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ASSESSMENT OF USAID-FUNDED HEALTH AND POPULATION ASSISTANCE (1987-1994)

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
AIDSCAP	AIDS Control and Prevention project (AID/W project)
AIDSTECH	AIDS Technical Support (AID/W project)
A.I.D.	Agency for International Development (Washington, D.C.)
AID/Pop	A.I.D. Population Office (Washington, D.C.)
CA	Cooperating Agency (centrally-funded)
CAPP	Centre d'Approvisionnement Pharmaceutique Provinciale
CARE	CARE International
CDC	Center for Disease Control
CDD	Control of Diarrheal Diseases
CDSS	Country Development Strategy Statement
COSA	Comité de Santé / Health Committee
CSW	Commercial Sex Worker
CYP	Couple Year of Protection
DDM	Data for Decision Making project
DEPS	Directorate for Evaluation and Planning Services
DFA	Development Fund for Africa
DFMH	Directorate of Family and Mental Health
DPM	Directorate of Preventive Medicine
DPT	Diphtheria, Pertussis, and Tetanus Immunization
FAC	French Assistance Cooperation
FCFA	Franc de la Communauté Financière Africaine (Cameroon currency)
FHI	Family Health International
FHI II	Family Health Initiatives II (regional project)
GDP	Gross Domestic Product
GRC	Government of the Republic of Cameroon
GTZ	German Technical Cooperation
HCRP	Health Constraints to Rural Production project
HIID	Harvard Institute for International Development
HIV	Human Immuno-deficiency Virus
HMIS	Health Management Information System
IDP	Ivermectin Distribution Project
IEC	Information, Education, and Communication
IEF	International Eye Foundation

TABLE OF CONTENTS

page

Acronyms and Abbreviations

Table of Contents

Executive Summary i

Summary of Impact iii

Summary of Lessons Learned vi

I. INTRODUCTION 1

A. Purpose of the Assessment 1

B. Assessment Methodology 1

C. Organization of the Report 1

II. BACKGROUND 2

A. Baseline Situation 2

1. Plateauing Health and Development in Africa 2

2. Health Sector Status in Late 1980's 3

B. USAID Health and Population Strategy 5

1. Relationship to the CDSS and DFA 5

2. Overview of USAID programs 1987-1994 6

3. Transition from Child Survival to Reoriented Primary Health Care 8

C. Conceptual Framework for an Integrated Health System 9

III. ASSESSMENT OF HEALTH SECTOR PROGRAMS 12

A. Overview of Program Impact 12

1. Long-Term Impact Indicators 12

2. Intermediate Impact Variables 13

3. Future Prospects for RPHC 17

B. Primary Health Care . . . . . .

1. Maternal Child Health/Child Survival (MCH/CS I & II) . . . . . .

2. Reform of Health Delivery System (RHDS) . . . . . .

3. Technical Assistance for AIDS and Child Survival (TAACS) . . . . . .

4. Lessons learned . . . . . .

5. Prospects for sustainability . . . . . .

C. Disease Control . . . . . .

1. Health Constraints to Rural Production (HCRP I & II) . . . . . .

2. Ivermectin Distribution Program (IDP) . . . . . .

3. Control of Diarrheal Diseases (CDD) . . . . . .

4. Data for Decision Making (DDM) . . . . . .

5. Lessons learned . . . . . .

6. Prospects for sustainability . . . . . .

D. AIDS . . . . . .

1. Baseline Situation in 1987 . . . . . .

2. AIDSTECH & AIDSCAP . . . . . .

3. Lessons learned . . . . . .

4. Prospects for sustainability . . . . . .

E. FAMILY PLANNING . . . . . .

1. Family Health Initiatives (FHI) & National Family Health (NFHP) . . . . . .

2. Lessons learned . . . . . .

3. Prospects for sustainability . . . . . .

IV. REFERENCES CITED . . . . . .

MCH	Maternal Child Health
MCH/CS	Maternal Child Health/Child Survival project
MOPH	Ministry Of Public Health
NCDDP	National Control of Diarrheal Diseases Program
NFHP	National Family Health project
NGO	Non-Governmental Organization (Host Country)
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
PRITECH II	Technology for Primary Health Care II project
PSI	Population Services International
PVO	Private Voluntary Organization (International)
RHDS	Reform of the Health Delivery System project
RPHC	MOPH Reorientation of Primary Health Care policy
SAP	Structural Adjustment Program
SAVE	Save the Children Federation
SESA I	Soins d'Enfant Sud et Adamaoua (MCH/CS I)
SESA II	Santé dans l'Extreme Nord, Sud et Adamaoua (MCH/CS II)
STD	Sexually Transmitted Disease
TAACS	Technical Advisor in AIDS and Child Survival
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

A. PURPOSE OF THE ASSESSMENT:

USAID/Cameroon plans to terminate its bilateral development assistance program in Cameroon by the end of 1994. In order to assess the impact and document the legacy of its health and population portfolio, the Mission contracted two consultants to document progress in achieving the broad health objectives of USAID's (1987-1994) Country Development Strategy Statement, assess the sustainability of major achievements, and identify important lessons learned. The assessment included an extensive review of project and Ministry of Public Health (MOPH) documents, interviews with MOPH and donor representatives, focus-group discussions at all levels of the health system, and site visits to six of Cameroon's ten provinces.

B. BASELINE HEALTH SITUATION IN THE LATE 1980'S:

In the late 1980's, Cameroon's economic crisis began to have a major impact on the functioning of its primary health care (PHC) system. As a result of the economic downturn, 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 virtually ceased. Health center utilization dramatically declined. As a result, the health system ceased to function in a coordinated, effective fashion.

C. FINDINGS OF THE ASSESSMENT:

To address the serious problems in the health system, the MOPH, assisted by USAID and other major health donors, developed a new health delivery strategy called the Reorientation of Primary Health Care (RPHC) to emphasize decentralized planning, community co-management of health facilities, and community co-financing of health services. By 1990, USAID began to reformulate all USAID-funded health projects to bring them in line with the RPHC and its integrated, systems development approach.

By choosing an integrated health systems approach to health in Cameroon, and by implementing projects to assist the MOPH in making the transition from selective primary health care to RPHC, USAID has probably had a much greater, wider and permanent impact on health in Cameroon than if it had maintained a selective or narrowly focused approach for its projects.

USAID-funded projects, like the Maternal Child Health/Child Survival (MCH/CS I) and Reform of Health Delivery System (RHDS) projects, have provided a conceptual, policy, and implementation framework for the application of RPHC. The implementation of the MCH/CS II (SESA II) project (through A.I.D. or other donor support) should permit Cameroon to achieve an integrated, sustainable health development system before the year 2000.

USAID's non-traditional, integrated health systems strategic approach to development has supported:

- cost-effective delivery of child survival interventions, e.g., immunizations;
- a rapid expansion of access to important services such as family planning;
- a model to begin integration of public and private sector health systems;
- a mechanism for recurrent cost financing for non-salaried health services; and
- a mechanism to address longstanding problems, such as the funding of control measures in the early phases of epidemics.

Each of these effects are illustrated in relevant sections of this paper.

D. CONCLUSION:

Despite the relatively young age of its health and population portfolio (major programs begun 1988-1991), USAID and the MOPH have made remarkable progress in the development of innovative approaches in health and population development. Given the declining economic situation in Cameroon since 1986, these accomplishments are even more remarkable.

By taking an active role in policy dialogue and development with the MOPH, USAID helped shape Cameroon's reorientation of primary health care (RPHC).

By choosing an integrated health systems approach to health in Cameroon, USAID has designed or reformulated its projects within the framework of developing integrated health systems.

By using drug supply and cost recovery support components as catalysts for establishing a sustainable integrated health system, USAID has perfected a strategy which could be replicated in other provinces and/or countries.

By integrating disease control programs for onchocerciasis and schistosomiasis into primary health care, USAID has demonstrated that it is possible to address priority diseases without losing the focus on developing integrated health systems.

By recognizing the need for a mix of donor support in developing integrated health systems, USAID has become a key player in helping the MOPH define and coordinate the full spectrum of assistance required to develop an integrated health system.

The lessons learned by USAID/Cameroon in community participation, management systems, and service provision may have a particular relevance to the reorientation of child survival programs in other African countries. There is a high level of interest by USAID's Africa Bureau and other Missions, therefore, in USAID/Cameroon's health systems development approach.

SUMMARY OF IMPACT

Health impact is traditionally measured through indicators such as infant, child and/or maternal mortality rates, total fertility rate, and HIV infection prevalence rates. In general, these indicators change very slowly over time. The measurement of health impact indicators rates is a very difficult and costly process requiring large population-based surveys with rigorous methodologies that can, in themselves, disrupt the development and operation of a health care system. In many countries, like Cameroon, interpretation of any change in mortality rates has to take into account a fluctuating epidemiology and a rapidly changing socio-economic situation. In such an environment a lack of change in mortality levels does not necessarily indicate that the health care provided is inappropriate. In fact, effective health interventions may simply prevent an increase in mortality rates during a declining socio-economic period.

Although mortality reduction is an implicit aim of any health care system, it is not usually the primary objective perceived by the community when compared with the immediate need for care and relief of suffering. This is particularly true when the primary demand on the services is to deal with problems that are not major causes of death.

Most primary health care projects are not intended to test the efficacy of program interventions, but to make tried-and-proven interventions accessible to and utilized by communities in order to have a positive impact on health status. The intermediate variables of primary health care, accessibility and utilization, directly influence the health status of children and can effectively be used to monitor programs.

USAID-funded projects in Cameroon have concentrated on identifying intermediate variables and data sources to measure the accessibility and utilization of PHC services as logical precursors to achieving sustainable health system development and health impact. While USAID's health and population programs are relatively young, they are nevertheless demonstrating promising increases in access and utilization indicators:

- population access to primary health care increased from 0% in 1990 to 33% in 1993.;
- % of women enrolled in prenatal care rose from less than 20% to 60% in Far North province;
- % of children seen in well child care increased from less than 20% to 90% in South province;
- vaccination coverage rose to 46% for reoriented health centers in Adamoua province compared to 27% for the province as a whole;
- the number of family planning service sites increased from 50 to 217 since 1991;
- couple years of contraceptive protection almost doubled since 1991 (from 50,000 to 90,000);
- condoms sales increased from 2.1 million in 1991 to 5.7 million in 1993; and
- condom sale per capita has increased from .17 in 1990 to .46 in 1993.

From 1984-1987, the Health Constraints for Rural Production (HCRP) for schistosomiasis control was the only bilateral health project funded by USAID in Cameroon. Field implementation of RPHC through the Maternal Child Health/Child Survival (SESA) I Project and the Reform of the Health Delivery System (RHDS) Project did not effectively begin until 1991. Support for AIDS control began in 1989, while comprehensive support for family planning started in 1991. These

projects represented initial implementation phases aimed at laying the foundation of the RPHC, and were planned to be continued into the next decade.

The worsening economic crisis has underscored the importance of this long-term approach to implementing the RPHC. The crisis has affected the implementation of the program:

- by decreasing people's ability to pay for health services, resulting in lower than expected utilization of health services and reducing cost recovery revenues;
- by further reducing that portion of the MOPH's budget which is available for non-salaried recurrent costs of health facilities and offices, making these recurrent costs almost entirely borne by the population through cost recovery;
- by reducing the GRC's ability to regularly pay salaries of public servants which has eroded the performance of MOPH personnel at health facilities/offices; and
- by diminishing the financial viability of private sector facilities which collaborate with the MOPH in providing health care to the population.

The chief accomplishments USAID-funded projects, especially SESA and RHDS, include:

- assisting the MOPH in designing the RPHC and establishing the policy framework in which to implement it;
- developing high quality training materials (adopted by other donors) to begin implementation of the RPHC;
- further developing important aspects of RPHC including delimitation of health areas, provincial Health Management Information Systems (HMIS), and a model for health supervision;
- developing provincial medical supply system (CAPPs) to provide essential drugs and medical supplies to health facilities, and to cover the essential, non-salaried, recurrent costs of health management systems and services;
- decentralization of medical supply logistics, health information, health care budgeting, and training to the provincial level; deconcentration of supervision to the health district level;
- establishing functioning community co-managed and co-financed health centers providing basic health services, and achieving the coverage objective for these projects (30% of the populations of three provinces); and
- helping to establish a pilot health district in Meiganga.

The major limitations of the RPHC program to date include:

- the slow start developing pilot health districts. As a result, decentralization of many elements has not descended below the provincial level;

- problems encountered in fostering genuine community participation in the diverse communities which represent the three provinces;
- the late start in building public and private collaboration in provision of basic health services and management of health districts; and
- little progress in improving the MOPH's personnel management system.

SESA II was designed in late 1992 to address these deficiencies, and to build on, expand and reinforce the health system sustainability. SESA I and RHDS provided the conceptual, policy, and implementation framework for the application of the RPHC reform program in the three targeted provinces. SESA II was to create more functional health districts, enhance public-private sector collaboration, and expand basic health care coverage to the remainder of the population (1994-1996). The decision to close USAID/Cameroon meant that SESA II could not be continued. The implementation of SESA II (through A.I.D. or other donor support in the future) would permit Cameroon to achieve an integrated, sustainable health development system before the year 2000.

SUMMARY OF LESSONS LEARNED

O By choosing an integrated health systems approach to health in Cameroon, and by implementing projects to assist the MOPH in making the transition from selective primary health care to RPHC, USAID has probably had a much greater, wider and permanent impact on health in Cameroon than if it had maintained a selective or narrowly focused approach for its projects.

O Coordination of donor agencies in Cameroon has been facilitated by the RPHC policy to define responsibilities for planning and management at each level of the integrated health system. The integrated health system has provided a mechanism for coordinating the comparative advantages of donor programs.

O It is necessary to plan for a mix of donor support in developing integrated health systems. Most donor agencies are unable, or unwilling, to provide the full spectrum of assistance required to develop integrated health systems.

O Even with a clear national policy for RPHC, there is a continuing need for marketing the concept of integrated health systems to donor/partner agencies. We should never underestimate the tendency for donors, especially with pressure from headquarters, to "verticalize" their assistance and projects.

O Implementation of decentralization should begin at the system level that has the capacity for planning, management and supervision over the functions to be decentralized. While health districts are to be the operational unit for decentralized planning and management in Cameroon, the weakness of government infrastructure and personnel at this level made it necessary to begin decentralization by concentrating systems building at the provincial level.

O The absence of functional health districts to serve as replicable models for national decentralization can become an obstacle to getting decentralization moving at that level. Priority should be given to developing model health districts where a minimal effort is needed, e.g., in a district with a completely functional referral hospital.

O The capacity of local NGOs (non-governmental organizations) to manage district referral hospitals and to participate in, or even completely manage, district health services is a potential resource which is just now being seriously explored. Given the current economic situation in Cameroon, there is a need to maximize the use of existing, limited health infrastructure and resources by actively pursuing greater public/church coordination.

O While model health districts are being developed, it has been politically important to develop an interim strategy to expand access to primary health care services, especially access to essential medicines. This has been essential in Cameroon to maintain program credibility, to increase the confidence of the population, and to expand the acceptance of cost recovery.

O The creation of a vertical national health intervention program (such as schistosomiasis control) is important to launch a specific disease control program, especially for developing and testing effective interventions, adoption of a national strategy and establishing a training/supervision capacity. However, following general acceptance of the intervention, emphasis should be placed on decentralizing and merging responsibility for planning, management, training, supervision, Health

Management Information System (HMIS) and logistics to regions and health districts, and completely integrating the intervention as a health center and outreach activity.

O A vertical approach may be necessary in the early stages of establishing a family planning program in order to achieve faster progress. This is because the health care system has to be functional and decentralized before family planning can be integrated into it. However, the creation of centralized systems and structures may become obstacles to integration at a later stage, and may be difficult to dismantle.

O Disease control programs which are committed to developing integrated health systems can be an entry point for increasing access to limited services; establishing principles of co-management and co-financing; and creating community enthusiasm for primary health care.

O Before a drug supply and cost recovery system is initiated, it is necessary to calculate and determine its costs - including the marginal recurrent costs involved in operating and sustaining such a system.

O Capacity building at the provincial level to establish provincial to health center support systems for drug supply may be necessary to get an integrated health system started, especially in a situation where districts are non-existent or very weak. One support component, such as the logistics/drug supply system, may well serve as a catalyst for getting an integrated system moving. However, the "twin engines" of RPHC (drug supply and cost recovery) should not become so emphasized that other support components lag far behind.

O The delivery of endemic and epidemic disease control commodities (Oral Rehydration Solution (ORS), ivermectin, Hematuria detection strips, and praziquantel (Biltricide)) can be effectively accomplished as part of an integrated drug supply system. Establishment of a separate logistics supply system should be avoided except where an integrated system is not yet in place.

O Integrating epidemic disease control drugs with a revolving drug supply:
- avoids expiration of drugs/supplies stocked specifically for an epidemic;
- provides a system to automatically restock drugs;
- provides a mechanism for health centers to deal with indigent care; and
- generates funds for outbreak investigation and immediate response to an epidemic before external assistance is mobilized.

O Because the need for information is common to all programs and directorates, and because the control of information can be extremely powerful, the development of a National Health Management Information System needs to be a consensus-building process. There is a distinct advantage in developing a National HMIS through a high level committee structure that can:
- establish a neutral secretariat and environment for discussions;
- include representation of all concerned and interested agencies, and
- facilitate dialogue with partner agencies which might not be otherwise possible.

O An HMIS should place greater emphasis on non-computerized local (health center and health district) analysis and feedback of data during supervision visits, than it does on computerized feedback from a provincial or national level. Otherwise, the tendency will be for health center nurses to equate the HMIS with computer-generated graphics and provincial-generated decision-making.

O Supervision needs to include a strong training component that promotes and rewards problem-solving at the health center level. This is a form of action-oriented operations research which also reinforces the role of the supervisor as someone who comes to teach, rather than simply to inspect.

O Coordination of supervision of NGO-managed health facilities health services as part of a health district should be negotiated at the district and provincial levels. Coordination can be facilitated by making a clear distinction between administrative supervision (which remains the responsibility of the NGO) and technical supervision (which is the responsibility of the health district supervisor).

O Service policy and protocols [for family planning], if too stringent in establishing conditions prior to provision of a method (such as age and parity, frequency of follow-up visits etc.), can impose unnecessary medical barriers, and detract from the true purpose of such policy and protocols.

O Community development is a continuing process, and does not stop with the establishment of health committees (COSA's). Health district and health center personnel need training specific to problem-solving, community development, and adult education in order to function as facilitators for community development. However, unless such training is linked to increased resources and compensation, the results will probably be short-lived.

O Mechanisms, other than participation in health committees (COSA), must be found in Cameroon to involve women in the planning and management of health centers and outreach programs.

