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TRACKING REPORT ON AID SPONSORED  
PRIMARY HEALTH CARE PROJECTS  
Volume III: Africa  
December 1980

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International Health Programs  
American Public Health Association  
1015 15th Street, NW  
Washington, DC 20005

## PREFACE

The United States Agency for International Development (USAID) is one of the major sources of external support for programs and projects aimed at making basic health services available to the rural poor in developing countries. Currently USAID assists over fifty primary health care (PHC) projects around the world. This report, the third in a series of five, summarizes fifteen such projects Asia. A subsequent volume will report on projects in the Near East, and the final volume will analyze trends and problems across geographic lines. All five volumes will be updated at regular intervals.

These reports will serve several purposes:

- o to give USAID personnel and other interested parties an overview of the agency's PHC activities;
- o to provide the framework for tracking progress and problems as project implementation proceeds;
- o to serve as a briefing document for USAID consultants working in countries where these projects are active;
- o to provide a resource for researchers, students and others wishing to acquaint themselves with current activities in PHC; and
- o to assist USAID staff and others in extracting both positive and negative lessons from USAID's experience that will be useful in planning and implementing future programs and projects.

Besides providing basic descriptions of project plans and actual accomplishments, this third volume analyzes problems and

constraints to project progress by drawing on evaluations, consultant reports, and interviews with persons familiar with each project.

Although the projects differ in many ways, they all train and use auxiliary health workers to extend basic, affordable preventive and curative services to underserved populations. They also integrate health services in such areas as disease control, sanitation, nutrition, and family planning, as opposed to projects that provide services in only one program area.

In an attempt to standardize the presentation of information on the fifteen projects, each one is dealt with under the following headings: 1) standardized identification data on the project; 2) country statistics\* that place the project in the country's socioeconomic/health context; 3) a synopsis of the project's purpose, major activities and perceived progress; 4) background information that places the project within overall country health developments; 5) a project description; 6) an analysis of factors encouraging or hindering project progress; 7) references indicating documents reviewed and persons interviewed; and 8) a checklist of primary health care strategies and services. Checklist notations indicate whether particular strategies or services are a) not planned as part of the project design, b) planned but not yet begun, or c) currently underway. These data will help to measure each project's progress over time, as well as indicate the extent to which the project represents a complete primary health care

| <u>*Statistic</u>                            | <u>Year</u> | <u>Source</u> |
|--|-------------|---------------|
| Total Population (millions of people)        | Mid-1980    | 1             |
| Population Growth Rate (percentage)          | Mid-1980    | 1             |
| Infant Mortality Rate (per 1000 live births) | 1977-1978   | 1             |
| Rural Population (percentage)                | 1980        | 2             |
| GNP Per Capita (in U.S. dollars)             | 1978        | 2             |
| Life Expectancy at Birth (years)             | 1978        | 2             |
| Adult Literacy Rate (percentage)             | 1975        | 2             |

1-1980 World Population Data Sheet, Population Reference Bureau  
 2-World Development Report, 1980, the World Bank

system. Tabulations based on the checklist for each project will appear in the fifth volume of the report that will examine problems encountered in the implementation of PHC projects assisted by USAID.

Since tracking the progress of USAID-assisted PHC projects will be an ongoing activity at the American Public Health Association, the authors welcome comments and new information about these projects.

## CONTENTS

| <u>Project Number</u> | <u>Country</u>                 | <u>Project Name</u>   | <u>Page</u> |
|-----------------------|--------------------------------|---|-------------|
| 615-0179              | Kenya                          | Kibwezi Rural Health Scheme                                       | 1           |
| 615-0185              | Kenya                          | Kitui Primary Health Care   | 17          |
| 621-0138              | Tanzania                       | Hanang Ujamaa Village<br>Public Health Program                    | 26          |
| 621-0150              | Tanzania                       | Tanzania School Health<br>Program                                 | 40          |
| 632-0058              | Lesotho                        | Rural Health Development  | 51          |
| 633-0078              | Botswana                       | Health Services Development                                       | 65          |
| 650-0011              | Sudan                          | Northern Sudan Primary<br>Health Care                             | 77          |
| 650-0019              | Sudan                          | Southern Primary Health<br>Care                                   | 90          |
| 660-0057              | Zaire                          | Health Systems Development  | 100         |
| 676-0002              | Central<br>African<br>Republic | Ouham Province Rural Health                                       | 114         |
| 682-0202              | Mauritania                     | Rural Medical Assistance  | 128         |
| 683-0208<br>0214      | Niger                          | Rural Health Improvement/<br>Basic Health Delivery                | 140         |
| 685-0210              | Senegal                        | Rural Health Services<br>Development                              | 163         |
| 688-0208              | Mali                           | Rural Health Services<br>Development                              | 177         |
| 698-0398              | Central<br>and West<br>Africa  | Strengthening of Health<br>Delivery in Central and<br>West Africa | 190         |

Fall 1980

KENYA

IDENTIFICATION

Project Name  
and Number: Kibwezi Rural Health Scheme,  
Number 615-0179

Location: Makindu District at Kibwezi

Project Dates: FY 1979 - FY 1981

Funding Level  
and Source: USAID: \$815,525  
Association of Swiss Civil  
Servants; Norwegian Church Aid;  
Canadian International Develop-  
ment Agency; Government of Kenya  
(GOK)

Responsible Offices: Bureau for Africa, Office of  
East Africa Affairs,  
AID/Washington  
Health Officer, USAID/Kenya

Contractor: International/African Medical  
Research Foundation, New York  
African Medical Research Founda-  
tion  
Nairobi, Kenya

Implementing Agency: Ministry of Health (MOH)

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## COUNTRY STATISTICS

Total Population: 15.9 million

Rural Population: 86%

Infant Mortality Rate: 83

Population Growth Rate: 3.9%

Life Expectancy at Birth: 53

GNP Per Capita: \$330

Adult Literacy Rate: 40%

## SYNOPSIS

The Kibwezi Rural Health Scheme is an important experimental primary health care project that is intended to be replicated in about 10 other underserved, remote rural areas. In the Kibwezi pilot area, a health center is to be complemented by a system of trained community health workers, supported by a mobile health unit. Construction of the facility at Kibwezi is nearly complete, though almost a year behind schedule. Forty-one community health workers (CHWs) have been selected by their communities and are in training. A baseline survey has been completed and individual villages have identified and prioritized the health needs to be attended by the CHWs and the health system.

The contractor, AMREF, is near completion of several self-teaching manuals for CHWs as part of their highly regarded series of manuals on medical and primary health care. Additionally, the project is pioneering low cost rural electricity production.

## BACKGROUND

Kenya is a country of enormous demographic and ecological contrasts. Population density ranges from severely overcrowded to sparse, the terrain from arid grasslands to rainforest.

About 90% of the people live in rural areas and only about 7% in the two major cities of Nairobi and Mombasa. Medical care is provided by the Government of Kenya (GOK) Ministry of Health (MOH) and by a variety of private voluntary, usually religious, agencies. The doctor-patient ratio in Nairobi is 3,000 to 1, while in some rural areas the ratio is over 250,000 to 1. Twenty-five percent of

the population live more than twelve kilometers from the nearest health facility.

Population pressures together with the politics of land tenure are the two main factors responsible for a migration to urban areas as well as to arid regions of low productivity. Strong tribal boundaries, large foreign agribusiness, and GOK holdings make access to land difficult for those moving away from overcrowded areas. Land can be divided only so many times among sons and grandsons before plots become too small to live on. Kibwezi, however, has some available land, and is receiving migrants from other regions.

While Kenyan per capita income (1978) stood at \$330, for the rural population comprised mostly of small farmers (with land holdings of 1.5 hectares or less), it is about \$111. Almost one third of rural children suffer from some degree of malnutrition, and over half the rural population is under 15 years of age. Scarce water supplies, scattered populations, and poor roads further complicate the challenge of delivering basic health services.

It is the long-term plan of the Government of Kenya to provide health and other services to the very poor 1 million or so people in the arid areas of marginal productive value. The GOK is initiating projects in these areas in order to accommodate the present and future population with needed services, especially in the area of health. Kenya's 1979-83 development plan has evolved slowly from the "growth oriented" plan of 1966, through the "redistribution with growth" approach of 1974, to the "poverty alleviation strategy" of 1979 (according to AID).

The main rural health objectives of the current 5 year plan are to 1) increase health care for rural areas, 2) increase resources for preventive public health care, and 3) increase capacity and quality of staff training at all levels, particularly primary health care workers. The basic goal is to provide

integrated primary health services for about 1 million impoverished people living in remote rural areas.

The Kibwezi Rural Health Scheme has evolved from the long-term commitment of the GO<sup>K</sup> to improve rural health services and from the experience of a variety of previous projects. The Kibwezi project consists of a central in- and outpatient facility that can serve up to 300 people a day, the selection and training of community health workers, the ongoing training of project staff, and a mobile health unit to provide additional preventive and curative services and health education. These services will eventually reach about 100,000 people in an area about 110 miles southwest of Nairobi on the road to Mombassa, the second largest city.

The Kibwezi Project is a model on which a series of rural health centers will be based, thus forming the backbone of Kenya's rural health services. The whole system depends on the community health worker to provide the appropriate preventive and curative health services at a minimum cost.

The contractor is the African Medical Research Foundation. (AMREF). AMREF is the only direct medical service PVO to be founded and is based in a developing nation. Begun over 20 years ago with teams of "flying doctors" serving rural areas, AMREF is a highly professional health service with projects throughout East Africa. These projects operate in close cooperation with the individual national governments' long-term health plans.

#### PROJECT DESCRIPTION

AMREF has been requested by the MOH to assist in the development of an "integrated and comprehensive rural health service system for the Makindu Division of Kenya at Kibwezi."

Major activities planned for the first two years (1978-1980) include:

- 1) Baseline surveys.
- 2) Meetings with local village leaders on the concept of primary health care, and the role of community health workers.
- 3) Construction of a health center to serve as the referral and supervisory base facility.
- 4) Refresher training for staff at existing rural health facilities in the area, including briefings on the Kibwezi Rural Health Scheme and its implications for health workers in Makindu Division, especially regarding their relationship to CHWs.
- 5) Training of 40 CHWs selected by their communities. Training is developed in close cooperation with each community to be served.
- 6) Post-basic training, supervision, and support.
- 7) Health care self-teaching manuals produced and distributed by AMREF for health staff CHWs, and other health professionals and students. This is being undertaken in response to the generally limited availability of appropriate texts, manuals, and journals for health auxiliaries. Twelve manuals (4 annually) are programmed for the OPG with 1000 free copies distributed to training schools in Kenya and Tanzania. Further distribution for near cost through bookstores and "textbook centres" will make this part of the project ongoing and self-financing. Four planned titles include: Rural Health Service Planning and Administration, Mobile Medicine, Continuing Education Training Programs for Rural Health Workers and

Community Health Worker Manual for Kenya. Three manuals (one annually) will be translated into Swahili and 1000 distributed free to training schools. Two AMREF health journals, AFYA and DEFENDER, will also be produced and distributed.

- 8) Detailed cost accounting records as a part of evaluation process, to determine replication value of the project.
- 9) A standard mobile health unit working with CHWs will provide the link for the promotion of health services on an area wide basis. Activities will include sanitation, health education, water supply matters, immunizations, family planning, health education for teachers, and supervision of CHWs.

Construction of the health center and staff housing is nearly completed. Several staff members have moved in, and some out-patient services have begun.

Two one-day refresher training seminars were held in 1979 for staff at existing health facilities in the Kibwezi area. The first involved 15 people, the second 39, including some "non-medical" assistant chiefs, teachers, and others. Similar seminars have been held in 1980.

During the last half of 1979 and 1980, AMREF staff visited villages and met with leaders and committees to discuss the concept of primary health care and the role of the community health worker. Though the CHW is to initially be a volunteer, it is assumed that at some point the community will take responsibility for remuneration. The first step is the formation of a village health committee (VHC) which has a specific set of duties that include assisting in the construction of a "village health post" (which is usually adjoining or near the home of the CHW), coordinating the selection and supervision of the CHW, promoting the program, and

providing necessary logistical support.

A baseline survey of the health status in the target area has been completed, as well as several steps to determine the community "felt needs" that the CHW could help meet. While the formal CHW job description is quite detailed, each village situation is expected to vary considerably. Generally, however, CHW activities will consist of 1) preventive, rehabilitative, and health promotional activities, 2) curative activities, and 3) administrative duties such as maintaining patient and drug records.

CHWs are to receive training in such areas as 1) personal and community hygiene; 2) environmental sanitation (relevant practical skills); 3) methods of digging wells, building dams, and water catchments; 4) simple diagnosis; 5) MCH/FP methods; 6) simple record keeping; 7) understanding the local health network, available communications, and the referral system; 8) communicable disease control; 9) nutrition education and better farming methods; 10) simple methods of individual and group communication; and 11) how to know one's limitations and educate oneself.

The training schedule is to be flexible to assure that each trainee masters the basic course content. Because of seasonal and personal interruptions, it was anticipated that the actual training might vary for each individual.

AMREF considers supervision of CHWs by the Kibwezi staff to be very important: it should "therefore be continuous and reliable." However, great care is to be exercised in avoiding authoritarian relationships by fostering a teaching and participation role that might even involve living periodically in a given village. The village health committee is also envisioned as playing an unspecified "supervisory back-up" role. However, the main function of the Kibwezi supervision is to check on the health problems of the area and strengthen the relationship between the CHW and the local development agencies.

As of September 1980, the training of 41 CHWs was well underway "with no dropouts." The types of trainees range from traditional healers and midwives to older male farmers who are respected members of their communities. Some are illiterate, which introduces special problems in teaching. The group varies from "late 40's to early 20's," and "about half" are women.

Remuneration was left open in hopes of finding appropriate forms of ongoing community financing. Since the underlying program philosophy is that "the community must accept responsibility for the program at the outset" the understanding was clear that while CHWs initially worked voluntarily some form of remuneration must evolve. AMREF believed that given adequate interest, enthusiasm, and commitment on the part of the villagers, the program could work. The response has initially been good. For example, one village said that it was ready to provide land, bricks, and labor for the village health post and build a house for the CHW as well. AMREF reports that once explained, the concept of PHC has been accepted with enthusiasm.

### ANAYLSIS

Given the importance of the Kibwezi project to the overall rural health plan of Kenya, all parties are paying close attention to what is happening there. What is learned there will be of great value throughout East Africa and elsewhere. It is also a very visible project for AMREF.

It is important to understand the close working relationship between AMREF and the MOH. The MOH operates most of the health facilities in the country, and is actively working to increase cooperation and planning with voluntary and church projects and hospitals in order to minimize conflicts and overlap of services. Moreover, the MOH gives AMREF about \$80,000 per year for various medical services and training workshops around the country. Also, the AMREF medical director is a former MOH official. Under this

close MOH oversight, AMREF has responsibility for project implementation, including hiring subcontractors. However, even here the MOH plays an integral role, since it is AMREF's responsibility to train native Kenyans to take over the project when the MOH assumes day-to-day implementation and financial responsibilities.

With replication in mind, great care seems to be taken to make the two main components of the system as efficient and low cost as possible. These two features are the health facility itself and the selection and training of CHWs.

Great attention to detail is being taken in the health center building design. For example, in cooperation with the electrical subcontractor, Timpex International, AMREF is trying to reduce Kibwezi's electrical requirements, particularly at staff residences, where "electrical cookers" and refrigerators were eliminated because of the projected high fuel costs for the diesel generator. Also, outpatient and inpatient lighting loaders were reviewed by Timpex, and found to provide higher "lumen output" than needed.

Additionally, in September 1980 a contract was signed between USAID, NASA, and AMREF, to build a supplementary photovoltaic solar system which will transform sunlight directly into electricity for the Kibwezi project. The solar electricity will power a two way radio and some outpatient electrical needs. This is the first in a planned series of USAID financed rural solar pilot projects. The underlying philosophy of the AID program is to provide electric power to rural areas that could not otherwise afford it.

This form of power generation is particularly appropriate for remote areas beyond central power grids. Such locations are often dependent on diesel generators which, because of increasingly prohibitive fuel costs, and the relative inaccessibility of maintenance services and spare parts, constitute a costly and unde-

pendable power source. A NASA consultant believes that "a system of photovoltaics can be competitive and very efficient," and that photovoltaic systems like the one planned for Kibwezi would be appropriate not only for health centers but also for rural schools and cottage industry, particularly in the tropics.

AID selected Kibwezi as a pilot project site not only because of its accessibility and visibility (as a future major training center for rural health personnel in Kenya), but also because of the enthusiasm and support of the AMREF management for evaluating alternative energy sources to replace high cost diesel electricity.

Great attention has also been given to the community health worker component of the project, and considerable efforts were made to involve the community in a meaningful, empowering way. Nevertheless, AMREF reported in March 1980 that unforeseen construction delays\* gave them "more time to establish and develop a relationship with the local community which will benefit the project long-term." This occurrence constituted a fortuitous realization of the need for even more preliminary community organizing than had been planned.

The Kibwezi project evolved out of experiences of a number of projects carried out during the past 5 years, and embodies AMREF's general project philosophy. The two main points are: "We should never create anything that cannot be locally self-sustaining and replicable elsewhere," and that CHWs "are only as useful and competent as their training permits them to be."

Although only limited information is available on the status of the CHW program, information at hand indicates the kind of process AMREF used to develop the CHW system. AMREF's approach can be seen from the following examples.

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\*The construction delay was caused by the construction subcontractor stopping work midway, when he realized he was losing money. AMREF had to go to court to pressure him to complete the construction.

In its first organizing effort in Kai cluster (a cluster consists of about 2,000-4,000 people living in about 400 houses), AMREF conducted a baseline survey of organized community involvement in a typical project area. Kai was chosen largely because it was the most effectively organized cluster in the area, with a history of participation in development programs (including self-help construction of schools, roads, and wells), which AMREF considers examples of crucial community response necessary for the success of a primary health care program.

Kai has 16 self-help groups working on a variety of projects including handicrafts, a cotton farm, and pit latrines. The self-help groups assisted in identifying Kai's main health problems, and were introduced to the concept of primary health care, which "took time and numerous meetings." In the case of Kai, the people felt that a village health committee would be unnecessary since the self-help groups could serve that function. Then the villagers were delegated the responsibility of selecting the CHW with guidance from AMREF, which stressed that the CHW not be selected by just a few community leaders.

The result of the self-help group's meeting was a list of criteria on which selection would be based, all of which fall in details within the broader definition of the CHW, as presented by AMREF. For example, the candidate had to be a responsible adult capable of working independently with limited supervision. Each had to be a volunteer, willing to sacrifice personal work for the community's work, and ready to offer services even at night if called upon. In some groups, mobility was one criterion, including readiness to cover great distance without complaining," and "in some cases selection was extended to nursery school teachers and adult education teachers."

AMREF reports that 3 major issues were repeatedly raised during the community meetings:

- (1) Payments for CHWs. This matter was deferred for a later date after the final selection. Since one year has passed since these meetings, and training is still in progress, this problem has presumably been resolved.
- (2) Educational requirements for CHWs. There was often a heated discussion as to whether education should be an overriding criterion, because many people were reluctant to exclude the invaluable services of illiterate traditional birth attendants. As it turned out, several of the trainees are, in fact, illiterate, which reportedly has presented special training problems.
- (3) CHWs' expectations. Before accepting selection, candidates were warned against expecting to be delivering a variety of services in a short time period, since a new project was expected to suffer from implementation delays. These issues were discussed to avoid frustration, discouragement, and subsequent antagonism towards the project.

AMREF planned to follow up this community participation process with further discussions on primary health care, obtaining input from community leaders at local meetings (barazas) on methods that might be useful in teaching CHWs, and providing training on community relations and ongoing data collection to the CHWs.

One long-term result of this process, for Kibwezi, Kenya, and much of East Africa, is a manual for training community health workers, based in large part on the Kibwezi experience. The manual is now written and is being translated from English into both the local language (Kikamba) and Swahili. Other manuals in the series will have similar distribution and long-term value to health workers.

What is perhaps most distinctive about the Kibwezi project is the strong sense of it being a project by and for the people of Kenya. Even though AMREF has many expatriates on its staff, it is clear that they are committed to East Africa, and that in the past 20 years they have developed a close working relationship with the GOK. This relationship contrasts with that of many PVOs not founded and headquartered in the area they serve. Both the GOK and AMREF were committed to training and using native personnel wherever possible in the Kibwezi project. This is wholly consistent with the "grassroots development" of a primary health care system, based on community-selected CHWs. Planners of similar projects should be aware of the motivating, empowering process that AMREF views as key to essential community participation. AMREF espouses the view that effective, appropriate, and ongoing community organizing may be the measure, if not the main determinant, of a successful preventive health program.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>3</u>                 |
| 4. emphasis on role of women                        | <u>1</u>                 |
| 5. significant community financing                  | <u>2</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>4</u>                 |
| 2. logistic support                                 | <u>3</u>                 |
| 3. increasing food production                       | <u>3</u>                 |
| 4. generate increased family income                 | <u>4</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>3</u>                 |
| 3. home visits                                      | <u>4</u>                 |
| 4. mobile units                                     | <u>3</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>3</u>                 |
| 2. project intended to be replicated                | <u>3</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>4</u>                 |
| 7. efforts to recruit women                         | <u>4</u>                 |
| F. Emphasis on prevention over curative care        | <u>3</u>                 |
| G. Use of appropriate technology                    | <u>3</u>                 |

## PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>3</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>1</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>1</u>                 |
| 4. oral rehydration (specify type) _____   | <u>4</u>                 |
| 5. nutritional status monitoring   | <u>4</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>2</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>2</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>4</u>                 |
| 2. well baby care  | <u>4</u>                 |
| 3. train traditional birth attendants  | <u>3</u>                 |
| 4. family planning education   | <u>3</u>                 |
| 5. distribute contraceptives   | <u>4</u>                 |
| 6. surgical family planning procedures   | <u>4</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>4</u>                 |
| 2. cold chain support  | <u>4</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>2</u>                 |
| 2. malaria vector control  | <u>2</u>                 |
| 3. other vector control  | <u>2</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>2</u>                 |
| 2. referral system   | <u>2</u>                 |
| 3. drugs dispensed by health workers   | <u>2</u>                 |
| 4. use of traditional practitioners  | <u>2</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>2</u>                 |

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- USAID Operational Program Grant Proposal, June 1978.

Fall 1980

KENYA

IDENTIFICATION

|                              |   |
|------------------------------|---|
| Project Name<br>and Number:  | Kitui Primary Health Care<br>Project, Number 615-0185   |
| Location:                    | Kitui District  |
| Project Dates                | FY 1979 - FY 1981   |
| Funding Level<br>and Source: | USAID: \$413,000<br>Government of<br>Kenya: \$275,000   |
| Responsible Offices:         | Bureau for Africa, Office of<br>East Africa Affairs,<br>AID/Washington<br><br>Health Officer, USAID/Kenya   |
| Contractor:                  | CODEL (Coordination in Develop-<br>ment), provides direct medical<br>services, trains community health<br>workers and midwives, and<br>conducts ongoing evaluation and<br>data collection |
| Implementing Agencies:       | Ministry of Health  |

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 15.9 million

Rural Population: 86%

Infant Mortality Rate: 83

Population Growth Rate: 3.9%

Life Expectancy at Birth: 53

GNP Per Capita: \$330

Adult Literacy Rate: 40%

## SYNOPSIS

The Kitui Primary Health Care Project is comprised of 4 mobile health units that serve remote rural areas of the Kitui District of Kenya. Antenatal care, immunizations, and simple curative treatment are the main tasks of the health teams. They also are involved in health education and some training of community health workers and midwives. Except for periods of heavy rains, which make some roads impassible, the mobile health units are now all functioning. It appears, however, that curative services are taking precedence over preventive measures, although only two of the mobile units have been operating long enough to be evaluated.

## BACKGROUND\*

In conjunction with the GOK's goal of providing basic health services to about 1 million people living in rural areas, the Kitui Primary Health Care Project was initiated in 1977 by the Catholic Diocese of Kitui in cooperation with the MOH and community leaders. Kitui District is a rural area 50 miles west of Nairobi. The project was initiated following 1 1/2 years of CRS-supported drought intervention, which had succeeded in establishing contact with large numbers of mothers and children through food distribution schemes.

\*Please refer to the previous project summary for more detailed background information on Kenya.

CODEL (Coordination in Development) is the contractor with exclusive responsibility for the project. CODEL is a coalition of about 50 (most religious) organizations in the United States. CODEL plans and implements development projects in those countries classified as "least developed" and "most seriously affected" by the United Nations. Of the 139 projects supported by CODEL in 1978-79, 15 were located in Kenya.

### PROJECT DESCRIPTION

The Kitui Project intends to provide health care to the people of Kitui District not presently served by existing government or mission medical facilities. Four mobile health units visit village centers, usually on market days, to provide immunizations, antenatal care, and simple curative treatment. The teams, headed by a registered nurse, consist of 6 midwives and students or assistants. Health education workshops are held during the village visits. Special training sessions are held for rural women for 5 days a month in a plan to providing remote areas with "health experts." Fever, wounds, worms, diarrhea, vomiting, hygiene, anemia, and other common problems are the focus, along with training in health education. CODEL reports that as of late 1979 a number of Mumoto women "already...are looked upon in their areas as people with medical knowledge, and their advice is sought."

Regular village health education classes cover nutrition (including demonstrations of weaning diets, since gastroenteritis is a serious problem), food sanitation, and environmental sanitation. Family planning appears to be limited to the rhythm method. Maternal and child health are also emphasized.

The four areas of the district presently covered by mobile units are Mumoto, Kimarigao, Muthale, and Mutito. The Mumoto team visits 16 sites per month and spends 4 days in the field, one day for preparation and maintenance of records, drugs, and the other three for providing services. The Mumoto team has been operating

since 1975 in pilot and pre-pilot stages of the present organization.

The Kimarigao Team began with 8 site visits in July 1979 and increased these to 14 by December. CODEL reported in December 1979 that "the list of clinics is still on an experimental basis, and may have to be changed, depending on the response of the people."

The Muthale Team began in December 1979 with recruitment of staff, and program publicity that included letters to chiefs and subchiefs, and public explanations given at tribal meetings. CODEL reports the response to be "enthusiastic."

The Mutito Team was scheduled to begin in January 1980; however, no information is available yet on its activities.

The project is keeping careful records of patients treated and has compiled statistics on the two most active units. These data indicate, for example, that between July and December 1979, 10,291 immunizations were administered to children and pregnant women in Mumoto and 5,144 in Kimangao. Immunizations included smallpox, BCG, DPT, oral polio, and measles for children, and tetanus toxoid for pregnant women. The project continues to face problems in obtaining vaccine supplies. In February, March, and April, DPT was in very short supply, and polio vaccine was not available from March to June. A countrywide shortage of both vaccines existed from July through September, which affected supplies available from the Kitui District Hospital.

Major project outputs include immunizations; curative care and referral, antenatal care, health education, training of community health workers and midwives, evaluation of records, and surveys to determine the impact and appropriateness of the project design.

## ANALYSIS

CODEL, in cooperation with the MOH, is responsible for the ongoing development and evaluation of the project. Medical students from Nairobi conducted a comprehensive baseline survey of the Mutomo area during the early stages of the project; however, the extent to which project staff have utilized the voluminous information derived from the study is unclear. Judging from MOH experience elsewhere, it is clear that constant feedback on community attitudes toward health services provides the most effective and inexpensive methods of influencing hygiene, nutrition and sanitation practices. Such studies are thus crucial to the development of a rural health delivery system. Yearly follow-up studies are planned during the life of the project, to be supplemented by clinic records kept by the staff on inputs and immediate outputs, as well as by more informal information from day to day staff experiences with mothers.

