SAHAN CAAFIMAAD

PRIMARY HEALTH CARE FEASIBILITY STUDY

LOWER JUBBA REGION, SOMALIA

PROJECT CONCERN INTERNATIONAL

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PART ONE

FEASIBILITY STUDY

I. INTRODUCTION

1. 1. Background on PCI Involvement in Somalia

Project Concern International (PCI) has been exploring a program for the Somali Democratic Republic (SDR) in primary health care training and development since 1979. Initial talks with the Somali Ministry of Health resulted in an invitation to provide assistance in PHC development in one region (probably nomadic), and a health planner and a health visual aids specialist educator for the MOH in Mogadishu. PCI was not able to act along the lines discussed because of funding uncertainties. Therefore, in October, 1981, PCI opened discussion with the MOH and AID/S for a possible Operational Program Grant (OPG), but iittle progress was made due to AID-Somalia concerns over problems in the existing rural primary health health care project in Somalia.

In August of 1982, the Office of Food For Peace (FFP), AID-Washington, expressed its interest to PCI in developing new and improved strategies for delivering health and nutrition services to nomadic and more isolated rural populations. FFP is committed to finding new methods of investing FFP resources (food assistance plus generated funds) in ways that promote the integration of development efforts - health and nutrition, income generation, and rural development, etc. The interest of PCI in contributing to this effort brought FFP and PCI together.

The Somali MOH confirmed its continuing interest in a PCI primary health care program in Somalia. The Nugaal Region was designated for a PHC training and development program. Because of the difficulties of developing a PHC program to serve a nomadic population such as found in the Nugaal Region, PCI and the MOH

agreed that a feasibility study was needed to design a viable and relevant implementation plan. FFP agreed to fund a feasibility study.

Responsibility for the contract was assumed by AID-Somalia, and Contract AID No. 938-0700-C-00-3051 was negotiated and signed with PCI in September, 1983.

A review of the complete scope of work for the contract is found in Part One, Section II, of this report.

In October, 1983, a four-member PCI team commenced planning work in Mogadishu. The team left for the field during the second week in November, 1983, but work work was interrupted, and the survey was not completed in the Nugaal Region because of security reasons.

A change order was negotiated for the original contract once the MOH and AID-Somalia identified the Lower Jubba as the new region for investigation. This was signed on March 29, 1984. In April, 1984, the feasibility study for Lower Jubba was initiated.

2. Cooperation of GSDR and Other Agencies

Excellent assistance and cooperation was given to the Project Concern team by the Government of the Somali Democratic Republic at the national, regional, district, and local levels. This greatly aided PCI in the completion of the survey. There is not sufficient space here to cite all those who assisted Project Concern, but we would like to especially thank the the following people for their exceptional help and cooperation:

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Dr. Qasim Adan Egal, Director of Primary Health Care, Primary Health Care National Office (PHCNO), MOH

Dr. Abdi Guri, Director of Training, NPHCO, MOH

Dr. Ahmed Dahir, Director of Planning, then, Ministry of Local Government and Rural Development (now incorporated into the Ministry of Interior)

Mr. Mohamed Mohamoud Liban, Governor of Lower Jubba

Dr. Omar Hersi Mohamed, District Medical Officer, Kismaayo District

Mr. Abdulahi Haji Hassan Ali, Regional Executive Administrator, Lower Jubba

Colonel Ilmi Faran, Regional Police Commander, Lower Jubba

Mr. Sallah, Director, Fisheries Department, Kismaayo

Mr. Salut Abdouli, District Commissioner, Badhaadhe District

Mr. Ougas Ali Farah, District Health Officer, Badhaadhe District

Mr. Ahmed Ibrahim, Livestock Officer, Badhaadhe District

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Mr. Ali Ashur Baro, Regional Sanitarian, Lower Jubba Region

Mr. Jibil Ali Adan, District Commissioner, Kismaayo District

Dr. Ali Mohamed Samatar, District Medical Officer, Jamaame District

Dr. Abdul Rahman Ali Sirhan, District Medical Officer, Afmadow District

Major Khalif Farah, District Police Commander, Afmadow District

Mr. Abdulrasq Ali Ahmed, Assistant to District Medical Officer, Afmadow District

Mr. Abdulahi Bashir, District Health Nurse, Afmadow District

Mr. Abdulah Haji Ali Sululo, Mayor of Afmadow and Acting District Commissioner, Afmadow

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Mr. Terry Jeggle, Director, ELU-CARE

Mr. Stafford Clarry, ELU-CARE

Mr. Earl Goodyear and Mrs. Kham Goodyear, CARE-Somalia

Mr. Wes Wilson, ELU-CARE

3. Organization of the Report

This report is divided into two parts. Part One presents the feasibility study carried out in Lower Jubba, including a description of the scope of the work, the survey methods, and an analysis of the implications for implementation of a PHC program in Lower Jubba. Part Two outlines the recommended project design proposed by PCI to address the PHC needs of the Lower Jubba Region. This incudes the implementation plan, the financial plan, and an analysis of recurrent cost implications.

II. PCI FEASIBILITY STUDY MANDATE (SCOPE OF WORK)

The purpose of Contract No. 938-0700-C-00-3051 is twofold. First, to determine the feasibility of a Project Concern International (PCI) primary health care training and development program for the Lower Jubba Region. Second, to explore new combinations of development resources emphasizing the use of Food for Peace (FFP) resources for development purposes.

This section of the report presents a summary of the findings and recommendations of the PCI team in relation to the tasks called for in the Statement of Work. These are included at this point even though there will be considerable discussion of them in other parts of the report. It is felt that an early summary will provide a clear and concise progress report on the whole scope of the contract.

II.1 Determine the Appropriateness of a Cost-Effective PHC Program, Given Geographical and Cultural Constraints

The survey revealed both a wide range of endemic health problems--malaria, schistosomiasis, TB, anemia and malnutrition in women and young children, diarrhea in children, complications in childbirth--and serious gaps in health services in the rural areas of Lower Jubba. District health facilities, rural dispensaries, and other health posts lack even the most basic equipment, supplies of drugs, and other medications. These conditions are totally inadequate to provide an acceptable level of health care. The

District Hospital in Afmadow, for example, has no mattresses and sheets for the beds, almost no equipment, and three months' supply of drugs allocated from the region is said to be sufficient for only about 10 days of operation. Although there is a laboratory attached to the district facility, the only equipment proved to be two glass slides and a wooden rack for holding test tubes. There are no microscopes, no reagents, and no cleaning materials.

The situation is even more meager at the beel (central town/village) level. Many dispensaries are without qualified staff, lacking in equipment and drugs, and are frequently closed for days on end due to lack of support. Below the beel level, at the tuulo (village and subvillage) or at nomadic settlements, there are no health facilities nor health workers in most locations. Immunization activities are nonexistent.

The PCI Team concluded that the only way in which health services could be improved in Lower Jubba was through a community-based decentralized health development program. Such a program would make training and supporting community health workers a first priority, at the same time, establishing the necessary linkage and health subsystems at the district level. It is the Team's view that an appropriately designed PHC program, taking into account the varying needs, problems, conditions, and resource capabilities of each district, and areas within districts, would be both cost-effective and viable. Long-term improvement in health status and program sustainability, however, would have to rest on broad-based

rural improvement in other key development sectors that are supportive and reinforcing.

II.2 The Design of Such a Program, Including the Capability of the MOH and PCI To Carry It Out

The program design is presented in Part Two, Sections I to IV. In brief, the design focuses on the community and other rural outreach levels, decentralized district health development, and multi-sectoral components.

PCI has both the primary health care technical expertise and the grass-roots experience, capability, and commitment to carry out the program envisioned. The MOH has committed itself to the establishment of a national primary health care program and to the extension of health services to the rural areas. The increasingly competent PHC National Office is making efforts to strengthen the MOH staff at regional and district levels to support PHC. The major weaknesses are the lack of qualified district and beel level staff familiar with PHC, the top-down focus of PHC planning, and the delay in training and development at the community level.

The proposed program design addresses these deficiencies by focusing on community-level work, strengthening district health infrastructure in a manner supportive of PHC, and emphasizing community motivation and participation skills in district and lower level MOH staff. Some programs have concentrated on first building a structure at the region and working from the region, down.

This approach has failed to engage the community in any meaningful way. Fortunately, while at the district levels, the Team identified a number of health, and other, staff who both understand and support giving priority to the community.

A modification of the current PHC strategy is recommended. Based on the current concept of the PHCU, and proposed rates of coverage by CHWs, these facilities would be overelaborate and overstaffed in much of Lower Jubba. Modest health facilities can be constructed using local materials, existing ones can be refurbished, and MOH staff levels can be adjusted down to more realistic levels. The latter will have to be compensated for by increased numbers of CHWs being trained--to relate to smaller, more dispersed population groupings. This modification recommendation is determined by various cultural differences, as well as geographical and demographic factors, particularly the small group size and wide dispersion of the population in the two interior districts of Badhaadhe and Afmadow, the considerable nomadic population, and the isolation of interior areas during the main rainy season (April through June).

The proposed program is supportive of the MOH commitment to PHC, and should provide an example of a flexible, adaptable model of community-based health care development and delivery. The Team also recognized a strong need for a multi-sectoral approach, not only because this is, or should be, a key element in any PHC program, but also especially in Somalia where the village and rural people see their problems as interconnected. The manner in which

the technical agencies in the districts cooperated together is also encouraging for a multi-sectoral development approach.

The efficacy of a rural development component in a PHC program for Lower Jubba was perceived early on in our discussions with villagers. To cite just one example, the need for increased quantity and quality of water was identified almost everywhere. Water development is directly supportive of improved human health, critical to the survival of livestock, and a potential resource for increasing food production and diversity in the diet.

II.3 Determine Whether and How Use of PL 480 Resources (Food for Work, Title II, and/or Other FFP-Generated Resources - Local Currency Generations) Could Help To Increase the Effectiveness of a PHC Program

The PCI Team found ample need and scope for the use of Food for Peace (FFP) resources including PL 480 Title II food and locally generated currencies from Titles I, II, and III through the CIPL Program.

Surveys revealed a wide incidence of nutrition and nutrition-related problems--anemia, miscarriages, and protein-energy malnutrition in children--a high prevalence in three of the four districts. The diet is most often maize and milk, food items whose production is extremely dependent on variable water resources. Endemic malaria and schistosomiasis and frequent diarrhea in children contribute to, and interact with, low nutritional status to place this vulnerable group at serious risk. Infant mortality and child mortality are high, as are miscar-

riages among women.

Under these circumstances, food assistance needn't be programmed in the traditional broad-based manner, but rather, targeted to nutritionally deficient individuals identified by CHWs in the vulnerable MOH category. Food aid would be provided on a prescription basis as curative and preventive therapy. This nutrition intervention would be programmed in conjunction with non-food inputs such as health services, nutrition education, water development, and small-scale food production.

Opportunities for the use of FFP resources in the form of locally generated currencies from Titles I, II, and III through the CIPL program are varied and broad. Community health and health-related projects of all types will require some outside funds. Financing of drugs or pharmaceuticals from hard currencies in the CIPL program could relieve foreign exchange demands on the GSDR if tied to a system of "earning" credits for pharmaceuticals through a community's work on community projects. Types of projects would include repair and construction of health facilities, digging and improvement of shallow wells, construction, improvement, and protection of reservoirs and ponds, development of roof catchment water systems and water storage, road repair and drainage, village cleanup activities, refuse pits, cattle dips, kitchen gardens, and others.

Such a system would be an imaginative way of linking resources together and creating a multiplier in terms of curative

health services, preventive health activities, and improvements in infrastructure, the environment, and productivity. Such interaction would be supportive of the "total" or wider health of the community. The details of this approach will be worked out in Sections I and II of Part Two--Recommended Project Design.

II.4 Determine Required Inputs (i.e., Manpower, Materials, Administration, and Calculation of Initial and Recurrent Costs) for Such a Program

Details of project implementation will be found in Part Two, Sections II, III, and IV. The design covers manpower, administration, materials, initial and recurrent costs, and timelines. The critical element is ensuring that the project has adequate manpower that is both technically competent and experienced in working at the local level under difficult conditions. The majority of project staff will be stationed in the districts.

II.5 Determine How Best To Integrate the Program with Existing PHC Efforts, Paying Particular Attention to Maximizing the Potential of the PHC Training Centers

There is considerable diversity in the implementation and design of PHC programs in Somalia. One of the strengths of the PHC effort in Somalia, to date, has been the ability of the national program to embrace this diversity. The PHC National Office is naturally interested in providing overall guidelines and standardizing some elements in PHC programs. It is hoped that this may be done without discouraging flexibility and adaptation to local conditions.

PCI proposes giving priority to training CHWs and other

community workers first, then building linkages to intermediate and district levels, rather than working from the region, down. The end product--improving rural health care delivery and health status--is consistent with MOH national PHC goals.

Every attempt will be made to utilize the skills developed, the experience and lessons learned, and the materials devised in other PHC programs, particularly those of the PHC training centers and the PHC National Office. At the same time, as has been noted in several reports, it must be acknowledged that the focus of the training effort in the training centers has been on the technical side. Gaps in preparation for community participation and motivation, teaching methods, and health management and supervision skills are serious. There is almost no training in PHC support subsystems such as drug supply, health information, referral, and planning.

The program for Lower Jubba would be complementary to existing training efforts. It would seek to fill the identified gaps and make for a more well-rounded and effective community health trainer and supervisor. The training centers have only limited experience in the actual training of CHWs. Both the training centers and PCI must draw on the experience of the Refugee Health Unit (RHU) and other PHC programs, particularly in the North West, in this regard.

11.6 Determine the Degree to Which Interrelationships Between the Health/Nutrition Sector and Other Development Sectors Lead to Improved Health and Nutrition

Almost everywhere the PCI Team went in Lower Jubba, district

officials, villagers, farmers, and herders spoke of the interrelationships, often eloquently, between water, the health of their animals and crops, and their own health. One herder told us, "When our animals are healthy, we are healthy; when there is no water, our animals become sick and we become sick." While this may be a dramatization and oversimplification, there is a solid core of truth in this observation. Even if we didn't need prompting, we were forced to think and look at interrelationships.

In discussions of primary health care, there is always a description of the role of primary health care in promoting development. This development process is broken down into two broad categories. One is health services and primary health care training and delivery; the second is related services and activities. The second category is often called multi-sectoral because successful implementation of PHC is said to call for, and depend on, complementarities and linkages with agriculture, water, public works, education, forestry, and the like. PHC training, services, and delivery are discussed in substantial depth. The related services and activities are described but almost never discussed.

An organizational entity, or a project which establishes primary contact at the local level encounters a wide range of developmental concerns, no matter what the primary focus of the program may be. These concerns are interlocking, and most often prove intractable when approached in isolation. A primary health

care program is usually an instrument of primary contact for the communities and settlements in which it operates. Because it is strategically placed and emphasizes building local capacity in individuals, groups, and institutions, PHC is at the cutting edge of development, a core intervention in rural development.

The PCI Team found critical relationships between water development, productivity, and health. A short discussion of these interrelationships and the problems of water development would be appropriate here.

Water

Shortages of water affect animal health, agriculture, and productivity; all impact negatively on income, nutrition, and health status in many areas of lower Jubba. Shortage of water in dry season periods results in a chain of problems. The worsening of already low water quality, leading to a rise in diarrheal diseases, and decline in the quantity of water result in poor hygiene and brings an increase in infections, water-washed skin, and other problems. Limitations in water supply prevent its utilization to improve or diversify agricultural production. The lack of balance in the diet contributes to both nutritional problems and a predisposition to more serious consequences from illness and infection.

Even though herders and villagers have made considerable efforts to increase water supply by building ponds and reservoirs, they are limited in scope to hand-dug and built structures. Often the siting of ponds or catchments is less than optimum to harvest and store maximum runoff water. Attempts to keep the reservoirs

free of contamination by animals and humans proves difficult when the pressure on water resources becomes too great.

Increasing water supplies through a water development component links directly to productivity and health. Besides alleviating some of the problems mentioned above, other benefits would be realized.

A more convenient and increased supply of water frees women and children from vast amounts of time spent in hauling and carrying water, thus affording opportunity for attention to other family tasks or even rest. Increase of water and health education in the safer use of water has a direct impact on human health.

Through proper ponding, the level of water in shallow wells can be raised or the wells can stay productive longer through the dry season. Simple improvements in roof catchment methods for rainwater harvesting and storage can increase water supply.

Yet in a water development component potential negative consequences and side effects can occur. The most serious of these would be possible concentration of animal populations leading to overgrazing and erosion and/or a rise in water-borne diseases such as malaria and schistosomiasis. The project plan must include activities to counter such possible negative side effects.

Roads and Transportation

Travelling as the PCI Team did during the rainy season, and experiencing the hazards and difficulties of travel as do the people of Badhaadhe, Afmadow, and coastal Kismaayo and Badhaadhe, we saw the overwhelming impact that the weather had on the movement of people, goods, and food. Because of the disruption of transport, in the interior

of Badhaadhe and Afmadow, for example, milk--a key food in the rural diet--was in short supply or not available in certain towns and villages or at a cost too high for many families to afford. We also observed the opposite; the effects that delays in the rains had on the health and survival of cattle and other livestock and the health of the people. There is an intimate relationship between water, productivity, transport, and health and nutrition in the interior districts of Bahaadhe and Afmadow. There are similar relationships between water, productivity, and health and nutrition in the agricultural areas of Jamaame and Kismaayo districts; and isolation and inacessibility impact on the health status of the coastal people of Badhaadhe and Kismaayo districts.

Thus, the problems of rainy seasonal isolation and the breakdown of transport and food supply are far-reaching. Simple upgrading of roads, drainage, and culverting could help to relieve the situation, thus improving food distribution and availability, nutrition, and health. Improved roads and village tracks will be critical for health service delivery and supervision.

Agriculture and Nutrition

There is scope for both improved nutrition and income generation as increased water availability opens up opportunities for increased agricultural productivity and diversification. Kitchen gardens linked to the health preventive and promotive aspects of PHC in nutrition education and child care could do much to improve the health of vulnerable groups in the population. Agricultural extension workers are rarely seen in the villages of Badhaadhe and Afmadow. Demonstration

advice, and seeds are needed.

Forestry and Village Woodlots

As population grows, the use of wood for fuel and building material rises sharply. Environmental impacts of overharvesting are well known: erosion, damage to grass and shrub cover, breakdown of catchment areas, drying of soils, and decline in water tables. Even a PHC activity teaching people to boil water for health reasc would also add to wood fuel use. Thus conservation, education, and reforestation are necessary complementary activities in the health education process. Forestry is a natural component of community development work whether its leading edge is primary health care or agricultural development.

General

There is an intimate relationship between water, transportation, productivity, nutrition, agriculture, and health of the people in all the districts of Lower Jubba.

Not only did the PCI survey find that the relationship between health/nutrition and other development sectors would lead to improved health and nutrition, but that it was unlikely that health and nutrition could effectively be improved and sustained without working through these multi-sectoral linkages. Unless all areas are simultaneously developed through an integrated rural development program, efforts to improve the overall health status of the people are likely to have limited impact or success.

II.7. Explore the Potential of Using Community Volunteers as Extension Personnel in the PHC Program

(It is unfortunate that the language above is somewhat limiting.

The original intent of this facet of the study had been to explore the potential of using the methodology of training community health workers as a model for training other types of community and rural paraprofessionals such as livestock aides and agricultrual extension workers. However, the spirit of this enquiry is retained if the multi-sectoral dimensions of PHC are recognized.)

There is previous experience in Somalia in the training of herders in basic veterinary care. The Ministry of Livestock, Range, and Forests trained many herders during the literacy and rural development crash programs. To some extent, the livestock officers are already building on this capacity and felt it could be further developed.

Similarly, we think that villagers and those more permanently residing in nomadic settlements could be trained as basic extension aides to promote kitchen gardens or family gardens, supported with seeds, and backstopped by technical advice from a rural development worker. This is particularly necessary for Badhaadhe and Afmadow, given the fact that few of the villages and settlements had ever seen an agricultural extension worker. This must be contrasted with the situation for livestock workers, many of whom are based in villages or reach villages and settlements through mobile teams.

Prospects exist for community forestry workers and perhaps even for general development workers.

The key to this is that, like the CHW, they be given real skills and supported so that what they do is of genuine benefit to their groups and communities.

II. 8. Explore the Potential for Collaboration Between PCI and Other PVOs to Further the Objectives of the Program

The potential for collaboration with other PVOs is excellent, both formally and informally. CARE and Save the Children Federation-U.S. in Somalia have been responsive to the idea. Additionally, PCI through its contacts with the Joint PVO/University Rural Development Center at Western Carolina University has access to a collaborative framework embracing a network of PVOs and universities involved in rural development.

The Joint PVO/University Rural Development Center is a consortium of universities and PVOs. The Governing Board consists of five PVOs--CARE, Church World Service, Lutheran World Relief, Christian Children's Fund, and the American Council for Voluntary Agencies for Foreign Service (ACVAFS) and five universities--the University of Georgia, Virginia Polytechnic University, Appalachian State University, North Carolina Agricultural and Technical University, and Western Carolina University. Other PVOs and universities such as Catholic Relief Services, Heifer Project International, Meals for Millions, Freedom from Hunger Foundation, and PCI have participated in Joint Center activities as well. The Joint Center has collaborated with Auburn University, East Carolina University, Mississippi State University, and Pennsylvania State University.

The Joint Center has an aid-funded project, with the International Center for Aquaculture at Auburn University to provide technical expertise in water harvesting and aquaculture to participating PVOs. Among the first PVOs to participate are CARE, Lutheran

World Relief, CLUSA, and Save the Children Federation (SCF). Technical assistance in catchment and water harvesting would be available to PCI in Somalia.

The Joint Center is also developing ties with other University centers of specialized development expertise wherein appropriate/relevent university professional, technical, and research capability can be combined with the grass-roots project development, management, and implementation expertise of PVOs and the PVOs long-term presence and commitment to work in developing countries. These university centers include Mississippi State (seed development and multiplication), University of Arizona (arid lands development), and University of Rhode Island (marine fisheries).

11.9 Recommend Appropriate Institutional Relationships Necessary to Carry Out Such a Program

As a primary health care program, the main central level relationship is with the PHC National Office. As a program to be established and principally implemented in the districts and lower levels, there must be strong relationships with district authorities and the District PHC Team.

The multi-sectoral aspects of the GSDR's PHC program is supported by government intersectoral coordinating committees at national, regional, district, and ultimately the beel or zonal levels. PCI's primary relationships with these committees consist variously of the Governor, District Commissioners, PHC Regional Coordinator, SRP Representatives, Regional and District Medical and Health Officers, Ministry of Interior (through the division of Local Government and Rural Development), Local Government Representatives, and representatives

of the Ministries of Education; Water Development; Livestock, Range, and Forests; Agriculture; Finance; and the Somali Women's Organization, the Somali Youth Organization, and the Somali Trade Union.

An active rural development component at the district and lower levels would strengthen this nascent institutional framework of multi-sectoral cooperation. In fact, as previously noted, considerable practical multi-sectoral cooperation is in evidence at the district levels.

A second strong institutional relationship at the central level should be established with the Planning Division of the Ministry Of the Interior. This division was in the former Ministry of Local Government and Rural Development (MLGRD). The MLGRD was the only government ministry in Somalia that embraced a bottom-up planning process which emphasizes public participation in planning, funding, and implementing development projects. It is hoped that this local development planning orientation will be continued in the new organization of the Ministry of Interior.

Following is a summary of possible key institutional relationships between PCI and various levels and sections of the GSDR:

PCI Country Director (Mogadishu)	relates to	PHC National Office; Inter-Ministerial Coordinating Committee for PHC; Planning Division, Ministry Of Interior
PCI Regional Project Director (Kismayu)	relates to	Regional PHC Coordinator; Regional Medical Officer; Governor and Regional Government; Regional Development Committee

PCI District Team:	relates to	District Health Team; District PHC Committee; District Commissioner and Local Government; Local People's Assembly; Village Councils or Village Development Committees; Village Health Committees
District Health Manager/ Trainer		
District Rural Development Specialist		

In action terms, the counterpart of the PCI District Health Manager/Trainer is the District Medical Officer or the District Health Officer; the counterpart of the PCI Rural Development Specialist is the District Commissioner and his designated staff. As a point of practical implementation, PCI staff should establish a good working relationship with the Regional Police Commandant and the District Police Commandant. This is especially useful for transportation and communications assistance.

The PCI Country Director in Mogadishu should relate to the AID Health Officer and the AID Division Chief of Social Development and/or Rural Development. The PCI Team should closely coordinate with AID-Somalia in monitoring and evaluation activities and in implementing any mid-course corrections in the program should they be necessary.

III. CURRENT STATUS OF NATIONAL HEALTH SYSTEM INCLUDING PRIMARY HEALTH CARE DEVELOPMENT

III. 1. National Health Status and Health Policy

Of a developing country which impresses the outsider with its poverty of western technical resources, difficulties of communication and transport, vast and arid distances, and extreme swings from flood to dry-season famine, it is perhaps startling to read that "Somalia has more nospital beds per thousand population than there are in the Unites States." (57) Even discounting the great portion of these beds which are not functional--no mattresses, sheets, pillows, nor staff and supplies to properly man them-- the statement is accurate enough in its evocation of the orientation of western health care here: In most areas of the country, modern health services are only available in cities, heavily curative in orientation, and inaccessible to most of the rural public.

Detailed discussions of Somalia's overall health profile and national health policy are available in several sources and will not be repeated here (see, e.g., 57,19,53,32). This chapter will concentrate on particular aspects of health conditions, health service delivery, and national policy which, in our opinion, either have not been adequately discussed elsewhere, or which seem to us to bear with particular relevance on the nature and design of the project to be outlined in Part Two.

a. Health Status

Quantitative indicators reveal that the health status of the Somali people is poor on a world scale. Life expectancy at birth

is 43 years (45 for urban residents, 40 for rural people), reflecting high infant and child mortality rates. Infant mortality is variously estimated from 150 to 177 per 1000 live births as a gross national average; for rural areas the rate was placed at 193 by one study (cited in (53). Child mortality (1-4 years) is 30 per 1000. (The well-supplied and supported primary health care programs among the refugee population have succeeded in halving these mortality rates in three years (48).

Factors which are most commonly said to cause poor levels of public health include: (1) lack and poor quality of water (only 30% of the population is estimated to have reliable access to "safe" water, a figure which breaks down into 60% for urban dwellers, 18% in rural areas); (2) poor environmental hygiene; (3) malnutrition, particularly of women and young children. On a countrywide basis major disease problems include tuberculosis and malaria; waterborne diseases, particularly infant diarrhea; contagious childhood diseases; respiratory infections. In the southern interriverine and irrigated areas, malaria is reported to be particularly widespread, and urinary schistosomiasis is common. There are indications that malaria and schistosomiasis may be increasing with the spread of irrigated agriculture. The increase in number of artificial catchments and ponds, for livestock watering and household use, may also contribute to a rise in these diseases in the absence of appropriate environmental sanitation and health education.

Analysis of the health status of Lower Jubba, the target region for this study, will be found in Section IV.

b. Health Service Delivery Status

Two major systems of health service delivery exist: the indigneous and the western. Indigenous medical theory and practice preexisted the introduction of western practice during the colonial period; and, in terms of availability, indigenous health services continue to outstrip any sort of western practice by 100 to one. Traditional medicine--"Somali medicine" (dawo Soomaali) or "rural medicine (dawo duur)--comprises a highly diversified offering of preventive and curative herbal and dietary practice; surgery of several varieties (notably including circumcision of boys and girls, and infibulation of girls); first aid, including sophisticated bonesetting practice; midwifery, from simple to fancy; and religious and spiritual medicine, which is called upon for all problems of mental illness but also for curing and some prevention of physical disease.

The following should be stressed. First, "Somali medicine" is as comprehensively available to the entire Somali public, urban and rural, as are aspirin and cough drops in the U.S. or Europe. Second, for most of these services people pay, and often well. Finally, even when both options are easily available--as is the case in cities, large towns, and refugee camps--a substantial portion of the population continues to prefer traditional solutions over western interventions (even when the latter are provided gratis), for certain health problems.

(1) Traditional or/Indigenous Health System

At the risk of oversimplifying, it can be said that a majority of the rural public, and many urban people as well, will tend to choose traditional over western remedies in the following instances:

(a) Mental Illness

This includes both insanity (waalli) and spirit possession (as a general category often called saar). Spirit possession has many physical manifestations which may, on further investigation, be found to arise from somatic causes. Also, certain definable conditions--TB and anemia among them--are sometimes ascribed to spirit or djinn possession and treated spiritually.

In the public perception, western medicine does not address problems defined locally as being of mental origin, at all;

(b) Broken Bones

This includes compound and (very) complex fractures. Western bonesetting is widely, though not universally, perceived as being, on the average, inferior to proper indigenous practice, and even as being liable to make serious, sometimes permanent, mistakes;

(c) Laxatives and Purgatives

These are generically called qarasbixin and are used in many courses of curative treatment but also extensively used for regular health maintenance, including prevention of illness (further discussed in 7,58,6). When the public are in contact with western medical services, they quickly become aware that western practitioners do not support this practice; thus they continue to satisfy their demand for health maintenance care through recourse to indigenous services;

(d) Infant and Child Illness

In particular, these are infant diarrhea and respiratory diseases. These two are usually treated by women family members or neighbors by burning in the affected body area, or excision of the uvula and sometimes the tonsils (though, if antibiotics were

plentifully available, many rural people would administer them for these problems). Worth noting in this context is that the refugee population has proven substantially resistant to the intensive and persistent attempts by the Refugee Health Unit (RHU) over several years to introduce oral rehydration therapy.

The final point about traditional health practice which should bear on planning and design is that, for the most part, the terms "traditional practitioner" (herbalist, bonesetter, etc.) and "traditional birth attendant" do not describe highly articulated roles. Rather, the skills are widely and differentially spread among the population. A significant proportion of the residents of most villages or grazing settlements know and practice one or another, or several, elements of the traditional medical armory. Particularly worthy of note is the widespread practice of home remedies by elder female family members serving their close relatives and neighbors, occasionally in defiance of recommendations made by a western-trained worker. The implications of this point are already being felt in the attempts to utilize TBAs in PHC delivery; they will be discussed below.

(2) Western Health System

Slightly during the colonial period, and with increasing vigor since independence, western or "modern" medicine has been introduced into Somalia. At present the western health resources available to the Somali public include private and government components. The government health system, operated by the Ministry of Health, will be discussed below. First, those elements comprising the private western system will be briefly described, since they far surpass the government system in terms of their extension into the

Somali Countryside.

(a) Private System--Pharmacies

Since mid-1983, MDs who work for the MOH are allowed to practice privately during off-work hours. However, this service is strictly urban-based and will not, therefore, be further considered here. The other aspect of private westernized practice, which does contribute substantially to health care outside the cities, is the system of private pharmacies. At least one, and more if the market will bear, is available in regional and district capitals almost without exception, as well as in many of the larger towns along the more traveled main roads. Rural people, especially pastoralists, will come from one to two hours' walk to buy penicillin for a supposed pneumonia (to be administered by the local injectionist), antibiotics for a variety of ills, one or more chloroquine tablets to treat a locally diagnosed case of malaria, and multivitamins--tablets, or preferably in syrup form--which are often used in a way somewhat analogous to the traditional practice of qarasbixin--as a body refurbisher or health jackup. Also, western preventive measures which have been demonstrated to be effective are fairly popular; it is generally not difficult to persuade rural people to participate in immunization programs.

Thus, just as the mass of the public prefers Somali medicine for purposes in which they see that western medicine has little interest or expertise, at the same time they embrace western medicine where, in their eyes, it has proven its capacity. In remote areas, they will pay up to several times the Mogadishu price for those western drugs they know to be effective.

By law, pharmacies can only be run by cooperatives, but in

fact most are effectively owned and managed by one person. More often than not, the owner-operator has some western medical background--normally not pharmacy training per se, but paramedical, nursing, midwifery or even some MD training. Running a pharmacy is one of the commoner forms of moolighting for government health personnel. Many of these pharmacists do not merely sell drugs, but act as mini-doctors, offering medical advice and effectively prescribing over-the-counter from their own stocks. The more knowledgeable play a role in correcting prior self-diagnosis and self-prescription on the part of their clients, who can be extremely opinionated about what treatment they wish to buy. As an example, RHU notes, "When co-trimoxazole is used, parents (and health workers) learn to report the child's diarrhea as "diarrhea with blood" so they can get (or give) a "real" medicine instead of the ORS."(48) Given the active demand, the ignorant or venal pharmacist will often yield to an insistent client or to his own desire to make a sale. However, in comparing the potential and performance of the private sector with the government one, it should be kept in mind that the same "drug abuse" problem is all-too-often evident in the practice of government health staff who are ill-prepared or poorly supervised.

Two points should in conclusion be stressed about the pharmacy system. First, as a deliverer of western health care, it is a funtioning and self-supporting system which far outstrips the government service in successful delivery to semi-remote areas. Even in the large towns where both services coexist, pharmacies are as a rule far better stocked than the government dispensary, leading to the curious situation that the perceived failures of the government service are made up for by referral of patients from the clinic to the pharmacy, where the pharmacist can

often supply an alternative if the suggested medication is not in stock.

Second, in the interaction of the public with the western medical system, there exists what RHU has described as "a drug abuse problem." While outside the refugee camps, people universally complain, and correctly, about the lack of western drugs, serious abuses occur with those drugs which are available. Further, the strong demand for drug treatment complicates outside attempts to introduce cheaper and more healthful, but less spectacular, measures--like those promoted and used in primary health care programs.

(b) Public or Government System

The MOH itself controls and operates most of the western health system--all dispensaries, clinics and hospitals as well as MCH, EPI and other special (vertical) programs. The national office in Mogadishu heads up a hierarchical service structure which includes:

(i) Regional Medical Centers

Each headed by a Regional Medical Officer (RMO, a doctor), to which a regional hospital and MCH center are attached;

(ii) District Health Centers

Headed by a District Medical Officer (DMO, a doctor) or District Health Officer (DHO, a nurse), with a dispensary and inpatient clinic or small hospital, and usually an MCH center;

(iii) Town or Central Village Dispensaries

Staffed by an auxiliary or fully-trained nurse, several per district in the larger towns and villages (beels). These centers are intended to provide curative services to the public. Their work is seriously hampered by problems of staffing and supply; both tend either to adhere to city centers or to "trickle back up" once they

have gotten out.

Many regional hospitals are themselves poorly stocked and staffed. The effect is compounded in the remoter district capitals. Many beel dispensaries have received no new supplies in many months or longer. In addition to the obvious implications of this for the basic effectiveness of curative medical care in the countryside, it creates serious morale problems among the rural health staff, compounding the sense of isolation which urban people feel when they are posted in rural areas. Even at the regional level in remote parts of the country, there is frequent turnover of dissatisfied staff.