O Projects should not hesitate to work with and through existing local church NGO structures, assuming they are financially sound, even if they do not conform entirely to the MOPH principles of co-financing and co-management.

O Disease specific interventions can succeed only if they build on community awareness concerning the disease. Where popular perceptions appear to remain unfocused, concerted efforts are needed to develop awareness, e.g., primary school health education.

O IEC is a broad activity which needs to be linked to all support components and program interventions, just like supervision, evaluation and training. This is particularly important for child survival programs which are being reoriented to create an integrated health system including community participation.

O Priority should be given to the counselling aspect of family planning services. Awareness and availability of family planning services alone are often not enough to make the individual accept a family planning method. Family planning training should include awareness of social-cultural barriers, and rumors about contraceptive methods.

O A social marketing program cannot stand alone but needs complementary activities such as counselling and targeted IEC activities.

I. INTRODUCTION

A. PURPOSE OF THE ASSESSMENT

The United States Agency for International Development (USAID/Cameroon) plans to terminate its bilateral development assistance program in Cameroon by the end of 1994. In order to assess the impact and document the legacy of its health and population portfolio, the Mission has contracted for this assessment to:

- document the progress in achieving the broad health objectives of USAID's Country Development Strategy Statement (CDSS) ;
- assess the potential for long-term impact of these programs;
- assess the sustainability of program achievements; and
- identify the lessons learned and elements worth replicating.

B. ASSESSMENT TEAM AND METHODOLOGY

USAID contracted with two independent consultants to conduct this assessment. Both consultants had previous experience in the evaluation and design of health and population projects in Cameroon. Ms. Man-Ming Hung conducted the assessments of the family planning and AIDS-related projects. Dr. Franklin C. Baer examined primary health care and disease control projects, and served as editor of the final report. The evaluators were asked to:

- assess the effectiveness of the major programs which USAID financed from 1987 to 1994 to (1) help design and implement the Ministry of Public Health's (MOPH's) Reorientation of Primary Health Care (RPHC) program, and (2) to integrate priority disease prevention and maternal child health (MCH) interventions into the RPHC program;

- review the effectiveness of targeted disease prevention and maternal child health (MCH) projects redesigned to complement the RPHC program; and

- assess the impact of the major USAID-supported policy reform efforts.

These activities were achieved by an extensive review of project and MOPH documents; by interviews with at the key project and MOPH personnel; and by visits and interviews at provincial, district and health center levels in six of the ten provinces of Cameroon.

C. ORGANIZATION OF THE REPORT

Chapter II describes the 1987 baseline situation and health sector environment. An overview of the health portfolio is then presented with discussion of the transition from child survival to reoriented primary health care. A conceptual model for an integrated health system is presented as a framework for discussion of program interventions, support components and system levels.

Chapter III comprises the assessment the health portfolio projects which, for purposes of presentation, have been grouped into four sections - primary health care, disease control, family planning and HIV/AIDS.

II. BACKGROUND

A. BASELINE SITUATION

1. Plateauing Health and Development in Africa

A 1986 issue of the journal Social Science and Medicine examined why health and development has plateaued, or is declining, in many African countries. Concerns raised in the introduction entitled "Health Revolution in Africa?" were that:

1) Decentralization and community involvement have been too slow;

2) Conflict exists between top-down and bottom-up approaches;

3) Vested interests in status quo protects vertical programs;

4) Policy decisions are often suggested from outside the health system;

5) Conflict between high vs. appropriate technology;

6) Women and communities have not been empowered to make decisions;

7) Improvements are piecemeal without coherent integration;

8) There is a lack of monitoring and adequate information system;

9) A preoccupation exists with recurrent emergencies & not new approaches;

10) Few successes exist in high level intersectoral coordination;

11) Training is seldom used as a development tool;

12) Incentives to work are often inadequate;

13) High population growth rates are accepted with complacency; and

14) Universities seldom play an innovative role in primary health care.[1]

Almost all of these problems were present in Cameroon's health system in 1987 when USAID began a significant expansion of its health portfolio - from one disease control project, for schistosomiasis, into a balanced portfolio of projects including primary health care, endemic and epidemic disease control, AIDS and family planning. In the process USAID has helped the MOPH to address, directly or indirectly, many priority issues:

- PHC projects which include community participation as a key to decentralization;
- disease control projects which transcend vested interests in vertical programs;
- family planning initiatives to deal with high population growth rates;
- epidemic disease control strategies to deal with recurrent emergencies;
- dialogue which leads to the emergence of policy decisions from within the system;
- a health management information system for local monitoring and decision-making;
- endemic disease control which balances high and appropriate technology; and
- a coherent strategy for program integration and health system development.

2. Health Sector Status in Late 1980's

During Cameroon's growth years (1960-1985), the GRC allocated as much as 6 percent of the national budget to the health sector which permitted the funding of drugs, personnel, and many of the critical recurrent costs of delivering rural health services. During this period infant mortality declined steadily from approximately 150 per 1000 live births to less than 90 per 1000 by 1986.

However, as a result of the country's economic downturn, the MOPH budget has registered sharp declines since 1986, dropping from a high of 26.76 billion FCFA in 1986/87 to 22.76 billion FCFA in 1990/91. Prior to the economic crisis, in excess of 30 percent of the health budget was allocated to the rural health services (subdivision level 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. Utilization of health facilities dramatically decreased. As a result, primary health care and rural health services had ceased to function in a coordinated, effective fashion in the country.

The weaknesses of the public health system in the late 1980's were manifest in low coverage rates for preventive services. The proportion of children fully vaccinated had reached a plateau of 30 percent in 1986. A national vaccination campaign raised the coverage to 64 percent in 1987. However, since this mass campaign was a one-time event and could not be sustained, coverage soon dropped thereafter. The 1990 national vaccination coverage survey found that at one year of age measles coverage was 29 percent and DPT III (Diphtheria, Pertussis, and Tetanus) vaccine coverage was 40 percent.

During the late 1980's oral rehydration therapy was not well accepted by medical and paramedical personnel, ORS (oral rehydration solutions) use in health facilities was uncommon, and anti-diarrheals were often prescribed to treat diarrhea. In addition, home use of any type of oral rehydration therapy was low. The National Control of Diarrheal Disease Program was created in 1988.

Family planning services were available only in large urban areas in Cameroon. Long-known as a pro-natalist country, there was no National Population Policy and no MOPH policy on the integration of family planning into public sector health facilities. The contraceptive prevalence rate for modern methods was between 2% (1978, National Fertility Survey) and 4% (1991 Demographic and Health Survey). The proportion of women knowing of a modern contraceptive method was between 29% and 63% during the two surveys. In the late 1980's, contraceptive services were offered in less than 10 facilities, mostly protestant hospitals and a handful of parastatal and private-for profit clinics.

The National AIDS Control Program and the National Condom Social Marketing Program were both launched in 1988. Prior to these programs, the blood supply was essentially unprotected against HIV contamination, and AIDS education activities were limited. There was little consumer demand for or use of condoms either as a way to prevent sexually-transmitted diseases (STD's) or to avoid unwanted pregnancies.

Onchocerciasis and schistosomiasis were prevalent diseases in the country but no proven cost-effective treatment or health education programs were available to affected rural populations.

In general, the operations of the national health system in the late 1980's were as follows:[2]

Primary health care (PHC): The National PHC program consisted of community health posts staffed by community health workers. According to a survey conducted in 1989 by the MOPH, these posts were functioning poorly because community health workers did not have the training, skill level, or resources to effectively provide preventive or curative services. In addition, because there were no effective links or supervision between the PHC posts and MOPH health facilities, the attrition rate of community health workers was high.

Rural Public Health Services: Rural health services were hampered by the lack of essential drugs, laboratory equipment and reagents and other expendable supplies. The lack of community-managed or private pharmacies in rural areas limited the availability of pharmaceuticals to the inadequate supplies of free drugs furnished to MOPH facilities. (These supplies were essentially terminated by 1991). A "time-motion" study conducted in two provinces in 1989 indicated that 70% of health center workers' time was unproductive due to lack of clients and activities.[3] Clinical practices were characterized by the prescription of inappropriate medications, over-medication, little follow-up of illnesses, and lack of coordination of the various services offered at health facilities. There was no working logistic system to deliver the supplies which were available to health facilities. Because there was no delimitation of health service areas, health facilities had no defined population to serve and health personnel were unresponsive to local needs. Preventive programs such as childhood immunizations, ORT, nutrition monitoring and promotion, family planning, and pre- and post-natal care were absent from many health centers. The little supervision that existed in the health system was hampered by the lack of supervision guidelines and protocols, little follow-up of findings, and inappropriate attitudes on the part of supervisors. The net result was a rural health system in the late 1980s which was non-functional.

Medical Referral System: The medical referral system lacked guidelines for identification of at-risk patients and there was no follow-up or feedback on referred patients. In addition, reference facilities lacked laboratory, surgical, radiology and other equipment required to permit quality secondary care to be delivered. Due to a lack of confidence in primary health care centers, patients often bypassed these structures and utilized hospitals as dispensaries in the belief that these facilities were more likely to have drugs and other supplies.

Health Information System: The national health information system was functioning poorly. Data was incomplete and of low quality and its analysis was rudimentary. The system had six required forms (a monthly health facility activities report, a weekly health facility infectious disease report, a monthly divisional epidemiologic report, and monthly health facility reports on leprosy/tuberculosis, trypanosomiasis, and vaccinations). Moreover, additional forms were required by various donor projects. In North-West province 24 forms were theoretically completed and sent to the central MOPH. As a result, little data was analyzed, fed back to health facilities, or used for decision-making at any level.

Public/Private Sector Coordination: Cameroonian private health providers include church hospitals and clinics, employee-based health facilities, and some for-profit clinics and hospitals in large urban areas. The private sector provides about 20 to 30 percent of the health coverage of the population. Despite the severe financial constraints facing the public health sector in the late 1980's, little attention was focused on the integration of these resources into the national health care system. As a result, there was duplication of services (e.g., some religious and public health facilities next to

each other), there were no consistent medical standards and procedures, and there was no plan to effectively address underserved areas with available resources from the public and private sectors.

Cost Recovery: In a law enacted in 1961, the GRC authorized fees for services at all public hospitals in the country. Except for a small portion retained by practicing physicians for profit-sharing, all revenues collected as a result of this law had to be remitted to the national treasury. Thus, none of these funds were available to fund operating costs at hospitals or to improve services. Public health facilities were not authorized to sell drugs. As a result, no cost recovery revenues were available to finance health care.

Decentralization: In the late 1980's, Cameroon's public health system was a very centralized operation. Indications of this centralization were that:

- budgets were developed and allocated centrally by the national MOPH directorates based on their own perceptions of the needs of the rural areas;
- health planning was centralized at the national MOPH with little planning done at the provincial, divisional, and subdivisional levels;
- cost recovery revenues were sent back to the treasury, not retained locally; and
- available drugs for the public sector were shipped to health facilities based on estimates of needs determined at the central level.

As a result of the economic crisis and its resulting effect on the health system, the reductions in infant and child mortality rates achieved in earlier decades were not sustained.

B. USAID HEALTH AND POPULATION STRATEGY

1. Relationship to the CDSS and DFA

The basic goal for the 1990- 1994 USAID Country Development Strategy Statement (CDSS) was to assist the GRC to return to a position of sustained, broad-based economic growth. To achieve this goal USAID established three objectives:

- develop a market-oriented private sector that can flourish;
- increase the efficiency of the public sector; and
- reduce the over extended role of the GRC.

Within the health sector, the CDSS targeted its interventions towards:

- an improved rural program with increased emphasis on cost recovery;
- establishing family planning programs based on efficiency and affordability;
- redressing the urban/rural imbalance in health services delivery by expanding rural health initiatives;
- shifting the responsibility of providing certain health services to the private sector, e.g., liberalization of the input and distribution of pharmaceuticals.[4]

These objectives were also within the framework of the Development Fund for Africa (DFA) Action Plan for fiscal year 1989-1991 which stresses the need for cost recovery mechanisms in the health sector and also calls for the integration of child survival services in PHC programs. The DFA emphasizes cost recovery in order to promote the long-term financial sustainability of health programs. Integration of services is stressed to improve cost effectiveness.

All of USAID's health projects have been designed or reoriented with respect to these objectives, and with an overall strategic objective to increase access to and use of financially sustainable, effective and efficient primary health care. As a result USAID-funded health projects generally include component activities to:

- 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 the 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 the local availability of essential medicines; and delivery of key maternal child health/family planning services in every health center and hospital in the country; and

- progressively privatizing the procurement and distribution of pharmaceuticals and medical supplies, and privatizing the health cost recovery system.

2. Overview of USAID Programs, 1987-1994

The projects which have composed the USAID health portfolio from 1987-1994 are presented in Table 1. Information is provided about the project contractor/implementing agency, funding level, duration and major objective of each project.[5]

Table 1
USAID Health and Population Projects, 1987-1994

Project Name	Contractor	Total USAID Funding ($1000s)	87	88	89	90	91	92	93	94	Major Objective
					YEAR						
MCH/CS I: Maternal Child Health/Child Survival:SESA I	HIID	11,500									Develop RPHC mgt systems provinces, districts, health centers
MCH/CS II: Maternal Child Health/Child Survival:SESAII	RFP cancelled	1,500								97	Expand health districts &health centers to increase PHC access
RHDS: Reform of Health Delivery System	SAVE & CARE	2,600									Introduce RPHC into 4 divisions of Far North province
TAACS: Technical Assistance for AIDS and Child Survival	CDC	300									Develop the National Health Management Info. System
HCRP I : Health Constraints to Rural Production (Phase I)	TULANE	8,133	84								Schisto research, training, mapping and control
HCRP II: Health Constraints to Rural Production (Phase II)	TULANE	650									Field test schisto control integration into RPHC
IDP: Ivermectin Distribution Program	IEF	423									Develop RPHC integrated model to distribute Ivermectin
CDD: Control of Diarrheal Diseases	PRITECH	895									Improve diarrheal case mgmt and integrate into RPHC
DDM: Data for Decision Making	CDC	100								95	Increase capacity to detect, confirm and respond to epidemics
FHI: Family Health Initiatives	AID/Pop CAs	1,200									Formulate and implement family planning activities/promotion
NFHP: National Family Health Project	AID/Pop CAs	8,050								96	Integrate child spacing/maternal health into public private facilities
AIDSTECH/AIDSCAP:	FHI·	1,200									Plan and implement programs to combat the spread of HIV/AIDS
	TOTAL	37,551									

Notes: HCRP I began in 1984. Project Activity Completion Dates (PACDs) for SESA II, NFHP and DDM were respectively 1997, 1996 & 1995.

3. Transition from Child Survival to Reoriented Primary Health Care

In 1989 the MOPH and USAID concluded that the problems hampering the national health program were also adversely affecting the implementation of its MCH/CS I project (referred to as SESA I within this document). 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 decentralized, 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 expanded beyond the resupply of drugs to include the funding of some of the 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 Reorientation of Primary Health Care (RPHC)[6] to emphasize decentralized planning, community co-management of health facilities, and community co-financing of health services. Each province is to be organized into health districts to supervise and support health centers co-managed by community health committees. Each health center is to have a pharmacy and cost recovery mechanism to permit funding of important recurrent costs of the RPHC program.

RPHC is based on the premise that the Cameroon government does not presently have, nor will it have in the near future, sufficient budgetary resources to finance health care services. The cost recovery approach divides the costs of health care between the government and the population. The MOPH is to fund health workers' salaries, pre-service training, and other inputs which are currently provided. Local communities are to 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 improved health management systems.

With its emphasis on community financing, integration of PHC services, and revolving fund essential drug pharmacies, the RPHC directly addresses the major problems affecting Cameroon's health sector. The RPHC is the cornerstone of the MOPH's overall health sector strategy. In 1990 USAID and the MOPH began to reformulate all USAID-funded projects to bring them in line with RPHC. The RPHC provided USAID with a mechanism to coordinate its health and population portfolio, focus its projects on developing sustainable health systems, and forge closer donor collaboration.

USAID's integrated health systems approach to development has encouraged:

- cost-effective delivery of child survival interventions, e.g., immunizations;
- a rapid expansion of important services such as family planning;
- a model to begin integration of public and private sector health systems;
- a mechanism for recurrent cost financing for non-salaried health services; and
- a mechanism to address longstanding problems, such as the funding of control measures in the early phases of epidemics.

See sections III B-E of this report for illustrations of these points.