From the limited information available, it appears that the project is progressing well. Nevertheless, various problems have emerged.

Little information is available on the health education program, except a statement in a semiannual report that the content and teaching methodology may not be the most appropriate. Project reports also indicate some difficulties with the family planning component of the health education classes. There seems to be some reluctance to present the range of birth control and child spacing options. Considering that it is a project initiated by the Catholic Diocese of Kitui, it is not surprising that it stresses the natural method of family planning and the Billinger Ovulation Method.

Though health education is helpful, it is clear that organizing the community to initiate actual preventive measures is beyond the project's capability. The project director, for example indicated that the staff can only "hope" that some of the local

leaders to become local "health experts" is going well. However, available reports provide little information to substantiate this. The information on training content and methodology suggests that there may be problems. CODEL reports that "a simple syllabus on basic health, which was drawn up as felt needs in the training of these women, had to be abandoned as not being relevant." There are also indications that the training program was not able to cover all the topics in the time allocated.

The activities of the volunteer health experts in remote areas should probably be re-examined given the curative emphasis of what is known about the training, and the MOH's preventive primary care priority.

CODEL also reports that the Provincial Medical Team visited "and expressed their support and encouragement for this type of training." Following this, the Kitui District Hospital began training sessions for traditional midwives, and asked the team leader for assistance. CODEL views this as an encouraging step toward integration, which is crucial since the MOH will take over operation of the project at the end of the grant. At present, no information is available in the U.S. on plans to train new team leaders or on the old teams' staying under MOH direction.

Though a thorough assessment of what is happening in Kitui may not be possible until the formal evaluation takes place in November 1980, it is evident that the Kitui project is laying the groundwork for a rural health system in the province.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>4</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>3</u>                 |
| 4. emphasis on role of women                        | <u>3</u>                 |
| 5. significant community financing                  | <u>1</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>3</u>                 |
| 2. logistic support                                 | <u>3</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>4</u>                 |
| 3. home visits                                      | <u>1</u>                 |
| 4. mobile units                                     | <u>3</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>1</u>                 |
| 2. project intended to be replicated                | <u>3</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>1</u>                 |
| 3. inservice training                               | <u>1</u>                 |
| 4. management training                              | <u>1</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>1</u>                 |
| 7. efforts to recruit women                         | <u>3</u>                 |
| F. Emphasis on prevention over curative care        | <u>4</u>                 |
| G. Use of appropriate technology                    | <u>1</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>3</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>3</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>4</u>                 |
| 4. oral rehydration (specify type) _____   | <u>4</u>                 |
| 5. nutritional status monitoring   | <u>1</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>1</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>1</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>4</u>                 |
| 2. well baby care  | <u>4</u>                 |
| 3. train traditional birth attendants  | <u>3</u>                 |
| 4. family planning education   | <u>3</u>                 |
| 5. distribute contraceptives   | <u>1</u>                 |
| 6. surgical family planning procedures   | <u>1</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>3</u>                 |
| 2. cold chain support  | <u>4</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>4</u>                 |
| 2. malaria vector control  | <u>1</u>                 |
| 3. other vector control  | <u>1</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>3</u>                 |
| 5. use of folk treatments  | <u>2</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

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A Monitoring and Evaluation System for the Kitui Primary Health Care Program, undated, unsigned.

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Interview with Sr. Margaret Rogers, Coordinator, Africa Division, CODEL, New York City, September 1980.

Kitui Primary Health Care Project, Semi-Annual Report, February-July 1979.

Semi-Annual Report, July-December 1979.

Survey of Innovative Practices in Low Cost Health Delivery Systems in Developing Countries, American Public Health Association, 1979.

Fall 1980

TANZANIA II

IDENTIFICATION

Project Name  
and Number: Hanang Ujamaa Village Public  
Health Program, Number 621-0138

Location: Hanang District

Project Dates: FY 1977 - 1979

Funding Level  
and Source: Grant: \$499,000

Responsible Offices: Bureau for Africa, Office of  
East Africa Affairs,  
AID/Washington

Health Officer, USAID/Tanzania

Contractor: CODEL (New York City)  
Development Associates, Inc.;  
data collection system

Implementing Agencies: Project Director - Dr. Martha  
Collin, CODEL/Tanzania

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 18.6 million

Rural Population: 88%

Infant Mortality Rate: 125

Population Growth Rate: 3.1%

Life Expectancy at Birth: 51

GNP Per Capita: \$230

Adult Literacy Rate: 66%

## SYNOPSIS

This model primary health care project focuses on village organization to support first aid boxes, village leaders (health educators), and village health workers. The project is supported by the MOH infrastructure of dispensaries, hospitals, and personnel. A management information system has helped monitor project progress since a 1977 baseline survey. The project has been fully operational since early 1980 when the first VHWs were posted.

## BACKGROUND

The United Republic of Tanzania's approach to meeting the health needs of its population must be considered in the light of constraints imposed by its lack of financial resources and manpower. Tanzania is one of the 25 countries with the lowest per capita gross national product in the world. Also, the country emerged from colonialism with a minimal health infrastructure on which to build.

Tanzania has a land mass of approximately 1 million square kilometers. Much of the country is dry; large areas are covered by scrub and grassland, except in the region surrounding Mount Kilimanjaro where rainfall is good. The people are agropastoral, with 88% of the sparse population living in rural areas. As in

most developing countries, reliable statistics about disease patterns are not available.

Given the prevailing economic, social, and technological conditions, there was a clear need for a national will to bring about a change. This will was enunciated the 1967 Arusha Declaration, which forms the basis of Tanzania's current health policy. Health has to be viewed within the framework of this national socioeconomic plan, with the main emphasis on rural development. The Arusha Declaration calls for:

- Overall rural development.
- Government mobilization of all resources for eliminating poverty, ignorance, and disease.
- Active participation by the government in forming and maintaining cooperative organizations.
- A contribution from the people (self-reliance) as an instrument for self-liberation and social development.
- People, land, good policies, and good leadership as prerequisites of development.

It was decided to decentralize the planning machinery so that the people themselves could participate in the formulation of plans that would change their socioeconomic status. To this end, planning committees were established in each village, ward, and district, with the National Ministry of Economic Planning setting the broad outlines of national planning priorities and strategy. However, significant government efforts began only in 1972/73, when about 70% of the budget was devoted to rural development. International organizations and other donor agencies have played a

part in implementing the government's objective of rural development, but "cooperation and not poisoned aid" remains the national theme.

The national socioeconomic plan aims at developing an integrated basic health infrastructure that will be acceptable and accessible to most of the population within Tanzania's social, economic, and cultural framework at the lowest possible cost. Other components of rural development to be given prominence include the provision of safe water and free primary health care for all. Health services plans have been formulated at different levels and coordinated with national development plans, in which the promotion and restoration of the population's health are guiding principles.

In accordance with the Arusha Declaration, self-reliance was stressed. Local contributions in cash and kind were encouraged, giving the population an important role in the establishment of social services and necessary facilities. Mass mobilization was used to enhance the people's social consciousness as well as for health education.

To make it easier to provide essential social services, people in rural areas were encouraged to regroup in larger villages called Ujamaa villages. This regroupment tends to minimize the worst problems of planning for sparsely populated communities, achieving a wider coverage of the population more easily. To make self-reliance a reality, village health posts and dispensaries are constructed by the villagers themselves, the government providing the necessary materials, equipment, and services not obtainable locally. The villagers also participate in constructing their water supply systems and are encouraged to build their own pit latrines and rubbish dumps.

Hanang District was formerly a subdivision of Moulou District (to the north), but in 1970 it was designated a separate district.

This new administrative unit is approximately 3,300 square miles in size with a population of about 200,000 people. The district lies within the Rift Valley with altitudes in general ranging from 3,500 to 5,000 feet, although Mt. Hanang rises to over 11,000 feet. It is generally a good farming area with adequate soils and sufficient rainfall during most years. Major crops are maize, beans, and wheat. There are also extensive livestock holdings.

In general, roads are very poor and travel is slow and uncertain, particularly in the rainy season. The district is divided into divisions, divisions into wards, with several villages in each ward. Villages are further divided into ten house groupings.

The largest medical facility in the district is the Dareda Mission Hospital which has recently become the Designated District Hospital. In addition to this major facility, there are three health centers and 22 dispensaries, of which 15 are government, five are operated by voluntary agencies, and two are parastatal owned. Health in the district is no better or worse than in most areas of Tanzania. Even though in most years the food crops are adequate, malnutrition (kwashiorkor and marasmus) is prevalent, particularly among children.

Tuberculosis is widespread and sleeping sickness (treated at the Magugu Health Center) is found in the district. Leprosy appears to be declining. Other prevalent diseases include malaria, measles, schistosomiasis, gastroenteritis, infestations of hookworm and ascaris, pneumonia, and acute rheumatic fever with or without carditis in adolescents. At the present time, there is little public health or preventive medicine work being done in the district, although there is an under five clinic held at Dareda Designated District Hospital. To remedy this situation, a key element of the Hanang project will be greater emphasis on 1) nutrition, 2) health education, 3) inoculations of children, and 4) family planning.

## PROJECT DESCRIPTION

The Hanang District Health Project has been designed to contribute to the national health development effort by providing a model integrated primary health care delivery system. The development of health manpower training methods and of a management information system are expected to strengthen national capability to implement larger projects. The project intends to involve villagers and their local leaders in cooperative undertakings to improve their health and environment, particularly through preventive measures. Thus, the project focuses on responsible decision-making by villagers and implementation of resulting health related activities. Through activities carried out by villagers, the project aims to reduce the incidence of infectious and other preventable diseases such as tuberculosis, malnutrition, measles, bilharzia, eye diseases, and parasitic diseases. Villagers are being trained to provide family planning information and services, collect health data, provide health education, and address food, water supply, and sanitation problems. The project works towards its objectives through the following methods:

### I. Training Village Health Workers (VHWs)

Trainers of village health workers have been trained in health, animal husbandry, and farming. One male and one female worker have been selected from each village. These individuals carry out a baseline survey in each village to identify problems perceived by the villagers. These surveys, conducted thus far in 32 villages, point to contaminated water as a major source of illness, especially in children under 10.

Once trained, VHWs return to their villages to train others. There are 48 villages in the project from which 97 VHWs are being trained. To date, 87 persons have been trained for 10 months, and 30 are currently in training. VHWs are supported

by their villages during the training period in Babuti, the district capital.

Training village health leaders is taking place in each of the 48 participating villages. Candidates were elected by the villagers. Their village training enables them to serve under the supervision of the village health worker at the health unit level. Their role is to carry out health education activities in village households. This worker is called a health communicator or promoter in other projects.

## II. Baseline Data Collection and Analysis System

A subcontractor (Development Associates, Inc.) has designed an elaborate health services information system. This system permits project managers to monitor disease incidence, service utilization, nutrition status, environmental improvements, birth and death registration, etc.

This information can be compared to the baseline survey done in 1977, which covered vital statistics, nutrition, environmental sanitation, health services, and health status.

Village health workers and leaders are trained to collect data using forms developed by the contractor. The system permits the project to identify and monitor the nutritional system of children up to 10 years of age. Data analysis is then fed back to village leaders and health committees and to district health personnel for action. Data collected are transferred to magnetic tape for automatic data processing by the Development Associates, Inc.

### III. Health Delivery System

Each village is to have a health unit equipped with a first aid box. This box is established and replenished at the village's expense. However, due to fiscal constraints only 9 villages have been able to purchase first aid boxes.

MCH clinics have been established in 11 villages. The staff comes from nearby health facilities. Lack of manpower and limited transport have prevented opening more such clinics.

#### CURRENT PROJECT STATUS

##### OUTPUT I -- Training

|                                     | <u>Target</u> | <u>Current</u> |
|-------------------------------------|---------------|----------------|
| A. Village health workers completed | 127           | 87             |
| B. Village health leaders           | 48            | 43             |

##### OUTPUT II -- Data System

|  |                |
|--|----------------|
| A. Baseline survey   | Completed 1978 |
| B. Management information systems designed and operational | Completed 1979 |
| C. Training of health workers to collect data              | Completed 1979 |
| D. Distribution of information                             | Routine        |

### OUTPUT III -- Health Delivery System

|  |    |    |
|--|----|----|
| A. Village health committee                                | 48 | 43 |
| B. MCH clinic established                                  | 11 | 11 |
| C. First aid boxes   | 15 | 9  |
| D. Health education classes and demonstrations in villages |    |    |
| E. Construction of:  |    |    |
| Latrines   |    |    |
| Garbage pits   |    |    |
| Water protection   |    |    |

### ANALYSIS

Because of the lack of training for management personnel and because of the complicated nature of data system, the project remains very dependent on outside technical assistance. The contractor (CODEL) works with the Ministry of Health in planning and implementing the project. The project director, a CODEL employee, apparently assumes full management responsibility. The district health officer is the titular local project director. However, his role is unclear. Since there is no health planning/management training program for Tanzanian counterparts, it is questionable whether the project will continue without expatriate direction.

The data system is reported to be so sophisticated that long term expatriate technical support will be required to keep it in operation. External evaluations done in 1979 and 1980 noted the project's progress and recommended extending the support through 1981.

The reports indicated that efforts to organize villages around the primary health care program have met with varying success. Of the 110 target villages, only 43 are actively participating in the project. The village organizations--i.e. health committees, were considered active in only five.

The effectiveness of involving village leadership in the early stages of the project has been limited. In many villages, leaders discontinue their participation in the training program. Other leaders indicated that health was not a high priority issue. However, as the project staff have become more proficient at identifying the political structure of villages, they have selected better candidates for health leader positions, and they have been better able to involve residents in project activities.

The VHW training program has required considerable revision in order to meet the challenge of transferring technical and conceptual knowledge to illiterate village residents. Training of village health workers was lengthened from two months to ten months. It is not clear from the evaluation reports whether the curriculum continues to include agriculture and animal husbandry as well as health. As originally proposed, no evaluation was made of VHWs' performance as of April 1980. The accountability of VHWs to their villages has been well accepted and village committee secretaries have been named to monitor the VHWs' work.

Every 2 months a project health supervisor makes regular week-long visits. This contact provides the opportunity for continuing education and moral support for VHWs. It also reinvigorates village committee activities that have slacked off. District health officials also visit the villages. These visits should help familiarize MOH personnel with the project and facilitate takeover.

The requirement that villages establish and maintain a first aid box has caused problems. Many villages apparently have not been able to raise funds due either to lack of income or lack of interest. The continuing maintenance and management of the health unit will require strong community leadership and MOH technical support. Lack of adequate financial support is also hampering project supervisory efforts. The high cost of transportation is reducing the use of project vehicles.

Much of the project's success depends on the staff's ability to encourage maximum community participation. The current approach--i.e. using VHWs as community organizers--may answer the need for committed leadership. The fact that each village has both a male and a female VHW should encourage all residents to be active in this primary health care scheme. If the community participation aspect of the project can be made to work as well as the delivery of health care services, this project could serve as a model for the entire country. Thus far, however, it has been difficult to learn how to train community residents to take leadership roles in health for their communities.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>3</u>                 |
| 4. emphasis on role of women                        | <u>3</u>                 |
| 5. significant community financing                  | <u>3</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>3</u>                 |
| 2. logistic support                                 | <u>4</u>                 |
| 3. increasing food production                       | <u>3</u>                 |
| 4. generate increased family income                 | <u>3</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>4</u>                 |
| 2. minimize cultural barriers to services           | <u>4</u>                 |
| 3. home visits                                      | <u>4</u>                 |
| 4. mobile units                                     | <u>3</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>4</u>                 |
| 2. project intended to be replicated                | <u>3</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>4</u>                 |
| 3. inservice training                               | <u>4</u>                 |
| 4. management training                              | <u>4</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>4</u>                 |
| 7. efforts to recruit women                         | <u>3</u>                 |
| F. Emphasis on prevention over curative care        | <u>3</u>                 |
| G. Use of appropriate technology                    | <u>4</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>3</u>                 |
| 3. mass media health education   | <u>4</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>4</u>                 |
| 2. promote breastfeeding   | <u>4</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>4</u>                 |
| 4. oral rehydration (specify type) _____   | <u>4</u>                 |
| 5. nutritional status monitoring   | <u>3</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>3</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>3</u>                 |
| 2. well baby care  | <u>3</u>                 |
| 3. train traditional birth attendants  | <u>4</u>                 |
| 4. family planning education   | <u>3</u>                 |
| 5. distribute contraceptives   | <u>4</u>                 |
| 6. surgical family planning procedures   | <u>4</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>4</u>                 |
| 2. cold chain support  | <u>4</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>4</u>                 |
| 2. malaria vector control  | <u>4</u>                 |
| 3. other vector control  | <u>4</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>4</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

## REFERENCES

Project paper, 1976.

CODEL Project's Review, October 1980, CODEL, New York.

Project Evaluation Summary, March 16, 1979.

Rev. Boyd Lowry, Director of CODEL; telephone interview.

TANZANIA

IDENTIFICATION

Project Name  
and Number: Tanzania School Health Program,  
Number 621-0150

Location: Dodoma and Singida States

Project Dates: FY 1980 - FY 1983

Funding Level  
and Source: USAID: \$5.7 million

Responsible Offices: Bureau for Africa, Office of  
East Africa Affairs,  
AID/Washington

Health Officer, USAID/Tanzania

Contractor: Joyce Kimangano, MOH/Tanzania  
Ildefons Lupanga, Ministry of  
Education/Tanzania

Implementing Agencies: School Health Officers of Dodoma  
and Singida

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 18.6 million

Rural Population: 88%

Infant Mortality Rate: 125

Population Growth Rate: 3.1%

Life Expectancy at Birth: 51

GNP Per Capita: \$230

Adult Literacy Rate: 66%

## SYNOPSIS

Starting in 1980, eighty Tanzanian schools in Dodoma and Singida states are establishing a standardized program of health instruction, health services, and nutrition and environmental improvements. Teachers and students will provide primary health care services to their communities. Schools will receive support for water systems, latrines, and farms. If successful, the project may be copied in other regions of the country.

## BACKGROUND

The United Republic of Tanzania has a land mass of approximately 1 million square kilometers. Much of the country is dry; large areas are covered by scrub and grassland, except in the region surrounding Mount Kilimanjaro where rainfall is good. Tanzania has very limited financial resources and manpower. It is one of the 25 lowest per capital income countries in the world. Tanzania's health infrastructure at independence was minimal.

Given the prevailing economic, social, and technological situation in the country, a concerted national effort is needed to bring about change. The determination to effect such improvements was enunciated in the 1967 Arusha Declaration. The Declaration includes a national socioeconomic plan that emphasizes rural

development, community participation, and self-reliance. The statement resolved that "from now on the vital needs for water, schools and health shall be given priority in all expenditures."

In keeping with the development philosophy of the Arusha Declaration, the planning machinery has been decentralized so that the people themselves can participate. Planning committees were established at each village, ward, and district level, with the National Ministry of Economic Planning setting the broad outlines of national planning priorities and strategies. However, significant government efforts began only in 1972/73, when about 70% of the budget was devoted to rural development. International organizations and other donor agencies have played a part in implementing the government's rural development objective. Nevertheless, "cooperation and not poisoned aid" remains the national theme.

The national socioeconomic plan aims at developing an integrated basic health infrastructure that will be acceptable and accessible within Tanzania's social, economic, and cultural framework. Prominence is also given to the provision of safe water and free primary education for all. To make it easier to provide essential social services, people in rural areas were encouraged to regroup in larger villages called Ujamaa villages. Local populations have been given an important role in establishing social services and facilities. Village health posts and dispensaries are constructed by the villagers themselves, with the government providing necessary materials, equipment, and technical help. Villagers also participate in constructing their water supply systems and are encouraged to build their own pit latrines and rubbish dumps.

The Tanzania School Health Program was preceeded by an AID supported program to develop infrastructure for rural health services. The program supported the construction of village dispensaries and rural health centers, and provided for the

training of paramedical personnel--over 1,000 aides were trained for dispensary work.

Other donors supported training of physicians, nurses, medical assistants, and rural medical aides; dispensary construction; installation of water and sanitary systems; communicable disease control; and immunization programs.

### School Health Program

In 1977, the Ministry of Health asked USAID to collaborate in the development of a National School Health Program to address the needs of school age children. Since then, the Ministry of Education has succeeded in enrolling 65% of the primary school age children in the program -- about 3,000,000 pupils. This school infrastructure has provided the means for improving the health of both children and their families.

The program, however, manifested a number of problems, including high absenteeism of children and lack of follow-up. Children continue to suffer from high mortality and morbidity rates. The present School Health Program (1980-1983) is designed to address these problems.

### PROJECT DESCRIPTION

The Tanzania School Health Program provides health education, preventive and curative health care, and nutrition and environmental improvements within primary schools. Each of these project components is discussed in detail below:

#### I. Health Instruction

The project has been designed to introduce health topics during the two 40 minute class periods devoted to "domestic science." The capability of primary school teachers to

present health topics will be strengthened by a training program that includes:

- a) Review and revision of the health portion of the domestic science syllabus and teachers guide.
- b) Provision of inservice training on teaching methodology to one teacher from each of 800 schools.
- c) Provision of "in-school" educational programs on health at the National Colleges of Education by revising the curriculum and training the trainers.

## II. Health Services

One teacher from each of the 800 primary schools will be trained as a "health coordinator." These newly trained teachers will be expected to provide the following services:

- a) Observation and screening (health check-up) for gross health defects;
- b) Referral and follow-up of students needing special care;
- c) First aid and maintenance of school health kits; and
- d) Maintenance of school health cards (immunizations, illnesses, screening information, etc.) and collection of cumulative school health information for transmittal to government health and education officers.

This training will result in provision of elementary preventive services to primary school children. By acquiring health skills the teachers will be in a better position to establish working relations with local health personnel and to develop a greater awareness of health among their students.

The teacher's guide and the modified curriculum for the National Colleges of Education will reflect this emphasis on the teacher as a provider of preventive health services to school age children.

The teacher will be responsible for maintaining a cumulative health record card to be forwarded to the Ministry of Health. The information will be used:

- a) To record the health status of school children during the school year, including data such as: 1) immunization records; 2) incidence of illnesses; 3) absences for health reasons; and 4) referrals to dispensaries and treatments received.
- b) To correlate the above data with the advent of activities such as: 1) latrine construction; 2) water system provision; 3) school garden development; and 4) increased health instruction.
- c) To aid the government in identifying the health situation in the schools and in planning the continued development of the School Health Program.

An AID-supplied health education technician will assist the MOH in developing the record system.

### III. Healthful Environment

The project's approach to creating a healthful environment is to provide relevant learning experiences in the classroom, school grounds, and community. Instruction will emphasize the use of appropriate technology for water supply and waste disposal.

### Safe Water

a) Each school will have an evaluation of its water supply. Those requiring improvement will be assisted by community and project resources. It is anticipated that school health committees will arrange volunteer labor. Technical assistance for water provision (i.e. wells, rainwater storage, pumps, etc.) will be provided by project consultants. In all a maximum of 80 systems will be assisted.

### b) Waste Disposal

Ventilated improved pit (VIP) latrines will be built at 80 schools. Latrine construction will be carried out simultaneously with water system construction.

## IV. Food and Nutrition

School farms will be upgraded to provide sufficient crops to feed the school population. Catholic Relief Services (CRS) has agreed to provide training of school health officers and school health coordinators as the key implementers of this aspect of the project. In addition, Ministry of Agriculture extension agents will collaborate with schools, and AID contract technicians have been provided to develop and coordinate this subprogram with national counterparts.

### CURRENT PROJECT STATUS

#### OUTPUT I -- Health Instruction

|  | <u>Targeted<br/>by 1982</u> | <u>Completed<br/>by 1980</u> |
|--|-----------------------------|------------------------------|
| A. Review of domestic sciences syllabus and teachers guide, eight sections | 8                           | 0                            |
| B. Inservice training for teachers   | 800                         | 0                            |

|  |          |   |
|--|----------|---|
| C. Modification of teacher college curriculum. Revision of curriculum and guidelines | 1        | 1 |
| D. Training of tutors for health training in components of teaching training         | 10       | 0 |
| <u>OUTPUT II -- Health Services</u>  |          |   |
| A. Training teachers to provide health care  | 800      | 0 |
| B. Collection of health data from each school  | 800      | 0 |
| <u>OUTPUT III -- Healthful Environment</u>   |          |   |
| A. Safe water system at each school  | 80(1980) | 0 |
| B. Waste disposal V.I.P. - ventilated improved pit latrine at each school            | 80       | 0 |
| <u>OUTPUT IV -- Food and Nutrition</u>   |          |   |
| A. Establishing school farms   | 80       | 0 |
| B. Training of school health officers and school health coordinators                 | 80       | 0 |

#### ANALYSIS

This project uniquely ties health, education, agriculture, water supply and environmental sanitation to the community base. The focus on school children should provide a cadre of Tanzanian juniors citizen with the tools to improve the lives of their families and communities.

The project staff arrived in Tanzania in the summer of 1980 to initiate activities. It is too early, therefore, to evaluate activities at this time.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>1</u>                 |
| 3. volunteers                                       | <u>2</u>                 |
| 4. emphasis on role of women                        | <u>3</u>                 |
| 5. significant community financing                  | <u>2</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>3</u>                 |
| 2. logistic support                                 | <u>4</u>                 |
| 3. increasing food production                       | <u>3</u>                 |
| 4. generate increased family income                 | <u>4</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>4</u>                 |
| 3. home visits                                      | <u>4</u>                 |
| 4. mobile units                                     | <u>4</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>4</u>                 |
| 2. project intended to be replicated                | <u>2</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>2</u>                 |
| 5. experimental design                              | <u>4</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>1</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>1</u>                 |
| 5. preparing community leaders                      | <u>1</u>                 |
| 6. career advancement opportunities                 | <u>1</u>                 |
| 7. efforts to recruit women                         | <u>1</u>                 |
| F. Emphasis on prevention over curative care        | <u>3</u>                 |
| G. Use of appropriate technology                    | <u>3</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>3</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>3</u>                 |
| 2. promote breastfeeding   | <u>4</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>4</u>                 |
| 4. oral rehydration (specify type) _____   | <u>1</u>                 |
| 5. nutritional status monitoring   | <u>3</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>3</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>1</u>                 |
| 2. well baby care  | <u>1</u>                 |
| 3. train traditional birth attendants  | <u>1</u>                 |
| 4. family planning education   | <u>1</u>                 |
| 5. distribute contraceptives   | <u>1</u>                 |
| 6. surgical family planning procedures   | <u>1</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>1</u>                 |
| 2. cold chain support  | <u>1</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>3</u>                 |
| 2. malaria vector control  | <u>4</u>                 |
| 3. other vector control  | <u>4</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>1</u>                 |
| 5. use of folk treatments  | <u>1</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

## REFERENCES

Project paper, March 16, 1979. (621-0150)

DS/DIU - Data System, Project Design Information for Primary Health  
Care Projects.

Project Paper Review Committee Report, April 27, 1979.

