875
TOTAL REV	79249950	132083250	79249950	132083250	79249950	132083250
F. COSTS	30550000	30550000	37600000	37600000	61100000	61100000
V.-DRUGS /CASE	1100	1100	1100	1100	1100	1100
TOTAL	45881550	76469250	45881550	76469250	45881550	76469250
10% LOSS	4588155	7646925	4588155	7646925	4588155	7646925
TOTAL COST	81019705	114666175	88069705	121716175	111569705	145216175
SURPLUS	-1769755	17417075	-8819755	10367075	-32319755	-13132925
DIST HOSP						
POP	6	6	6	6	6	6
USE RATE	397013	397013	397013	397013	397013	397013
DH CASES	0.05	0.05	0.05	0.05	0.05	0.05
REV/CASE	19850.65	19850.65	19850.65	19850.65	19850.65	19850.65
TOTAL REV	4050	4050	4050	4050	4050	4050
	80395132.	80395132.	80395132.	80395132.	80395132.	80395132.
F. COSTS	3600000	3600000	4800000	4800000	6600000	6600000
V.-DRUGS /CASE	2700	2700	2700	2700	2700	2700
TOTAL	53596755	53596755	53596755	53596755	53596755	53596755
10% LOSS	5359675.5	5359675.5	5359675.5	5359675.5	5359675.5	5359675.5
TOTAL COST	62556430.	62556430.	63756430.	63756430.	65556430.	65556430.
SURPLUS	17838702	17838702	16638702	16638702	14838702	14838702
PROV. HOSP						
POP	397013	397013	397013	397013	397013	397013
USE RATE	0.005	0.005	0.005	0.005	0.005	0.005
PH CASES	1985.065	1985.065	1985.065	1985.065	1985.065	1985.065
REV/CASE	6000	6000	6000	6000	6000	6000
TOTAL REV	11910390	11910390	11910390	11910390	11910390	11910390
F. COSTS	1200000	1200000	1600000	1600000	2100000	2100000
V.-DRUGS /CASE	4000	4000	4000	4000	4000	4000
TOTAL	7940260	7940260	7940260	7940260	7940260	7940260
10% LOSS	794026	794026	794026	794026	794026	794026
TOTAL COST	9934286	9934286	10334286	10334286	10834286	10834286
SURPLUS	1976104	1976104	1576104	1576104	1076104	1076104

TABLE N.6.2
BREAKEVEN ANALYSIS: ADAMAOUA PROVINCE

	LOW COST OPTION (FCFA)		MEDIUM COST OPTION (FCFA)		HIGH COST OPTION (FCFA)	
CAPP						
REVENUE						
HC	45881550	76469250	45881550	76469250	45881550	76469250
DH	53596755	53596755	53596755	53596755	53596755	53596755
PH	7940260	7940260	7940260	7940260	7940260	7940260
TOTAL REV	107418565	138006265	107418565	138006265	107418585	138006265
COSTS						
FIXED	17000000	17000000	22000000	22000000	24000000	24000000
VARIABLE						
DRUGS						
HC/CASE	550	550	550	550	550	550
HCENTER	22940775	38234625	22940775	38234625	22940775	38234625
DH/CASE	1350	1350	1350	1350	1350	1350
DHOSP	26798377.	26798377.	26798377.	26798377.	26798377.	26798377.
PH/CASE	2000	2000	2000	2000	2000	2000
PHOSP	3970130	3970130	3970130	3970130	3970130	3970130
TOTAL	53709282.	69003132.	53709282.	69003132.	53709282.	69003132.
SHPG (35%)	18798248.	24151096.	18798248.	24151096.	18798248.	24151096.
TOTAL COST	89507531.	110154228	94507531.	113154228	96507531.	117154228
CAPP SURPLU	17911033.	27852036.	12911033.	22852036.	10911033.	20852036.
P. OFFICE						
COSTS						
FIXED	4000000	4000000	5500000	5500000	6750000	6750000
VARIABLE	0	0	0	0	0	0
TOTAL COST	4000000	4000000	5500000	5500000	6750000	6750000
D. OFFICE						
# D. OFFICE	6	6	6	6	6	6
COSTS						
FIXED	21000000	21000000	33000000	33000000	34500000	34500000
VARIABLE	0	0	0	0	0	0
TOTAL COST	21000000	21000000	33000000	33000000	34500000	34500000
CAP+PO+DO						
COST	114507531	135154228	133007531	153654228	137757531	158404228
SURPLUS	-7088966.	2852036.1	-25588966	-15647963	-30338966	-20397963
COST REC	171555472	224388772	17155472	224388772	171555472	224388772
SYST BAL	10956084.	40083917.	-16193915	12933917.	-46743915	-17616082
HC BE MU	3.0771445	2.5444685	3.3844575	2.7288563	4.4088344	3.3434825
CAP BE MU	2.1319877	19586680	2.4764347	2.2267717	2.5648737	2.2956092
SYS BE MU	2.7960113	24191000	3.3015105	2.8125604	3.8703135	3.2552939

BREAKEVEN ANALYSIS: FAR NORTH PROVINCE

	LOW COST OPTION (FCFA)		MEDIUM COST OPTION (FCFA)		HIGH COST OPTION (FCFA)	
H. CENTERS						
# OF HC'S	64	64	64	64	64	64
POP	936840	936840	936840	936840	936840	936840
USE RATE	0.15	0.25	0.15	0.25	0.15	0.25
HC CASES	140526	234210	140526	234210	140526	234210
REV/CASE	1900	1900	1900	1900	1900	1900
FEE REV	35131500	58552500	35131500	58552500	35131500	58552500
DRUG REV	231867900	386446500	231867900	386446500	231867900	386446500
TOTAL REV	266999400	444999000	266999400	444999000	266999400	444999000
F. COSTS	41600000	41600000	51200000	51200000	83200000	83200000
V.-DRUGS /CASE	1100	1100	1100	1100	1100	1100
TOTAL	154578600	257631000	154578600	257631000	154578600	257631000
10% LOSS	15457860	25763100	15457860	25763100	15457860	25763100
TOTAL COST	211636460	342994100	211636460	342994100	211636460	342994100
SURPLUS	55362940	120004900	45762940	110404900	13762940	78404900
DIST HOSP						
POP	15	15	15	15	15	15
USE RATE	1401000	1401000	1401000	1401000	1401000	1401000
DH CASES	0.05	0.05	0.05	0.05	0.05	0.05
REV/CASE	70050	70050	70050	70050	70050	70050
TOTAL REV	4050	4050	4050	4050	4050	4050
	283702500	283702500	283702500	283702500	283702500	283702500
F. COSTS	9000000	9000000	12000000	12000000	16500000	16500000
V.-DRUGS /CASE	2700	2700	2700	2700	2700	2700
TOTAL	189135000	189135000	189135000	189135000	189135000	189135000
10% LOSS	18913500	18913500	18913500	18913500	18913500	18913500
TOTAL COST	217048500	217048500	220048500	220048500	224548500	224548500
SURPLUS	66654000	66654000	63654000	63654000	59154000	59154000
PROV. HOSP						
POP	1401000	1401000	1401000	1401000	1401000	1401000
USE RATE	0.005	0.005	0.005	0.005	0.005	0.005
PH CASES	7005	7005	7005	7005	7005	7005
REV/CASE	6000	6000	6000	6000	6000	6000
TOTAL REV	42030000	42030000	42030000	42030000	42030000	42030000
F. COSTS	1200000	1200000	1600000	1600000	2100000	2100000
V.-DRUGS /CASE	4000	4000	4000	4000	4000	4000
TOTAL	28020000	28020000	28020000	28020000	28020000	28020000
10% LOSS	2802000	2802000	2802000	2802000	2802000	2802000
TOTAL COST	32022000	32022000	32422000	32422000	32922000	32922000
SURPLUS	10008000	10008000	9608000	9608000	9108000	9108000