Civil servants are uniformly underpaid relative to their perceived living needs. Most, especially family men, therefore moonlight--in more or less visible and regular ways. Also, medical staff outside Mogadishu who are responsible for hospitals, clinics or dispensaries find that in order to resupply they must go to their source; representatives from the metropole do not bring the supplies to them. Thus, a DMO makes trips to the regional capital for supplies; a beel nurse similarly must go to his district capital to restock. This means unavoidable periods of absence from post. Also, moonlighting and social life are in general enhanced by trips to the larger city, but constrained by trips away from town to the village or the countryside.

Effectively, therefore, most civil servants, including most MOH personnel are--of perceived necessity--somewhat less than full-time government workers, and the effect is compounded by rural posting. An attempt to lessen competing demands on their time is made in donor-supported projects like the primary health care programs, by paying a

graduated set of salary incentives or top-ups to MOH staff in these programs. However, this incentive system does not compensate the more rural-based health workers for their isolation from urban opportunities and social life.

In conclusion, one can say that in regions where PHC has not yet been introduced, the existing government system is curatively oriented, limited in outreach, poorly staffed and stocked, and all too often evinces a narrowly technical approach to clients which can be alienating to the public (7). Furthermore, in these areas, both traditional and pharmacy medical services have at present greater credibility and outreach than does the government service.

c. National Health Policy

During the 1970's, general health goals were formulated for the nation. These included strengthening the existing health services; diversifying the availability of services to rural and nomadic populations, both preventive and curative; raising the level of services by increasing the number and qualifications of personnel; and acquiring more modern and sophisticated medical equipment. The 1978 constitution stipulated that free preventive and curative health care is to be made available by government to all citizens. At the beginning of the 1980's, the MOH began to stress and develop its focus on rural health care delivery. In the 1980-85 Health Plan, primary health care is specified as a strategy to this end for the first time. The MOH is now engaged, with the help of a number of foreign donors, in a serious effort to extend services into rural areas. The MOH has recently affirmed that "PHC will be /the/ dominant force in the next 20 years and the first priority should be given to its implementation through well-defined duties and responsibilities at all levels." (33)

(1) Primary Health Care Policy

PHC policy itself is currently under debate in a number of areas. Underlying this debate is a tension between two opposing drives. On the one hand, there is much desire to develop a national policy which will provide standardized guidelines, no matter how general these may have to be, which can apply throughout the country. Competing with this is an equally strongly felt need to keep programming extremely flexible, in order to respond both to demonstrated failures in approach and to local variation in health problems and socio-economic, logistical, and cultural conditions. Though it was resolved, this conflict was openly aired at the recent Hargeysa conference in the context of a number of specific issues. An operating compromise was enunciated--namely, in most areas of strong disagreement, it was affirmed that national guidelines should be established but should be treated as guidelines rather than as requirements, in order to allow regional programs to deal with local realities in appropriate ways.

The following discussion will concentrate on certain policy elements which we think are particularly worthy of attention in developing an effective PHC project design for a region like Lower Jubba. These include: increasing access for all parts of the population; nature and selection of the front-line health workers; the nature of the interface between recipient communities and program initiators (government and donors); free provision of health services, including drugs; the existence of an intimate dependency, or interlinkage, between health development and development in certain other sectors; integration of vertical programs into the PHC system; and centralization and standardization of drug and logistical systems. In some cases, existing policy has both formal (explicit) and informal (unstated) components; where both are important, both will be discussed.

(a) Increasing Access to Health Care

The MOH and the GSDR are explicit on this subject. Health care is to be made accessible to all sectors of the population--rich or poor, male or female, young or old; urban, rural settled, or rural nomadic. In fact, this is an extremely challenging goal. In our view, however, it is being made additionally difficult by what may be called the "village orientation" of PHC policy. "Health posts" are set up in "villages" which are considered to constitute whole "communities."

With sensitivity to the possibility that some villages may comprise more than one community, this is an adequate approach in agricultural and fishing areas. However, in nomadic areas villages and towns are never communities in and of themselves. Their year-round populations represent only the stable cores of communities, other parts of which are mobile. Indeed, a sizeable village or rural town may contain small cores of three or four distinct communities.

Despite this, most PHC programs to date have approached villages in nomadic areas by employing a village-oriented vocabulary with which village residents willingly comply (it is what they have learned to expect from outsiders). The result has usually been the appointment of one or two CHWs who remain in the village year-round and who are, first, expected to serve what may in fact be parts of several communities, i.e., all people settled in the village itself or nearby; and, second, not available year-round to the mobile parts of these same communities.

An extreme but illustrative example came to our attention during

the Hargeysa Conference. A particular northern coastal village is regarded as a capital and is controlled almost entirely by one lineage group. However, a few members of another group live there during the winter, its most populous time. MOH/Primary Health Care Program (PHCP) representatives visited for orientation purposes during the winter. The main community consulted among themselves, but no member was willing to take on this unpaid job. The village committee, in an effort to comply with the program, pressured a resident from the minority group to take on the position, which he did. However, when the spring rains came, he moved away, as did most people--But he moved to his own group's grazing area, thus removing him entirely from access to the majority community. CHWs for his community should have been (and in fact were) selected in other towns which are their normal winter centers to serve the minority community. Care should have been taken to see that the majority community, rather than simply the village, nominated a CHW at the meeting which took place in the above village.

In general, a number of problems have arisen with "community participation." For example, the rather widespread failure of so-called "communities" to give promised compensation to their health workers may well arise in part from the fact that most PHC programs are structuring their work around physical villages rather than around communities. And equal access for all is far from being achieved or even approached if supposedly grass-roots programming provides settled and nomadic members of the same community with sharply distinct levels of care.

(b) Nature and Selection of Frontline Health Workers

It is a fundamental element of PHC policy that the base of

MOH structure delivering PHC is to be two complementary types of community worker, the Community Health Worker (CHW) and the Traditional Birth Attendant (TBA). They are to be trained, supplied and supervised by MOH workers at the subdistrict or Primary Health Care Unit (PHCU) level, but not paid by MOH. Any compensation for their new responsibilities is to be determined and paid by the communities who are to choose them and whom they will serve. A CHW-TBA pair are further described as constituting a "health post," the implication being that their functions are complementary, that they will in some ways constitute a team, and similar numbers of each kind of community worker are needed.

In practice ("informal policy"), the CHW job has turned out thus far to be a full-time, not to say, arduous, one. Though few PHC programs have trained substantial numbers of TBAs, current perceptions of the TBA's role and clientele would also have her working fairly full-time. The issue of compensation cannot be avoided for full-time workers. Though CHWs in North West Region claimed to cite visitors to be cheerfully carrying on in the absence of months' or year's worth of promised salary, it seems unlikely that these people will continue to function indefinitely on this basis.

With particular regard to the TBA, it has been previously noted that this is not a highly articulated traditional role. Preliminary findings of a UNICEF survey in North West Region suggest that, particularly in nomadic communities, many TBAs exist, and each serves only a small percentage of her immediate community. The cost-effectiveness of training and supplying them all (so as to achieve community-wide coverage), or of selecting and training a few from the many (thus reaching only part of each community), seems equally questionable at present.

This is particularly so in the case of nomadic populations. (Exactly the same considerations would apply if a program decided to insist on the selection of traditional practitioners as CHWs. However, though MOH guidelines state that traditional practitioners will be given "special consideration" as CHWs, there has been to date no insistence that they must be trained. Indeed, in practice they have been ignored in most instances. Many MOH staff look down on traditional health practices and have little understanding of rural health attitudes in general. This considerably undercuts their credibility when they work with rural people.)

Community workers are to be "selected" by their communities, under the influence of national guidelines set by MOH. These guidelines (previously called criteria) were said at the Hargeysa Conference to be optional; community orienters are enjoined to clarify to communities that this is the case. Nonetheless, the interaction of national guidelines with community preconceptions is a complex process which, to date, has produced rather similar candidates in many regions, despite the extremely varied circumstances under which they will be working. The experience of the North West PHC program is representative: "The typical CHW is male, in his early 20's, a long-time resident of the community, can read and write, although often not very well..., is a farmer or a shopkeeper." (65)

Selection of this type of CHW suggests that many potential

candidates are not going to be tapped. In areas with a high percentage of nomadic and semi-nomadic population as are found in Badhaadhe, Afmadow and parts of Jamaame Districts, these "typical" characteristics will undoubtedly exclude or deter the selection of some of the more potentially effective members of a group or community. Although literacy is helpful, many primary health care programs operate effectively with non-literate CHNs. PCI can attest to this in its PHC programs in The Gambia and Bolivia. Special non-literate training approaches and even reporting forms have been devised.

For fully rural programming, two of these effective criteria pose some concern. The first is that CHWs "should" be literate. Despite the non-obligatory nature of this "guidelines," the message is getting across. Posters painted in Somali which were observed by our team in Lower Jubba state that candidates must be able to read and write. The very statement that literacy would be preferable seems to signal communities that it is necessary; they nominate literate candidates while giving less weight to other elements, e.g., motivation and talent, which should perhaps, in the event of a choice being necessary, be given relatively greater weight.

In at least one PHC program, only literate TBAs were recruited by staff for a time, producing numbers of young women with some

education but without prior birthing experience. (53) This is an extreme example, perhaps, but illustrative of the conflict which multiple criteria can generate.

Among villagers it is generally possible to find literate candidates, though these may not in other ways be the most desirable. Our team did not do a literacy survey among nomads in Lower Jubba, but experience in the northern regionsl suggests that mobile pastoralists may not have retained the minimal literacy they gained during the literacy campaign of the 1970's. (7) If early experience in Lower Jubba shows this to be the case, such a "preferable" guideline may effectively stymie rural programming at its inception.

Another criterion which, in practice, is being formally imposed is that CHWs be male. Again, this is not required by policy. Still, due both to a certain understandable bias in the communities themselves (particularly when the principal contact is with village committees, which in Lower Jubba were unformly male), and also to rather explicit hints which are frequently given by MOH representatives during community orientation sessions, the vast majority of CHW nominees to date have been men. Justifications of this practice turn upon two factors. First, there is the common assertion that men are more "respected," even by women, and their work will thus have more impact. Analysis of the multiple fallacies contained in this apparently simple statement are beyond our scope here. However, it is precisely this male-dominated orientation of rural society which should suggest that in many instances the access of a male health worker to family

health concerns may be far less than would that of a woman. Indeed, it is quite possible that the advice of a male CHW would at times be overruled by the older women who traditionally have much say over health at home.

The second factor is pragmatic. As noted, the current CHW job is very full time, and it is itinerant; CHWs based in central villages are expected to do regular walking rounds of nearby sub-villages or settlements, covering many kilometers alone. This precludes a woman holding the job.

The matter of "selection criteria"--for, effectively, these do exist--will be raised again. Here we will only conclude by observing that we have certain reservations about the process of "community selection" as it is working out in practice. Prior PCI experience in other programs has shown that all too often a raw process of community selection, often with the added complication of criteria formulated and suggested by outsiders, can produce inappropriate choices. We will address ourselves to the issue of structuring processes of "appropriate selection" in Chapter V.

(c) Interface Between Participating Communities and Program Initiators

Another fundament of PHC policy is that communities will interact with MOH staff (and donor staff during project periods) through representative "committees." In general it is envisioned that villages will constitute communities, and village committees will appoint health committees whose functions will be to aid in community selection of health workers, organize and supervise community support mechanisms for the health workers, and in certain ways supervise their subsequent performance. In short, village committees are to be the

key link to community participation.

Three comments will be made about this formulation. First, it turns upon defining and acting upon, what a community is. As was mentioned, a clear definition has not been explicitly formulated. One reason for this is that in Somalia it is illegal even to discuss pastoral social structure explicitly. In such an environment, MOH workers who are responsible for developing effective liaison with real pastoral communities may well be reluctant to pursue the work with any zeal. However, in order to rationalize decision-making about client: community worker ratios, deployment and supervision of workers, means of communication, and resupply during grazing seasons, it will be necessary for program staff to articulate and accept among themselves a realistic definition which is explicit enough to be acted upon.

Our second observation relates to the nature of the village committees themselves. Their members are nominated by the local party structure and confirmed in office by community vote (see Claxton). It is therefore likely that they reflect a more centralist approach to government activity than is needed to involve rural people in even the modest program participation which is envisioned by the PHCP. Furthermore, they are not managerial bodies but are, rather, information and opinion channels between the public and government representatives. It seems clear that they will be the first point of contact of PHCP staff with communities, and in all likelihood they will have major influence on public understanding of the program, selection of health committee members and health workers, and so on. This means that project staff will have to devote considerable time and thought to

working with village committees--encouraging them to involve their communities very broadly, and possibly offering them some technical assistance as they carry out intermediary functions for the program.

The third concern of the PCI team relates to the general issue of decentralization in government. Though this issue is not emphasized as a strategy in discussion of PHC policy, it is strongly implied by the very objectives of creating strong and viable lower-level supervisory structures and stimulating lasting local participation as a program base. Responsibility at the lower and community levels will not grow unless a certain amount of authority is also delegated to them. It seems to us that the first step in delegating authority--in a case such as this program, where the major focus has already been determined by outsiders--is making it quite clear to the communities, in a consistent fashion over time, that if they participate in the program, it is because they choose to do so in a responsible and informed fashion--not because the donors and the government have mutually decided that it is for their good, so they had better go along. Unfortunately, "informal policy" again unwittingly tends to lend itself to a more centralist approach than would be optimal for fostering real community involvement. Orientation talks with community leaders often evince a top-down approach, the program being presented as one which "is going to be done" in the community. At times one member of this team has heard government officials, not only MOH workers, wonder why communities do not "cooperate" with government development efforts. We suggest that less powerful people "cooperate" with more powerful people under circumstances which are not necessarily promotive of "participation." Furthermore,

the phrase "community participation" (ka qayb galka bulshada) is associated entirely with government, hence with past top-down approaches. Proper community orientation procedures should eschew all use of vague and unfortunate governmental vocabulary. In place of "participation" and the like, it is probably preferable to think in terms of developing a community job description, which the community is free to undertake to do if it wishes to receive the program inputs. In the performance of this, if it feels the need, the community can request technical assistance from the program--as, for example, in developing a workable system for collecting and handling funds for community health projects or drug resupply.

(d) Free Provision of Health Services and Drugs

This is a cornerstone of MOH policy--even to the extent that when the MOH has been unable to supply drugs, it has nevertheless stopped at least one community from buying and reselling its own drugs in order to keep its CHW functioning. However, the thriving pharmacy trade indicates loudly and clearly that pharmaceuticals constitute one (perhaps the only) aspect of western health practice for which the Somali public is willing and, in many cases, able to pay (while any willingness to pay for CHW services has yet to be demonstrated).

The scarcity of government funds, which is so often adduced as a program constraint in other instances, makes the provision of free drugs a burden which, given public demand, is wholly gratuitous. Furthermore, it is inconsistent with other government policy, which allows veterinary treatment to be sold--admittedly at a subsidized

cost. Finally, providing drugs free is inconsistent with the western health establishment's vociferous complaints about the magnitude and seriousness of the "drug abuse" problem. Frankly, a more appropriate response in this regard might be to overprice drugs!

This approach is not recommended. We only wish to point out that there is a real lack of clarity concerning drug use and abuse, ability of rural dwellers to pay for drugs, and building local capacity for sustaining a community-based health program.

(e) Linkages Between Health Development and Development in Other Sectors

The MOH has recently made some strong affirmations of the importance of intersectoral coordination in achieving health care for all (35). The Vice Minister has stressed that "it is the responsibility of the institutions under the Ministry of Health, rather than the relevant other ministries, to pursue actively to achieve this intersectoral coordination and to promote action by the relevant other ministries" (35). Problems in what are traditionally considered "other" sectors all too often constitute health bottlenecks, blocking major achievements in the best-run health program. In a country like Somalia, increasing the quantity of water will have far greater positive impact on public health than will improving the quality of what water is available; increasing the production of fruits and vegetables is a necessary precursor to increasing their consumption; improving transport is prior to creating an effective health delivery and referral system or promoting wider marketing of agricultural products.

(f) Integration of Vertical Programs

In most rural areas, at least in Lower Jubba, vertical programs such as the Expanded Program of Immunization (EPI) and MCH are non-

existent. It is doubtful that the MOH has the additional resources to extend separate vertical programs very far into the rural areas, but the PHC program can provide the functional channel and context for the delivery of these services in the rural areas.

(g) Standardization of Drug and Logistical Subsystems

The MOH is moving toward a standardized drug formulary (with some local variation) for the PHCP. This seems desirable both in terms of order and efficiency. Economies of scale and lower cost source of supply are prevailing arguments for standardization.

Similarly, the ruggedness of road conditions throughout much of rural Somalia, the availability of spare parts, and skilled mechanics or, conversely, the lack of these necessities for appropriate vehicle maintenance, requires that careful attention be paid to the composition of vehicle and transport fleets. Vehicles should be selected on the basis of ruggedness, high performance, reasonable cost of operation, and maintenance factors such as availability of spare parts and trained mechanics. PHC Program success is highly dependent on the proper functioning of these two support subsystems.

III. 2. NATIONAL PHC DEVELOPMENT PLANS AND CURRENT PROGRAMS

a. PHCP Organization

The Primary Health Care Program is probably the most active and rapidly growing part of the MOH. The National Primary Health Care Office (NPHCO) comprises a Director and a sizeable program and administrative staff. PHC is currently being implemented in eight of Somalia's eighteen regions, supported by one or more foreign donors in each instance. In each region where the program is being developed, current MOH program staff is or should include a regional PHC team of five, including a Regional PHC Coordinator (RPHCC) as team leader, and a public health nurse, midwife, sanitarian and laboratory technician. MOH has recently decided to add a new regional PHC position, that of Regional Training Officer. Regions are subdivided into an average of four districts. In each district a PHC team of similar composition to the regional one is to be deployed, with the exception that the coordinator position is, in effect, filled by the DMO or DHO ex officio.

Within each district, plans call for the establishment of several subdistrict units--Primary Health Care Units (PHCUs)--each to be staffed by a nurse, midwife and sanitarian. As organizational plans still stand, these PHCUs are to be the final node in the governmental outreach structure, providing the institutional linkage with the grass-roots community workers --CHWs and TBAs. To date, PHCUs have been cited in some areas and not in others as

a result of variations in approach adopted by different regional programs. Their functions, staffing, and indeed their very usefulness at all have been, and continue to be, the subject of lively debate in the PHC community.

If fully implemented, such a pattern in the average region (four districts, four PHCUs) implies the addition of 72 professional individuals to man the PHCP alone, most of them additional to preexisting MOH staff. This extensive administrative structure was originally designed to provide sufficient professional outreach in order to offer effective training, supervision, and supply services to grass-roots workers, as well as referral facilities, on a region-wide, rural basis. It rests on the presumptions that staff will be available to accept rural postings in considerable numbers, and that staff will regularly sally forth from their already rural sites to deliver training, supervision and supply at even more rural sites. These assumptions fly in the face of both resource scarcity and the existing dynamic of attraction which draws people toward urban, metropole centers, rather than away from them.

In general, the problem of transport and fuel to "get the staff out" is addressed, during the period of donor involvement, by donor-provided vehicles, maintenance and fuel. The motivational problem--keeping professionals in rural areas at all, let alone getting them out to the countryside--is said to be addressed by a system of "rural incentives" or salary top-ups,

authorized by MOH, but paid by the relevant donor. However, examination of this incentive structure (see Appendix 1) reveals that these payments are graduated by levels of responsibility and thus, effectively, inversely scaled in terms of rural postings. They are incentives to work in the PHCP, but--far from being rural incentives--they are incentives to urban service. It is instructive to note that more isolated regions with PHC programs continue to experience staff turnover problems.

b. Community Workers

CHWs and TBAs are intended to be "the first contact of the community with health and health-related facilities" (33). General job descriptions for these workers exist (see Appendix 2). However, as has been the case with many other initiatives from the center for standardization, regional staffs have in some cases resisted hard and fast application of job descriptions. Assurance was obtained from national MOH representatives at the Hargeysa Conference that job descriptions may be tailored, to a considerable extent, in ways appropriate to local needs.

In general, CHWs are expected to serve all the subpopulations of their communities, offering simple curative care aimed at the principal causes of morbidity and mortality (e.g., child diarrhea, malaria, anemia), and to promote preventive activities such as appropriate environmental and domestic sanitation measures, vaccination when this is made available locally, improvements in nutrition, and so on. However, even so general a definition of

the TBA's role is still the subject of major disagreement. Original plans formulated in 1979-80 had TBAs taking on responsibility for supervising pregnancy, handling birth with improved techniques and referring emergency cases to hospital, and postnatal supervision. The same ground swell of opinion which questions the cost-effectiveness of working with TBAs argues that the principle impacts on maternal and infant mortality and morbidity which can be achieved through PHC are to be achieved, not through improving midwifery techniques, but through supervision and prophylaxis measures which CHWs could do as well. The MOH feels strongly that TBAs should be trained, but what their role is to be is still open to local experimentation.

As noted above, CHWs trained and deployed to date in the various regional programs have tended to serve fairly large client populations (one or two for an entire village with surrounding farms and settlements) and the job has turned out to be effectively a full-time one. It is probably too early to assess the impact these workers are having either on community attitudes about health, on health practices, or more directly, on health statistics. It is, however, instructive to observe the experience of the RHU. Worker-to-client ratios in RHU programs are smaller by an effective factor of five to ten; distances they must cover during home visiting are negligible; most RHU programs have been operating for three to four years. Nonetheless, health education activities have, to date, achieved very

little observable change in community attitudes toward drug use or the benefits of ORS. PCI's experience in other PHC programs suggests strongly that the CHW, as a health educator and promoter, can only be effective in fairly small groups where fairly intimate ongoing social relationships obtain. This, combined with the difficulty of covering large and dispersed nomadic populations, suggest that a truly rural program, in the Somali context, will have to restructure the CHW job as a part-time one serving smaller client groups. Such a role structure would also be more in keeping with the traditional structuring of service roles in the community.

c. Relationship of Regional and District Programs to National Training Centers

The national PHC training centers at Burco and Baydhabo are intended to reorient traditionally trained nurses, sanitarians, and midwives so that they can successfully implement and manage PHC work at district and subdistrict or PHCU levels. Basically, the intent of this training could be idealistically described as turning clinical people into true community health workers: trainers, managers, and community organizers, and turning their scale of medical values upside down, so that community health, rather than technical health, becomes the focus of their thinking.

This goal is not being achieved. The explosion in demand for PHCP staff, fueled by rapid program expansion, has meant that inexperienced, callow recent graduates of technical training

programs are sucked immediately into the training centers. Their lack of experience and weak technical preparation has forced center staffs to concentrate on providing them with remedial technical training, to the detriment of the training and management skills which are fundamental to implementing PHC. Regional PHC programs which have worked with these people have found they must train them first, and subsequently, have them work alongside skilled trainer/organizers for some time before they are able to do such work on their own. This situation seems unlikely to improve in the near future. Hence, any donor considering entry into PHC in Somalia must plan to provide substantial training and on-the-job education in community orientation, training and management skills for district and subdistrict MOH staff.

d. Relationship of Regional Programs to Each Other

One of the great strengths of the PHCP in Somalia is its extraordinary range, diversity, and potential for internal cross-fertilization. Twenty-odd RHU programs working with different donors have produced, over four years, a wealth of varying experiences within a common policy framework. Furthermore, core RHU staff has gained invaluable experience in coordinating and managing a varied and often feisty group of donors. Much of the lore and the skills thus amassed are turning out to be applicable in many aspects of national PHC programming. Even in highly dispersed or nomadic areas, where the logistical ease of refugee camps is lacking, the socio-attitudinal aspects of the RHU experience re-

main applicable in large part. As regards the newer, regional PHC programs, the style and focus of individual donor agencies and regional variation in conditions and in the nature and capabilities of MOH staff have created a wide variety of approaches and experiments in the different regions.

Some useful lessons may already be inferred from some of these experiences, though few regional programs are mature enough to provide immediately applicable solutions for a wide range of problems. Of particular interest to PCI (in addition to other regional inputs which have been previously discussed) were some current findings, or "takes", on: (1) service delivery to the mobile sectors of nomadic groups; (2) potential and actual relationships between PHCP and private purveyors of western drugs (pharmacists and others); and (3) what seems to be the best structural level at which to begin implementation of PHC.

(1) PHC for Mobile People

The Sanaag PHC program has trained some CHWs who move from one village center to another when their groups move from one village center to another when their groups move from one vicinity to another, thus achieving substantially broader group coverage than UNICEF's CHWs, who remain based in the same village year-round. It seems that in Sanaag whole communities, or their majority, fan out to the same general area for the forage season, thus allowing appreciable coverage by a few full-time CHWs.

(2) Relationships with Pharmacists

In what used to be North West (now two regions, Awdal and North West), the PHC program has found that demand for PHC is greatest in isolated areas. It is particularly low in towns with pharmacies. Further, in larger towns with pharmacy influence, CHWs may be tempted to go into the drug business themselves. There are actual conflicts between pharmacy practice and PHC practice--pharmacists' misuse of drugs, in line with public demand, undercuts the efforts by CHWs to use drugs responsibly and to introduce less dramatic remedies such as ORS. Drug misuse by pharmacists also undercuts "drug education" efforts by the PHC program. There is also a serious potential conflict; pharmacists may fear substantial loss of business due to the competition from free drugs or as a result of successful drug education campaigns. Given their current credibility with the public, since they respond to demand for medicines, it would not be difficult for them to cast doubts on the quality of the program.

In North West and Sanaag, the PHC programs have offered basic courses for pharmacists to introduce the idea of PHC and responsible drug use and to explore possible means of seeking "cooperation rather than conflict." In Hargeysa, which has on the order of 100 pharmacies, no pharmacists were willing to attend; the Sanaag program successfully ran one short course for representatives of the three pharmacies in Ceerigaabo and plans to hold a second. Sanaag PHC also plans to carry out a survey of public

health-service choice patterns in order to develop a profile of public demand and, among other findings, determine how serious the competition between pharmacy services and PHC services may be.

(3) Implementation--Top-Down or Bottom-Up?

Programs working from the-top down, like those in Togdheer and Bay regions, seem to get bogged down at the middle. Other programs have taken a bottom-up approach, using mobile district teams to train CHWs before moving on to consider what permanent supervisory/referral facilities should be established. These programs argue that if PHCUs are established before the grass-roots structure is deployed, nearby communities will refuse to support the "less-qualified" community workers. Also, local variations in distance, road conditions, available transport, local CHWs who might become good local supervisors, and the like can only be accurately assessed and meshed well into a functional superstructure once the local programs are actually functioning.

The Ministry of Health recently took the lead in facilitating the interchange of substantive information and views among regional PHC programs by holding the first national working PHC conference in Hargeysa. It is to be hoped that such conferences will occur regularly every year. PCI feels, further, that there is also much to be gained from more thorough and concrete interchange with other regional programs. This is best facilitated by low-fanfare, careful site visiting in programs which are working with areas of particular interest or concern. Thus, it will

be proposed that selected programs in other regions be visited by donor and MOH staff as part of their orientation activities before beginning work in the districts of Lower Jubba.

III. 3. SUMMARY AND CONCLUSIONS

To date, western medical resources have failed to reach substantially, consistently and sympathetically beyond the urban or town minority, with the partial exception of private pharmacies. However, where health is concerned the rural public is anything but a blank slate waiting for outsiders to write upon it. Suggestions that one of the most important functions a PHC program can perform is to create a "demand structure for health" or a "self-reliant approach to health," which will benefit communities whether or not government continues to provide supplies and support, are, it seems to us, incorrect. These things already, to a real extent, exist: people often go to extraordinary lengths to obtain the health care they feel they need, both preventive and curative; and they pay for it. The real problem is that in many cases the demand and the self-reliant approach are misguided and may do harm; in others, they are simply ineffective where western health care could be effective; in still others, the demand is right on target, but the resources are not there. In some instances, traditional practices may effectively fill health needs which western resources are unprepared to handle, or even to recognize.

It would be more accurate and productive to see the need as one of enabling sustained and mutually respectful cooperative

interaction between western and local expertise and resources. As regards "self-reliance," again the problem is not so much that it does not exist, but rather that indigenous forms of sustained self-help to not interface easily with the forms of outreach conditioned by centralized health service systems. The crucial issue, as we see it, is one of facilitating change on both sides of the interface so as to bring public and government energies into line and enable cooperative interaction to occur.

In order to achieve this, programming cannot flow all one way. Government outreach programs must shape themselves, to some extent, in accordance with rural people's life style, rahter than expecting them to give up their base in order to conform to government style. This requires an ongoing program response to local realities, community perceptions, and lessons learned during the implementation process.

This adaptive process has been referred to as "buffering" or as requiring a "buffer institution" in one study of rural change and development. (9) A buffer institution is a new institutional form or institutional mechanism that allows for an adjustment or change of perceptions and action during a transitional phase. When new technologies, concepts, or ways of doing things are being introduced or tried, the "buffer" absorbs the shocks on both sides, traditional and new, while change is taking place.

When any new activity is being introduced to a rural community or group, whether it is a health service, agriculture technique, or educational program, new demands are made on the

community. At the same time, the government or other intervention agencies must learn how to adapt to local conditions. An intermediary organization or buffer institution reduces the shocks of these encounters. A buffer institution can be a PVO, a project, or a new local organization.

A good deal of this buffering and adaptation is already occurring in the PHCP. As was often said in Hargeysa, national policies and guidelines must serve as a flexible blueprint, a framework within which implementers should develop and modify novel and individualized responses to problems. Without such a process approach, it seems to us unlikely that rural communities will invest themselves strongly in making the PHC program work over the long term. And, given that the productive backbone of Somalia is its agricultural and pastoral rural majority, it is clearly not merely humane but economically sound policy to attempt to redress the imbalance of health and other resources, offering country people a wider ra.ge of choices and resources, knowledge which enables them to make the choices well, and the ability to act upon those choices.

IV. SURVEY MEHTODS AND DATA ANALYSIS

1. Methodology

a. Introduction

The Lower Jubba Region was selected by the MOH and AID as the area for the PCI field survey, following the unfortunate abortion of the PCI survey in the Nugaal Region in November, 1983. The full mandate for the feasibility study is discussed Section II, Part One of this report.

The intentions of the survey team in the Lower Jubba were basically threefold:

(1) To visit all four districts in Lower Jubba and examine the socio-economic situation of the population, their health problems, and other general environmental conditions that affect health status;

(2) Identify the available government services in the rural areas and observe their capabilities and interrelationships with each other and to the general population;

(3) Examine the existing health care system at all levels in order to assess its capacity to provide services, to determine the feasibility of a PHC program for the region, and recommend a program design.

The survey was carried out in Lower Jubba between April 27 and May 26, 1984. An additional follow-up trip to Kismaayo, the regional capital, was made by the Executive Director of PCI and a member of the team during June 27 to June 29, 1984. They visited the Governor and other officials and also made additional site surveys in Kismaayo District.

b. Team Composition

The PCI Team was comprised of a Rural Development Specialist, a Community Health Planner/Training Specialist, a Community Organization Specialist, a Development Anthropologist/Social Scientist, the Director of Training of the National Primary Health Care Office of the MOH in Mogadishu, and three field assistants with social work and health backgrounds. One did double duty as a driver. Among this group was an array of language skills which covered every situation.

A driver and a second vehicle were supplied by the regional government in Lower Jubba. This assistance allowed our group to divide into two teams and thus cover more territory.

c. Survey Schedule and Activities

(1) Information Obtained in Mogadishu

Prior to the initiation of the field survey, the team gathered information in the national capital from various ministries and central government agencies: AID-Somalia, United Nations Agencies including UNICEF, WHO and UNHCR, international private and voluntary organizations working in Somalia, and various Somalia research agencies. In addition, reports and studies dealing with Somalia and the Lower Jubba were reviewed. Analysis of data from reports and these meetings, revealed that there was scant region-specific information available at the national level.

During this time, a Somali field support staff was put together and a vehicle procured for the regional survey work.

(2) Regional Contacts and Activities

While making cordial and successful contacts with regional officials, team members began compiling information about the general

characteristics of the region. Regional staff in Kismaayo, especially representatives of the ministries of Health, Local Government and Rural Development, Livestock Forestry and Range, Agriculture and Education provided vital information on the region's four districts. The data included overall information on the distribution of government services; population density and distribution; transport/travel conditions and constraints; and socio-economic patterns.

This information helped determine the scheduling of the field survey. Because the spring rains (gu) were imminent, we decided to survey the most remote districts first. It had often been cited to the team that the rains could shut down the roads to both Afmadow and Badhaadhe districts for long periods of time. The truth of these statements were born out later through direct experience. It should also be noted that the Governor's Office and the police provided impressive followup support when the team in Afmadow got stranded by the rains. The support and cooperation of all regional and district officials was outstanding. PCI is highly indebted to all of them for many personal courtesies as well as their assistance to our survey effort. In addition, the PCI Team visited regional facilities and offices including the Regional Hospital, Regional MCH Center, TB Hospital, Regional Sanitarian's Office, and the Animal Diagnostic Laboratory of the Ministry of Livestock, Range, and Forests.

(3) District Surveys

Survey work was completed in all four districts at district capital beel, tuulo and settlement levels. For a full explanation

of these terms, see Part One, Section IV. 2. a. of this report.

(a) District Capitals

At each district capital, the team met with the district commissioners, representatives of the technical ministries, and local government officials as well as representatives of other organizations (e.g., Somali Women's Democratic Organization, National Service Development Campaign, and the Somali Youth Organization).

We visited existing health facilities in the capital to observe the services being offered, the condition of facilities, and quantity and quality of supplies and equipment. The team sought to investigate:

(1) The Type of GSDR services available at district level, as well as their extent, relationships between the programs, and their potential for contributing to a community health program;

(2) The current status of the existing health care systems (Somali Government, private, and traditional);

(3) Number, names and locations of the beels in the district;

(4) The general population levels, structure, and socio-economic base of the district;

(5) Major features such as watering centers, grazing/farming areas;

(6) General Problems and health needs and problems in particular.

Information was obtained from local representatives of the Ministries of Health Education; Agriculture, Livestock, Range, and Forests; Fisheries Department; and Local Government and Rural Development (now incorporated in the Ministry of Interior).

(b) Sub-District Level (Beel, Tuulos, and Settlements)

Once this information had been gathered, we surveyed as many beels in each district as possible in the time available to us. The District Health Officer (DHO) of Badhaadhe and the District Medical Officer (DMO) of Jamaame accompanied us extensively; the DMO of Afmadow assigned us a district nurse for our field survey work in Afmadow. By dividing into two teams, we covered major parts of Afmadow and Badhaadhe--the most remote districts with the worst, most rained-out-roads--and substantially all of Kismaayo and Jamaame Districts. Meetings were conducted with beel officials, village and town committees in most instances, or with one ot two members when the entire committee could not be quickly assembled. Frequently, open village meetings of 20 to 25 people, including some women, were conducted.