Fall 1980

LESOTHO

IDENTIFICATION

|                              |  |
|------------------------------|--|
| Project Name<br>and Number:  | Rural Health Development Project,<br>Number 690-0058   |
| Location:                    | Nationwide   |
| Project Dates:               | 1978-1984  |
| Funding Level<br>and Source: | USAID: \$3.245 million<br>GOL: \$454,300   |
| Responsible Offices:         | Bureau for Africa, Office of<br>Southern African Affairs,<br>AID/Washington<br><br>Health Officer, USAID/Lesotho |
| Contractor:                  | University of Hawaii   |
| Implementing Agencies:       | Government of Lesotho,<br>subcontracted to the Private<br>Health Association of Lesotho                          |

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 1.3 million

Rural Population: 95%

Infant Mortality Rate: 111

Population Growth Rate: 2.4%

Life Expectancy at Birth: 50

GNP Per Capita: \$280

Adult Literacy Rate: 55%

## SYNOPSIS

This two phased project will assist Lesotho's Ministry of Public Health provide basic health services to the rural population. Phase I provided support to the Ministry of Health to improve its efficiency in planning, health manpower development and reorganization. In Phase II nurse clinicians and village health workers are being trained to deliver health services throughout rural Lesotho.

## BACKGROUND

Fourteen years after independence, Lesotho remains one of the least developed countries in the world. Ninety-five percent of the population lives in rural areas, where farming or herding are the major occupations.

The health problems are largely preventable and associated with low income, poor housing, inadequate water and sanitary facilities, and insufficient health education. The disease pattern is dominated by parasitic and infectious diseases. Typhoid, tuberculosis, venereal diseases, measles, and influenza are also prevalent. Malaria, bilharzia, and trypanosomiasis are not

believed to occur in Lesotho.

Lesotho has adopted the social goal of "Health for All by the Year 2000," and the primary health care strategy to reach it. Emphasis has been given to rural areas since adoption of the first 5 year plan (1970-1974). The Ministry of Health has taken responsibility for implementation of the plan for the health sector.

A health sector analysis was prepared in 1975 by UCLA. Other donor agencies--WHO, UNICEF, and UNDP--participated in planning activities for the Rural Health Development project. Following consultations with USAID/Lesotho and the MEDEX program of the University of Hawaii, a project implementation document (PID) was prepared in 1975. The project paper was prepared in 1976 and approved in September 1978.

The Private Health Association of Lesotho (PHAL) which prepared a document entitled "A Program to Effectively Establish a Cadre of Trained Nurse Assistants in Lesotho" plays an important role in the Rural Health Development project.

#### PROJECT DESCRIPTION

The Lesotho Rural Health Development Project has been designed to provide health for all in Lesotho by the year 2000. It intends to achieve this goal through a two-phased approach. In the first phase, the capability of the Ministry of Health to manage and support primary health care has been upgraded. In the second phase, health workers are being trained to provide preventive and curative health services in rural areas. Activities began in February 1978 and were evaluated in February 1980. During the first phase, project consultants organized a planning unit in the Ministry of Health and trained its personnel (statisticians and health

planners). One person from the planning unit went to the United Kingdom for advanced training in health administration. As a result of these activities, the structure of rural health administration was reorganized. Seventeen health service areas were established, and personnel was assigned to these areas.

Other accomplishments include 1) drafting and promoting of a national primary health care program 2) writing a chapter for the third national socioeconomic plan and 3) promoting collaboration with external assistance, including the Expanded Program on Immunization, a rural sanitation project, and a nutrition surveillance project, and 4) promoting the improvement and renovation of rural clinics.

In order to strengthen the capability of the health planning unit, a reorganization of the data gathering system was undertaken. New forms for village clinics, health centers, and dispensaries and a system for collecting and reporting data on diseases and utilization were developed. A statistics subunit was added to the new planning unit. This unit is responsible for assembling, analyzing, and interpreting planning data collected at all levels of the primary health care network. The data system was tested in 1978, and the information gained was used to design training programs for health administrators and health care providers. The data are also being tabulated and published as annual statistical reports regarding health.

A logistics system to support the expansion of primary health care in rural areas was also designed during Phase I. This included a mechanism for providing drugs, medical supplies, and equipment to rural clinics and dispensaries. The problem of distributing these was compounded by the difficulty of maintaining motor vehicles. The maintenance problem was exacerbated by the large variety of motor vehicles to be serviced.

Following the reorganization recommendations, much activity took place. The recommendations were summarized in a management workshop and seminar which took place in January, 1980. At this time, a project analysis was made which identified problem areas. It also established agreement on the role and curriculum for village health workers and clinicians, as well as the nurse assistants, to be trained in Phase II.

#### external

As a result of an evaluation completed in February, 1980, a recommendation was made to extend the project into Phase II. This was agreed upon in the Spring of 1980, and the second phase began subsequently. The second phase calls for training 59 nurse clinicians, 1,000 village health workers, and 165 nurse assistants.

The nurse clinicians will staff rural health posts and will supervise the village health workers. The nurse clinicians' role includes diagnosing and treating common medical problems at the clinic level. The nurses are also to organize preventive health care for children, both in clinics and in schools; give immunizations; provide prenatal care; offer family planning services; organize and supervise clinics; arrange for communications systems and emergency transport; institute public health measures (such as human and solid waste disposal); organize water supply and other community development projects; and train village health workers. The nurse clinicians are responsible to either the district medical officer, or a supervisor nurse clinician.

The nurse clinicians will be trained by the University of Hawaii MEDEX program in a modified competency-based program. The program includes a 6 month modular instruction, a 6 month clinical rotation, followed by a 3 month field preceptorship. During the modular phase to take place in the capital, didactic materials will be presented. During the clinical phase, students will rotate

through clinical medical services for 6 months. During the preceptorship, nurse clinicians will train and supervise village health workers. Teachers will be assisted by professionals from various institutions in the area.

A nurse examination board of Lesotho is being developed. Also, the newest health law to govern the activities of nurse clinicians has been submitted to the legislature, and it is hoped that passage of this legislation will eliminate embarrassment and legal problems for the trainees beginning their new careers. Nurse assistants are trained to replace the nurses recruited for the nurse practitioner program. After the nurse clinicians have been posted, nurse assistants will continue to assist them in their role as primary providers.

Village health workers will be trained by nurse clinicians at rural health posts. There is some earlier experience with training village health workers by the Private Hospital Association of Lesotho. Village health workers will be selected and financially supported by their villages.

The duties of village health workers are to 1) assist in developing and maintaining a safe water supply and sanitation system; 2) identify village health problems and assist the health team in controlling outbreaks of disease, assisting the village chief in collecting vital statistics in cooperation with extension workers; 3) promote good nutrition; 4) offer MCH and family planning and child care; 5) identify and manage common clinical problems; 6) prevent and manage vomiting and diarrhea; 7) promote personal hygiene and healthful living; 8) recognize and refer tubercular and leprosy patients; and 9) provide first aid.

During the life of the project, 166 village health workers will be trained. After termination of USAID support, the Ministry

of Health of Lesotho will continue to train these village health workers.

CURRENT PROJECT STATUS

| OUTPUT   | CURRENT STATUS   |
|--|--|
| Phase I: 1978-1980   |  |
| 1. a. Reorganization of the MOH  | Approved by cabinet.   |
| b. Seventeen health service areas functioning by 1981                                  | Ten administrators appointed to posts following training in Botswana--Regional Institute of Development Management.  |
| c. Outpatient facilities adequately administered and supported by the referral system. | Renovation of rural clinics completed.   |
| d. Upgrade the MOH's planning and administrative capabilities.                         | AID supplemental staff in place.   |
| e. Support facilities for staff and equipment.   | Three houses built. Three vehicles provided.   |
| f. Family planning supplies provided.  | No information.  |
| g. Nurse assistant training program planned.   | No information.  |
| h. Training of thirteen Basuto in administration and management.                       | Management seminar held November 1979 at Mazenod. Topics included:   |
|  | <ul style="list-style-type: none"> <li>- Financial management</li> <li>- Personnel</li> <li>- Reorganization of MOH</li> <li>- Transportation</li> <li>- Drugs and medical supply</li> <li>- Radio communication</li> <li>- Management information</li> <li>- Public information</li> <li>- Community participation</li> </ul> |

- i. Data collection for Phase II planning.      Statistics - subunits established national information gathering system in operation since 1978.
- j. Health sector plan developed by 1980.      Health chapter of national five year development plan completed.

Phase II: September 1980-1984

- a. 55 nurse practitioners trained - 15 by 1980.      January 1980 - Curriculum adaption completed. Nurse medical practice law rewritten.
- b. 165 nurse assistants trained - 70 by 1980.      Curriculum not completed.
- c. 1004 village health workers trained by 1981.      To start in 1981. Curriculum completed.

The University of Hawaii Medical School is a technical assistance contractor to the Ministry of Health of Lesotho. Their team of four professionals is supplemented by short-term consultants and the University of Hawaii Medex program director. This team has analyzed the problems and constraints of the MOH and made recommendations which have resulted in:

- a. A national primary health care five year plan.
- b. Reorganization of the Ministry and
- c. Establishment of various training programs based on the MEDEX concepts.

An extensive document entitled a "Plan for Strengthening and Supporting a Primary Health Care System for the Kingdom of Lesotho" was prepared as part of the University of Hawaii's semiannual report to the MOH. This document describes the project in great detail.

## ANALYSIS

A review of the project design suggests that a firm foundation has been laid for providing health services to the rural population. The development of a management and logistical infrastructure to support the primary health care program suggests that attention has been given to the needs of the Ministry of Health to carry out the program. The new planning capability provides strategic support for implementation of a long range rural health development project.

The project's overall long-term impact remains to be seen; however, it is likely that the repeated manpower drain that characterizes the Health Ministry will prevent the project from achieving its objectives in a timely manner. The retention of project counterparts in critical Ministry positions has become a problem. This repeated loss of highly trained personnel to the private sector may represent an insurmountable problem for the Government of Lesotho.

The development of communications, logistics, and transportation systems will provide the kinds of infrastructural support the project will need in

the long term. Attention to this essential element in the first phase of the project will make it feasible to support the nurse clinicians and VHWs in their rural locations. It appears that a realistic approach is being taken toward regular maintenance of vehicles and equipment, to ensure that these expensive resources are fully available to support the proposed extension of health workers to the 17 health services areas.

The nurse clinicians should be well trained to assume their duties, although the long list of assigned responsibilities seems somewhat excessive in view of the population base of five to ten thousand. It seems likely that the curative aspects of their job may quickly consume all of their time, preventing them from providing adequate supervision and further training for village health workers, or investing in development of safe water supply systems, sanitary disposal systems, or health education. A critical element for the success of the project, the relation of the supervisor nurse clinicians to the village health workers, is not spelled out in the project documents. It is fortunate that the Private Hospital Association of Lesotho has had several years' experience with nurse clinicians and village health workers, as the answers to these questions may be available from the earlier demonstration projects.

There is some question as to whether a sufficient number of nurse clinicians are being trained. The high attrition rate (15-20% per year) of this category of worker experienced in the past suggests that the current training output is too low.

It is expected that the previous experience of the Private Hospital Association of Lesotho will permit a successful implementation of the village health worker aspect of the project on a national basis. Whether village health workers will be provided with medication to distribute for common illnesses and to use for first aid is not made clear. This point needs clarification.

It is also unclear how village health workers will be remunerated supported. A national policy is needed to avoid the type of conflict caused by some receiving a salary while others do not. As sizable recurring costs would accrue if the Government of Lesotho paid salaries to village health workers on a nationwide basis, some other system will doubtlessly have to be worked out.

A three week field evaluation of Phase I accomplishments was conducted by a team of experts provided by the American Public Health Association in February 1980. This three-member team consisted of a health planner/health administrator, a nurse clinician, and a family health nurse practitioner.

The major finding was that substantial progress had been made in reorganizing the Ministry of Health to deliver health services in all parts of the country. It was noted that 1) the MOH and the Private Health Association of Lesotho are working collaboratively on their planning efforts; 2) systems to support PHC workers in the field have been designed, including logistics and vehicle maintenance; and 3) the MEDEX training modules have been adopted for nurse clinicians and villager health workers.

The project's impact on management support is less than hoped for, since the Government of Lesotho is unable to retain trained personnel because of general service conditions (salaries, postings, lack of inducements, etc.); but that the phasing of the project has permitted the establishment of a firm capability of the GOL to support a large expansion of its health services. This attention to planning and administration should permit effective implementation of the government health strategy.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>3</u>                 |
| 4. emphasis on role of women                        | <u>4</u>                 |
| 5. significant community financing                  | <u>4</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>1</u>                 |
| 2. logistic support                                 | <u>1</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>1</u>                 |
| 2. minimize cultural barriers to services           | <u>1</u>                 |
| 3. home visits                                      | <u>1</u>                 |
| 4. mobile units                                     | <u>1</u>                 |
| 5. health services at community facilities          | <u>1</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>3</u>                 |
| 2. project intended to be replicated                | <u>3</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>3</u>                 |
| 7. efforts to recruit women                         | <u>3</u>                 |
| F. Emphasis on prevention over curative care        | <u>3</u>                 |
| G. Use of appropriate technology                    | <u>4</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>2</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>1</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>1</u>                 |
| 4. oral rehydration (specify type) _____   | <u>1</u>                 |
| 5. nutritional status monitoring   | <u>1</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>1</u>                 |
| 2. hygiene education   | <u>1</u>                 |
| 3. waste disposal for family/community   | <u>1</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>1</u>                 |
| 2. well baby care  | <u>1</u>                 |
| 3. train traditional birth attendants  | <u>1</u>                 |
| 4. family planning education   | <u>3</u>                 |
| 5. distribute contraceptives   | <u>3</u>                 |
| 6. surgical family planning procedures   | <u>4</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>1</u>                 |
| 2. cold chain support  | <u>1</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>1</u>                 |
| 2. malaria vector control  | <u>1</u>                 |
| 3. other vector control  | <u>1</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>1</u>                 |
| 5. use of folk treatments  | <u>1</u>                 |
| H. Provision and resupply of essential drugs   | <u>1</u>                 |

## REFERENCE

Health Sector Analysis - 1975.

Project Paper - 1976.

Plan for Strengthening and Supporting a Primary Health Care System  
for the Kingdom and Lesotho - August, 1979.

Evaluation Report - APHA - February, 1980.

Personal communication, John Karefa Smart (evaluation team leader)  
- August, 1980.

Personal communication, Richard Smith, M.D., Director MEDEX  
Program, University of Hawaii - July, 1980.

Fall 1980

BOTSWANA

IDENTIFICATION

Project Name  
and Number: Health Services Development,  
Number 633-0078

Location: Nationwide

Project Dates: FY 1978 - FY 1981

Probable Termination  
Date: 1983

Funding Level  
and Source: Total Grant for Life of Project  
from AID: \$5.5 million  
From Host Country: \$1.7 million

Responsible Offices: Bureau for Africa, Office of  
Southern African Affairs,  
AID/Washington  
Health Officer, USAID/Botswana

Contractor: Medical Service Consultants, Inc.

Implementing Agencies: Ministry of Health, Government of  
Botswana

NOT OFFICIAL  
**DRAFT**  
FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 0.8 million

Rural Population: 88%

Infant Mortality Rate: 97

Population Growth Rate: 3.4%

Life Expectancy at Birth: 56

GNP Per Capita: \$620

Adult Literacy Rate: (not  
available)

## SYNOPSIS

This Primary Health Care Project in rural Botswana will serve to extend health services to the country's settled populations. A health services network is being placed at the village level. The basic point of contact in the health system will be the family welfare educator, a worker selected by his or her village and given basic training in health promotion and prevention. The family welfare educator refers villagers to the health post from which referral proceeds to the clinic health center and lastly to the hospital. The project proposes to train the following categories of personnel: 1) diploma level nurses; 2) nurse practitioners; 3) nurse educators; 4) nurse practitioner educators; and 5) health administrators. These people will supervise and support the family welfare educators.

## BACKGROUND

Botswana is a large country with an area of 570,000 sq. miles located on the South African Plateau. The Kalahari Desert occupies most of the land, which is unsuitable for agriculture. Most of the population resides along the more fertile eastern regions of the border with Zimbabwe and South Africa. There are eight principal tribes. The major health problems in Botswana are respiratory disorders (including tuberculosis), gastroenteritis, and venereal

diseases. Malaria is present but not endemic. Mental illness has increased markedly in recent years, as well as alcoholism, as a result of stresses arising from contact with the South African culture. Beginning with the third national health development plan, the government embarked on a long term effort to establish preventive services along with curative medical care. The government constructed clinics and health posts in all settled communities of more than 500 persons, and appointed new health personnel to work in rural areas. Hospitals were improved, and training was accelerated for paramedical auxiliary personnel.

A major source of health services outside the central government are the various missionary facilities. These facilities provide 25% of the inpatient beds, and they handle 20% of the outpatient visits. A Ministry Health Planning Committee has been successful in coordinating the mission's work with the national planning process.

A statement of the national health objectives in order of priority are:

1. Strengthened primary health services equitably distributed.
2. Expansion of training facilities and opportunities for medical and paramedical personnel.
3. Improvement of hospitals and health centers to ensure referral services.
4. Control or reduction of environmentally-induced diseases. Immunization, surveillance, and treatment.
5. Expansion and diversification of health education training.
6. Expansion of the Ministry of Health's capability to plan and manage new mental health services, occupational health, and handicapped services as part of the primary health care delivery system.

AID's role in Botswana was previously carried on by contract with Meharry Medical College in Nashville, Tennessee. This program called for support of the MCH/Family Planning Project's two major components: health education and inservice nurses training through technical, participant, and commodity assistance. A small health education unit was established in the Ministry of Public Health and two of the staff were sent to school for bachelor's degrees in health education. The others being trained are currently studying nursing education in the United States. Inservice nurse educators sponsored by Meharry have carried out the following activities:

1. Given an 8 week inservice public health MCH family planning course for RNs and ENs.
2. Integrated the inservice curriculum into the regular curriculum to train selected nurse tutors.
3. Developed field training sites for public health, MCH, and family planning.
4. Established effective postnatal services in government training hospitals.

Other types of assistance have been provided by the African Development Bank, the Netherlands Government, the Norwegian Government (to construct rural health facilities), the Harry Oppenheimer Foundation, the International Planned Parenthood Foundation, UNICEF, UNFPA, and UNDP. WHO has assigned an epidemiological information specialist as well as a smallpox technician. A Peace Corps team is also in the field working on bilharzia.

The supervision of family welfare educators by nurse clinicians is a critical factor in making the national primary health care strategy function effectively. Family welfare educator training is being supported by the International Planned Parenthood Federation. The educator's role is mainly motivational. A hundred family welfare educators are being employed now, and an additional sixty to ninety will be trained each year. These educators will work

under the supervision of the nurse practitioners and enrolled nurses to be trained in the AID-supported project. The educators are paid and selected by the local district or town council. It is anticipated that their supervision will be greatly improved by introducing senior registered nurse midwives trained to function as nurse practitioners and public health nurses. Supervisor nurse practitioners will be trained in the United States, and they will form a referral linkage to physicians serving in hospitals and other health facilities. The Norwegian assistance agency has constructed homes in rural areas for the nurse practitioners. This should, hopefully, encourage them to stay in the rural areas rather than migrate from the villages, as is so often the case.

#### PROJECT DESCRIPTION

The Health Services Development project proposes to train primarily middle level health workers to supervise village level health workers in the national primary health care scheme. Health administrators, nutritionists, and health educators will also be trained in a continuing effort to strengthen the capability of the Ministry of Health to improve the life of the people of Botswana. The support provided by numerous other international and multinational organizations permits the resources of this project to focus on the organizational infrastructure support of primary health care.

It is expected that the major outputs of the project will be:

- a. A reorientation of nurse training in Botswana so that nurses may provide comprehensive services in rural and urban areas.
- b. Nurse practitioners who will perform as public health nurses and clinical specialists in rural areas.

- c. An improvement in the administrative capacity to support health services delivery.
- d. Improved preventive and promotive health services, with an emphasis on health education.
- e. A national nutrition program.

NURSING - In order to improve nursing services, the curriculum for the two one-year diploma programs to train senior registered nurse midwives to function as nurse practitioners and public health nurses will be developed and directed by Botswana\* personnel. These programs will require the services of educator-teachers. These are currently expatriates, but they will be replaced by Botswana who are currently in training in the United States.

The enrolled nurses curriculum will be revised in order to permit these nurses to play wider roles in delivering health services and in supervising family welfare educators trained in the IPPF project. The foundation will be laid for the possible transition of the current nursing program into a Bachelor of Science program in nursing. Senior nurses will be given nursing service administration training. It is expected that these participants will fill senior level Ministry of Health positions in the Ministry itself and in government hospitals.

HEALTH ADMINISTRATION - As part of the project, health administrators will be trained in short-term, in-country courses for senior level positions in hospitals, on local council staffs, and in the Ministry of Health. One Botswana will be sent for health planning and management training outside of the country.

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\* People from Botswana.

The Botswana Bureau of Census will train four statistical assistants in census taking and vital statistics.

HEALTH EDUCATION - A National Health Education Plan has been developed as part of the project and is in the process of being implemented. The health education division of the Ministry of Health is providing training in health education at the new health education building.

NUTRITION - Nutrition research and a National Nutrition Plan have been developed and are in the process of implementation. Nutrition positions in the Ministry of Health are to be filled by Botswana, and a new nutrition building is to be constructed.

The contractor is responsible for coordinating AID inputs to the project and conducting most of the teaching and training programs. A large number of Botswana personnel will be sent to the United States for training, and therefore several years will be required before they can be placed in permanent staff positions. The contractor is to arrange for the selection of candidates with the Government of Botswana.

Considerable support has been obtained by the Government of Botswana from various multinational and international sources. The prospect of developing its health services infrastructure, including construction of hospitals and health centers by Norwegian and other bilateral agencies, permits the government focus to stay on developing rural primary health care services. The economic condition of the country is improving rapidly, so that the country will be able to take over the recurrent cost of this project once the personnel complete training and reach a field post.

The project staff plans to conduct annual evaluations. An external evaluation will occur at the end of the second year of

operation. Planning of project elements outlined in pre-project reports (the PP) seems quite complete, and the participation of the Government of Botswana in the decision making process seems to be active. Additionally, the government's financial commitment (\$1.7 million) covers one third of the project costs.

The AID Health Services Development project is also investigating the use of traditional healers. A survey revealed that 42% of rural families had consulted a traditional healer at some time. A policy towards integrating these healers into the Ministry of Health program will be developed during the life of the project.

#### CURRENT PROJECT STATUS

| <u>OUTPUT</u>                                    | <u>CURRENT STATUS</u> |
|--|-----------------------|
| Nurse practitioner training (60)                 | No information        |
| Enrolled nurses training                         | No information        |
| Bachelor in Education in Nursing assistance (16) | No information        |
| Public health nurses training (60)               | No information        |
| Health administration training program (32)      | No information        |
| National health education plan                   | Completed             |
| Health educator training program (8)             | No information        |
| Nutrition inservice training (8)                 | No information        |

## ANALYSIS

Only recently have AID contract staff gone to the field and project activities begun. As of January 1980 the staff consisted of a Project Director, eight teacher nurse educators, and a health education nutritionist. No project evaluation has been performed, though the project is considered to be on schedule.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE*</u> |
|---|---------------------------|
| A. Community participation                          |                           |
| 1. community health committees                      | <u>3</u>                  |
| 2. community-selected health workers                | <u>3</u>                  |
| 3. volunteers                                       | <u>3</u>                  |
| 4. emphasis on role of women                        | <u>4</u>                  |
| 5. significant community financing                  | <u>4</u>                  |
| B. Intersectoral coordination                       |                           |
| 1. collaboration between ministries                 | <u>4</u>                  |
| 2. logistic support                                 | <u>3</u>                  |
| 3. increasing food production                       | <u>1</u>                  |
| 4. generate increased family income                 | <u>1</u>                  |
| C. Accessibility of services                        |                           |
| 1. minimize transportation barriers to services     | <u>1</u>                  |
| 2. minimize cultural barriers to services           | <u>1</u>                  |
| 3. home visits                                      | <u>1</u>                  |
| 4. mobile units                                     | <u>1</u>                  |
| 5. health services at community facilities          | <u>1</u>                  |
| D. Technical cooperation                            |                           |
| 1. technical cooperation with third world countries | <u>3</u>                  |
| 2. project intended to be replicated                | <u>3</u>                  |
| 3. management information system/ongoing monitoring | <u>1</u>                  |
| 4. periodic evaluations                             | <u>3</u>                  |
| 5. experimental design                              | <u>1</u>                  |
| E. Training   |                           |
| 1. training new categories of health workers        | <u>1</u>                  |
| 2. new responsibilities for existing health workers | <u>3</u>                  |
| 3. inservice training                               | <u>3</u>                  |
| 4. management training                              | <u>3</u>                  |
| 5. preparing community leaders                      | <u>1</u>                  |
| 6. career advancement opportunities                 | <u>3</u>                  |
| 7. efforts to recruit women                         | <u>3</u>                  |
| F. Emphasis on prevention over curative care        | <u>1</u>                  |
| G. Use of appropriate technology                    | <u>1</u>                  |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>1</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>1</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>1</u>                 |
| 4. oral rehydration (specify type) _____   | <u>1</u>                 |
| 5. nutritional status monitoring   | <u>3</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>1</u>                 |
| 2. hygiene education   | <u>1</u>                 |
| 3. waste disposal for family/community   | <u>1</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>1</u>                 |
| 2. well baby care  | <u>1</u>                 |
| 3. train traditional birth attendants  | <u>1</u>                 |
| 4. family planning education   | <u>1</u>                 |
| 5. distribute contraceptives   | <u>1</u>                 |
| 6. surgical family planning procedures   | <u>1</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>1</u>                 |
| 2. cold chain support  | <u>1</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>1</u>                 |
| 2. malaria vector control  | <u>1</u>                 |
| 3. other vector control  | <u>1</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>1</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>4</u>                 |

## REFERENCE

Project Paper on Health Services Development project, September, 1978.

Activity Data Sheet from Congressional Presentation, July 1980.

Telephone interview with Patty McJoseph, Medical Service Consultants, August 14, 1980.

Fall 1980

SUDAN

IDENTIFICATION

Project Name  
and Number: Northern Sudan Primary Health  
Care Project, Number 650-0011

Location: Four provinces in Northern Sudan

Project Dates: FY 1979 - FY 1982

Funding Level  
and Source: USAID: \$5.8 million  
African Development  
Bank: \$ 8 million  
Sudan: \$ .89 million

Responsible Offices: Bureau for Africa, Office of East  
Africa Affairs, AID/Washington  
Health Officer, USAID/Sudan

Contractor: Medical Service Consultants

Implementing Agencies: Ministry of Health

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 18.7 million

Rural Population: 75%

Infant Mortality Rate: 141

Population Growth Rate: 3.1%

Life Expectancy at Birth: 46

GNP Per Capita: \$320

Adult Literacy Rate: 20%

## SYNOPSIS

This AID project will help implement the national primary health care program in four of Sudan's poorest provinces. Community health workers (CHWs) will be trained and returned to their rural villages or nomadic tribes to provide preventive and curative health care. The national PHC system has had problems in management, defining the role of CHWs, and with long-term financing. The AID project has made limited progress in the first year, and has encountered difficulties in developing a logistics/supply system. The lack of progress is due primarily to staffing problems of AID/Sudan and the contractor.