BREAKEVEN ANALYSIS: FAR NORTH PROVINCE

	LOW COST OPTION (FCFA)		MEDIUM COST OPTION (FCFA)		HIGH COST OPTION (FCFA)	
CAPP						
REVENUE						
HC	154578600	257631000	154578600	257631000	154578600	257631000
DH	189135000	189135000	189135000	189135000	189135000	189135000
PH	28020000	28020000	28020000	28020000	28020000	28020000
TOTAL REV	371733600	474786000	371733600	474786000	371733600	474786000
COSTS						
FIXED	17000000	17000000	22000000	22000000	24000000	24000000
VARIABLE						
DRUGS						
HC/CASE	550	550	550	550	550	550
HCENTER	77289300	128815500	77289300	128815500	77289300	128815500
DH/CASE	1350	1350	1350	1350	1350	1350
DHOSP	94567500	94567500	94567500	94567500	94567500	94567500
PH/CASE	2000	2000	2000	2000	2000	2000
PHOSP	14010000	14010000	14010000	14010000	14010000	14010000
TOTAL	185866800	237393000	185866800	237393000	185866800	237393000
SHPG (35%)	65053380	83087550	65053380	83087550	65053380	83087550
TOTAL COST	267920180	337480550	272920180	342480550	274920180	344480550
CAPP SURPLUS	103813420	137305450	98813420	132305450	96813420	130305450
P. OFFICE						
COSTS						
FIXED	4000000	4000000	5500000	5500000	6750000	6750000
VARIABLE	0	0	0	0	0	0
TOTAL COST	4000000	4000000	5500000	5500000	6750000	6750000
D. OFFICE						
# D. OFFICE	15	15	15	15	15	15
COSTS						
FIXED	52500000	52500000	82500000	82500000	86250000	86250000
VARIABLE	0	0	0	0	0	0
TOTAL COST	52500000	52500000	82500000	82500000	86250000	86250000
CAP + PO + DO COST	324420180	393980550	360920180	430480550	367920180	437480550
SURPLUS	47313420	80805450	10813420	44305450	3813420	37305450
COST REC	592731900	770731500	592731900	770731500	592731900	770731500
SYST BAL	179338360	277472350	129838360	227972350	85838360	183972350
HC BE MU	2.2836920	2.0683970	2.4079007	2.1429222	2.8219295	2.3913395
CAP BE MU	1.7454444	1.6596131	1.9418216	1.8133666	1.9794830	1.8428536
SYS BE MU	2.0351242	1.8311687	2.3014440	2.0396837	2.5381727	2.2250304

Because the hospitals can generate greater revenues than the health centers, it may be appropriate to earmark a portion of their surplus or to charge them a higher price for drugs in order to utilize a portion of their revenues to cover other PHC system costs.

In summary, while the high-cost option appears unfeasible, the resource configuration represented by the medium-cost option is consistent with project utilization and revenue targets. A more conservative approach would be to pursue initially a lower cost alternative in which breakeven is achieved at a lower utilization rate.

5.3.2 Breakeven Analysis Conclusions: Adamaoua Province

The major difference in the breakeven analyses of the South and Adamaoua Provinces is that while the average population per health center in the Adamaoua Province (5990) is greater than in the South Province (5121), there are only 47 health centers supporting the CAPP in Adamaoua in contrast to 69 in the South Province. Therefore, as indicated in the tables, the Adamaoua Province should use a lower health center mark-up and a higher CAPP mark-up to achieve system equilibrium.

As in the case of the South Province, the medium cost option appears feasible, but use of a lower cost configuration during early operational phases may be a wiser course to pursue.

5.3.3 Breakeven Analysis Conclusions: Far North Province

In contrast to the South and Adamaoua Provinces, the high cost option appears feasible in the Far North Province even at a health center use rate of 0.15 because of the average population of nearly 15,000 per health center. Only under the high cost option and a health center use rate of 0.15 are CAPP revenues inadequate to cover provincial and district office costs.

Again, the use of a more conservative fixed cost level may be advisable during early operational phases. The analysis indicates that the Far North Province may be able to maintain system viability at a significantly lower mark-up rate than the South or Adamaoua Provinces.

5.4 The Potential for Cost Recovery

The breakeven analysis in Section 5.3 showed that the proposed co-financed PHC system is financially feasible under certain conditions. Whereas the breakeven analysis examined the costs and revenues of a fully operational system, this section looks at utilization, drug consumption and potential revenues generated by the PHC systems in each of the three provinces as the systems are developed over the life of the project. The prime focus is on the evolution of drug utilization and revenues as more facilities become operational.

The fixed costs used in this analysis are those previously described as the high cost option. These provide a conservative basis for estimating PHC recurrent costs. The recurrent costs shown in Table N-5 and in the project budget are the same as those utilized in this section. As

was demonstrated in the breakeven analysis, the cost recovery system cannot generate sufficient revenues to support this level of fixed cost.

In the utilization, cost and revenue projections which follow, the model assumes that utilization will increase from the current level of about 0.15 in the South and Adamaoua Provinces to 0.20 over the life of the project.

Since the model for the breakeven analysis and the revenue projections is a spreadsheet version of the calculations performed by MCH/CS I, the revenue estimates generated by the model closely approximate those in the previously cited document entitled *Determination...*

For example, for a 52 health center PHC system serving a population of 336,000 in the Adamaoua Province, MCH/CS personnel estimate gross health center revenues of about FCFA 140 million. In comparison, using slightly higher prices, the computer model of a 47 health center system serving 278,000 people, as planned for MCH/CS II, would generate FCFA 145 million. MCH/CS I estimates overall system revenues at about FCFA 215 million compared with FCFA 225 million for the MCH/CS II model, which includes the provincial hospital. In both cases, gross annual revenues exceed $800,000. The cost of replacement drugs, shipping charges, and allowances for losses and contingencies at the CAPP and facility level absorb about 50 percent of gross revenues, leaving $400,000 to finance PHC fixed recurrent costs (exclusive of GRC personnel).

As depicted in Table N.7., gross revenues generated by the cost recovery system in the three provinces could exceed $12 million over the life of the project. Of this amount, about $6.3 million would be required to replenish drug supplies. A portion of the remaining revenue represents a surplus generated by some of the facilities and is therefore not available to finance recurrent costs.