C. A CONCEPTUAL FRAMEWORK FOR AN INTEGRATED HEALTH SYSTEM

In an article entitled "Building the Infrastructure for Primary Health Care: an Overview of Vertical and Integrated Approaches," authors Smith and Bryant concluded that:

> district health systems based on primary health care provide an excellent practical model for health development, including an appropriate health system infrastructure. Within this model the concerns with accelerating the application of known and effective technologies and the concerns with strengthening of community involvement and intersectoral action for health are both accommodated. The district health system provides a realistic setting for dialogue and planning involving both professionals and non-professionals concerned with health and social development.[7]

A conceptual framework for the integrated health system proposed by the authors is shown in Figure 1 as adapted from a World Health Organization (WHO) technical report.[8] This framework includes a matrix of program interventions, support components and community participation at several system levels:

- home and family
- health center
- regional
- community
- district
- national

Program interventions are health activities selected in consultation with the community. While certain priority diseases will certainly be common to all communities (e.g., malaria, diarrhea, acute respiratory infection, and malnutrition), others may vary because of geographical or cultural differences (e.g., schistosomiasis and onchocerciasis). Program interventions are represented in the model by, but not limited to, the eight essential components of primary health care as established at the 1978 Alma-Ata PHC conference:

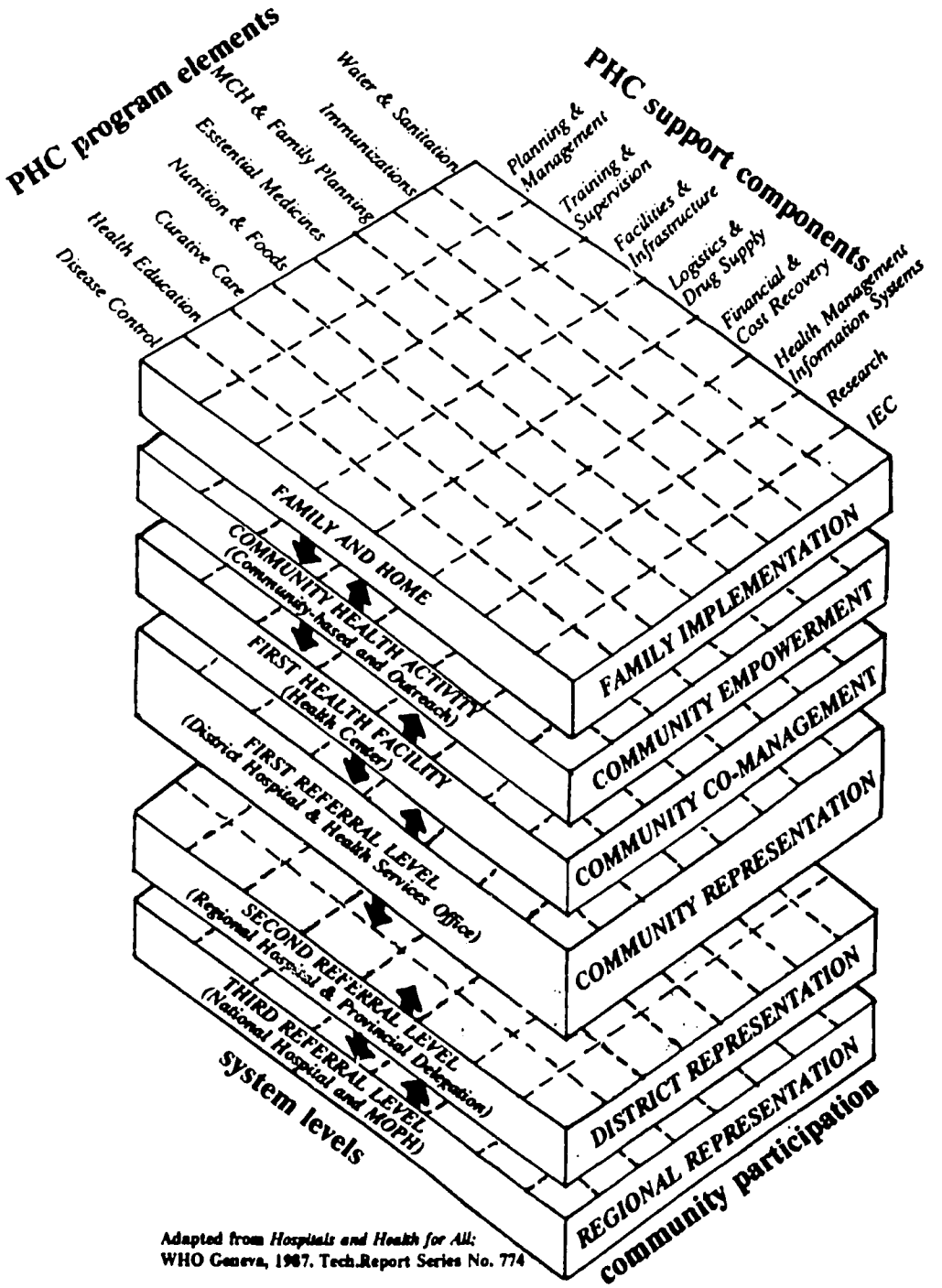
- water & sanitation
- nutrition
- essential medicines
- curative care
- immunizations
- maternal child health & family planning
- health education
- disease control

Support components are systems to facilitate and support the delivery of program interventions. Examples of major support components are:

- planning & management
- financial sustainability
- health education
- research
- logistics and facilities
- information
- community development
- training and supervision

The goal of Cameroon's RPHC strategy is to create such an integrated health system. This assessment report uses, therefore, the above framework as a reference point for examining how USAID's health portfolio has contributed to developing integrated health systems.

Figure 1
Conceptual Framework for an Integrated Health System



Adapted from *Hospitals and Health for All:*
WHO Geneva, 1987. Tech.Report Series No. 774

While there may be general agreement on the components of an integrated health system, there are usually quite differing views about how to create such as system. Should the health development process be top-down, bottom-up or middle-out? What should be the operational unit for organizing the management of PHC? Should health districts be developed before, after or at the same time as the provincial support systems? Which support components or program interventions might serve as catalysts for system development?

Selective PHC and Child Survival projects emphasized oral rehydration therapy (ORT) and immunizations as the "twin engines" to develop PHC systems, but there is a growing consensus that this strategy has only been a qualified success. A recent 1993 proposal for a revision of A.I.D.'s Child Survival strategy for Africa recommended that:

> *There is growing consensus that while immunization and ORT efforts were very successful during the 1980's, coverage levels have now plateaued or are even decreasing. Child survival interventions cannot be sustained without a functioning health system. More attention must be given to reinforcing the support components of integrated health systems. Each level (national, regional, and district) of an integrated health system must include subsystems to support the health interventions.*[2]

By choosing an integrated health systems approach to health in Cameroon, and by implementing projects to assist the MOPH in making the transition from selective primary health care to RPHC, USAID has probably had a much greater, wider and permanent impact on health in Cameroon than if it had maintained a selective or narrowly focused approach for its projects.

USAID/Cameroon's embracing of the RPHC strategy in 1989 appears, therefore, to be receiving increasing support both in Africa and in the United States. For example, USAID/Malawi, based in part on Cameroon's experience, is now "refocusing" its large PHC project to emphasize systems development at the district level. The lessons learned documented through this health assessment may have a particular relevance to the reorientation of child survival programs in other African countries. For this reason there is a high level of interest by USAID's Africa Bureau and other Missions in USAID/Cameroon's health systems development approach.

III. ASSESSMENT OF HEALTH SECTOR PROGRAMS

A. OVERVIEW OF PROGRAM IMPACT

1. Long-Term Impact Indicators

Health impact is traditionally measured through indicators such as infant, child and/or maternal mortality rates. Impact in the population sector for family planning programs is generally measured through the total fertility rate. AIDS control programs are assessed through measurement of HIV infection prevalence rates. Table 2 provides the most recent, albeit rather limited, information for these indicators in Cameroon. The next planned measurement is programmed for the 1997 national census.

Table 2
Long-Term Health Impact Indicators for Cameroon

INDICATOR	1970	1987	1990	1991
Infant Mortality (Infant deaths per 1,000 live births)	126 (WB)	88 (Census)	80 (WB)	64 (WB)
Child Mortality (Child deaths per 1,000 live births)		155 (Census)	127 (WB)	
Maternal Mortality (Maternal deaths per 100,000 births)		420 (Census)		
Total Fertility (Number of live births)				5.8 (DHS)
HIV Infection % infected of sexually-active population				.5

Sources: Census=National Census projections; DHS=Demographic and Health Survey; WB=World Bank

In general, these indicators change very slowly over time. Mortality rates usually change gradually in response to sustained health development efforts coupled with favorable economic progress and increases in literacy and primary education. Family planning services can require more than ten years of sustained donor support before reducing the total fertility rate, e.g., Kenya. Finally, because of the long incubation period for AIDS, control programs need to be functioning for many years before an effect can begin to be seen on national HIV infection rates.

Without exception, the measurement of health impact indicators rates is a very difficult and costly process requiring large population-based surveys with rigorous methodologies that can, in themselves, disrupt the development and operation of a health care system. For example, to have an 80% chance of observing a 20% reduction in child mortality, with a significance level of 5%, requires an observation of 4216 child-years each year - all this assuming that epidemiological variables remains stable, and that other fluctuations (other than those induced by the health care

system) are random. In many countries, like Cameroon, interpretation of any change in mortality rates has to take into account a fluctuating epidemiology and a rapidly changing socio-economic situation. In such an environment a lack of change in mortality levels does not necessarily indicate that the health care provided is inappropriate. In fact, effective health interventions may simply prevent an increase in mortality rates during a declining socio-economic period.

Although mortality reduction is an implicit aim of any health care system, it is not usually the primary objective perceived by the community and by health workers.

> *A quantitative reduction in mortality levels is an abstract concept, when compared with the immediate need for care and relief of suffering. This is particularly true when the major demand on the services is to deal with problems that are not major causes of death. Focusing exclusively on mortality reduction could lead the health workers to lose sight of these other equally important aspects of their work and jeopardize the flexible response to demand which is essential if the service is to be, and remain, acceptable.*[10]

Most primary health care projects are not intended to test the efficacy of program interventions, but to make tried-and-proven interventions accessible to and utilized by communities in order to have a positive impact on health status. Monitoring and evaluation indicators should be selected, therefore, to measure these program effects and characteristics. If the program scores well of these intermediate variables, child survival and development chances will be better than without them.

There is considerable support in the health literature for this approach:

> *There is too much attention for health impact in the evaluation of PHC programmes. The empirical lack of successful impact evaluations in the last 10 years necessitates a reconsideration of the value of health impact as a stated objective of PHC interventions. The current state of knowledge on determinants of child survival and development allows the identification of a set of intermediate variables which directly influence health status of children and can be considered as simple programme outputs. This simplification of evaluations will open the way for more and equitable community participation and understandable evaluation.*[11]

2. Intermediate Impact Variables

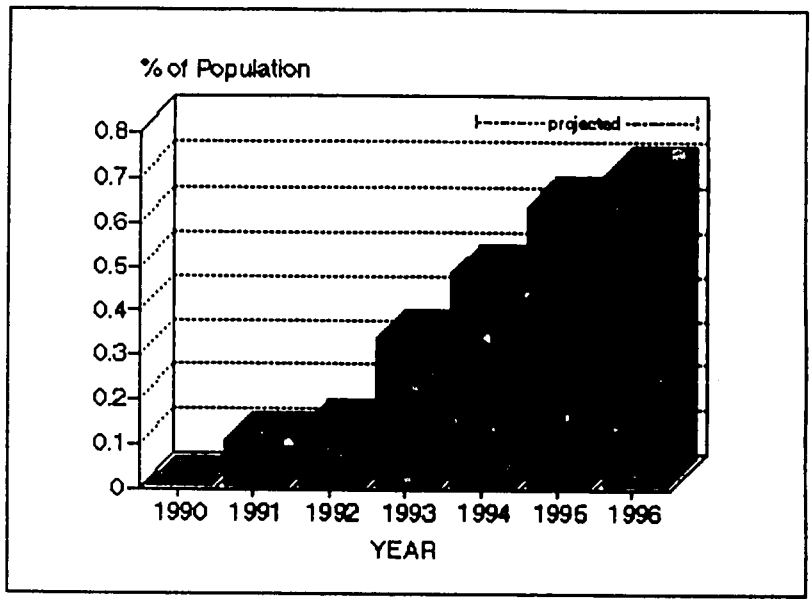
USAID-funded projects in Cameroon have concentrated on identifying intermediate variables and data sources to measure the accessibility and utilization of PHC services as logical precursors to achieving health impact. While USAID's health and population programs are relatively young, they are nevertheless demonstrating promising increases in access and utilization indicators.

Primary health care must first become accessible, available and affordable, i.e., the population lives within reasonable access to a dispensary with essential medicines and preventives services. This is generally measured by calculating the percent of the population living within the health area of a functional health center.

Figure 2 illustrates the actual and projected increases in population access to functional co-financed and co-managed health centers for the three USAID-assisted provinces. Functional health centers

provided availability of essential drugs, curative care, vaccinations, health education and outreach services. Population access to essential medicines and curative care increased from essentially 0% in 1990 to 33% in 1993.

Figure 2
Increasing Access to Primary Health Care in Three Provinces of Cameroon
(showing percent of population with access to reoriented health centers)



SESA II was designed in late 1992 as the second phase of RPHC implementation in which functional health districts would be created, public-private sector collaboration would be enhanced, and basic health care coverage would be expanded to the remainder of the population (1994-1996). The decision to close USAID/Cameroon meant that SESA II could not be implemented.

To be effective, primary health care interventions must not only become accessible, but subsequently be utilized by the population. Utilization is measured routinely as part of a health management information system (HMIS). Since the launch of the RPHC program in 1991, new community co-financed and co-managed health facilities assisted by USAID-funded projects have demonstrated important increases the number of women enrolled in prenatal care and number of child benefitting from well child care (see Table 3.)

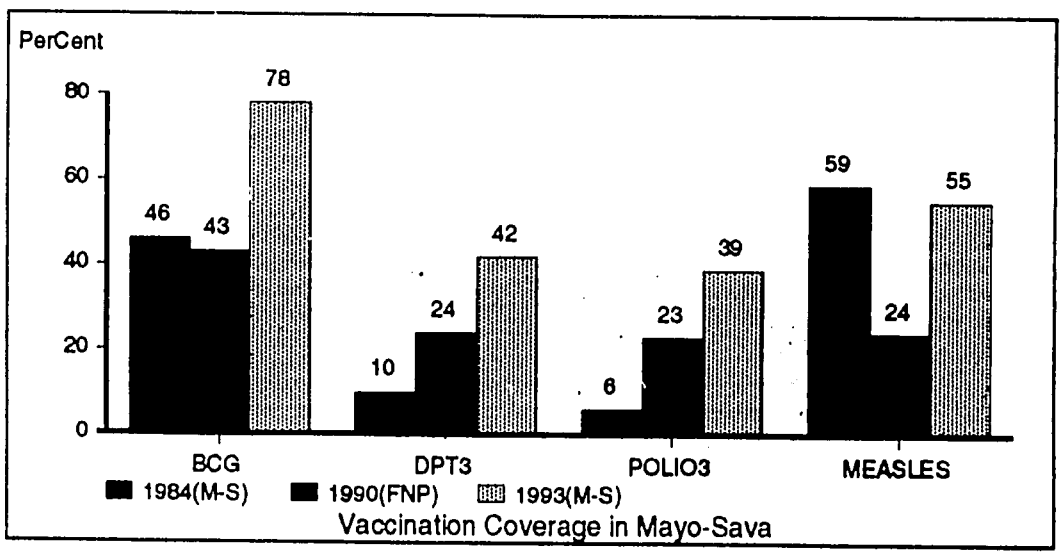
Table 3
Enrollment in Prenatal and Well Child Care Programs

Indicator	Province	Estimated 1991*	Sept. 1993**
Percentage of pregnant women who enroll in prenatal care	South Adamaoua Far North	20 20 20	54 46 60
Percentage of children under 5 years benefitting from well child care	South Adamaoua Far North	20 20 20	90 51 50

*= baseline percentages are estimated but err on the "high" side
**=Source: Provincial Health Management Information System

A more precise measurement of utilization can be made through periodic population-based coverage surveys. A vaccination coverage survey, financed by UNICEF, was conducted for the Mayo Sava division of the Far North province in February 1993 by OCEAC (Organisation de Coordination Pour La Lutte Contre Les Endemies en Afrique Centrale). This survey included 30 clusters of 7 children 12 to 23 months of age. Results for Mayo-Sava Division (see Figure 3) show significant progress for most vaccinations when compared to the 1984 coverage in Mayo-Sava Division and to the 1990 coverage for the Far North Province as a whole.

Figure 3
Vaccination Coverage in Mayo Sava Division of Far North Province
(showing percentage of children vaccinated for selected immunizations)



Comparable results in increasing vaccination coverage have been achieved in the Adamoua province. The vaccination coverage in co-financed, co-managed health areas (46%) was significantly higher than the provincial rates of (27%). In the South province the co-financed, co-managed health centers had a vaccination coverage of 36% while the provincial rate was only 14% (see section 1.8 Program Interventions).

Family planning services have also demonstrated significant improvements in both access and utilization. The number of family planning service sites increased from 50 to 217 since 1991, while the estimated number of couple years of protection has almost doubled in less than three years (see Table 4)

Table 4
Access to Family Planning and Couple Years of Protection

Indicator	Sept. 1991	Sept. 1992	Sept. 1993	March 1994
Number of Family Planning Service Sites	50	75	151	217
Couple Years of Protection (CYPs)	50,000	65,000	85,000	90,000

The AIDS control program has also demonstrated important increases in access and utilization, i.e., number of condoms sold. Table 5 indicates that the number of condom service delivery points increased to 6570 by 1993, that almost 6 million condoms were sold through social marketing during fiscal year 1993, and that condom sale per capita has nearly tripled since 1990.

Table 5
Access to and Utilization of Condoms for AIDS Prevention

Indicator	FY 1990	FY 1991	FY 1992	FY 1993
Number of condom service delivery points	No data available	No data available	5050	6750
Number of condoms sold through social marketing	2,100,000	3,100,000	4,600,000	5,700,000
Condom sale per capita	.17	.25	.41	.46

3. Future Prospects for RPHC

From 1984-1987, the Health Constraints for Rural Production (HCRP) for schistosomiasis control was the only bilateral health project funded by USAID in Cameroon. Field implementation of RPHC through the Maternal Child Health/Child Survival (SESA) I Project and the Reform of the Health Delivery System (RHDS) Project did not effectively begin until 1991. Support for AIDS control began in 1989, while comprehensive support for family planning started in 1991. These projects represented initial implementation phases aimed at laying the foundation of the RPHC, and were planned to be continued into the next decade.

The worsening economic crisis has underscored the importance of this long-term approach to implementing the RPHC. The crisis has affected the implementation of the program:

- by decreasing people's ability to pay for health services, resulting in lower than expected utilization of health services and reducing cost recovery revenues;
- by further reducing that portion of the MOPH's budget which is available for non-salaried recurrent costs of health facilities and offices, making these costs almost entirely borne by the population through cost recovery;
- by reducing the GRC's ability to regularly pay salaries of public servants which has eroded the performance of MOPH personnel at health facilities/offices; and
- by diminishing the financial viability of private sector facilities which collaborate with the MOPH in providing health care to the population.[12]

The chief accomplishments USAID-funded projects, especially SESA and RHDS, include:

- assisting the MOPH in designing the RPHC and establishing the policy framework in which to implement it;
- developing high quality training materials (adopted by other donors) to begin implementation of the RPHC;
- further developing important aspects of RPHC including delimitation of health areas, provincial Health Management Information Systems (HMIS), and a model for health supervision;
- developing provincial medical supply systems (CAPPs) to provide essential drugs and medical supplies to health facilities, and to cover the essential, non-salaried, recurrent costs of health management systems and services;
- decentralization of medical supply logistics, health information, health care budgeting, and training to the provincial level; deconcentration of supervision to the health district level;
- establishing functioning community co-managed and co-financed health centers providing basic health services, and achieving the coverage objective for these projects (30% of the populations of three provinces); and

- helping to establish a pilot health district in Meiganga.

The major limitations of the RPHC program to date include:

- the slow start developing pilot health districts. As a result, decentralization of many elements has not descended below the provincial level;
- problems encountered in fostering genuine community participation in the diverse communities which represent the three provinces;
- the late start in building public and private collaboration in provision of basic health services and management of health districts; and
- little progress in improving the MOPH's personnel management system.

These deficiencies were to be addressed by the SESA II project, which was to build on, expand and reinforce the sustainability of SESA I's accomplishments. SESA I and RHDS, provided a conceptual, policy, and implementation framework for the application of the RPHC reform program in the three targeted provinces. The implementation SESA II (through A.I.D. or other donor support in the future) would permit Cameroon to achieve an integrated, sustainable health development system before the year 2000.