## BACKGROUND

Sudan is Africa's largest country, covering an area nearly as large as Western Europe. It stretches from the Sahara in the north to the tropics in the south. The Sudanese people are approximately two-thirds Moslem Arabs living in the north and one-third African animistic peoples in the south, further divided into an estimated 6 separate ethnic groups. In the northern regions a large percentage of the people lead nomadic or seminomadic lives, breeding cattle or camels.

The major health problems of Sudan, also common to other developing countries in Africa, include endemic, communicable and infectious diseases, lack of safe water supply, maternal and child health problems and malnutrition. Problems within the health sector infrastructure include a shortage and maldistribution of health manpower and facilities, deficiencies in budgetary resources, and a low priority placed on health compared to other development sectors. There are 18 health administrative divisions (provincial); 12 in the four northern regions under the Ministry of Health (MOH) in Khartoum, and six in the southern region coordinated by the Southern MOH in Juba.

In 1975, the Government of Sudan (GOS) with the assistance of the World Health Organization and other donor agencies developed a National Health Plan for 1977/78-1983/84. Programs were developed for each of eight priority areas including primary health care. Due to geographical, cultural, and political differences, separate primary health care programs, (PHCPs) were developed for the northern and southern regions in 1976. (See the southern PHCP report.) At that time the GOS began implementing the northern PHCP and in September 1979, the AID-sponsored team began working with national and provincial MOH officials.

#### PROJECT DESCRIPTION

The purpose of the Northern Primary Health Care Project (NPHCP) is to reach the country's rural population with a comprehensive health delivery system that relies on community participation. This is being accomplished through training community health workers (CHWs) selected by their own communities to provide basic preventive/promotive and curative medical services. They will staff primary health care units (PHCUs) being built by communities to serve an average of 4,000 people. For every 5 PHCUs, a dispensary will be provided for referral, supervision and drug supply. Medical assistants (MAs) will staff the dispensaries and supervise CHWs.

To serve the large nomadic population of the eastern and western regions, a separate category of CHW will be trained--the nomad community health worker (NCHW). They will be recruited from each of the nomadic clans (one NCHW per population of 1,500) and selected and supervised by the clans' nomadic councils. To adapt to these special circumstances, the PHC program will be made more flexible, simple, and acceptable to nomadic communities. Existing health services will handle referrals.

The GOS began implementing the national PHC program in 1976 and has received assistance from a variety of outside donors. By January of 1978, over 425 PHCUs were renovated or built, baseline studies were started, a health information system was being tested, tutors for CHWs were being trained, and medical stores were being established. Also, by the end of 1979, about 1,200 CHWs had been trained. The AID funded team arrived in the field in September 1979 and began developing a work plan along with MOH counterparts. The NPHCU has been operating in all of Northern Sudan, but AID will concentrate on the four poorest provinces of Northern Darfur; Southern Darfur, Northern Kordofan, and Southern Kordofan. The four major areas of project outputs are: training primary health care personnel; building PHCUs; developing information/evaluation systems; and upgrading medical logistics/supply.

## CURRENT PROJECT STATUS

### OUTPUTS

CURRENT STATUS (April 1980)

Training: Reorientation courses for medical supervisors, refresher courses for CHWs, third country training for 36 Deputy or Assistant Health Commissioners, long-term U.S. training for 3 GOS health officials, short-term U.S. training for 12 MOH personnel.

Long-term U.S. training for 2 GOS health officials to begin in January 1981.

PHCU Construction: 35 PHCU units.

Meetings between an AID engineer, the MOH, the Ministry of Public Works, and project staff have taken place to discuss procedures and design of the units.

Information/Evaluation System:

Standardized national data system, improved vital statistics registration system, PHCP data forms distributed, information sharing between northern and southern projects, 1980 data survey, short-term advisor reports, mid-course evaluation.

PHCP data forms being tested, final form to be decided later in 1980. Training for statistical clerks planned for late 1980. Health information officer has worked with counterparts on reporting format for all levels of health infrastructure and with the Department of Health Statistics in developing a monthly statistical report on diseases and other health information.

Logistics/Supply System: Design and implement national logistics system. Improve equipment/supply delivery, delivery of initial equipment/drug supplies to 35 PHCUs.

Training for mechanics planned for late 1980. Short-term U.S. logistics training for 2-4 people also planned.

## ANALYSIS

Sudan has been implementing the PHCP throughout Northern Sudan since 1976, and a number of problems have surfaced. Problems include health system management, defining the role of CHWs, and long-term financing. In addition to problems with the PHCP, in general the AID-funded portion of the program, which began in September 1979, has had its own problems. These include difficulties with staffing and the development of a logistical system.

The Sudanese health system has a variety of management problems. The referral system between health facilities is not clear and sometimes not appropriate to existing lines of public transportation. Also, people tend to go directly to the larger and more specialized units. Within provinces there is not a clear pyramid of health care management. Staff supervision from one level to the next is irregular and insufficient. Management of supplies has been difficult due to a lack of warehouse space, data processing, railroad problems, and a lack of coordination with other parts of the health care system.

When the National Health Program was developed, it concentrated on bringing services to rural areas, but planning for the necessary systemic changes in the design of total health care in Sudan was left on the sidelines. Another factor contributing to management problems is the government's efforts to decentralize its administrative functions. Many planning and budgetary decisions now occur at the provincial level, which may not yet be fully prepared for it. There is also an absence of management training for health personnel and a lack of resources for such training within Sudan.

A second problem in the NPHCP is defining the role of community health workers. The original plan was for CHWs to bring preventive health services to rural areas, with curative care

being of secondary importance. However, CHW training has tended to emphasize curative rather than preventive functions, mainly because trainers have been "curative oriented" medical assistants. Indeed, the public demands curative services, which motivates CHWs to improve clinical rather than public health knowledge. CHWs have been assigned too heavy a work load in many cases, servicing areas with populations 4 to 6 times that specified in the original plan. Also, the scope of their responsibilities and the length of training is too demanding.

Some of the problems in defining the role of the CHWs are due to the fact that the position was newly created as part of the PHC plan. CHWs and the public were not prepared for the intended emphasis on preventive services, and the demand for curative services may have been greater than anticipated. Now it may be necessary to provide the wanted curative services in order to make preventive services effective.

Another issue of concern is the program's long-term financing. It was originally anticipated that the GOS could pay recurrent costs; however, it now faces a balance of payments crisis. Debt servicing obligations have severely reduced the foreign exchange available to buy drugs and fuel. Villagers have helped construct PHCUs, but the people are too poor to consider establishing a fee-for-service system. CHWs were supposed to be paid by the communities; however, they are now "temporarily" being paid by the MOH until an alternative means is found. Villagers, however, now expect free services and are unlikely to be willing to pay for CHW services. Also, CHWs like their status as government civil servants and would resist change. MOH officials are now experimenting with placing collection boxes at health facilities. All things considered, however, continued external assistance may be the only way to continue the program in the near future while some means of long-term financing is developed.

To respond to some of these problems, AID's Rural Health Support Project (650-0030) was authorized in August, 1980. It will continue and expand upon the present program in both the four poorest provinces where AID is now active and in the southern region. Management training will be provided for health administrators at the central, regional, and provincial levels. The project will underwrite the cost of \$2.2 million in drugs and supplies. It will also strengthen the logistical system by providing bicycles and motorcycles and by using radio broadcasts to educate CHWs and the public.

Medical Service Consultants, Inc. (MSCI) was selected by AID as the contractor for the project. In September 1979 the MSCI field team, which consisted of a chief of party (a PHC physician), a health information specialist, and a supply and logistics specialist, arrived in Sudan's capital of Khartoum. They began working with their MOH counterparts in developing a workplan for the first year of activities.

From the beginning there were staffing problems that hurt the project's progress. AID did not have a health officer in Sudan when the project began. Other mission staff cooperated in initiating the project, but a health officer did not arrive until June 1980. About a month after his arrival, the MSCI chief of party resigned because of contractual problems. The role of the chief of party was changed from PHC physician to a training and evaluation specialist, and the position was filled in April 1980. In the interim the health information specialist served as acting chief of party and received temporary back-up from MSCI Washington staff.

The absence of key personnel for extended periods made project implementation difficult. One serious problem was a lack of communication between the MOH, AID, and MSCI concerning project progress and activities. Fortunately, at the time of an AID evaluation of the project in September 1980, the key positions were filled, and all parties agreed to participate in regularly scheduled

meetings. Lack of personnel during the first year, however, has contributed to problems in major areas of project activities, such as training PHC personnel and developing information and logistical systems.

There has been little activity in the area of training PHC personnel. Long-term U.S. training for 2 GOS health officials scheduled to begin in January 1981 constitutes the major activity in this area. This limited progress was primarily due to the lack of a training specialist until the arrival of the new chief of party in April 1980.

Although the health information specialist also served as the chief of party for approximately six months, he was able to make progress in this area. A nationwide health information system exists; however, figures usually differ depending on their sources, and they are often estimates. The AID project intends to develop an improved system in its four provinces that can then be replicated in other areas. Activities in this area include: working with counterparts on a demonstration project in Khartoum Province and Red Sea Province to test data forms, establishing a reporting format for all levels of the health infrastructure, and developing a monthly statistical report on disease and other health information to be used by the Department of Health Statistics. A training session for statistical clerks is planned for late in 1980.

Serious logistical problems emerged during the first year of the project. Although the initial shipment of 25 trucks arrived on time, a variety of preparatory activities, such as designing and printing forms for drivers and monthly province reports were not completed. Rather than waiting for these forms, as well as for proper documentation and mechanical preparation, the Sudanese chief of party had the trucks immediately sent to the field. Two of the vehicles were at the MOH in Khartoum. A problem arose when the MOH would not let the MSCI staff use the vehicles. The MSCI

staff were forced to rent a car, at an exorbitant rate, for use in Khartoum, and to rely on public transportation to get to the field. This usually meant flying, which in Sudan may require going to the airport for three days before getting on the right plane.

There was also little control over where repair and maintenance of trucks would take place at the MOH garage or the Ministry of Transport garage. Reports have shown that the trucks have not been properly maintained and 25% of them were out of commission after only 3 months of operation. Spare parts were in short supply and no mechanics had been trained. There were, however, some accomplishments, including construction of a warehouse for spare parts, and completion of plans for a mechanics training course scheduled for late 1980 and for sending 2-4 people for short-term U.S. training in logistics.

In the first year there has been little progress in logistics, and the sound advice of the logistics/supply advisor was not followed by the Sudanese chief of party. The original logistics/supply advisor left the project in August 1980, and a replacement arrived in October 1980. During the September 1980 AID evaluation, the need for better maintenance and proper documentation and recordkeeping was recognized by all parties: they plan to support the new advisor. Having a complete staff at AID and MSCI should help project implementation in this and other areas.

Since the September 1980 AID evaluation, a number of changes are being made in the project. The Dutch government is planning to assist the NPHCP in Northern Darfur Province. AID will then be moving into other areas, and the project outputs have been changed. More complete information on the project is not available at this time.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE*</u> |
|---|---------------------------|
| A. Community participation                          |                           |
| 1. community health committees                      | <u>2</u>                  |
| 2. community-selected health workers                | <u>3</u>                  |
| 3. volunteers                                       | <u>1</u>                  |
| 4. emphasis on role of women                        | <u>1</u>                  |
| 5. significant community financing                  | <u>2</u>                  |
| B. Intersectoral coordination                       |                           |
| 1. collaboration between ministries                 | <u>3</u>                  |
| 2. logistic support                                 | <u>3</u>                  |
| 3. increasing food production                       | <u>1</u>                  |
| 4. generate increased family income                 | <u>1</u>                  |
| C. Accessibility of services                        |                           |
| 1. minimize transportation barriers to services     | <u>3</u>                  |
| 2. minimize cultural barriers to services           | <u>2</u>                  |
| 3. home visits                                      | <u>2</u>                  |
| 4. mobile units                                     | <u>1</u>                  |
| 5. health services at community facilities          | <u>3</u>                  |
| D. Technical cooperation                            |                           |
| 1. technical cooperation with third world countries | <u>3</u>                  |
| 2. project intended to be replicated                | <u>1</u>                  |
| 3. management information system/ongoing monitoring | <u>2</u>                  |
| 4. periodic evaluations                             | <u>3</u>                  |
| 5. experimental design                              | <u>1</u>                  |
| E. Training   |                           |
| 1. training new categories of health workers        | <u>3</u>                  |
| 2. new responsibilities for existing health workers | <u>3</u>                  |
| 3. inservice training                               | <u>3</u>                  |
| 4. management training                              | <u>3</u>                  |
| 5. preparing community leaders                      | <u>3</u>                  |
| 6. career advancement opportunities                 | <u>4</u>                  |
| 7. efforts to recruit women                         | <u>2*</u>                 |
| F. Emphasis on prevention over curative care        | <u>2</u>                  |
| G. Use of appropriate technology                    | <u>2*</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>2*</u>                |
| 3. mass media health education   | <u>2*</u>                |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>2*</u>                |
| 3. supplemental food for weanlings and/or mothers  | <u>1</u>                 |
| 4. oral rehydration (specify type) _____   | <u>3</u>                 |
| 5. nutritional status monitoring   | <u>3</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>3</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>3</u>                 |
| 2. well baby care  | <u>3</u>                 |
| 3. train traditional birth attendants  | <u>2*</u>                |
| 4. family planning education   | <u>2*</u>                |
| 5. distribute contraceptives   | <u>2*</u>                |
| 6. surgical family planning procedures   | <u>2*</u>                |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>1</u>                 |
| 2. cold chain support  | <u>2*</u>                |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>2*</u>                |
| 2. malaria vector control  | <u>2*</u>                |
| 3. other vector control  | <u>2*</u>                |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>3</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

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Number 650-0011, USAID Document, July 1978.

SUDAN

IDENTIFICATION

Project Name  
and Number: Southern Primary Health Care  
(OPG) Project, Number 650-0019

Location: Southern Region

Project Dates: FY 1979 - FY 1983

Funding Level  
and Source: USAID: \$3.2 million  
Sudan: \$1.3 million  
Others: Maryknoll Fathers,  
Lutheran World Federation, Sudan  
Council of Churches

Responsible Offices: Bureau for Africa, Office of  
East Africa Affairs,  
AID/Washington  
Health Officer, USAID/Sudan

Contractors: International/African Medical and  
Research Foundation (management  
of the project's technical and  
administrative staff)

Implementing Agencies: Regional Ministry of Health  
(RMOH)

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 18.7 million

Rural Population: 75%

Infant Mortality Rate: 141

Population Growth Rate: 3.1%

Life Expectancy at Birth: 46

GNP Per Capita: \$320

Adult Literacy Rate: 20%

## SYNOPSIS

The Government of Sudan (GOS) has developed a comprehensive plan to bring primary health care services to its predominantly rural population. With the exception of the training component, the project is behind schedule, primarily due to logistical difficulties. There are also staffing and financial problems. Another project was recently authorized to bring additional resources to these problem areas.

## BACKGROUND

Until the 1972 Peace Accord, Southern Sudan endured seventeen years of civil and political disruption which left it in worse condition than the nation as a whole. (See the Northern Primary Health Care Project summary for more complete background information.) During the years of strife, the region's social and administrative infrastructure was devastated. Health care personnel were dispersed and health facilities destroyed.

The South has a tradition of tribal and ethnic divisions. It has African tribal cultures, in contrast to the predominately Moslem Arab culture of the North. Per capita income is even lower in the South than in the rest of the country, and the death rate is twice as high. There is a severe lack of transportation and communications.

In 1975, the Government of Sudan (GOS), with the assistance of the World Health Organization and other donor agencies, developed a National Health Plan for 1977/78-1983/84. Programs were developed for each of eight priority areas including primary health care. Due to geographical, cultural and political differences, separate primary health care plans (PHCPs) were developed for the northern and southern regions in 1976.

The African Medical and Research Foundation (AMREF), has been working in Southern Sudan since the end of the Sudan civil war in 1972. AMREF participated in planning the southern PHCP, and in 1976, at the request of the Regional Ministry of Health (RMOH), began implementing the plan by training primary health care personnel. In 1979 AMREF contracted with AID to assume overall project management.

#### PROJECT DESCRIPTION

The purpose of the Southern Primary Health Care Project (SPHCP) is to provide the country's rural population with a comprehensive health services that rely on community participation. This is being accomplished by training community health workers (CHWs) selected by their own community to provide basic preventive/promotive and curative medical services. They will staff primary health care units (PHCUs) being built by communities throughout the region to serve an average of 4,000 people. A dispensary will serve every 5 PHCUs for referral, supervision and drug supply. Medical assistants (MAs) will staff the dispensaries and supervise CHWs. The four major areas of project outputs are: training primary health care personnel; construction of PHCUs by local people and the building of training schools/dispensaries; development of information/evaluation systems; and upgrading medical logistics/supply.

A regular evaluation by AID, completed in March 1980, noted the following specific outputs in the first year.

- ▣ Training - One week refresher training course were completed for 122 primary health care personnel, including CHWs, MAs, and sanitary overseers. The planned schedule calls for 1,331 people to be trained by the project's end. The CHW training manual has been revised twice and approval and adoption by the Regional MOH is expected by the end of the year. A training program for sanitary overseers has been developed and a public health officer to assist in the activity has been hired. In FY 82 two RMOH staff people will be given long term training in the U.S. (M.A. degrees) and five will be given short-term training in a third country.
  
- ▣ Construction - The project's planned ten PCHUs were to have been completed in FY 80, but have not yet been started. The two CHW training schools and affiliated dispensaries planned were scheduled to be completed in FY 80. One is almost complete and the foundation has been laid for the second.
  
- ▣ Information/Evaluation Systems - Each of the six provinces in the southern region are to have a baseline study and follow-up survey for a total of twelve studies. Four were to be completed in FY 80, but only one baseline study was completed, and the data from another is being analyzed. The CHW monthly reporting form was revised and instructions prepared for its use. Forms to evaluate CHWs have been developed and are being pretested. In FY 81, inservice training is scheduled for PHCP data collection personnel.
  
- ▣ Medical Logistics Supply Systems - The reporting, accounting, and drug distribution systems were upgraded at the regional PHCP medical store. The PHC drug list was revised.

## ANALYSIS

As the AID grantee, AMREF has hired technical and administrative personnel for the project. The RMOH has counterpart personnel on the project staff, who at the project's end will assume management from AMREF.

As of March 1980, when an AID evaluation was completed, the project was behind schedule in all areas, except the training of PHC personnel. The primary reason for project delays is the logistical situation. Other issues of concern are staffing, finances and defining the role of CHWs.

Any program in southern Sudan faces enormous logistics problems. Iran is the major source of fuel and supplies are extremely variable. Air Sudan has few flights to the South and at times cancels all flights because there is no fuel for a return trip. For the first year of the project the only supply route to Juba, seat of the Southern Regional Government, crossed through Uganda and was closed for six months due to the political upheaval there. These problems have caused delays in many areas. The lack of fuel and construction materials has delayed the building of two CHW training schools and dispensaries, 10 PHCUs, and project staff housing. The difficult logistical situation has also led to weak field supervision of CHWs. This is understandable considering the project's shortage of fuel and the size of area to be covered--larger than the state of Texas.

Staffing the project has also been a problem. Although the project's success depends heavily on a fully-staffed Public Health Care Department to eventually assume full control, there are a number of staff openings due to lack of qualified Southerners. The Director of the RMOH is therefore advertising key positions in Northern Sudan. Partially due to delays in building staff housing, AMREF had difficulty staffing the project with long-term personnel in the first year. What was accomplished was in large part due to

technical support from AMREF's Nairobi office. The key positions were filled by March 1980. A volunteer funded by the Canadian University Service Organization was to coordinate the building of PHCUs. Unfortunately, he proved to be ineffective and a replacement is being recruited. Also, in January 1980, the position of project manager was added to the staff. The medical training officer was originally serving both functions but spent an inordinate amount of time on administrative problems rather than training.

There have also been problems in defining the role of the community health worker. The original plans were for CHWs to bring preventive and promotive health services to rural areas, with the curative aspects having secondary importance. In the past, however, the curative side had been dominant in the health system; moreover, the experience of the CHW trainers is weak in preventive/promotive care and in the communication and organizational skills needed to foster community development. Also, according to villagers, curative care is more important, so that the effectiveness of preventive/promotive care measures often depends on the quality of curative care. Related issues are whether the scope of CHW activities and the length of training are too demanding. The problems surrounding the role of CHWs are due in large part to the fact that the position was newly created as part of the PHC plan. The need for preventive/promotive care is great, but the original plan may have been too rigid to follow under the difficult circumstances of Southern Sudan where basic curative services are needed and wanted by rural people.

Escalating costs and funding difficulties have also caused problems. Due to construction delays, contractor insurance coverage was extended, thereby increasing total insurance costs. To bring commodities through Uganda, shippers placed a twenty percent surcharge that increased the cost of construction materials. The inflation rate is at an unexpected rate of 28 percent, and labor costs for construction have also gone up. Even more serious is the crisis situation with respect to GOS balance of payments. The

dramatic climb in debt service obligations has caused a severe reduction in foreign exchange available to buy drugs and the fuel necessary to transport them to rural PHCUs. An important issue which has not yet been addressed is the long-term financing of the SPHCP. At present the RMOH is paying health care personnel salaries, but there may be insufficient funds when external assistance ends. Some form of reliable local financing, beyond collection boxes which are now used on a pilot basis, may have to be developed.

The Southern PHCP's deadlines appear to be unreasonably tight, given the lack of even an elementary logistical system, lack of health infrastructure and personnel, and the region's extreme poverty. To deal with these problems, the Rural Health Support Project (650-0030) was authorized in August of 1980 to continue and expand upon the present program. The new program will cover both the southern region and the four poorest regions in Northern Sudan. Special emphasis will be placed on strengthening the logistical system through the provision of bicycles and motorcycles, and the use of radio broadcasts to educate CHWs and the public. There will be an effort to strengthen planning and management functions at the central, regional, and provincial levels. This will include training programs for health administrators at each level. In response to funding problems, the project will underwrite the cost of \$2.2 million in drugs and supplies to be used throughout the project.

Increased emphasis will be placed on maternal and child health/family planning which was given high priority in the National Health Plan, but has not yet been integrated into the PHCP. There may be difficulties in having CHWs, who are almost all men, delivering MCH/FP services in a culture where men are not accepted for maternal care. It is planned that this new project will use phased planning and implementation to allow the necessary flexibility to accommodate diverse cultural and demographic characteristics.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>2</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>1</u>                 |
| 4. emphasis on role of women                        | <u>1</u>                 |
| 5. significant community financing                  | <u>2</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>1</u>                 |
| 2. logistic support                                 | <u>3</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>2</u>                 |
| 3. home visits                                      | <u>2</u>                 |
| 4. mobile units                                     | <u>1</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>3</u>                 |
| 2. project intended to be replicated                | <u>1</u>                 |
| 3. management information system/ongoing monitoring | <u>2</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>1</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>4</u>                 |
| 7. efforts to recruit women                         | <u>2*</u>                |
| F. Emphasis on prevention over curative care        | <u>3</u>                 |
| G. Use of appropriate technology                    | <u>3</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>2*</u>                |
| 3. mass media health education   | <u>2*</u>                |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>2*</u>                |
| 3. supplemental food for weanlings and/or mothers  | <u>1</u>                 |
| 4. oral rehydration (specify type) _____   | <u>3</u>                 |
| 5. nutritional status monitoring   | <u>3</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>3</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>3</u>                 |
| 2. well baby care  | <u>3</u>                 |
| 3. train traditional birth attendants  | <u>2*</u>                |
| 4. family planning education   | <u>2*</u>                |
| 5. distribute contraceptives   | <u>2*</u>                |
| 6. surgical family planning procedures   | <u>2*</u>                |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>1</u>                 |
| 2. cold chain support  | <u>2*</u>                |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>2*</u>                |
| 2. malaria vector control  | <u>2*</u>                |
| 3. other vector control  | <u>2*</u>                |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>3</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

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ZAIRE

IDENTIFICATION

Project Name  
and Number: Health Systems Development,  
Number 660-0057

Location: Kinshasa, Kongolo and Maluku

Project Dates: 1978 - 1980

Funding Level  
and Source: USAID Grant: \$675,000\*  
Government of  
Zaire (GOZ): \$440,000

Responsible Offices: Africa Bureau, Office of Central  
Africa Affairs, AID/Washington  
Health Officer, USAID/Zaire

Contractor: Planning and Human Systems, Inc.,  
Dr. William Guy, Project Director.

Implementing Agencies: Department of Health, GOZ

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\*Figure from PES. Original figure was \$1,285,000.

NOT OFFICIAL  
**DRAFT**  
FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 29.3 million

Rural Population: 66%

Infant Mortality Rate: 160

Population Growth Rate: 2.8%

Life Expectancy at Birth: 46

GNP Per Capita: \$210

Adult Literacy Rate: 15%

## SYNOPSIS

Zaire's Department of Health (DOH) has been ineffective in reaching the rural population due to lack of human and financial resources and insufficient planning, management, and support capacity. This project was designed to improve the DOH's planning and implementation capability through training of a key group of high-level personnel and implementing pilot projects in two rural areas.

The final evaluation found that this goal was not achieved, though some useful work was done. The contract terminated as scheduled. The project may be continued in a different form.

## BACKGROUND

Most of Zaire's rural population suffer from chronically poor health; they are victims of numerous, severe endemic diseases, complicated by malnutrition and parasites. Data from a Kinshasa hospital indicates an average of 2.7 diseases per person per year. Infant and child deaths account for 80% of total annual deaths.

A GOZ study undertaken in the Kinshasa area revealed that only 19% of the poor (who comprise over half the total population) had access to medical facilities.

During their period of colonial rule, the Belgians established an extensive health network but made virtually no provision for its continuation by Zairian personnel; during the economic and political problems which followed independence, the system collapsed. GOZ efforts to revive it have not yet been successful: health manpower is scarce and extremely maldistributed, training is inadequate, and government health services are severely hampered by poor administration and ineffective logistics.

In November 1973, President Mobutu cited health as a priority for development planning. A plan for health services was drawn up emphasizing basic health care services to be delivered via a number of rural and urban development zones and integration of "desired birth services" (family planning for health reasons, not population control) into the health care system. A National Health Council comprised of the heads of all health agencies, the education ministry, and the university medical faculty was created in 1974 to serve as a national health planning and implementing body.

The project in question was designed during this period (1975) to help the GOZ implement its new health policy by improving planning and managerial capabilities. It was intended to complement a project on endemic disease control and lead into the Basic Family Health project, which would expand the plans developed under the subject project through an ambitious system of health development zones. (The Basic Family Health project has since been extensively revised; a much-reduced version is still in the planning stage.)

However, a severe decline in Zaire's economic position since 1974 has resulted in elimination of health as a priority and heavy cuts in the health budget. The National Health Council is apparently not operative. Currently, the GOZ relies heavily on missionary groups to provide rural health care because of its personnel, organizational, and budgetary constraints.

## PROJECT DESCRIPTION

The project's purpose was to strengthen GOZ institutional capacity to deliver health services.

Planned outputs were as follows:

- A unit established in the GOZ Department of Health (DOH) capable of planning and executing a system of integrated health services, with a training cadre in place.
- Written national plans for major support systems in logistics and supply (including maintenance), transportation (including maintenance); medical records and health data collection and analysis; manpower development and utilization; budgeting and fiscal accounting.
- An initial integrated health delivery system operating in Kongolo and plan of action, operating procedures, and essential commodities ready to begin implementation of an integrated delivery system in a second zone.
- A study to determine the requirements for a schistosomiasis control project.