While it is extremely difficult to determine how much net revenue would be available to meet recurrent costs, this amount has been estimated conservatively at two-thirds of the net revenue generated under the low utilization projection presented above. Accordingly, the project budget indicates that cost recovery funds of about $4 million would be available to finance recurrent costs, in addition to the $6.3 million earmarked for drug purchases.

Since recurrent costs have been projected at the high-cost option, a moderate revenue shortfall could be accommodated by a reduction in certain expenditures financed through cost recovery, such as depreciation. While this would adversely affect the long term sustainability of the system, it would probably have limited short term implications. Because PHC revenue targets are ambitious, it is essential that the operation of the system be closely monitored and that prompt corrective action be taken if warranted.

UTILIZATION, REVENUE AND COST PROJECTIONS: SOUTH PROVINCE

	1994	1995	1996	1997
H. CENTERS				
# OF HC'S	24	40	58	69
POP	124272	207120	300324	357290
USE RATE	0.15	0.16	0.18	0.2
HC CASES	18640.8	33139.2	54058.32	71458
REV/CASE	1900	1900	1900	1900
FEE REV	4660200	8284800	13514580	17864500
DRUG REV	30757320	54679680	89196228	117905700
TOTAL REV	65417520	62964480	102710808	135770200
F. COSTS	31200000	52000000	75400000	89700000
V.-DRUGS				
/CASE	1100	1100	1100	1100
TOTAL	20504880	36453120	59464152	78603800
10% LOSS	2050488	3645312	5946415.2	7860380
TOTAL COST	53755368	92098432	140810567	176164180
SURPLUS	-18337848	-29133952	-38099759	-40393980
DIST HOSP	6	6	6	6
POP	464658	464658	464658	464658
USE RATE	0.05	0.05	0.05	0.05
DH CASES	23232.9	23232.9	23232.9	23232.9
REV/CASE	4050	4050	4050	4050
TOTAL REV	94093245	94093245	94093245	94093245
F. COSTS	6600000	6600000	6600000	6600000
V.-DRUGS				
/CASE	2700	2700	2700	2700
TOTAL	62728830	62728830	62728830	62728830
10% LOSS	6272883	6272883	6272883	6272883
TOTAL COST	75601713	75601713	75601713	75601713
SURPLUS	18491532	18491532	18491532	18491532
PROV. HOSP				
POP	0	464658	464658	464658
USE RATE	0.005	0.005	0.005	0.005
PH CASES	0	2323.29	2323.29	2323.29
REV/CASE	6000	6000	6000	6000
TOTAL REV	0	13939740	13939740	13939740
F. COSTS	0	2100000	2100000	2100000
V.-DRUGS				
/CASE	4000	4000	4000	4000
TOTAL	0	9293160	9293160	9293160
10% LOSS	0	929316	929316	929316
TOTAL COST	0	12322476	12322476	12322476
SURPLUS	2517264	1617264	1617264	1617264

UTILIZATION, REVENUE AND COST PROJECTIONS: SOUTH PROVINCE

	1994	1995	1996	1997
CAPP				
REVENUE				
HC	20504880	36453120	59464152	78603800
DH	62728830	62728830	62728830	62728830
PH	0	9293160	9293160	9293160
TOTAL REV	83233710	108475110	131486142	150625790
COSTS				
FIXED	24000000	24000000	24000000	24000000
VARIABLE				
DRUGS				
HC/CASE	550	550	550	550
HCENTER	10252440	18226560	29732076	39301900
DH/CASE	1350	1350	1350	1350
DHOSP	31364415	31364415	31364415	31364415
PH/CASE	2000	2000	2000	2000
PHOSP	0	4646580	4646580	4646580
TOTAL	41616855	54237555	65743071	75312895
SHPG (35%)	14565899.	18983144.	23010074.	26359513.
TOTAL COST	80182754.	97220699.	112753145	1256, 2408
CAPP SURPLUS	3050955.7	11254410.	18732996.	24953381.
P. OFFICE				
COSTS				
FIXED	6750000	6750000	6750000	6750000
VARIABLE	0	0	0	0
TOTAL COST	6750000	6750000	6750000	6750000
D. OFFICE				
# D. OFFICE	6	6	6	6
COSTS				
FIXED	34500000	34500000	34500000	34500000
VARIABLE	0	0	0	0
TOTAL COST	34500000	34500000	34500000	34500000
CAP + PO + DO				
COST	121432754	138470699	154003145	166922408
SURPLUS	-38199044	-29995589	-22517003	-16296618
SYST BAL	-38045360	-39020745	-40507967	-36581802
HC BE MU	4.7886325	4.5984339	4.2814362	4.0277869
CAP BE MU	2.9178743	2.5530409	2.3425	2.2163854
COST RECOVER	129510765	170997435	210743793	243803185
LESS DRUGS	41616855	54237555	65743071	75312895
& SHPG/LOSS	22889270.	29830655.	36158689.	41422092.
AVAILABLE FOR				
REC COSTS	65004639.	86929254.	108842032	127068197
EQUIV. ($)	260018. 5	347717.01	435368.13	508272.79
REC COSTS	103050000	125950000	149350000	163650000
REC COST ($)	412200	503800	597400	654600

UTILIZATION, REVENUE AND COST PROJECTIONS: ADAMAOUA PRO

	1994	1995	1996	1997
H. CENTERS				
# OF HC'S	25	38	46	47
POP	147900	224808	272136	278070
USE RATE	0.15	0.16	0.18	0.2
HC CASES	22185	35969.28	48984.48	55614
REV/CASE	1900	1900	1900	1900
FEE REV	5546250	8992320	12246120	13903500
DRUG REV	36605250	59349312	80824392	91763100
TOTAL REV	42151500	68341632	97070512	105666600
F. COSTS	32500000	49400000	59800000	61100000
V.-DRUGS				
/CASE	1100	1100	1100	1100
TOTAL	24403500	39566208	53882928	61175400
10% LOSS	2440350	3956620.8	5388292.8	6117540
TOTAL COST	59343850	92922828.	119071220	128392940
SURPLUS	-17192350	-24581196	-26000708	-22726340
DIST HOSP	6	6	6	6
POP	397013	397013	397013	297013
USE RATE	0.05	0.05	0.05	0.05
DH CASES	19850.65	19850.65	19850.65	19850.65
REV/CASE	4050	4050	4050	4050
TOTAL REV	80395132.	80395132	80395132.	80395132.
F. COSTS	6600000	6600000	6600000	6600000
V.-DRUGS				
/CASE	2700	2700	2700	2700
TOTAL	53596755	53596755	53596755	53596755
10% LOSS	5359675.5	5359675.5	5359675.5	5359675.5
TOTAL COST	65556430.	65556430.	65556430.	65556430.
SURPLUS	14838702	14838702	14838702	14838702
PROV. HOSP				
POP	0	397013	397013	397013
USE RATE	0.005	0.005	0.005	0.005
PH CASES	0	1985.065	1985.065	1985.065
REV/CASE	6000	6000	6000	6000
TOTAL REV	0	11910390	11910390	11910390
F. COSTS	0	2100000	2100000	2100000
V.-DRUGS				
/CASE	4000	4000	4000	4000
TOTAL	0	7940260	7940260	7940260
10% LOSS	0	794026	794026	794026
TOTAL COST	0	10834286	10834286	10834286
SURPLUS	0	1076104	1076104	1076104