We again investigated the types and extent of government services, relationships between the different services and their potential for involvement in aspects of community health programming, and the health care resources which were currently available along with the villagers' evaluation of them and recommendations for improvement. We also obtained information on the beel-tuulo relationships with respect to trading, population movement, water sources, service sharing, etc.; and private and public transport systmms.

In each beel, we surveyed a sample of tuulos and/or settlements attached administratively to the beel. In the tuulos and settlements, we concentrated on local demographic patterns (permanent, nomadic, semi-nomadic); levels of community organization present

(traditional, GOS, and attempts at integrating the two); access to services from the beel; sources of livelihood, nutritional/health status of the population, and relationships between the two; patterns of community resource allocation; and the communities' perception of their major needs and problems including general problems, health, livestock, and agriculture. One team also visited several current grazing areas and spent an enforced night camping in the car in another.

In each location, specific data collection methods Included:

(1) Administration of the MOH Health Assessment Form

(See Appendix 7), This was done normally with the full village committee and villagers, but occasionally with only one or two of its representatives.

(2) Substantial Open-ended Interviews

This included government representatives (particularly, all available health personnel), town or village committee members, pharmacists, women, local TBAs, teachers, etc.

(3) Brief, Single-purpose Interviews

This involved herders, farmers, fisherman, traders, truck and Xaaji Khamsiin (passenger pickup) drivers, boat owners, shop owners, dispensary and hospital patients, idle children, market people, etc.

(4) Observation and Inspection of Facilities

Health facilities and health records, homes, schools, and water facilities were included.

(5) Notation and Collection of Spontaneous Comment

For example, discussion leading to agreement on the answer to a question in the Health Assessment Form was usually as informative as the answer itself, and often more so.

d. Concluding Remarks

It should be noted here that the MOH questionaire is not designed to elicit meaningful information about pastoral demography and movement; it is village-oriented. Moreover, explicit inquiry about social structure is illegal in Somalia. Methods (3), (4) and (5) above yielded occasional suggestive clues on these matters which, when combined with subsequent interviews by the social scientist with staff of the Ministry of Livestock and the Academy of of Science and Arts' Livestock Research Project, as well as with extensive debriefing of our driver (He spent and enforced two weeks in the mud of southern Afmadow/northern Kismaayo districts) have together yielded what must at this time be considered as informed hypotheses. Hence, observations about size, continuity of existence, and movements of potential "target communities" among pastoralists--which can support and maintain reasonable ongoing access to a CHW and/or TBA--will have to be tested and refined during program implementation. It may not be as hard as it looks now.

Finally, since the survey schedule did not allow for site visits to ongoing PHC programs, one team member attended the Hargeysa Conference with the principal purposes of participating in the planned site visits, remaining aware of the current state of policy formulation, and consulting with representatives of other

programs about issues raised in this report.

IV. 2. Survey Analysis of Lower Jubba

Introduction

Lower Jubba is the southernmost of Somalia's eighteen regions (see Map 1). Bordered to the east by the fertile Jubba River area and the Indian Ocean, it is in the main made up of flat or gently rolling land which ranges from open savanah to thick thornbush. Rainfall in parts of the region can be as high as 500 mm. per year. This, plus the presence of large tsetse fly-infested areas, determines the choice of cattle pastoralism as the principal economic base of most of the rural population.

Kismaayo, located near the mouth of the Jubba, is the regional capital--a thriving city which is Somalia's third largest port. The region's four districts represent administrative divisions designed to bring government and services to populations roughly comparable in terms of overall logistics and administrative difficulty. Jamaame, for example, is the most populous district but few logistical factors complicate the delivery of services compared to Afmadow--the least populated but logistically most difficult area in which to deliver services.

The following outline of important findings about the region will discuss administrative and "organic" patterns separately, since the two do not coincide. This has implications for a government-based rural program which will be pointed out. Health status of the population, distribution and organization of government and non-government health service delivery, and the status of other development activities in the area will also be noted.

a. Administrative Structure and Government Services

(1) Administrative Structure

(a) Government Structure

The four districts of Lower Jubba--Kismaayo, Jamaame, Badhaadhe and Afmadow--have capitals by the same names. The top political/administrative official of each district is the District Commissioner. Under his general authority, ministries maintain district offices in each district seat. By far the widest range of government services in the districts of Lower Jubba concentrated in district capitals. Districts are administratively subdivided into beels, a term which can be applied either to the town or central village, which is the beel seat itself or to the entire group of smaller villages which are administratively attached to it. Each district capital is itself also a beel seat for nearby villages.

The district capitals and beel seats of Lower Jubba are indicated on Map 2. Their concentration generally reflects the relative local concentration of villages, though not of absolute population, which shifts about seasonally.

The administrative term for any permanent town or village which is not a beel seat is tuulo. The number of tuulos reported by beel officials as being attached to their beel varied from one to 25; in a few instances, representatives of two different beels claimed the same tuulo. In addition, there are often nomadic settlements of a semi-permanent nature that are part of the beels.

In general, beel seats represent the end points of government service delivery: all are supposed to have public schools,

a government dispensary manned by a nurse, a police post, a veterinary worker--which should provide services to the surrounding population including the tuulos and, theoretically, even the nomadic settlements. As will be illustrated in the case of health service delivery, these services exist at the beel level more often in theory than in fact.

The relationship between "theory" and "fact" is heavily mediated by the organic or non-governmental structure of the region. The District Medical Officer (DMO) of Jamaame stated that medical supplies receive preferential distribution: Kismaayo city gets the most, Jamaame District next most, and all the rest (Afmadow, Badhaadhe and the rural parts of Kismaayo), the least. In general, beel level services are fairly accessible to most dependent tuulos in the riparian areas of Kismaayo and Jamaame districts. Here are the best roads, the densest transport network, the shortest distances and (as a consequence) the most dependably present government staff. However, the off-road areas of Kismaayo district, and all of Budhaadhe and Afmadow, present the more typical rural picture: government staff is, by necessity as well as preference, often absent in the larger metropole, whether this be a beel official gone to the district, or a district official off in Kismaayo city. Physical access from outlying tuulos and the countryside to beel services is more difficult due to greater distances, roads which are sometimes impassible, thick bush, perceptions of danger to the individual traveller (lions and thieves are often cited). Furthermore, in these areas rural people know that the likelihood of obtaining service

satisfaction is low, so they are simply less motivated to go for this purpose alone. Hence, effective administrative ties are looser in these areas than along the river.

As an extreme case, the southern coastal fishing villages are wholly cut off by rain from Badhaadhe town, their titular district seat, for weeks or months each year. Effective communication at these times is by radio or by boat. The dichotomy is further reinforced by cultural and language differences between them and the rest of the district population. Thus, they depend for most services on Kismaayo, reached by boat, and on the towns across the Kenya border.

(b) Village Committees

Every permanent village or town has a committee (guddi) whose principal function may be described as mediating the relations between the public and the government: it channels public opinion, problems, needs, requests for self-help funding and the like, to beel officials--and government opinion and needs to the public. Since these committees will constitute the principal formal link into communities, by which project staff is to foster the community engagement process and development of a constituency base for primary health care development, some comments on those we met in Lower Jubba are in order.

Committee members are nominally elected from among the public. In Lower Jubba they are entirely male. In larger villages and beel seats, the membership is generally seven; in small villages, usually three. The committee head (guddoomiyaha guddida) may or may not be the same individual as the village "headman" (samaddoon or "seeker of good"), a stipended post. In nomadic areas, the government-stipended representatives of nomadic communities (nabaddoon, or "seeker of peace") may be included among the membership of that village committee with which they are most closely associated, usually that of their dry-season center.

In beels and district capitals, government officials are ex officio members. When we asked to meet with a committee, those government representatives who were in town invariably participated, actively. In well-staffed beels or district capitals, this could include not only representatives of service ministries, "people's organizations," and the local national-service corps, but also of

the police, the Daraawiish (border patrol), national security force and Guulwadayaal (described to us in English at Afmadow as "the people's army." These youngsters are responsible for such functions as forcible conscription).

As previously mentioned, the Somali equivalents of "community participation" and "self-help" (is kaa was u qabso) are historically associated with centralist approaches to development which have all too often failed to benefit the rural majority. While committees in Lower Jubba were, as a rule, very polite in their response when we broached these concepts (in marked contrast to the more outspoken camel pastoralists of other areas), a number of private comments and observations garnered by team members indicate a considerable reservoir of skepticism about the possibility of a truly cooperative relationship between government--with whom a donor becomes associated--and the public.

During our survey, we were not able to observe village committees at work, beyond their PR function of interfacing with our team. We did meet with a great number of them. At first glance, they appear to be administrative artifacts first, constituency respresentatives second. The uniform failure of village committees in Lower Jubba to say they should consult their communities before responding to the idea of participating in PHC; and, on the other hand, the frequency of such on-the-spot responses as: "Oh yes, we will do it!" or, "We will have to do it!" is at least suggestive that the initiating agencies must assume considerable responsibility for ensuring that the "community participation" process is more widespread. This will require more time and a more relaxed or human approach to each village with its catchment

population, than is normally the case in fast-paced, massive development projects. Otherwise, it is likely that, as in North West, villages will nominate CHW candidates in an effort to demonstrate a "cooperative" attitude, without real understanding or acceptance of the responsibility which they are undertaking by entering into the program.

(2) Government Services

Almost all SDR government services arefound in the district capitals. In Lower Jubba, and fisheries in the coastal areas, education and livestock proved to have the best outreach to beel levels and below. Of 57 population locations, the team obtained information on (45 site visits): educational services reached 22 of the locations or 39%; livestock services reached 27 or 47%; agricultural extension services reached 7 locations or 12%; and Fisheries Coops were found in 6 of 10 locations or 60%.

Health services were found or reported in 17 or 30% of the locations. 6 of the 23 health facilities identified were closed or inoperative due to lack of staff or 26% of the total. Many of those health facilities that were operating had no drugs and to all intents were unable to provide services beyond issuing prescriptions to be filled at private pharmacies.

A complete list of services identified in the survey is found in Appendix 5.

When people were questioned, they generally were satisfied with livestock services. A few comments about shortages of veterinary medicines were voiced; but, on the whole, livestock services had adequate staff, medicines, and vehicle support — far better than

health or agriculture. Conversely, when talking about health, people readily commented on the lack of health services.

A comment should be made about private western and traditional health services. Private pharmacies are generally found in the same communities along with government health facilities and, to some extent, are replacing them as providers of modern health care. Traditional practitioners— bonesetters, herbalists and spirit healers--are reported in many communities. For example, 39 communities reported TBAs or 68%. Twenty reported other traditional healers or 35%. There is considerable under-reporting here, however.

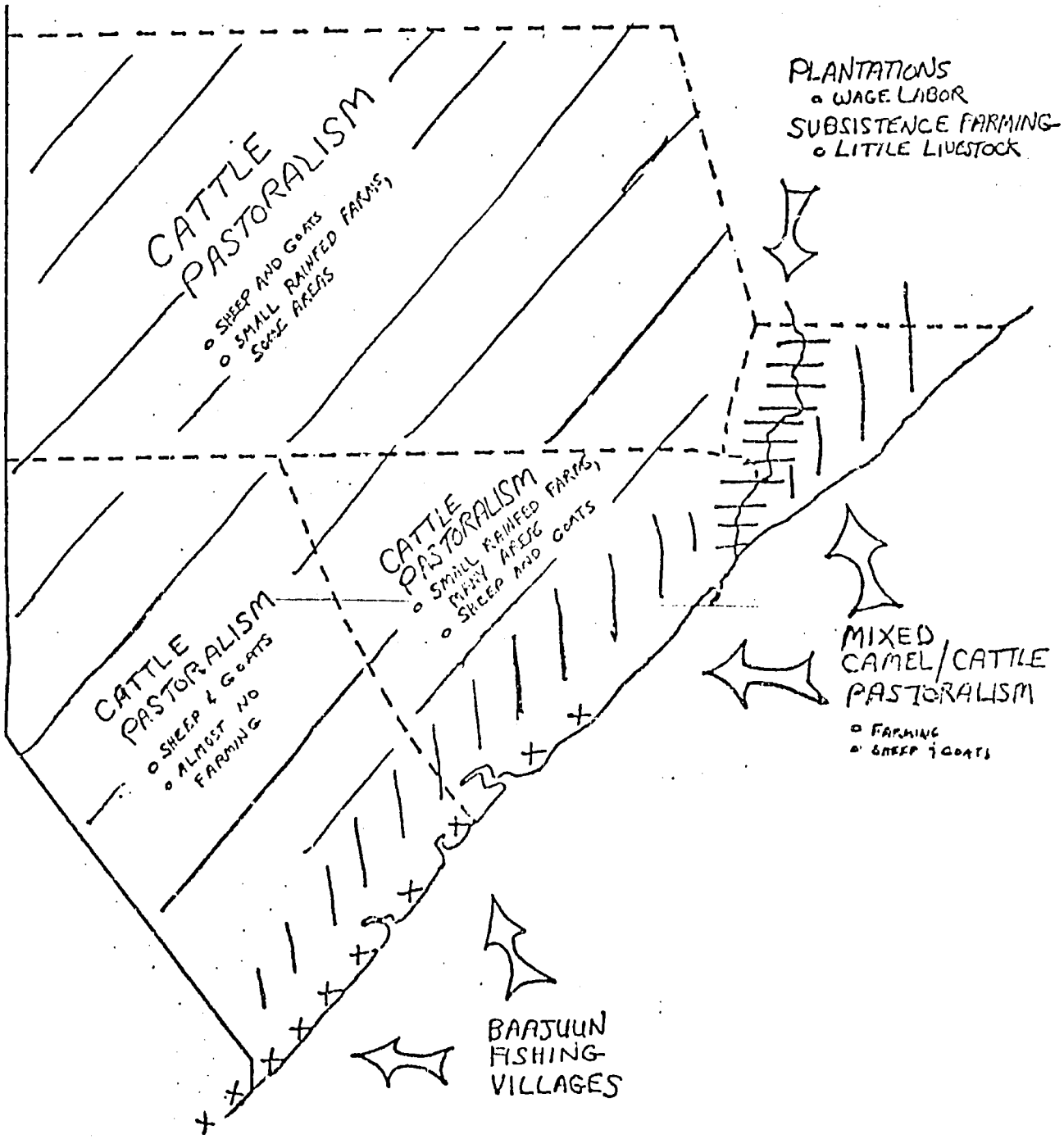
b. Organic Profile of the Districts

Economic activity, demography, logistics and, to some extent, health problems directly reflect geography--or, more accurately, environmental resources and constraints. On this basis, the region may be divided into three areas (see Map 3). It takes its name from the Jubba River, Somalia's only permanent watercourse which always debouches into the sea. The riparian area, fertile and abundantly watered, is densely populated and heavily farmed. The coastal strip, extending from south of Kismaayo city into Kenya, is mainly populated by a string of small settled communities whose principal economic activity is fishing. The remainder of the region is primarily pastoral, although many villages and towns in Kismaayo District, and a fair number in Afmadow, also engage in rain-fed farming on a small scale; here, this is a secondary economic activity. The riparian, fishing and pastoral areas will each be described with reference to basic economic activity, population type and demography, and logistical factors.

(1) Riparian area (Parts of Jamaame and Kismaayo Districts)

This fertile area with abundant rain and good water is heavily farmed. It is the most densely populated area in the region, as is suggested by the concentration of beel seats along the river (Map 2) and also by population estimates: by 1985, Jamaame District is projected to have approximately 112,000 population. When compared to the projections for the far larger, principally pastoral districts--Afmadow and Badhaadhe, 69,000 and 42,500 respectively--this population figure reveals a clear correlation between population density and livelihood.

MAP 3. SOCIO-ECONOMIC DIVISIONS



Large, irrigated plantations produce bananas for export and other produce (mangoes, papayas, grapefruit, sesame, maize) for national markets. However, the majority population are small farmers who raise maize and small quantities of sesame, beans, peppers, groundnuts, watermelon and tomatoes. Dietary staples were said to be principally maize (prepared several ways but most often as soor, a cooked maize-meal porridge eaten with ghee or a meat sauce), tea, sometimes river fish, and occasional rice or meat. There was some indication that soor is considered the "poor person's diet" by the better off. Many small farmers have no livestock at all; in Mugaambo, interviewees estimated that perhaps 5% of small farmers own livestock. Milk is not regularly mentioned as a major feature of the diet; and, though chickens, eggs and fruits are produced in small quantities by many, these are normally treated as cash crops rather than consumed regularly at home. Wage labor is available as part of the economic package for many families: men work on the large banana plantations, for the Jamaame plastics factory, or for the new Mugaambo rice project.

In the river area, one speaks of "the regular Somalis" (Soomaalida caadiga ah) and the "river people" (reer gosha, as the "regular Somalis" say; "Msiguli," as they call themselves). As a first language, Msiguli speak Swahili or, in some villages, what appears to be either a dialect of Swahili or a closely related language. However, most speak Somali also. On superficial observation--all we had opportunity to do--it looks as though in these communities, while the vast majority are Msiguli, the Somalis are disproportionately represented (and disproportionately vocal) on the village

committees along the main road and as owners of the large commercial farms.

Logistically, this is the most promising rural area of the region. Despite the season, our team was able to reach, without difficulty, every town or village we proposed to visit. Villagers stated that they were seldom, if ever, cut off by rain from the towns along the main paved road. Traffic along that road is frequent, transport of trade goods and people is continuous, and access to the Jamaame health center and to the shops, markets and pharmacies of the road towns, Jamaame town and Kismaayo City, is easy. Intervillage communication is by foot, by donkey cart, and by truck or bus.

(2) Baajuun Coastal Strip (Coast of Badhaadhe and Part of Kismaayo Districts

An estimated total of about 9,000 Baajuun people, Swahili speakers, live in a number of settlements along the coast. Here the principal economic base is fishing, an activity which is controlled and assisted by a government fishing cooperative setup which is headquartered in Kismaayo. Pastoral nomads use the area also; at the time of the team's visit, approximately 2,000 total were reported to be present in different settlements in the two coastal beels, Kudhayo and Kambooni. Somali is, of course, commonly spoken as a second language, but this is a seaward-and coastal-affiliated culture with most ties to Kismaayo, Lamu and Mombasa and intervening towns. Both logistics and culture cut the Baajuunis off from Badhaadhe. Foodstuffs, medicine and commerce flow along the coast; our team visited these settlements by boat.

(3) Primarily Pastoral Areas (Interior Badhaadhe and Afmadow Districts)

Though Lower Jubba receives substantial rainfall overall, its unpredictability mediates against primary dependence on fixed agriculture outside the riverine area. The timing, quantity, and distribution of rainfall varies from year to year, causing unpredictable variation in the quality and quantity of graze and forage which a given area will yield at any time. Such variety is best exploited by a highly mobile crop--livestock. Most pastoral production is, therefore, more or less nomadic.

(a) Livestock

Large tsetse-infested areas and the presence of flourishing grass during part of each year determine the choice of cattle rather than camels as the basic investment stock, with secondary husbandry of small numbers of sheep and goats. People from the coastal areas may keep camels as well as cattle, particularly in the savannah area east of the river where there is no tsetse and shallow wells dot the coastline. Keepers of both cattle and camels will often split them up, sending cattle to a different area from camels since the two have different needs. Another area of secondary production in many areas is small-scale dry farming, which is particularly prevalent around many villages of Kismaayo District, but also common near population centers in Afmadow. (Only two beels in Badhaadhe reported any farming activity.) The primary food products of livestock husbandry are milk, ghee and buttermilk (ciir or garoor); meat is marketed in large towns, but country people do not regularly slaughter to meet family needs any more than prudent investors in other sorts of stock would regularly liquidate investments in

order to meet day-to-day needs. For bulk and carbohydrate, families regularly consume corn meal dishes and occasionally rice (and pasta in towns); sorghum is not grown here and is apparently not much imported from other regions.

(b) Nomadic Population

Classification of people as "nomadic" versus "settled" tends to be an extremely subjective exercise in the absence of careful definition (what about a shopkeeper or a "town wife" who shifts seasonally from one village center to another?) The figures available are also incomplete. However, data obtained from Badhaahde District indicate a rough percentage of 17% nomadic population at the coast and 62% in the entire interior area; for the entire district, the figure is 48%. Figures for Afmadow are too incomplete to build such an estimate, but considering it similar to interior Badhaadhe (lowering the figure to account for the greater farming activity), it seems reasonable to estimate that 55-60% of Afmadow's people are probably also nomadic. Thus it can be said with some conviction that on the order of 50% minimum of the region's population outside Kismaayo City and the riparian area are from somewhat to extremely mobile. As will be seen, this mobility is extensive enough to hamstring any outreach program which is purely village-based. The nature and organization of nomadism in this area will be briefly discussed here, since it has informed many of the more unorthodox elements of the project design to be subsequently recommended.

(c) Nomadic Movement/Spatial Organization

The spatial organization of a nomadic community is based on a watering area, with wells and/or watering ponds and usually a town or several towns/villages, where a stable core of the community remains year-round. There the group concentrates in dry seasons. During and after the rains, nomadic families disperse more widely into grazing areas where the green fodder is; and, in this region, temporary pools of water tide over cattle without trips to permanent water sites. (In the meantime, grass and forage replenish themselves at the permanent sites.) Though home watering sites for groups remain the same, grazing areas can be different at different times. Before moving, families send out scouting parties (sahan).* They assess known grazing areas and return with recommendations, since even the well-known grazing areas may be better or worse in a given year, or even early or later in the season. As an example, an encounter between our driver and a scouting party from middle Kismaayo District yielded the information that they planned to visit at least three grazing areas in southern and mid-Afmadow, thus suggesting that this first or, more likely, second move of the season could take them from one district into another. Later in the season, they may move again. Given the relative lack of territoriality which obtains in grazing matters, they could as likely

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*The word can also mean "survey" in the modern sense, as well as "breaking trail"-- an activity in which our team engaged for several days in the mud and bush of Afmadow. Hence, on both counts, the sub-title of our report: "sahan caafimaad" means "health survey."

move farther north in Afmadow or even beyond, before falling back toward Kismaayo. The total range of movement away from home and back can also vary from year to year; in general, people move farther and more frequently during dry years. People consistently reported that, given two equally good areas to choose between, they would move to the area without tsetse or other exoparasites. However, in one area on the edge of a tsetse belt, a number of pastoralists were settled because, as one woman stated, non-infested areas nearby were not in pasture at the time.

We do not have sufficient data to draw any firm generalizations about the average extent of nomadic movement nor dispersal of communities. The constraints described under "methodology" limited us to primarily gathering village-oriented data for the most part. Furthermore, pastoralists fiercely resist requests to generalize about their movement patterns, though they will readily respond to more properly framed questions (e.g., "Where have the people from here just moved to?") However, our observations convince us that, first, there is sufficient movement of rural populations over sufficient distances that village-based CHWs would not be able to remain even within referral distance of substantial portions of their communities. And, second, even if we were to redefine the CHW's role, making him or her a service provider to anyone in his/her area (whether from his/her community or not), village based. CHWs would not be accessible to many grazing populations, since the two grazing areas we saw were 15-20 km. from the nearest permanent villages. A third observation,

which will be hard on the overly schedule-oriented, is that nomadic people cannot commit themselves one or two months in advance to attending a course in a given location. Though they may do so under pressure from a project staff which is anxious to "get the program going," when the scouts come home and a decision is reached--one goes. It seems unlikely to us that, before a PHC program has gained a certain fame in the region, CHW candidates will willingly remain behind when their families move away, in order to await a promised course.

Representatives of one pastoral group in Kismaayo District, when they were asked if they would be interested in having a CHW, responded honestly that they thought it would be impossible: "Not enough of us to stay together." Optimistic estimates have it that in Lower Jubba as many as fifteen families may constitute a fairly stable group, moving together from one grazing area to another for years at a time. Though this figure seems high to us as a working average, it is probably true that most pastoralists in Lower Jubba move about in nuclei of at least several families each. (This is in contrast to North West and Togdheer, where easier travel conditions and greater safety allow families to make individual moves.)

Such groups are composed of people who are fairly close relatives. In the Somali social context, they thus constitute what may, for amny purposes, be treated as "subcommunities." As a general rule in pastoral societies like Somalia's, the size of the operant community is a variable, determined by the nature of the issue at hand. While very large groups can "pull together" for the purpose

of paying blood compensation, and middle-sized ones can work it out to pay jointly in order to have a water tanker come out to fill a watering pond for them during the dry season, health is generally a small-group, local issue as far as group cooperation in non-emergency situations is concerned. Furthermore, if one plies a medical specialty (whether traditional or modern), one helps out one's closer relatives free of charge, in contrast to one's distant relatives or members of other groups. In a sense, one could look at groups of the grazing-nucleus size, made up of close relatives, as the natural "health resource sharing group," within the confines of which there is a tradition of part-time, voluntary service--a tradition which, for issues like health, does not obtain in larger communities. It seems likely to us, therefore, that a number of logistical and participative problems may be resolved by a "countryside" rather than a "village" approach, which trains CHWs to be part-time workers for their own small mobile groups.

(d) Towns and Villages as Nodes in the Pastoral Network

Though nomadic communities are in no way coincident with physical villages, villages and towns do constitute important logistical resources for them. A successful "countryside" approach will take advantage of the fact that Kismaayo City, district capitals, beel seats, permanent villages and temporary towns built out of brush all constitute nodes in the pastoral network. They constitute gathering points where people come together to carry on commercial, social, political and personal transactions; and they are nodes for the dissemination of information to the countryside. Except for the brush

towns, all the others contain stable or non-mobile cores of nomadic communities--whose movements can be tracked, and with whom communication can be maintained, by project staff who develop relationships with these core people. They are the people who run shops and private trucking, practice rain-fed farming or work in government offices (some of them) and whose livestock is probably with a more mobile relative.

Pastoralists in Somalia do not ride animals, though in Afmadow District two interviewees stated that a seriously ill person might be transported to a health facility by camelback. Normal transport, where one cannot hitch a ride, is on foot. A village or town normally serves as a regular meeting and communications center for people who are settled within an hour or so's walk of it--"those who meet here" (kuwa meesha u soo shir taga). This will probably constitute the effective radius for drawing people to meetings from the countryside, during the community orientation and engagement phases of program work. If such program work is done during the grazing season, when people are fairly dispersed in large grazing areas, meetings will probably have to be held in a number of locations in each grazing area in order to include representatives of the entire populaiton.

c. Problems

(1) Summary

Appendix 6 details the problems defined by the communities surveyed by district. We asked village committees members of the community, and governement staff to identify their major problems in four categories: general, livestock, farming, and human health.

Following is a summary of major problems by category by district.

PROBLEMS IDENTIFIED BY COMMUNITIES

District	Total Places	General		Livestock		Farming		Human Health	
Badhaadhe	19	Water:	9	Pests (tsetse, ticks, etc.):	6	Lack of rain:	2	Malaria:	7
		Roads:	13	Lack of vet services:	2			Schisto:	8
		Isolation:	8					Worms:	7
								TB:	7
								Anemia:	5
								Diarrhea:	5
								Malnutrition:	3
								URI	4
								Fetal Death:	2
								Eye:	2
								Measles:	2
Kismaayo	14	Water:	7	Pests (tsetse, ticks, etc.):	4	Lack of rain:	1	Malaria:	11
		Roads:	1	Lack of vet services:	3	Insects:	3	URI:	11
		No Transport:	1	Other:	3	Lack of pesticides:	1	Schisto:	5
						Seasonal problems:	1	Anemia:	5
								TB:	4
								Diarrhea:	3
								Malnutrition:	1
								Measles:	2
Afmadow	6	Water:	3	Pests (tsetse, ticks, etc.):	3	None		Malaria:	5
		Roads:	1	Gastroenteritis in cows:	1			Schisto:	4
		Food shortage:	1	Predators:	1			Anemia:	4
								URI:	4
								Malnutrition:	2
								TB:	2
								Diarrhea:	2
								Worms:	1
								Fetal Death:	1
								VD	2
								Snakebite:	2

PROBLEMS IDENTIFIED BY COMMUNITIES (Cont'd)

District	Total Places	General		Livestock	Farming		Human Health	
Jamaame	10	Poor sanitation:	6	Lack of vet services:	Lack of technical services:	1	Schisto:	7
							Malaria:	6
							Malnutrition:	5
							Anemia:	5
							Worms:	4
							URI:	2
							Diarrhea:	3
							Maternal Death:	1

(2) Health Problems

Following is a summary of major health problems:

COMMUNITIES IDENTIFYING AS A PROBLEM

Places	Malaria	Schisto	Diarrhea	Anemia	TB	Worms	Malnutrition	Fetal Death
45	29	24	13	19	10	12	11	3
Percentage Reporting as Problem	64	53	27	42	22	27	24	7

The rank order of health problems is as follows:

1. Malaria
2. Schistosomiasis
3. Anemia
4. Diarrhea
5. Worms
6. Malnutrition
7. TB
8. Fetal death

V. IMPLICATIONS OF THE FEASIBILITY STUDY

Introduction

The feasibility study confirmed existing general impressions that there are serious and widespread health problems throughout the Lower Jubba Region. In addition, PCI gathered site and district-specific information on the types and incidence of disease and other health problems and their relationship to the environment and other socio-economic factors. The survey revealed serious gaps in health services. Staff, facilities, and equipment, are deficient, expecially in the interior districts of Afmadow and Badhaadhe and in the coastal areas of Badhaadhe. Existing patterns of rural out-reach are inadequate to serve the more isolated and inacessible villages, and, more especially, the nomadic population of the region.

The PCI Team concluded that a primary health care program is feasible in the Lower Jubba Region. In fact, we think the only way in which health services could be improved in the region is through a community-based decentralized health development program. This PHC Program would have to be organized district by district, taking into account the varying needs, problems, conditions, and resource capabilities of each district, and even of areas within districts (e.g., interior Badhaadhe and Coastal Badhaadhe).

The field survey also underscored that there is an intimate relationship between water, transportation, productivity, agriculture, nutrition, and the health of the people in all of the

districts of Lower Jubba. These relationships make it unlikely that health and nutrition could effectively be improved and sustained without working through these multi-sectoral linkages.

Accordingly, the successful implementation of a PHC Program in the Low Jubba will require supporting development work in other sectors for two reasons: First, to remove impediments that will act as bottlenecks to the improvement of health services; second, to bring about the synergism that will advance and sustain basic social and economic development.

V. A. Health Service Development and Delivery

V. 1. General Considerations

a. Emphasis must be on:

services, not structures;

functions, not schedules;

communities, not places.

b. Begin the Least Accessible Areas (Districts) First

Given the history of differential service provision to more and less accessible areas, and given public skepticism about government and donor ability to deliver rural services, a rural outreach program should begin in the least accessible areas first.

c. Begin at the Community Level and Work Up

The program should begin at the community level and work up. Therefore, it is proposed to adopt the district team approach, wherein district PHCP staff and donor staff would comprise a mobile team, working in cooperation with any subdistrict (beel) staff in each area, to develop and supervise community-level PHC. At a later date, when

the team must withdraw from ongoing supervision, intermediate supervisory/referral resources will be developed, in line with the local resources and realities of each area.

d. Roles of CHWs, TBAs, Village Committees, and Communities

Specifics of the roles of CHWs, TBAs, communities, and committees, as well as the precise nature of target communities, logistical arrangements, etc., must be planned in detail locally on the basis of local input. There must be flexibility to allow for variations in local conditions, health needs and perceptions of health needs, and community resources and commitment.

e. Training of Supervisors and Trainers

The training of district PHCP staff (and later, subdistrict- or beel- level staff) will be critical to the successful implementation of the PHC Program for Lower Jubba. In some ways, it will be PCI's most critical training constituency. These people will need major initial training in PHC skills, including:

- community engagement process, a decentralized approach;
- training skills for working with rural, possible illiterate, adults;
- management and supervisory skills appropriate for working with rural volunteers;
- positive approaches to traditional health resources.

They will also need to work alongside trainers who are skilled in the above areas for a considerable time, since packaged training modules are not sufficient for actually building these skills.

f. Flexibility in Establishing Referral/Supervisory Structures

During the later development of intermediate supervisory/ referral institutions for each locale, flexibility should be paramount.

If a local CHW can become a local supervisor, this should happen. Beel dispensaries can be refurbished and existing MOH staff can be retrained. A full PHCU staff complement may not be necessary in all locations. Supervisory and supply "lines" should reflect local logistical realities: for example, the Baajuun coastal strip should not be made to depend on Badhaadhe. Also, the final institutional form should reflect the reality of the "metropole" or urban center attraction.

g. Rural Incentives

Professional MOH staff should receive not only the standard PHCP incentives but also rural hardship incentives as well. These would be of two kinds: (a) for working in a rural post, a salary top-up, graduated solely by the degree of isolation and physical hardship and without reference to the person's professional credentials. Thus, district-level staff in Jamaame and Kismaayo would receive no hardship payment; beel staffs in these two districts would receive the most. (b) An additional incentive payment for rural travel and supervision work outside of post. This would perhaps best be structured simply as a very adequate per diem setup.

V. 2. Community Engagement in PHC Implementation

a. Operant Communities

Working out from villages as communication centers, the first task will be to define, in discussions with village leaders, what are the operant communities for PHC to work with. Logistical and social factors will interact in determining what will constitute effective base groups for health workers. Village communities should

never be considered as representing single communities, but should be engaged in helping to plan how all the different groups can be reached.

Experience in other PHC programs, traditions of health-resource sharing in Somalia, and the considerable movement and thin dispersal of nomadic groups all suggest the need for small client-to-health-worker ratios in the case of mobile groups. As a working hypothesis, we suggest 100:1. However, this will undoubtedly vary, perhaps greatly.

b. Community Engagement Process

The process of community engagement in any given village center/catchment area (or grazing area if done after the rains) will last approximately three months, from initial orientation meetings to the initiation of CHW training. During this time, approximately 4-8 village centers, or grazing areas, should be regularly visited by the team. Most of these meetings will involve one or two days' presence (at least one night each visit) in each village center or in settlements near it. Two to three weeks will be allowed between each contact, to allow for the news of what happened and announcement of the subsequent visit to be widely diffused among the catchment population.

(1) Orientation

Initial meetings, the orientation phase, will undoubtedly involve speechmaking, including the explanation of the PHC program. The true community engagement phase begins when meetings move into mutual discussion of such topics as:

- defining operant communities;
- logistics which can work;
- "institutional" job descriptions: what the program is willing to offer; what the communities are willing to offer; and negotiating these two into line. (The team will approach these discussions without assuming that supply and demand will necessarily link up and be prepared to accept that in some instances agreement will not be achieved);
- initiation and completion of the selection process (at least two separate visits; see below);
- training to be initiated as promptly after selections as possible.