B. PRIMARY HEALTH CARE

1. Maternal Child Health and Child Survival I Project (MCH/CS I)

MCH/CS I (1987-1993) is more commonly known as the SESA project. The objective of SESA was to assist the MOPH to strengthen Cameroon's existing health system and to improve health services to women and children in South and Adamaoua provinces. SESA's original strategy was based on the centrally-managed delivery of five key maternal child health and child survival interventions - immunizations, diarrheal disease control, nutrition 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 delivery of interventions.

A major reorientation of SESA took place in 1989 to bring in it line with the MOPH's RPHC strategy. Key activities of SESA which have strengthened support components for an integrated health system are discussed below.

1.1 Policy Development

With the active support of USAID/SESA and other major health donor PHC projects, the MOPH initiated health sector reform beginning in 1989, several years after the onset of the country's severe economic crisis. Health sector reform has proven to be a long process involving operations research, policy formulation, and implementation of pilot programs. USAID support of health sector reform included funding of operations research to test new cost recovery and health management

systems; participation and funding of policy formulation seminars; hiring of local experts to help draft legal texts; targeted short-term TA; and funding of special initiatives such as pilot health districts. The major elements of the health sector reform program are now in place. These include:

a) Drug Financing Law of 1990

In 1990, the National Assembly passed legislation authorizing public health facilities to establish community-managed revolving fund drugstores in which all receipts are retained locally. This important legislation provides the legal basis for USAID and other donors to develop sustainable medical supply systems under PHC projects. This measure was adopted after several years of pilot testing of community-managed revolving-fund pharmacies at health centers. Testing demonstrated that community health and health management committees could effectively manage cost recovery revenues; community administrators could administer small drug stores if overseen by community health committees and MOPH personnel; and that the population had the willingness and ability to pay for essential medications. This law was originally opposed by some private pharmacists who wanted to retain the monopolies of their urban-based pharmacies and wished to restrict the sale of drugs, even at the community level, to formally-trained pharmacists. This opposition was overcome when field experience demonstrated the substantial improvement in the quality of services at health centers as a result of the availability of essential drugs and the positive reaction of local populations to the new program.

b) Formal Adoption of RPHC as MOPH Health Policy

The RPHC was developed in 1989 and pilot tested in four provinces for several years. At first, the RPHC was viewed as the strategy of the Directorate of Preventive and Rural Health, USAID, and GTZ (German Technical Cooperation), the major designers and implementors of the new program. After the potential value of the community co-financed and co-managed model was clearly demonstrated in pilot health areas, other donors and MOPH central directorates became interested in the approach. Successful pilot programs of the RPHC also convinced the Minister of Public Health to officially support the program. In 1992, the Minister was ready to authorize the RPHC as official MOPH health policy and to include it as an integral part of larger policy statements on the health sector.

c) 1992 Hospital Financing Law:

In 1961, the MOPH authorized the collection of fees for services (e.g., hospitalizations, deliveries, surgical procedures, etc.) at public hospitals. However, except for a portion of the revenues dispensed to consulting physicians for profit-sharing, all revenues had to be sent directly to the national treasury. This arrangement did not permit these revenues to contribute to the financing of operating costs at hospitals.

When local retention of service fees at hospitals was proposed, the Ministry of Finance opposed the idea because of its effect on overall government revenues. In 1992, the SESA project conducted a study of a pilot cost recovery program in a large public hospital which demonstrated that retention of a portion of service fees by the hospital coupled with improved financial management could actually increase the overall revenues sent back to the treasury. The results of this study, strong donor lobbying for reform, and MOPH discussions with the Ministry of Finance resulted in a new hospital financing law in 1992. This law permits public hospitals to retain 50% of their revenues

from fees for services. This legislation will provide hospitals access to significant revenues which can be utilized to maintain equipment and infrastructure; purchase supplies; train staff; extend profit-sharing to non-physicians; and to fund other operating costs.

d) Statutes for Establishing Non-Profit Health Associations:

At the beginning of the RPHC program, community health committees were established based on a text signed by the Minister of Public Health. However, there were no standard operating procedures for these committees and they had no legal status with local administrative authorities. As a result, the health committees had no legal right to collect and manage funds and participate in the management of health centers.

To address this problem, the MOPH worked with the USAID/SESA and the GTZ PHC projects to draft model statutes to establish the legal framework for a pyramid of non-profit community health and health management committees at the levels of the health center, district, and province. With these statutes, health committees can request legal status from the Provincial Governor and be formally created under the GRC's 1990 law of association.

e) Policy Reform Process:

USAID/SESA and GTZ were the principal donors assisting the MOPH in policy formulation. Without exception, these policy reforms were made possible by the successful field experiences in pilot zones. Texts were drafted with the active assistance of the major donors and went through a series of reviews and revisions prior to adoption. The success of policy reform was also directly related to the economic crisis and its effect on the health sector. The MOPH realized that without policy reform, public health facilities could not provide effective services to its population.

1.2 Establishing of a Broad Donor Coalition in Support of the RPHC

By recognizing the need for a mix of donor support in developing integrated health systems, USAID played a leading role among donors in policy dialogue with the MOPH to define and coordinate the full spectrum of assistance required to develop an integrated health system. The design of the RPHC, its implementation in pilot areas, and the initiation of health policy reform, in particular, has helped the MOPH to establish and control a broad donor coalition to implement the RPHC nationwide.

USAID and the GTZ's PHC projects were leaders in promoting strong donor coordination in support of the MOPH health reform program. At present, all major health donors actively support the RPHC and donor funding is available to implement the program in significant parts of all ten provinces. Effective donor collaboration has been demonstrated in the sharing of training materials, HMIS and supervision instruments, and in development of pilot health districts.

USAID and the MOPH have learned that it is necessary to plan for a mix of donor support in developing integrated health systems, because no single donor has the resources or the mandate to provide all inputs necessary to fully implement RPHC. Most donor agencies are not able, or not willing, to provide the full spectrum of assistance required to develop integrated health systems. For example, donors who are primarily interested in supporting health center and community outreach

activities usually have less interest in providing major rehabilitation or equipment to referral hospitals. However, donor agencies and their projects have officially committed themselves to supporting the creation of an integrated health system even if their assistance is only to one or two support components or program interventions of the system. This helps to prevent a "verticalization" of components and projects, and facilitate their integration into the system as a whole.

1.3 Planning and Management

The health district was selected to be the operational unit for RPHC in Cameroon. This corresponds to the experience of other countries in Africa who have found 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.*[13]

Initially, the MOPH intended that health districts would correspond to administrative sub-divisions (arrondissements). However, this proved to be too small as some sub-divisions had catchment (target) populations of less than 10,000 people and the development costs for 220 districts could not be justified.

In 1992, the MOPH, in large part based on the problems encountered by SESA's attempts to establish health districts at the sub-division level, decided that the geographical definition of the boundaries of health districts need not adhere strictly to administrative boundaries. The chief criteria for delimiting health districts has now become population size and movement; existing health infrastructure (including those of non-governmental organizations (NGOs)); and ease/cost of supervision and referral. This is just one example of how the SESA project and USAID have assisted the MOPH in formulating and/or refining health policies.

Unfortunately, the lack of any functioning health districts to serve as a replicable model is still a handicap to achieving decentralization at the district level. Following several national conferences which attempted to define the parameters and operational guidelines for districts, the MOPH encouraged each project to create at least one functional health district. SESA is now striving to get several health districts started, but really needs the additional years of GRC and project support, planned for under SESA II, to assure that the development process is sustainable.

SESA and the MOPH have learned that decentralization to health districts remains largely theoretical unless there are working models. SESA II proposes that priority be given to developing model health districts where the least amount of project effort is needed, e.g., in a district with a completely functional referral hospital, even though this might not always seem equitable. The development of functional health districts would provide the GRC with models on which to build a sustainable, effective, and efficient national primary health care system. This could be one of the most important contributions of USAID-funded projects.

David Korten in a 1987 article entitled "Third generation NGO strategies: a key to people-centered development," proposed three types of NGO development strategies:

- a first generation which focuses on relief and hospital-based curative care;
- a second generation which moves from the hospital into community development and preventive medicine; and
- a third generation which collaborates with national and international efforts to develop and manage health systems.[14]

NGOs in Cameroon could make important contributions in developing, implementing, and sustaining integrated health systems. The inclusion of host country (NGOs), especially those running church hospitals, in the management of health districts and health centers has already opened a dialogue which could lead to:

- a more cost-effective use of existing infrastructures;
- relieve the MOPH of some financial and administrative burdens;
- improve community participation;
- enhance resource management;
- and encourage more international health assistance provided through NGOs.

SESA is currently assisting in negotiations with two well-functioning church hospitals to serve as district referral hospitals and to participate in the supervision of the district health services. SESA has learned that the coordination of supervision of NGO-managed health facilities health services as part of a health district is best negotiated at the district and/or provincial levels. Coordination of supervision can be facilitated by making a clear distinction between administrative supervision (which remains the responsibility of the NGO) and technical supervision (which is the responsibility of the health district supervisor).

SESA has also learned that capacity building at the provincial level to establish provincial to health center support systems, e.g., HMIS and drug supply, may be necessary to get an integrated health system started, especially in a situation where districts are non-existent or very weak. One support component, such as the logistics/drug supply system, may well serve as a catalyst to develop an integrated system. However, the "twin engines" of RPHC (drug supply and cost recovery), should not be emphasized so much that other support components lag far behind. It is important to constantly remind the population and health personnel that PHC is much more than drugs and cost recovery.

Provincial capacity building should not hinder the development of decentralized health districts. The creation of a strong and functional CAPP inevitably reinforces a health center to provincial dependency. To avoid permanent institutionalization at the provincial level, there needs to be an established strategy to decentralize the support components to the district level. Project and provincial personnel need to be on the outlook for opportunities to strengthen districts, e.g., provincial training of health center personnel should include health district supervisors.

1.4 Cost Recovery and Co-financing

If the "twin engines" of Child Survival in the 1980's were immunizations and oral rehydration therapy, the "twin engines" of RPHC are cost recovery and drug supply logistics. Prior to the

RPHC policy, pharmaceuticals were imported for MOPH facilities through a state owned monopoly called the Office Nationale de Pharmaceutique (ONAPHARM), but when the MOPH could not pay its bills to ONAPHARM, this source of medicines languished.

A 1990 Cameroonian law permits MOPH facilities to "recover the costs related to the sale of generic medicines." After encountering many problems of poor management in trying to set up numerous decentralized depots, SESA decided to establish Provincial Pharmaceutical Supply Centers (CAPPs) based on a system already established by GTZ in the Northwest province. The CAPP serves as the primary pharmaceutical wholesaler for retail sales of generic essential drugs and medical supplies in MOPH facilities.
The SESA project completed a thorough calculation of all the recurrent costs to be supported by cost recovery before initiating the drug supply system.[15] This was essential in order to calculate mark-ups to recover not only the full cost of medicines and the recurrent costs of the drug supply system, but also to set aside a percentage of funds for local operating costs of the health center, and contribute to a Provincial Health Fund to finance special health projects within the province. Such a study is also important to convince partner agencies to agree to fund the start-up operating costs for the system.

The SESA project has contributed extensively in this effort with the results that:

- **72% of health center recurrent costs are now covered by fee revenues in co-financed health centers of the Meiganga district (Adamaoua province); and**

- **69% of the health district recurrent costs are covered by recurrent fees.**[16]

In addition, a large proportion of non-salaried, recurrent costs of the provincial management system are funded through cost recovery. This is one of SESA's most significant achievements in developing a sustainable integrated health system.

The CAPP maintains financial records to separate the balances in retained earnings by each health facility. Although effective control rests with the CAPP, health facilities are kept informed about their positive or negative accumulation of funds. The stricter financial controls established by the CAPP have greatly reduced the loss of funds through poor management. Decentralized, local management of drug funds resulted in losses of around 12,800,000 FCFA during the 1991-1992 period. During 1993-1994, the restructuring of the provincial depot with stronger provincial control of finances reduced losses to less than 40,000 FCFA . From the outset, losses have remained below the supplemental 5% margin on sales included in the CAPP budget to cover such losses.

SESA also found that linking user fees to improved quality of care was important to stimulate utilization of the health centers. A study comparing co-financed/improved health centers with control health centers results indicated that the percentage of sick people seeking care at co-financed health centers was significantly greater than in the control areas (see Table 6).

Table 6
Percentage of Sick People Seeking Health Care at Co-financed and Control Health Centers

	Oct. 1990	June 1991	Oct. 1991
Control	45%	38%	38%
Co-financed	44%	48%	52%

This study concluded that:

> *travel and time costs involved in seeking alternative sources of care are high; when good quality drugs became available at the local health center, the fee charged for care and treatment represented an effective reduction in the price of care and thus utilization rose. Moreover, contrary to previous studies which have found that the poorest segment of the population is most hurt by user fees, this study found the probability of the poorest segment of the population seeking care increases at a rate proportionately greater than the rest of the population. Since the poor are most responsive to price changes, they appear to be benefitting from local availability of drugs more than others.*[12]

Without on-site assistance from technical experts, the drug supply and cost recovery systems are now working quite effectively, although there are still minor planning and management adjustments to be made to improve efficiency. Perhaps the best testimony comes from the local populations. They are quick to point out that before the co-financed system was implemented dispensaries were virtually devoid of medicines, but that now there are always medicines available.

1.5 Health Management Information System (HMIS):

In order to coordinate partner agencies who were developing their own information systems the MOPH decided that the responsibility for developing the prototypes for the various sub-systems of the National HMIS would be shared among different groups. SESA's responsibility was to work on the health district reporting system. SESA has done a commendable job in developing both the management and informational components of an integrated HMIS.

SESA devoted considerable effort in developing a management guide for health centers which includes technical guidelines for each aspect of primary health care.[18] The loose-leaf format adopted for this manual makes it easy to update and to integrate other components as they are developed. USAID has requested each of its projects to develop guidelines to be included as part of this manual, e.g., family planning, CDD, and schistosomiasis.

On the information side, SESA developed a software system to simplify and streamline the entry, analysis and feedback of information. This software will probably be adopted for the National HMIS.

SESA has recognized, however, that computerization of a HMIS is not an end in itself, but simply a means to help programs monitor and achieve their objectives. SESA designed its HMIS to be population-based, flexible, user friendly, and action oriented.[19] The system is unified; linked to supervision; encourages decisions based on pre-determined indicator levels; permits information to circulate rapidly, and corresponds to available national resources.[20] More emphasis is placed on non-computerized local (health center and health district) analysis than on computerized feedback from the provincial level. SESA introduced a poster/graphing system for monthly manual graphing of key indicators at the health center, and for use as a supervision tool.[21]

1.6 Community Participation

According to the MOPH the key elements of the Reorientation of PHC are:

- community participation with a view to promoting self-reliance vis-á-vis solutions to its health problems;
- affirmation of the close link between health and development; and
- respect for human rights such as the right to be informed and that of individual integrity including free will.[22]

Community participation goes hand-in-hand with decentralization. A basic principle of decentralization is defining a geographical area within which the health center will be responsible for organizing the health services of the catchment population including curative, preventive and promotive care. However, accountability must go along with responsibility:

> *When hospital staff and other peripheral health workers are made accountable to distant ministries of health... lapses are likely to occur. It is therefore essential that health services be made accountable to the communities they serve. To achieve this a devolution of authority through decentralization is essential. Regional and district level health committees extending all the way through to village health committees can not only ensure community involvement in health matters but also help to make constraints and shortcomings better known.*[23]

Cameroon's RPHC and USAID-funded projects have directly supported these principles by helping to establish a legal framework for a pyramid of non-profit health associations at the health area, district and provincial, levels. These associations will have responsibility for managing the cost recovery funds generated by co-financed and co-managed health facilities.[24]

The RPHC calls for community participation in the planning, managing, and financing of health care. Reoriented health facilities are to charge for services and to have a dispensary stocked with essential medicines which will be sold by prescription to the community. The health centers are to be co-managed by health committees (COSA's) composed of local health personnel and community representatives. Each COSA is to have a management sub-committee to monitor both the pharmacy stock/security and the utilization of cost recovery funds. A similar arrangement is proposed for the health district committee (COSADI).

Co-financing has been defined by the MOPH as the sharing of the costs by the state budget, external aid and community-generated user fees. Co-management is the sharing of the management of health

services by health personnel and the community. The objectives of the co-financing/co-management strategy are to:

- finance the non-salaried recurrent costs of health services;
- institutionalize social dialogue and partnerships between the community and health personnel; and
- improve the effectiveness and efficiency of health services by using community knowledge and technical know-how to enhance human development and community self-reliance.[25]

In this context, COSA's are 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 outreach and disease prevention activities.

The results, to date, in organizing COSA's have been mixed. Health officials held sensitization meetings with communities in the health areas chosen to be in the first wave of the reoriented PHC program. COSA's and COGEs were established. Some community members of COSA's thought, however, they would have influence over the composition and pricing of the stock of medicines in the pharmacy. When their ideas were not immediately accepted, or they did not get certain benefits for their service, a number resigned from the COSA's or just stopped participating in meetings.[26]

SESA has found that community development is a continuing process, and does not stop with the establishment of health management committees. Health district and health center personnel need more training in problem-solving, community development, and adult education in order to function as facilitators for community development. However, unless such training is followed by access to resources for implementation, regular supervision, and increased compensation/motivation, the results will probably be short-lived.

SESA conducted numerous focus group discussions to learn about community and service provider perceptions of the RPHC policy, health care preferences, and thoughts on community participation. This information was used as a basis for a workshop on provincial IEC (Information, Education, and Communication) action plans and messages to promote RPHC and community participation.

While the IEC efforts of SESA I have concentrated on promoting community development related to the co-management and co-financing of health centers, one of the important lessons learned in the process is that:

> *IEC cannot "belong" to any one central directorate in the same spirit that supervision, evaluation and training do not. This is particularly relevant given the evolution of the project from a classic child survival project to the current design with an emphasis on sub-systems in support of health care delivery including community participation.*[27]

1.7 The Involvement of Women in RPHC

The officially stated goal of the SESA project is "to contribute to the improvement of the health status of the people of Cameroon, particularly women and children." Clearly, the primary beneficiaries of SESA activities have been women and children. Since they are the most vulnerable

to health problems; they are the most frequent visitors to health centers. They also gain the most from outreach programs. The challenge for SESA, and other PHC projects, has been to ensure that:

- health facilities deliver a high level of health care to women and children;
- women and children are able to avail themselves of the care provided; and
- women have a voice in the planning and implementation of health center and outreach programs.