UTILIZATION, REVENUE AND COST PROJECTIONS: ADAMAOUA PROVINCE

	1994	1995	1996	1997
CAPP				
REVENUE				
HC	24403500	39566208	53882928	61175400
DH	53596755	53596755	53596755	53596755
PH	0	7940260	7940260	7940260
TOTAL REV	78000255	101103223	115419943	122712415
COSTS				
FIXED	24000000	24000000	24000000	24000000
VARIABLE				
DRUGS				
HC/CASE	550	550	550	550
HCENTER	12201750	19783104	26941464	30587700
DH/CASE	1350	1350	1350	1350
DHOSP	26798377	26798377.	26798377.	26798377.
PH/CASE	2000	2000	2000	2000
PHOSP	0	3970130	3970130	3970130
TOTAL	39000127.	50551611.	57709971.	61356207.
SHPG (35%)	13650044.	17693064.	20198490.	21474672.
TOTAL COST	76650172.	92244675.	101908461	106830880
CAPP SURPLUS	1350082.8	8858547.4	13511481.	15881534.
P. OFFICE				
COSTS				
FIXED	6750000	6750000	6750000	6750000
VARIABLE	0	0	0	0
TOTAL COST	6750000	6750000	6750000	6750000
D. OFFICE				
# D. OFFICE	6	6	6	6
COSTS				
FIXED	34500000	34500000	34500000	34500000
VARIABLE	0	0	0	0
TOTAL COST	34500000	34500000	34500000	34500000
CAP + PO + DO				
COST	117900172	133494675	143158461	148080880
SURPLUS	-39898917	-32391452	-27738518	-25368465
SYST BAL	-42253565	-41057843	-37824421	-32179999
HC BE MU	4.4090069	4.2425348	3.9650815	3.7429895
CAP BE MU	3.0230714	2.6407600	2.4806538	2.4134620
COST RECOVER	122546632	160647154	185376034	197972122
LESS DRUGS	39000127.	50551611.	57709971.	61356207.
& SHPG/LOSS	21450070.	27803386.	31740484.	33745914.
AVAILABLE FOR				
REC COSTS	62096434.	82292156.	133750000	102870000
EQUIV. ($)	248385.73	329168.62	535000	411480.00
REC COSTS	104350000	123350000	149350000	135050000
REC COST ($)	417400	493400	597400	540200

UTILIZATION, REVENUE AND COST PROJECTIONS: FAR NORTH PRO

	1994	1995	1996	1997
H. CENTERS				
# OF HC'S	31	45	57	64
POP	453778	658710	834366	936840
USE RATE	0.15	0.16	0.18	0.2
HC CASES	68066.7	105393.6	150185.88	187368
REV/CASE	1900	1900	1900	1900
FEE REV	17016675	26348400	37546470	46842000
DRUG REV	112310055	173899440	247806702	309157200
TOTAL REV	129326730	200247840	285353172	355999200
F. COSTS	40300000	58500000	74100000	83200000
V.-DRUGS				
/CASE	1100	1100	1100	1100
TOTAL	74873370	115932960	16520[illegible]38	206104800
10% LOSS	7487337	11593296	16520446.	20610480
TOTAL COST	122660707	186026256	255824914	309915280
SURPLUS	6666023	14221584	29528257.	46083920
DIST HOSP	0	10	15	15
POP	0	934000	1401000	1401000
USE RATE	0.05	0.05	0.05	0.05
DH CASES	0	46700	70050	70050
REV/CASE	4050	4050	4050	4050
TOTAL REV	0	189135000	283702500	283702500
F. COSTS	0	11000000	16500000	16500000
V.-DRUGS				
/CASE	2700	2700	2700	2700
TOTAL	0	126090000	1891350000	189135000
10% LOSS	0	12609000	18913500	18913500
TOTAL COST	0	149699000	224548500	224548500
SURPLUS	0	39436000	59154000	59154000
PROV. HOSP				
POP	0	1401000	1401000	1401000
USE RATE	0.005	0.005	0.005	0.005
PH CASES	0	7005	7005	7005
REV/CASE	6000	6000	6000	6000
TOTAL REV	0	42030000	42030000	42030000
F. COSTS	0	2100000	2100000	2100000
V.-DRUGS				
/CASE	4000	4000	4000	4000
TOTAL	0	28020000	28020000	28020000
10% LOSS	0	2802000	2802000	2802000
TOTAL COST	0	32922000	32922000	32922000
SURPLUS	0	9108000	9108000	9108000

UTILIZATION, REVENUE AND COST PROJECTIONS: ADAMAOUA PROVINCE

	1994	1995	1996	1997
CAPP				
REVENUE				
HC	74873370	115932960	165204468	206104800
DH	0	126090000	189135000	189135000
PH	0	28020000	28020000	28020000
TOTAL REV	74873370	270042960	382359468	423259800
COSTS				
FIXED	0	24000000	24000000	24000000
VARIABLE				
DRUGS				
HC/CASE	550	550	550	550
HCENTER	37436685	57966480	82602234	103052400
DH/CASE	1350	1350	1350	1350
DHOSP	0	63045000	94567500	94567500
PH/CASE	2000	2000	2000	2000
PHOSP	0	14010000	14010000	14010000
TOTAL	37436685	135021480	191179734	211629900
SHPG (35%)	13102839.	47257518	66912906.	74070465
TOTAL COST	50539524.	206278998	282092640	309700365
CAPP SURPLUS	24333845.	63763962	100266827	113559435
P. OFFICE				
COSTS				
FIXED	0	6750000	6750000	6750000
VARIABLE	0	0	0	0
TOTAL COST	0	6750000	6750000	6750000
D. OFFICE				
# D. OFFICE	10	15	15	15
COSTS				
FIXED	57500000	86250000	86250000	86250000
VARIABLE	0	0	0	0
TOTAL COST	57500000	86250000	86250000	86250000
CAP + PO + DO				
COST	108039524	299278998	375092640	402700365
SURPLUS	-33166154	-29236038	7266827.1	20559435
SYST BAL	-26500131	33529546	105057084	134905355
HC BE MU	2.8219387	2.7546584	2.6425247	2.5528108
CAP BE MU	NA	2.2165287	1.9619895	1.9028519
COST RECOVER	129326730	431412840	611085672	681731700
LESS DRUGS	37436685	135021480	191179734	211629900
& SHPG/LOSS	20590176.	74261814	105148853	116396445
AVAILABLE FOR				
REC COSTS	71299868.	222129546	314757084	353705355
EQUIV. ($)	285199.47	888518.18	1259028.3	1414821.4
REC COSTS	97800000	188600000	209700000	218800000
REC COST ($)	391200	754400	838800	875200

6.0 Factors Underlying the Viability of The Co-financed PHC System

There are a number of key factors affecting the viability of the primary health care system partially financed through cost recovery. Some of these are briefly discussed in the following paragraphs.