V. 3. Selection of Candidates for Training

a. Community Input and Criteria

A delicate combination of appropriate selection with community input and concurrence will be sought. If criteria are used at all, they should be individually developed in the discussions during the engagement process in different village centers. Injection of MOH preferences, as in the "guidelines," should not occur except as further contributions, probably in question form, to earlier suggestions by the public. Even community-generated criteria should be minimal, fundamental, extensively discussed and recognized as optional. (Agreement on these should not be sought.) During the engagement process, care will be taken to elicit discussion on current health roles in the community: traditional herbal and surgical practice, birth and family health, injectionists and drug sellers, etc., and how these would relate to the delivery of PHC, and whether or not people already engaged in health delivery should become CHWs or should relate

to the program in some other way.

The upshot of all this, however, should not be a vote nor the presentation of a short list of names by the village committee. We strongly recommend that the result should be the offer in open meeting of CHW training to all who are interested and able to attend.

This process will have to be refined and shaped during field work. The end goal is an informed process of self-selection by motivated individuals with community concurrence, rather than the offering of bodies by communities anxious to appear cooperative. PCI experience using this approach in other countries (e.g., Mexico, Bolivia, and, to some extent, The Gambia) is that a program is seldom deluged by too many people wanting to be trained. Becoming a CHW involves commitment and hard work. Once that is made apparent, the curious and the lazy drop out.

B. Other Health Practitioners

Even if other health practitioners of any stripe are not incorporated directly into the PHCP as CHWs, the potential for constructive interaction with the private-enterprise health services should be explored. Offering "parallel" courses, such as basic training for local pharmacists, is an example.

V. 4. CHW Training

a. Balance Between Local Needs and Program Inputs and Goals

The training of health workers must be responsive to demand from two sides: what the communities want, and what the program implementers want. If CHWs do not learn some of the curative skills which their constituencies value, they will not be considered again

nor further supported. If they do not learn some of the promotive and prventive skills shich the outsiders value, there is no reason for the outsiders to train and support them. Thus each training phase should equip trainees to begin working in some curative and some preventive ways. A balance or fit must be found between the communities --their needs and expectations-- and the resources and services to be made available as inputs to realize program outputs. (50)

b. Initial Training

Specifics will vary according to location and perhaps even according to the time of year, but the first training phase might well cover:

- diagnosis and treatment of anemia and malaria; malaria prophylaxis for pregnant women;
- diarrhea; the concept and use of oral rehydration salts (ORS);
- introduction to concepts of health, disease, and disease prevention;
- home visits;
- immunizations: what can be immunized for, orientation to EPI program, how to prepare community for immunization campaigns;
- introduction to reporting: elementary recording, for the literate and nonliterate.

c. Subsequent Training

Subsequent phases of organized training would respond to CHW requests where possible (communities will pressure them to treat things they can't yet treat), e.g. in all likelihood respiratory, eye and skin diseases and first aid. Simultaneously, the

agendas of the program implementors would be followed up on: nutrition, sanitation, and development of promotive skills could be introduced.

d. Pattern of Training

Group training will be delivered in short phases to allow for maximum absorption and minimum disruption of home life. In many instances, it may be preferable or even necessary, as in the case of women trainees who may not be allowed to leave home for several weeks, not to deliver training in blocks at all, but on a one- or two-day-a-week basis, near home. We suggest that the initial training for these health workers include three weeks or approximately eighteen to twenty contact days, which will be scheduled and located according to the local logistical situation.

e. Appropriate Training Methods

Emphasis should be on nonformal, adult education training methods. The classroom or lecture approach should be minimized in favor of practical, "hands-on" work. (This means, as already indicated, that a great deal of prior training of district and beel-level MOH staff will have to be accomplished. MOH staff must know how to teach CHWs and other community workers. And CHWs must learn how to "teach" and reach members of their communities.) Once the project has staff from the district and some CHWs functioning fairly well, much training will be done by taking small groups of trainees to spend time with CHWs who are already working. It will probably be advisable to establish a working pilot PHC program with a CHW, etc. in an appropriate community as part of the training of district and subdistrict staff, and as a demonstration of community-based primary

health care.

V. 5. Ongoing Relations with Communities and Health Workers in Place

a. Training and Supervision Rounds

The team will make regular training and supervision rounds in the areas where new CHWs are working, at an interval of 4 - 6 weeks for each CHW. Health committees (which may be simply a single contact person for small groups) should be actively involved during supervision visits; they themselves may need training, advice and support in carrying out managerial functions like the supervision of drug supply and in order to relate actively to the program, the health worker, and the health needs of the group.

The proposed large numbers of CHWs make it likely that every CHW cannot be visited in situ on each supervisory round, particularly during the grazing seasons when people are, relatively, widely dispersed. When this turns out to be the case, groups of CHWs can very possibly gather within a walking radius (about one hour or 5 Kms) at a pre-decided settlement, meeting tree, or other landmark for a morning's discussion (it tends to rain in the afternoon), reporting of basic statistics and problems, additional training input and resupply of medicines. This could perhaps take place at a different settlement each time, to have regularly rotating, if infrequent, contact with each group.

b. Remaining in Contact with Nomadic Groups

To remain in contact with nomadic target groups, supervisory work will have to shift to different areas as the communities shift with the season. Village contact people will be able to inform the team where the people have gone. Though logistically this is, of

course, more difficult than working continuously with a settled group, it offers the advantage that on the new supervisory circuit the team can probably begin a simultaneous new cycle of "community" engagement" discussions with other groups which are in the same areas as the groups already contacted.

c. Drug Supply

Given the strong public demand for, and misuse of, drugs--we recommend that drugs for PHC be sold at or near cost. This approach will take advantage of public demand to eliminate one important recurrent cost implication arising from the program; it may also bring the ancillary benefit of being somewhat less threatening to village pharmacists. To ensure access to drugs by all, those are unable (or unwilling) to pay for them will be allowed to earn needed medicines through a "drugs for work" program --a system which will eliminate complicated efforts to determine impartially who is and who is not able to pay.

d. EPI Programming

Immunizations should be scheduled to follow on after training and placement of CHWs in a given area. The CHWs can help with it; it can lend them credibility.

V. 6. Health-Related Development Activity

In accordance with MOH policy and the focus of PHC on community and environmental health, project staff will take on responsibility for proposing and developing areas of inter-sectoral cooperation within the districts. This will be discussed in item B of this section.

V. B. Multi-Sectoral Development and Cooperation

1. Overview

When the herder told us, "When our animals are healthy, we are healthy; when there is no water, our animals become sick and we become sick", he summed up concisely the intimate relationship that exists between water, productivity, and health and nutrition. The lack of rain in Badhaadhe and Afmadow Districts was evidenced by the scores of dead cattle we observed along the roads, by reported shortages of milk in the towns, and by persistent reports of malnutrition.

In fact, what the herder and others are telling us, backed up by our own observations, is that reality is multi-sectoral or multi-disciplinary, so in life and so in development. Neither reality nor the development arena is broken up into discrete fields or sectors but runs together in dynamic processes. Development practitioners, whether in primary health care, water, or agriculture, better take note of this. They cannot, because of the nature of their work, be afraid to jump across the disciplines.

The different sectors need to be joined together at the local level in an enabling context to do a proper, full job of promoting community and individual health and development. At the local level, there is almost always a need for either resources to complement the technical tools or skills available or a need for the skills to utilize the resources available or both. To an encouraging degree, the PCI Team found district officials cooperating together to approach and solve common and related problems. An effective rural

program, whether the focal point is primary health care, water supply, or agriculture, can recommend no less.

2. Inter-Sectoral Problems Identified in the Survey

Thirty-nine percent of the locations surveyed in Lower Jubba identified lack of water as a major problem. Thirty-one percent also identified poor roads as a problem. If the 10 locations with relatively good roads in Jamaame District were taken out of the overall total, the percentage identifying poor roads would then be 38%. Eighteen percent (23% if adjusted for Jamaame) identified isolation, also related to lack of roads, as a problem.

The need for water development and for improving roads in the interior is borne out both by our observations and the priorities which rural people and local government place on them. These needs will have a major impact on the implementation of a PHC program in these districts. The lack of water and transport will act as serious constraints on the improvement of health and nutrition status. Poor roads seriously impact on service delivery.

Earlier in this report, we stated that there is an intimate relationship between water, transportation, productivity, nutrition, agriculture, and health of the people in all the districts of Lower Jubba. We have concluded that an effective PHC program must incorporate these multi-sectoral linkages in its design if it is to be effective. A PHC program is an instrument of primary contract and is in a strategic position to promote a coordinated rural approach, as the Vice Minister of Health stated at the Hargeysa workshop on Primary Health Care.

3. Multi-Sectoral Cooperation in Somalia

> The Ministry of Health justly recognizes the need for close inter-sectoral coordination especially in the areas of food and nutrition, envrionmental sanitation and safe water supply, and health education. It seeks the active participation of the relevant other ministries in furthering the country's aim of providing health care for all based on primary health care concept and its underlying principles. It must, however, be emphasized that it is the responsibility of the institutions under the Ministry of Health to pursue actively to achieve this inter-sectoral coordination and to promote appropriate action by the relevant other ministries. (40)

Section II has identified and discussed these linkages in some detail. They include:

- Water development
- Roads and transportation
- Agriculture and nutrition
- Forestry and village woodlots
- Livestock

The PCI Team found an excellent spirit of cooperation and sharing of resources in the districts, particularly in Badhaadhe and Afmadow. This can be built on a strong multi-sectoral component will energize and attract other resources to the districts.

PART TWO

RECOMMENDED PROJECT DESIGN

I. PROPOSED PCI APPROACH TO DISTRICT AND COMMUNITY DEVELOPMENT FOR PRIMARY HEALTH CARE IN THE LOWER JUBBA REGION

1. Conceptual Underpinnings

a. Emphasis on Development as a Process of Social Learning

Project Concern shares the growing view that development is best thought of as a social learning process. Social learning has been defined as "the creation of an ability of the human to solve his (and her) problems (and) to discern better pathways to goals, no matter how the environment may change" (25). Development which involves people, is responsive to the needs of the poor, and builds local capacity to do something about those needs, does not lend itself to conventional project planning methods which emphasize a blueprint approach, and the discrete project as the basic unit of development action.

The blueprint approach assumes a high degree of certainty in dealing with development needs and problems, and a rather precise correlation with a technology, or procedure, that will meet the needs, or solve the problems. The process approach, in contrast to the certainties of the blueprint style, assumes considerable uncertainty in the development environment, and is characterized by flexibility and a continual openness to redesign and adaptation to changing circumstances. On-the-spot study and solution of problems are relied upon, rather than remote expertise. (25)

PCI has no blueprint for the Lower Jubba. We do have enough information gathered on-the-spot to tell us there is going to have to be a great deal of flexibility built into the approach to PHC in the Lower Jubba. We also know that we need to know a great deal more.

Programs and project activities, rather than being the vehicles for "known" solutions, must be cast as flexible responses to local needs and problems in which learning is a key element. Implicit in this responsiveness is the capacity for the adaptiveness necessary for effective learning. (47)

While the blueprint approach of goals, timeframes, and careful specification of resource requirements predominates in all projects, David Korten notes that the blueprint approach is:

> ...well suited to the construction of large-scale physical infrastructure where the task is defined, the outcomes terminal, the environment stable, and the costs predictable. However, in rural development, objectives are more often multiple, ill-defined and subject to negotiated change, tasks requirements unclear, outcomes unbounded by time, environments unstable, and costs unpredictable. (45)

This can be applied to small-scale infrastructure also. For example, a health clinic is a physical, terminal outcome, while improving and maintaining the health of a rural population is not.

Thus, the learning process approach allows us to confront uncertainty, to learn from error, and become progressively more efficient in our development assistance. If you are willing to admit that you, as a developer, are learning from development, not merely providing answers, and the beneficiaries are truly partners in the process, it is possible, together, to discontinue design elements (technology, organization, goals, even projects) which are determined to be inappropriate. There is a caveat in all of this, however; there must be an overview of where you are going, and what you are trying to do. Otherwise, you cannot learn from your experience; you are willy-nilly doing things.

b. Emphasis on People-Based Development

The challenge of development is to help people. And people are

not abstractions. John Thomas of the Harvard Institute for International Development believes that, "individual or human change is development; all else is ancillary." But development is not a simple input, here and there. It is a complex process of interactions. Thomas observes:

> Only as the individual is freed of the limits that predetermine personal, social, or economic roles, is real development possible. Providing people with what I call a sense of their own efficacy to change and improve their lives is the essence of development. But human change cannot take place in a vacuum. It is dependent on changes in the physical and social environment that hold the individual in poverty. These changes must include opportunities for increasing income and economic potential as well as improvements in the services, such as roads, water supply, and health care; these together provide the individual a release from the acculturation of poverty.*

PCI stresses that its PHC approach reaches people in direct and immediate ways that contribute to this sense of their own efficacy. Or in Korten's words: "People are the central purpose of development and that human will and capacity are its most critical resource." (50)

We think that one of the reasons Project Concern is successful is that, by focusing on the individual and the community--that is, people--the development process it is able to tap an enormous resource. As Arthur Mosher has commented, that development requires effort, and effort is a function of persons. The crucial question in development is how to release persons into work, innovation, and creativity. (63)

c. Primary Health Care As a Core Intervention in Rural Development

Some development interventions are core interventions. They have multiple impact; the complementarities involved build development

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*John W. Thomas, International Assistance in the 1980s: Can We Be Efficient and Compassionate?, Keynote address to Annual Board Meeting, Project Concern International, San Diego, 1982.

momentum. Examples of core interventions in rural development are:

(1) Improved seed and technology packages - with credit and marketing services;

(2) On-farm agricultural research; and

(3) Water development linked to domestic and productive use.

A community-based primary health care program, with emphasis on curative as well as preventive/promotive health services, such as environmental sanitation, health and nutrition education, immunization, etc., is also a core intervention. There are other multi-sectoral linkages; these interventions can become even stronger.

There are two ways to conceptualize this. One is that the intervention is a kind of enzyme, providing activation energy that lifts, or pushes, problems, needs, and unperceived opportunities to the level of benefits, with the capacity of people to perceive and act on new opportunities, being strengthened in the process.

A second way to look at a core intervention is as a kind of fish lure with lots of little hooks that catch on to activities, resources, energies, etc., going by.

Core interventions impact on development problems, and cut across narrow technical and sectoral boundaries. This is why they have impact, or the potential, for greater impact. They intervene in the circles of development/underdevelopment at several points, and have a simultaneous effect. According to Mosher, it is simultaneity that is more important than integration. (63)

> As we have stressed earlier in the report:
>
> Because PHC is strategically placed and emphasizes building local capacity in individuals, groups, and

institutions, it is at the cutting edge of development, a core intervention in rural development.

However, these core interventions will not be successful unless the technologies and inputs introduced focus on needs and problems in a way appropriate to local conditions and potentials.

d. Respect for Traditional Knowledge and Survival Skills

The farmer, or the herdsmen, or the fisherman, knows a lot more in certain circumstances than we do. He knows enough about his world to survive in it more effectively than we can. We need to be very careful when we enter that world, and we need to learn the lesson that:

> ...there remains a basic need to integrate participation and expert problem-solving within the context of village experience so that both contribute to the solution of the problem. (29)

Unless development strategies and policies take into account age-old mechanisms for survival, and unless they are based on the understanding of local cultures and economic structures, the likelihood is that they will only make matters worse. (23)

As an example, no one group, perhaps, has been more victimized by these cultural blinders than the nomadic peoples. Plans for nomadic development usually involve misplaced schemes for sedenterization, range management, or ranching, that drastically alter, or terminate, the transhumant patterns that constitute pastoral nomads' fundamental (and largely successful) adaptation to environmental uncertainty. (23)

e. Project Activities as Training Mechanisms

Project activities, or even the whole program, are developmental tools. They are a training mechanism that broadens the aware-

ness of the community of its problems and how they can be solved. The development of leadership and the strengthering of community organization; the growth of problem-solving skills; the improved management of local resources; and the change in individual and community attitudes to reach a commitment that is positive toward change and development are as much a part of the project goal as is the accomplishment of the immediate task, or physical output of the program.

However, in all of the above, a cautionary note must be sounded: This process must be tied to identifiable goals, to measurable outputs. The failure to tie development of human capacities and social institutions to targets of achievement, weakens the potential of community-based, people-oriented development.

2. Program Characteristics for PHC and District Development in the Lower Jubba

a. Community-Based

A community-based PHC program with people trained from the local communities, adequately supplied with basic drugs, and properly supervised and supported, is the best method of delivering improved health service to rural and nomadic populations in Lower Jubba.

b. Decentralized District-Oriented Training and Support

For such a PHC program to succeed, it requires a decentralized system of training, planning, support, and supervision of the community-based programs. Training, planning, support and supervision must be relevant to district needs and problems, and shaped by local capacities and resources. At the same time, there may be differing

conditions within different areas in the same district.

c. Multi-Sectoral Linkages

Because problems are interrelated at the district and local levels, multi-sectoral linkages and intersectoral cooperation will be actively promoted by the project. PHC is, by definition, multi-sectoral. There is a need for close cooperation with other government agencies in the districts - especially among livestock, agriculture, education, and local government officials. As the promotion of community health recognizes and stresses the relationships between various social and economic sectors, and requires their complementary action, it has the capacity for being an effective core intervention in rural development.

d. Phased Approach

While an appreciation of the holistic and interrelated nature of development is maintained, a phased approach following a feasible sequence of objectives should be the operant mode of implementation. The mystique of integration all at once should be avoided. Project staff must work with the opportunities they have, and be alert to future ones.

II. PROGRAM DESIGN

II. 1. Summary - Goals and Targets

Goal Statement/ Objectives	1985 Activities/Targets	1986 Activities/Targets	1987 Activities/Targets
1. Develop and implement a PHC & District Health Development Program designed to improve health service delivery and health status in Lower Jubba	1.a. Establish PHC services in 1 subdistrict	1.a. Establish PHC services in 3 subdistricts	1.a. Establish PHC services in 2-3 subdistricts
	b. Maintain & strengthen PHC services	b. one subdistrict	b. Four subdistricts
2. Training & Upgrading of skills	2. Training/Skill Development	2. Training/Skill Development	2. Training/Skill Development
a. District Health Team	a. 4	a. 4	a. 4
b. Beel Nurses	b. 6	b. 20	b. 18
c. CHWs (including TBAs trained as CHWs)	c. 106	c. 340	c. 245
d. Upgrade TBAs	d. 20	d. 56	d. 65
3. Parallel Programs	3. Parallel Programs		
a. Training Private Pharmacists	a. To be developed in work plans	a.	a.
b. Wild plants - nutritional value & use	b. Underway	b. Completed	b. ____
c. Folklore & health materials	c. Underway	c. Completed	c. ____
d. Traditional Practitioners	d.	d. Underway	d. Completed

Goal Statement/ Objectives	1985 Activities/Targets	1986 Activities/Targets	1987 Activities/Targets
4. Upgrading & improving rural health facilities	4. To be developed in work plans	4.	4.
5. Develop health support Subsystems	5. Health Support Subsystems	5. Health Support Subsystems	5. Health Support Subsystems
a. Drug Supply	a. 1 subdistrict	a. Operating in 4	a. Operating in 6-7
b. Referral	b. 1 Subdistrict	b. Operating in 4	b. Operating in 6-7
c. Supervision	c. 1 Subdistrict	c. Operating in 4	c. Operating in 6-7
d. Information	d. 1 Subdistrict	d. Operating in 3	d. Operating in 6-7
6. Develop Targetted Nutrition Program	6. Establish program in 1 district	6. Establish program in 2nd district	6. Establish program in 3rd district
a. Establish nutrition surveillance	a. Train CHWs & Beel nurses in 1 district	a. Train CHWs & Beel nurses in 2nd district	a. Train CHWs & Beel nurses in 3rd district
b. Identify & treat malnourished at-risk MCH group	b. 3,240 beneficiaries	b. 18,400 beneficiaries	b. 30,060 beneficiaries
7. Develop & implement multi-sectoral rural development componer to complement & support PHC program in health related areas:	7. Multi-sectoral development in 1 district	7. Multi-sectoral development in 2 new districts continue in three	7. Multi-sectoral development in 3 districts
	To Be Developed in Work Plans		
a. Water catchments (reservoirs)	a.	a.	a.
b. Roof catchments/storage	b.	b.	b.
c. Road repair & improvement	c.	c.	c.
d. Agriculture & nutrition (kitchens, gardens, small farms)	d.	d.	d.

Goal Statement/ Objectives	1985 Activities/Targets	1986 Activities/Targets	1987 Activities/Targets
e. Cattle dip construction	e.	e.	e.
f. Village woodlots & forestry	f.	f.	f.

II. 1.a. SUMMARY - COMMENTS

The foregoing summary chart of program goals and targets attempts to project MOH staff training and CHW training numbers. These are planning numbers only and are based on our best population estimates from surveys in the four districts. The plan for the first three years does not call for activity in Kismaayo District until year four. This is because Kismaayo District has more health facilities, both public and private, than the other districts. However, if circumstances permit, it may be possible to start in one sub-district in 1987.

b. Estimates are given for start up of parallel activities but numbers are not given at this time for pharmacy training. These will be developed in subsequent work plans, when staff is on site.

c. Numbers for multi-sectoral activities will be worked out in subsequent work plans when staff is on site.

II.2. BASIC GUIDING PRINCIPLES

a. Start with planning and implementation of community-based activities first. This involves PCI and District Health Team contact at the community level for PHC development, community engagement, and training. It is part of the training process as well for District Health Teams (DHTs) and beel nurses.

b. As community-based activities and training of CHWs are established and functioning, the upgrading and strengthening of district and lower-level support structures can begin. The initial effort, however, must go into the community level.

c. Emphasis is on training and services, not places and structures. Most communities can undertake necessary improvements of local health posts and dispensaries. (The PHCU complex is far too elaborate and costly for rural conditions and population service areas. Money saved can go into other more beneficial things like training, simple equipment, and community education.)

d. The CHWs in the community are the main training and outreach constituency of the Project. PCI will work with the district health teams and health staff at Beel levels to allow that training to happen, to provide for proper suppprt of CHWs, and to enable them to take over the training as their training and PHC skills are developed. Initial training rounds with CHWs will involve PCI staff. They will be working with PCI Somali outreach staff to ensure that training of beel staff, CHWs, and TBAs is stressing the appropriate material. However, the District Health Team and the beel or central village staff are crucial in the whole process of training Somali and supervisors.

e. It is highly unlikely that the subdistrict (or the PHCU level) can be assigned the planned four staff--nurse, midwife, sanitarian, and lab technician. Therefore, a modification of Beel or subdistrict staff appears necessary. The most advantageous combination would appear to be a nurse plus sanitarian.

f. The whole process of community engagement will require extensive time, presence, and commitment of the PCI team at the community level.

g. The training will have to include the village committees, given the need to work with this institution at the community level: in supervision, their responsibilities in PHC, and management of resources.

h. Because of our determination to reach the nomadic communities and avoid an exclusive tuulo- or village-based focus, the training design will have to be flexible and adaptable to different types of communities. The clear implication is training more CHWs than GSDR/MOH and other agencies have envisaged or attempted. We think a nomadic community CHW ratio of 100 to 1 CHW is about the highest for adequate coverage. Please refer to Part One, V for a discussion of the need for flexibility.

II.3. FACTORS INFLUENCING DESIGN OF TRAINING AND SERVICES

a. Size of population.

b. Dispersal of population.

c. Nomadic settlements, patterns and extent of movement, affected by rains - average, good, and bad. In good rain years, the nomads will generally not go so far. In average years, they will go to their usual grazing areas. In bad years they will be forced out of their normal patterns, hence will be the least accessible. Lack of rain impacts on available pasturage and this affects the health of the animals. Ultimately it may mean the loss of the animal and the loss of the milk it produces for the nomadic family's own consumption or sale for income.

d. Accessibility - Influenced by rain, road conditions and the like.

e. Availability and quality of supervisory staff. Good supervisory staff will make training and supervision easier. If they are not available, PCI staff and the District Health Team will have to be more involved. Fortunately, the District Health Officer in Badhaadhe is excellent--a real asset to the PHC program. The PCI Team found other capable MOH staff in Badhaadhe. These are good people to build on.

11.4. BASIC GEOGRAPHICAL APPROACH TO PROGRAM IMPLEMENTATION

a. Training and Service Areas

We are basing implementation on identified training and service areas, largely grouped around beels (central towns/villages) but sometimes cutting across. These training and service areas encompass settled villages, semi-permanent nomadic settlements, and transitory nomadic settlements. Training will be grouped around beels but in some cases will be undertaken in villages or settlements away from the beels. A considerable amount of follow-up training for nomads could be given at meeting points one hour's distance by walking from encampments.

The proposed training and service areas are based on the analysis of centers of population and a corresponding population catchment area. See Map Nos. 4 and 5 of Badhaadhe and Jamaame Districts, and also the District Lists of towns, villages and settlements by beel for an idea of the number of communities involved. Some of these are temporary locations, however.

b. District Coverage

The Team recommended dividing districts into two sub-districts. In the case of Badaadhe District, this meant a division into an interior region and a coastal region. Upon further analysis into training and service areas, we found a large area around Hossweyne that cannot readily be accommodated into the proposed training cycle because of the dispersed nature of settlements and the large extent of the area.

We do not know if it will be possible to conduct two training cycles a year because of the rainy season and the difficulty of travel. The point is, neat divisions of the population may not work.

11.5. THE TRAINING CYCLE

a. Phased Basis

The training cycle is flexible to allow for the different types of population, local planning, and participation in determining training modes, and to promote the self-selection process. Training will not be rigid as to time and place. It will involve a mix of grouping CHW trainees at times in central locations and following them to their locations at other times.

b. The Concept of Self-Selection

This concept of self-selection for CHW training is based on PCI's experience of open candidacy for training. All those interested may attend the initial orientation sessions in the community. Those who are really interested come forth and continue in the training. Quite often they are found to be natural leaders in the community. The end goal is an informed process of self-selection by motivated individuals with community concurrence. See Part One, Section V.3 for further discussion.

c. Training Phases

Following is a description of the phases of training:

Phase I	Community participation - includes time with communities, village committees and potential CHWs over several weeks - maybe 2 days a week in several communities up to 2 months - orientation to PHC, selection process	60 days
Phase II	Orientation of CHW candidates & village council (to some extent) to PHC (follow-up) duties & responsibilities of CHW & Community	20 days
Phase III	Skill development for CHW - up to 3 weeks	21 days
Succeeding Phases	On-the-job training - ongoing training reaffirm what learned, add special skills - disease entities, activities, etc.	80 days

The whole thing takes place between a 180 to 200-day period.

The cycle repeats itself in second year in other subdivisons and training and service areas. (This is assuming that the proposed training cycle is found to be workable.)

d. Training Curriculum

PCI has developed training curriculums for CHWs and TBAs, community health nurse supervisors, and other health workers under a variety of different conditions. Many of the most successful CHWs trained in these programs have been non-literate. An example of some of these training materials are included in Appendix 8. The curriculum, in effect, are the pictures that illustrate each subject. Drama, songs, etc. are used to get the lesson across. Illiteracy need not exclude a person from being a good CHW. In The Gambia reporting forms were developed for non-literate CHWs. PCI's experience in this respect may be relevant in Somalia.

As noted throughout this report, flexibility in designing training, service, and other components of the PHC program will be critical to success. The standard CHW curriculum needs to be adjusted according to local circumstances.

11.6. TYPES OF TRAINING

a. Main Programs

(1) Training of TBAs as CHWs

as PHC workers especially for women & children

(2) Training of CHWs

as PHC workers

(3) Training of beel or central village nurses

- PHC supervision, reporting, training methods

(4) Training of District Health Team

- PHC planning, management, supervision, training methods

b. Training of TBAs as CHWs

After extensive discussion of the matter, and noting that the health problems of women and young children were frequently underreported, it seemed clear that women and young children are subject to considerable discrimination in accessibility to health care. Even at the underreporting, 42% of the communities reported anemia of women and children as a serious health problem. Malnutrition, at 24%, and diarrhea, at 27%, were also quite high.

The prevailing tendency to appoint male CHWs is unlikely to redress the imbalance either. We propose to train TBAs in the skills of CHWs as one way to try and ensure better distribution of health services to women and young children. By offering the opportunity to TBAs, criticism of the program will likely be forestalled.

We think this is an important innovation that should be tried.

11.7. PARALLEL PROGRAMS

The Team identified a number of parallel programs, not part of the main program, but supportive of the entire PHC effort. Each in its own way is an important program element.

a. Training of private pharmacists in proper drug use; some elements of PHC and CHW training to make them programmatic allies rather than competitors; and to correct drug abuse--incorrect prescription, under and over prescriptions.

b. Action research into the nutritional value of wild plants eaten by nomads and rural dwellers to ascertain nutritional content and the nutritional contributions these make to the rural diet and their possible incorporation into health and nutrition education activities.

c. Collection of oral teaching material developed for CHW and TBA training in RHU PHC programs - stories, songs, dramas--as an important addition to methods of conveying health knowledge. The traditional oral Somali methods may be more effective than visual and other types of information transmission and education. At the least they would be supportive and reinforcing.

d. Investigation of the whole area of traditional medicine and how appropriate elements of traditional knowledge might be incorporated into the PHC program.

11.8. HEALTH SUPPORT SUB-SYSTEMS

PCI will work with District Health Team, supervisory beel staff, and community level health workers to establish viable and functioning health support subsystems including:

- Drug supply (either a drug fee system or community work credit system for drug replenishment)
- Referral
- Supervision
- Health Information

Drug Supply

Despite the fact that there are some problems associated with a drug fee system we think this is advisable. Many community-based primary health care programs charge for drugs and drug replenishment is locally financed. This would relieve one recurrent cost pressure on the MOH. At the same time, it would help to cut down on drug overuse and misuse.

The village committees or some other community body would possibly require training in supervison of a drug supply system and management of local funds.

In order to ensure fairness, PCI proposes that an alternative system to payment be established. This would enable those who could not pay to earn credit for drugs through community or health-related project work. The precise mechanism for this would, of course, have to be worked out. The work payment system would insure that

some lasting benefit be made to the family or the community.

PCI has recently been requested by the Bolivian MOH and AID/Bolivia to set up a national drug supply system in four departments in that country. A copy of the manual PCI developed for the program is included in the Appendix.

11.9. UPGRADING DISTRICT AND LOCAL HEALTH FACILITIES

A modest and low cost component to aid in simple upgrading of district heel, and local level health facilities would be included as part of the district health development program.

11.10. COORDINATION WITH REGIONAL PRIMARY HEALTH CARE COORDINATOR

The PCI District Project Director would work with the Regional Primary Health Coordinator and other regional health authorities in developing PHC plans and programs for the region.

11.11. RURAL DEVELOPMENT (MULTI-SECTORAL COMPONENT)

PCI proposes a district based multi-sectoral component to provide linkages and complementary support to PHC program activities.

a. Elements

(1) Work with District Commissioners and District Rural Development Coordinating Committees, local government bodies including village councils, village development committees, village health committees, and rural people to identify local needs and problems and plan activities to meet and solve them that relate to PHC (planning, technical advice, materials and equipment); and to assist them in planning, organization, and technical advice that would help the district in other rural development activities.

(2) Rural development activities so far identified include:

- water development (catchments, reservoirs, shallow wells, roof catchment systems, water storage, simple filtration methods)
- Improvement of rural roads and village tracks (simple upgrading, repair, drainage, and placing of culverts)
- Cattle dip construction
- Agricultural development (kitchen and family gardens, improvement of local crop production, crop diversification)

- Livestock development and improvement (to be determined)

- Forestry and village woodlots (planting of trees to protect the environment and for fuel, building materials, and income generation (charcoal making)

- Environmental sanitation (village cleanup activities, digging refuse pits, village drainage, etc.--also a part of direct health prevention and promotion activities)

The above activities would promote to the maximum extent possible the use of local resources including district rural development funds, and local contributions of cash, labor, and building materials through self-help. Many villagers stated their willingness, for example, to pay for fuel and operation costs for a bulldozer to do water catchment work.

(3) Possible training of community paraprofessionals as volunteer rural development workers, in agriculture, forestry, livestock, and general village improvement.

III. IMPLEMENTATION PLAN

III.1. Implementation Plan

III.2. Implementation Schedule

III.1. IMPLEMENTATION PLAN

The following is an overview of the activities which will be undertaken through the completion of the first cycle. These activities include the initiation of the second cycle. The implementation schedule for the continuation of the second cycle will be based on the lessons learned in the implementation of the first cycle of the program in Badhaadhe District.

1. Establishment of Support Systems:

September 1984-December 1984 - Mogadishu contingent sets up support systems
Culture and Language Training

2. MOH/PHC Orientation, Team I:

January 1985-February 1985 - PCI District Team I (Badhaadhe) in Mogadishu for MOH/PHC Orientation, Culture and Language Training, Visit other PHC sites

3. Field Orientation, Team I:

March 1985-April 1985 - PCI District Team I in Kismaayo for Orientation, site visit to Badhaadhe (March) and continue language training

4. Training of District Health Team:

May 1985-June 1985 - PCI District Team I works with Badhaadhe District PHC Team on teaching methods, community participation methods, training curriculum for CHW and TBA training, and plans for training beel nurses as trainers and PHC supervisors. Each district divided into two sub-districts.

5. Training of Beel Nurses, Badhaadhe:

July 1985-August 1985 - PCI District Team I and Badhaadhe District PHC Team trains beel nurses in PHC, community participation, non-formal education methods, and supervision.

6. Community Engagement Process:

September 1985-October 1985 - PCI District Team, Badhaadhe District, PHC Team and Sub-District Team undertake community participation process leading to VHW and TBA selection and participation in PHC program.

7. MOH/PHC Orientation Teams II & III:

October 1985-November 1985 - PCI District Teams II and III for Jamaame and Afmadow in Mogadishu for MOH/PHC orientation, culture and language training, visit other PHC sites.

8. Orientation of CHW Candidates:

November 1985 - PCI District Team I, Badhaadhe District PHC Team, and Sub-District team pre-training of CHWs, TBAs to be trained as CHWs and TBAs

Pre-training includes CHW/TBAs return to villages/settlements to carry out initial assignments.

9. Skills Development

December 1985-January 1986 - Main training of CHWs, TBAs to be trained as CHWs and TBAs and post-testing on first phase of training by above.

10. Field Orientation, Teams II & III:

December 1985-January 1986 - PCI District Teams II & III in Kismaayo for orientation, site visits to Jamaame and Afmadow, and continue language training.