These outputs were to be achieved through 1) technical assistance provided by the contractor (supplemented by a USAID-contracted coordinator in Kongolo and an assistant to the contractor Chief of Party, to compensate for lack of resources in the contract); 2) commodities for the two pilot zones, and 3) a schistosomiasis expert. The Peace Corps also provided volunteers to work with the project in the two zones.

The technical assistance approach was redesigned in February 1979, on the basis of data gathered during the project's first six months. Activities included a three-phased training program for

the National Health Planning Group, a group of about 10 high level DOH civil servants. Training consisted of a series of weekly workshops in Kinshasa to analyze the status of the Zairian health system, a three-week U.S. study tour for on-site observation of relevant management methods and processes, and another series of weekly Kinshasa workshops to adapt the principles learned to Zaire. Eight short-term consultants in various technical areas, together with the contractor's resident Chief of Party (COP) as project director, conducted the workshops. Although 24 person-months of short-term assistance were planned, only about 10 were provided.

Concurrently, model projects were to have been developed in the Kongolo and Maluku areas. AID assigned a coordinator in Kongolo, and seven Peace Corps Volunteers (PCVs) are working in community organization, formation of local health planning committees and development of preventive health services at the Kongolo hospital. Two PCVs are working in Maluku. PCVs have established MCH clinics, initiated regular inoculation campaigns, provided health education and family planning counseling, trained Maluku promoters in nutrition and health education, and cooperated with GOZ personnel in providing clean water and latrines. Both the AID coordinator and the PCVs have received guidance from the contractor project director.

Though much delayed, initial medical supplies and equipment have been provided in the two field zones under the AID grant.

A study to determine the requirements for a schistosomiasis control project is to be carried out by a short-term consultant. This study has been added recently (May 1980) to the project outputs, and additional funding has been authorized though not obligated. No further information is available in Washington at this time concerning other aspects of this study.

## CURRENT PROJECT STATUS

### PLANNED OUTPUTS

### CURRENT STATUS

|  |   |
|--|---|
| Planning and implementing unit established in DOH.   | Group trained in planning and coordination.*  |
| Written plans for support systems: logistics, transportation, information, manpower, budgeting and accounting. | Transportation plan done. Consultant reports only for others.*** Some restructuring being done and necessary legislation prepared.* |
| Integrated health delivery system in Kongolo; elements ready for implementation of system in second zone.      | Not achieved. PCVs are providing services in Kongolo and Maluku.***   |
| Study to determine requirements for schistosomiasis control.   | Funds authorized but not yet obligated. No other information available.**   |

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\*Source--Contractor  
\*\*Source--AID/Washington, AFR/DR  
\*\*\*Source--PES

## ANALYSIS

The contractor, Planning and Human Systems, Inc., had chief responsibility for technical assistance to be provided under the project, as well as overall coordination. Other responsibilities were less clear, some being shared with USAID/Zaire. Authority over non-contractor project personnel hired by USAID/Zaire was not

clear and caused problems which will be discussed later. The contractor was responsible for the first three outputs listed, but not for the schistosomiasis study.

This project was approved in 1975/76, but contractor selection and contract negotiations took almost three years. The contractor COP arrived in Zaire in October 1978. A six-month delay then occurred because of lack of cooperation from the GOZ. According to the contractor, this was due to GOZ dissatisfaction with the project design. The Minister of Health objected to training directed to the National Health Council, which is outside the bureaucracy. Besides considering such training ineffective, the Minister viewed it as infringing on the DOH's territory. The Minister also felt that training additional professionals in the U.S. would constitute a waste of resources, as there was already a large group of U.S. trained individuals who were not properly utilized. When the design was changed to train a key group within the DOH, the Minister immediately gave his support, as well as office space, facilities, and counterpart funds. However, because of unrelated logistical problems, a currency change, and banking rulings, the project was without counterpart funds for approximately 12 months.

Numerous other problems have arisen as a result of the unrealistic and poorly worked out project design\* that led to misunderstandings concerning priorities and responsibilities. The number of full-time resident contractor personnel originally proposed was reduced by the AID/W contracts office from three to one, although no corresponding changes were made in the scope of work. Extreme transportation and logistical difficulties were encountered in trying to develop a pilot project in Kongolo, 1,100 miles from Kinshasa in the North Shaba region. Neither USAID nor the contractor foresaw the difficulties involved, and no contingency allowances were included in the contract. The Kongolo area was originally selected because USAID had a large agricultural project there and was interested in providing social services as

well, thereby moving toward an integrated rural development approach.

Conflict between the Mission and the contractor arose over the contractor's efforts to change the site to a more accessible area near Kinshasa. Although the difficulties of working in Kongolo became apparent to everyone, the Mission felt that the contractor was renegeing on the original agreement, and the contractor felt that the Mission was insisting on Kongolo in order to support a higher priority (the agricultural project) at the expense of an effective health project.

Because there was no clear agreement on what was to be accomplished or how it was to be done, there was a definite lack of rapport and cooperation between USAID and the contractor which severely affected project implementation.

According to AID/Washington sources, a key lesson learned was that the DOH is probably not capable of carrying out a project in as isolated an area as Kongolo: in hindsight, it is felt that the pilot effort should have been in a more accessible area. But according to AID, difficulties and conflict might also have been avoided if a more flexible approach had been taken by the contractor, such as requesting a time extension because of the logistical problems involved rather than insisting on changing the site.

Because of the problems mentioned, the COP concentrated his efforts on the Kinshasa training program for the DOH group rather than on developing an integrated health system in Kongolo. The contractor's April 1980 Status Report indicates that the Kinshasa training has been effective in preparing the DOH group in health planning. The report states that the group is now actively engaged in planning the health system, coordinating the efforts of all DOH directorates, and seeking necessary changes in legislation 1) to permit user fees in order to develop a self-supporting system;

2) to improve pharmaceutical distribution and control; and 3) to institute a national health insurance program. Both the Mission and AID/Washington agree that the workshops have been useful. However, the project evaluation (PES) questions the substitution of a three-week training tour for long-term training in health planning and management, and notes that total training was reduced from the 63 person-months envisioned in the project paper to 7.5 person-months. The evaluators, however, were unable to make a judgment on the DOH team's level of expertise after their training.

The PES also indicates that national plans for logistics, information, manpower, and budgeting/accounting were not prepared as planned. What was produced was a series of consultant reports on these general areas. Furthermore, the DOH officials, apparently unaware that they were supposed to prepare these national plans, appeared satisfied with the consultant reports. (In the area of transportation, it is possible that a plan for a central garage will be implemented.)

As noted earlier, however, the effort in Kongolo to establish a health delivery system has encountered serious problems. The contractor complained that the COP had responsibility for the project without having any legal authority over the USAID-contracted coordinator in Kongolo or the PCVs. While the COP maintained regular radio contact, his instructions apparently were not always followed, and extreme transportation difficulties prevented frequent supervisory visits. AID recognized the lack of legal authority, but stated that the contractor had functional, de facto authority. AID's feeling (as reported by AID/Washington sources) seemed to be that the contractor was too rigid in attempting to disclaim responsibility because of lack of legal authority and was not making the necessary adjustments to work effectively with the Mission and the PCVs.

According to the contractor, the coordinator (whose contract was also permitted to expire in August) did not perform effectively

and both she and the PCVs were undertaking activities which were not related to immediate project objectives as understood by the contractor, i.e., training local health personnel for the integrated health system being developed by the Kinshasa planning group. Kongolo and Maluku were supposed to be a demonstration of the group's work. However, according to the contractor, an apparent desire by USAID/Zaire for more rapid implementation, especially in Kongolo as support for the agriculture project, led to direct delivery of services by the PCVs, instead of the training of local personnel and formation of linkages between health providers. Some training was provided to local DOH personnel and private hospital staff by the contractor's short-term consultants, but the contractor felt that there was no effective linkage between them and the PC activities. In the contractor's opinion, the DOH group is only now ready to implement a health system based on realistic planning.

The PES judged the Kongolo intervention somewhat differently, crediting PCV services with success in demonstrating that rural villages can address immediate health problems with locally available and affordable resources, thereby leading some GOZ officials to feel that health can be improved without an increase in expenditures. The PES recognized, however, that the project did not create a functioning rural health delivery system.

The general conclusions of the PES were that the project failed to accomplish its purpose of strengthening GOZ capabilities in health planning and management, though it did at least partially succeed in training a cadre of DOH planners/managers. Other outputs were not achieved as planned. The PES attributed this failure to poor project design, citing numerous failures to comply with established AID design procedures, which in turn led to misunderstandings, disagreements and poor interpersonal relations between the parties. The PES also indicated that external circumstances--economic decline, lack of priority for health, and communication and transportation difficulties--contributed to the project's problems.

The wisdom of selecting a small firm under minority set-aside rather than open bidding was questioned, as well as the criteria for selecting the COP.

The PES recommended that the contract with Planning and Human Systems be allowed to expire as scheduled; that the Kongolo coordinator's contract also be allowed to expire; that AID continue to assist Peace Corps activities in Kongolo; that AID provide short-term consultants to the DOH on request; and that the project be extended through August 1982 using remaining project funds. Changes in personnel and activities were recommended as well as additional commodities support.

When the contractor's involvement ended as scheduled, August 30, 1980, the firm proposed, with the support of the DOH, to extend the contract to permit continued technical assistance to the DOH group. This request was not accepted by the Mission.

There remain differences in contractor and PES conclusions about the success of the project. The contractor has emphasized the success of the DOH training program. On the other hand, the PES recognized that a group had been trained, but expressed reservations as to thoroughness of training; the PES also attributed greater success to the Kongolo PCV effort than the contractor did. Both, however, agree on the problems caused by lack of clarity in project design and the consequent lack of agreement on strategies and responsibilities.

PHC CHECKLIST

Zaire 0057

PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>4</u>                 |
| 3. volunteers                                       | <u>4</u>                 |
| 4. emphasis on role of women                        | <u>4</u>                 |
| 5. significant community financing                  | <u>2</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>4</u>                 |
| 2. logistic support                                 | <u>2</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>2</u>                 |
| 3. home visits                                      | <u>4</u>                 |
| 4. mobile units                                     | <u>1</u>                 |
| 5. health services at community facilities          | <u>4</u>                 |
| 6. referral system                                  | <u>2</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>1</u>                 |
| 2. project intended to be replicated                | <u>yes</u>               |
| 3. management information system/ongoing monitoring | <u>2</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>4</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>4</u>                 |
| 2. new responsibilities for existing health workers | <u>4</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>4</u>                 |
| 7. efforts to recruit women                         | <u>4</u>                 |
| F. Emphasis on prevention over curative care        | <u>3</u>                 |
| G. Use of appropriate technology                    | <u>4</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>3</u>                 |
| 3. mass media health education   | <u>4</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>4</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>4</u>                 |
| 4. oral rehydration (specify type) _____   | <u>4</u>                 |
| 5. nutritional status monitoring   | <u>4</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>3</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>3</u>                 |
| 2. well baby care  | <u>3</u>                 |
| 3. train traditional birth attendants  | <u>4</u>                 |
| 4. family planning education   | <u>3</u>                 |
| 5. distribute contraceptives   | <u>4</u>                 |
| 6. surgical family planning procedures   | <u>4</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>3</u>                 |
| 2. cold chain support  | <u>4</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>4</u>                 |
| 2. malaria vector control  | <u>4</u>                 |
| 3. other vector control  | <u>4</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>2</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>4</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>2</u>                 |

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### Interviews

Dr. Frances Georgette, President, Planning and Human Systems, Inc., Washington, D.C. August 29, 1980.

Laurence Bond, Project Division Chief, AFR/DR/CAWARAP, AID/Washington, September 4, 1980.

Sidney Chambers, Project Officer for Zaire, AFR/DR/CAWARAP, AID/Washington, September 3, 1980.

Fall 1980

CENTRAL AFRICAN REPUBLIC

IDENTIFICATION

Project Name  
and Number: Ouham Province Rural Health  
Project, Number 676-0002

Location: Ouham Province

Project Dates: FY 1977-79  
(terminated September 1979)

Funding Level  
and Source: AID (grant): \$1.7 million  
Peace Corps: \$330,000  
Government of  
CAR (GOCAR): \$931,000

Responsible Offices: Bureau for Africa, Office of  
Central Africa Affairs,  
AID/Washington

Health Officer, USAID/Central  
African Republic

Contractor: No major contractors

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## COUNTRY STATISTICS

Total Population: 2.2 million

Rural Population: 59%

Infant Mortality Rate: 190

Population Growth Rate: 2.2%

Life Expectancy at Birth: 46

GNP Per Capita: \$250

Adult Literacy Rate: --%

## SYNOPSIS

As part of an effort to begin extending basic health services to rural areas, the Ouham Rural Health Project was designed to strengthen management capability in one province of the Central African Republic. The project's activities also included training health personnel, developing vehicle repair capabilities, and rehabilitating and constructing health facilities. The project was abruptly terminated due to a change in government. However, during its two years of operation, the project was not successful in meeting most of its goals. Problems included basic design limitations, personnel and coordination, and logistics.

## BACKGROUND

The Central African Republic is a vast, sparsely populated plateau consisting mostly of open savannahs. About 70% of the population live in rural villages of less than 1000 inhabitants, and although the government has made strong efforts to resettle these populations along roads, they remain dispersed. As one of the newly independent countries of Africa (1960), the Central African Republic (CAR) suffers from an embryonic infrastructure in

all sectors as well as inadequate resources to pursue development without the help of considerable outside assistance. The very unsettled political climate following the recent change in governments has caused serious disruptions in all areas, thereby further compounding existing problems.

The health situation in the country is typical of most developing countries, and is characterized by a low life expectancy and high infant mortality and birth rates. The CAR has a particularly difficult combination of tropical diseases, including malaria, filariasis, bilharzia and ankylstomiasis. The diseases of childhood, venereal diseases, and the diseases resulting from poor sanitation are also prevalent. Health infrastructure is concentrated in the prefecture (provincial) capitals and sous-prefecture capitals, with few government services at the rural level. The cadre of trained health personnel is inadequate to meet even the needs at the central ministry level. Consequently, the health system is heavily dependent upon expatriate French physicians.

Paying expatriate salaries places a heavy burden on scarce health resources. The GOCAR is acutely aware of the gravity of its health situation, and its dependence on external resources for health development. In the past decade the country has made progress toward improving its health situation. Health was included for the first time as a separate chapter in the 1971-1975 Five Year Plan, with emphasis being given to developing "basic health services throughout the country, and training qualified health workers at all levels, specifically through preventive programs directed at rural populations." Recent measures to improve rural health include: 1) the development of a paramedical training program, 2) the establishment of the Bimbo pilot zone to study and demonstrate the delivery of health services that could be successfully extended to the entire rural population; and 3) the

grouping of various Ministry of Health (MOH) vertical programs to facilitate integrated health delivery (though very recently this trend has reversed once more).

The Ouham Prefecture, located in the northwest area of the country, is the second most populated prefecture, and has the advantage of a basic road system. Ouham has a population of about 350,000, mostly small cultivators living in semipermanent settlements which shift location every 2-10 years as the surrounding soil becomes depleted. Ouham is typical of much of the county in terms of health needs and characteristics. At present most government fixed health services are clustered in the sous-prefecture capitals. Other government services include a mobile immunization team which visits each village every two years. Existing infrastructure is not always actively delivering services. A 1975 APHA team assessing the health situation in the prefecture estimated that only half of the 19 health posts in villages were operating. In addition to government services, three missions sponsor hospitals and rural dispensaries which, according to the APHA team, are more utilized than government facilities, despite the small fee they charge for services.

The antecedents of the Ouham Province Rural Health Project date back to 1974, when AID prepared a Development Assistance Program (DAP) for the country, which recommended assistance for a Bimbo-like demonstration rural health delivery project. In the following year in a follow-up visit, APHA explored the possibility of including the CAR in a health delivery system demonstration project. However, after several visits by various individuals and teams, a 1975 APHA team decided that a full-scale demonstration project should not be undertaken prior to the development of improved local management systems. The APHA team recommended instead a two phase project, the first emphasizing management, and the second supporting the expansion of services to rural areas.

According to the Project Paper (PP) (1976), Ouham Prefecture was selected as the project site because the GOCAP already planned to expand health services there in 1977, and because the Ministries of Social Affairs, Agriculture and Education also planned increased community development activities there. In the third five year plan (1976-80), Ouham is one of four prefectures selected for extension of rural health services. However, the GOCAR Study Commission reviewing the PP document commented that they had "reservations with respect to this choice" as it was "arrived at unilaterally," and that "it is not acceptable for a government to allow its hand to be forced in this manner." Apparently, the prefecture of Basse-Kotto was slated to precede Ouham in receiving development priority, and government efforts to extend health and other services were already underway there. As a result, the GOCAR officially requested that some of the U.S. planned assistance be diverted to the Basse-Kotto prefecture. This compromise was accepted by AID, and the issue is not mentioned again in the project evaluation documents.

The Ouham project, although based on the experience of the Bimbo pilot zone, was designed to be a lower cost system, less heavily dependent on large teams and four-wheeled transport. It was to be a health delivery model that could cooperate without external financial support.

#### PROJECT DESCRIPTION

The Ouham Rural Health Project was designed to address the administrative, management, personnel and communication/transportation problems impeding the development of an integrated, village level health care delivery system. Progress in the county's health status was, and still is, dependent upon the extent to which these management issues can be resolved and a low cost rural health system put into operation.

## CURRENT PROJECT STATUS\*

### OUTPUTS

STATUS REPORTED IN FEBRUARY 1980

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1. A prefectural administration system for support and supervision of rural health planning and evaluation.
  - a. The project was to have developed health planning and evaluation manuals. None were ever developed during this project.
  - b. Baseline surveys and disease incidence data in addition to development of a Prefecture Base Data Collection system was to have been conducted and set up respectively. An evaluation of the Bossangoa population's health problems provided baseline demographic data for the project. This was done as part of the AID short-term technical assistance to the project. The report was useful in that it furnished helpful information on reference diseases by which the project could later be evaluated. However, there were no follow-up studies undertaken which could be compared with the baseline data.
  - c. Health plan for Ouham developed. The evaluation team found no evidence of one having been established.
2. A system for the delivery of village level health education and rural sanitation.
  - a. Sixty active village health committees were envisioned in the P.P. Dr. Finlay reported that (Sept. 1979) "More than 100 village health or development committees have been formed with more than 80 described as active." The evaluation team was unable to confirm or deny this statement. However, in 3 villages visited by the team (Bouanssouma, Boussera and Bangayanga), there had been no village committee meetings within the past six

\* Source: USAID Special Project Evaluation.

## CURRENT PROJECT STATUS

### OUTPUTS

STATUS REPORTED IN FEBRUARY 1980

---

2.

a. Continued

months since the project had been terminated. These were among the villages in which committees had been reported. Apparently committee activity was unrelated to dispensary activity in these three villages.

b. Fifty primary schools with health education being a part of the curriculum was planned.

Finlay (Sept. 1979) reported that "Health curriculums have been introduced and are known to be functioning in only 10 schools of Ouham and Basse-Kotto at this stage of the project. Teachers from more than 50 schools, however, have been introduced to the adopted Togo health curriculum and are in possession of a copy of this curriculum. This curriculum has not yet been officially adopted by the Ministry of Education in Bangui.

c. A distribution system for health education materials would be established.

Health education materials were obtained. An attempt was made to distribute these materials to various health workers in the villages. Although a system was being evolved for the distribution for these materials, the project was terminated before this could be effected (Finlay, 1979).

3. A system for delivery of village level health care services.

a. 1,000 traditional birth attendants and healers were to have attended MCH workshops.

The evaluation team saw no workshops in session, nor did it meet with known workshop participants. However, Finlay reports that at least 50 people attended these workshops (Finlay, 1979) which

## CURRENT PROJECT STATUS

### OUTPUTS

STATUS REPORTED IN FEBRUARY 1980

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3.
  - a. Continued  
were conducted by a PCV in Boguila. As the evaluation team did not have the opportunity to visit Boguila, we are unable to comment further.
  - b. 20 Villages Health Care Agents (VHCA) identified by the community and trained in prototype training.  
5 VHCA underwent training in Boguila. (Finlay, 1979). They were chosen by the community.
4. A system for vehicle maintenance, 10 mechanics trained.  
1 mechanic and 2 apprentices received on-the-job training at the Bossangoa rural health services garage. The evaluation team did not see any evidence of a system for vehicle maintenance.

## ANALYSIS

The Ouham Rural Health project was abruptly terminated by an action of the U.S. Congress in September of 1979 because of the political situation surrounding the overthrow of President for Life Bokassa. During its two year period of operation, however, the project encountered a series of obstacles which precluded its implementation. While there was apparently considerable activity in some of the project areas, none of the objectives were achieved to any substantial degree by the time the project was terminated.

When a special evaluation team reviewed the project in February of 1980 in order to determine which elements should be reinstated, they recommended discontinuing the project. According to the special evaluation, the project encountered problems arising from a change in government, personnel problems, logistics problems, as well as problems of implementing the project within the existing administrative structure and existing transportation situation in the country. Very briefly:

Problems arising from external factors: The unstable political situation preceding the change in government caused delays in assigning AID direct hire technicians for the project. Also, the high degree of fiscal weakness and chaos during the entire period of the project's operation, posed problems as the GOCAR was unable to fulfil its financial obligations.

Project design problems: The 1980 special evaluation indicated that the goals of the project could never be achieved given the framework within which the project was implemented. The two major design problems (although not referred to as such by the evaluation team) were the project's incompatibility with the MOH's management style and philosophy; and its dependence on scarce fuel. The country's health system is administered by French expatriates.

Because of differences in management style and approach to health systems, the evaluation team felt that a U.S.-conceived project would have little likelihood of being taken over by the CAR's health system, or serve as a prototype for the delivery of basic health services in the other prefectures -- one of the project's objectives. Given this situation, the 1980 evaluation recommend that "USAID not design projects with the intention of developing health systems or management capacity so long as expatriate technicians continue to administer the health system for the entire country."

Another critical design shortcoming was that the project was fuel dependent, giving it a high probability of failure. Given the chronic fuel shortages in Bangui and the country as a whole, important elements of the project simply could not be carried out as planned.

Personnel problems: Recruiting AID technicians for an isolated project site for a long-term period is generally a major problem, and one that the Ouham project was never able to resolve. The first technician (Physician, Chief of Party) assigned to the post resigned after 6 months. For the rest of the project period, his duties were carried out long distance by the other technician, who was based in the capital. The resulting constant shuttling from Bangui to Bossangoa, the project site, also disrupted the planned health planning activities at the central level.

Peace Corps participation in the project proved to be problematical, as the project director did not have direct authority over the activities of volunteers. There were also problems arising over the coordination of volunteers' tours of duty with project activities. These problems were compounded by the fact that there was no AID Program Officer assigned to the CAR during the project period. The responsible officer was based in

Yaounde, which delayed many funding and administrative questions. This also meant there was no arbitrator of conflicts among AID technicians, between AID technicians and PCVs, and between AID technicians and GOCAR personnel. According to the evaluation document, many of "these differences were severe enough to preclude optimum execution of duties thus affecting project outputs."

Logistics problems: Waivers for drugs procurement consumed 1 year of project time. Furthermore, the contractor for dispensary construction had unforeseen transportation problems, which significantly delayed building the planned dispensaries.

It is hoped that the lessons learned from this project will help prevent similar problems from arising in other projects.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>2</u>                 |
| 2. community-selected health workers                | <u>2</u>                 |
| 3. volunteers                                       | <u>1</u>                 |
| 4. emphasis on role of women                        | <u>1</u>                 |
| 5. significant community financing                  | <u>1</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>2</u>                 |
| 2. logistic support                                 | <u>2</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>1</u>                 |
| 2. minimize cultural barriers to services           | <u>2</u>                 |
| 3. home visits                                      | <u>4</u>                 |
| 4. mobile units                                     | <u>1</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>3</u>                 |
| 2. project intended to be replicated                | <u>2</u>                 |
| 3. management information system/ongoing monitoring | <u>2</u>                 |
| 4. periodic evaluations                             | <u>4</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>4</u>                 |
| 7. efforts to recruit women                         | <u>4</u>                 |
| F. Emphasis on prevention over curative care        | <u>2</u>                 |
| G. Use of appropriate technology                    | <u>4</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>2</u>                 |
| 2. group health education  | <u>2</u>                 |
| 3. mass media health education   | <u>4</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>2</u>                 |
| 2. promote breastfeeding   | <u>2</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>2</u>                 |
| 4. oral rehydration (specify type) _____   | <u>2</u>                 |
| 5. nutritional status monitoring   | <u>2</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>2</u>                 |
| 2. hygiene education   | <u>2</u>                 |
| 3. waste disposal for family/community   | <u>2</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>2</u>                 |
| 2. well baby care  | <u>2</u>                 |
| 3. train traditional birth attendants  | <u>2</u>                 |
| 4. family planning education   | <u>1</u>                 |
| 5. distribute contraceptives   | <u>1</u>                 |
| 6. surgical family planning procedures   | <u>1</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>1</u>                 |
| 2. cold chain support  | <u>1</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>1</u>                 |
| 2. malaria vector control  | <u>1</u>                 |
| 3. other vector control  | <u>1</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>2</u>                 |
| 2. referral system   | <u>4</u>                 |
| 3. drugs dispensed by health workers   | <u>2</u>                 |
| 4. use of traditional practitioners  | <u>2</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>2</u>                 |

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### Interviews

Dr. Thomas Georges - Member Special Evaluation Team.  
Africa Bureau  
Director, Health, Nutrition Office  
AID/Washington

MAURITANIA

IDENTIFICATION

Project Name  
and Number: Rural Medical Assistance  
Number 682-0202

Location: Trarza Region (southwest  
Mauritania)

Project Dates: FY 1979 - FY 1983

Funding Level  
and Source:

|                                     |             |
|-------------------------------------|-------------|
| AID Grant:                          | \$1,662,000 |
| Peace Corps:                        | \$ 272,000  |
| Government of<br>Mauritania (GIRM): | \$ 225,000  |
| Red Crescent:                       | \$ 4,000    |
| Total                               | \$2,163,000 |

Responsible Offices: Africa Bureau, Office of  
Sahel and Francophone West  
Africa, AID/Washington

Health Officer, USAID/Mauritania

Contractor: Dimpex Associates, Inc., (Techni-  
cal Assistance and project co-  
ordination)

Implementing Agencies: Directorate of Health, Ministry  
of Health, Labor and Social  
Affairs, Nouakchott, Islamic  
Republic of Mauritania

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## COUNTRY STATISTICS

Total Population: 1.5 million

Rural Population: 77%

Infant Mortality Rate: 187

Population Growth Rate: 2.8%

Life Expectancy at Birth: 42

GNP Per Capita: \$270

Adult Literacy Rate: 17%

## SYNOPSIS

This project's goal is to improve rural health and help stem Mauritania's rapid rural-urban migration through testing a model for rural health outreach by community health workers. Due to economic constraints, the project is designed to minimize recurring costs through community financing of health workers and basic medicines and supplies at the local level. Implementation is just beginning after about a six-month delay.

## BACKGROUND

The Islamic Republic of Mauritania is one of the West African nations most severely affected by the 1969-74 and 1977-78 droughts. The drought and the war in the Western Sahara (from which Mauritania withdrew in 1978) severely drained the country's economic resources. Much of the once-nomadic population has migrated to urban centers or settled in villages, partly because of scarce food supplies and the loss of animals during the drought. As a result, the proportions of nomadic and sedentary population have virtually reversed during the past ten years, though Mauritania is still predominantly rural. Most of the population is engaged in raising livestock-raising, farming, and fishing. About half the modern sector workforce is self-employed in commerce, and about 40% of the labor force is unemployed.