Availability of Drugs. Ensuring the reliability of the drug supply and distribution system is critical to the success of the co-financed PHC system. The unavailability of drugs is a primary reason for the low utilization of MOPH health centers. Drug supply problems which have plagued the MCH/CS Project have delayed project implementation, reduced revenues, and undermined public confidence in the RPHC system. While the MCH/CS Project's supply problems appear to have been corrected, distribution problems persist. Unless these are effectively resolved, they could threaten the survival of the new system.

Pricing Policy. The cost recovery objectives of MCH/CS II are extremely ambitious. Drug sale revenues must cover not only the cost of drug distribution, but also most of the non-GRC personnel costs of the PHC system. Even at the lowest procurement prices, the mark-up necessary to cover these costs could affect the competitive position of the co-financed health centers. If their prices are higher than those of alternative sources, patients may choose to purchase their drugs elsewhere.

The use of differential pricing through which larger mark-ups are placed on less expensive and less critical products can be used to promote a more cost-effective use of drugs, but this, per se will not necessarily enhance the viability of the system.

It is the policy of the MOPH that no one be denied access to health care because of inability to pay. One method proposed for financing the care of the indigent is the earmarking of a portion of the drug mark-up or of surplus revenues for this purpose. While this approach has merit, it also raises some equity concerns since the burden of indigent care is borne by the sick rather than by the population as a whole.

Utilization of Health Services. A major assumption underlying the operation of the PHC system is that utilization will be high enough to cover the costs of the system. While MCH/CS I revenue and cost projections have been based on an annual use rate of 0.25 cases/person, actual 1992 utilization in MCH/CS I co-financed health centers has been closer to 0.15. Moreover, utilization in health areas with small and/or scattered populations may be insufficient to cover the fixed costs of the system. It is therefore essential that management be responsive enough to reduce fixed costs as described in previous sections to accommodate lower revenue levels.

The Economy. There is general consensus that the CFA franc is overvalued and there is a possibility of currency devaluation in the foreseeable future. This would increase the price of imported drugs, and this cost would have to be passed on to the users of co-financed health facilities. The resulting decline in utilization would have an adverse impact on system survival.

The current and ongoing economic crisis has resulted in a drop in disposable income and in a decline in health services utilization. This situation has serious implications for the viability of the PHC system, and, if not reversed, could necessitate continued operational subsidization of the system by the donor community.

A further decline in Cameroon's economic situation could affect the ability of the GRC to meet its payroll expenses. This would adversely have impact on not only health services delivery, but also the entire public sector. Because the GRC is a major employer, significant reductions in federal employment without a concomitant expansion of the private sector would further reduce aggregate demand and could possibly trigger a further decline in employment.

On a more positive note, any improvement in economic conditions would enhance the viability of the RPHC system.

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of these projects is always problematic. However, there is at least general evidence from a variety of sources that implementation of selected PHC interventions is a cost-effective strategy. "A review of 21 primary care projects" (Wilcox, et al 1984) found that ORT, growth monitoring, health education, immunizations, family planning and nutritional counseling show consistently positive results in reducing morbidity and mortality. A study of mortality (WHO, "Interventions for Reducing Diarrhea Morbidity and Mortality", 1984) classifies promotion of breastfeeding (nutrition education), water supply and sanitation, measles vaccination, and health education as 'clearly effective and known to be feasible and affordable'".

The operations research and policy aspects of the project will lead to improve quality and efficiency of services, and more effective cost recovery strategies. This, in turn, will increase financial autonomy and long-term viability of the whole PHC system.

It is the policy of the MOPH that no one be denied access to health services because of inability to pay. Accordingly, each co-financed facility has been provided guidelines for the formulation of its own policy on indigent care. It is anticipated that each health committee (COSA) will identify individuals within its community who really cannot afford to pay for health care and will earmark a percentage of cost recovery revenues or set up another mechanism to finance the care provided to this segment of the population. The former approach also raises equity issues since the financial burden of indigent care should be borne by the community as a whole and not only users of health services.

6.4 Provincial Revenue Sharing

The revised drug distribution and cost recovery system being implemented by MCH/CS provides for the creation of a provincial health fund (FSPS) through which a portion of the "surplus" generated by the CAPP is earmarked for redistribution to health districts and health centers. Decisions regarding the award of funds would be made by the CAPP board of directors (General Assembly) at its annual meeting based on an evaluation of action plans submitted by districts and health areas applying for such funds. This solidarity mechanism is seen as a way to fund health activities which could not otherwise be implemented.

Because there may be considerable variation in the amount of funds made available through this approach, it may be more appropriate to use the fund for special "one time" activities than as a source of operational subsidies to marginal health centers. It must be noted that the FSPS is a CAPP-generated surplus and is not based on a pooling of the surpluses realized by individual facilities. For each co-managed, co-financed health facility, the health committee (COSA) is authorized to utilize its surplus funds to finance health-related activities. Mark-ups at the CAPP and the periphery will determine the amount available for such use at each level.

7.0 Benefits from Project Interventions

The ultimate goal of economic development is the improvement of the quality of life. Health status is an integral component of this well-being. Health care can be viewed as a consumption good, because it contributes directly to improved health status, and as an investment in human resources which contributes indirectly to the goal of economic development by increasing human productivity--by decreasing debility and time lost.

However, the benefits resulting from project interventions, improved health status and quality of life for the target population, are difficult to quantify (in terms of reductions in morbidity and mortality) or to estimate how soon benefits will occur after project interventions are in place. While the interventions may have relatively well defined costs, the benefits occur indirectly from illnesses and/or deaths prevented. It is possible to estimate savings resulting from the reduced use of health services, but extremely difficult to assess the utility value of decreased mortality and morbidity or to impute a value to improved school performance or work productivity. This is especially true in Third World countries experiencing low economic output and very high unemployment and underemployment.

The initial focus of the MCH/CS I Project funded in 1987 was on technical interventions addressing the major causes of early childhood mortality and morbidity in Cameroon, including neonatal tetanus, measles, malaria and diarrhea, which account for 60% of all infant deaths. Shortly after the start of the project, it became apparent that these interventions were not achieving desired results because of

the ineffectiveness of the health care delivery system.

As a consequence, the project was restructured in 1989, with major emphasis on improving primary health care. It is anticipated that improvements in health services delivery achieved through better drug distribution, decentralized planning, better supervision, and the integration of services will greatly enhance the effectiveness of the child survival interventions mentioned above, as well as other aspects of maternal and child health.

Systems development activities have been prioritized in order to expand the population covered under the RPHC system at the lowest cost. In addition, a cost recovery program has been introduced to finance the procurement of drugs and to cover other operating expenses not funded by the MOPH, thereby minimizing the need for continued donor support.

7.1 Cost-Benefit Analysis

For most development projects, the economic analysis would involve the use of standard cost-benefit methods, but for several reasons such an analysis is inappropriate for MCH/CS II. First many of the project interventions will lead to changes in the health system, not just improvements in service delivery. These benefits from the project are difficult to quantify, and nearly impossible to fit into a pre-determined timeline.