11. On the Job Training:

February 1986-March 1986 - PCI District Team I and Badhaadhe PHC Teams - Main training process continues with establishment of CHWs, TBAs in communities, post-testing second phase, development of sub-systems--drug supply, information, referral, supervision by Beel (Sub-District) Nurses.

12. Training of District Health Teams:

February 1986-March 1986 - PCI District Teams II & III work with Jamaame and Afmadow District PHC Teams on teaching methods, community participation, training curriculum for CHW & TBA training, and plans for training Beel Nurses as trainers and PHC supervisors. Each District sub-division into two sub-districts.

13. Evaluation/Planning Workshops (End of First Cycle)

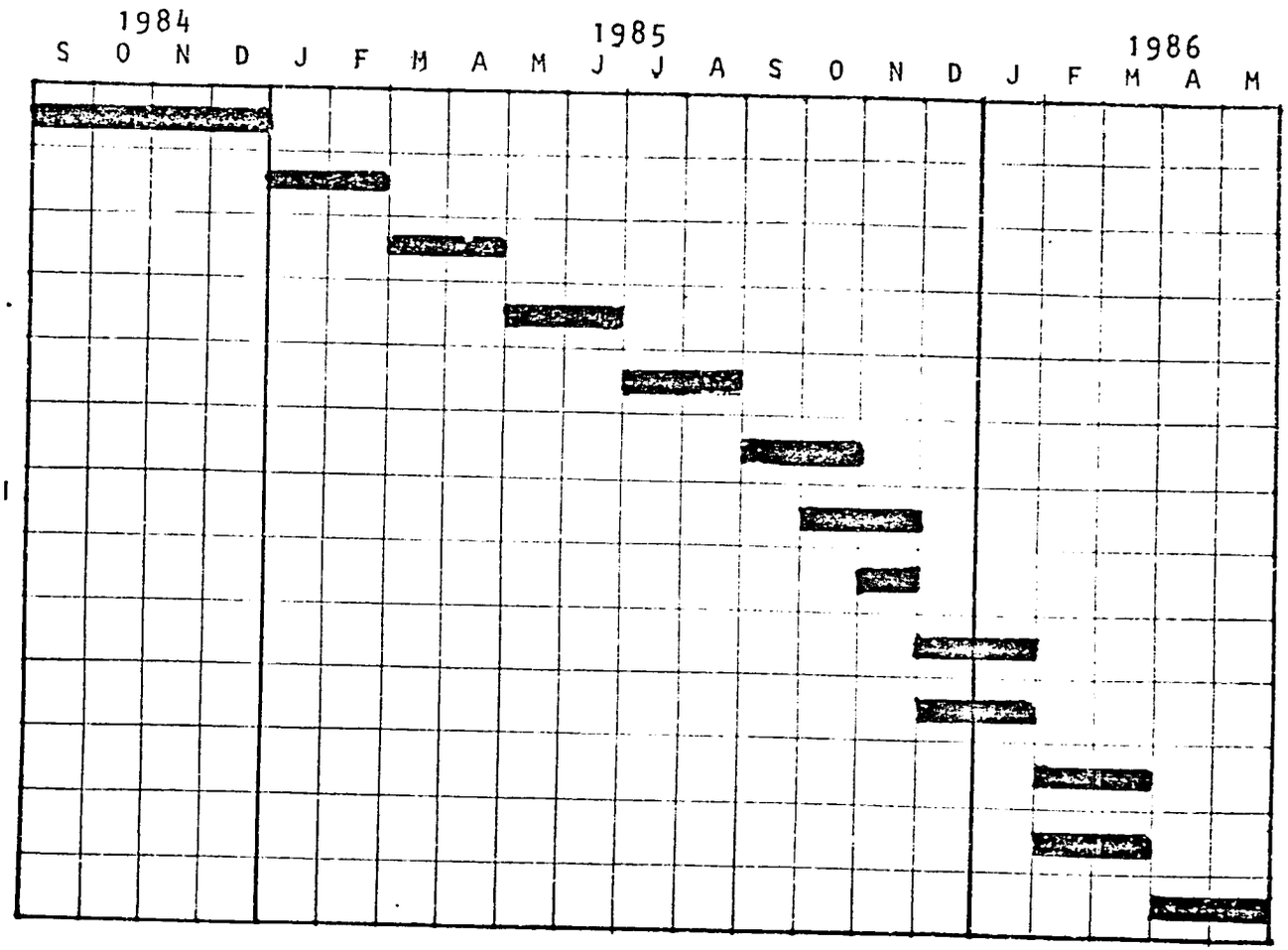
April 1986-May 1986

PCI District Team I and Badhaadhe District PHC Team and sub-district nurses concentrate on rainy season health problems with CHWs, TBAs, and communities.

In last two weeks in May PCI District Team I carries out assessment of experience in first sub-district in Badhaadhe. Regional Team in Kismayo participates. Also begins work with Kismayo District PHC Team.

III.2 IMPLEMENTATION SCHEDULE
FIRST CYCLE

1. ESTABLISHMENT OF SUPPORT SYSTEM
2. MOH/PHC ORIENTATION, TEAM I.
3. FIELD ORIENTATION, TEAM I.
4. TRAINING OF DISTRICT HEALTH TEAM I.
5. TRAINING OF BEEL NURSES
6. COMMUNITY ENGAGEMENT PROCESS
7. MOH/PHC ORIENTATION, TEAMS II & III
8. ORIENTATION OF CHW CANDIDATES
9. SKILLS DEVELOPMENT
10. FIELD ORIENTATION, TEAMS II & III.
11. ON THE JOB TRAINING
12. TRAINING OF DISTRICT HEALTH TEAMS II & III.
13. EVALUATION/PLANNING WORKSHOPS



IV. FINANCIAL PLAN

A. Cost Proposal

B. Certifications/Statements

C. Contractor Responsibility

D. Business Management Information

FINANCIAL PLAN

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SECTION A

Cost Proposal

PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Summary Budget for Year One

	Primary Health Care	Rural Development	Total Program
Salaries	95,306	36,008	131,314
Consultants	83,032	24,258	107,290
Fringe Benefits	14,807	4,890	19,697
Sub-Total:	193,145	65,156	258,301
Overhead (Rate 32.2%)	62,193	20,980	83,173
Travel/Transportation	96,950	38,050	135,000
Allowances	80,045	48,190	128,235
Other Direct Costs	37,291	12,430	49,721
Equipment, Vehicles, Supplies	122,665	127,911	250,576
Sub-Total:	592,289	312,717	905,006
General & Administrative (Rate 6.8%)	40,276	21,265	61,541
GRAND TOTAL:	632,565	333,982	966,547

PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Budget for Year One

	Man-Months	Primary Health Care			Rural Development			Total Program		
		*Local	U.S.	Total	*Local	U.S.	Total	*Local	U.S.	Total
I. Salaries										
A. U.S. Staff										
Field Professional	44		67,166	67,166		22,083	22,083		89,249	89,249
B. Host Country Staff										
Field Nonprofessional	234	28,140		28,140	13,925		13,925	42,065		42,065
II. Consultants	15		83,032	83,032		24,258	24,258		107,290	107,290
III. Fringe Benefits		4,732	10,075	14,807	1,578	3,312	4,890	6,310	13,387	19,697
IV. Sub-Total:		32,872	160,273	193,145	15,503	49,653	65,156	48,375	209,926	258,301
V. Overhead (Rate 32.2%)		10,585	51,608	62,193	4,992	15,988	20,980	15,577	67,596	83,173
VI. Travel/Transportation										
Int'l. Travel			36,700	36,700		14,500	14,500		51,200	51,200
Other Personnel Travel			12,000	12,000		4,800	4,800		16,800	16,800
H.H. Goods/Vehicles			48,250	48,250		18,750	18,750		67,000	67,000
Total Travel:			96,950	96,950		38,050	38,050		135,000	135,000

VII. Allowances									
Post Differential		16,791	16,791		5,521	5,521		22,312	22,312
Quarters		15,000	15,000		5,000	5,000		20,000	20,000
Temp. Lodging		9,645	9,645		6,015	6,015		15,660	15,660
Education		35,250	35,250		30,550	30,550		65,800	65,800
Supple. Post		3,359	3,359		1,104	1,104		4,463	4,463
Total Allowances:		80,045	80,045		48,190	48,190		128,235	128,235
VIII. Other Direct Costs									
Rent & Utilities	25,675		25,675	8,558		8,558	34,233		34,233
Postage	5,016		5,016	1,672		1,672	6,688		6,688
Telegraph/Telex	6,600		6,600	2,200		2,200	8,800		8,800
Total Direct Costs:	37,291		37,291	12,430		12,430	49,721		49,721
IX. Equipment, Vehicles, Supplies									
Drugs/Med. Supplies		16,933	16,933					16,933	16,933
Housing Maint./Equip.		5,625	5,625		1,875	1,875		7,500	7,500
Office Supplies/Equip.		10,900	10,900		3,633	3,633		14,533	14,533
Other Equipment		10,748	10,748		3,582	3,582		14,330	14,330
Vehicles (C.I.F.)		60,000	60,000		96,675	96,675		156,675	156,675
Fuel/Spare Parts		18,459	18,459		22,146	22,146		40,605	40,605
Total Equip./Vehicles:		122,665	122,665		127,911	127,911		250,576	250,576
X. Sub-Total:	80,748	511,541	592,289	32,925	279,792	312,717	113,673	791,333	905,006
XI. General & Administrative (Rate 6.8%)	5,491	34,785	40,276	2,239	19,026	21,265	7,730	53,811	61,541
XII. GRAND TOTAL:	86,239	546,326	632,565	35,164	298,818	333,982	121,403	845,144	966,547

*The rate of exchange for converting to Somali schillings is 17.38 S.S. = $1 U.S.

PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Budget for Year Two

	Man-Months	Primary Health Care			Rural Development			Total Program		
		*Local	U.S.	Total	*Local	U.S.	Total	*Local	U.S.	Total
I. Salaries										
A. U.S. Staff										
Field Professional	108		140,675	140,675		65,025	65,025		205,700	205,700
B. Host Country Staff										
Field Nonprofessional	444	44,749		44,749	28,111		28,111	72,860		72,860
II. Consultants	12		66,996	66,996		25,272	25,272		92,268	92,268
III. Fringe Benefits		7,307	20,674	27,981	3,599	10,182	13,781	10,906	30,856	41,762
IV. Sub-Total:		52,056	228,345	280,401	31,710	100,479	132,189	83,766	328,824	412,590
V. Overhead (Rate 32.2%)		16,762	73,527	90,289	10,211	32,354	42,565	26,973	105,871	132,854
VI. Travel/Transportation										
Int'l. Travel			50,705	50,705		42,220	42,220		92,925	92,925
Other Personnel Travel			16,416	16,416		9,984	9,984		26,400	26,400
H.H. Goods/Vehicles			23,100	23,100		31,500	31,500		54,600	54,600
Total Travel:			90,221	90,221		83,704	83,704		173,925	173,925

VII. Allowances									
Post Differential		29,764	29,764		21,662	21,662		51,426	51,426
Quarters		22,680	22,680		13,320	13,320		36,000	36,000
Temp. Lodging		2,400	2,400		6,600	6,600		9,000	9,000
Education		34,498	34,498		59,502	59,502		94,000	94,000
Supple. Post		5,953	5,953		4,333	4,333		10,286	10,286
Total Allowances:		95,295	95,295		105,417	105,417		200,712	200,712
VIII. Other Direct Costs									
Rent & Utilities	26,256		26,256	12,932		12,932	39,188		39,188
Postage	6,633		6,633	3,267		3,267	9,900		9,900
Telegraph/Telex	8,844		8,844	4,356		4,356	13,200		13,200
Total Direct Costs:	41,733		41,733	20,555		20,555	62,288		62,288
IX. Equipment, Vehicles, Supplies									
Drugs/Med. Supplies		44,738	44,738					44,738	44,738
Housing Maint./Equip.		7,500	7,500		7,500	7,500		15,000	15,000
Office Supplies/Equip.		8,786	8,786		4,328	4,328		13,114	13,114
Other Equipment		9,364	9,364		4,612	4,612		13,976	13,976
Vehicles (C.I.F.)		57,530	57,530		287,345	287,345		344,875	344,875
Fuel/Spare Parts		47,866	47,866		158,249	158,249		206,115	206,115
Total Equip./Vehicles:		175,784	175,784		462,034	462,034		637,818	637,818
X. Sub-Total:	110,551	663,172	773,723	62,476	783,988	846,464	173,027	1,447,120	1,620,147
XI. General & Administrative (Rate 6.8%)	7,517	45,096	52,613	4,248	53,311	57,559	11,765	98,407	110,172
XII. GRAND TOTAL:	118,068	708,268	826,336	66,724	837,299	904,023	184,792	1,545,567	1,730,359

*The rate of exchange for converting to Somali schillings is 17.38 S.S. = $1 U.S.

PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Budget for Year Three

	Man-Months	Primary Health Care			Rural Development			Total Program		
		*Local	U.S.	Total	*Local	U.S.	Total	*Local	U.S.	Total
I. Salaries										
A. U.S. Staff										
Field Professional	108		147,710	147,710		68,276	68,276		215,986	215,986
B. Host Country Staff										
Field Nonprofessional	444	46,054		46,054	30,448		30,448	76,502		76,502
II. Consultants	11		60,970	60,970		26,337	26,337		87,307	87,307
III. Fringe Benefits		7,689	21,707	29,396	3,787	10,691	14,478	11,476	32,398	43,874
IV. Sub-Total:		53,743	230,387	284,130	34,235	105,304	139,539	87,978	335,691	423,669
V. Overhead (Rate 32.2%)		17,305	74,185	91,490	11,024	33,908	44,932	28,329	108,093	136,422
VI. Travel/Transportation										
Int'l. Travel			53,646	53,646		62,457	62,457		116,103	116,103
Other Personnel Travel			16,416	16,416		9,984	9,984		26,400	26,400
H.H. Goods/Vehicles			76,130	76,130		55,072	55,072		131,202	131,202
Total Travel:			146,192	146,192		127,513	127,513		273,705	273,705

VII. Allowances									
Post Differential		31,252	31,252		22,746	22,746		53,998	53,998
Quarters		22,680	22,680		13,320	13,320		36,000	36,000
Temp. Lodging									
Education		34,498	34,498		59,502	59,502		94,000	94,000
Supple. Post		6,250	6,250		4,550	4,550		10,800	10,800
Total Allowances:		94,680	94,680		100,118	100,118		194,798	194,798
VIII. Other Direct Costs									
Rent & Utilities	26,898		26,898	13,249		13,249	40,147		40,147
Postage	7,296		7,296	3,594		3,594	10,890		10,890
Telegraph/Telex	9,548		9,548	4,702		4,702	14,250		14,250
Total Direct Costs:	43,742		43,742	21,545		21,545	65,287		65,287
IX. Equipment, Vehicles, Supplies									
Drugs/Med. Supplies		66,478	66,478					66,478	66,478
Housing Maint./Equip.		7,500	7,500		7,500	7,500		15,000	15,000
Office Supplies/Equip.		5,360	5,360		2,640	2,640		8,000	8,000
Other Equipment									
Vehicles (C.I.F.)		36,580	36,580		154,090	154,090		190,670	190,670
Fuel/Spare Parts		73,736	73,736		221,519	221,519		295,255	295,255
Total Equip./Vehicles:		189,654	189,654		385,749	385,749		575,403	575,403
X. Sub-Total:	114,790	735,098	849,888	66,804	752,592	819,396	181,594	1,487,690	1,669,284
XI. General & Administrative (Rate 6.8%)	7,806	49,987	57,793	4,543	51,175	55,718	12,349	101,162	113,511
XII. GRAND TOTAL:	122,596	785,085	907,681	71,347	803,767	875,114	193,943	1,588,852	1,782,795

*The rate of exchange for converting to Somali schillings is 17.38 S.S. = $1 U.S.

Long-term Technical Assistance Personnel

Positions	Year 1	Year 2	Year 3	Total
Project Director:				
Married, 2 children (6 & 9)				
36 Man-months				
Location: Mogadishu				
Salary	30,000	31,500	33,075	94,575
Benefits	4,500	4,725	4,961	14,186
Round-trip travel	4,200	0	4,632	8,832
R&R travel	12,200	12,600	13,230	38,030
In-country travel	4,800	4,800	4,800	14,400
Vehicle transport	3,000	0	3,308	6,308
Household goods transport	12,000	0	13,230	25,230
Post differential	7,500	7,875	8,269	23,644
Quarters allowance	4,000	4,000	4,000	12,000
Temporary lodging	4,860	0	0	4,860
Educational allowance	9,400	9,400	9,400	28,200
Suppl. post allowance	1,500	1,575	1,654	4,729
Total:	97,960	76,475	100,559	274,994
Regional Project Director:				
Married, 2 children (8 & 10)				
33 Man-months				
Location: Kismaayo				
Salary	20,833	26,250	27,563	74,646
Benefits	3,125	3,938	4,134	11,197
Round-trip travel	4,200	0	4,632	8,832
R&R travel	12,200	12,600	13,230	38,030
In-country travel	3,600	3,600	3,600	10,800
Vehicle transport	3,000	0	3,308	6,308
Household goods transport	12,000	0	13,230	25,230
Post differential	5,208	6,563	6,891	18,662
Quarters allowance	4,000	4,000	4,000	12,000
Temporary lodging	3,600	0	0	3,600
Educational allowance	28,200	28,200	28,200	84,600
Suppl. post allowance	1,042	1,313	1,378	3,733
Total:	101,008	86,464	110,166	297,638

Long-term Technical Assistance Personnel

Positions	Year 1	Year 2	Year 3	Total
Assist. Health Program Coordinator:				
Single				
33 Man-months				
Location: Kismaayo				
Salary	13,333	16,800	17,640	47,773
Benefits	2,000	2,520	2,646	7,166
Round-trip travel	1,400	0	1,544	2,944
R&R travel	4,000	4,200	4,410	12,610
In-country travel	2,400	2,400	2,400	7,200
Vehicle transport	3,000	0	3,308	6,308
Household goods transport	8,000	0	8,820	16,820
Post differential	3,333	4,200	4,410	11,943
Quarters allowance	4,000	4,000	4,000	12,000
Temporary lodging	1,200	0	0	1,200
Educational allowance	0	0	0	0
Suppl. post allowance	667	840	882	2,389
Total:	43,333	34,960	50,060	128,353
Rural Development Technologist:				
Married, 2 children (14 & 15)				
31 Man-months				
Location: Badhaadhe				
Salary	14,583	26,250	27,563	68,396
Benefits	2,187	3,938	4,134	10,259
Round-trip travel	5,600	0	6,176	11,776
R&R travel	4,800	16,800	17,640	39,240
In-country travel	3,600	3,600	3,600	10,800
Vehicle transport	3,000	0	3,308	6,308
Household goods transport	12,000	0	13,230	25,230
Post differential	3,646	6,563	6,891	17,100
Quarters allowance	4,000	4,000	4,000	12,000
Temporary lodging	4,800	0	0	4,800
Educational allowance	28,200	28,200	28,200	84,600
Suppl. post allowance	729	1,313	1,378	3,420
Total:	87,145	90,664	116,120	293,929

Long-term Technical Assistance Personnel

Positions	Year 1	Year 2	Year 3	Total
District Health Manager/Trainer:				
Single				
31 Man-months				
Location: Badhaadhe				
Salary	10,500	18,900	19,845	49,245
Benefits	1,575	2,835	2,977	7,387
Round-trip travel	1,400	0	1,544	2,944
R&R travel	1,200	4,200	4,410	9,810
In-country travel	2,400	2,400	2,400	7,200
Vehicle transport	3,000	0	3,308	6,308
Household goods transport	8,000	0	8,820	16,820
Post differential	2,625	4,725	4,961	12,311
Quarters allowance	4,000	4,000	4,000	12,000
Temporary lodging	1,200	0	0	1,200
Educational allowance	0	0	0	0
Suppl. post allowance	525	945	992	2,462
Total:	36,425	38,005	53,257	127,687
Rural Development Technologist:				
Married, 1 child (7)				
24 Man-months				
Location: Afmadow				
Salary	0	25,000	26,250	51,250
Benefits	0	3,750	3,938	7,688
Round-trip travel	0	3,675	3,860	7,535
R&R travel	0	10,500	11,025	21,525
In-country travel	0	2,400	2,400	4,800
Vehicle transport	0	3,150	3,308	6,458
Household goods transport	0	12,600	13,230	25,830
Post differential	0	6,250	6,563	12,813
Quarters allowance	0	4,000	4,000	8,000
Temporary lodging	0	3,000	0	3,000
Educational allowance	0	14,100	14,100	28,200
Suppl. post allowance	0	1,250	1,313	2,563
Total:	0	89,675	89,987	179,662

Long-term Technical Assistance Personnel

Positions	Year 1	Year 2	Year 3	Total
District Health Manager/Trainer:				
Single				
24 Man-months				
Location: Afmadow				
Salary	0	18,000	18,900	36,900
Benefits	0	2,700	2,835	5,535
Round-trip travel	0	1,470	1,544	3,014
R&R travel	0	4,200	4,410	8,610
In-country travel	0	2,400	2,400	4,800
Vehicle transport	0	3,150	3,308	6,458
Household goods transport	0	8,400	8,820	17,220
Post differential	0	4,500	4,725	9,225
Quarters allowance	0	4,000	4,000	8,000
Temporary lodging	0	1,200	0	1,200
Educational allowance	0	0	0	0
Suppl. post allowance	0	900	945	1,845
Total:	0	50,920	51,887	102,807
Rural Development Technologist:				
Married, 1 child (15)				
24 Man-months				
Location: Jamaame				
Salary	0	25,000	26,250	51,250
Benefits	0	3,750	3,938	7,688
Round-trip travel	0	4,410	4,632	9,042
R&R travel	0	12,600	13,230	25,830
In-country travel	0	2,400	2,400	4,800
Vehicle transport	0	3,150	3,308	6,458
Household goods transport	0	12,600	13,230	25,830
Post differential	0	6,250	6,563	12,813
Quarters allowance	0	4,000	4,000	8,000
Temporary lodging	0	3,600	0	3,600
Educational allowance	0	14,100	14,100	28,200
Suppl. post allowance	0	1,250	1,313	2,563
Total:	0	93,110	92,964	186,074

Long-term Technical Assistance Personnel

Positions	Year 1	Year 2	Year 3	Total
District Health Manager/Trainer:				
Single				
24 Man-months				
Location: Jamaame				
Salary	0	18,000	18,900	36,900
Benefits	0	2,700	2,835	5,535
Round-trip travel	0	1,470	1,544	3,014
R&R travel	0	4,200	4,410	8,610
In-country travel	0	2,400	2,400	4,800
Vehicle transport	0	3,150	3,308	6,458
Household goods transport	0	8,400	8,820	17,220
Post differential	0	4,500	4,725	9,225
Quarters allowance	0	4,000	4,000	8,000
Temporary lodging	0	1,200	0	1,200
Educational allowance	0	0	0	0
Suppl. post allowance	0	900	945	1,845
Total:	0	50,920	51,887	102,807

TOTALS:				
Salaries	89,249	205,700	215,986	510,935
Benefits	13,387	30,856	32,398	76,641
Round-trip travel	16,800	11,025	30,108	57,933
R&R travel	34,400	81,900	85,995	202,295
In-country travel	16,800	26,400	26,400	69,600
Vehicle transport	15,000	12,600	29,772	57,372
Household goods transport	52,000	42,000	101,430	195,430
Post differential	22,312	51,426	53,998	127,736
Quarters allowance	20,000	36,000	36,000	92,000
Temporary lodging	15,660	9,000	0	24,660
Educational allowance	65,800	94,000	94,000	253,800
Suppl. post allowance	4,463	10,286	10,800	25,549
TOTAL:	365,871	611,193	716,887	1,693,951

Long-term Technical Assistance Personnel

Assumptions:

1. Total of 260 man-months required.

2. Benefits are calculated at 15% of base salary.

3. Raises are calculated at 5% per year.

4. Round-trip travel is estimated at $2,800 per adult; children under 12 calculated at half fare. Air fare increased 5% per year for inflation. Estimated return ticket will not be purchased until completion of tour.

5. R&R travel is assumed to be one round-trip per family per year to Rome at a cost of $1,200 per adult (half fare for children under 12) and one round-trip per family per year to the U.S. at the same cost as item 4 above.

6. In-country travel is calculated at $40 per day.

7. Vehicle transport is estimated at $3,000 per person in year 1 and increasing 5% per year for inflation.

8. Household Goods transport allowance is 7,500 lbs. for a family and 4,500 lbs. for single employees. Cost is projected at approximately 1.65/lb. with 5% increase per year.

9. Post differential is 25% of base salary.

10. Quarters allowance is $4,000 per year with or without a family.

11. Temporary lodging allowed $54/day in Mogadishu, $40/day elsewhere (children 1/2 the adult allowance). Maximum term is 30 days.

12. Educational allowance is calculated at $4,700 Kindergarten to 8th grade and $14,100 for grades 9-12 in Mogadishu. Elsewhere allowance is $14,100 for all grades.

13. Supplemental post allowance is calculated at 5% of base salary.

Host Country Personnel

(Shown in Somali schillings)

Positions	Year 1	Year 2	Year 3	Total
Location: Mogadishu 252 Man-months				
Administrative Assistant				
Salary	72,000	75,600	79,380	226,980
Benefits	10,800	11,340	11,907	34,047
Portman/Expediter				
Salary	64,800	68,040	71,442	204,282
Benefits	9,720	10,206	10,716	30,642
Secretary				
Salary	36,000	37,800	39,690	113,490
Benefits	5,400	5,670	5,954	17,024
Driver				
Salary	36,000	37,800	39,690	113,490
Benefits	5,400	5,670	5,954	17,024
Warehouseman/Watchman				
Salary	18,000	18,900	19,845	56,745
Benefits	2,700	2,835	2,977	8,512
Office Boy				
Salary	18,000	18,900	19,845	56,745
Benefits	2,700	2,835	2,977	8,512
Night Watchman				
Salary	21,600	22,680	23,814	68,094
Benefits	3,240	3,402	3,572	10,214
Total Mogadishu:	306,360	321,678	337,763	965,801

Host Country Personnel

(Shown in Somali schillings)

Positions	Year 1	Year 2	Year 3	Total
Location: Kismaayo 396 Man-months				
Office Assistant				
Salary	40,500	56,700	59,535	156,735
Benefits	6,075	8,505	8,930	23,510
Secretary				
Salary	27,000	37,800	39,690	104,490
Benefits	4,050	5,670	5,954	15,674
Expediter				
Salary	35,100	49,140	51,597	135,837
Benefits	5,265	7,071	7,740	20,076
Field Assistant				
Salary	40,500	56,700	59,535	156,735
Benefits	6,075	8,505	8,930	23,510
Warehousman				
Salary	10,800	15,120	15,875	41,795
Benefits	1,620	2,268	2,381	6,269
Office Boy				
Salary	10,800	15,120	15,875	41,795
Benefits	1,620	2,268	2,381	6,269
Driver/Mechanic (4)				
Salary	129,600	181,440	190,512	501,552
Benefits	19,440	27,216	28,577	75,233
Chief Mechanic				
Salary	54,000	75,600	79,380	208,980
Benefits	8,100	11,340	11,907	31,347
Assistant Mechanic				
Salary	32,400	45,360	47,628	125,388
Benefits	4,860	6,804	7,144	18,808
Total Kismaayo:	437,805	612,627	643,571	1,694,003

Host Country Personnel

(Shown in Somali schillings)

Positions	Year 1	Year 2	Year 3	Total
Location: Badhaadhe 186 Man-months				
Field Assistant				
Salary	25,200	45,360	47,628	118,188
Benefits	3,780	6,804	7,144	17,728
Clerk/Typist				
Salary	21,000	37,800	39,690	98,490
Benefits	3,150	5,670	5,954	14,774
Driver (2)				
Salary	21,000	37,800	39,690	98,490
Benefits	3,150	5,670	5,954	14,774
Watchman (2)				
Salary	16,800	30,240	31,752	78,792
Benefits	2,520	4,536	4,763	11,819
Total Badhaadhe:	96,600	173,880	182,575	453,055
Location: Afmadow 144 Man-months				
Field Assistant				
Salary	0	45,360	47,628	92,988
enefits	0	6,804	7,144	13,948
Clerk/Typist				
Salary	0	37,800	39,690	77,490
Benefits	0	5,670	5,954	11,624
Driver (2)				
Salary	0	37,800	39,690	77,490
Benefits	0	5,670	5,954	11,624
Watchman (2)				
Salary	0	30,240	31,752	61,992
Benefits	0	4,536	4,763	9,299
Total Afmadow:	0	173,880	182,575	356,455

Host Country Personnel

(Shown in Somali schillings)

Positions	Year 1	Year 2	Year 3	Total
Location: Jamaame 144 Man-months				
Field Assistant				
Salary	0	45,360	47,628	92,988
Benefits	0	6,804	7,144	13,948
Clerk/Typist				
Salary	0	37,800	39,690	77,490
Benefits	0	5,670	5,954	11,624
Driver (2)				
Salary	0	37,800	39,690	77,490
Benefits	0	5,670	5,954	11,624
Watchman (2)				
Salary	0	30,240	31,752	61,992
Benefits	0	4,536	4,763	9,299
Total Afmadow:	0	173,880	182,575	356,455
TOTAL ALL DISTRICTS:				
Salaries	731,100	1,266,300	1,329,613	3,327,013
Benefits	109,665	189,545	199,446	498,656
TOTAL:	840,765	1,455,845	1,529,059	3,825,669
Conversion to U.S. Dollars: (17.38 S.S. = $1 U.S.)				
Salaries	42,065	72,860	76,502	191,427
Benefits	6,310	10,906	11,476	28,692
Total:	48,375	83,766	87,978	220,119

Assumptions:

1. Benefits calculated at 15% of base salary.
2. Raises calculated at 5% per year.

Consultants

Positions	Year 1	Year 2	Year 3	Total
Anthropologist				
20 Man-months				
Fees	31,680	24,948	26,195	82,823
Travel	8,400	8,820	9,261	26,481
Per Diem	10,608	7,956	7,956	26,520
Drug Consultant				
3 Man-months				
Fees	7,920	4,158	0	12,078
Travel	5,600	2,940	0	8,540
Per Diem	2,652	1,326	0	3,978
Medical Consultant				
3 Man-months				
Fees	3,960	4,158	4,366	12,484
Travel	2,800	2,940	3,087	8,827
Per Diem	1,326	1,326	1,326	3,978
Rural Development Specialist				
9 Man-months				
Fees	11,880	12,474	13,098	37,452
Travel	8,400	8,820	9,261	26,481
Per Diem	3,978	3,978	3,978	11,934
Program Evaluator				
3 Man-months				
Fees	3,960	4,158	4,366	12,484
Travel	2,800	2,940	3,087	8,827
Per Diem	1,326	1,326	1,326	3,978
Total:	107,290	92,268	87,307	286,865

TOTALS:

Consultant Fees	59,400	49,896	48,025	157,321
Travel	28,000	26,460	24,696	79,156
Per Diem	19,890	15,912	14,586	50,388
Total:	107,290	92,268	87,307	286,865

Consultants

Assumptions:

1. Total of 38 man-months required.
2. Consultant fees are averaged at $180/day.
3. Total of 27 trips required.
4. Travel cost estimated at $2,800 round trip in the first year; costs increased at 5% per year.
5. Per diem calculated at $54/day in Mogadishu and $40/day elsewhere in Somalia. Estimates are that 30% of the time will be spent in Mogadishu, with the remainder spent in the field.

Overhead Rate

In determining an appropriate overhead, the following formula was used:

1. Calculate what percent primary health care represents of total expense.
2. Multiply total general and administrative by that percent; then subtract any transfers to AmDoc (a wholly-owned subsidiary) and to Hong Kong (a self-reliant project requiring no management by PCI). This results in program-specific G&A.
3. Add to that expenses for general program development/evaluation. The result is a true overhead.
4. Subtract from primary health care expenses the costs for AmDoc and Hong Kong to get true program expenses.
5. Divide true overhead by true program expenses to get overhead rate.

Using this formula, overhead calculations are as follows:

	1980	1981	1982	1983
PHC expenses	2,454,618	1,474,253	2,721,714	3,234,598
total expenses	4,804,827	3,100,494	4,277,197	4,715,613
= %	51.1%	47.6%	63.6%	68.6%
G&A	415,339	338,062	376,837	376,837
X % above	X 51.1%	X 47.6%	X 63.6%	X 68.6%
	212,238	160,918	239,668	258,510
- AmDoc transfers	- 74,335	- 37,854	- 45,211	- 41,380
- H.K. transfers	- 2,171	- 0	- 9,869	- 7,612
= Prog. specific G/A	135,732	123,064	184,588	209,518
+ Prog. Develop.	+443,745	+249,135	+181,298	+167,693
= True overhead	579,477	372,199	365,886	377,211
PHC expenses	2,454,618	1,474,253	2,721,714	3,234,598
- AmDoc expenses	- 80,762	- 44,387	-1,268,710	-1,455,094
- H.K. expenses	-303,389	-356,964	- 508,840	- 609,049
= True program exp.	2,070,467	1,072,902	944,164	1,170,455
True overhead	579,477	372,199	365,886	377,211
True program exp.	2,070,467	1,072,902	944,164	1,170,455
= overhead rate	28.8%	34.7%	38.8%	32.2%

PCI has not been audited by a government agency; we are submitting information requesting an audit of our indirect cost rate.

PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Drug/Medical Supplies
(Year One)

	Size/ Strength	Quantity	Package	Unit Cost	Total
Chloroquine Phos.	250 mg.	85 Btls.	1,000s	$ 9.75	$ 829
Streptomycin, Inj.	1 gr.	3,000 Btls.	5 gm	.65	1,950
Isoniazid (Inh.)	100 mg.	35 Btls.	1,000s	2.65	93
Cotrimoxazole (Bactrim)	80 mg.	30 Btls.	500s	11.72	352
Mebendazole (Vermoc)	100 mg.	335 Btls.	36s	2.00	770
Piperazine (Antepar)	500 mg.	150 Btls.	100s	.36	54
Piperzine (Antepar) Syrup	500 mg.	60 Btls.	Pints	3.20	192
Paracefamol or Tylenol	325 mg.	30 Btls.	1,000s	4.94	148
Chlorhexidine (Hibiclens)		20 Btls.	32 oz.	8.00	160
Chlorhexidine (Hibitane)		100 Btls.	4 oz.	1.00	100
Benzyl Benzoate		20 Btls.	Pints	3.57	72
Promethiazine (Phenergan)	25 mg.	50 Btls.	100s	.50	25
Promethiazine (Phenergan) Syrup	5 mg.	50 Btls.	8 oz.	.57	29
Penecillin V	250 mg.	250	100s	1.60	400
Ampicillin, Tabs/Caps	250 mg.	20	1,000s	30.92	618
Metrifonate	100 mg.	40	100s	9.00	360
Praziquantel (Biltricide)	600 mg.	40	6s	24.00	960
Ferrous Sul./Folate	300 mg.	20	1,000s	1.12	23
Gentian Violet Pwdr.		25	25 grain	1.00	25
Oral Rehy. Salt		2,000 Pkts.		.06	120
Ergometrine (Ergonovine)	.2 mg.	5	1,000s	3.82	20
Iodine, Tincture	3%	45	1 oz.	.50	23
Benzakonium Chl. (Zephiran)	17%	40	4 oz.	2.00	80
Neomycin/Bacitracin, topical		60	20 gr.	.40	24
Tape, Adhesive	2" x 10 yds	20 Boxes	6/box	6.00	120
Bandage, Gauze	2" x 5 yds.	4 Cases	8doz/case	15.00	60
Bandage, Elastic	3" x 5 yds.	20 Boxes	4/box	4.00	80
Gauze, Absorbent	4" x 4"	3 Cases	2,000/case	15.25	46
Scissors, episiotomy	6"	5		2.20	11
Scissors, strt., shp/blunt		35		2.00	70
Forceps, dressing	5"	35		1.50	53
Tongue depressors, metal		35		.50	18
Teaspoon, ss		35		.30	11
Sponge Bowl	600 ml.	5		1.50	8
Sponge Bowl	1,200 ml.	5		2.00	10
Basin, handwashing	6 lt.	5		3.89	20

PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Drug/Medical Supplies
(Year One)

		Size/ Strength	Quantity	Package	Unit Cost	Total
Soap			500		.20	100
Soapdish			35		.25	10
Nailbrush			35		.45	16
Measure, grad., ss.		1 lt.	5		2.20	11
Cup, ss		150 ml.	35		.65	23
Kerosene lamp			4		38.00	152
Bottle		250 ml.	35		.25	9
Bottle		500 ml.	35		.40	14
Bottle		1,000 ml.	35		.70	25
Tape measure			35		.25	9
Hanging Scales, Infant		25 kg.	5		40.00	200
Thermometer, clinical, oral			50		.50	25
Thermometer, clinical, rectal			50		.50	25
TBA Kits, 12 items:			20		26.04	520
	Aluminum case	4.00				
	Solution Bowl, 600cc	1.50				
	Solution Bowl, 1200cc	2.00				
	Plastic Apron	2.00				
	Plastic Sheeting	3.00				
	Nailbrush	.75				
	Soap box	.75				
	Soap	.40				
	Tape, umbilical cord	3.44				
	Solution Bottles, 250cc	1.50				
	Scissors, umbil. cord	2.20				
	Mucous trap	4.50				
		26.04				
Blood pressure appar.			3		11.00	33
Stethoscope			3		2.00	6
Syringe, hypodermic, reusable		2 ml.	100		.36	36
Syringe, hypodermic, reusable		5 ml.	50		.36	18

PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Drug/Medical Supplies
(Year One)

	Size/ Strength	Quantity	Package	Unit Cost	Total
Needles, Hypo., ss.	22 g., 3/4"	20	12	.40	8
Needles, Hypo., ss.	23 g., 3/4"	20	12	.40	8
BCG Vaccination Kit		2		85.00	170
Forceps, thumb, needle, spring type, ss.	6"	12		.75	9
Forceps, dressing/sponge, ss.	8"	12		1.35	17
Syringe, hypo., Tuberculin Testing, glass	1 ml. grad.	12		2.00	24
Needles, Hypo., ss.	26 g., 1/2"	20	12	.50	10
Jar, dressing, ss.	2 qt.	8		4.00	32
Jar, Needle, ss	3 x 3"	12		2.50	30
Stone, Needle sharpening	6 x 2 x 1"	6		3.00	18
Tray, Instrument, ss	12 x 7 x 2"	8		5.00	40
Sterilizer, Syringe & Needles	10 x 5 x 2"	6		32.48	195
Vaccines:					
DPT		6,800 doses		.07	476
BCG Tuberculosis		6,800 doses		.08	544
Polio, Sabin oral		6,800 doses		.06	408
Measles		6,800 doses		.12	816
Typhoid		6,800 doses		.056	380
Refrigerators, kerosene 210 lt., 7.4 cu. ft.		2		525.00	1,050
Refrigerators, electric 285 lt., 10 cu. ft.		2		226.00	452
Carrying Cases (Vaccine) Refrigerated		4		20.00	80
Sub-total:					13,933
In addition to the above drugs/supplies for the community level facilities, approximately one-third of the items are required for the district health center.					3,000
TOTAL DRUGS/MEDICAL SUPPLIES:					16,933

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PROJECT CONCERN INTERNATIONAL
Proposal for Somalia Project

Equipment/Vehicle Detail

	Unit Price	Year One PHC	Year One R.D.	Year One Total	Year Two PHC	Year Two R.D.	Year Two Total	Year Three PHC	Year Three R.D.	Year Three Total
Vehicles (C.I.F.)										
Toyota LC BG-60	16,000	48,000	32,000	60,000	32,000	32,000	64,000			
Toyota 3/4-Ton P.U.	13,530				13,530		13,530			
Fiat 10-ton	36,580					36,580	36,580	36,580		36,580
Fiat 10-ton w/trailer	52,675		52,675	52,675		52,675	52,675			
D-7 Caterpillar	154,090					154,090	154,090		154,090	154,090
Sub-Total:		48,000	84,675	132,675	45,530	275,345	320,875	36,580	154,090	190,670
17'Travel trailer	12,000	12,000	12,000	24,000	12,000	12,000	24,000			
Total Vehicles:		60,000	96,675	156,675	57,530	287,345	344,875	36,580	154,090	190,670
Spare Parts										
1st Year at 15% of cost		7,200	12,701	19,901	6,829	41,347	48,176	5,487	23,114	28,601
2nd Year at 20% of cost					9,600	16,395	35,595	9,106	55,069	64,175
3rd Year at 30% of cost								14,400	25,403	39,803
Sub-Total:		7,200	12,701	19,901	16,429	58,282	74,711	28,993	103,586	132,579
Attachments for D-7										
Blade 7S	20,660					20,660	20,660		20,660	20,660
Ripper, three shank	16,625					16,625	16,625		16,625	16,625
Canopy (R.O.P.S.)	7,255					7,255	7,255		7,255	7,255
Sub-Total:						44,540	44,540		44,540	44,540
Total Spare Parts:		7,200	12,701	19,901	16,429	102,822	119,251	28,933	148,126	177,119
Fuel*										
Diesel:										
Toyota LC BG-60:										
Yr 1: 29,333 km @7/lt	60.4¢	7,593	5,062	12,655						
Yr 2: 40,000 km @6/lt	63.4¢				21,133	16,907	38,040			
Yr 3: 40,000 km @5/lt	66.6¢							26,640	21,312	47,952

*Figures shown are per vehicle usage.

Equipment/Vehicle Detail

Fuel (cont'd.)	Unit Price	Year One PHC	Year One R.D.	Year One Total	Year Two PHC	Year Two R.D.	Year Two Total	Year Three PHC	Year Three R.D.	Year Three Total
Toyota 3/4-ton:										
Yr 2: 25,000 km @4/lt	63.4¢				3,963		3,963			
Yr 3: 25,000 km @4/lt	66.6¢							4,163		4,163
Fiat 10-Ton:										
Yr 2: 30,000 km @2.75	63.4¢					6,916	6,916			
Yr 3: 30,000 km @2.75	66.6¢							7,265	7,265	14,530
D-7 Caterpillar:										
Yr 2: 576 hrs @30/lt	63.4¢					10,956	10,956			
Yr 3: 576 hrs @30/lt	66.6¢								23,017	23,017
Fiat 10-Ton w/trailer:										
Yr 1: 5,000 km @2.75	60.4¢		1,098	1,098						
Yr 2: 30,000 km @2.75	63.4¢					13,833	13,833			
Yr 3: 30,000 km @2.75	66.6¢								14,531	14,531
Generators:										
Yr 1: 1440 hrs @3/lt	60.4¢	2,609	2,609	5,218						
Yr 2: 1440 hrs @3/lt	63.4¢				5,478	5,478	10,956			
Yr 3: 1440 hrs @3/lt	66.6¢							5,754	5,754	11,508
Engine Oil										
Toyota LC BG-60:										
8 times @60/lt	22.0¢	198	132	330	528	422	950	528	422	950
Trucks:										
9 times @27/lt	22.0¢		53	53		160	160	53	160	213

Equipment/Vehicle Detail

Fuel (cont'd.)	Unit Price	Year One PHC	Year One R.D.	Year One Total	Year Two PHC	Year Two R.D.	Year Two Total	Year Three PHC	Year Three R.D.	Year Three Total
Engine Oil (cont'd)										
D-7:										
2 drums (400 lt/year)	22.0¢					176	176		352	352
Gear Oil										
10 lt/vehicle/year	18.0¢	5	6	11	13	13	26	14	14	28
Hydraulic Oil										
D-7:										
3 drums (600 lt/year)	20.0¢					240	240		240	240
Fiats:										
20 lt/year	20.0¢		4	4	4	8	12	8	8	16
Storage for Oil Drums, Batteries, Tires		801	534	1,335	318	318	636	318	318	636
Total Fuel:		11,206	9,498	20,704	31,437	55,427	86,864	44,563	73,393	118,136
Office Supplies/Equip.										
Copy Machine	1,350	2,025	675	2,700	1,899	936	2,835			
Typewriter (electric)	830	4,358	1,452	5,810						
Typewriter (manual)	260				1,097	541	1,638			
Calculator	62	326	108	434	262	129	391			
Desk	150	788	262	1050	633	312	945			
Desk Chair	75	394	131	525	317	156	473			
Desk Lamp	22	116	38	154	93	46	139			
File Cabinet	220	660	220	880	464	229	693			
Office Supplies		2,233	747	2,980	4,021	1,979	6,000	5,360	2,640	8,000
Total Office Supplies/Equip:		10,900	3,633	14,533	8,786	4,328	13,114	5,360	2,640	8,000

Equipment/Vehicle Detail

	Unit Price	Year One PHC	Year One R.D.	Year One Total	Year Two PHC	Year Two R.D.	Year Two Total	Year Three PHC	Year Three R.D.	Year Three Total
Other Equipment										
Generators	5,635	8,453	2,817	11,370	7,929	3,905	11,834			
Air Conditioners	510	2,295	765	3,060	1,435	707	2,142			
Total Other:		10,748	3,582	14,430	9,364	4,612	13,976			

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PL 480 FOOD

CCC and Ocean Freight Value per Commodity per Year

	Year 1	Year 2	Year 3	Total
NFDM	3,888	22,080	36,072	62,040
CSM	23,406	132,922	217,153	373,481
VEGOIL	17,496	99,360	162,324	279,180
Sub-Total:	44,790	254,362	415,549	714,701
Ocean Freight	14,930	84,787	138,516	238,233
TOTAL:	59,720	339,149	554,065	952,934

Assumptions:

MCH Beneficiaries per Year	3,240	18,400	30,060	51,700

Rations:

NFDM	2 lbs. per beneficiary per month at .05/lb.
CSM	4.3 lbs. per beneficiary per month at .14/lb.
VEGOIL	1 lb. per beneficiary per month at .45/lb.

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CIPL Funds
(In Somali Schillings)

CHW/TBA TRAINING	Year 1	Year 2	Year 3	Total
CHW Training				
Yr. 1: 106 CHWs 110 SS/day 50 days/year	583,000			583,000
Yr. 2: 340 CHWs 120 SS/day 50 days/year		2,040,000		2,040,000
Yr. 3: 245 CHWs 130 SS/day 50 days/year			1,592,500	1,592,500
CHW Manuals				
Yr. 1: 106 Manuals 125 SS each	13,250			13,250
Yr. 2: 340 Manuals 130 SS each		44,200		44,200
Yr. 3: 245 Manuals 140 SS each			34,300	34,300
Total CHW Training:	596,250	2,084,200	1,626,800	4,307,250
TBA Training				
Yr. 1: 20 TBAs 130 SS/day 10 days/year	26,000			26,000
Yr. 2: 56 TBAs 140 SS/day 10 days/year		78,400		78,400
Yr. 3: 65 TBAs 145 SS/day 10 days/year			94,250	94,250

CIPL Funds
(In Somali Schillings)

	Year 1	Year 2	Year 3	Total
TBA Manuals				
Yr. 1: 20 Manuals 125 SS each	2,500			2,500
Yr. 2: 56 Manuals 130 SS each		7,280		7,280
Yr. 3: 65 Manuals 135 SS each			8,775	8,775
Total TBA Training:	28,500	85,680	103,025	217,205
PHCP Incentives				
District Staff				
Average 650 SS/month				
Yr. 1: 4 staff	31,200			31,200
Yr. 2: 8 staff		62,400		62,400
Yr. 3: 12 staff			93,600	93,600
Beel Staff				
Average 600 SS/month				
Yr. 1: 6 staff	43,200			43,200
Yr. 2: 26 staff		187,200		187,200
Yr. 3: 38 staff			273,600	273,600
Rural Post Incentives				
Rate = 200 SS/month				
Yr. 1: 10 staff	24,000			24,000
Yr. 2: 32 staff		76,800		76,800
Yr. 3: 46 staff			110,400	110,400
Total Incentives:	98,400	326,400	477,600	902,400
Rural Travel				
Rate = 40 SS/day				
Travel Time = 10 days/month				
Yr. 1: 10 staff	48,000			48,000
Yr. 2: 32 staff		153,600		153,600
Yr. 3: 46 staff			220,800	220,800
Total Rural Travel:	48,000	153,600	220,800	422,400
TOTAL CHW/TBA TRAINING:	771,150	2,649,880	2,428,225	5,849,255

CIPL Funds
(In Somali Schillings)

	Year 1	Year 2	Year 3	Total
RURAL DEVELOPMENT INPUTS				
Agricultural Materials	260,700	1,042,800	1,390,400	2,693,900
Tools & Equipment	86,900	391,050	443,190	921,140
Construction Materials	173,800	564,850	825,550	1,564,200
TOTAL RURAL DEVELOPMENT INPUTS:	521,400	1,998,700	2,659,140	5,179,240
PL 480 FOOD SUPPORT				
Kismaayo				
Warehouseman (2) 1200/mo. each	24,840	34,776	36,515	96,131
Badhaadhe (7 mos. year 1)				
Field Asst., 3600/mo.	28,980	52,164	54,772	135,916
Warehouseman (2) 1200/mo. each	19,320	34,776	36,515	90,611
Construction of warehouse*	25,000			25,000
Afmadow				
Field Asst., 3780/mo.		52,164	54,772	106,936
Warehousman (2) 1260/mo. each		34,776	36,515	71,291
Construction of warehouse*		25,000		25,000
TOTAL PL 480 FOOD SUPPORT:	98,140	233,656	219,089	550,885
GRAND TOTAL ALL CIPL FUNDS:	1,390,690	4,882,236	5,306,454	11,579,380

*Warehouse is to store and safeguard PL 480 commodity and other project supplies. At the conclusion of PCI's tenure in Somalia, the facility will be turned over to host country counterpart government agency.

Note: Salaries include 15% benefits and provide for 5% increase per year.

COUNTRY PROGRAM DIRECTOR

Duties and Responsibilities

The Director of the Somalia project is the chief administrative officer and senior manager responsible for the finance, personnel, logistics and other administrative aspects of the Somali headquarters and field operations. He/she will be the lead coordinator between PCI, Somali government ministries and U.S.A.I.D. and other entities. Principal headquarters to be Mogadishu. This employee will be accountable for the job performance of the Somalia all PCI-project staff and the achievement of country program goals and targets.

Examples of Duties

- Fiscally responsible for budget surveillance and all authorized receipt and expensing. Will formulate on-going budgets in cooperation with HSD, headquarters.

- Establish and maintain proper channels of communication and working relationships with PCI headquarters, San Diego and appropriate officials of the various ministries involved in the program development, U.S.A.I.D., other private and voluntary and other development agencies and contractors where appropriate.

- Responsible for personnel management (national and expatriate). Includes welfare, health and security of staff, records, financial management, benefits, relocation problems, housing, leaves and other absences, etc.

- Administer and coordinate field aspects of Title II, PL-480 commodities. (Logistics, records, storage transportation distribution.)

- Responsible for vehicle acquisition, maintenance, repair and spare parts inventory and supervision of staff assigned to same. Vehicle record keeping and surveillance of use.

- Responsible for training as regards vehicle operation, maintenance and record keeping and inventory and purchasing of spare parts.

- Assures compliance with San Diego headquarters directives, administration procedures and reporting schedules as they relate to program, operations, personnel, finance, resource development and public information.

- Aid and supervise as appropriate the implementation of the PHC program in Lower Juba including rural development efforts (water development, small scale agriculture, rural resource management, etc.) in order to insure its success.

- Develop, implement, purchase for a diverse logistics support system for staff and program needs. Requires time-lining in planning, storage, inventory, security and distribution.

- Responsible for expatirate staff housing and related needs and whatever amenities that can be reasonably implemented, including the construction of housing and staff support facilities if necessary.

- Communications supervisor.

- Oversee import and export of expatriate personnel's personal effects, travel arrangements, etc.

- Coordinate and work with local banking and international banking operation.

- Develop program-wide administrative management operations system in conjunction with PCI headquarters and insure continued observation of same.

...and other duties as assigned in keeping with the thrust of the program.

Supervision: Reports to PCI HSD Director of Operations and/or Executive Director.

Qualifications

- Bachelor's or Masters in International Administration, Rural Development or equivalent.

- Experience in appropriate technology.

- Experience in logistics.

- Experience in administering Title II, PL-480 commodities.

- 10 to 15-years field management experience in Africa or Middle East.

- Cultural adaptability.

- Able to perform, by virtue of past experience and/or training, all the tasks listed in the preceding section.

- A willingness and able to learn new languages, as demonstrated by past experience in learning a language. Willingness to study Somali.

- Solid background in financial and inventory control, the budget process, human resource management and country program administration.

- Familiar with appropriate U.S. legislation (such as PL-480) and contract management.

- Healthy, sturdy; able to adjust in isolated areas and be comfortable in basic hardship-type living conditions.

- Expert at multi-year development program planning and time-lining as part of planning.

- Facile communicator both orally and in writing.

    - Able to create reports, manuals and training aids within the scope of experience outlined in preceding section.

- Experienced in dealing with U.S.A.I.D. and government entities.

- Practical experience in repairing vehicles and other mechanical and electrical equipment in order to supervise the national staff.

8/1/84

ASSISTANT HEALTH PROGRAM COORDINATOR

Duties and Responsibilities

The principal responsibilities of this employee will be to support the district teams in the health information aspect of the program and to set up mechanisms for evaluation and monitoring the PHC program as well as the rural development component. (Assignment - Kismayu.)

Examples of Duties

- Supports district teams in health information components of the program. Sets up mechanisms to monitor and evaluate PHC program activities (and to a certain extent rural development activities).
- Responsible for survey and PHC project development work for the Kismayu district.
- Will be involved, as directed by need, in the training and implementation of the Kismayu PHC project.
- Assists the Regional Project Director as needed.

Supervision: Reports to Regional Project Director.

Qualifications

- Experience in health information systems.
- Master of Public Health.
- Experience in program monitoring and evaluation of PHC field programs.
- Knowledge, based on grass roots experience, of PHC training.
- Familiority with Swahili desirable. 'Foreign language learning ability as demonstrated by existing fluency in another language.
- Must have demonstrated ability to adapt to new or different cultural settings and a willingness to study the Somali language.
- Must be in good health, sturdy, able to physically (and mentally) work under isolated and primitive living conditions.
- Able to demonstrate a capacity for prolonged field work.

8/1/84

REGIONAL PROJECT DIRECTOR

Duties and Responsibilities

The Regional Project Director is the overall PHC project manager and chief technical PHC specialist for the Lower Juba region. The responsibilities include program development, coordination and implementation, personnel, logistics and administrative aspects as necessary and delegated by the Project Director. (Assignment is to be in Kismayu.)

Examples of Duties

- Responsible for the job performance of the Somali staff assigned to the region and the achievement of the region's goals and targets.
- Responsible for the coordination and supervision of district teams.
- Responsible for liaison and coordination with region's government primary health care coordinator, other GOS medical authorities, the region's governor and other offices of the regional government.
- Responsible for implementing logistics support (pharmacy, food aid, fuel, parts, vehicle repairs, maintenance, rural development materials) and other factors of general support of the district teams.
- Responsible for regional, delegated personnel management (national and expatriate), program records, financial matters and all other records and reports as required by direction of the Country Program Director and Project Concern International.
- Regular liaison with PCI program (country) director, and A.I.D. and the Somali public health officials as required at the regional level.
- Aids and supervises as appropriate the implementation of the PHC-rural development program being carried out at the village level. Requires time-lining in planning and regional storage and inventory.

Supervision: Reports to Country Program Director.

Qualifications

- Experience in directing and planning primary health care programs.
- MPH, or equivalent in practical experience.
- Experience in designing motivational and community participation activities.
- Experience working with counterparts and in monitoring PH care project activity.

- Community level, "grass roots" field experience in primary health care administration in a foreign location of from 4 to 5 years.

- Experience in designing health support sub-systems (drug supply, supervision, maintenance and referral of health information).

- Experience in grass-roots training.

- Must have demonstrated ability to adapt to new or different cultural settings and a willingness to study the Somali language.

- Foreign language learning ability as demonstrated by existing fluency in another language.

- Must be in good health, sturdy, able to physically, and mentally, work under isolated and relatively primitive living conditions.

8/1/84

DISTRICT HEALTH MANAGER/TRAINER

Duties and Responsibilities

The employee will be a team member and work in concert with public and private sector counterparts in a district of Lower Juba, Somalia, in a program encompassing planning and implementation of a GSDR (Government of the Somali Democratic Republic) approved primary health care training and development program. The program will take place in agricultural, fishing and nomadic communities. The (thrust) of the program will be public health and rural community development. The position will involve cooperation and work with local Somali government authorities at all levels of project development. Assignment is to be in Badhaade, Afmadow or Jamame.

Examples of Duties

- Evaluate existing resources and community needs. Public health surveys.
- Assess training skills of counterparts and assist in training Somali health counterparts in primary health care, community motivation, supervision, PHC management, and non-formal teaching methods. Counterparts will work with PCI to train community volunteers in primary health care, (primary curative and preventive and promotive health care), incorporating applicable technologies and community motivation techniques.
- Assist in design of training plans and materials emphasizing non-formal learning techniques in PHC.
- Conduct training sessions.
- Aid in identifying and developing community health needs.
- Aid in strengthening infra-structure to support PHC system.
- Assist in planning logistical support.
- Help to establish health support sub-systems; i.e., drug supplies, referral. supervision, evaluation, health information and reporting.
- Assist in community organization and training.
- Adapt and disseminate training plans and materials for use throughout assigned district.
- On-going evaluation of training course, participants, trainers.
- Participate in regular overall program evaluations.
- Participate in community organization and training at village level.

...and other duties as assigned.

Supervision: Reports to Regional Project Director.

Qualifications

- Must have demonstrated ability to adapt to new and/or different cultural settings and willingness to study the Somali and Swahili language.
- MPH or equivalent.
- Minimum of 3 to 5 years working at (grass roots) level in Africa or Middle East, or equivalent.
- Must have experience working with government counterparts in public health at the community level.
- Must be in good health, sturdy, able to physically and mentally work under isolated and primitive living and working conditions.
- Foreign language learning ability demonstrated by virtue of existing fluency in another language.

8/1/84

RURAL DEVELOPMENT SPECIALIST

Duties and Responsibilities

The employee will be a rural development generalist, a team member working in conjunction with government counterparts in a district of Lower Juba, Somalia in a program encompassing planning and implementation of training and development in agricultural, fishing and nomadic communities. The thrust of the overall program is public health and rural community development. (Assignment is to be in Badhaade, Afmadow or Jamame.)

Examples of Duties

- Develop multi-sectoral aspects of public health care with other PC team members.
- Train counterparts and work with local groups and communities in water development, small scale agriculture, rangeland improvement, resource conservation and utilization of forestry and wood resources.
- Responsible for water catchment engineering and related problem solving (animal and human water supply development).
- Responsible for developing small scale agricultural projects (small farming, kitchen gardens).
- Improvement and refurbishment of rural roads and able to operate and train nationals on operation of caterpillar-type bulldozer.
- Assist district technical ministries in planning and implementing rural development projects.
- Will interface with Regional and District technical ministries, developing working relationships with the host country development officials.

...and other duties as assigned.

Supervision: Reports to Regional Project Director.

Qualifications

- Must have demonstrated ability to adapt to new or different cultural settings and a willingness to study Somali language.
- Masters degree or equivalent experience in Rural Development, small scale food production, and/or water development.
- Technical training in agriculture or/and appropriate technology and a good theoretical understanding of components of rural development.

- Minimum of 5 years rural development experience (agriculture, water, appropriate technology) in Africa or Middle East at the grass roots level.

- Some public health experience or realted health program experience desirable.

- Experience in planning, in time-lining, mechanical repair, rural construction.

- Must be in good health, sturdy, able to physically (and mentally) work under isolated and primitive living conditions.

- Foreign language learning ability as demonstrated by existing fluency in another language.

8/1/84

SECTION B

Certifications

Certifications/Statements

1. Negotiator/Administrator:

The primary negotiator/administrator with whom the Government may discuss this proposal is:

Mr. Henry Sjaardema
Executive Director
Project Concern International
3550 Afton Road
San Diego, California 92123
(619) 279-9690

The secondary negotiator/administrator is:

Mr. Ralph Montee
Director of Health Services
Project Concern International
3550 Afton Road
San Diego, California 92123
(619) 279-9690

2. Statements/Plans:

The signed Representations and Certifications and Acknowledgements (AID Form 1420-12) is attached.

The Clean Air and Water Certificate is attached.

Project Concern's plan for minority representation is attached.

Project Concern's official statement on non-discrimination is attached.

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PART V
Attachment C
Page 1

REPRESENTATIONS, CERTIFICATIONS, AND ACKNOWLEDGEMENTS

Name of Offeror/Bidder Project Concern International

The Offeror/Bidder represents and certifies as part of his offer/bid that: (Check or complete all applicable boxes or blocks.)

1. SMALL BUSINESS (FPR 1-1.702 and 1-1.703)

He (.) is, (X) is not, a small business concern. If the Offeror is a small business concern and is not the manufacturer of supplies offered, he also represents that all supplies to be furnished hereunder (X) will, ( ) will not, be manufactured or produced by a small business concern in the United States, its possessions, or Puerto Rico.

2. MINORITY BUSINESS ENTERPRISE (FPR 1-1.1303)

He ( ) is, (X) is not, a minority business enterprise. A minority business enterprise is defined as a "business, at least 50 percent of which is owned by minority group members, or, in case of publicly owned businesses, at least 51 percent of the stock of which is owned by minority group members." For the purpose of this definition, minority group members are Negroes, Spanish-speaking American persons, American-Orientals, American-Indians, American-Eskimos, and American-Aleuts.

3. CONTINGENT FEE (FPR 1-1.505)

(a) He ( ) has, (X) has not, employed or retained any company or person (other than a full-time, bona fide employee working solely for the offeror) to solicit or secure this contract, and

(b) He ( ) has, (X) has not, paid or agreed to pay any company or person (other than a full-time, bona fide employee working solely for the offeror) any fee, commission, percentage, or brokerage fee contingent upon or resulting from the award of this contract;

and agrees to furnish information relating to (a) and (b) above, as requested by the Contracting Officer. (For interpretation of the representation, including the term "bona fide employee", see Code of Federal Regulations, Title 41, Subpart 1-1.5).

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TYPE OF BUSINESS ORGANIZATION

He operates as ( ) an individual, ( ) a partnership, (X) a nonprofit organization, ( ) a corporation, ( ) other (specify) _____, incorporated under the laws of the State of California.

5. SOURCE OF COMMODITIES (AID PR 7-6)

Each commodity to be procured with U.S. dollars under this contract, except the commodities listed below, is of United States source and has been mined, grown, or through manufacturing, processing or assembly, produced in the United States.

Excluded commodities (show country of origin for each excluded commodity): Not Applicable

6. GEOGRAPHIC SOURCE (AID PR 7-6)

He (x) is, ( ) is not, a U.S. Firm. A U.S. firm is defined as "a firm that (1) is incorporated or legally organized in the United States; (2) has its principal place of business in the United States, in other eligible source country (A.I.D. Geographic Code 941), or in the cooperating country; and (3) is more than 50 percent beneficially owned by a U.S. firm or firms, or by U.S. citizens." For the purpose of this definition, beneficial ownership of a firm is presumptively established by a bona fide certification by a duly authorized officer of the firm as to the citizenship of the firm's owners. In the case of corporations, the corporate secretary shall certify as to beneficial ownership; he may presume citizenship on the basis of a stockholder's record address, provided, however, he certifies, regarding stockholder's record address, provided, however, he certifies, regarding any stockholder whose holdings are material to the corporation's qualifications, that he knows of no fact which reouts that presumption.

7. CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (FPR 1-1.317)

(a) By submission of this bid or proposal, each bidder or offeror certifies, and in the case of a joint ~~bid~~ or proposal each party thereto certifies as to its own organization, that in connection with this procurement:

(1) The prices in this bid or proposal have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or offeror or with any competitor;

(2) Unless otherwise required by law, the prices which have been quoted in this bid or proposal have not been knowingly disclosed by the bidder or offeror prior to opening, in the case of a bid, or prior to award, in the case of a proposal, directly or indirectly to any other bidder or offeror or to any competitor; and

(3) No attempt has been made or will be made by the bidder or offeror to induce any other person or firm to submit or not to submit a bid or proposal for the purpose of restricting competition.

(b) Each person signing this bid or proposal certifies that:

(1) He is the person in the bidder's or offeror's organization responsible within that organization for the decision as to the prices being bid or offered herein and that he has not participated, and will not participate, in any action contrary to (a)(1) through (1)(3) above; or

(2) (i) He is not the person in the bidder's or offeror's organization responsible within that organization for the decision as to the prices being bid or offered herein but that he has been authorized in writing to act as agent for the persons responsible for such decision in certifying that, such persons have not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above, and as their agent does hereby so certify; and

(ii) He has not participated, and will not participate in any action contrary to (a)(1) through (a)(3) above.

(c) This certification is not applicable to a foreign bidder or offeror submitting a bid or proposal for a contract which requires performance or delivery outside the United States, its possessions, and Puerto Rico.

(d) A bid or proposal will not be considered for award where (a)(1), (a)(3), or (b) above has been deleted or modified. Where (a)(2) above has been deleted or modified, the bid or proposal will not be considered for award unless the bidder or offeror furnishes with the bid or proposal a signed statement which sets forth in detail the circumstances of the disclosure and the head of the agency, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

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REGULAR DEALER-MANUFACTURER (FPR 1-12.601) NOT APPLICABLE

(NOTE: Applicable only to supply contracts in excess of $10,000)

He is a ( ) regular dealer in, ( ) manufacturer of, the supplies offered.

9. EQUAL OPPORTUNITY (FPR 1-12.805-4)

(NOTE: Applicable to all contracts and subcontracts in excess of $10,000 unless exempt under FPR 1-12.804)

We (X) have, ( ) have not, participated in a previous contract or subcontract subject either to the Equal Opportunity clause herein (Section 202 of the Executive Order No. 11246), or the clause originally contained in Section 301 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114; that he (X) has, ( ) has not, filed all required compliance reports; and that representations, indicating submission of required compliance reports signed by proposed subcontractors, will be obtained prior to subcontract awards.

10. AFFIRMATIVE ACTION PROGRAM (FPR 1-12.810)

(Applicable to contracts and subcontracts in excess of $50,000, unless otherwise exempted under 41 CFR 60-2.)

He (1) (X) has, ( ) has not, had contracts subject to the written affirmative action program requirement of the rules and regulations of the Secretary of Labor, and (2) he (X) has developed and has on file, ( ) has not developed and does not have on file, at each establishment affirmative action programs as required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2).

11. MINORITY AND WOMEN REPRESENTATION ON OVERSEAS TEAM AGREEMENT

(Applicable to all contracts and subcontracts in excess of $10,000, which involve oversees performance by U.S. Nationals, unless otherwise exempt under FPR 1-12.804.) (AID/ECP)

The offeror must submit, as part of his offer, a written statement indicating what affirmative steps will be taken to seek to include a significant number of American minority group members and women (see FPR 1-1.1310-2 for the definition of a minority group) among the personnel he will send oversees in the performance of this contract. Failure to submit such a statement for teams of three or more persons, may result in the offer being rejected as nonresponsive.

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12. CERTIFICATION OF NONSEGREGATED FACILITIES (FPR 1-12.803-10)

(Applicable to (1) contracts, (2) subcontracts, and (3) agreements with applicants who are themselves performing Federally assisted construction contracts exceeding $10,000 which are not exempt under FPR 1-12.804.)

By submission of this offer, the offeror, applicant, or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The offeror, applicant, or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any awaiting rooms, work areas, rest areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit direction or, are in fact, segregated on the basis of race, color, religion or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certification in his files; and that he will forward the following notice to any such proposed subcontractors (except where the proposed subcontractors have submitted identical certification for specific time periods):

Notice to Prospective Subcontractors of Requirement for Certifications of Nonsegregated Facilities.

A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semi-annually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

13. AFFILIATION AND IDENTIFYING DATA

(Applicable only to formally advertised solicitations.)

Each bidder shall complete (a) and (b):

(a) He ( ) is, (x) is not, owned or controlled by a parent company.

(b) If the bidder is owned or controlled by a parent company, he shall enter in the blanks below the name and main address of the parent company and the IRS employer's identification number.

14. DATA UNIVERSAL NUMBERING SYSTEM

The Contractor's Data Universal Numbering System Number (DUNS) is Does not apply

Name of parent company and main office address (include ZIP)

Does not apply

Offeror's E. I. No.:

Parent E. I. No.:

15. WOMAN-OWNED BUSINESS

Concern is ( ), is not (x) a woman-owned business.

A woman-owned business is a business which is, at least, 51 percent owned, controlled, and operated by a woman or women. Controlled is defined as exercising the power to make policy decisions. Operated is defined as actively involved in the day-to-day management.

For the purposes of this definition, businesses which are publicly owned, joint stock associations, and business trusts are exempted. Exempted business may voluntarily represent that they are, or are not, woman-owned if this information is available.

This is to certify that the REPRESENTATIONS, CERTIFICATIONS, AND ACKNOWLEDGEMENTS above, in support of the offer dated Feb. 27, 1984, for the purpose of Liberia RFP, are complete and correct.