About 70% of the population are Moors, divided into several castes, with several black Sudanese ethnic groups concentrated in the southern region making up the remainder. The Moors have traditionally been nomads, though many have recently settled down. The black ethnic groups are sedentary agriculturalists. Sharp caste divisions define suitable economic activities and relations among and between groups. All groups share the Islamic faith. Mauritanian women, particularly Moors, enjoy more freedom and participate to a greater degree than women in most Islamic societies. It is likely that half or more of the health workers in this project will be women.

In an effort to deal with the crises caused by the drought, the government (GIRM) is concentrating on basic improvements in agricultural production and on improved rural health care in an attempt to develop the interior and limit further rural-urban migration.

The health problems facing Mauritania are endemic throughout the Sahelian region: high morbidity and mortality from infectious and parasitic diseases, complicated by early childhood nutritional deficiencies. Many health problems stem from the nomadic lifestyle and desert climate. Water is scarce and bathing is very uncommon and believed harmful, so personal hygiene is poor. Prevailing eating patterns largely preclude vegetables. Loss of animals through drought has severely affected the diet of the meat and milk dependent Moors, and malnutrition has increased. Preventive health practices are virtually unknown, except for immunization, which has been provided widely by mobile teams.

The GIRM has recognized that the urban, hospital-based, primarily curative health care system inherited from the French is inappropriate for Mauritania, where the Ministry of Health (MOH) is trying to develop a system for extending health care to the rural areas. The challenge is to devise a low cost system that can accommodate both nomadic and settled populations, as well as diverse

ethnic, cultural, and caste groups. The current AID-assisted demonstration project is a first step in the effort to extend low cost basic health care to the village and encampment level (temporary nomadic settlements).

### PROJECT DESCRIPTION

The project aims to help stabilize the rural population in the interior of Mauritania and to improve basic health services for the rural poor:

- o By designing, implementing, and evaluating a demonstration rural health system that will bring promotive and preventive as well as curative services to the village level, be integrated into the existing GIRM health structure, and minimize recurring costs to the GIRM.
- o By providing a data base to enable the GIRM to decide whether to further replicate the project.

The major project outputs are the following:

- Initiation at the village/encampment level of a preventive health care system.
- Improvement of the existing system at the dispensary level and at the regional hospital at Rosso.
- Development of locally based and supported community health workers (CHWs).
- Establishment of a resupply system that will capitalize on local community and entrepreneurial resources.

The demonstration project is being carried out in the Trarza region in southwest Mauritania because of its ethnic diversity,

relative accessibility, and existing network of dispensaries and PMI units (maternal/child health centers) to provide the necessary teaching and supervisory staff. Implementation is just beginning.

AID funds will support technical assistance, training of trainers, and initial medical supplies and equipment.

Technical assistance and project coordination will be carried out by two long-term contract advisors in public health and training, supplemented by short-term consultants, who will work with the counterpart project director in the MOH.

Two Mauritanian public health nurses will train and supervise ten MOH nurses from the regional dispensaries and PMIs, who will in turn train and supervise 192 community health workers (CHWs) in three-month courses at four training centers; they will then serve their own communities. In addition to the initial three months of training, CHWs will receive one or two weeks of refresher training every year to review capacities and introduce new skills. Eight U.S. Peace Corps Volunteers (PCVs) (in two slightly overlapping groups of four each) will serve as support to the trainers under the supervision of the two public health nurses.

Community participation is a key element. In order for the project to succeed, community support will be essential in forming community health committees (CHCs), which will then select CHWs for training; paying CHWs; generating funds to resupply CHWs with medicines; evaluating the performance of the agents supplying medicines; and increasing community self-awareness and responsibilities and capabilities for improving health. Supported by the PCVs and possibly by the Red Crescent (equivalent to the Red Cross), the ten trainers will help mobilize communities in their areas.

A series of three workshops will be held in the next few months with the trainers, PCVs, and advisors to plan the curriculum for CHW training.

Red Crescent participation was originally planned to provide first aid training throughout the project area for anyone interested in order to help create health awareness among the populace and demonstrate immediate results. It was assumed that those so trained would be good candidates for CHC or CHW responsibilities. However, because of delays in signing the project agreement, training will have to be postponed until the end of the academic year (many trainers and trainees are students). Therefore, although first aid training will occur, it will no longer be a preliminary activity. A larger role for the Red Crescent in community orientation and organization is under discussion.

The degree and type of local financing envisaged in this project is unusual, due to the need to keep GIRM recurring costs to a minimum. This is essential for project continuation and replication. CHWs will be trained and supervised by GIRM personnel, but they will not be GIRM employees. They will be compensated directly by the CHCs, in a manner determined by each committee. Project funds will be used to buy each CHW an initial kit of medicines and supplies which should last two or three months. After that, resupply will be the responsibility of the CHCs through a system of licensed commercial agents. An agent at each of the four training sites will be licensed by the GIRM pharmaceutical distributor, PHARMARIM, to sell medical supplies only to CHCs or CHWs. The agent is responsible for maintaining sufficient stock and keeping records of sales. Maximum prices are set by the GIRM. Licenses are renewed annually, with input from CHCs regarding satisfaction with the agents' services as well as evaluation by the MOH.

CHCs are responsible for generating the funds to pay CHWs and to purchase and transport medicines and supplies. Funds will be raised using whatever means are appropriate to the community. Agreement on a system is necessary before a CHW actually begins work, to assure adequate resupply. Short-term technical assistance

will be provided to help CHCs develop their funding systems.

The information system being planned will utilize baseline data gathered by the training staff and PCVs during the initial community animation/organization phase, and will receive continuing input in the form of simple data collected by CHWs. All those engaged in data collection will receive appropriate training. The data collected will be used to determine health problems, evaluate project impact, indicate areas where project adaptation is needed, and assist in deciding on project replication.

The use of CB radios by CHWs has been budgeted on a pilot basis to determine their feasibility for emergency communications, referrals, and inquiries regarding availability of supplies. Based on the project's experience, health authorities are to determine whether or not to expand the use of radios.

The CHW system will become a part of the existing health care system of dispensaries, PMIs, and the regional hospital. Existing staff will be oriented regarding the CHW system, and some of them will become trainers and supervisors. Since referrals are expected to increase, the project is providing equipment and vehicles to enable existing facilities to cope with an increased workload and supervisory duties. The regional hospital will also receive new equipment. There will thus be a three-tiered system: primary care by CHWs; dispensaries and PMIs to handle cases referred by CHWs and provide training and supervision; and the regional hospital to receive referrals requiring more complex care or surgery.

## CURRENT PROJECT STATUS

| <u>OUTPUTS</u>   | <u>CURRENT STATUS</u>               |
|--|-------------------------------------|
| Trainer training -<br>2 public health nurses<br>10 dispensary/PMI nurses | 2 nurses trained<br>Not yet started |
| CHW training   | Not yet started                     |
| Medicine resupply systems<br>established                                 | Not yet started                     |
| Preventive health care<br>system at village/encampment level             | Not yet started                     |
| Improvement of existing health<br>facilities                             | Vehicles & equipment ordered        |

## ANALYSIS

A 6 month delay in initiating project implementation was caused in part by delays in signing the Project Agreement (because of the unavailability of a translator and typing problems) and in signing the technical assistance contract.

The contractor (Dimpex Associates, Inc.) has been selected. The contract should be signed by mid-October 1980, and the two advisors assigned to the project should arrive in Mauritania before the end of 1980. The contractor will be responsible for providing all long- and short-term technical assistance consultants as well as coordinating all project elements with the Mauritanian MOH project director.

Some elements of the project are already underway. The MOH has appointed a project director and has established a new Directorate of Preventive Medicine within the Ministry to oversee

this and other primary health activities. The two public health nurses, who will train and supervise the ten trainers of CHWs, have been selected and trained at the WHO training facility in Lome, Togo.

The initial group of PCVs has just finished their U.S. training and should depart for Mauritania on September 14, 1980, to undergo in-country training through November, when they will be ready to assume their posts.

Necessary commodities, including vehicles, have been purchased or ordered.

The design of this project is unusual in the degree of community participation and local financing envisaged. The development and implementation of the project will be of interest, especially in light of Mauritania's complex and changing social structure and relative lack of resources. Three evaluations have been scheduled.

PHC CHECKLIST

PHC Strategies

- CODES: 1. Not an activity and not planned  
 2. Not an activity but planned  
 3. A current activity  
 4. No information

|   | <u>ACTIVITY<br/>CODE*</u> |
|---|---------------------------|
| A. Community participation                          |                           |
| 1. community health committees                      | 2                         |
| 2. community-selected health workers                | 2                         |
| 3. volunteers                                       | 1                         |
| 4. emphasis on role of women                        | 4                         |
| 5. significant community financing                  | 2                         |
| B. Intersectoral coordination                       |                           |
| 1. collaboration between ministries                 | 4                         |
| 2. logistic support                                 | 2                         |
| 3. increasing food production                       | 1                         |
| 4. generate increased family income                 | 2**                       |
| C. Accessibility of services                        |                           |
| 1. minimize transportation barriers to services     | 2                         |
| 2. minimize cultural barriers to services           | 2                         |
| 3. home visits                                      | 2                         |
| 4. mobile units                                     | 1                         |
| 5. health services at community facilities          | 2                         |
| D. Technical cooperation                            |                           |
| 1. technical cooperation with third world countries | 4                         |
| 2. project intended to be replicated                | yes                       |
| 3. management information system/ongoing monitoring | 2                         |
| 4. periodic evaluations                             | 2                         |
| 5. experimental design                              | yes                       |
| E. Training   |                           |
| 1. training new categories of health workers        | 2                         |
| 2. new responsibilities for existing health workers | 3                         |
| 3. inservice training                               | 3                         |
| 4. management training                              | 2                         |
| 5. preparing community leaders                      | 2                         |
| 6. career advancement opportunities                 | 4                         |
| 7. efforts to recruit women                         | 2                         |
| F. Emphasis on prevention over curative care        | 3                         |
| G. Use of appropriate technology                    | 4                         |

\*Most activities have not started yet.

\*\*In the sense that community compensation of CHWs will increase their income.

## PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>2</u>                 |
| 2. group health education  | <u>2</u>                 |
| 3. mass media health education   | <u>4</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>4</u>                 |
| 2. promote breastfeeding   | <u>2</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>4</u>                 |
| 4. oral rehydration (specify type) <u>not supplied</u>                                       | <u>2</u>                 |
| 5. nutritional status monitoring   | <u>2</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>2</u>                 |
| 2. hygiene education   | <u>2</u>                 |
| 3. waste disposal for family/community   | <u>2</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>2</u>                 |
| 2. well baby care  | <u>2</u>                 |
| 3. train traditional birth attendants  | <u>2</u>                 |
| 4. family planning education   | <u>2</u>                 |
| 5. distribute contraceptives   | <u>4</u>                 |
| 6. surgical family planning procedures   | <u>4</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>2</u>                 |
| 2. cold chain support  | <u>4</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>2</u>                 |
| 2. malaria vector control  | <u>2</u>                 |
| 3. other vector control  | <u>4</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>2</u>                 |
| 2. referral system   | <u>2</u>                 |
| 3. drugs dispensed by health workers   | <u>2</u>                 |
| 4. use of traditional practitioners  | <u>2</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>2</u>                 |

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### Interviews:

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D.C., September 11, 1980.

Fall 1980

**NIGER**

**IDENTIFICATION**

Project Name  
and Number: Basic Health Services, Number  
683-0214/Rural Health Improvement,  
Number 683-0208

Location: Diffa Department/nationwide

Project Dates: FY 1978 - FY 1979 (BHS)  
FY 1978 - FY 1983 (RHI)

Funding Level  
and Source: BHS, \$1,468,000 from USAID  
  
RHI, \$14,029,000 from USAID, West  
Germany, Belgium, France, and the  
Government of Niger (GON)

Responsible Offices: Bureau for Africa, Office of Sahel  
and Francophone West Africa  
Affairs, AID/Washington  
  
Health Officer, USAID/Niger

Contractor: Africare

Implementing Agencies: Ministry of Health (MOH)

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 5.5 million

Rural Population: 87%

Infant Mortality Rate: 200

Population Growth Rate: 2.9%

Life Expectancy at Birth: 42

GNP Per Capita: \$220

Adult Literacy Rate: 8%

## SYNOPSIS

The Basic Health Services Delivery project was designed to train village health workers, retrain health professionals, set up sanitation programs, and establish a vehicle repair garage for Diffa Department, Niger. The U.S. organization Africare has had prime responsibility for managing the project. Due to a variety of problems, especially the lack of counterparts and direction from the MOH, the project met only part of its long-term goals. It is currently being merged with the national Improving Rural Health Project. The latter project, although founded in 1978, is just beginning, and is being redesigned. The broad goal is to strengthen the Nigerien health system by training and retraining village health workers in all departments, improving the public health component in the national nursing curriculum, building several health headquarters and dispensaries, and providing a standardized set of vehicles and appropriate maintenance to improve mobility within the health system. Both projects have been hampered by problems of coordination and communication between the external agencies, their Nigerien offices, and MOH.

## BACKGROUND

Niger was incorporated into French West Africa in 1896. In 1958 the voters approved the French constitution and voted to make the territory an autonomous republic within the French Community. The republic adopted a constitution in 1959 and in 1960 withdrew from the Community, proclaiming its independence.

An Army coup on April 15, 1974 ousted President Hamani Diori, who had held office since 1960, claiming Diori had mishandled relief for the terrible drought that devastated Niger, and five neighboring sub-Saharan nations for several years. An estimated 2 million people were starving in Niger, but 200,000 tons of imported food (half U.S.-supplied) substantially ended famine conditions by the year's end. The new President, Lieut. Col. Seyni Kountche, chief of staff of the army, installed a 12-man military government, suspended the constitution, dissolved the National Assembly, and banned political groups.

In addition to drought, insect infestation prevents habitation of some arable land and devastates crops. Eighty percent of the land is desert or semi-desert, and the rest is also of low fertility. Because of the northern desert climate and terrain, 90% of the people live along a narrow band along the southern border immediately north of Nigeria.

Niger is relatively sparsely populated, primarily by sedentary small farmers, and nomadic herdsman. They are Moslems, Animists, or Christians, some of whom speak French, the official language of government. However, most Nigeriens speak Sudanese dialects. The illiteracy rate is 90%, and technical skills are scarce.

Despite the harsh conditions and social challenge of ethnic diversity, the GON is placing an emphasis on regional equity and

social justice as a framework for "life enhancing" economic growth.

Niger's main source of development capital, aside from external assistance, comes from recently expanded uranium resources. Almost all of this money is devoted to a national development investment fund. Uranium mining is controlled by several outside interests in partnership with the GON. Several American oil companies have also been exploring for oil.

The Nigerien investment fund has grown from approximately \$15 million in 1976 to \$95 million in 1979, and is projected to grow to over 200 million by 1984. Niger's uranium supply is believed to be small. However, according to AID, the planned use of revenues will "be significant for at least the next generation and, coupled with continued external assistance, should help provide the extra margin required to raise overall goals several rungs above the target of a self-sustaining subsistence economy."

Despite well known health problems associated with uranium mining, no references appear in the Nigerien health literature on preventive occupational health measures, nor is there manifested any awareness or concern for the potential problems.

Official U.S. aid began in 1961 (shortly after Niger's independence from France) through the AID Affaires Office in Abidjan, Ivory Coast. The office later moved to Niamey, the capital of Niger, and was finally established as a Regional Development Office in 1967.

In 1964, the GON prepared a "Ten Year Perspective on the Development of Health Services" which was financed by AID with the technical collaboration of WHO. This study acknowledged the need for reforming the health sector in order to extend basic health services to the vast majority of the population.

Although AID had provided large amounts of food grains to alleviate hunger during the Sahelian drought, its first large development program aid began in 1975 with a \$5.9 million grant to increase food production. It is Niger's long-term plan to achieve and maintain self-sufficiency in food, although not at the expense of export crops such as peanuts, which account for more than 50% of export earnings.

Niger's health strategy since 1964 has been to build on the existing system of primary health care that grew out of the French colonial health system. This system emphasized the use of the secouristes-- health workers with a primarily first-aid function, usually male, between the ages of 15-40. They also served as a liaison to the mobile preventive health services.

By 1959, the concept of the village health team (VHT) had gained wide acceptance. The team (Equipe de sante villageoise) was comprised of a securiste (usually a village leader) and a matrone (traditional midwife) retrained in modern birthing practices. The securiste was by then also trained in expanded preventive and curative skills.

Even then, rudiments of the contemporary concept of "community participation" was in effect through community selection and support of the VHT. Supervision was provided by the MOH from the "canton" (local dispensary), circonscriptions medicale or health center, and departmental, a physician. The VHT concept progressed far beyond what was (or is) found in other Sahelian countries.

Training of securistes lasts between 10-15 days. It is given by MOH physicians and other health professionals, depending on who is available. Secouristes are taught basic concepts of personal and environmental hygiene, simple curative skills, such as cleaning

and bandaging wounds, distributing simple medicines for treatment of specific symptoms (e.g. aspirin, vitamin C, eye ointment), malaria prevention and treatment, and referral of more complex problems to the nearest medical facility. They are also taught to keep summary records of patients treated and medicines received and disbursed.

The matrone is prepared to teach personal and household hygiene to village mothers, to monitor pregnant women, identify high risk pregnancies, conduct deliveries, and care for the new mother. The matrone is also taught to keep records of pregnancies and of live and still births. She is given a midwifery kit that is replenished free of charge by the health center.\*

There have been several historical problems in implementing the VHTs: logistic problems in supervision and supply, resource constraints, lack of adequate personnel, relevant training and motivating of supervisory personnel, problems of sustaining volunteerism at the village level, and special problems in serving the nomadic population. VHT development has also been uneven in the different departments. Part of this problems is the cultural and political distance which separates the nomads from established GON services, which are designed primarily for more sedentary villagers, due largely to the cost and difficulty of serving nomads. It is, however, not GON policy to segregate health services for nomads. Instead, the GON hopes to adjust local systems to enable them to deal with nomad needs, though it realizes that this will be a slow process.

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\*A detailed description of the structure of the MOH and job descriptions of the secouriste and matrone can be found in Rural Health Policy and Village Health Services in Niger by Family Health Care, Inc.

When the GON formally initiated discussions on formulating a national health system and revised long range goals in 1975, AID was already conducting a health sector analysis (HSA) in preparation for long term collaboration. An American Public Health Association consultant report on Diffa Department, as part of the HSA, laid the groundwork for what was to become Africare's project in Diffa; and ultimately the national assistance project, Improving Rural Health. The report identified malaria, ambiasis, schistosomiasis, venereal disease, and conjunctivitis as the major health problems in Diffa Department, while finding little of the tuberculosis or malnutrition common in other parts of the country.

During this period, the national health plan was developed which called for three priority measures: 1) public health services, both preventive and simple curative, for the rural population; 2) health education, particularly on maternal and child health, nutrition, and village hygiene; and 3) training Nigerien community health workers. The major constraints to achieving these goals were seen as the lack of qualified personnel and financial resources.

The characteristic pattern of external assistance has been for the MOH to assign expatriate technical personnel (especially doctors) to service roles in specific geographical areas; for example, the Belgians in Dosso, the Germans in Tahoua, the French in Maradi and Zinder, and Africare in Diffa. Prior to the AID contract, Africare had begun providing technical health assistance in the Diffa town of Maine-Soroa in 1974.

## PROJECT DESCRIPTION

The Basic Health Services Delivery Project, administered by Africare, is the first step towards establishing a comprehensive, basic health delivery system in Diffa Department. To do this, Africare was to strengthen the existing system, particularly the quantity and quality of village health teams. Africare was also to retrain Diffa-based state nurses and certified nurses. At the Ministry of Health, Africare was to develop a national epidemiological surveillance unit and to train Nigeriens to direct it. Additionally, assistance was planned for the national laboratory to enable it to develop standardized testing methods. Finally, through the construction of a department office building, and vehicle maintenance garage, along with training mechanisms to operate it, logistical problems were expected to be solved.

According to several sources, though much progress has been made toward reaching project goals, some have not been met for a variety of reasons. Among these are problems of recruitment of personnel, management and communication problems in all of the participating agencies, and somewhat unrealistic project goals.

Although the project was funded in 1977, problems of recruiting appropriate personnel delayed activities until 1978. The delay also resulted in postponing the training of village health workers planned as part of project activities.

Eventually, 6 Africare technicians (including a public health physician and an epidemiologist) were placed in Niamey to work closely with the MOH; and in Diffa, a garage mechanic, a biomedical technician, a gynecologist and a surgeon were placed. The latter were to train Nigerien doctors and state/certified nurses. The former were to train their Nigerien replacements to take over their activities at the end of the 3 year AID contract. Apart from

from certified nurses, who have a 10 month rotation through a department hospital, no systematic training of Nigerian counterparts has taken place through this project. Africare does claim that one Nigerien surgical nurse they trained has performed minor operations as well as assisted in major surgery cases. It is evident, however, that "systematic" training has not taken place and that, in general, the Africare personnel have primarily taken up expatriate curative roles.

At the MOH, an epidemiologist was hired to work in strengthening MOH epidemiological surveillance capacities. However, since he had a strong laboratory background, he worked instead on the development of standardized laboratory techniques. Although a project evaluation team was unable to determine if this work in Niamey was useful, they did say that no improvement of laboratory techniques was evident, and furthermore that lab techniques in Diffa were "deficient and inadequate." A successor epidemiologist did follow the project plan to strengthen epidemiological surveillance; however, he "avoided the national laboratory." In Diffa, meanwhile, "the team did not observe any systematic data collection efforts which contributed significantly to the day to day monitoring of this project."

The public health physician (PHMD) was assigned to increase and strengthen the public health course content in the curriculum of the state and certified nurse training schools in Niamey and Zinder, respectively. He was also to assist in retraining health personnel at Diffa.

The evaluation team noted that Africare did not have anyone with a public health or epidemiology background at Diffa, and that the public health planning oversight of the project has been fragmented because the Division doctor was incapacitated and his replacement had various responsibilities, which allowed him to provide only limited oversight of the project. The problem was alleviated finally in 1979 when a Nigerien state nurse was assigned

full-time to oversee the VHT program. This arrangement enabled him to devote time to program planning, budget preparation, drug supply monitoring, and supervisory visits.

The garage mechanic, whose function was to set up a garage and train mechanics, also provided mostly "curative" services. Africare reports this in a 1979 quarterly report: "...the Diffa garage service has attained national recognition...vehicles are now being towed from Zinder Department to Diffa for repairs." Africare adds that in addition to serving as an interim medical equipment repairman, the mechanic has put his technical skills at the disposal of the Department of Youth and Sports, Education and the Military in Diffa Department. He assisted with the repair not only of vehicles, but power generators, road graders, the installation of fencing and water pumps at a pumping station.

The evaluation team reports that the gynecologist and surgeon have had no medical students rotate through their service for training and have provided no training to state nurses, the majority of whom will be assigned to work in a hospital. Both physicians have strengthened services of the matrones and midwives through training and retraining, but again, not systematically.

Africare was to develop both VHT training programs and certified and state nurse supervisory visits. The PHMD in Niamey was to visit Diffa four times a year. As it turned out, the PHMD helped develop the 10 day curriculum and participated in the training. Unfortunately, communication was hampered since he had to speak through an interpreter of the local dialect.

Africare was also to help plan a system of supervisory visits to the VHVs, as well as provide the supervisors improved access through functioning vehicles. According to the evaluation team, no

supervisory visits were made in 1978. The number of visits in 1979 is in dispute, primarily because the only documentation of such visits are gasoline consumption records. This lack of records was regarded as serious, because there is no information on what was done or by whom. Therefore, there is no information about the effectiveness of VHWs. Additionally, the team felt this neglect was particularly unfortunate as part of the project's mission was to help strengthen the national statistical services. Given Africare's role in Diffa, this seemed an opportunity, if not a responsibility, to connect the regional program to the national effort.

Otherwise, the evaluation reports that VHTs appear to be functioning as they are expected, noting that "their system of record keeping generally appeared to be adequate," that no irregularities in drug management were evident, that secouristes and matrones were "performing duties commensurate with their training." The team believes that the access to health care afforded by the VHTs increases "officially recognized coverage" by about 5-15% and that the referral system is working satisfactorily. Finally, the team notes that the term village health team is a misnomer, since the matrones and secouristes perform their functions separately.

In other specific areas, completion of the project goals has been mixed: For example, Africare financed the building of latrines at primary schools as a part of an attempt to shift the focus of public health programs from curative to preventive. However, Africare was not involved in latrine design or construction and had not developed school curricula for health education and use of latrines. Therefore, few were being used, and many were in disrepair.

On the other hand, the numerical goal for trained village health workers was surpassed for the 3 year period by 10, with 131 secouristes and 145 matrones trained. Africare financed the training, but was otherwise uninvolved.

Of the four training guides to be produced under the project, only the one on vehicle maintenance was written and distributed. The status of the training guides for VHWs and sanitation aides is unknown. At this point, the Africare-Diffa project is being extended, to allow several key personnel to continue their work until they join the Improving Rural Health project following its redesign in the Spring of 1981. It is expected that in the new project Africare will continue to provide technicians and be responsible for recruitment, but without having any management responsibilities.

## PROJECT DESCRIPTION

### Improving Rural Health

The Improving Rural Health project is a major national primary health program for Niger. The project's emphasis is on training 1,500 village health teams, a total of 6,000 people, and retraining about 13,500 existing village health workers. The plan, in 1978, was to bring basic health services to 3,500 villages or about 39% of the rural population.

Village health teams are comprised of 2 matrones and 2 secouristes supported by an administrative committee. The VHTs are to be selected by the communities where they will serve and are to be trained and supervised by dispensary nurses. The secouristes and matrones are to carry out minor curative care and disease prevention activities. The matrones will perform traditional midwifery, enhanced by training in modern medical practices. Both

will refer cases beyond their capacity to dispensaries.

This project will also expand and strengthen other parts of the health system, particularly those support services vital to the success of the VHTs. Generally, support is to include: upgrading and expanding the number of professional health workers assigned to rural areas, increasing their mobility, improving facilities, and providing sufficient drugs and supplies.

Specifically, this support is to include:

#### Training of Personnel.

- Academic health training for 25 teachers, senior MOH officials, and logistic/maintenance personnel, at a rate of 2 teachers, 2 MOH officials, and 1 maintenance person per year of the project
- 1,100 persons participating in MOH continuing education conferences
- 40 certified nurses, 20 state nurses, 35 medical students, 15 environmental health workers in technical training each year of the project
- 25 medical equipment technicians and 50 auto mechanics trained by short-term consultants

#### Institutional Support

- 200 mopylettes for supervisors and 42 functioning 4-wheel drive vehicles for better supply distribution which is also expected to lead to 45% more supervisory visits to health centers and dispensaries, and a 10% increase in operational efficiency of all vehicles.

- 2,700 VHTs equipped with drugs, educational materials, and other supplies
- Sanitation improvements for 250 existing health facilities
- New equipment or furnishings for 220 existing health facilities
- 7 new dispensaries and 2 new department health centers already operating in Zinder and Agadez
- Mobile health units immunizing 100,000 persons per year
- Two garages and medical repair shops at the department health center
- Sanitary education programs reaching 35% of the rural population

The Improving Rural Health project is currently being redesigned, and the Diffa project merged into the new project.