Second, though the cost side of the analysis is relatively easy to address, the benefits are indirect and difficult to measure. When illnesses are averted to savings in cost of treatment could be quantified, but the pure-utility values of reduced morbidity and mortality and the value of improved performance in school or one the job can not be realistically determined. In addition, since MCH/CS II interventions take place in the context of the MOPH RPHC, and given the presence of other donor/actors in the health sector, it would be difficult to isolate the benefits attributable to MCH/CS II alone.

The primary objective of the project is to improve the PHC system, and to ensure sustainability of these improvements by instituting community participation, cost recovery activities, and effective management and supervision systems. Some of the major outputs will be community co-financed and co-managed health centers organized into health districts.

The expansion of the health center pharmacy with generic drugs priced competitively means that quality curative services will be economically and geographically more accessible, leading to significant increase in consumer welfare. In addition to reduced morbidity through more effective curative care, increased utilization of health centers will also increase contacts for preventive and promotive services. Increased utilization of PHC will reduce the unnecessary use of more costly referral facilities at the provincial level. Growth in national health expenditures can be reduced to the extent that future services are delivered at more appropriate and lower cost sites.

The profits generated by the health centers and the installation of user fees for services will result in an increased flow of financial resources to meet the recurrent costs of the health system. This will significantly improve the productivity of the health sector's existing physical and human resources.

The approach taken in this project to provide a comprehensive package of primary health care interventions is fairly standard for development agencies financing PHC projects. Quantitative analysis

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While the results of her study are encouraging, Litvack warns that the observed increase in utilization may be a short-term effect due to previously unmet need and may reflect a draw-down in savings. Additionally, the results of the study may not be generalizable to other areas unless they are very similar to the study site.

Overall health services utilization in Cameroon has declined dramatically in recent years. It would be reasonable to assume that at least part of this drop is attributable to the economic crisis which has persisted since 1986. People have less disposable income and are consequently spending less on health care.

Public health centers are seeing fewer than half of the patients they saw a few years ago. The economic crisis is also having an adverse impact on Cameroon's private health sector. Both of the country's major church health networks, the Federation of Evangelical Missions in Cameroon (FEMEC) and the Catholic Health Services Foundation (Ad Lucem) are currently experiencing serious financial difficulties.

FEMEC is struggling with a 50% drop in contributions, a 70% reduction in MOPH budgetary support, and declining revenues due to lower utilization. As a result, staffing has been reduced and services curtailed. Ad Lucem has faced similar problems and has had to abandon an ambitious expansion program because of insufficient funding. Private-for-profit clinics are also in financial distress. Some have responded by laying off staff, curtailing the range of services offered and reducing prices by as much as 85%.

While MCH/CS co-financed health facilities have experienced an initial rise in utilization, this increase was less than anticipated. While the population appears willing to pay for drugs if prices are kept below those in the private sector, there has been significant opposition to the FCFA 200 consultation fee.

A review of 12 health centers conducted during the mid-term evaluation showed a 1991 utilization rate of 0.18 new cases per capita, about 25% below projected levels. This was accompanied by lower than expected revenues per new case, resulting in a nearly 50% shortfall in projected revenues. For 1992, these sites reflect an increase in revenue per new case to the originally projected level of about FCFA 2500, but a drop in utilization to 0.14 new cases per capita.

In contrast, the CIM project in the Far North Province, which charges only FCFA 500 per new case (including drugs), had a 1990 utilization rate of 0.29. CIM can maintain this price only by heavily subsidizing the operation of the drug distribution system. While several factors may account for the differences in utilization between these two projects, one cannot discount the five-fold disparity in prices. Despite its low prices, CIM utilization dropped to 0.25 in 1991.

Unfortunately, information available on health services utilization in Cameroon is fragmentary and fails to provide a coherent picture of recent patterns and trends. An October 1990 household survey conducted in Adamaoua province by Litvack found that the average expenditure per episode of illness was FCFA 4393, consisting of FCFA 2133 for drugs, FCFA 1589 for consultation and FCFA 671 for transportation. However, there is no information available on how these expenditures vary by income group.

In summary, there is strong evidence that the population is willing to pay for health services, economic

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stringencies faced by the GRC and private households may necessitate a revision of cost recovery targets and a prioritization of activities to be financed through cost recovery; revenues may be inadequate to cover all activities currently planned. Moreover, greater donor support of the PHC system, including an operational subsidy, may be needed until the economic situation improves.

6.2 The Pricing of Health Services and Drugs

Because prices should not constitute an unreasonable barrier to health services utilization, equity considerations suggest that prices be set as low as possible consistent with the financial viability of a co-financed health services delivery system.

As was described above, the demand for health services in the price ranges observed is inelastic. Therefore an increase in price results in a less than proportionate decline in utilization and an increase in total revenue. However, as prices increase, the use of alternative health services and goods becomes progressively more attractive and, beyond a certain point, a further increase in price will result in a greater than proportional decline in utilization and therefore lower total revenue. There is some concern whether MCH/CS I Project prices are approaching this level. Devaluation of the CFA franc would increase the price of drugs, and this cost would have to be passed on to the user of co-financed health services, resulting in lower utilization and possibly lower revenues.

The use of a uniform fee and price schedule on a province-wide basis rather facility-specific pricing greatly simplifies the operation of the system. To maximize price stability, the overall mark-up should be also great enough to absorb minor fluctuations in the purchase price of drugs.

While the initial pricing strategy used by MCH/CS was based on a uniform mark-up of all products, this approach has been modified to permit cross-subsidies. Larger mark-ups are applied to less expensive or less critical drugs whereas a lower margin is used for more expensive and more vital products. This system is obviously more complex since the effective overall mark-up is a weighted average of the mark-up on individual products, but should promote a more cost-effective use of drugs.

The flat fee of FCFA 200 per episode charged by MCH/CS health centers also involves a cross-subsidy since the care provided in serious cases may require more visits and consume more resources than a simpler case. Similarly, the wholesale price charged to hospitals and health centers is another form of cross-subsidy since the margin is intended to cover the costs of transporting drugs to the periphery as well as travel costs related to supervision. The costs of servicing the more distant centers is thereby partially covered by facilities located closer to the provincial depot.

There are equity issues associated with the proposed use of cost recovery funds to purchase vaccines which are administered free, because this practice is tantamount to a tax imposed upon the sick to finance a service for the entire population. Ideally, vaccine costs should be spread more evenly.

6.3 Indigent Care

While the Litvack study concluded that the lower socio-economic groups appear to benefit more from the introduction of a drug distribution system financed through a revolving fund, she did not address the issue of providing care to the "truly indigent."