Feb. 27, 1984
(Date)

Signature of Individual Authorized to Sign Offer

These REPRESENTATIONS, CERTIFICATIONS, AND ACKNOWLEDGEMENTS shall form part of any contract resulting from this solicitation/offer.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Part V
Attachment G

CLEAN AIR AND WATER CERTIFICATE

(Applicable if the bid or offer exceeds $100,000, or the Contracting Officer has determined that orders under an indefinite quantity contract in any year will exceed $100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act (42 U.S.C. 1857c-8(c)(1)) or the Federal Water Pollution Control Act (33 U.S.C. 1319(c)) and is listed by EPA, or is not otherwise exempt.)

The bidder or offeror certifies as follows:

(a) Any facility to be utilized in the performance of this proposed contract has (__), has not (X) been listed on the Environmental Protection Agency List of Violating Facilities.

(b) He will promptly notify the contracting officer, prior to award, of the receipt of any communication from the Director, Office of Federal Activities, Environmental Protection Agency, indicating that any facility which he proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities.

(c) He will include substantially this certification, including this paragraph (c), in every nonexempt subcontract.

Signature of Individual Authorized to Sign Offer

Henry Sjaardema-Chief Executive Officer
Typed Name and Title of Individual Authorized To Sign

February 27, 1984
Date of Signature

MINORITY RECRUITING

Project Concern International (and its affiliate AmDoc/Option) has a policy of recruiting the best available personnel for its domestic and foreign positions (and in the case of AmDoc/Option of recruiting for referral purposes) without regard to race, color, sex, age, ancestry, religion and national origin or political preference or marital status.

In recruiting, Project Concern places notices at all Schools of Public Health in the United States, contacts other voluntary agencies, advertises in journals, newspapers and magazines where we feel there will be the most impact for the dollar. We have consistently recruited through the Peace Corps "Hotline", TransCentury's bulletins, The American Journal of Public Health, Nurse Practitioner magazine, The American Nurse, The Nation's Health, and other such magazines.

Our ads point out that we are an equal opportunity employer and are interested in male or female applicants.

It is Project Concern's policy not to discriminate and this is pointed out in our manuals: "Project Concern wants each employee to know that it has a definite non-discrimination policy. It is our policy that no person will be discriminated against in hiring, tenure, pay, promotion or other conditions of employment because of race, color, national origin, ancestry, political preference or marital status."

Project Concern's applications for employment contain the same verbiage.

The Project Concern Board of Directors have stated in the By-Laws: "Selection of Directors shall be without regard to race, sex, creed, religion or national origin. Qualifications and merit alone shall determine nomination of Directors."

PERSONNEL RECRUITING

The offerer has a unique ability to recruit short and long term personnel. We have been doing it for 23-years. One contributing factor of this ability is found in utilizing the network of applicants registered with AmDoc/Option, Inc., Project Concern's non-profit recruiting organization.

The active files of AmDoc/Option as of 31 January contained 4,518 health professionals.

Each year 80 to over 100 placements are made with an aggregate of 50 to 60-years of service committed. At year-end 1983 for instance AmDoc/Option had placed 112 persons internationally and domestically for a total of 66.9-years. One-thousand-eight-hundred-fifty referrals were made.

AmDoc/Option has been working with about 100 institutions (including universities) and organizations worldwide, and those principally in Africa which we have assisted over the years are:

Holy Family Hospital, Ghana
Tumu Tumu Hospital, Kenya
Operation Crossroads-Africa
(Kenya, Ghana, The Gambia, Sudan, Nigeria)
Africare, Kenya
Ghogoria Hospital, Kenya
Maua Methodist Hospital, Kenya
Mwihila Main Hospital, Kenya
St. Joseph Catholic Hospital (Monrovia), Liberia
Mlamba Hospital, Malawi
Mulunje Hospital, Malawi
PHAM (Private Hospital Association of Malawi), Malawi
Mainland Clinic, Nigeria
CED Clinics, Nigeria
Lalmba Associates, Sudan
Inter-Church Response (N.Y. African Desk)
Ngora Hospital, Uganda
Salisbury Clinic, Zimbabwe
United Presbyterian Vocation Agency (Africa-wide)

PROJECT CONCERN INTERNATIONAL®

Nonprofit nongovernmental health care training and development organization

3550 AFTON ROAD, P.O. BOX 85323, SAN DIEGO, CALIFORNIA 92138 • USA • Telephone 619/279-9690 • Cable: PROJCONUS Telex: 695488

"Involved In Mankind"

2/27/84

RESOLVED, that no person is excluded from service because of race, and

RESOLVED FURTHER, there is no segregation of persons served on the basis of race, and

RESOLVED FURTHER, that there is no discrimination on the basis of race with regard to hiring; assignment; promotion or other conditions of staff employment, and

RESOLVED FURTHER, that Project Concern have a written plan for positive action to achieve equal employment opportunity for all persons in the filling of its staff positions including elements such as contact with various organizations in the community, including minority group organizations, regarding employment needs, recruitment advertisements in minority news media where advertising in the general media is used to fill jobs, identifying Project Concern as an equal employment opportunity employer in recruitment advertisements and the use for job referral purposes of only those employment agencies which do not discriminate on the basis of race in making referrals, and

RESOLVED FURTHER, that there is no dicrimination on the basis of race in membership on Project Concern's Board of Directors.

I hereby certify that the above resolutions were adopted at the Project Concern Board of Directors Meeting held February 1, 1974.

Quinn K. Matthewson
Secretary

SOLICITATION NOTICE

Facilities Capital Cost of Money

Facilities capital cost of money (see FPR 1-15.205-51(a)) will be an allowable cost under the contemplated contract, but only if the contractor specifically identifies or proposes it in the cost proposal for the contract and elects to claim this cost by checking the appropriate box below. If the contractor does not specifically identify or propose facilities capital cost of money and does not elect to claim this cost, the contract will include the Waiver of Facilities Capital Cost of Money Clause.

/_/ The prospective contractor has specifically identified or proposed facilities capital cost of money in its cost proposal and elects to claim this cost as an allowable cost under the contract.

/X/ The prospective contractor has not specifically identified or proposed facilities capital cost of money in its proposal and elects not to claim it as an allowable cost under the contract.

Firm: Project Concern International

Signature: _____

Henry Sjaardema

Title: Chief Executive Officer

Date: February 27, 1984

Part V
Attachment E

ORGANIZATIONAL CONFLICTS OF INTEREST REPRESENTATION

(i). The offeror represents, to the best of its knowledge and belief, that: The award to it of a contract or the modification of an existing contract does ( ). or does not (X). involve an organizational conflict of interest.

(ii). The term "organizational conflict of interest" means that a relationship exists whereby an offeror or a contractor (including its chief executives, directors, proposed consultants or subcontractors). has interest which (A). may diminish its capacity to give impartial, technically sound, objective assistance and advice or may otherwise result in a biased work product, or (B). may result in an unfair competitive advantage. It does not include the "normal flow of benefits" from the performance of a contract.

(iii). The term "contractor" means any person, firm, unincorporated association, joint venture, partnership, corporation or affiliate thereof, which is a party to a contract with the United States of America. As used in this definition, the term "affiliate" has the same meaning as provided in FPR 1-1.601-1 (e).

CONTRACTOR Project Concern International

By _____
(Signature) Henry Sjaardema

Title Chief Executive Officer

Date February 27, 1984

SECTION C

Contractor Responsibility

Contractor Responsibility

1. Financial Resources:

PCI generates financial support from a wide variety of sources including the general public, corporations, service organizations, the U.S. and Canadian Governments through AID and CIDA funding. PCI's international affiliates in Australia, Canada, New Zealand, Hong Kong, and Mexico provide both funding and jointly participate, in some cases, in program development and implementation. We look to them to provide increased levels of funding in the future.

In addition, PCI has been able to motivate other development organizations; governmental, international, and non-governmental, such as the German Development Organization (GTZ) in the Gambia, WHO (The Gambia), UNICEF (Bolivia), and Save the Children (UK), the Gambia, to provide support for PHC programs assisted by PCI.

Host governments and local communities provide a wide range of contributions in-kind, facilities, labor and materials for PCI projets in keeping with PCI's programming philosophy of self-reliance. These inputs have been monetized at approximately $250,000 per year.

PCI has demonstrated a consistent ability to operate its overseas programs at minimal cost with effective results.

PCI has maintained an average annual budget for international programs from non-U.S. governmental sources of 83% over the past three years.

2. Compliance/Performance/Integrity:

PCI has a proven record of accomplishment in the field of primary health care training and development, its major focus of activity. PCI is currently assisting the Ministries of Health of Belize, Bolivia, Indonesia, and The Gambia in planning, training, and developing their national and regional primary health care programs. Innovative and effective local PHC programs have been developed in Guatemala and Mexico and are being integrated with national PHC policies and programs. There is strong governmental interest in these countries in expanding these PCI programs.

Strong expressions of interest in and endorsement of PCI's work in Guatemala and The Gambia have been received from AID Missions in those countries and from AID/Washington.

PCI is directly involved in the management and implementation of overseas development projects working in cooperation with host country Ministries of Health and other health departments and local groups, organizations, and communities. It also provides services and technical assistance to interested developing countries.

The emphasis in PCI's programs is on training and developing local capacity. In particular, PCI's programs are aimed at reaching the poor majority of people in developing countries in a key area of basic need--health improvement. Health is critical to expanding individual and national productivity.

In all countries in which PCI now works or anticipates working, our efforts are directed, in close collaboration with host authorities, at the development of appropriate, affordable accessible, sustainable primary health care services. The content and design of these PHC systems are developed with specific reference to the health resource needs, disease patterns, institutional and cultural structures and values of the individual country.

Fostering self-reliance is a major objective of PCI, philosophically, and all of our projects, programmatically. We are especially careful to promote and support activities which are ultimately affordable to the people, communities, and governments involved.

SECTION D

Business Management Information

Business Management Information

1. AID Matching Grant:

   a. Description: Develop and expand primary health care services in Belize, Bolivia, Guatemala, The Gambia, and Mexico. The basis of PCI's operation is health care training. Our grassroots approach involves training people to care for their own health needs. By establishing working models that use local resources, we encourage self-reliance and host country replication.

   b. Contract No: PDC-0193-G-SS-3106-00

   c. Period: January 1, 1983 to December 31, 1985

   d. Type of Contract: Matching Grant

   e. Dollar Amount: $1,200,000

   and:

   b. Contract No: AID/SOD/PDS-G-0279

   c. Period: October 1, 1980 to September 30, 1982

   d. Type of Contract: Matching Grant

   e. Dollar Amount: $1,002,000

2. USAID Indonesia Co-Financing Grant:

   a. Description: Increase the capability of the Provincial Health Service of North Sulawesi to plan, design, implement and evaluate primary health care programs in rural areas of the province.

   b. Contract No: Grant #84-4, Project #497-0336

   c. Period: October 1, 1983 to March 31, 1985

   d. Dollar Amount: $164,000

3. Indian Health Service:

   a. Description: To provide dental care for Navajo Indians in areas where no dental facilities exist.

   b. Contract No: 245-82-0002, 245-82-0003

   c. Period: January 1, 1983 to September 30, 1984

   d. Dollar Amount: $248,134

4. Home Office Management Support:

   Support by PCI's headquarters will be provided in the following areas:

   a. Administration
   b. Personnel
   c. Financial Services
   d. Program
   e. Operations

5. Incorporation:

   PCI was incorporated in the state of California in 1961. A copy of the Article of Incorporation are attached. Also included is a copy of PCI's tax exempt status under section 501(c)3 of the Internal Revenue Code.

State of California

OFFICE OF THE SECRETARY OF STATE

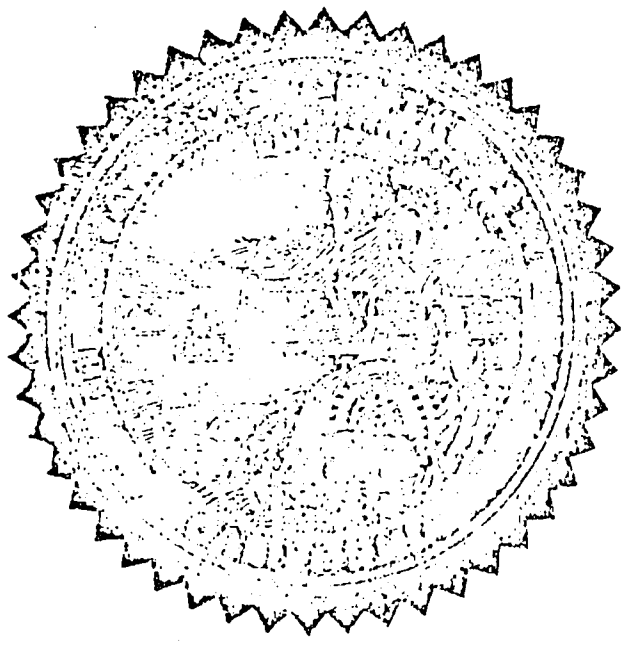
Reproduction Certification

I, *MARCH FONG EU*, Secretary of State of the State of California, hereby certify:

That the annexed transcript was prepared by and in this office from the record on file, of which it purports tc be a copy, and that it is full, true and correct.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this

MAY 22 1977



March Fong Eu

Secretary of State

ARTICLES OF INCORPORATION

OF

PROJECT CONCERN, INCORPORATED

FILED
NOV 1 1961

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, for the purpose of forming a corporation under Part 1 of Division 2 of Title 1 of the Corporations Code of the State of California, also known as the General Non-Profit Corporation Law, do hereby adopt Articles of Incorporation as follows:

Restriction of rights to dissolution

Yes

ARTICLE I

Name

The name of said corporation is "PROJECT CONCERN, INCORPORATED".

ARTICLE II

Purposes

The corporation's purposes are:

(a) Primarily and specifically to establish, maintain and operate an independent Christian medical relief organization.

(b) To establish, maintain and operate a charitable medical clinic and minor surgical facility among the Chinese refugees and residents of Hong Kong, China.

(c) To assist in charitable work of any nature deemed beneficial for the promotion of the welfare (medical, educational and spiritual) of the Chinese refugees and residents now living in the vicinity of Hong Kong, British Crown Colony.

(d) To obtain by way of gifts, purchase or otherwise, clothing, medical supplies, food stuffs and other similar articles of personal property, and to distribute the same to the poor and needy Chinese refugees and residents of Hong Kong, British Crown Colony, and surrounding areas.

(e) To act as a medical missionary organization and to promote Christianity among those receiving care and attention from said corporation.

(f) To receive gifts and grants of money and property of every kind, and to administer the same for charitable purposes.

(g) To act as trustee under any trust incidental to the principal objects of the corporation, and to receive, hold, administer and expend funds and property subject to such trust.

(h) To convey, exchange, lease, mortgage, encumber, transfer upon trust, or otherwise dispose of all property, real or personal.

(i) To make contracts; and to do all other acts necessary or expedient for the administration of the affairs and attainment of the purposes of the corporation.

The above purpose clauses shall not be limited by reference to or inference from one another, but each such purpose clause shall be construed as a separate statement conferring independent purposes and powers upon the corporation.

ARTICLE III

Non-Profit Corporation

The purposes for which this corporation is formed are purely benevolent, charitable and humanitarian, and not for financial gain, and no financial gain shall ever accrue to any member of this corporation, nor any other person or institution in the conduct of same.

ARTICLE IV

Location

The county in the State of California where the principal office for the transaction of the business of the corporation is located is the County of San Diego.

ARTICLE V

Number and Names of Directors

(a) The number of directors of the corporation is five (5).

(b) The names and addresses of the persons who are appointed to act as first directors are:

Name	Address
James W. Turpin	1105 8th Street Coronado, California
Martha Turpin	1105 8th Street Coronado, California
Paul Erwin Fleener	1717 Kenmar Manhattan, Kansas
Thelma Shirley Fleener	1717 Kenmar Manhattan, Kansas
J. Jackson Wills	918 "A" Avenue Coronado, California

ARTICLE VI

Stock Structure

The corporation formed hereby shall have no capital stock, and shall be composed of members rather than shareholders.

ARTICLE VII

Conditions of Membership

The conditions and regulations of membership and the rights or other privileges of the classes of members shall be determined and fixed by the by-laws.

ARTICLE VIII

Non-Assessibility

The private property of the members of this corporation shall not be liable for its corporate debts.

ARTICLE IX

Dissolution

This corporation does not contemplate the distribution of gains, profits, or dividends to the members thereof, and the assets of this corporation are irrevocably dedicated to charitable purposes, and upon the liquidation, dissolution or abandonment of the corporation, all assets of the corporation shall be distributed to a fund, foundation or

corporation operated and organized for religious, medical or charitable purposes, and in no event shall any of the assets or property of this corporation, or the proceeds of any of said assets or property, in the event of dissolution thereof, go or be distributed to the members.

IN WITNESS WHEREOF, we, the undersigned and above named incorporators and first directors of this corporation have executed these Articles of Incorporation on the date set opposite our respective names.

	Date:
James W. Turpin	October 23, 1961
Martha Turpin	October 23 1961
Paul Erwin Fleeher	October 21, 1961
Thelma Sibley Reames	October 21, 1961
J. Jackson Wills	October 23, 1961

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN DIEGO)

On this 23rd day of October, 1961, before me, the undersigned, a Notary Public in and for said County and State, personally appeared JAMES W. TURPIN, MARTHA TURPIN, and J. JACKSON WILLS, known to me to be the persons whose names are subscribed to the foregoing Articles of Incorporation, and acknowledged to me that they executed the same.

WITNESS my hand and official seal.

Notary Public in and for said County and State.

My Commission Expires: Jan 13, 1962

STATE OF KANSAS)
) ss.
COUNTY OF RILEY)

On this 24th day of October, 1961, before me, the undersigned, a Notary Public in and for said County and State, personally appeared PAUL ERWIN FLEENER and THELMA SHIRLEY FLEENER, known to me to be the persons whose names are subscribed to the foregoing Articles of Incorporation, and acknowledged to me that they executed the same.

WITNESS my hand and official seal.

Notary Public in and for said County and State.

My Commission Expires: April 14, 1965

A66770 4.22.68

CERTIFICATE OF AMENDMENT

OF

ARTICLES OF INCORPORATION

FILED
In the office of the Secretary of State
of the State of California
APR 22 1968
[illegible]
Deputy

ROBERT SCANLAND and MARIE WAHL certify:

1. That they are now, and at all times herein mentioned were, the duly elected vice-president and secretary, respectively, of PROJECT CONCERN INCORPORATED, a California non-profit corporation.

2. That pursuant to the by-laws of the corporation, any action required or permitted to be taken by the board of directors may be taken without a meeting, and with the same force and effect as a unanimous vote of the directors, if all members of the board shall individually or collectively consent in writing to such action.

3. That the directors by unanimous written consent without a meeting duly adopted the following resolution:

WHEREAS, it is deemed by the Board of Directors of this corporation to be to its best interests and to the best interests of its members that its Articles of Incorporation be amended as hereinafter provided;

RESOLVED, that Article SECOND of the Articles of Incorporation of this corporation is hereby amended to read as follows:

"SECOND: (a) The specific and primary purpose for which this corporation is formed is to establish, operate and maintain hospitals and out-patient medical clinics exclusively for charitable purposes among people anywhere in the world who are in need of medical care.

(b) The general purposes for which this corporation is formed are to use, own, administer, and manage property (personal real or mixed) which has been donated for charitable or scientific purposes to the corporation for use by it; to administer medical care among the needy people of the world and to educate them, where possible, to take care of their own medical and health needs; to establish, operate and maintain facilities among the needy people of the world for the purpose of administering and supporting medical and health education; to establish, operate and maintain facilities among the needy people of the world for the purpose of administering and supporting primary and secondary schools; and to perform such other acts of a charitable or scientific nature which are in any way related to the above specific, primary and general purposes of the corporation.

(c) Notwithstanding any of the above statements of purposes or powers, this corporation shall not, except to an insubstantial degree, engage in any activities or exercise any powers that are not in furtherance of the primary and general purposes of this corporation.

(d) This corporation will not engage in politic or propaganda activities.

RESOLVED, FURTHER, that the Vice-President and Secretary of this corporation be and they hereby are, authorized and directed to sign and verify by their oaths and to file a certificate in the form and manner required

by Section 3672 of the California Corporations Code, and, in general, to do any and all things necessary to affect said amendment in accordance with said Section 3672."

4. The number of members of the corporation consenting to such amendment is fourteen (14) and pursuant to the amended by-laws of PROJECT CONCERN INCORPORATED, the number of members of the corporation is fourteen (14). The wording of the amended article as set forth in the Written Consent of Members is the same as set forth in the directors resolution described in Paragraph 3 of this certificate.

Each of the undersigned declares under penalty of perjury that the matters set forth in the foregoing certificate are true and correct.

Executed at San Diego, California on February 28, 1967.

Robert Scanland

Robert Scanland, Vice President

Marie Hahl

Marie Hahl, Secretary

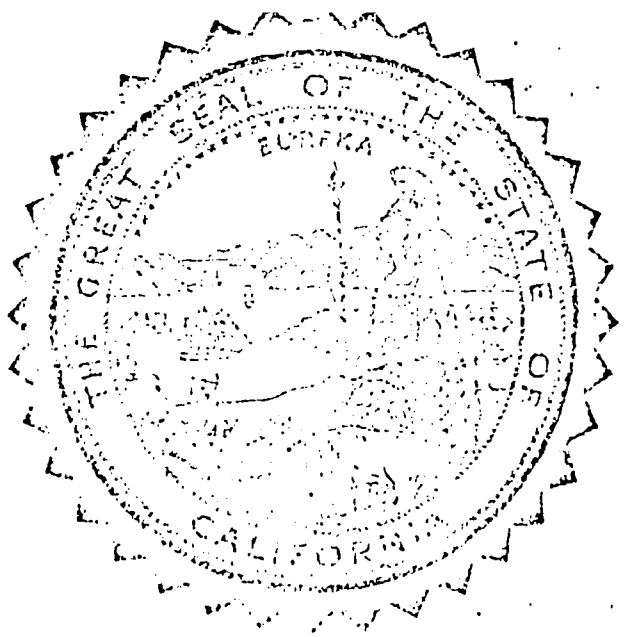
State of California
OFFICE OF THE SECRETARY OF STATE

I, *MARCH FONG EU*, Secretary of State of the State of California, hereby certify:

That the annexed transcript has been compared with the record on file in this office, of which it purports to be a copy, and that same is full, true and correct.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this

SEP 19 1985



March Fong Eu

Secretary of State

241

CERTIFICATE OF AMENDMENT OF ARTICLES OF INCORPORATION OF PROJECT CONCERN, INCORPORATED

ENDORSED
FILED
In the office of the Secretary of State
of the State of California
SEP 12 1980
MARCH FONG EU, Secretary of State
Kathleen P. Gutierrez
Deputy

C. Robert Cronk and Quinn K. Matthewson certify that:

1.) They are the Executive Vice President and Secretary, respectively, of Project Concern, Incorporated (the "Corporation"), a California corporation.

2.) Article I of the Articles of Incorporation of the Corporation shall be amended to read as follows:

"Name"

The name of said Corporation is Project Concern International.

3.) The foregoing amendment of the Articles of Incorporation of the Corporation has been duly approved by the required vote of the Board of Directors of the Corporation and of the members of the Corporation.

C. Robert Cronk
Executive Vice President

Quinn K. Matthewson
Secretary

The undersigned declare under penalty of perjury that the matters set forth in the foregoing certificate are true of their own knowledge.

Executed at San Diego, California, on Sept 10th, 1980.

C. R. Cronk

Quinn K. Matthewson

Compared

U. S. TREASURY DEPARTMENT
INTERNAL REVENUE SERVICE
WASHINGTON 25, D. C.

IN REPLY REFER TO
T:R:EO: 4
TUC

NOV 8 1963

PURPOSE	
Charitable	
ADDRESS INQUIRIES & FILE RETURNS WITH DISTRICT DIRECTOR OF INTERNAL REVENUE	
Los Angeles, California	
FORM 990-A REQUIRED ☐ YES ☒ NO	ACCOUNTING PERIOD ENDING

Project Concern, Incorporated
Post Office Box 2468
San Diego, California 92112

Gentlemen:

Based upon the evidence submitted, it is held that you are exempt from Federal income tax as an organization described in section 501(c)(3) of the Internal Revenue Code, as it is shown that you are organized and operated exclusively for the purpose shown above. Any questions concerning excise, employment or other Federal taxes should be submitted to your District Director.

You are not required to file Federal income tax returns so long as you retain an exempt status, unless you are subject to the tax on unrelated business income imposed by section 511 of the Code and are required to file Form 990-T for the purpose of reporting unrelated business taxable income. Any changes in your organization's character, purposes or method of operation should be reported immediately to your District Director for consideration of their effect upon your exempt status. You should also report any change in your name or address. Your liability for filing the annual information return, Form 990A, is set forth above. That return, if required, must be filed after the close of your annual accounting period indicated above.

Contributions made to you are deductible by donors as provided in section 170 of the Code. Bequests, legacies, devises, transfers or gifts to or for your use are deductible for Federal estate and gift tax purposes under the provisions of sections 2055, 2106 and 2522 of the Code.

You are not liable for the taxes imposed under the Federal Insurance Contributions Act (social security taxes) unless you file a waiver of exemption certificate as provided in such act. You are not liable for the tax imposed under the Federal Unemployment Tax Act. Inquiries about the waiver of exemption certificate for social security taxes should be addressed to your District Director.

Your District Director is being advised of this action.

Very truly yours,

R. J. Stevens

Acting Chief, Exempt Organizations Branch

Department of the Treasury

RECEIVED

SEP 15 1971

Internal Revenue Service
Washington, DC 20224

Date: SEPTEMBER 10, 1971 | In reply refer to: EO:Mc:Lang

PROJECT CONCERN INC
440 WEST "B" STREET
SAN DIEGO CALIF 92112

Gentlemen:

Based on the information you recently submitted, we have classified you as an organization that is not a private foundation as defined in section 509(a) of the Internal Revenue Code.

Your classification is based on the assumption that your operations will be as stated in your notification. Any changes in your purposes, character, or method of operation must be reported to your District Director so he may consider the effect on your status.

Sincerely yours,

J. A. Nelson

Chief, Rulings Section
Exempt Organizations Branch

FORM M-0714 (6-70) (CONTINUOUS)

D-15

JOINT PVO/UNIVERSITY
RURAL DEVELOPMENT CENTER
Western Carolina University
Cullowhee, N.C. 28723
(704) 227-7492

AN ALLIANCE OF UNIVERSITIES AND PRIVATE AND VOLUNTARY ORGANIZATIONS TO BETTER SERVE THE NEEDS OF RURAL PEOPLE.

JOINT PVO/UNIVERSITY RURAL DEVELOPMENT CENTER

CAPABILITY STATEMENT

The Joint PVO/University Rural Development Center (Joint Center) is a nonprofit organization dedicated to the collaboration of universities and private and voluntary organizations (PVOs) involved in rural development, especially in the international field. By bringing together these two communities in complimentary relationships, the efforts of each are strengthened. The Joint Center performs specific work in collaboration for development.

Under an agreement with Western Carolina University, the Joint Center is housed and administered by the Center for Improving Mountain Living (CIML). CIML is organized into five divisions--namely, International Programs, Human Resource Development, Leadership Development, Economic Development, and Natural Resources Management. The Joint Center has access to this wide base of experience and professional expertise.

The Joint Center is controlled by a Governing Board made up of the four chief executive officers of CARE, Church World Service, Lutheran World Relief, Christian Children's Fund, and the former executive director of the American Council of Voluntary Agencies in Foreign Service; and the five chancellors or presidents of Appalachian State University, North Carolina A & T, Virginia Polytechnic and State University, Western Carolina University, and the University of Georgia. Institutional members--that is member universities, PVOs, and centers of specialized development expertise, now number fourteen with other institutions under consideration as the Joint Center develops.

One of the major assets of the Joint Center is its experienced staff. The executive secretary of the Joint Center and also CIML's director, a former executive with one of the largest PVOs, has been active on the BIFAD Joint Committee on Agriculture Development (JCAD), is the university's Title XII officer, and has worked in the international development field for 25 years. He maintains a deep commitment and a personal involvement with all program activities at CIML. The associate director for International Programs has recently completed a five-year assignment

as Peace Corps country director in Micronesia and Fiji. She has also had extensive experience in rural development in the U.S. The staff includes the former dean of the College of Agriculture at the University of Georgia and a rural development specialist whose experience rests with project design, evaluation, and administration. Both serve as research fellows. The staff is completed by the short-term training coordinator.

The offices of the Joint Center are located in the Bird Building at Western Carolina University. Computer facilities, editorial services, conference facilities, publication production, data analysis, program development, implementation, and evaluation are all available at the Joint Center.

Experience and Vision

Founded only four years ago, the Joint Center is growing at a rapid rate. More and more PVOs and universities are seeking assistance from and contributing expertise to the Joint Center. Described by many as "an idea whose time has come," the Joint Center has developed with surprising speed as the ideas have grown to projects and support services for the collaborative initiatives forthcoming from its constituents. Activities presently include a water harvesting/aquaculture project developed in collaboration with the International Center for Aquaculture of Auburn University, several PVOs including CARE, Lutheran World Relief, and the Cooperative League of the USA, the Women in Development Office of SECID, and the US Agency for International Development.

Exchanges between university faculty members and the field staff of PVOs have been implemented with both communities gaining from the exchanges. Training in water harvesting has been given in collaboration with the International Center for Aquaculture at Auburn University. Practical hands-on training in environmental health has been given to African students from Uganda and Ethiopia. This training was given in the rural areas surrounding the Joint Center offices. Consultative services have been provided by the Joint Center for several international PVOs as well as to indigenous PVO beneficiaries. Assistance in the development of village health programs was provided to Project Concern International in the countries of Somalia, Surinam, and others. A coffee growers cooperative in Guatemala benefited from an in-depth evaluation of the additional agricultural opportunities possible for the coffee growing coops. Seminars and meetings have been held at the offices and proceedings have been published. A Volunteer Consultant Pool has been formed to provide university experts in a wide field to PVO projects at the cost of travel and per diem only.

The Future

Many programs are in the developmental stages at this time. Programs being considered for funding by foundations and other funding sources are:

Central American Agricultural Training Program

The Pan American Agricultural Training Center in Tegucigalpa, Honduras, to provide training to PVO staffers, village leaders, women in development leaders, secondary school teachers, and extension

workers. This Center will provide short-term practical training in a variety of areas to provide technical knowledge and supportive services to PVO efforts in the Central American countries of Guatemala, Honduras, El Salvador, and Nicaragua.

Indigenous Talent for African Development

ITAD is a program to provide training and initial support for African students returning to work in the development of their own or other African countries. It is primarily a development tool to provide PVOs working in Africa with skilled, professional, indigenous talent for their work.

Centers of Specialized Expertise

This program provides program development funds to expand the collaboration between PVOs and selected universities or centers with specialized development expertise through defining the needs of PVOs working in development, and identifying and involving the appropriate center of specialized expertise in responding to those needs.

Education and Training of US Students for Effective Service in Developing Countries

This project will involve the Joint Center, Western Carolina University, and other associated universities to plan an undergraduate program to prepare students for service in the developing world.

To summarize, the Joint Center has the capability of bringing together diverse but complimentary strengths from a wide variety of sources to provide strong technical support and expertise to rural development projects as well as to provide personnel and management service to these projects. Each member of the Joint Center is a strong development agent alone. Together with the other members, additional strength is given and expert service provided.

V. RECURRENT COST IMPLICATIONS

This is under study and the section will be completed at a later date.

VI. EVALUATION PLAN

PCI has developed a set of guidelines for the evaluation of primary health care programs currently in operation around the world. From these broad guidelines, PCI will design an evaluation plan tailored to measure specific program activities in the lower Jubba.

VI.1. GENERAL GUIDELINES

PCI's evaluation guidelines are based on an understanding and commitment that an evaluation system for primary health care projects should provide answers to these questions.

a. What is being or has been done (immediate: 6 months- 2 years) focuses on completion of activities according to stated targets and objectives.

b. What effect has this had on the quantity and quality of health services and the behavioral changes PCI is concerned with? (intermediate: 2-5 years)-- focuses on health services and behavior objectives and measures the appropriateness of the project to the development of a functioning PHC system or components of the system.

c. Finally, what impact have changes in health services and behaviors had on health status in the target population? (long term: 5-10 years)--measures trends and changes in morbidity, disease prevalence, mortality, etc. that are generally attributable to an effective PHC system functioning over time.

Actual selection and adaptation of indicators depends upon the scope of a program and the feasibility of collecting and processing the data required.

Our ability to develop and implement an evaluation system that answers these questions is affected by duration, scope of program involvement, and by the nature of PCI's relationship to a collaborating agency or entity in a given country program.

Duration of PCI involvement in a program is particularly relevant to information and evaluation goals. In general, PCI's program involvement ranges from two to five years, or the time needed to establish a demonstration system, to supervise and monitor it for a given period, to make needed modifications, and to turn it over to the collaborating agency for continuation and replication. Thus our program evaluation guidelines have been devised to encompass change at various stages in the change process, both during and after direct PCI involvement.

The scope of PCI's involvement in program implementation and the nature of our relationship to controlling and collaborating entities also have a profound effect on the evaluation criteria for individual programs. While we may not always be in a position to control the information and evaluation design in the projects we assist, PCI field staff have input into that design. They are responsible for assuring that adequate attention is given to monitoring activities and that factors related to the componets in which PCI is involved are considered and measured by the monitoring and evaluation system.

To ensure that the specific evaluation plan designed for the Lower Jubba program is on target and to validate the monitoring and evaluation indicators being utilized, PCI will hold annual evaluations and planning workshops in Somalia. At these workshops, PCI's field staff, key counterpart co-workers, a member of PCI's headquarters staff, and an evaluation consultant will come together to discuss the year's progress and plans for activities in the subsequent cycle. Program goals, project activities and specific monitoring systems will comprise the basic agenda at these workshops.

VI.2. SUGGESTED SPECIFIC MONITORING AND EVALUATION INDICATORS

a. Monitoring Project Activities

Level: Immediate-Target accomplishment (6 months-2 Years)

These activities or project components are concerned principally with training and subsystem development and CHW activities. They include such things as training and orientation of host country health staff, training of CHWs, TBAs, and other health auxiliaries, training of trainers and supervisors, health subsystems, and the curative, promotive, and preventive health activities of community health workers.

Monitoring would also include assessing completion of tasks in preparation for the key activities selected. For example, pre-training tasks include defining objectives of the training, curriculm development materials preparation, etc. Many tasks involved in PHC development cannot be specifically highlighted but it should be understood that monitoring of these tasks is also an important part of the evaluation responsibility.