Among the other lessons which should be incorporated into the redesign, are the following from a Diffa project evaluation:

1) Nigerien counterparts are essential if the project is to overcome its dependence on foreigners.

2) Precision is needed in program design, e.g. in the kinds of personnel needed for each stated project purpose.

3) Scheduled self-evaluation should be designed to identify and solve unanticipated problems that might be impeding progress, such as personnel being sidetracked into, for example, curative services only or other deviations from the project's intentions.

4) Technical assistance personnel should participate in decisions involving AID-financed expenditures. For example, Africare in Diffa had no input into the latrine construction.

5) A project should have decision making capability, instead of having to get clearance from Niamey or Washington for minor decisions.

Beyond the field experience in Diffa, which has been scrutinized by the scheduled evaluation, the U.S. General Accounting Office, and the Auditor General of AID, there are several important issues involving the external agencies' interrelationships which presently are being worked out, but have been unclear in the past.

According to the AID project paper (PP) (March 30, 1978) "in keeping with the AID country strategy, the proposed project focuses on the preventive aspects of health care and offers a program which the GON will be able to sustain and operate upon completion of the project." The PP also states (pg. 94) that: "The objectives contained in this project paper are the result of joint planning meetings with the Ministry of Health, and reflect the wishes of the government and the professional judgement of an experienced project paper team. Unless some unforeseen exigencies develop, we expect to carry out the program to full realization."

At present, little information exists on what, if anything, has been done on this project. The commodities have been ordered but have not yet arrived.

#### ANALYSIS

AID's two primary health care projects in Niger have achieved limited results due to an unrealistic project design as well as to

poor communication and a lack of real agreement on project objectives among AID, Africare, and the MOH.

### Project Design

In 1976, an APHA consultant's report which AID commissioned as a part of the health sector assessment and project development process stated: "Availability of foreign capital does not, at present appear to be a key development constraint: the lack of well prepared projects, local skills and management capacity are probably more important factors."

Significantly, one AID official, over a month before the project paper for Improving Rural Health was released (1978), stated in a memo that although the PP states that the MOH has the absorptive capability to manage all resources well, including approximately \$50 million in inputs from AID and other donors; the description of the MOH's existing capability (manpower, resources, and management capability) was lacking. The official went on to point out (in 1978) exactly what the problem would be in 1980: "There is no clear discussion as to how our inputs will permit or assist the GON to expand its capability," and further that "...it is stated that they need management and planning assistance, yet the GON is unwilling to accept this type of assistance." Another AID official reports that a project in management assistance and planning for MOH is now being negotiated.

While there are a number of other reasons for the problems in implementing both projects, these limiting factors should have been realistically addressed in the project design. This is cited as among the "lessons learned" by the evaluation team: "Design of a project with reasonable objectives couched in logical approaches lends itself more to success than overly ambitious rhetoric couched in ambiguity. Keep it simple."

## Management and Oversight

Only recently has the U.S. Mission in Niamey become a channel for significant AID assistance. It is apparent from a 1977 Auditor General's report that the office there was severely understaffed. The report concluded "...clearly some of this is the result of poor communications between Washington, and Niamey, and a lack of adequate attention in Washington to Niger's needs." One AID official concedes that the Mission is "only now" (fall 1980) able to adequately perform its duties. It is unclear how the Mission's state of development played a role in the problems encountered in implementing the Diffa project. However, a 1980 Auditor General report says that "the Mission has had very little, if any, official contact with Africare. Mission officials have neither visited the project sites nor followed up on the Diffa progress reports."

The AG report goes on to say that "AID (AID/Washington) monitoring has been restricted to the review of Africare quarterly progress reports which lack sufficient information to measure success in meeting project objectives." While Africare's progress reports contain little evaluation, AID is somewhat constrained by the structure of its relationships to its contractors--leaving it up to the contractor to perform well, with a minimum of supervision. This allows AID to concentrate its interest elsewhere, and to respect the preference of most PVO's not to have AID "looking over their shoulders."

However, as the AG report points out, Africare receives about 90% of all its funding from AID. Also AID has given Africare a grant to improve its own capacity to operate AID-financed projects such as Diffa, leading some critics to characterize Africare, (along with several other similarly funded PVOs) as a virtual extension of AID, all of which tends to blur lines of accountability and authority.

From Africare's point of view, the communication problem resulted from the lack of continuity in AID personnel. The AG report explains how "one Africare official stated that because of the turnover of AID personnel and organizational changes in AID, on occasion, it is uncertain what AID offices should receive the various required reports."

Both the evaluation team and the AG's staff discovered that Africare/Diffa field staff were not authorized to speak for the project. The AG report noted: "The present Africare structure requires the local Africare representative to obtain instructions from Africare/Washington prior to USAID/Niger request for information, or the Mission must work through AID/Washington to obtain an official response from Africare/Washington. Since all project accounting and administrative procedures take place in Washington, the Mission is concerned about its ability to effectively monitor Africare projects..."

Identification of these problems of coordination and communication has led AID to plan for more centralized and attentive monitoring of Africare projects by placing oversight responsibilities in AID's Bureau for Africa.

Many of these problems may be attributed in part to the relative newness of all the concerned agencies in primary health care in Africa. Moreover, these are problems of large, complex, and overburdened institutions learning to work effectively together. Also, one AID official commenting on the AG report stated that: "...the audit doesn't adequately confront a major Africare dilemma; the necessity but difficulty of a small organization working through the structures and systems of a resource poor LDC government." Unfortunately, these problems are not limited to a small organization.

AID's relationship to Niger's MOH has been a developing one as well. For example, an evaluation team for Improving Rural Health got all the way to Niger in the Spring of 1980 only to be told the MOH would not cooperate with it. The Mission commented at the time: "If any lessons are to be learned from this experience, the Mission hopes that fuller understanding is gained of the divergency of priorities and perspectives held by host governments and AID on the importance of evaluation (despite signed agreements) and the incessant problems facing the field daily in the conduct of field operations... These problems are compounded by numerous personnel changes within the Ministry and lack of a full-time GON project director (both topics of discussion in the upcoming evaluation)."

One AID official noted that many of the problems in West Africa are felt to be so pressing that scheduled evaluations called for in a project paper are likely to seem far less important than the immediate alleviation of human suffering, and the extraordinary problems encountered in implementing human services. This is also cited as a reason why the MOH was not forthcoming with counterpart personnel for the Diffa project. Despite AID's views on training, the MOH saw the project and others in the country as primarily delivering curative care, provided mostly by expatriate health professionals. For example, the Africare doctors in Diffa have now been replaced by 3 Egyptian doctors.

Finally, while there have been many identifiable problems in the design and implementation of these projects, much has been accomplished that is of great short-term, and long-term value to health in Niger. The evaluation stated that despite adversity and an overly ambitious project design, Africare performed modestly well, and especially "provided exceptionally professionally well-qualified and dedicated personnel." Additional testimony to this is the fact that several of the Africare staff, including the team leader, have been asked and agreed to join the Improving Rural Health project.

It is apparent that all parties are committed to the projects' goals and that despite the difficulties, frustration, and expense of these initial attempts, problems are being seriously addressed; there is reason to believe that they will be worked out. It is also apparent that only long-term commitment, perhaps even more than many of the implementation and evaluation mechanisms alone, will lead to long-term benefits from the project.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>3</u>                 |
| 4. emphasis on role of women                        | <u>4</u>                 |
| 5. significant community financing                  | <u>4</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>3</u>                 |
| 2. logistic support                                 | <u>3</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>1</u>                 |
| 3. home visits                                      | <u>4</u>                 |
| 4. mobile units                                     | <u>2</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>3</u>                 |
| 2. project intended to be replicated                | <u>3</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>1</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>1</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>2</u>                 |
| 5. preparing community leaders                      | <u>1</u>                 |
| 6. career advancement opportunities                 | <u>4</u>                 |
| 7. efforts to recruit women                         | <u>4</u>                 |
| F. Emphasis on prevention over curative care        | <u>2</u>                 |
| G. Use of appropriate technology                    | <u>4</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>4</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>4</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>4</u>                 |
| 4. oral rehydration (specify type) _____   | <u>4</u>                 |
| 5. nutritional status monitoring   | <u>4</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>2</u>                 |
| 2. hygiene education   | <u>4</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>4</u>                 |
| 2. well baby care  | <u>4</u>                 |
| 3. train traditional birth attendants  | <u>3</u>                 |
| 4. family planning education   | <u>1</u>                 |
| 5. distribute contraceptives   | <u>1</u>                 |
| 6. surgical family planning procedures   | <u>1</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>4</u>                 |
| 2. cold chain support  | <u>3</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>3</u>                 |
| 2. malaria vector control  | <u>3</u>                 |
| 3. other vector control  | <u>3</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>3</u>                 |
| 5. use of folk treatments  | <u>1</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

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Fall 1980

SENEGAL

IDENTIFICATION

Project Name  
and Number: Rural Health Services Development  
Project, Number 685-0210

Location: Sine Saloum Region

Project Dates: FY 1977 - FY 1980

Funding Level  
and Source: USAID: \$3.3 million  
Peace Corps: \$5.5 thousand  
Senegal: \$1.6 million

Responsible Offices: Bureau for Africa, Office of  
Sahel and Francophone West  
Africa, AID/Washington  
  
Health Officer, USAID/Senegal

Contractor: Only short-term personal service  
contractors

Implementing Agencies: Ministry of Health, Promotion  
Humaine (Promotion of Human  
Resources)

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## COUNTRY STATISTICS

Total Population: 5.7 million

Rural Population: 75%

Infant Mortality Rate: 160

Population Growth Rate: 2.6%

Life Expectancy at Birth: 42

GNP Per Capita: \$340

Adult Literacy Rate: 10%

## SYNOPSIS

After long delays, the Rural Health Services Development Project (Sine Saloum project) has been opening village health huts since August, 1979. Unfortunately, a recent AID evaluation team has found serious management problems at the village level and in the Senegalese bureaucracy. Also, AID did not provide an experienced technical assistance team which the project needed. In June of 1980 a consulting firm hired by AID began work on redesigning the project.

## BACKGROUND

Senegal is a country of diverse climates and cultures. Climatically, the north is an arid Sahelian region while the south is a humid tropical area. The Wolof, Serrer and Peul are the major ethnic groups, and 80 percent of the Senegalese are Muslims. Since its independence from France in 1960, Senegal has chosen a political system of modified socialism. Economically, Senegal is an agrarian society that relies on peanut production for 80 percent of its export earnings.

The Senegalese have serious health problems, including malnutrition, malaria, tuberculosis, measles, and gastrointestinal diseases in children. Few rural people have access to health care

services because there are not enough health posts. In its fourth and fifth four year plans, the Government of Senegal (GOS) pledged to place one health post in every rural community. Unfortunately, the GOS did not implement more than 10-15 percent of its fourth four year plan (1973-1977) in the area of health and accomplished almost nothing in the area of rural health. The percentage of the national budget spent on health has declined from 9.2 percent in 1969-70 to 6 percent in 1978-79. There are also great disparities in the allocation of health resources. The Cap Vert Region (including the capital, Dakar), with 19 percent of the population, received 45 percent of the health budget, while the Sine Saloum Region, with 20 percent of the population, received 9 percent.

There have been a number of previous efforts to improve primary health care services in Senegal. The most successful is the Pikine project located in the suburbs of Dakar. It began in 1976 with Belgian assistance and has demonstrated that a self-financed health system can work in Senegal. WHO and UNICEF have supported the GOS' health post system. UNICEF also established rural maternity centers and village pharmacies; the latter are being converted to health huts in Sine Saloum. In the Gossos Department (province) of Sine Saloum, the Canadian Government sponsored a project in 1977 that included a vaccination program and training village health workers (VHWs). Since the Canadian technical assistance team left in mid-1979, the project has deteriorated rapidly. The Dutch Government sponsored a project in the Fatick Department of Sine Saloum which is virtually identical in its objectives to the Sine Saloum project. In contrast to the Sine Saloum project, the Fatick project started on a pilot basis in one rural community, and Dutch advisors have provided very close support. The project is working well so far.

#### PROJECT DESCRIPTION

The goal of the Sine Saloum project is to create a self-sustaining village-based health care system that can be replicated

in other regions at a manageable cost. The two major purposes are (1) to create a network of village health posts supported and staffed by community level personnel, and (2) to strengthen the support system of the GOS for services to secondary health posts.

The two agencies of the GOS with primary responsibility for the project's implementation are the Ministry of Health (MOH) and Promotion Humaine, a cabinet level organization concerned with rural development programs. The MOH is to provide a project director to work with three AID technical assistance staff people. The Peace Corps is to provide six volunteers to assist in project implementation. The project is being phased in, starting with two of five departments. The following page and a half summarize the project's plans.

When the project started, the most basic level of health services was the health post. The MOH is to renovate its existing 58 posts and provide a post chief or nurse, a midwife, a sanitarian, and an orderly at each post. Also, 21 new posts (six provided by the GOS) are to be constructed and staffed. Health post personnel will receive training. Sanitarians specifically will be trained for one year at the Khombole School which is being renovated and expanded through AID support. The renovation and construction activities are to be completed by the Rural Engineering Service.

For each health post, 5-10 health huts will be established and staffed with 3 village health workers (VHWs): a male first aid worker to administer medicines for common ailments, a woman to handle maternal and child health, and a man to organize sanitation activities. At the hut level, the health system relies on community support. This approach coincides with GOS policy of administrative reform and decentralization in which rural community councils assume increasing responsibility for development projects in their area. In this project the rural council, working with Promotion Humaine, is to select persons to be trained as VHWs,

agree on a mode of compensation for VHWs, and arrange village contributions of labor and materials for building health huts. Rural councils also help establish and oversee village management committees to be formed for each hut to receive the hut's income, check records and order medicines, and support the unit through communal labor and contributions.

A regional training and supervisory team is to prepare a curriculum that health post personnel will use to train VHWs at the health posts. A department supervisory team is to be established to help the post chief supervise medical services at the post and hut level. The post sanitarian has the responsibility for regularly supervising huts and is provided a horse and buggy for transportation. An initial stock of medicines is supplied by the project and is sold to villagers at cost. The money collected is to be used to restock drugs as necessary.

#### CURRENT PROJECT STATUS

| <u>OUTPUT 1977</u>  | <u>CURRENT STATUS (1980)</u>   |
|---|--|
| 1. Rural community councils will have selected 1800 village health workers (VHW) and installed a "functioning mechanism" for their remuneration by the villagers. | Rural community councils have selected 1200 VHWs; no "functioning mechanism" for their remuneration has yet been installed.  |
| 2. 600 health huts will have been constructed by the rural communities.   | A total of 350 health huts have been constructed.  |
| 3. VHWs will have received preliminary training and refresher courses.  | All VHWs in the first two departments have been trained (though 20-30% have left their posts since training). Training is in process in the next two departments.                            |
| 4. A total of 21 new health posts (including 6 under supervision of the GOS) will have been constructed, staffed and equipped.                                    | Of the 15 AID proposed posts to be constructed, 8 have been completed. Of the 6 proposed posts to be constructed by the GOS, all have been built by the local residents, but have been mini- |

- |     |   |   |
|-----|---|---|
|     |   | <p>mally staffed and equipped by the GOS; hence they are partially functioning.</p>   |
| 5.  | <p>All health post chiefs and VHW supervisors will have received inservice training or recycling which will enable them to instruct and monitor VHWs.</p> | <p>Of the total of 79 health posts chiefs, 45 have received inservice training or have been recycled. (Given the current lag in project development, no more are expected to be trained/retrained in the next two years.)</p> |
| 6.  | <p>Supplementary equipment will have been purchased and provided to health posts and health huts.</p>   | <p>All supplementary equipment (syringes, forceps, bassinets, surgical knives, etc) have been delivered in health posts and huts.</p>   |
| 7.  | <p>Horses and carts will have been provided to health posts for transportation purposes and will be maintained by villagers.</p>                          | <p>Horses and carts have been provided only since December 1979-March 1980 to all health posts.</p>   |
| 8.  | <p>Regular medicine and drug restocking, as well as maintenance of horses and buggies will have been undertaken by the rural community councils.</p>      | <p>To date virtually nothing has been done (other than original installation of village health hut medicines and horses and carts).</p>   |
| 9.  | <p>The Khombole Sanitation School will have been supplying at least 18 graduates per year.</p>  | <p>The first group of graduates (20) completed training in June, 1980.</p>  |
| 10. | <p>Renovation of 58 health posts will have been completed.</p>  | <p>Of the 58 health posts, 40 have been renovated. Because of project development lag, no more are anticipated to be renovated in the next three years.</p>   |

Source: Rural Health Services Development Project Paper, June, 1977

Source: AID Interview with Project Manager, Dr. M. Vincent, Dakar, April, 1980

## ANALYSIS

In April of 1980 USAID evaluated the Sine Saloum project and found serious problems in both project design and management. The project agreement was signed in August, 1977 and was to run for four years; however, long delays in the early implementation phases have meant that health huts are operating in only two of the five target departments. Reasons for the delay include late delivery of furniture, problems in procuring drugs, and difficulty in hiring AID advisors. The evaluators identified three elements which are vital if the project is to be successful: (1) The village health huts must be financially viable; (2) the GOS must be able to deliver needed support and supervisory services; and (3) an efficient medicine resupply system, lifeblood of the entire project, must be organized.

A number of implementation problems at the village level were identified. The most important was the health huts' lack of financial viability. Random visits to huts revealed that they were not taking in enough money to replace the medicines used and cover other operating costs. Also, villages did not have the cash on hand that health hut books indicated they should. There are a variety of possible reasons for this, including inaccurate records or misuse of medicines and money. One definite problem, however, is the system developed for paying VHWs. This was supposed to be set up by the rural councils. In fact, the decisions were made at the department level and everyone was informed by memorandum signed by the Prefet, a department-level political official. The decision on what to charge clients was made in the same way and differed between departments. The situation now is that 60 percent of the hut income is used to pay the three VHWs, 35 percent to buy medicines, and 5 percent for maintainance. With such a large percentage of the income being used to pay the VHWs, there is not enough money for medicine resupply, so huts are forced to close down. Not only was the original design not followed but also the

wrong people made the decisions. Furthermore, the decisions were made without sufficient attention to the project design or guidance from advisors to ensure the system's financial viability.

Other problems at the local level include VHW selection criteria, location of health huts and village management committees. In the first nine months, over one third of the huts lost or changed one of their VHWs. The problem lies primarily in a basic contradiction in the selection criteria which required both strong ties to the village and literacy in French. In practice literacy was given priority, but those people tended to have a formal education and were younger and less attached. Because literacy in French is an important job skill in Senegal, VHWs with this ability tend to seek to better themselves elsewhere. Wisely, many replacements are being found who fit the criteria of stability (older, married, landowners) whether or not they know French.

Rural councils chose hut locations but were not given any guidelines. Council members usually secured one for their village, and a few larger villages were selected regardless of proximity to other huts and health posts. The result is that huts were too close to each other and to the posts, and villagers would often bypass huts to get free medicines and services from posts. In Nioro, the first department with huts, one of every three huts closed within nine months of opening. The other departments are anxious to open their huts but have not learned from the mistakes in Nioro. Once a site for a hut is known, control of the hut is given to the village management committee. Although committees were formed, they did not actually manage the health team. One treasurer said that since the post chief and the first aid worker were the only ones who really know what was going on, management responsibility was left to them.

A second priority area for project success is the need for support and supervisory services from the Senegalese government. The many problems at the village level indicate a lack of support services. Promotion Humaine (PH) was responsible for working

with the rural councils and village management committees. Although PH worked to set up the village committees, a lack of follow-up contributed to the difficulties at the local level. Another factor was the project design itself, which was contradictory, as in the case of VHW selection criteria, and often too vague to be of help, as in the area of hut financing.

Day-to-day project management was designed to be the responsibility of the project director, who heads the project executive committee. However, a project director was not appointed, and the committee never met. The result is that the governor of Sine Saloum runs the project his way and keeps the project checkbook in his desk drawer. Since the governor is an important political figure, there are few checks and balances, and day to day problems are not easily handled.

In the medical area there are also severe supervisory problems. The regional supervisory team (and an AID technical assistance person) are responsible for supervising the health posts. However, they are more interested in and occupied with expanding the project into new areas than in assuring that the existing system functions properly. Furthermore, the department supervision teams that were to provide two full-time staff people to help with supervision at the post and hut level were never established.

According to the project design, sanitary agents are responsible for making supervisory visits to health huts. However, since this class of personnel has not yet graduated from training schools, the supervision of huts has become the post chief's responsibility. However, it was found that his workload was greater than originally anticipated, and visits to huts were infrequent. Visits usually occurred when Peace Corps volunteers took the chiefs out in their cars. Post chiefs are also skeptical about sanitary agents taking over hut supervision, since the Chiefs feel that as senior officials, it is their responsibility. Transportation is also a problem in supervising huts. Horses and buggies were provided for visits, but in Niore they are used only

in 3 of 12 posts. Post chiefs resist the loss of status and convenience in using horses, yet there are long delays in repairing cars. A final area of difficulty is that there are serious inadequacies in the records of project activities and use of resources. This makes it difficult to monitor and supervise the system.

The third priority area for the project's success is a reliable pipeline of medicines. It is essential that huts have an adequate supply of medicines or villagers will not use the huts. The AID evaluators could not reach a firm conclusion on this issue. Huts were only beginning to run out of the AID-supplied initial stock, and so far had been able to resupply at health posts. In the long run, health huts must become financially viable if they expect to afford restocking their medicine supply. There were some problems with the initial supply of medicines. Villagers complained that some basic drugs were missing or in low supply (i.e., diarrhea medicine and aspirin). Also a drug for eye infections did not arrive at the huts until it was within one month of its expiration date. There is also a question of U.S. procurement of project medicines. The problem is having an initial medicine stock with English labels and unfamiliar names and dosages, when the project will later be switching to a permanent local supply.

The Sine Saloum project has serious problems in both its design and management. A few of the design problems have been mentioned; however, the major one is that AID started this large project without the experience of a pilot project to identify problem areas and workable solutions. The project design was also not followed in many important aspects. Lack of a project director and department supervisory teams was a major factor leading to the serious management and supervisory problems. Probably the most important factor, however, was AID's failure to provide the strong cohesive, experienced technical assistance team that the project needed. Although there were supposed to be three AID advisors present throughout the project, the staff consisted of a series of one or two short-term people located in Dakar. AID chose to use a

"hands off" style of management, anticipating that the local people would take responsibility for the project. In this case, the responsible national group never exerted the control needed, and neither did AID personnel. A comparison can be made with the similarly designed Fatick project, in which the Dutch began with a small pilot project, and the advisors were closely involved in its implementation. The Fatick project has had greater success.

Despite the many failings of the Sine Saloum project, there have been some achievements. In 200 villages, residents organized committees, selected VHWs, and built health huts. Training programs were designed and implemented and training materials developed. There were also a variety of other activities, all of which demonstrate a willingness on the part of villagers to work to improve their health care. Health post records show there has been a substitution effect in that villagers now are having common ailments treated at village huts rather than health posts. A survey of villagers found that a majority felt that there had been improvement in health care since the project started. However, about half gave negative responses on the ability of villages to take on the cost when external help ceases.

After the April evaluation, AID contracted with Family Health Care, Inc., to send a team to Senegal to redesign the project. Since then, a new governor of Sine Saloum has taken office, and control of the project has been transferred to a newly appointed project director. Hopefully, the redesigned project will be better managed so that the villagers, who are willing to contribute to better health care, will receive more than unfulfilled promises.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>1</u>                 |
| 4. emphasis on role of women                        | <u>1</u>                 |
| 5. significant community financing                  | <u>3</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>3</u>                 |
| 2. logistic support                                 | <u>3</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>1</u>                 |
| 3. home visits                                      | <u>1</u>                 |
| 4. mobile units                                     | <u>1</u>                 |
| 5. health services at community facilities          | <u>1</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>1</u>                 |
| 2. project intended to be replicated                | <u>3</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>1</u>                 |
| 7. efforts to recruit women                         | <u>3</u>                 |
| F. Emphasis on prevention over curative care        | <u>1</u>                 |
| G. Use of appropriate technology                    | <u>3</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>1</u>                 |
| 2. group health education  | <u>1</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>4</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>1</u>                 |
| 4. oral rehydration (specify type) _____   | <u>4</u>                 |
| 5. nutritional status monitoring   | <u>4</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>3</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>3</u>                 |
| 2. well baby care  | <u>3</u>                 |
| 3. train traditional birth attendants  | <u>3</u>                 |
| 4. family planning education   | <u>1</u>                 |
| 5. distribute contraceptives   | <u>1</u>                 |
| 6. surgical family planning procedures   | <u>1</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>1</u>                 |
| 2. cold chain support  | <u>1</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>1</u>                 |
| 2. malaria vector control  | <u>1</u>                 |
| 3. other vector control  | <u>1</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>3</u>                 |
| 5. use of folk treatments  | <u>4</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

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- "Rural Health Services Development," Project Paper for Project Number 685-0210, March, 1977.
- "The Sine Saloum Rural Health Care Project in Senegal," Project Impact evaluation, Richard F. Weber, Team Leader, USAID, April, 1980.
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Fall 1980

MALI

IDENTIFICATION

|                              |  |
|------------------------------|--|
| Project Name<br>and Number:  | Rural Health Services<br>Development, Number 688-0208  |
| Location:                    | Mopti and Kayes Regions  |
| Project Dates:               | FY 1979 - FY 1983  |
| Funding Level<br>and Source: | USAID: \$3.89 million<br>Mali: \$ .87 million  |
| Responsible Offices:         | Bureau for Africa, Office of<br>Sahel and Francophone West<br>Africa, AID/Washington<br><br>Health Officer, USAID/Mali |
| Contractor:                  | Harvard Institute for Interna-<br>tional Development   |
| Implementing Agency:         | Ministry of Health   |

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## COUNTRY STATISTICS

Total Population: 6.6 million

Rural Population: 80%

Infant Mortality Rate: 190

Population Growth Rate: 2.7%

Life Expectancy at Birth: 42

GNP Per Capita: \$120

Adult Literacy Rate: 10%

## SYNOPSIS

The Rural Health Services Development Project is operating two pilot projects that use volunteer village health workers to bring basic curative health services to the village level. Ministry of Health staff are being trained, so that the pilot projects can serve as the foundation for a national rural health system. The project has had problems in a number of areas, particularly in management. A recent and complete assessment of the project carried out in the Spring of 1980 has not yet been released by USAID/Mali.

## BACKGROUND

Over 80 percent of the Malian population live a subsistence agricultural or seminomadic pastoral existence, with little access to basic social services. Modern health services are available to less than 10 percent of the rural population. Often, those services that are available are inadequate to meet the needs for disease prevention or even simple curative care.

The health problems of Mali--high mortality and morbidity from infectious and parasitic diseases, complicated by childhood malnutrition--are typical of those of Sahelian West Africa. The major diseases affecting the population nationally are respiratory and skin infections, gastrointestinal and childhood diseases,

malaria, tetanus, schistosomiasis and leprosy. In addition there are areas with high levels of onchocerciasis, giving rise to significant economic problems because of population out-migration and increased dependency ratios due to blindness.