The SESA project has succeeded in the first two points, as evidenced by increased participation in prenatal and well baby care services. However, the involvement of women in the planning and management of PHC services has not progressed very far. Women, the principal targets of SESA II, are rarely represented on the COSA's. Even when represented, they generally do not take an active part in discussions. In most of the cultural settings in Cameroon, joint men-women groups or meetings are the exception. In the Adamaoua and Far North provinces, the prevailing Muslim religion is a serious obstacle to meaningful involvement of women in decision-making.

Mechanisms, other than participation in health committees (COSA's), must be found in Cameroon to involve women in the planning and management of health centers and outreach programs. SESA II proposed, and budgeted resources for, specific ideas on how to achieve greater women's involvement by:

- forming a women's health advisory committee in addition to the COSA;
- encouraging the formation of a women's groups to discuss current health questions;
- funding community micro-projects planned and managed by women; and
- arranging for women's focus group discussions and providing reports thereon to COSA's and to health officers at local, district, and province level.

Without the impetus of a SESA II project (or another donor/project who has a keen interest in women and development) the prospect for greater involvement of women in the management of PHC services will simply remain a long-term objective. Cultural barriers to involvement of women in community affairs remains a serious, systematic problem in these areas.

1.8 Program Interventions (see also Disease Control Projects)

One of the criticisms of the integrated systems approach is that it "dilutes" the impact of program interventions and results in lower coverage rates for specific activities, e.g., measles vaccination coverage. Intensives vaccination campaigns in 1986-1987 increased vaccination coverage dramatically throughout Cameroon, but was not sustained.[28]

A similar situation was documented in Senegal and found that intensive campaigns conducted from 1986-1989 were not sustained, interfered with other health service activities, and possessed some technical deficiencies related to the managerial characteristics of an intensive campaign. The study recommended a "reorientation of health policy that advocates district management and the administrative as well as operational integration of vertical programs".[29]

This is effectively what the RPHC strategy attempts to do and what SESA is helping to develop by assuring that a certain percentage of receipts from sale of medicines is designated to maintain the cold chain and to support immunization activities. SESA estimates that the fixed strategy and

outreach activities from co-financed health centers are able to provide complete vaccination coverage at a cost of 946 FCFA per child as compared to a cost of 1,620 FCFA if the program depended on a mobile team strategy.[30]

Preliminary results from SESA indicate that the RPHC strategy is making a difference. A comparison between vaccination coverage in co-financed health areas and the overall provincial vaccination rate demonstrates a significant difference (see Table 7). Using measles coverage rates (which are usually the lowest), SESA found a 46% rate for co-financed health centers in Adamoua province compared to a provincial rate of 27%. In the South province co-financed centers had a rate of 36% compared to a provincial rate of 14%. As a result of functioning cost recovery, health management information, and supervision systems, these substantial increases in vaccination coverage should be sustainable.

Table 7
Comparison Between Measles Vaccination Coverage in Co-financed Health Areas and Overall Provincial Rates

Province	Overall provincial measles vaccination coverage	Measles vaccination coverage in co-financed health areas
South	27%	46%
Adamaoua	14%	36%

2. The Reform of Health Delivery System (RHDS)

In August 1990 USAID approved a three year $2.6 million operational program grant (OPG) to Save the Children Federation (SAVE) and CARE International (CARE) to "strengthen the capacities of both community, public and private health services in the delivery of primary health care to mothers and children in the Far North province of Cameroon." The goal of the Reform of the Health Delivery System (RHDS) project was to reduce overall child and maternal mortality in four departments of the Far North by developing the program areas of five child survival interventions, health care financing, health planning services delivery, and program management and coordination.

The project was redesigned in 1991 to bring it in line with the RPHC policy. Like SESA I, the project's centralized, vertical approach was replaced by a decentralized, integrated strategy focused on improvement of health systems and community involvement in the management of health care. In addition, the decreasing MOPH budget available for rural health meant that the cost recovery component of the project was significantly expanded.

RHDS got off to a slow start. This was due to changes in key project personnel; poor coordination between SAVE and CARE; a project revision to align it with RPHC; the lack of a clear definition of health districts; confusion and delay in the procurement of medicines; one cholera and two

meningitis epidemics; and the lack of an MOPH delegate for most of 1992. RHDS was able, however, to resolve most of these problems and the first wave of community co-managed and co-financed health centers under the project opened in September 1992. According to the project external evaluation, the difference in quality/quantity of PHC activities between co-financed/co-managed and non-assisted health centers was dramatic.[31]

The RHDS project has clearly demonstrated that international Private Voluntary Organizations (PVOs), like SAVE and CARE, have the capability to implement the RPHC program. The following project accomplishments by RHDS are particularly relevant to the development of support components for an integrated health system:

2.1 Planning and Management

The RHDS project emphasized health system development at the health center level, and was not specifically intended to develop health districts. This fact, coupled with the lack of a clear definition of health district by the MOPH, and with SAVE's and CARE's lack of experience in developing integrated health systems, meant that RHDS achieved little progress in creating functional health districts. However, all 30 of the planned co-managed, co-financed health centers were assisted by RHDS. The direct contact and supervision by RHDS of health centers, though justified under the circumstances, created the impression that these health centers were part of a SAVE or CARE program, rather than part of a health district system. Both SAVE and CARE have now succeeded in transferring responsibility for supervision to MOPH district managers.

2.2 Coordination of Partner Agencies

The original design of RHDS called for the creation of a consortium of primary health care agencies called CAISP (Cellule d'Appui aux Initiatives des Santé Publique). CAISP was to assist the Provincial Health Delegation in the training of personnel, collaboration among partners (public and private), and designing/implementing a standardized health information system. RHDS did establish a CAISP office administered by a CAISP director and two deputy directors. This format, which was dominated by SAVE and CARE, made other potential partner agencies hesitant to participate. When CAISP came to be perceived as a second provincial delegation, it was wisely discontinued and replaced with a commission under the provincial delegate. Various sub-committees of this commission have been formed when necessary to deal with specific topics, e.g., HMIS, supervision protocols and provincial pharmacy. Effective donor/MPH collaboration has resulted in the development of a provincial medical supply system to be opened officially in April 1994.

2.3 Drug Supply and Cost Recovery

Because of difficulties in its initial supply of drugs under the operational program grant, SAVE set up a small depot using "matching" private funds to procure some drugs through GTZ's CIAME (Centre for the Procurement of Essential Drugs) in order to supply its centers pending the start-up of the Far North Provincial Center for Supply of Essential Medicines.

A.I.D. handbook regulations require central AID/W procurement of pharmaceuticals through a combination of U.S. suppliers and UNICEF/Copenhagen. Even under the most favorable conditions, an order takes one year to complete. AID/W Office of Procurement needs to identify ways to streamline and/or decentralize these procedures to permit overseas missions to procure essential

drugs in a more expeditious fashion, particularly given the crucial role that the availability of medicines plays in systems development and cost recovery.

2.4 Training and Supervision

RHDS did a good job in providing the basic training required in the principles of primary health care, co-financing and co-management. Training from three days to two weeks was provided for the health center chief nurse, the nurse-aide, the members of the health committee and health center management committee. The effectiveness of this training was demonstrated in that:

- all centers had a maps of their health areas showing villages and outreach points;
- all centers had village maps showing household position and number;
- all centers had a monthly schedules for health center and outreach activities;
- all centers were completing and submitting monthly HMIS reports;
- some centers had graphs to monitor the level of activity; and
- some centers had job descriptions or an organigram of health center personnel.

Supervision visits were, however, rarely used as opportunities for in-service training. Supervision was perceived as supervision/control rather than as supervision/training. RHDS project personnel placed more emphasis on training seminars and not enough on training during supervision, but eventually learned that it is not always necessary to organize a training seminar to initiate a new idea, e.g. teaching nurses to graph health indicators.

While this might seem as a more time-consuming process, as opposed to teaching everyone at the same time, it has several distinct advantages. First it saves money by reducing the number of training seminars. Second, it develops the role and self-worth of the supervisor as someone who comes to teach, rather than simply to inspect. Third, supervision/training increases the opportunity for dialogue that can uncover additional problems and solutions.

Supervisory protocols, developed by RHDS, which should have streamlined supervision, actually made it more complex. The forms attempted to capture an excessive amount of information, and in the process buried key findings in a morass of trivia. For example, in assessing the cleanliness of the facility, the supervisor had to note the presence or absence of every piece of cleaning equipment. As one health center nurse stated, the supervisor already knows the answer to most of the questions and could have completed the form without visiting the center. RHDS recognized this weakness and, through the provincial sub-committee for supervision, revised protocols to monitor some aspects once or twice per year, and to develop supervision-by-exception protocols to identify deviations from generally accepted norms.

2.5 HMIS and Family Registration

Most health centers assisted by RHDS completed a family census of their health service area. Data on each family were recorded on a family card (fiche familiale). However, such cards were not updated on a regular basis. In some cases, the COSA, which was supposed to obtain data on births, deaths, immigration and emigration, was unwilling to perform this task without some form of compensation. The question is whether this potentially useful system is consistent with existing health center resources and level of sophistication. There may also be easier and less labor-intensive ways of accomplishing some of these same functions.

2.6 Community Participation

RHDS successfully transmitted the concepts of co-financing and co-management to health committees (COSA) and health center management committees (COGE). Community dialogue (sensitization) about RPHC was initiated around existing health centers with more than 90% of the population. However, when asked to define primary health care, one COSA president stated that the nurse should respond to such a technical question. However, when the same person was asked to define "REO" (Reorientation of Primary Health Care) he immediately began expounding on the principles of co-financing and co-management. RHDS quickly recognized the need to emphasize that "REO" is much more than drugs and cost recovery. Getting COSA and COGE to focus on vaccination coverage, village sanitation, health center renovation, and water supply as part of "REO" may also help COSA members gain greater satisfaction in their work.

Outreach activities (stratégies avancées) are generally perceived by the population and the health workers as decentralized opportunities for vaccination. These activities are an excellent starting point for outreach, but RHDS should encourage (and reward) those nurses who expand into other community based activities such as village sanitation and/or any long-term development activity.

3. Technical Assistance Advisor for AIDS and Child Survival (TAACS)

TAACS is not really a project, but rather a mechanism managed through the Centers for Disease Control (CDC) to provide long-term technical assistance to USAID Missions for AIDS and Child Survival. In the case of Cameroon, the TAACS advisor was asked to concentrate his efforts in the development of the National Health Management Information System (HMIS).

Originally, the National HMIS was the responsibility of the DEPS (Directorate for Evaluation and Planning Services), but it soon became clear that the need for information is common to all programs and directorates. Because the control of information can also be extremely powerful, the development of the National HMIS by DEPS alone was not acceptable to the other MOPH directorates, nor to the numerous partner agencies that were independently developing their own information systems.

The solution was to create a sub-committee for HMIS under the national PHC committee. The secretariat of the sub-committee, situated somewhat above the directorates in the MOPH hierarchy, served as the nucleus for the development of the National HMIS.[32] The TAACS advisor became, therefore, a chief advisor to the sub-committee. The advantage of developing a National HMIS through this structure was that it established a neutral secretariat and environment for discussions; included representation from all concerned and interested agencies; and facilitated a dialogue with partner agencies which otherwise might not have been possible.

In order to coordinate partner agencies that were developing their own information systems, it was decided that the responsibility for developing the prototypes for the various sub-systems of the National HMIS would be shared among different groups - health center/area (GTZ), hospital and district health services (SESA) and the provincial (French Assistance Cooperation- FAC). This process avoided the design of a theoretical and overly complicated system at the national level. The pre-testing of the prototypes proposed was conducted by the sub-committee, under the direction of the TAACS advisor.[33]

All the sub-systems of the NHMIS have not yet been completed, but the health center and health district systems have been developed, pre-tested, and are ready for production and diffusion during 1994. They are already in use in USAID-assisted provinces. It is noteworthy, that this work was completed without benefit of a dedicated donor project, and represented what can be accomplished, albeit slowly, with good donor coordination.

4. Lessons learned

Health Development:

O By choosing an integrated health systems approach to health in Cameroon, and by implementing projects to assist the MOPH in making the transition from selective primary health care to RPHC, USAID has probably had a much greater, wider and permanent impact on health in Cameroon than if it had maintained a selective or narrowly focused approach for its projects.

Donor Coordination:

O Even with a clear national policy for RPHC, there is a continuing need for marketing the concept of integrated health systems to donor/partner agencies. We should never underestimate the tendency for donors, especially with pressure from headquarters, to "verticalize" their assistance and projects. The substantial advantages of integrated health programs, such as USAID's, should be widely disseminated to new donors in the sector.

O Coordination of donor agencies in Cameroon has been facilitated by the RPHC policy to define responsibilities for planning and management at each level of the integrated health system. The integrated health system has provided a mechanism for coordinating the comparative advantages of donor programs.

O It is necessary to plan for a mix of donor support in developing integrated health systems. Most donor agencies are unable, or unwilling, to provide the full spectrum of assistance required to develop integrated health systems. For example, donors that are primarily interested in supporting health center and community outreach activities usually have less interest in providing major rehabilitation or equipment to referral hospitals.

O Donor agencies and their projects need to officially commit themselves to supporting the creation of an integrated health system, as in Cameroon, even if their assistance is only to one or two support components or program interventions of the system. This helps to prevent a verticalization of components and projects, and to facilitate their integration into the system as a whole.

Planning and Management:

O Implementation of decentralization should begin at the system level that has the capacity for planning, management and supervision over the functions to be decentralized. While health districts are to be the operational unit for decentralized planning and management in Cameroon, the weakness of government infrastructure and personnel at this level made it necessary to begin decentralization by concentrating systems building at the provincial level.

O The process of defining geographical boundaries of health districts should not promote administrative boundaries; rather accessible and equitable PHC. Defining boundaries by population size and movement, existing health infrastructure (including that of NGOs), ease and cost of supervision and referral, and infrastructure to accommodate personnel should be the principal criteria for delimiting health districts. The definition of such boundaries should be kept as flexible and as locally-focused as possible until successful working models for districts are well established.

O The absence of functional health districts to serve as replicable models for national decentralization can become an obstacle to getting decentralization moving at that level. Each province is now striving to develop one functional/replicable health district. Priority should be given to developing model health districts where a minimal effort is needed, e.g., in a district with a completely functional referral hospital.

O The capacity of local NGOs (non-governmental organizations) to manage district referral hospitals and to participate in, or even completely manage, district health services is a potential resource which is just now being seriously explored. Given the current economic situation in Cameroon, there is a need to maximize the use of existing, limited health infrastructure and resources by actively pursuing greater public/church coordination.

O While model health districts are being developed, it has been politically important to develop an interim strategy to expand access to primary health care services, especially access to essential medicines. This has been essential to maintain program credibility, to increase the confidence of the population, and to expand the acceptance of cost recovery.

Training and Supervision:

O Direct contact and supervision of health centers by a donor-funded project can create the impression that these health centers are part of a donor program, rather than part of a health district or provincial system. Projects need to make a concerted effort to develop and respect the hierarchy of supervision of health centers by health districts.

O Supervision needs to include a strong training component that promotes and rewards problem-solving at the health center level. This is a form of action-oriented operations research which also reinforces the role of the supervisor as someone who comes to teach, rather than simply to inspect.

O Supervision protocols should streamline supervision, not make it overly complex and repetitious. Some aspects, e.g., building infrastructure, might be checked only once or twice per year, while others might focus on identifying deviations from generally accepted norms.

O Coordination of supervision of NGO-managed health facilities health services as part of a health district should be negotiated at the district and provincial levels. Coordination can be facilitated by making a clear distinction between administrative supervision (which remains the responsibility of the NGO) and technical supervision (which is the responsibility of the health district supervisor).

Drug Supply and Cost Recovery:

O Before a drug supply and cost recovery system is initiated, it is necessary to calculate and determine its costs - including the marginal recurrent costs involved in operating and sustaining such a system.

O Capacity building at the provincial level to establish provincial to health center support systems for drug supply may be necessary to get an integrated health system started, especially in a situation where districts are non-existent or very weak. One support component, such as the logistics/drug supply system, may well serve as a catalyst for getting an integrated system moving. However, the "twin engines" of RPHC (drug supply and cost recovery) should not become so emphasized that other support components lag far behind. It is important to constantly remind the population and health personnel that PHC is much more than drugs and cost recovery.

O Capacity building at the provincial level, with provincial to health district support can become an obstacle to developing decentralized health districts. To avoid permanent institutionalization at the provincial level, a strategy is needed to decentralize support component to the district level. Project and provincial personnel need to be on the outlook for opportunities to strengthen districts, e.g., provincial training of health center personnel should include health district supervisors.

O In the absence of an established functional supply line, a "mini-depot" supply system managed by a PVO (as SAVE did in the Far North province) can be a good interim mechanism for providing health centers with medicines.

O There is an inherent danger in cost recovery that the drug supply system can become so predominant that the success or failure of PHC is measured only in terms of positive or negative balance sheets, rather than in utilization of services or decreasing morbidity.

O AID/W Office of Procurement needs to identify ways to streamline and/or decentralize these procedures to permit overseas missions to procure essential drugs in a more expeditious fashion, particularly given the crucial role that the availability of medicines plays in systems development and cost recovery.

Community Participation and IEC:

O Community development is a continuing process, and does not stop with the establishment of COSA's. Health district and health center personnel need training specific to problem-solving, community development, and adult education in order to function as facilitators for community development. However, unless such training is linked to increased resources and compensation, the results will probably be short-lived.

O Motivation (monetary and non-monetary) needs to occur with a minimal feed-back delay. Health centers and COSA's become discouraged if they have to wait a long period for the compensation system to be implemented.

O The form of community participation in health services, such as COSA's and provincial funds, will vary depending upon local cultural factors.

O Projects should not hesitate to work with and through existing local church NGO structures, assuming they are financially sound, even if they do not conform entirely to the MOPH principles of co-financing and co-management.

O IEC is a broad activity which needs to be linked to all support components and program interventions, just like supervision, evaluation and training. This is particularly important for child survival programs which are being reoriented to create integrated an health system including community participation.

O Mechanisms, other than participation in health committees (COSA), must be found in Cameroon to involve women in the planning and management of health centers and outreach programs, such as:

- forming a women's health advisory committee in addition to the COSA;
- encouraging the formation of a women's groups to discuss current health questions;
- funding community micro-projects planned and managed by women; and
- arranging for women's focus group discussions and providing reports thereon to COSA's and to health officers at local, district, and province level.

Health Management Information Systems (HMIS):

O Because the need for information is common to all programs and directorates, and because the control of information can be extremely powerful, the development of a National Health Management Information System needs to be a consensus-building process. There is a distinct advantage in developing a National HMIS through a high level committee structure that can:

- establish a neutral secretariat and environment for discussions;
- include representation of all concerned and interested agencies, and
- facilitate dialogue with partner agencies which might not be otherwise possible.