Table O-1

FINANCING OF THE PRIMARY HEALTH CARE REORGANIZATION

LEVEL	EXPENSE DESCRIPTION	PROPOSED FINANCIAL SOURCE				
		MOPH	CAPP	HOSP. REVENUE	HLTH CTR. REVENUE	MCH/ CS II
HEALTH CENTER	SALARIES	✓				
	MEDICATIONS/PRODUCTS				✓	✓
	OPERATION FEES	✓			✓	
	EQUIPMENT	✓				✓
	HLTH CTR/COMMUNITY TRNG	✓				✓
	MINOR RENOVATION	✓				✓
	TRANSPORTATION	✓			✓	
REFERENCE HOSPITAL	SALARIES	✓				
	MEDICATIONS/PRODUCTS			✓		
	OPERATION FEES	✓		✓		
	EQUIPMENT	✓		✓		✓
	HOSPITAL PERSONNEL TRNG.	✓		✓		✓
	MINOR RENOVATION	✓				✓
	TRANSPORTATION	✓		✓		
CENTRAL BUREAU FOR HEALTH DISTRICTS	SALARIES	✓				
	OPERATION FEES	✓	✓	✓		
	EQUIPMENT	✓				✓
	PERSONNEL TRAINING	✓				✓
	HLTH CTR SUPERVISION	✓	✓			✓
	MINOR RENOVATION	✓				✓
CAPP	SALARIES	✓	✓			
	OPERATION FEES		✓			
	EQUIPMENT	✓	✓			✓
	PERSONNEL TRAINING	✓	✓			✓
	DIST/HLTH CTR SUPERV.		✓	✓		
	MINOR RENOVATION	✓				✓
PROVINCIAL PUBLIC HEALTH DELEGATION	SALARIES	✓				
	OPERATION FEES	✓	✓			
	EQUIPMENT	✓				✓
	PROV. PERSONNEL TRAINING	✓				✓
	DISTRICT SUPERVISION	✓	✓			
	MINOR RENOVATION	✓				✓
	OTHER	✓				✓

6.0 Cost Recovery Issues

6.1 Ability and Willingness to Pay

The ability and willingness to pay for health services is affected by a number of factors. First, there must be the perception that a health problem exists and the belief that health services will reduce or eliminate the problem. The decision to obtain a given health service is also affected by its cost (and convenience) to the patient. In addition to the specific price or fee, this cost also includes transportation expenses, time lost, and related opportunity costs.

Additionally, the prices of substitute and complementary services, e.g., those available from private practitioners and pharmacies, traditional practitioners or the informal sector, affect the demand for a given health service. The utilization of health services is also associated with income level and impressions of potential consumers regarding effectiveness and quality.

This conceptual framework has provided the basis for numerous studies of health services utilization in the Third World. On the whole, these studies have shown that health care is a normal good the demand for which is both price and income inelastic. In other words, an increase (decrease) in the price of a given health service will result in a less than proportionate decline (increase) in the quantity demanded, whereas an increase (decrease) in income will result in a less than proportionate increase (decrease) in the quantity demanded at any given price.

Enhancing the perceived quality of health services by improving the availability of drugs with no change in price will result in increased demand. Conversely, introducing a cost recovery system in which prices are increased with no change in quality results in decreased utilization. Some studies (e.g., Gertler) conclude the drop in utilization is more pronounced among the poor, who have the greatest need for health services and the least ability to pay.

In a study of 800 households in the Adamaoua Province conducted in 1990 and 1991, Jennie Litvack examined the effect of a simultaneous improvement in health services quality and the introduction of a charge for health services and drugs in MCH/CS I Project-supported public co-financed health centers.

According to Litvack, there was no significant change in overall health care expenditures after the introduction of fees, but utilization of and expenditures for health services in co-financed facilities reflected a marked increase. Thus, the positive effect of improved quality more than offset the negative impact of higher prices. The increase in co-financed health center utilization was accompanied by a decline in expenditures on alternative sources of care since there was no change in overall household expenditures for health care.

Moreover, the increase in co-financed health center use was found to be proportionally greater among lower socio-economic groups, leading Litvack to conclude: "It seems certain...that poorer people are not being hurt by this policy and in fact, it appears that they are benefitting proportionately more...than the wealthier people."

However, one critical question remains. While the need for health services is greatest among the poor, they spend significantly less for health care than the rest of the population. One must therefore ask whether the health system adequately addresses the needs of this group.

competing facilities in some areas, large segments of the population do not have access to care. Similar problems exist in the distribution of health personnel, with a serious misallocation in favor of urban areas and relatively few health providers relative to the population within rural areas.

Health providers are poorly utilized since they lack the equipment, supplies and drugs needed to provide health services. Operations research studies conducted by MCH/CS I revealed that public health center personnel spent nearly 75% of their time in non-productive activities. In recent years, the credibility of the MOPH health delivery system has been seriously eroded, resulting in a decline in health services utilization.

4.1 MOPH Response to Health Sector Constraints

To its credit, the GRC is aware of the constraints adversely affecting health services delivery and has recently issued a blueprint for health sector reform which addresses the rationalization of the health infrastructure, human resources management, improved drug distribution and prescriptive practices, as well as health care financing. Moreover, in the draft "Health Sector Policy", the GRC has expressed a commitment to increase the health share of the national budget to 10%, as advocated by WHO, over the next ten years.

In response to the decline in government financing for health services, the MOPH issued an official policy document last March entitled "...la Reorientation des Soins de Sante Primaire," which provides a formal framework for restructuring health services delivery and expanding cost recovery.

The Drug Financing Law of 1990 authorizes public health care facilities to establish community-managed revolving funds through which drug sale revenues can be retained locally. Based on pilot programs carried out by the Belgian Cooperation, the German Cooperation and USAID, this legislation provides the legal basis for the development and operation of drug supply and cost recovery systems, thereby permitting USAID and other donors to assist in the establishment of revolving-fund pharmacies which could ultimately be self-sustaining and which may be able to support certain activities previously planned but underfinanced by the MOPH.

Community participation, which is a major component of the RPHC, has been facilitated by 1) a 1990 MOPH issuance authorizing the establishment of community health committees, 2) the enactment of a law in December 1990 which simplifies the legal establishment of private associations, and 3) the issuance of an MOPH letter instructing all health committees to obtain association designation. This formalization of health committee status provides the legal basis for their involvement in the co-management and co-financing of health services delivery.

The Hospital Financing Law of 1992 authorizes selected hospitals to retain 50% of fee-generated revenues. Formerly, hospitals were required to remit all receipts not earmarked for physician "profit-sharing" directly to the national treasury. Funds returned to the treasury frequently exceeded the hospital's budgetary allowance for non-personnel operating costs. This law, in

combination with the 1990 drug financing legislation, should significantly increase resources available to meet operating expenses, thereby enhancing the functionality and effectiveness of public hospitals. Implementation of these measures could foster the revision of the law, permitting hospitals to retain more than 50% of fee-generated revenues.

In summary, the environment for health financing policy reform is very positive and the need for more fundamental changes in the health infrastructure has been officially acknowledged. However, reorganizing the distribution of health resources is politically difficult; it remains to be seen how successful the MOPH will be in effecting these changes.

5.0 The Roles of the Government, the Community and the Donors under the PHC Reorientation

The donor community is playing a major role in the RPHC. Principal donor activities include: technical assistance in the development and implementation of systems for planning, supervision, integrating PHC services, drug distribution and cost recovery; financial support for the renovation of health facilities, procurement of equipment and initial supplies; training and operational subsidy of the system during the start-up phase.