Most of the Government of Mali's (GOM) health facilities, personnel, and services are concentrated in urban areas. Although the GOM has a policy of extending health services to rural areas, it is constrained by limited planning and management capabilities, scarce financial resources, and inadequate physical infrastructure and personnel. This project, which emphasizes the provision and support of basic health services at the village level, is in keeping with the GOM's development objectives as stated in the 1974-1978 national plan. It also has the support of national and regional MOH and development officials.

#### PROJECT DESCRIPTION

The purpose of the project is:

1. To design, implement, and evaluate a demonstration rural health system that will:
  - a. bring health services to the village level, emphasizing promotive and preventive activities;
  - b. be integrated with other community and economic development activities;
  - c. function with an annual budget of U.S. \$3 per person, of which \$1 per person will be recovered through sale of drugs in villages.
2. To have the GOM adapt the demonstration project as the basis for a national rural health system, and to assist MOH preparations to implement such a system.

Administratively Mali is divided into six regions which are divided into five to nine cercles. Each cercle is further sub-divided into six to eight arrondissements which, in turn, contain 20 to 40 villages. In the two regions selected for the project, the focus will be on a particular cercle. Full project services will be developed in all the villages within one arrondissement, while medicines and supplies will be provided to the remaining arrondissements in the cercle. Project activities are currently underway in the cercles of Koro and Yelimane in the regions of Mopti and Kayes respectively.

The first activities, after the signing of the project agreement in June 1978, were a series of anthropological and baseline studies, and discussions with MOH personnel. Peace Corps Volunteers (PCVs) assigned to the project were in the field well before the project started and had conducted background and felt needs surveys in the area. Only after the field teams had arrived and surveys had been completed were the arrondissements to receive full services selected. They are Toroli in Koro Cercle and Tambacara in Yelimane Cercle.

The project is providing health care at the village level through part-time volunteer village health workers (VHWs). Within guidelines suggested by the project staff, VHWs are chosen by their villages. The curriculum for training VHWs was developed in the field. Workshops for local health and development workers were held in Yelimane and Koro. The purpose was to help health workers understand the project design and build a team that could train and support VHWs. The health workers also discussed guidelines for the training curriculum. The curriculum which was developed covered simple curative and first aid procedures. A retraining effort to stress promotion and prevention is also planned. Training sessions for VHWs were held in villages beginning in January 1979.

A network of village level pharmacies is being established. The MOH cannot sell drugs and therefore supplies them free of charge.

MOH programs, however, are plagued by chronic drug shortages. A quasi-governmental organization, the Pharmacie Populaire, sells drugs on a retail basis and has a legal monopoly. For the project to provide drugs legally, village pharmacies are set up as cooperatives and use the price structure of the pharmacies populaires. The American drugs used are tax-free, and communities can buy drugs at a 15 percent discount. Money from drug sales is used to restock supplies: profits go into a MOH-AID revolving fund. In Yelimane, there is a treasurer and management committee for each pharmacy, while in Koro some have treasurers and some are managed by VHWs.

### CURRENT PROJECT STATUS

| <u>OUTPUTS</u>   | <u>CURRENT STATUS (January 1980)</u>  |
|--|---|
| 1. Establishment of demonstration projects   | Two of three planned demonstration projects established   |
| 2. Training health workers at village, arrondissement, cercle, and regional levels | Village level: 59 VHWs, 8 traditional birth attendants  |
| 3. Five persons trained in U.S. for 1 year returned to key MOH positions           | One person  |
| 4. Community diagnosis reports for project zones                                   | Completed   |
| 5. Replicable VHW course including teaching aids                                   | Completed   |
| 6. Replicable refresher course   | Planned   |
| 7. Evaluation of pilot project   | AID evaluation completed in Spring 1980 not yet released. Final evaluation scheduled near the project's end |

## ANALYSIS

The Harvard Institute for International Development (HIID) is the contractor for the project and maintains administrative and technical assistance personnel who work with MOH counterparts. In the Spring of 1980 USAID evaluated the project, but AID/Mali has not yet released the document. The information presented here, therefore, is based primarily on earlier HIID evaluations, which do not provide the most complete and up-to-date picture.

Generally speaking, the project site in Yelimane has encountered numerous problems and delays, while the Koro site has been more successful. Both sites have logistical difficulties due in part to a rainy season that isolates them for three to four months a year. In Yelimane temperatures reach 120 degrees in the summer; because of severe fuel shortages, electrical power produced by generators is very limited. The original Harvard field advisor in Yelimane left after one year. A husband and wife team (doctor/public health advisor) replaced him in December of 1979, but left the project after 6 months. The current plan is for MOH personnel who have already been trained to continue project activities. Harvard will no longer maintain a permanent field team in Yelimane, but will provide short-term technical assistance as needed. There has been a permanent Harvard team in Koro; the present plan is that they will expand activities in this region rather than begin work in a third region as originally planned.

Problems have arisen in the areas of training, medicine supply, data collection, community development activities, and most significantly, project management. One major difficulty stemmed from a disagreement between the project staff and USAID/Bamako on the meaning of host country contracts and the nature of project implementation. The Harvard project director felt that since HIID signed the project agreement with Mali, the HIID team was primarily responsible to the MOH. However, AID, as the project funder, felt that the project is responsible primarily to AID and secondly to the MOH. This resulted in disagreements on issues such as the

sequence of budget authorizations and whether money in the revolving fund from village drug sales was subject to U.S. purchase requirements. AID also expected project staff to follow the project paper as closely as possible, justifying changes in writing. This conflicted with HIID's approach to implementation of determining the plan as warranted by field conditions and observations.

Since the project was designed to be replicated nationwide, it has tried to work with existing MOH structures and personnel. The feeling has always been that the MOH would have a real sense of ownership. Working completely within the system, however, has also meant inheriting the system's problems. For example, the continual breakdown of telephone service has necessitated increased vehicle use. Setting priorities for vehicle use, repair schedules, and related issues have generated conflict. The MOH is supposed to furnish office supplies for the project; however, the project is regarded as a good source for supplies. The project originally shared the MOH secretarial pool, but hired its own secretary in November 1979 because of delays in getting out letters, memos, and materials to the field. Problems of this kind have resulted in higher than anticipated support costs.

HIID and the MOH also have differences concerning finances. The MOH felt that financial statements of HIID's project expenses did not meet their accounting requirements. HIID, however, felt that it had supplied the information in a format to which the MOH had agreed.

The MOH's administrative structure created additional problems for the HIID team. Thus, when the Malian project director is out of the country, most MOH decisions that relate to the project are delayed until his return. Although the project staff was responsible for implementing the project, a number of field staff decisions were questioned or overturned by the MOH. Another problem has been the loss of MOH personnel to the project after they have been trained as VHW trainers. In Koro 17 percent of

the health personnel were reassigned in the first 19 months after VHW training began.

Additional management difficulties arose within the HIID team--differences in interpretation of goals and methods developed between the center and the periphery. The field personnel felt that the Bamako-based staff was unresponsive to their needs and provided insufficient policy direction. The Harvard director cited logistical problems and the need for decentralization and noted that the field was somewhat slow in developing action plans. Meetings were held to address this issue. In an effort to improve communications, radio transmitters have been placed at the national, regional, and cercle levels.

Summing up the entire management area in December 1979, one evaluator stated that the project was operating "in a complex problem-ridden organizational environment as well as a difficult task environment...[where] implementation becomes more of political process than the straight forward technical one it is often assumed to be." Since the writing of the report on which much of this material is based, there have been a number of personnel changes and resolution of many of the managerial problems. The "political process," however, remains a major factor in implementation.

The Education Development Center, Inc., is the subcontractor working on training. It designed a process in which Malians would participate as much as possible. The curriculum was based on villagers' felt needs, and villages selected their own VHWs. The project staff trained Malians to be trainers of VHWs. As of January 1980, 33 VHWs had been trained in Koro, while in Yelimane 26 VHWs and 8 traditional birth attendants had been trained. A study of Yelimane (Feb. 1980) found that there was some form of coverage for 32 percent of the villages and 60 percent of the population.

The same study in Yelimane also looked at the quality of VHW health care. Nineteen VHWs were tested on basic information that was part of their training. Only 8 of the 19 achieved a satisfactory score and only three were keeping adequate records. Two contributing factors were lack of supervision and compensation. The original intention was that supervisory visits would be a continuation of VHW education. However, in Yelimane few VHWs received adequate medical supervision. There has not been a systematic effort to compensate VHWs. It was hoped that the villagers would deal with the problem, but this has not happened, and there have been signs of discontent from some VHWs. The project staff see in-kind payment or profits from drug sales as possible sources of compensation, but the issue has not yet been resolved.

Another unresolved issue is the source of medicine supplies for villages once USAID funding ends. Either the MOH could continue to import tax-free American drugs and use funds from drug sales for rural health activities, or the Pharmacie Populaire could take on the responsibility, and the MOH would then look for other sources of funds. This is a particularly difficult issue since the MOH is involved in "turf" battles with the Pharmacie Populaire and other agencies. The project planned to establish pharmacies, but not other services, throughout its area of operation. However, civil authorities have been reluctant to grant permission for implementation of this aspect of the project.

As of January 1980, there were eight pharmacies in Yelimane and 17 in Koro. Pharmacists for each of the village-level pharmacies have been trained, and systems for keeping money and drug supply records have been instituted. A study in Yelimane showed an unacceptably high error rate in record-keeping and inventory control and noted that orders for resupply were not made until the supply had run out (similar information is unavailable for Koro).

The collection of data for the entire project is an ongoing process in Bamako, Koro, and Yelimane. Data collection includes evaluations and program monitoring activities such as finances, consultation records, vehicle use, etc. The data that were collected in the two areas were based on differing methodologies. Also, data are more complete in Koro than in Yelimane. Records were not as well kept in Yelimane where there was a large staff turnover.

A final area of concern is community development activities. The National Center for Community Development assigned a graduate of its new training school to each project field team. Much of their time has been devoted to training and supervising VHWs. Other activities have occurred in the area of water supply, where there have been surveys on the number and condition of wells in the villages. In Koro, plans for construction of 20 wells were developed. Although two are under construction, delays in outside funding have affected the project's credibility in a number of villages that were promised wells. Also, in Koro there has been reconstruction work on a village-built dam and plans made for water quality testing. In Yelimane, efforts were taken to make a high capacity water pump operational. The pump had been sent to the community by relatives in France. The village decided, however, not to finance the technical studies needed to determine the feasibility of using their pump.

One of the project's original intentions was to compare the relative success of the pilot projects in the two areas based on the degree of community development that had existed in each area prior to the project's start. Koro had community development activities in the area of agricultural production, while Yelimane did not. However, it is now recognized that there were too many other variables--such as the high percentage of Yelimane males working in France--to make a valid comparison.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>3</u>                 |
| 2. community-selected health workers                | <u>3</u>                 |
| 3. volunteers                                       | <u>3</u>                 |
| 4. emphasis on role of women                        | <u>2/3</u>               |
| 5. significant community financing                  | <u>3</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>3</u>                 |
| 2. logistic support                                 | <u>3</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>3</u>                 |
| 2. minimize cultural barriers to services           | <u>3</u>                 |
| 3. home visits                                      | <u>4</u>                 |
| 4. mobile units                                     | <u>1</u>                 |
| 5. health services at community facilities          | <u>3</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>1</u>                 |
| 2. project intended to be replicated                | <u>2</u>                 |
| 3. management information system/ongoing monitoring | <u>3</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>3</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>3</u>                 |
| 6. career advancement opportunities                 | <u>3</u>                 |
| 7. efforts to recruit women                         | <u>3</u>                 |
| F. Emphasis on prevention over curative care        | <u>3</u>                 |
| G. Use of appropriate technology                    | <u>3</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | <u>3</u>                 |
| 2. group health education  | <u>3</u>                 |
| 3. mass media health education   | <u>1</u>                 |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | <u>1</u>                 |
| 2. promote breastfeeding   | <u>1</u>                 |
| 3. supplemental food for weanlings and/or mothers  | <u>1</u>                 |
| 4. oral rehydration (specify type) _____   | <u>3</u>                 |
| 5. nutritional status monitoring   | <u>3</u>                 |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | <u>3</u>                 |
| 2. hygiene education   | <u>3</u>                 |
| 3. waste disposal for family/community   | <u>3</u>                 |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | <u>2</u>                 |
| 2. well baby care  | <u>2</u>                 |
| 3. train traditional birth attendants  | <u>3</u>                 |
| 4. family planning education   | <u>1</u>                 |
| 5. distribute contraceptives   | <u>1</u>                 |
| 6. surgical family planning procedures   | <u>1</u>                 |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | <u>2</u>                 |
| 2. cold chain support  | <u>1</u>                 |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | <u>3</u>                 |
| 2. malaria vector control  | <u>1</u>                 |
| 3. other vector control  | <u>1</u>                 |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | <u>3</u>                 |
| 2. referral system   | <u>3</u>                 |
| 3. drugs dispensed by health workers   | <u>3</u>                 |
| 4. use of traditional practitioners  | <u>3</u>                 |
| 5. use of folk treatments  | <u>3</u>                 |
| H. Provision and resupply of essential drugs   | <u>3</u>                 |

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Projet De Sante Rurale: A History and Analysis of Nineteen Months of Operation, by Derick W. Brinkerhoff, Harvard Institute for International Development, January 1980.

"Rural Health Services Development," Project Paper for Project Number 688-0208.

Fall 1980

CENTRAL AND WEST AFRICA

IDENTIFICATION

|                              |  |
|------------------------------|--|
| Project Name<br>and Number:  | Strengthening of Health Delivery<br>Systems in Central and West<br>America |
| Location:                    | Headquarters, Abidjan, Ivory<br>Coast                                      |
| Project Dates                | Phase I - September 1977<br><br>Phase II - January 1978 - April<br>1980    |
| Funding Level<br>and Source: | USAID:           \$20 million<br><br>WHO Grant:       ?                    |
| Responsible Offices:         | Bureau for Africa, Office of<br>Regional Affairs, AID/Washington           |
| Contractor:                  | Boston University, to coordinate<br>U.S. inputs                            |
| Implementing Agencies:       | World Health Organization,<br>Brazzaville, Congo; Boston<br>University     |

NOT OFFICIAL

**DRAFT**

FOR EDITORIAL REVIEW ONLY

## REGIONAL STATISTICS

Total Population: 200 million

Rural Population: 85%

Infant Mortality Rate: 185

Population Growth Rate: 2.7%-3% Life Expectancy at Birth: 50

GNP Per Capita: \$185

Adult Literacy Rate: 38%

## SYNOPSIS

The project entitled "Strengthening of Health Delivery Systems in Central and West Africa" is designed to increase the capability of the 20 countries in this region to plan and manage low cost health delivery systems. The project's approach builds upon existing Central and West African institutions. A cooperative effort funded by the Agency for International Development and the World Health Organization, the project emphasizes 1) training for health planners and managers, nurses, and village health workers; 2) regional and national disease surveillance and health information systems; and 3) research and evaluation in affordable health care delivery systems.

## BACKGROUND

The Central and West African countries, recently freed from colonialism, suffer from a lack of health manpower, facilities, and financial resources necessary to provide health services outside of urban areas. Tropical diseases, food shortages, and a lack of transportation and communication infrastructure further cripple the ability of these nations to deliver basic health services to their citizens.

The "Strengthening of Health Delivery Systems in Central and West Africa" Project (SHDS) was established to help meet the region's need to develop the capability and infrastructure to deliver health services on a national basis. The project's regional nature has an antecedent in the smallpox and measles eradication effort mounted by USAID in the 1960's and 1970's. That project was regional in effort, and involved the participation of several bilateral and multilateral agencies. After successfully combating measles and smallpox, the participating agencies were interested in continuing to build the capabilities of West and Central African nations in health delivery and to utilize the facilities and institutions developed as part of that earlier effort. The Center for Disease Control, for example, had established centers in several countries of the region. The World Health Organization had established training centers in Senegal, Nigeria, and Togo, and the French Government had established regional epidemic control centers in the Ivory Coast and the Cameroon.

In the early 1970's, the AID regional directors together with Bureau for Africa staff designed a project that would strengthen and broaden the capabilities developed in the WHO project, and would integrate new programs into the infrastructure remaining from the smallpox eradication programs.

Various national governments supported the primary health care strategy that was later defined in the Alma Ata Declaration of 1978. The idea of using primary health care to reach the rural populations had been accepted by the Africa region of WHO, and efforts were being made to spread these ideas throughout the continent. Tanzania, for example, made a resolution addressing this issue in the 1967 Arusha Declaration.

Each of the 20 countries participating in the SHDS project has adopted a national health plan based on the primary health care strategy. Each of the countries has developed a series of national targets to be achieved during the next five years. The countries in the region are assisted in planning by the World Health Organi

ation Country Health Programming Exercises (CHP) that have received AID support.

The American Public Health Association received a contract from the Agency for International Development in 1975 to plan and develop the first phase of the SHDS project. APHA sub-contracted with Boston University in 1976 to perform Phase I. A project Director was named and a headquarters was established in Abidjan, Ivory Coast.

### PROJECT DESCRIPTION

The project's broad goal is to improve the capability of the participating governments to plan, manage, and evaluate their health services delivery systems using a primary health care strategy. The project focuses on the development of health manpower, systems of communicable disease control and planning and management, and on research and evaluation of efforts to develop low cost delivery systems in the countries involved.

The 20 countries participating in the project are: Benin, the Cameroon, the Central African Republic, Chad, the Peoples Republic of Congo, Guinea Bissau, Gabon, the Gambia, Ghana, Equatorial Guinea, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo, and Upper Volta.

The principal project activities are the following:

1. The project's first objective is to improve national and regional health planning capabilities. The project operates by supporting the training center for national planning, management, and budgeting in Dakar (Senegal). This center was opened in 1975 under the sponsorship of the World Health Organization. Since its inception, it has trained 246 administrators from the 20 countries. It has conducted country health programming exercises in three countries and given

orientation to country health programming in three other countries. Consultations on health planning and management are given in-country. New courses have been devised for intermediate level managers, and a special seminar was presented to ministry level personnel to develop new approaches to policy analysis and management of national health programs.

2. Objective number two is to increase the skills and improve the utilization of health personnel providing basic health services at the supervisory and local level. In order to carry out this objective, the training centers at Lome (Togo) and Lagos (Nigeria) have developed a training course for trainers of village health workers. Graduates of this program are expected to train persons in their countries who will train village health workers in rural areas. This part of the project focuses on both course content and teaching methods. In the classroom and the field, priority is given to teaching methods appropriate for community leaders and community workers in rural areas. A manual developed by the project is used in training village health workers. The course is taught in English in Lagos (Nigeria) and in French in Lome (Togo).

Activity two is the training of post-basic nurses. The anglo-phone training program was developed at Cuttington College in Liberia and has only recently enrolled its first class.

The francophone post-basic nursing training program is located in Dakar (Senegal) at the Center for Nurses' Training (CESSI). These schools are attached to the national universities of Senegal and the Cameroon.

Consultants and teachers are provided for both centers through Boston University. Faculty is assigned on a short- or long-term basis as needed and must be able to teach in either English or French.

3. Objective three is to improve regional and national disease surveillance and health information systems and to integrate them into their respective health delivery systems. The Center for Disease Control is responsible for executing this part of the project under a PASA Agreement (Participating Agencies Services Agreement) with AID. The program's activities include an in-depth analysis of each nation's surveillance system, training of national personnel to develop surveillance systems, construction of laboratories, distribution of vaccines, and execution of disease surveillance.

Courses have been presented on communicable disease surveillance and on developing immunization programs for the countries. Laboratories are being developed in the Cameroon and the Ivory Coast. Measles vaccine has been distributed to the countries. The vaccination program demonstrations are conducted by the operations officers from the Center for Disease Control, and an epidemiologist works with the development of national disease surveillance capability. Expanded Immunization Program (EPI) demonstrations take place in the Cameroon, the Ivory Coast, and the Gambia. In this part of the project, baseline surveys are conducted by program staff, and immunizations are provided according to the diseases found to be most common. Investigations of outbreaks have been conducted in the Cameroon for typhoid, monkey pox and Lassa fever.

4. The fourth objective is to research and develop low cost affordable health delivery systems in each country. Originally the project called for a demonstration of low cost delivery systems similar to those in the DEIDS Project, the predecessor of the current project. However, this could not be completed for a variety of reasons. Instead, the training of research manpower to understand the problems and constraints in the

management of health care delivery systems was substituted. Initially a center for health services research was to be developed at the Cameroun University for Health Sciences in Younde; however, this was not found to be feasible, and thus far the activity has consisted of one course in applied research design and methodology presented in March 1980. Support for research projects undertaken by graduates of the short course has also been provided under the contract. The project director from Boston University (the prime executor of the project) works with WHO staff members, representatives from the 20 countries, and the regional AID office in the Ivory Coast. The organizations involved formed a project review committee consisting of senior officials from the Ministry of Health as well as representatives from the implementing agencies. This committee formed a subcommittee called the Program Coordinating Committee to serve as an executive program committee to monitor project progress. The subcommittee meets with the project staff on a regular basis, and the project review committee meets every other year.

In March and April 1978 an evaluation of the SHDS project was carried out by DIMPEX Associates, Inc., of New York City and Washington, D.C. The independent six member evaluation team composed of Americans, Africans and a WHO representative visited the eight countries participating in the SHDS project. They found that goals and objectives were generally being achieved: the project clearly benefited the participating countries.

### ANALYSIS

The contractor's scope of work for this project is complex. Overall implementation responsibility is shared between SHDS headquarters in Abidjan (Ivory Coast) and the World Health Organization

in Brazzaville (Congo). The Abidjan headquarters of SHDS is responsible for planning and managing project implementation and arranging for American consultants to work on project activities. Project headquarters arranges for procurement and provides general administrative support.

The Brazzaville WHO office (AFRO) is responsible for fielding African consultants to and participants in the project. WHO-AFRO supports students who work in the project and arranges for students being supported to participate by 1) their own governments, 2) separate WHO funds and 3) funds from other sources in project training programs. WHO also acts as an important link between the African nations and the project headquarters, especially to the Agency for International Development. This rather complex administrative arrangement has required extraordinary diplomatic efforts by the project director, WHO personnel, and AID staff members.

It is significant to note that the project is essentially on schedule and most activities agreed upon by all parties. The administrative complications of the project are resolved by transoceanic communication and travel. A project evaluation report indicated that the nations participating in the project were generally satisfied with project progress, and wish to have even greater participation of their countries' health programs in the project. Participating countries felt that the project addressed real needs in their countries, and gave them a significant role in decision making. The project staff has been able to win friends and elicit cooperation for the SHDS project in countries which have previously been relatively unfriendly to the United States, and have not previously sought AID assistance. The high level of cooperation between the project staff, member governments, and participating agencies that has characterized the project's

preparation and operation suggests a positive prognosis for achieving project goals and objectives. Project staff often visit participating countries and communicate frequently with WHO headquarters and country representatives. Cooperation and coordination between the headquarters staff in Abidjan and AFRO has greatly facilitated the project's progress. According to the evaluation report, cordial relations at this level are not common, although they are crucial. It may be significant that numerous African consultants are participating as experts in this project, providing technical assistance to other African nations (TCDC). The African consultants have been very well received. The evaluation report suggests that given this experience, perhaps more African consultants could be involved at the headquarters decision making level. The project staff in the WHO regional training centers are all Africans and are assisted by Americans who play a minor role in project implementation. This staffing pattern may well be a key factor in the successful implementation of this and other health projects.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

|   | <u>ACTIVITY<br/>CODE</u> |
|---|--------------------------|
| A. Community participation                          |                          |
| 1. community health committees                      | <u>1</u>                 |
| 2. community-selected health workers                | <u>1</u>                 |
| 3. volunteers                                       | <u>1</u>                 |
| 4. emphasis on role of women                        | <u>1</u>                 |
| 5. significant community financing                  | <u>1</u>                 |
| B. Intersectoral coordination                       |                          |
| 1. collaboration between ministries                 | <u>3</u>                 |
| 2. logistic support                                 | <u>3</u>                 |
| 3. increasing food production                       | <u>1</u>                 |
| 4. generate increased family income                 | <u>1</u>                 |
| C. Accessibility of services                        |                          |
| 1. minimize transportation barriers to services     | <u>1</u>                 |
| 2. minimize cultural barriers to services           | <u>1</u>                 |
| 3. home visits                                      | <u>1</u>                 |
| 4. mobile units                                     | <u>1</u>                 |
| 5. health services at community facilities          | <u>1</u>                 |
| 6. referral system                                  | <u>1</u>                 |
| D. Technical cooperation                            |                          |
| 1. technical cooperation with third world countries | <u>3</u>                 |
| 2. project intended to be replicated                | <u>4</u>                 |
| 3. management information system/ongoing monitoring | <u>2</u>                 |
| 4. periodic evaluations                             | <u>3</u>                 |
| 5. experimental design                              | <u>3</u>                 |
| E. Training   |                          |
| 1. training new categories of health workers        | <u>3</u>                 |
| 2. new responsibilities for existing health workers | <u>3</u>                 |
| 3. inservice training                               | <u>1</u>                 |
| 4. management training                              | <u>3</u>                 |
| 5. preparing community leaders                      | <u>1</u>                 |
| 6. career advancement opportunities                 | <u>1</u>                 |
| 7. efforts to recruit women                         | <u>1</u>                 |
| F. Emphasis on prevention over curative care        | <u>1</u>                 |
| G. Use of appropriate technology                    | <u>1</u>                 |

PHC Services

|  | <u>ACTIVITY<br/>CODE</u> |
|--|--------------------------|
| A. Public education in the recognition, prevention and control of prevailing health problems |                          |
| 1. person-to-person health education   | 1                        |
| 2. group health education  | 1                        |
| 3. mass media health education   | 1                        |
| B. Promotion of adequate food and nutrition  |                          |
| 1. distribution of food  | 1                        |
| 2. promote breastfeeding   | 1                        |
| 3. supplemental food for weanlings and/or mothers  | 1                        |
| 4. oral rehydration (specify type) _____   | 1                        |
| 5. nutritional status monitoring   | 1                        |
| C. Safe water and basic sanitation   |                          |
| 1. community water supply  | 1                        |
| 2. hygiene education   | 1                        |
| 3. waste disposal for family/community   | 1                        |
| D. Mother/child health and family planning   |                          |
| 1. prenatal care   | 1                        |
| 2. well baby care  | 1                        |
| 3. train traditional birth attendants  | 1                        |
| 4. family planning education   | 1                        |
| 5. distribute contraceptives   | 1                        |
| 6. surgical family planning procedures   | 1                        |
| E. Immunizations against major infectious diseases   |                          |
| 1. part of national Expanded Program of Immunization   | 3                        |
| 2. cold chain support  | 3                        |
| F. Prevention and control of locally endemic diseases  |                          |
| 1. disease surveillance system   | 3                        |
| 2. malaria vector control  | 1                        |
| 3. other vector control  | 1                        |
| G. Appropriate treatment of common diseases and injuries                                     |                          |
| 1. treatment by non-physicians   | 3                        |
| 2. referral system   | 1                        |
| 3. drugs dispensed by health workers   | 3                        |
| 4. use of traditional practitioners  | 1                        |
| 5. use of folk treatments  | 1                        |
| H. Provision and resupply of essential drugs   | 1                        |

## REFERENCES

Project Paper

AID Project 693-0398

WHO Project ICP SPM-013

Midterm Project Evaluation of the SHDS Project - May 1980  
DIMPEX Associates, Inc., - New York, Washington, D.C.

Six-Month Internal Evaluation of SHDS Project - December 1979