O Computerization of a HMIS should not be an end in itself, but simply a means that helps programs to monitor and achieve their objectives. Such systems should be population-based, flexible, user-friendly, and action-oriented. They should be unified; linked to supervision; encourage decisions based on pre-determined indicator levels; permit information to circulate rapidly, and reflect available national resources.

O An HMIS should place greater emphasis on non-computerized local (health center and health district) analysis and feedback of data during supervision visits, than it does on computerized feedback from a provincial or national level. Otherwise, the tendency will be for health center nurses to equate the HMIS with computer-generated graphics and provincial-generated decision-making. SESA's health center poster, specifically designed for monthly graphing of key indicators, and used as a supervision tool, is useful in this regard.

O Even though HMIS data may be entered directly into a computer at the provincial level, the health district should be the front-line support system for data collection, analysis and feedback to health centers. Provincial analysis and production of computer graphics should go first to the health district supervisor, rather directly to health centers.

O The decentralized development and testing of a provincial HMIS is a necessary step in the preparation of a national HMIS. Special attention needs to be made to structure the HMIS forms for the convenience of the health providers who are collecting the information.

O The National HMIS should consist of a "triage" of information from local or provincial HMIS's which is deemed essential for national planning. Indicators should be carefully selected for each level, as was done in Cameroon. A National HMIS should not simply be the sum total of information collected at all levels of the health system.

O The family registration system (establishing a health center "fiche" for each family which lists all family members) is a costly, labor intensive system which is difficult to maintain and use effectively. While it could be a valuable tool for the planning and delivery of health services, e.g., serve as a tickler file for the immunization program or for chronic illnesses such as TB, there are often easier and less labor-intensive ways of accomplishing these functions.

5. Prospects for sustainability

When considering prospects for sustainability, it is necessary to examine the prospects for both management and financial sustainability. The USAID-funded PHC projects in Cameroon have made excellent progress in creating the managerial capacity to sustain an integrated health system, and in developing the financial potential to cover most recurrent costs using in-country resources.

The drug supply and cost recovery systems, which have provided the momentum for RPHC, were designed to become completely functional as part of a four year process. The CAPPs have now been functional for about two years, and can be considered sustainable, i.e. they will continue even in the absence of USAID-funding. In addition, the almost 100 co-financed and co-managed health facilities (providing 30% health care coverage for three provinces) may also be considered financially and managerially sustainable. However, given the unplanned early termination of USAID investment, the Mission should strive to identify mechanisms for continued technical assistance to optimize the chances for sustainability.

However, while the foundation for an integrated health system has been laid at the provincial level, initiatives at the health district level are just beginning to show some measurable progress. Several more years of effort will be required to establish functional/replicable health districts in the three provinces assisted by USAID. Given the now-established capacity at the provincial level, it should be possible to continue the existing momentum by providing assistance through follow-on regional or central funding.

C. DISEASE CONTROL PROJECTS

1. Health Constraints to Rural Production (HCRP)

Phase I of HCRP (1984-1990), managed the Tulane University, began in 1984, and for several years was the only bilateral health project funded by USAID in Cameroon. The objective was to develop a schistosomiasis research center in Yaounde that would serve Francophone West and Central Africa. The project also included training of a Cameroonian cadre to map the epidemiology

of schistosomiasis and to develop a control manual. While almost all of the project objectives were met.[34] However, due to the economic crisis, the research center is only partially sustainable.

Phase II of HCRP (1990-1993), also managed by Tulane University, was designed as a follow-on activity to assist the MOPH in develop and test an affordable model for the control of schistosomiasis in highly endemic areas. Specifically, HCRP II was to develop and integrate effective health education, treatment, cost recovery and control strategies for schistosomiasis into RPHC. Project findings and achievements in these areas included:

- Student knowledge of schistosomiasis' infection route rose from 11 to 72%;
- Schistosomiasis prevalence was reduced by 67% in the four test villages;
- Infection rates in snail control villages were slightly lower than in test villages;
- Cost recovery for lab tests and treatment was established and integrated;
- Cost recovery for snail control was not considered very feasible; and
- Sustainability of health education was deemed possible if integrated into the health district supervision system.[35]

One of the chief outputs of HCRP is a manual, Schistosomiasis Control in Cameroon[36], which outlines the procedures and the costs of integrating schistosomiasis control into community co-financed and co-managed health centers. The manual also includes a generic plan for the integration of schistosomiasis control into primary health care. The MOPH is now designing a national schistosomiasis control strategy based on the model developed by HCRP. The integration of schistosomiasis control within the RPHC program is a low-cost, effective method to address an important public health problem.

2. Ivermectin Distribution Program (IDP)

The Cameroon River Blindness (Ivermectin Distribution) Program (IPD) was a three-year project implemented by the International Eye Foundation (IEF) in collaboration with USAID, MOPH, the River Blindness Foundation (RBF), Tulane University, and Merck & Co. which donated the ivermectin. The purpose of the project was to assess the feasibility of using U.S.-based private voluntary organizations (PVOs) to strengthen the institutional capacity of indigenous health institutions in Dja and Lobo Division of South province to provide cost-effective and sustainable delivery of ivermectin for the control of onchocerciasis.

Project activities and accomplishments included:

- intensive/rapid assessments to establish the endemicity of onchocerciasis;
- KAP (Knowledge, Attitude & Practice) surveys leading to the design, testing and delivery of IEC materials;
- development of the delivery protocol for tracking project progress;
- treatment of 17,800 persons during first round ivermectin distribution; and
- training/supervision of more than 100 health personnel in MOPH facilities.

The project estimated that the cost per person treated would vary from 596 FCFA through a mobile team distribution approach, to 287 FCFA by community-based distribution, to 71 FCFA by passive distribution from a fixed health facility.[37] Because of a concern for long-term program sustainability and the decision to integrate ivermectin distribution into RPHC, the project adopted the passive distribution approach. This approach emphasizes clinic-based ivermectin distribution; the sale of

ivermectin at community pharmacies; health education on onchocerciasis at the health center and during community IEC sessions; and amending PHC supervision and information systems to include data on onchocerciasis.

The weakness of the passive/fixed approach is that coverage rates tend to be much lower than might have been attained with a more costly mobile team approach. The mid-term evaluation agreed, however, that this was the most pragmatic approach and found that Cameroon's integration of ivermectin delivery into the primary health care system is unique in the history of onchocerciasis.[38] They concluded that the inherent cost-effectiveness of this model will contribute to a program that is both sustainable and replicable.

3. Control of Diarrheal Diseases (CDD)

Since 1988, USAID has supported the National Control of Diarrheal Diseases (CDD) Program through a sub-project of the AID/W managed Technology for Primary Health Care II (PRITECH II) Project. The project purpose was to assist the MOPH to plan and implement CDD programs so as to increase the effectiveness of diarrheal case management by health care providers and parents. Specifically, the project included objectives for training, KAP research, IEC design and pre-testing, ORS distribution, establishment of ORT units, and launching of breastfeeding activities.

PRITECH completed all of its objectives satisfactorily.[39] In collaboration with SESA I, PRITECH developed a CDD curriculum for service providers working in community co-financed and co-managed health facilities. PRITECH has also worked closely with SESA I and other PHC projects to design supervision protocols and health information indicators to be used in integrated PHC supervision and health information systems.

PRITECH played a leading role in bringing the National Control of Diarrheal Diseases Program (NCDDP) in line with RPHC. As a result of RPHC, CDD planning and management is to be decentralized to the provincial and health district levels. PRITECH helped revise the objectives of NCDDP in 1992 to change it form a CDD implementation organization to more of a consultative and policy body. Responsibility for CDD service delivery, supervision, provision of ORS, and the collection of CDD information is now the responsibility of the provincial-based PHC programs. The result of this effort is the availability of CDD activities and ORS in over 250 health centers and the absence of harmful anti-diarrheal drugs. The prospects for sustainability are very good.

4. Data for Decision Making (DDM)

Responses by the MOPH to outbreaks of meningitis, cholera and yellow fever were historically ineffective in northern Cameroon. In 1992, at the request of the MOPH and USAID, CDC provided technical assistance to train health officers in Northern Cameroon in epidemic preparedness. These steps included positioning of vaccine buffer stocks, improved meningitis surveillance, and determination of epidemic threshold rates for use in deciding when to vaccinate. In early March 1993, district health officers effectively used detailed epidemiologic data to detect and respond to new outbreaks of meningitis. According to the MOPH, a large scale epidemic was definitely avoided, and epidemic preparedness training is often cited by the MOPH has an example of training that can make a difference in lives saved.

In order to further improve and institutionalize epidemic preparedness in Northern Cameroon, USAID contracted a long-term project (1993-1995)[40] with Data for Decision Making (DDM) Project. The goal of DDM/Cameroon is to increase the capacity of the Cameroon MOPH and collaborating NGOs to effectively detect, confirm and respond to epidemics of meningitis, cholera and yellow fever in the North and Far North provinces.

The integration of epidemic preparedness with RPHC has also been achieved. This consists of (1) clearing defining specific epidemic response actions for each level in the health system; (2) inclusion of epidemic disease reporting as part of the health center monthly reports; and (3) integrating epidemic disease control drugs with the provincial revolving drug supply. The latter strategy is the key to sustainability because it:

- avoids expiration of drugs/supplies stocked specifically for an epidemic;
- provides a system to automatically restock drugs;
- provides a mechanism for health centers to deal with indigent care; and
- generates funds for outbreak investigation and immediate response to an epidemic before external assistance is mobilized;

5. Lessons learned

Integration with PHC:

O The creation of a vertical national health intervention program (such as NCDDP or Schistosomiasis Control) is important to launch a specific disease control program, especially for developing and testing effective interventions, adoption of a national strategy and establishing a training/supervision/HMIS capacity. However, following general acceptance of the intervention, emphasis should be placed on decentralizing and merging responsibility for planning, management, training, supervision, HMIS and logistics to regions and health districts, and completely integrating the intervention as a health center and outreach activity.

O Integration of disease control programs into RPHC was facilitated by the fact that these programs existed under the national Directorate of Preventive Medicine rather than as independent units.

O Planning for integration needs to begin before active distribution of drugs begins, e.g., ivermectin. Quantitative indicators need to be developed to enable project managers to assess progress in the process of integration. Every component of the intervention needs to be designed, with the aim of complete integration before the end of the project.

O Generalizing project specific accomplishments and strategies into a generic guide for integration of the disease control program into integrated health system is one of the most valuable end products of such projects, (c.f., Schistosomiasis Control in Cameroon manual).

O Disease control programs which are committed to developing integrated health systems can be an entry point for increasing access to limited services; for establishing principles of co-management and co-financing; and for creating community enthusiasm for primary health care.

Systems Strengthening:

O The delivery of disease control interventions can be accomplished in functional health facilities which are financially viable and are supported by regular supervision, continuing education, supply line. etc. Cameroon's RPHC provides such a framework.

O The delivery of endemic and epidemic disease control commodities (ORS, Ivermectin, Hematuria detection strips, and praziquantel (Biltricide)) can be effectively accomplished as part of an integrated drug supply system. Establishment of a separate logistics supply system should be avoided except where an integrated system is not yet in place. Assuring the use of essential medicines, and discouraging the use of inappropriate drugs, e.g., anti-diarrheal drugs, can be greatly facilitated through a secure supply line.

O Integrating epidemic disease control drugs with a revolving drug supply:

- avoids expiration of drugs/supplies stocked specifically for an epidemic;
- provides a system to automatically restock drugs;
- provides a mechanism for health centers to deal with indigent care; and
- generates funds for outbreak investigation and immediate response to an epidemic before external assistance is mobilized.

O Large scale epidemics can be avoided or controlled by relatively simple, low-cost epidemic preparedness measures. These include positioning of vaccine buffer stocks, improved meningitis surveillance, and determination of epidemic threshold rates for use in deciding when to vaccinate.

Community Participation:

O Disease specific interventions can succeed only if they build on community awareness concerning the disease. Where popular perceptions appear to remain unfocused, concerted efforts are needed to develop awareness, e.g., primary school health education.

6. Prospects for Sustainability

The MOPH and USAID receive high marks in reorienting and integrating disease control programs into RPHC. While this approach has currently resulted in temporarily lower coverage rates than might be expected by a more vertical program, it appears to be the most pragmatic approach available in terms of cost-effectiveness, sustainability and replicability.
In the case of schistosomiasis control and ivermectin distribution, these programs were implemented only in pilot areas. In these instances, existing provincial PHC systems may need to provide some technical assistance and trouble shooting over the next few years to replicate the integration of these control programs in other endemic areas of Cameroon.

D. AIDS

1. Baseline Situation in 1987

Cameroon is fortunate to be a relatively low-prevalence country for HIV infection. The sero-prevalence rate among sexually active population in urban areas was estimated about 2% in 1993.[41] The first AIDS case was reported in 1985. The first studies completed in between 1984 and 1987 found between 0 to 0.5% sero-prevalence rate among the adult population in various scattered areas, with a 4% sero-prevalence rate in Douala and 2.7% in Yaounde among commercial sex workers (CSW). Other sexually transmitted diseases have been recognized as a serious problem in Cameroon for a long time. Condoms were available only in pharmacies at prices that were unaffordable for most and were not widely used. Sentinel surveillance (monitoring of activities in a few selected health facilities), which began in 1988, indicated that the epidemic was increasing steadily among different populations. Timely intervention was needed to slow and eventually halt the spread of the epidemic before it reached catastrophic proportions (as it has in neighboring countries).

In 1987, there was no strategy nor national program to combat the spread of HIV infection. In 1988, the Government of Cameroon, alarmed by the epidemic proportions of the disease in other countries in the region, established a multi-sectorial National AIDS Committee to develop a strategy for the prevention of HIV/AIDS. Subsequently, an AIDS Control Unit was established at the MOPH which is responsible for the planning, coordinating, monitoring and evaluation of AIDS control activities. Two five-year Medium-Term Plans were since established, the first for the period 1988 - 1992, and (after a comprehensive review in 1993) the second for the period 1994 - 1998. The Medium-Term Plans defined and prioritized problems, and defined planned objectives, strategies and activities, as well as the use of resources. Multi-donor support is being provided in the implementation of these plans.

2. AIDSTECH and AIDSCAP

USAID's assistance in AIDS control was implemented through buy-ins to the centrally-funded project AIDSTECH, from September 1987 - September 1992. This was followed by AIDSCAP, from October 1992 to the present. Assistance for condom social marketing was also provided through several grants from centrally-funded projects. The activities under these two projects were designed to fit within the Medium Term Plan and to address the needs of the country.

Under AIDSTECH, USAID's assistance focused on two of the objectives of the first Medium Term Plan, i.e., to:

- reduce the sexual transmission of HIV; and
- reduce the transmission of HIV through the blood supply.

USAID also supported the three main strategies of the project, i.e., to:

- health promotion, IEC, and social marketing of condoms);
- reduction of risks from blood transfusions; and
- psycho-social management of AIDS patients, sero-positives and their families.

The follow-on phase of USAID assistance in the AIDS sector through the AIDSCAP project, the focus was narrowed to support the strategy of health promotion (IEC, social marketing of condoms), and the reduction of sexually transmitted diseases. As the main mode of transmission is through heterosexual activity and account for 90% of the AIDS cases, this refocusing increased the effective use of resources. The two activities of condom social marketing and IEC are complementary to one another: IEC and marketing campaigns stimulate the demand for condoms, and the social marketing program ensures a wide availability of condoms to meet the demand.

Therefore, the assistance provided the means to continue IEC activities with the commercial sex workers (CSWs), and expanded IEC activities to include other groups, namely university students and the military. Two PVOs, CARE International and Save the Children Federation, received grants from the AIDSCAP Project to carry out AIDS education projects targeting youth and other high-risk groups in the East and Far North provinces. AIDSCAP continues to provide logistical support for sentinel surveillance, but it has ceased to provide reagents for blood testing, and has stopped providing support for quality assurance of blood transfusions, and counselling at health facilities.

The major outputs achieved under AIDSTECH and AIDSCAP are listed in Table 8.

Table 8
Major Outputs of AIDSTECH and AIDSCAP

Project Activity	AIDSTECH Accomplishments from 1989 to 1991	AIDSCAP Accomplishments 1991 to present
IEC targeting CSWs	Reported condom use increased from 46% to 73% in the past week among CSWs sampled; and from 54% to 75% among male bar patrons; 80 CSW peer educators active in Yaoundé and Douala; CSWs sold 1.1 million condoms.	164 CSW, 70 university student peer educators active in providing AIDS prevention education; CSWs sold 2.2 million condoms.
Condom social marketing	4.6 million condoms sold from Oct 89 to Sept 91 with 24% of sales by CSW salespersons.	10.7 million condoms sold from Oct 91-Sept 93, with 19% of sales by CSW sales persons.
Sentinel surveillance	Surveillance activities initiated in Yaoundé, Douala, Bertoua & Garoua with sentinel groups regularly tested.	Sentinel surveillance activities on-going, with regular reports compiled & published annually.
Social marketing of STD treatment kits	Surveys conducted to collect baseline surveillance and KAP data.	Pilot project launched in May 93. 1,321 kits sold by Dec 93.
Quality assurance for HIV testing	Provincial supervisors and lab technicians trained; proficiency and validation testing conducted.	not continued under AIDSCAP
Strengthening of AIDS Prevention Counselling Services	100 health personnel trained for prevention counselling to 2,280 persons and long-term supportive counselling to 118 persons.	not continued under AIDSCAP
Computer modeling of the AIDS epidemic	Demographic, behavioral & STD data gathered/compiled. 2 epidemiologists trained.	On-going
Developing an HIV diagnostic test	Clinical testing phase conducted	On-going

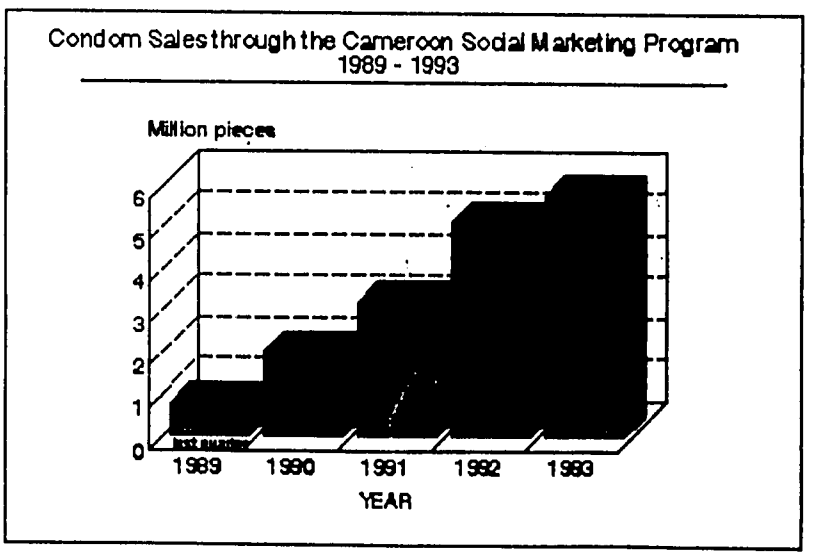
It should be noted that other donors, including the GTZ, WHO and French Cooperation, have also contributed to the sentinel surveillance, blood safety and counseling activities. Other donors have funded a range of activities which, taken together, have contributed to the accomplishments of the National AIDS Control Program.