Responsibility for financing recurrent costs of the co-managed, co-financed PHC system are outlined in Table O-1. The viability and sustainability of the system are discussed in greater detail in ANNEX N. It must be realized that the success of the program is contingent upon continued financial commitment by the GRC since the cost-recovery program is intended to complement and not replace MOPH funding for PHC.

significant portion of the population in the subsistence sector. Health indicators, which provide a valuable insight into socio-economic conditions, are more characteristic of countries with substantially lower per capita incomes. For example, despite numerous immunization efforts over the years, only 27% of Cameroon's children are completely immunized. The results of this failure are all too clear: as indicated in "Analyse de la Situation des Enfants et des Femmes en Republique du Cameroun" (1990), about one-third of all infant deaths are attributable to neonatal tetanus and measles, both of which can be prevented through vaccination.

During the last three years, there have been substantial declines in per-capita income and in private consumption of goods and services. The current economic outlook remains bleak. According to USAID Cameroon's Action Plan for FY1990-1992, "...there is little cause for optimism regarding the Cameroonian development environment. This environment is an extremely difficult one, in which maintaining zero growth should be viewed as a very significant accomplishment."

There is general consensus that the CFA franc is overvalued, and there is the possibility of currency devaluation in the foreseeable future. The immediate effect would be an increase in import prices and a decline in the prices of exports. While this would increase the competitiveness of Cameroonian exports, the net effect on the balance of trade would depend on the relative price elasticities of exports and imports. Given the world market for the country's exports and the price inelasticity of many of its imports, the overall impact of devaluation would probably be negative, at least in the short run.

2.2 Structural Adjustment

In early 1988 the GRC began discussions with both the World Bank and the International Monetary Fund (IMF) regarding the stabilization and structural adjustment of its economy. With the support of a Stand-by Agreement approved in September 1988 and a Structural Adjustment Loan approved in July 1989, the GRC initiated actions aimed at 1) curtailing the growth of public expenditures, 2) strengthening and broadening revenue collection, 3) reforming the civil service, 4) liberalizing trade, 5) liquidating, privatizing and restructuring the parastatal sector, and 6) restructuring the commercial banking sector.

In its efforts to significantly reduce its budgetary deficit, the GRC has curtailed social sector funding in such areas as education and health. Moreover, the structural adjustment program has had an overall negative impact on employment. In response, the World Bank has developed the Cameroon Social Dimensions of Adjustment (SDA) program. While it does not represent a coherent program of social sector reform, the SDA program has been an effective mechanism for mobilizing donor funding in the areas of health, population, education, employment and women in development.

The principal objectives of this program include 1) short to medium term protection of the disfavored and vulnerable segments of the population, particularly groups directly affected by the economic crisis and the adjustment program, 2) short- to medium-term participation of the

poor in the process of recovery, and 3) direct assistance to the health sector.

Unfortunately, the GRC has encountered serious difficulties in implementing these programs. In September 1992, the World Bank blocked disbursement of the third tranche of the Structural Adjustment Loan because of arrears in the GRC's payments to the IMF and the World Bank. However, in January 1993, the GRC received a new loan from France allowing Cameroon to clear its arrears with the World Bank.

3.0 MOPH Funding for Health Services: Budget, Expenditures, Trends

Like most other African countries at independence, Cameroon espoused the philosophy that health care is a human right and formulated policies aimed at assuring that health services would be available free of charge to all Cameroonians. However, while public expenditures for health are high ($12.60 per capita in 1988/89) compared to other African countries, expenditures have not kept pace with other public expenditures.

The GRC investment budget for health between 1981 and 1985 totalled FCFA 2.6 billion. As a result of the economic boom, investment during the next two years reached FCFA 15 billion, most of which was allocated to hospital construction. In 1987/88, health center construction accounted for 14% of public investment in health infrastructure. In the wake of the economic downturn, public investment in health decreased dramatically and now represents less than 1% of the total GRC investment budget.

Between 1970 and 1987, the GRC operating budget for health grew from FCFA 2.5 billion to nearly FCFA 28 billion. However, during this period the health share of the GRC budget declined by one half from nearly 7% to 3.5%. Over the last five years, the budget declined in nominal terms to FCFA 24 billion, representing an even greater drop in real per capita terms.

The GRC response to this reduction in resources has been to devote a progressively increasing share of its budget to personnel in order to maintain staffing. As a consequence, less that 20% of the budget is currently available for non-personnel operating costs. The inability of the MOPH to expend more than 60% of its non-personnel budget allocation has only exacerbated this problem. While the MOPH allocated nearly FCFA 200 per capita for drugs in 1989/90, actual drug expenditures were less than FCFA 40 per person.

4.0 The Policy Environment for Health Care Financing

The effectiveness of health services delivery depends upon explicit and implicit policies affecting the allocation of resources into the health sector, the appropriate distribution of these resources within the health sector, the efficient use of these resources in producing health services, and the equitable distribution of the services among the population.

According to the World Bank, the inadequacy of resources available to the health sector in Cameroon is compounded by the uneven distribution of these resources. While there are

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1.0 Introduction: Purpose and Scope of the Analysis

This analysis examines the economic environment within which the Cameroonian health care delivery system must function, describes recent trends in GRC funding for health care in light of the current economic situation, and discusses the implications of the current policy environment for health care financing reform. The relative roles of the GRC, the community, and the donors in implementing the RPHC are also briefly outlined. A major segment of the analysis deals with issues surrounding cost recovery, including ability to pay, pricing, and care of the indigent. The final section briefly examines benefits associated with project interventions.

2.0 The Economy of Cameroon

2.1 Structure, Performance and Outlook

The World Bank classifies Cameroon, with a 1991 per capita Gross National Product (GNP) of approximately US$1000, as a "middle income" country. Recent estimates place Cameroon's GNP at between $820 and $860. During its first 25 years of existence after achieving independence in 1960, Cameroon experienced steady economic growth, capitalizing on its abundant natural resource base, including oil, and agricultural products such as coffee, cocoa and rubber. In light of its impressive performance, the country was frequently cited as an African success story.

During the 1970s Gross Domestic Product (GDP) grew at an annual rate of over 5%, achieving a level of 1,800 billion FCFA in 1980. The rapid expansion in oil production beginning in 1978, stimulated by the boom in oil prices, further accelerated the growth in GDP, which averaged 8% per year between 1980 and 1985. This period was characterized by expanded capital formation, including investment in health infrastructure, and by a 10% annual growth in public-sector employment.

The 40% decline in the world price of oil beginning in 1986, and the subsequent precipitous drop in the price of coffee (39%) and cocoa (54%) beginning in 1987 have cut overall export earnings by nearly one-third, and have triggered an economic recession and financial crisis with which the country is still struggling. Since 1986, the GDP has shrunk by nearly 25%.

Previously hidden inefficiencies in the Cameroonian economy and its inability to adapt to changing circumstances soon became apparent. Fiscal measures have been insufficient to reverse the decline in tax revenues. Restructuring and privatization of parastatals has been slow. Moreover, despite the need for austerity, public sector employment grew by nearly 20% between 1985 and 1990. This wage bill could only be sustained by reducing public investment and curtailing non-wage recurrent expenditures.

In retrospect, it is evident that rapid economic growth has resulted in only minor movement along the path of social and economic transformation. Per capita income levels mask the fact that Cameroon remains very much a dual economy with a relatively small formal sector and a

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ANNEX 0

- ECONOMIC ANALYSIS