The Government of Cameroon is to be commended for its commitment to combatting AIDS. It initiated programs such as condom social marketing program and AIDS education program in schools - programs which other governments in the region have been slow to adopt.

Bringing about sexual behavioral change is a slow process and there will be a time lapse before the sero-prevalence rate plateaus or decreases. Sentinel surveillance data from five sites showed increases in HIV infection rates among pregnant women attending pre-natal clinics except in Yaoundé, where the rate remained stable from 1992 to 1993. Sero-prevalence surveys have found that the rates among CSWs to have also stabilized in Douala and Yaoundé between 1992 and 1993. In addition, sentinel surveillance data showed syphilis rates to be decreasing. Although encouraging, it may be too soon to draw conclusions about the trend in HIV infection rates. Continued sentinel surveillance should give a clearer picture of where the AIDS epidemic is heading in Cameroon.

While program success, therefore, cannot be measured using sero-prevalence rates at this time, it can be measured by the increase in condom use among the target groups. Condom use is the single most effective means to prevent the spread of AIDS and STDs. It may be concluded that the program has had a considerable impact on condom use, as evidenced by the sales figures, and on condom use among the targeted high-risk groups. The social marketing program has the second highest per capita condom sales in Africa. Around 17.8 million (including free samples) condoms have been sold since the program began in October 89, and sales figures have been climbing exponentially (See Figure 4). Two of the CSW peer educators have become wholesalers of condoms. It is expected that condom use will continue to rise, and as a result, the rate of HIV infections and STDs will decrease. Recent studies have also shown an impressive increase in the knowledge of AIDS among the population.

Figure 4



The program has also improved the capability of the MOPH to monitor the disease through sentinel surveillance, improve blood safety, and counselling services in health facilities. The assistance provided was timely and having acquired the technical capability to carry out these activities, other donors are prepared to continue financial support to the MOPH.

A centrally-funded experimental project in the marketing of STD treatment kits in the universities has not met with much success so far. The low sales figures may be due to a price set too high (5000 FCFA); the limited outlets available through the university and military health clinics; and the lack of a promotion campaign. Expansion of this program to permit sales of the kits through pharmacies has been impeded by the lack of progress in obtaining MOPH approval due to a disagreement on the antibiotics to be included in the kit. The sale price of the kit now must also be revised due to the FCFA devaluation. This may take it out of the reach of many STD sufferers. Nevertheless, this experimental project has the potential to develop into a cost-effective strategy to combat STDS in Africa and is being considered for replication in the region.

The first phase of the program under AIDSTECH was too diversified, with nine activities of which four are research and development activities. Some of these activities require a great deal of specialized technical input from outside, and MOPH personnel with technical expertise became over-extended. Therefore, for the second phase under AIDSCAP, it was decided to reduce the number of activities and focus on three strategies.

The Quality Assurance activity helped to improve the safety of the blood supply for transfusions. However, the training has not led to significant improvement in hygiene and safety practices by laboratory technicians. More on-site training and supervision are required. This activity will be continued by the French (FAC) and German (GTZ) aid programs.

All activities in the AIDS sector, except condom social marketing and two new projects with international PVOs, were implemented by the MOPH with the assistance of project staff (non-civil servants hired under the project) who are housed in the Ministry. Each activity was managed by a MOPH official. Under the AIDSTECH Project, there was only one project staff member, the project coordinator. Implementation progress of some of the activities was slow as MOPH project managers were not full-time on the project and were often unable to dedicate the time needed. Under the AIDSCAP phase, therefore, project staffing was increased to nine. Activities requiring specialized technical expertise should reside in the MOPH, but the IEC activities could perhaps be housed elsewhere, ideally with host country NGOs.

As with most MOPH programs, the project managerial level is staffed almost exclusively by men. As the beneficiaries of some of the activities such as the IEC activity targeting CSWs are women, they can benefit from greater involvement of women in project management and coordination.

3. Lessons Learned

<u>globally</u>:

○ Focus the program on fewer cost-effective interventions as under the AIDSCAP Project. The absorptive capacity of the MOPH should be taken into consideration in program design.

○ Greater involvement of NGOs in the IEC activities can ease the management burden at the MOPH and speed up implementation.

in Condom Social Marketing:

O A regional strategy using sales agents based in each province to assist the local wholesalers in marketing and promotion is more successful in increasing sales.

O Care should be taken in the selection of distributors and avoid a monopoly distributor. Establish trademark rights so that the brand names are controlled.

O Publicity using mass media should not associate use of condoms with high-risk groups such as CSWs and truck drivers.

O A social marketing program cannot stand alone but needs complementary activities such as counselling and targeted IEC activities.

O Isolated rural areas which cannot easily be reached through a private distribution network, can be served, as AIDSCAP has done, through grants to NGOs.

in IEC Activities Targeting High-risk Groups:

O Individual counselling using peer educators is a successful approach in the promotion of low-risk behavior.

O Motivation for the peer educators has to be provided to avoid high attrition rates. It should not be provided through stipends and financial gains but through recognition for their efforts and payment in-kind. Only those who are concerned with the safety of their community would then be interested in participating.

4. Prospects for Sustainability

4.1 Condom Social Marketing Program

A rule of thumb used in pricing policy in social marketing programs is the index of 1% of the per capita GNP (Gross National Product) for a year's supply of 100. The "Prudence" brand of condoms in Cameroon is priced at below this index at around 0.5% before the FCFA devaluation. It is currently sold at 4 for 50 FCFA or 12.5 FCFA (about $0.02). The current cost per condom delivered by PSI (Population Services International) is $0.11 plus unit cost including freight of $0.06, bringing the total cost to $0.17. Given the recent introduction of condoms and the economic crisis, it would be unwise to increase prices at this stage of the program, and it is clear that the program, like all social marketing programs, is not sustainable without subsidized condoms for some time to come. Experience from the well-established condom social marketing program in Bangladesh showed a significant decrease in sales when prices were increased.[42] A comparative study of 24 condom social marketing programs concluded that condom prices must be kept low for a successful program that will maximize condom use and prevalence, and that an ideal price is probably 0.5% on the per capita income scale or below.[43] Any price increases in the future must be made gradually and cautiously, and take into account the actual buying power of the intended beneficiary.

USAID is currently the only donor providing support for the condom social marketing program in Cameroon. Maintaining or increasing the present level of input is necessary to expand the program

to meet the country's needs. In addition, inputs from other donors are required to diversify the financing.

The marketing and distribution systems for condom social marketing have been set up and are functioning. It is envisaged that PSI will assist in the creation of a local NGO which will eventually take over the marketing operations of the program at a lower cost. This move will ensure a certain degree of sustainability, as the expertise becomes institutionalized locally. The local NGO can become a viable organization by winning contracts for implementing the program.

The condom social marketing program has been replicated in many countries in the region, and has met with success in the Côte d'Ivoire and Ghana (among others). The program in Cameroon is therefore replicable in countries with comparable levels of income and commercial distribution networks.

4.2 IEC Activities targeting High-risk Groups

A movement is under way to create an association of CSWs and its statutes are being formulated. If successful, the CSW's can then organize to help themselves, and might eventually take over the IEC activity. This is the best way to assure that the program is sustained after the end of donor assistance. The CSW leaders will need some assistance to organize themselves, and to provide leadership and support to the peer educators. Contributions to the association by the members and other interested parties can be used to continue the IEC activities, and train new peer educators to replace those who leave.

There is a high attrition rate among the CSW peer educators. Only a quarter of the CSW peer educators recruited during the first phase of the project (under AIDSTECH) have remained in the program. In December 1993, half of the forty recruited at the beginning of the second phase (under AIDSCAP) in Douala had to be replaced with new recruits. The high attrition rate is partly due to the mobile nature of the CSW's and partly due to dissatisfaction with financial gains from participating in the program. The CSW's currently receive an allocation for transport and profit from the sale of condoms. Their share of the condom market, however, has seen a sharp decline since the rapid expansion of the social marketing program and the increase in the number of outlets. They need to be given moral encouragement to remain in the program. Efforts are needed to make them see the non-financial gains they can obtain from the decrease in their community's exposure to HIV/AIDS. One such means of motivation and recognition is through in-kind payment by the MOPH, which could provide the peer educators with free medical consultations.

The program is highly replicable. Some initial investment is necessary to provide training and organization of the activities, but there are no recurrent costs.

The long-term impact of the AIDS prevention program is obvious. There has been a dramatic increase in the knowledge of HIV/AIDS and the use of condoms by high-risk groups and in high-risk encounters (with irregular partners). By reducing the transmission of the virus in this high-risk group and high-risk encounters, the spread of the disease can be effectively slowed. Once the use of condoms is adopted, the practice will likely remain as long as there is a risk of AIDS and STDS.

E. FAMILY PLANNING

1. Family Health Initiatives II and National Family Health Project (NFHP)

From the mid-1970's on, USAID made judicious use of centrally-funded population projects to respond to specific requests of assistance from both the public and private sectors covering a wide spectrum of activities. These activities prepared the groundwork for later expansion in the sector. In August 1988, using the mechanism of the regional Family Health Initiatives II Project, USAID authorized $1.2 million for population activities that provided the 'bridge' to the five-year bilateral National Family Health Project (NFHP) which was authorized in August 1991. Both projects used 'buy-ins' to centrally-funded projects to implement the activities, with a Personal Services Contractor to coordinate and manage the projects at the Mission. This modality for project implementation was necessary because of the limited funding available for the population program.

The Family Health Initiatives II project financed activities in the following areas: policy development, training, information, education and communication (IEC), data collection and analysis, and service delivery. The NFHP continues activities in the same areas, but with a much higher level of input and increased support for service delivery to meet the program's needs as it continues.

The NFHP is at approximately at its mid-point and a mid-term evaluation would normally be carried out at this time. The activities are mid-way in their implementation, some were accelerated while others have been put on hold in view of the premature termination of the project. As there was no evaluation of the FHI II activities, the program has not benefitted from any previous formal review. Hence, this assessment of project progress has to be put in this context.

The many activities under the national family planning program work towards increasing the accessibility of family planning services and stimulating the demand for them. Emphasis is placed on the delivery of quality services as an integral part of health services, and establishing the systems to support these services. USAID has been the major donor in this sector, and without its contribution the national family planning program would not exist.

The major outputs are summarized in Table 9. As most of the activities begun under the FHI II Project are continued under the NFHP, the two projects are considered as one entity.

As a prerequisite to the expansion of family planning, the policy climate had to be converted from a hostile to a favorable one. USAID, UNFPA and the World Bank have worked together to support awareness-raising activities aimed at policy and decision makers, and development of a National Population Policy which was adopted in 1992. The Policy signifies the Government's acknowledgement of the problem of rapid population growth and its commitment to make available family planning information and services to the entire population. The NFHP has supported the dissemination of this policy at the provincial level.

Another prerequisite to the expansion of family planning is acceptance by the target population. To this end, research has been conducted to determine the knowledge, attitudes and beliefs concerning family planning, based on which messages were developed. The awareness of family planning was raised through mass media campaigns, distribution of IEC materials, identification of family planning service sites by the public, and promotion by health and community workers. A recent evaluation survey of the IEC program found that knowledge levels were high and the

attitudes towards family planning were favorable among the majority of the respondents.[44] However, rumors and concerns about the safety of modern contraceptive methods persist.

Table 9
Major Outputs of FHI II and NFHP Projects

Project Activity	Cooperating Agency/R&D Projects	FHI II and National Family Health Project Accomplishments
Service Delivery	JSI/Family Planning Service Expansion & Technical Support	CYPs increased from 30,000 in 1990 to approximately 90,000 in 1993. 217 sites providing family planning services (2/3 of target for FY 1997).
In-service training	INTRAH/Family Planning Training for Paramedical, Auxiliary & Community Personnel	Two clinical training curricula and an IEC training curriculum developed for family planning training for health personnel. 450 service providers trained in-country (1/3 of target).*
Pre-service training	JHPIEGO/Training in Reproductive Health	Reproductive health curricula developed for the University Medical Faculty, CESSI and nursing schools.
Policy development	Futures Group/OPTIONS	National Population Policy adopted in 1992. MCH/family planning service policy and standards, and family planning service protocols developed, adopted and disseminated.
Data collection & analysis	IRD/Demographic & Health Surveys II	Demographic & Health Survey completed. Results disseminated
IEC	JHU/Population Communication Services	Developed logo, billboards, family planning clinic signs, IEC materials & messages, mass media programs. 50 health and community workers trained in IEC.
Social marketing of contraceptives	PSI	License obtained in March 1994 to distribute oral contraceptives
Breastfeeding promotion	Wellstart/Expanded Program of Breastfeeding Promotion	National Breastfeeding Policy formulated. In-service training curriculum for health and community workers developed.

* including those given in-service training by JHPIEGO and SEATS

There is now a functional family planning service delivery system through both the public and private sectors:

- service providers have been trained at the reference hospital and health center levels;
- a wide range of contraceptive methods, including voluntary surgical contraception (VSC) are now available in the major hospitals and MCH centers, hormonal and barrier methods are available in the rural health centers;
- the availability of long-term surgical methods (mini-laparotomy and Norplant) is being expanded and made accessible;

- contraceptives logistics and distribution system has been set up and low-cost contraceptives are available in the service sites;
- group education and individual counselling are being provided in the service sites.

Reliable demographic data and baseline data on contraceptive use have been collected through the 1987 National Census and the National Demographic and Health Survey. These activities provide information that is essential for planning and evaluation of development activities.

Tremendous progress in the area of training has been made in a relatively short period. The development of the two family planning clinical training curricula, and the service policy and standards and protocol, are important milestones as they have standardized family planning training and service delivery in the country. These in turn, help to ensure quality family planning services. The same training curricula are now used nation wide and have been accepted by other donors to use in programs that they assist.

The assistance provided by INTRAH created an in-country training capacity through the training of trainers. Using the standardized curricula, a team of 14 national trainers and 20 provincial trainers are now able to conduct family planning clinical training with minimal outside assistance.

The pre-service reproductive health training curricula, developed with USAID assistance, are beginning to be officially incorporated into the curricula of the medical faculty and nursing schools. In the future pre-service training will ensure that health workers graduate with competency in family planning skills, and eventually eliminate the need for in-service family planning training. This activity also introduced new and better pedagogic methods and approaches to the teaching staff of these schools.

The National Family Planning Program (NFHP) began as a "vertical program," implemented by the Directorate of Family and Mental Health, which was created in 1989 to handle all family planning activities. The Directorate is responsible for implementing the NFHP; formulating service policy and standards; planning and organizing training; receiving and distributing contraceptives, clinic equipment and supplies; supervising service providers; collecting and compiling service statistics; and managing the funds generated by the sale of contraceptives. Women are increasingly involved in training in the program and are actively involved at the service provider level.

The family planning program is being integrated into the primary health care system. Training of health workers from the health centers in the system has begun in the USAID, GTZ and UNICEF-assisted PHC zones. Training of health center service providers will continue in the provinces using district training teams rather than provincial or central level training teams. The trainers will also be the supervisors. The National Training Team will act as resource persons.

The contraceptive logistic system and warehouse will be dismantled, and the function will be taken over by the Centre for the Procurement of Essential Drugs (CIAME) which will handle contraceptives and clinical supplies as part of the essential drug supply system. CIAME will supply the provincial drug depots (CAPPs). In turn, the CAPPS will supply the health centers and hospitals.

Supervision will no longer be carried out by DFMH personnel, but by District PHC supervisors as part of their regular supervision of the health center, and by provincial supervisors who will supervise the district hospitals or health centers. This does not eliminate the need for DFMH

personnel to make regular visits to the field for monitoring and evaluation of the program, and for other programmatic purposes.

The health management information system (HMIS) will incorporate family planning service statistics into the monthly activity reporting form which will replace the current separate family planning reporting forms. The compilation of family planning service statistics will still be carried out by DFMH staff at the central level.

The private sector service delivery will follow more or less the public sector model, except that supervision will be carried out by the supervisors in their own systems.

Despite the progress in policy development, training and IEC, the technical assistance provided by the main RD/POP cooperating agency in the development of service delivery was weak. As a result, progress in systems development was slower than expected.

The service sites, such as the urban-based MCH centers (centre de protection maternelle et infantile or PMI) and maternities, which are not presently part of the PHC system present a temporary problem in the plan for integrating family planning services. These centers serve the urban population, which represent a large proportion of the case-load. It was not clear in the project design how these centers could become integrated into the PHC system, since they do not function like community co-managed and co-financed centers and no plan has been developed to establish the necessary systems. The MCH centers in existing PHC zones are being converted to district hospitals and integrated into the PHC system. There are plans under the World Bank Project to convert the MCH centers in Yaoundé and Douala into urban PHC centers, but interim supervision, logistics and information systems still need to be developed.

Regarding the private sector, the project has focused its efforts to date in integrating family planning information and services into approximately 43 church-supported health facilities. The development of activities in the private for-profit sector involving clinics of large businesses and parastatal entities did not take place during this first half of the NFHP (except for the Cameroon Development Corporation and Caisse Nationale de Prévoyance Sociale). Plans for these activities have been made, but insufficient time is left to implement them.

The management information system is problematic. The collection and compilation of service statistics is slow and reporting is often incomplete. Up-to-date service statistics are not available and no feed-back is being provided to the reporting sites. Information is not being analyzed in a timely fashion or used for management and planning purposes. Family planning service statistics are being integrated into the National Health Management Information System currently under development, and this should resolve many of these problems. Communication channels between the DFMH (Directorate of Family and Mental Health) and the National HMIS Committee need to be established to ensure a good flow of information.

The large number of new sites offering family planning services have considerably increased the number of family planning acceptors. Family planning has enhanced the status of women by providing them with the freedom of choice in the matter of child-bearing, and improving their health and welfare. However, demand for family planning is still low. The service sites are currently under-utilized and many of the sites outside of the major urban centers have low client case-loads. Service providers need to take a more aggressive approach in providing family planning IEC and individual counselling to potential clients attending the pre-natal, post-partum and

infant clinics. Due to lack of personnel and space, family planning services are not available on a daily basis in some of the major centers.

The maternal and child care aspects of the integrated MCH and family planning program have not been yet addressed. A training curriculum for maternal care has been developed but requires re-writing to address training needs of the personnel. This curriculum will form a complementary part to the family planning training curriculum. It should be revised to also include an up-date on infant and child care, so that future training will be truly integrated and eliminate the need for vertical training programs in immunizations, diarrheal disease control, breastfeeding, etc.

Overall, USAID successfully coordinated the process of institutionalizing family planning into the national primary health care system by assuring the collaborative development of medical standards and curriculums; sponsoring important integration seminars and meetings; assuring full integration of contraceptives into the essential drug program; and working with other donors to plan the integration of family planning into provincial PHC systems.

2. Lessons Learned

in Planning and Management:

O A vertical approach may be necessary in the early stages of establishing a family planning program in order to achieve faster progress. This is because the health care system has to be functional and decentralized before family planning can be integrated into it. However, the creation of centralized systems and structures may become obstacles to integration at a later stage, and may be difficult to dismantle.

O USAID-funded cooperating agencies (CA's) in the population sector have specialized mandates and experience in working in family planning. They are not always responsive to the needs of the national program nor do they provide the assistance necessary for integration. A resident technical assistance team which draws on specific expertise from CA's can provide stronger technical support. However, this approach would require significantly greater bilateral resources.

O Management skills training needed to be provided to the MOPH/DFMH management personnel early on, and a team spirit cultivated to avoid poor management styles and communications problems.

in IEC Activities:

O Priority should be given to the counselling aspect of family planning services. Awareness and availability of family planning services alone are often not enough to make the individual accept a family planning method. The counselling component in training need to be expanded, and more personnel other than clinical personnel (social workers, community development workers, etc.) should be given training in counselling to provide support to clinical services. The training should include awareness of social-cultural barriers, and rumors about contraceptive methods.

O Male attitudes and beliefs are an important obstacle to the acceptance of family planning. Awareness-raising activities targeting men can remove this obstacle, as shown by a Northwest province operations research study using male opinion leaders.

in Training and Supervision:

O The two-week basic family planning training course is too short and too intensive to enable trainees to acquire the necessary competency level of skills. Additional on-the-job training is required after the initial training. This can best be provided by the direct supervisors.

O Emphasis on technical supervision is needed to improve the performance of service personnel.

O Service policy and protocols, if too stringent in establishing conditions prior to provision of a method (such as age and parity, frequency of follow-up visits etc.), can impose unnecessary medical barriers, and detract from the true purpose of such policy and protocols.

3. Prospects for Sustainability

Major donor input was required to establish the program, conduct training and set up systems. It will still be required for some time to come, in order to expand the program nation-wide. The institutionalization of training capability, and the move to integrate family planning into the reoriented PHC system, will help ensure the sustainability of the program. Once established, family planning service delivery can be sustained provided that contraceptive supply can continue. Unlike essential drugs, however, the demand for family planning is still very elastic, and an increase in price will undoubtedly lead to a fall in demand given the limited purchasing power of the target population.

Assuming that the private sector can determine its own pricing policy for contraceptives and services, the prospect for sustainability of family planning service delivery in the private, non-for-profit sector is also good. The private sector has to take personnel costs into account, and it must charge higher prices in order to keep the family planning services viable.

As it is only in the early stages of implementation, the success of the integrated model of the Cameroon family planning program has yet to be proven. It may suffer from the substantial cut-backs in USAID support. Nevertheless, its chances of success seem good, and its sustainability prospects appear much greater than a vertical program. **Other donors such as GTZ, FAC, UNICEF, and World Bank are adopting the USAID model and are taking steps to integrate family planning into their PHC programs. This is an important development which bodes well for sustainability.**

Other African countries could benefit from Cameroon's integrated model of family planning service provision. Tangible benefits are more cost effective delivery of information and services; elimination of parallel logistics, information, and other management systems; potential for higher quality services due to availability of consumable supplies, small equipment, and forms in integrated supply systems; and the potential for rapid expansion of services by introducing family planning in fully functional health facilities.

In the long-term, the stimulation of demand for family planning and the institutionalization of the capability to provide services in both the public and private sectors will lead to a continuous increase in contraceptive prevalence. USAID's assistance to Cameroon's family planning program should lead to a decrease in the fertility rate, and bring population growth rate down to one that will be more consistent with national economic growth and productivity.

IV. REFERENCE DOCUMENTS

A. REFERENCES CITED

1. Bennett, F.J. Health revolution in Africa? *Soc.Sci.Med.* 22:737-740, 1986.

2. Health Sector Assessment, USAID/Cameroon, October 1992.

3. Report of a Field Study to Establish the Baseline for Future Activities of Project SESA, MSP/SESA, January 1990.

4. *Country Development Strategy Statement (FY 90-94): Cameroon*, Washington, DC, USAID, 1989.

5. Greene, R. Profile of USAID/Cameroon's Health and Population Assistance, 1991.

6. Essomba, R.O., Bryant, M. and Bodart, C. The reorientation of primary health care in Cameroon: rationale, obstacles and constraints. *Hlth.Pol.Plan.* 8:232-239, 1993.

7. Smith, D.L. and Bryant, J.H. Building the infrastructure for primary health care: an overview of vertical and integrated approaches. *Soc.Sci.Med.* 26:909-917, 1988.

8. Hospitals and Health for All. *WHO Tech.Rep.Series* No. 774:1987.

9. *Revised Child Survival Strategy for Africa*, HHRAA/SARA project, 1993.

10. Van Norren, B., Boerma, J.T. and Sempebwa, E.K. Simplifying the evaluation of primary health care programmes. *Soc.Sci.Med.* 28:1091-1097, 1989.

11. Van Lerberghe, W. and De Brouwere, V. Assessment of appropriate child care at district level: how useful are mortality rates? *Trans.R.Soc.Trop.Med.Hyg.* 83:23-26, 1989.

12. API Health Report, USAID/HPN, 1993.

13. Better Health in Africa: Introduction and Overview. In: *Better Health in Africa*, edited by WB/AT/HRP, Washington, DC: World Bank, 1993, p. 1-13.

14. Korten, D.C. Third generation NGO strategies: a key to people-centered development. *World Devlp.* 15, Suppl.:145-159, 1987.

15. Détermination de la Tarification des Médicaments dans le Cadre des Activités de Co-financement et de Co-gestion. MSP/SESA, Septembre, 1992.

16. Mbede, J., Owona-Essomba, R. and Kamwa, M. *User Fees for Public Health Services: The Experience of Cameroon*, 1993.

17. Litvack, J.I. and Bodart, C. User fees plus quality equals improved access to health care: results of a field experiment in Cameroon. *Soc.Sci.Med.* 37:369-383, 1993.

18. Manuel du Centre de Santé, MSP/SESA, October 1992.

19. Sauerborn, R. *Memo concerning Guiding Principles for Computerizing a Health Management Information System*, 1994.

20. Bodart, C. *Experiences et Perspectives de Mise en Place d'un HMIS dans le Cadre des Activités du MSP/SESA*, 1991.

21. *Le Système d'Information du Projet SESA/MINSANTE (SIPS)*, 1991.

22. National Declaration of the Implementation of the Reorientation of Primary Health Care, MOPH, May 1993.

23. Primary Health Care and Change. In: *Primary Health Care: Reorienting Organizational Support*, edited by Ebrahim, G.J. and Ranken, J.P. London: Macmillan, 1993, p. 4-28.

24. FSPS, COSADI, COSA, Résumé des Statuts, MOPH, July 1993.

25. Mbede, J., et al. *Op. Cit.*

26. Schubert, J. Community and Service Provider Perceptions on the Reorientation of Primary Health Care, October 1991.

27. Schubert, J. Information, Education and Communication: End of Project Report, MSP/SESA, 1993.

28. van der Geer, E.R. and Prats, J. Vaccine coverage in the Noun Department, Cameroon, 1 1/2 year following the 1986-1987 National Vaccination Days. [French]. *Ann.Soc.Belg.Med.Trop.* 72:37-44, 1992.

29. Unger, J.P. Can intensive campaigns dynamize front line health services? The evaluation of an immunization campaign in Thies health district, Senegal. *Soc.Sci.Med.* 32:249-259, 1991.

30. Bodart, C. *Memo of March 25, 1994: MOPH/SESA project assessment*, 1994.

31. Baer, F.C., Lagace, A., Minya, K. and Seyo, T.H. *Evaluation of the Reform of the Health Delivery System (RHDS) project*, 1993.

32. Réunion du Sous-Comité Technique Ad Hoc Pour la Mise en Place du Système Nationale d'Information pour le Management Des Services de Santé, 1993.

33. Field Test of NHMIS Health Centre Report: Notes and Comments, 1993.

34. Final Report: Health Constraints to Rural Production, 1993.

35. Baer, F.C., Ngoumou, P. Evaluation of Health Constraints to Rural Production (HCRP) Phase II, May 1993.

36. Greer, G.J. *Schistosomiasis Control in Cameroon: A Manual for Health Workers*, New Orleans:SPH&TM Tulane Univ., 1993. pp. 1-68.

37. Khan, M.M. *Economic Analysis of Ivermectin Distribution Program in South Province, Cameroon*, 1993.

38. Boyle, P., Burnham, G., Etoa, B.E., Ngoumou, P., Nsom, C. and Oliver, C.W. *Mid-Term Evaluation of the Cameroon River Blindness (Ivermectin Distribution) Program*, Arlington:VBC Project, MSCI, 1993. pp. 1-101.

39. Greene, R. *Project Assistance Completion Report: Cameroon PRITECH Control of Diarrheal Diseases*, 1993.

40. Data for Decision Making Project Workplan, CDC, October 1993.

41. *Rapport de la Revue du Programme de Lutte Contre le SIDA au Cameroon PMT 1990-1992*, 1993.

42. Ciszewski, R.L. and Harvey, P.D. The effect of price increases on contraceptive sales in Bangladesh. *J.Biosoc.Sci.* 26:25-35, 1994.

43. Harvey, P.D. *The correlation between per-capita sales and consumer prices of condoms in 24 social marketing programs*, 1993.

44. *Enquete de suivi aupres de publics*, Ministere de la Santé Publique & Johns Hopkins Univ., 1993.

B. OTHER DOCUMENTS OF INTEREST

AIDS:

AIDSTECH Final Report, Volume I & II. 16 Sept 87 - 15 September 92. Family Health International.

Final Report. Population Services International/Cameroon Condom Social Marketing. January 1, 1993 to September 30, 1993.

Final Report. Cameroon AIDS Prevention Counselling. ULS/Ministère de la Santé Publique/AIDSTECH/FHI. Yaoundé, Dec 1992.

Garcia-Calleja, J.M., Mvondo, J.L., Zekeng, L., Louis, J.P., Trebucq, A., Salla, R., Owona-Essomba, R. and Kaptue, L. A short term projection of HIV infection and AIDS cases in Cameroon. *Trans.R.Soc.Trop.Med.Hyg.* 86:435-437, 1992.

HIV Surveillance Report 1992. AIDS Control Unit, Ministry of Health; November 1992.

HIV.AIDS Surveillance Report 1993. AIDS Control Unit, Ministry of Health.

Programme National de Lutte Contre le SIDA. Deuxième plan à moyen terme (PMT-2) 1994 - 1998. Ministère de la Santé Publique, DMPR/ULS/GTZ.

Rapport de la revue du Programme National de Lutte Contre le SIDA au Cameroun. PMT I 1990-1992. Ministère de la Santé Publique, DMPR/ULS/OMS/GTZ; Mars 1993.

Social Marketing Child Survival VII Project Mid-Term Evaluation. Population Services International; December 1993.

Strategic and Implementation Plan for Cameroon. Family Health International (FHI) AIDSCAP Project; December 1992.

COMMUNITY PARTICIPATION:

Isely, R.B. and Martin, J.F. The village health committee. Starting point for rural development. *WHO Chron.* 31:307-315, 1977.

Jato, M.N., Carriere, J.F., Candy, D. and Jato, J.G. Community participation in rural health care. *Int.Nurs.Rev.* 31:180-1, 183, 1984.

DISEASE CONTROL:

Boyle, P., Burnham, G., Etoa, B.E., Ngoumou, P., Nsom, C. and Oliver, C.W. *Mid-Term Evaluation of the Cameroon River Blindness (Ivermectin Distribution) Program*, Arlington:VBC Project, MSCI, 1993. pp. 1-101.

Green, R. *Project Assistance Completion Report: Cameroon PRITECH Control of Diarrheal Diseases*, 1993.

Enquete sur la Morbidité et la Prise en Charge des Cas de Diarrhée, PRITECH, Nov. 1991.

Greer, G.J. *Technical Assistance to the Guinea Worm Eradication Program in Cameroon (Phases IV and V)*, Arlington:VBC, MSCI, 1992. pp. 1-23.

Ngoumou, P. and Walsh, J.F. *A Manual for Rapid Epidemiological Mapping of Onchocerciasis*, Geneva:WHO, 1993. pp. 1-37.

Prod'hon, J., Boussinesq, M., Fobi, G., Prud'hom, J.M., Enyong, P., Lafleur, C. and Quillevere, D. Control of onchocerciasis with ivermectin: results of a mass campaign in northern Cameroon. [French]. *Bull.World Health Organ.* 69:443-450, 1991.

Ratard, R.C., Kouemeni, L.E., Bessala, M.M., Ndamkou, C.N., Greer, G.J., Spilsbury, J. and Cline, B.L. Human schistosomiasis in Cameroon. I. Distribution of schistosomiasis. *American Journal of Tropical Medicine & Hygiene* 42:561-572, 1990.

Ratard, R.C., Kouemeni, L.E., Bessala, M.M. and Ndamkou, C.N. Estimation of the number of cases of schistosomiasis in a country: the example of Cameroon. *Trans.R.Soc.Trop.Med.Hyg.* 86:274-276, 1992.

Water Supplementation in Exclusively Breastfed Infants Aged 0-6 monhts in Hot and Arid Areas: The Case of Meri-Maroua in Cameroon, PRITECH, Oct. 1991.

DRUG SUPPLY AND COST RECOVERY:

Creation d'une C.A.P.M.E. (Far North Province), Pre-projet, 1993.

Foreit, K.G. and Levine, R.E. *Cost Recovery and User Fees in Family Planning*, Washington, DC:Options: The Futures Group, 1993. pp. 1-20.

Litvack, J. *The Effects of User Fees and Improved Quality on Health Facility Utilization and Household Expenditure: A Field Experiment in the Adamaoua Province of Cameroon*, 1992.
Ogbu, O. and Gallagher, M. Public expenditures and health care in Africa. *Soc.Sci.Med.* 34:615-624, 1992.

Sauerborn, R., Bodart, C. and Owona-Essomba, R. *Provincial Revolving Drug Funds for the Recovery of Recurrent Health Services in Cameroon*, 1993.

Systeme d'Approvissionnement Provincial dans le Cadre de la Reorientation des Soins de Santé au Cameroun: Manuel d'Instructions pour le CAPP, MSP/SESA, Septembre, 1992.

van der Geest, S. The efficiency of inefficiency. Medicine distribution in South Cameroon. *Soc.Sci.Med.* 16:2145-2153, 1982.

van der Geest, S. Propharmacies: a problematic means of drug distribution in rural Cameroon. *Trop.Doct.* 13:9-13, 1983.

FAMILY PLANNING:

Curriculum de Formation en PF Clinique de Base. MSP/DFSM/USAID/INTRAH; Août 1993

Curriculum National de Formation Clinique en SMI/PF; Première Partie - Planification Familiale. DSFM/MSP; Août 1992.

Declaration of the National Population Policy. National Population Commission, Ministry of the Plan and Regional Development, Republic of Cameroon; March 1993.

Politique et Standards des Services de Santé Maternelle et Infantile et Planification Familiale. Direction de la Santé Familiale et Mentale, Ministère de la Santé Publique; Juillet 1993.

Project Paper: Cameroon National Family Health Project (NFHP). USAID/Cameroon; Aug 1991.

Protocoles des Services de Planification Familiale. Direction de la Santé, Ministère de la Santé Publique; Juin 1993.

Technical Report: Institutionalization of the Reproductive Health Training Program in Pre-Service Education and Recommendations for Follow-Up Activities. Cameroon Reproductive Health Program (HRP/CUSS - JHPIEGO); March 1994.

HEALTH MANAGEMENT INFORMATION SYSTEMS:

Bodart, C. Indicateurs pour l'hôpital et Service de Santé du district, Aout 1993.

Bodart, C. Experiences et Perspectives de Mise en Place d'un HMIS dans le Cadre des Activités du MSP/SESA, Atelier HMIS Kribi, Decembre 1991.

Sauerborn, R. Propositions pour un Système d'Information pour le projet SESA, Oct. 1991.

PLANNING AND MANAGEMENT:

Azevedo, M.J., Prater, G.S. and Lantum, D.N. Culture, biomedicine and child mortality in Cameroon. *Soc.Sci.Med.* 32:1341-1349, 1991.

Bafoussam District Hospital Workshop, MSP/GTZ, April 1993.

Mise en Oeuvre du District de Santé de Meiganga, Adamaoua, MSP/SESA, Octobre 1993.

Ngatchou, R.D., Gubry, P. and Ngwe, E. Geographic inequalities in mortality in Cameroon. [French]. *Soc.Sci.Med.* 36:1285-1290, 1993.

Reorientation des Soins de Santé Primaires dans la Province du Sud, MSP/SESA, Oct. 1993.

PROGRAM INTERVENTIONS:

Merlin, M., Josse, R., Josseran, R., Kollo, B. and Kouka-Bemba, D. The expanded vaccination program in Cameroon: status of the intermediate objectives and future prospects. [French]. *Medecine Tropicale* 46:175-179, 1986.

Merlin, M., Josse, R., Josseran, R., Owona-Essomba, R., Ghogomu, A., Sanokho, S. and Kouka Bemba, D. Impact of the African year of vaccination on vaccine coverage in Cameroon. [French]. *Medecine Tropicale* 48:259-261, 1988.

Summary of Cameroon Report on Traditional Healers, PRITECH, July 1990.

TRAINING AND SUPERVISION:

Joseph, S.C. Health manpower for rural primary care. Problems and potentials in relating medical education to rural needs, as illustrated by recent attempts in Wyoming and in Central Africa. *Public Health Reports - Hyattsville* 91:159-163, 1976.

Guide Diagnostique et Therapeutique pour le Centre de Santé, MSP/SESA, Juin 1993.

Methodologie pour la Mise au Point de Grilles de Supervision des Centres de Santé, MSP/SESA, Feb. 1991.

Seminaire de Formation des Equpes d'Arrondissement (Modules I - VIII), MSP/SESA, October 1991.