The quantifiers are either in terms of activities completed, numbers of activities, population served, or service units provided.

b. Monitoring and Assessment of Skill Proficiencies and Performance of CHWs, TBAs, or Other Health Providers Level: Immediate and Intermediate (6 months- 2 to 3 years)

Although the skills of health workers vary with the services to be provided, which also vary with the morbidity pattern of a given area, community and auxiliary health workers are generally required to: work with and promote community involvement; recognize and treat specific disease entities; to promote prevention of disease through behavior change; plan and report their activities to supervisors.

The indicators below reflect the key knowledge and most important tasks which CHWs and other auxiliary health workers must carry out. They are expressed in terms of numbers of activities, knowledge retention, percentage estimates of proficiency, completion of tasks, numbers of people served or covered, percentage of population covered, etc. Assessment takes place periodically at intervals throughout the project through pre and post testing, supervisors' reports, CHW reports, clinical observation, field visits, etc. Not all indications in the list below will be used. Some specific indicators may have to be developed for nomadic.

1. Knowledge of Specific Diseases/Treatment

(a) Recognition of symptoms

(b) Drug prescription and treatment

(c) Understanding reasons for illness

(d) Following proper referral procedures

(e) Proper supervision and follow-up of cases

(f) Knowledge of aseptic delivery techniques (TBAs)

(g) Referrals of complicated pregnancies (TBAs)

(2) Nutritional Surveillance

(a) Ability to use scales, arm circumference, Road-to-Health charts

(b) Recognition of nutritional problems

(c) Treatment and referral of malnutrition cases

(3) Dehydration

(a) Knowledge and use of sugar-salt solution and oralite packs

(b) Demonstration mixing of sugar-salt solution

(4) Promotive and Preventive Health Services

(a) Health and nutrition education work - content, sessions, numbers reached

(b) Operation of nutrition programs, MCH, under-fives clinics

(c) Environmental sanitation projects - numbers, type, population served, percentages of population covered

(d) Immunization - number served, type, percentages of at-risk population covered

(e) Information and reporting of activities - compliance, accuracy

(5) Condition of Health Post or Facility/Equipment

(a) Clean, tidy

(b) Drugs organized, labelled, stock maintained

(c) Supplies and equipment maintained

(d) Record keeping - records maintained, accuracy

(6) Development of Village Health Committees or Equivalent

(a) Established and functioning

(b) System of local support for CHWs established and maintained

(c) Community health project activities started/completed

(7) Staffing/Attrition Rate of CHWs

(a) Number and percentage of communities staffed

(b) Number CHWs remaining on job, length of service, dropout rate

c Institutionalization of Primary Health Services Level: Immediate/ intermediate - (1 to 5 years)

In order to develop a system of health care which will be continued and replicated, considerable attention must be given to supply, supervision, planning, financial management, and information and evaluation subsystems. These may be grouped or further divided as required but in essence the goal is to develop capacity within the MOH or other health levels for executing institutional support and maintenance of the types and levels of service created or reinforced by the PCI program.

Although we have found that PCI has become increasingly involved in the development, reorganization, or refinement of subsystems, this is not true in all cases. Where the latter is the case, a program will not attempt to evaluate the effectiveness of each subsystem but will consider the effect of the various subsystems on the results of PCI assisted activities.

Besides administrative and support subsystems, PCI is also concerned with continued support for a program and future replication As such, we will attempt to measure information transfer and policy changes as they occur.

(1) Training and Supervision

(a) Extent of counterpart involvement in training

(b) Adoption of recommended training methods

(c) Curriculum - suitability of content, ratio of pratical/demonstration to theory/lecture

(d) Upgrading, continuing training, in-service training

(e) Extent of counterpart involvement in supervision, competence in executing tasks

(2) Support for Primary Health Care

(a) Budget for PHC - current level, trend, adequacy

(b) Personnel - numbers, adequacy, potential for skill development

(c) Adequacy of other support - transport, supply, equipment, infrastructure, etc.

(3) Use of Protocols, Procedures, Maintenance of Subsystems

(a) Understanding and compliance--tested at different intervals and levels after training and development

(b) Subsystems Functioning

i) Drug Supply

ii) Information/Reporting

iii) Supervision

iv) Equipment

v) Transport

vi) Other

(4) Community Organization and Participation

Community organization is not treated as an end in itself but as the means to activate community involvement and participation in health care. The goal of community organization in PHC is to mobilize existing manpower and resources in the community, and to develop community leadership ability and channels of communication which will allow for the continuation of this involvement over time.

Community health organization and involvement flows from the community but is also stimulated by the activities of the CHW, health supervisors, and other government workers at the community level. It cuts across various aspects of the entire PHC program.

We believe it is more appropriately considered under institutionalization than as a separate category.

Measurement of community organization and its results is a difficult task. Among the indicators of institutionalization and vitality are the ability of the community to carry out tasks such as selecting CHWs, providing support for CHWs, supervising CHWs, support of community health projects, and plans and actions taken to improve community health.

d. Rural Development / Sectoral Component

Although the provision of health services is principally the responsibility of the Ministry of Health, the maintenance of health has much wider implications and is dependent on the quality of life of the population. Health care programs cannot, by themselves, effectively improve the health conditions of the people. The promotion of health is dependent in large measure on other social and economic programs which focus on land, food, education, housing, accessibility of roads, and communications. Multi-sectoral coordination must therefore be actively pursued to ensure that limited resources are used in the most effective way.

Project Concern's primary health care program, while unable to excercise direct control over inter-sectoral cooperation, still can serve as a catalyst to strengthen the already existing spirit of working together which the survey team found in the interior districts.

Rural development activities such as the construction of water catchment basins, road improvement, small gardens, etc., will be used as the foci for bringing together human and material resources from diverse sectors to impact on the health of the people of Lower Jubba.

The evaluation plan for Somalia will incorporate a component which focuses on fostering multi-sectoral cooperation. But because the achievement of such collaboration is a subject to a great many factors over which neither PCI nor the Ministry of Health can exercise governance, specific targets and goals can best be identified through a process which invites input from other sectoral authorities.

e. Impact on Health Status Level: Intermediate/Long Term - (2 to 5 to 10 years)

Significant impact on health status, especially where preventive strategies are employed, may not be detected except on a long-term basis. Changes in attitudes and practices necessary for improved health take place slowly over time and are difficult to measure. The suggested indicators in this section are designed to measure trends in the incidence of diseases, morbidity and mortality, in the population reached by the program. This sets the stage for evaluation at a later date of the program's impact on health status in the general population as PHC coverage expands.

PCI will rely on data collected on a routine and systematic basis during and beyond the initial development of the PHC system such as monthly activity reports, supervisors' reports, village site visits. Another important source of data for PCI will be benchmark surveys. Benchmark surveys are samplings in representative villages of key disease indicators.

Benchmark surveys are not as extensive as baseline surveys and do not generally obtain as much family background and socio-ecomonic data. They are a more manageable survey tool than baseline surveys and more focused, but, like baselines, they are conducted to establish the levels of specific disease prevalance and to identify the characteristics of the target population most likely to affect health status.

The disease and mortality indicators in the attached page relate to the disease entity symptoms which CHWs and other auxiliary health care workers are taught to recognize, treat, and refer. For example, the disease category malaria/fevers is used rather than malaria because malaria needs to be clinically verified by a blood smear and analysis and this is not going to be possible in most PHC programs. At the same time, a significant number of the fevers detected and treated by CHWs will be malarial. A reduction in the total cateogory over time will indicate improvement in health status as regards this generalized disease category. Similarly, diarrhea is for our purposes a more trackable disease symption than gastroenteritis or some other specific disease. The same is true for the various types of worm caused diseases (hookworm, roundworm, pinworm, etc.). Upper respiratory illnesses are optional, not because they are not important but because they are encountered in such a range from mild to severe and with such frequency. It seems an unnecessary complication.

What the indicators loose in clinical accuracy they gain in feasibility of data collection.

Disease Symptom Enitities	Assessment Methods		
	Bench mark	CHW Reports;	Repeat Bench mark;
	CHW Data	Supervisors Reports	Analysis of Reports
Times:	Before	Trends	After

(1) Malaria

(2) Schistosomiasis

(3) Anemia

(4) Diarrhea

(5) Worms

(6) Malnutrition

(7) TB

(8) Fetal Death

(9) Infant Deaths

g. Cost Factors

Cost factors are important in program evaluation. They, of course, help implementing and donor agencies know if the program is living within financial plans and generating satisfactory results from the funds expended. Some cost comparison techniques can be very revealing and provide, for example, support for why a PHC outreach program is preferable to the clinic-based one. Moreover, because PCI primary health care projects frequently support innovative interventions and undertake demonstrations of PHC, attempts at expansion or scaling-up usually follow. To know whether a program is replicable and affordable on a larger scale, costing must be a integral part of the program.

PCI will attempt to provide relevant cost data relating to PCI program expenditures, community and counterpart inputs, total program costs for training and PHC development. We will also attempt to provide data in terms of cost efficiency and cost effectiveness. The actual methods are to be worked out.

PCI, through its PHC training and development programs, undertakes projects that build local capacity, that are replicable, and sustainable by host governments, local communities, and other organizations after PCI assistance has ended. Collection and analysis of cost data is essential to the achievement of these objectives.

VI.3. Conclusion

While the monitoring and evaluation strategy discussed above is based on recent experience, it may require some modification when applied to the Lower Jubba. We do think it provides a workable framework for assessment of the activities and expected outcomes of PCI Primary health care training and development projects.

PCI plans to assign an evaluation/information specialist to the project in Lower Jubba. This individual will be responsible for the monitoring of the district based PHC projects. In addition PCI is strengthening its own monitoring and evaluations capabilities. PCI is firmly committed to successfully implementing its monitoring and evaluation strategy.

APPENDIX 1

MOH SALARY INCENTIVE RATES FOR SERVICE IN PRIMARY HEALTH CARE PROGRAM

JAMHUURIYADDA DIMUQRAADIGA SOOMAALIYA
WASAARADDA CAAFIMAADKA

9 Oct. 1983

WC/WK/1/4-5057

Ujeeddo: Habka Gunno siinta shaqaalaha Caafimaadka ee lagu soo wareejiyey Barnaamijka DCA.

KU: MAAMULAHA BARNAAMIJKA DCA,
X A M A R.
OG: AGAASIMAHA GUUD W/CAAFIMAADKA,
X A M A R.
WASAARADDA SHAQADA IYO ARRIMAHA BULSHADA,
X A M A R.
XISAABIYAHA BARNAAMIJKA DCA,
X A M A R.

"""""""""""

Waxaa la idiin farayaa in aad Shaqaalaha Caafimaadka ee lagu soo wareejiyo Barnaamijka Daryeelka Caafimaadka Asaasiga ah aad ku gunnosiisaan sida hoos ku qoran.

1.	General Manager PHC	3.500
2.	Deputy Manager	2.000
3.	Secretary of the Project	1.000
4.	Regional Medical Officer	1.000
5.	PHC Co-ordinator	1.500
6.	District Medical Officer	800
7.	Director of the Training School	800
8.	Director of Drug & Equipment Depart	2.000
9.	Enjineer	2.000
10.	Tutor,	700
11.	Midwife, Sanitarian, PHN, & Lab.Tech.,	600
12.	Administration Director	600
13.	Director Health Office	750
14.	Mechanic Sare	1000
15.	Driver	600
16.	Clerk from the Port	550
17.	Store-keeper,	500

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18. Statistic,.....500
19. Typist,.....400
20. Asst. Store--Keeper,.....400
21. Watchman,.....300
22. Technicaan,.....400
23. Asst. Mehhanic,.....400
24. Administration Officer,.....1,200
25. Cashier.....500 Risk and 600 Allow...1,100
26. Janitor,.....300
27. Gardener.....300
28. Asst. Statiscian.....400
29. Farmashiste,.....600
30. Training Officer.....1,200
31. Personel Officer.....1,200
32. General Service Officer.....1,200
33. Statistics & H. Officer.....1,200
34. Assistant Officers.....1,100
35. Office Messengers..... 500
36. Welding 600

KU-XIGEENKA WASIIRKA W/CAAFIMAADKA
Dr. CABDIRASHIID SHEEKH AXMED

/GUYGW/.-

APPENDIX 2

MOH JOB DESCRIPTIONS FOR THE PRIMARY HEALTH CARE PROGRAM

JOB DESCRIPTION

Duties and Responsibilities of the Office of the Regional(PHC Coordinator).

- Directly responsible to the National PHC Office Unit HQ.
- Work in close conatct with the International PHC Medical Officer.
- Representing with the Regional Health Coordinator the Ministry of Health in the Regional developing committee.
- To implement with the Regional Health Centre (RHC) plans for an adequate referral system as an inherent component of the health infrastructure.
- To manage the PHC Programme in the Regionalso that a structure is established and developed for the delivery of PHC to the grass root of communities among nomads, rural settled and urban areas in the region.
- To organize at the Regional level the logistic support, drugs supplies and equipment, and to ensure the follow of the adequate logistic support, drugs, supplies to all the district Health Centres, PHC Units, PHC Post and to the Nomadic, and to keep records on that.
- To finalize the yearly requirements of drugs, supplies and equipment for all PHC levels to be submitted to the PHC Unit HQ.
- To keep records on the administrative infrastructure of the Region District-Zones, and Health Information System.
- To insure the proper maintenance and repairs of the programme vehicles.
- To prepare and manage properly all accounts of the Programme and submit quarterly reports to PHC HQ.
- To prepare the Annual Budget proposal for the Region to be submitted to PHC HQ.
- Responsible for advocacy of PHC to the Political leaders, Governmental Civil service and Community leaders at all levels, and with the District PHC Coordinators to arrange for the orientation meetings, for the discussions of all health matters, health care services to be implemented at all levels, the selection of the CHWs their training, timing, place, and the support needed by the community, the
- To plan and participate with all District PHC Coordinators for the training programmes of the Regional, Dishricts PHC Staff, CHWs and TBAs, inservice training orientation workshop for all health personnel.

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- Responsible for implementing the Health Education and Public Information Programmes in the Region
- Responsible for the flow of monthly, quarterly, yearly reports from all levels to the Region and from the Region to PHC Unit HQ.
- To investigate any outbreak and take the necessary control measures reported from any district and report to HQ.
- To develop and implement sanitation activities at all levels of PHC.
- To supervise the activities of all the vertical public health Programmes in the Region which will lead to the gradual integration.

Qualification:

Physcian with minimum of two years experience with MOH.

- Leadership ability and motivated to promote PHC philosophy.
- English language skills required.
- Willingness to work and live in a Rural Area.

JOB DESCRIPTION

Regional Training Officer (RTO)

The Regional Training Officer (RTO) will be assigned to a Region where he will work under the Direction of the Regional PHC Coordinator with a Regional Training Team (Mid-wife, Nurse, Sanitarian, and Lab Technician). This Team is responsible for all aspects of CHW and TBA Training and supervision within the Region.

Specific Duties include:

1. Responsible for the recruitment of CHW/TBA candidates following selection criteria and procedures developed by PHC/MOH.
2. Responsible for selection of Health Post locations in cooperation with the village committee following criteria and procedures developed by PHC/MOH.
3. Responsible for organizing CHW/TBA training at PHCU/District Health Center locations by instructor-trainers following criteria and procedures developed by PHC/MOH.
4. Responsible for the development of training and supervisiory schedules for CHWs/TBAs at PHCU/District Healhh Center locatations and the Posting of these schedules in the appropriate place.
5. Responsible for the supervision of CHW/TBA Training in the Classroom. Supervision in the development of Community organizational and leadership skills through the active planning and participation in community projects, supervision in the development of additional communication skills through the Posters and Visual Aids.
6. Responsible for acting as team leader in carrying-out PHC activities at all levels in the Region.
7. Responsible for submitting requests from various levels to the Regional PHC Coordinator.
8. Responsible for insuring the proper utilization of supplies according to procedures and criteria developed by PHC/MOH.
9. Coordinate and supervise inservice training of District/PHCU instructor-trainers with appropriate MOH/PHC Officials.
10. Coordinate and recommend candidates from the field for additional opportunities in Country and Abroad. Example, third Country training.
11. Develop, schedule and coordinate W/Shops and Seminars to meet PHC Training requirements for the Region.
12. Report progress and problems to PHC Director through RPHC Coordinator.
13. Assist in the preparation of the quarterly reports and periodic evaluations as required according to procedures developed by PHC/MOH.
14. Assist EPI AND other type Vertical Programs operating in the Region.

15. Assist in the certification of CHWs and TBAs and suggest appropriate methods to recognize village committees and other individuals at the village level for outstanding contributions towards the development of a PHC system in the Region.

Qualifications: Qualified Health Professional with a minimum of two years training experience with MOH. Proficiency in English. Qualified to take additional third Country Training in Primary Health Care concepts, leadership ability and willingness to work and live in a Rural Environment.

June, 1984.

/GUYOW/

JOB DESCRIPTION FOR A DISTRICT PHC TEAM LEADER.

The team leader will be selected by the district Medical Officer from among the four team members, the district PHC Nurse, Sanitarian, Midwife, and Lab. Technicann.
The team leaders will be responsible for the duties listed here in addition to her/his responsibilities as a team member.

Management.

- Reports directly to the district Medical Officer with whom he/she meets regularly.
- Is in charge of the District Primary Health Care Team.
- Assesses the needs of the District Health Centre, PHCUs and health Posts for drugs and other supplies. Orders and distributes them as necessary.
- Insures that the set objectives and plans are implemented and that the implementation is evaluated.
- Insures that the necessary arrangments have been made and implimplemented to conduct immunization within the district.
- Is responsible for cold chain maintenance.
- Organize leaves and holidays within his/her district for the final approval of the district Medical Officer.

June, 1984

JOB DESCRIPTION FOR A DISTRICT PRIMARY HEALTH CARE NURSE (PHN)

Qualification:

A qualificate nurse that has been trained in a Primary Health Care Training Centre.

Community Orientation and Mobilization.

- Meets with Village Leaders and Government Authorities to explain PHC and the CHWs/TBAs role in the Village.
- Assists Villages to select a village health Committee and a CHW/TBA to assess the needs and set the health priorities of the village.
- Serves as a liaison between the village and the district and Regional health facilities.
- Teaches communities about the importance of immunization and mobilised them to participate.

Management.

- Supervises the work of the staff of the PHCU or Health Post in his/her area of responsibility.
- Sets objectives, plans for the health needs and evaluates the results in his/her area of responsibility.
- Formulates a plan for running immunization programmes within district
- Maintains records as required.
- Prepare reports as required
- Follows policies as laid dorm as required.
- Serves as a liaison between the village/PHCU and other health Programmes such as EPI, TB, Malaria and etc.
- Assists in integrating PHC activities with the vertical Programmes such as EPI, TB, Malaria, and etc.
- Participates in the performance evaluation of CHWs/TBAs and PHCU staff while in training as well as on the job.
- Responsible to the district PHC team leader.
- Reports to the district PHC team leader
- Requests from the team leader supplies for the PHCUs and CHWs and distributes them as necessary.
- Gives advice to staff and community on problems related to work.
- Provide personnel reports as required.

Professional.

- Organized and takes part in initial in-service and practical training programmes for personnel of the district Health Centre, PHCU, and Health Post.
- Assists in field training of students and assesses their competency.
- Educates the community on the prevention of the spread of communicable disease along with other members of the health team.
- Takes the appropriate actions to control communicable disease outbreaks.
- Visits the PHCUs or Health Posts in order to provide in-service training of all health staff.
- Assists PHCU staff or H. Post volunteers in designing a health education and preventive care programme appropriate to the needs of the Village.
- In cooperation with the staff of the TB Programme, plans and implements a preventive and curative programme for TB.
- Accepts referrals from health posts and PHCUs for children and adults where problems are beyond the competency of the CHWs and auxiliaries.
- Refers cases with which he/she is not competant to treat to the DMO.
- Treats emergencies that arise in his/her speciality.
- Attends in-service training programmes in order to keep his/her own knowledge up to date.
- Reports his/her own personal problems which affect the job to the district PHC team leader.

JOB DESCRIPTION FOR A DISTRICT PHC MIDWIFE.

A Qualificate Midwife that has been trained in a Primary Health Care Training Centre.

Community Orientation and Mobilization

- Meets with village leaders and government authorities to explain PHC and the CHWs/TBAs role in the village.
- Assists villages to select a village health committee and a CHW/TBA, and supports the committee in its role of supervising the CHW/TBA.
- Assists the village health committee, the village leaders, and the CHW/TBA to assess the needs and set the health priorities of the village.
- Serves as a liaison between the village and the district and Regional health facilities.
- Teaches communities about the importance of immunization and mobilizes them to participate.

Management.

- Supervises the work of the staff of the PHCU, or Health Post in his/her area of responsibility.
- Sets objectives, plans for the health needs and evaluates the results in his/her area of responsibility.
- Formulates a plan for implementing the immunization programme in the district in cooperation with other member of the district team.
- Maintains records as required
- Follows policies as required
- Serves as a liaison between the village/PHCU and other health programmes such as EPI, TB, Malaria and etc.
- Assists in integrating PHC activities with the vertical programmes such as EPI, Malaria, TB and etc.
- Shares in the performance evaluation of CHWs/TBAs and PHCU Staff while in training as well as on the job.
- Responsible to the district PHC team leader.
- Reports to the district team leader.
- Supervises the organization of MCH activities within the district.
- Requests from the team leader supplies for MCH activities and TBAs and distributes them as necessary.

- Gives advice to staff and community on problems related to work.
- Provides personnel reports as required.

Professional.

- Organizes and takes part in initial, and in-service practical training programmes for personnel of the district health Centre/ PHCU, and Health Post.
- Assists in field training of students and assesses their competency.
- Educates the community on the prevention of the spread of communicable diseases along with other members of the health team.
- Takes the appropriate actions to control communicable disease outbreaks.
- Visits the PHCUs and health Posts in order to provide in-service training of all health staff.
- Assists PHCU staff or Health Post Volunteers in designing a health education and preventive care programme appropriate to the needs of the Village.
- Teaches and supervises others in the implementation of improved methods of antenatal, delivery and postnatal care.
- Accept referrals from health posts and PHCUs for those mothers and children whose problems are beyond the competency of the TBAs and auxiliaries.
- Trains CHW/TBAs and other health staff about the value of immunization, and how to organize and perform vaccination programmes.
- Provides help and advice for women attending the MCH Centres where there are no other staff to assume this responsibility.
- Refers cases with which she is not competant to treat to the district medical Officer.
- Treats emergencies that arise in her speciality.
- Attends in-service training programmes in order to keep her own knowledge up to date.
- Reports her own personal problems which affect the job to the district PHC team leader.

JOB DESCRIPTION FOR A DISTRICT PHC SANITARIAN.

Qualifications:

A Qualified sanitarian trained in a Primary Health Care Training Centre.

Community Orientation and Mobilization.

- Meets with Village and government authorities to explain PHC and the CHWs/TBAs role in the village.
- Assists villages to select a village health committee and a CHWs/TBAs and support the committee in its role of supervising the CHW/TBA.
- Assists the village health committee, the village leaders and the CHW/TBA to assess the needs and set the health priorities of the village.
- Serves as a liaison between the village and the district and Regional health facilities.
- Teaches communities about the importance of immunization and mobilizes them to participate.

Management:

- Supervises the work of the staff of the PHCU, or Health Post in his/her area of responsibility.
- Formulates a plan for implementing immunization programmes in the district in cooperation with other members of the district team.
- Maintains records as required
- Prepares reports as required
- Follows policies as required.
- Serves as a liaison between the village/PHCU and other health Programme such as EPI, TB, Malaria, and etc.
- Assists in integrating PHC activities with the vertical programmes such as EPI, TB, Malaria, and etc.
- Shares in the evaluation of the performance of CHWs/TBAs and PHCU Staff while in training as well as on the job.
- Responsible to the district PHC team leader.
- Reports to the district PHC team leader.
- Requests from the team leader supplies for environmental sanitation and distributes them as necessary.
- Gives advice to staff and community on problems related to work.

- Provides personnel reports as required.

Professional:

- Organized and takes part in initial in-service and practical programmes for personnel of the district Health Centre and PHCU, and Health Post.
- Assists in field training of students and assesses their competency.
- Educates the community in the prevention of the spread of communicable diseases along with other members of the health team.
- Takes the appropriate actions to control communicable disease outbreaks.
- Visits the PHCUs and health Posts in order to provide in-service training of all health staff.
- Assists PHCU Staff or Health Post Volunteers in designing a health education and preventive care programme appropriate to the needs of the village.
- Plans clean-up campaigns to be implemented by CHWs and other sanitation.
- Teaches communities and other health staff in the district about the importance of clean water, sanitation and the digging of latrines and insures that CHWs and other sanitarians implement these programmes.
- Chooses proper sites for rubbish disposal, and the slaughtering of camels, sheep, and goats etc.
- Supervises all personnel engaged in inspecting tea shops, markets and slaughterhouses, and provides advice on the importance of good hygiene in these public places.
- Explain to the community and other health staff the importance of proper food storage and protection.
- Attends in-service training programmes in order to keep his/her own knowledge up to date.
- Reports his/her personal problems that affect the job to the district PHC team leader.

JOB DESCRIPTION FOR A DISTRICT PHC LAB. TECHNICIAN.

Qualification:

A qualificate Laboratory Technicianttrained a Primary Health Care Training Centre.

A person who has taken a course for laboratory technicians and who has reached a standard of competency to fulfill the job.

Management:

- Responsible to the regional laboratory technician.
- Reports to the regional laboratory technician.
- Prepares the laboratory in such a way that the work carried.
- out there is of a high standard and reliable results are obtained.
- Prepares records and reports as required.
- Works with vertical programmes as necessary
- Assesses the needs for the laboratory equipments, reagents & etc.
- Prepares orders for laboratory equipments & supplies.

Professional:

- Carries out tests on various specimens according to the required standard.
- Takes part in in-service training for community health workers and traditional birth attendants when their work concerns the collections of specimens.
- Refers specimens to the regional Lab. Technician as required.
- Attends in-service training programmes in order to keep his/her own knowledge up to date.
- Reports his/her personal problems that affect the Job to the district PHC Team Leader.

June, 1984.

JOB DESCRIPTION FOR THE COMMUNITY HEALTH WORKERS (CHW)

Qualification:

Capable to undertake or has under taken a period of training in community health work and has attained a standard of competency to perform the job.

Management:

Responsible to the person in charge of the Primary Health Care Unit/~~DOH~~/DHC

- Reports to the same person.
- Assesses community needs with the community.
- Organises a plan of work in the community.
- Plan on-going education for and with the community.
- Requests supplies from the DHC/THCU as necessary.
- Maintains records and reports as required.
- Seeks assistance from outside authorities when necessary
- Evaluates the health services in the village in conjuction with the community.

Professional.

- Organise and conduct the following health services in the community to which he/she has been assigned.
- Teaches the community about the importance of good nutrition and how to achieve it.
- Explains the importance of good personal and environmental hygiene and how to achieve it.
- Makes home visits for case finding and follow-up.
- Makes home visits for eduction.
- Advises the mothers on how to care properly for children .
- Teaches children in school about personal hygiene.
- Inspects children in school for infection, infestation, malnutrition, anaemia, & etc.
- Treats minor ailments
- Refers cases as necessary to the DHC/THCU.
- Works with Vertical Programmes for the prevention of tuberculosis, malaria, schistomoiasis and the EPI Programme etc.
- Performs immunization and assists in organizing the community for immunization.
- Attends in-service training programmes to keep knowledge up to data.
- Discusses with the person in charge at the THCU any personal problems that may arise.
- Notifies the person in charge if personal changes take place.

JOB DESCRIPTION FOR A TRADITIONAL BIRTH ATTENDANT (TBA)

Qualification:

Capable to undertake or has experience as a TBA and is willing to undertake a course to improve her previous skills, and has the competency to perform the Job.

Management:

- Responsible for reporting to the person in charge at the DHC/ .PHCU.
- Assesses community needs with the community in the area of MCH.
- Organizes a plan of work in the community to improve maternal and child health care.
- Plans on-going education for and with the community in the field of MCH.
- Requests supplies from the DHC/PHCU as necessary.
- Maintains records as required.
- Seeks assistance from outside authorities when necessary.

Professional:

- Finds the pregnant women in the area for which she is responsible.
- Progides antenatal, delivery and postnatal care.
- Cares for the new-born until the age of one year.
- Conducts home visits and group discussions on improved methods of health practices.
- Gives immunizations and assists in organizing the community for children up to five years.
- Treats some minor ailments.
- Attends in-service training programmes to keep her own knowledge up to date.
- Discusses with the person in charge at the DHC/PHCU any personal problems that may arise in her job or her private life which may affect her job performance.

APPENDIX 3

LIST OF SITE VISITS

LIST OF SITE VISITS

A. Afmadow District

1.	Afmadow	Town	(District Capital)
2.	Hayo	Village	(Beel)
3.	Liibooye	Town	(Beel)
4.	Qooqaani	Town	(Beel)
	a. Taabdo	Village	(Tuulo)
	b. Cag Libaay	Nomadic settlement, range station	

B. Baadhadhe District

1.	Baadhadhe	Town	(District Capital)
2.	Kambioni	Town	(Beel)
	a. Burgavo	Village	(Tuulo)
	b. Munarani	Village	(Tuulo)
	c. Oda	Village	(Tuulo)
3.	Kolbiyow	Town	(Beel)
4.	Kulmis (Kudhayo)	Town	(Beel)
	a. Sheeya	Nomadic Settlement	
	b. Tosha	Nomadic Settlement	
5.	Wadajir	Village	(Beel)
	a. Goba	Village	(Tuulo)
	b. Garsay Kusa	Village	(Tuulo)
6.	Xalima Cadeey	Town	(Beel)
	a. Yeedi	Village	(Tuulo)

C. Jamaame District

1.	Jamaame	Town	(District Capital)
2.	Deemo	Village	(Beel)
	a. Naftaguur	Village	(Tuulo)

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C. Jamaame District (cont'd)

3.	Kamsuuma	Town	(Beel)
	a. Baardhere Yari	Village	(Tuulo)
	b. Bulet Amin	Village	(Tuulo)
4.	Maana Moofa	Village	(Beel)
	a. Koban	Village	(Tuulo)
5.	Mugaambo	Town	(Beel)
6.	Sunguuni	Town	(Beel)
7.	Turdho	Town	(Beel)

D. Kismaayo District

1.	Kismaayo	City	(District Capital)
2.	Buulo Xaaji	Town	(Beel)
	a. Beeraasi	Nomadic Settlement	
	b. Stambuul	Village	(Tuulo)
	c. Yamani	Village	(Tuulo)
3.	Buulo Guduud	Town	(Beel)
4.	Caanjeel	Village	(Beel)
	a. Beer Xaani	Village	(Tuulo)
	b. Jana Cabdille	Village	(Tuulo)
	c. Golul Shuumbi	Nomadic Settlement	
	d. La Helay	Nomadic Settlement	
	e. Orgio	Water Hole	
	f. Wadaadi	Grazing area, Nomadic settlements	
5.	Goob Weyn	Town	(Beel)
6.	Qodqod	Village	(Beel)
	a. Buurmadka	Village	(Tuulo)
	b. Cabdulle Biroley	Village	(Tuulo)
7.	Yaantoy	Town	(Beel)

APPENDIX 4

LIST OF TOWNS, VILLAGES AND SETTLEMENTS

ACCORDING TO BEELS

BY DISTRICT

AFMADOW DISTRICT

TOWNS, VILLAGES, AND SETTLEMENTS ACCORDING TO BEELS

- Afmadow, District Capital Administrative Area
  - Mido
  - Bibi
  - Qaabo
  - Jamal
  - Da Shag
  - Tari
  - Anotal
  - Arbogarsu
- Xagar
  - Qaaley
  - Faar
- Diif
  - (Includes a number of nomadic settlements)
- Magar
  - Yeesya
  - Kiniis
  - (includes other nomadic settlements)
- Qoolgaani
  - Taabdo (8 nomadic settlements in vicinity)

Urungu

Buuro

Yora

Qarani

Malmalka

- Libooyi

  (includes 8 to 10 settlements)

- Hayo

  Dhuujima

  Dhaniij

  (Also 9 other settlements)

Listed on Maps But Not Mentioned by District or Beel Authorities

Tinguduud

Rug Rug

Bundo

Mulko Dhabdeh

Saaro.

Dhifabuura

Gubiie

Waadjaduuda

Jiiro

Naanigo

Yira

Abooli

Dhaniij

Haarniiga

Urungo

Caal Yoora

Qaalawiiley

Faaf Raxmo

BADHAADHE DISTRICT

TOWNS, VILLAGES AND SETTLEMENTS ACCORDING TO BEELS

- Badhaadhe - District Capital and Administrative Area
  - Qargyadi
  - Labanago
  - Nagigdhana
  - Bulanbeel
  - Badajila
  - Hola Wajir (Grazing area)
  - Sheer (dry farm area)
- Kulmis (Kudhayo)
  - Navara
  - Sheeya
  - Tosho
- Kambioni: (Ras Kamboni)
  - Bürgavo
  - Odo
  - Munarani
  - Kidivani
- Wada Jir
  - Goba
  - Garsay Kusa
  - Santaro
- Dalaayad
  - Dadudagato

Badagila

Rihaleyn

Hamash Dash

Roman

Baley

0 Halima Adey

Yeedi

Abalole

0 Hoosweyne

Wardey Jabdab

Hindey

Kola

Madheer-Koromi

Qexsanguur

Moola Qorsey

Sheefaraa

Koola

Albaati

Quulale

Jaliti

Muutagoda

Malaraja

(According to infomants, there are anotehr 40 settlements for a total of 53 making up Hoosweyne Beel)

0 Kolbiyow

(There are said to be 6 settlements in Kolbiow but there may be as many as 15. These were not identified by district or local government officials.)

Locations listed on maps are as follows:

Doola

Hariir

Hidda Sibra

Daanbalo

Lookoley

Jeeyo

Madiyaasha

Siirba

Kuusa Qaro

Amma

Bissadun

0 Mana Moofa

Koban

Beled Raxman

Sheek Canbuulo

Cisman Moto

Bangeeni Yare

Banbila

Buulo Xaanole

Boorin, Xaji Munye

Lokono

Aboorow

Budo Sheik

Dhayaabo Yar

Dhayaabo Wein

Baadhamey

Buulo Faryan

Kor Kaamarey Yar

Kor Kaamarey Wein

0 Mogaambo

Mashaago

Moofa

Maasegino

Buulo Yako

0 Sunguuni

Ebyam

Bandar Jadid

Malayieh

Wargey

Tomfiig

Mayuonda

0 Turdho

Jumba

Niirey

Gobanimo

Buulo Mareer

Yaji Cali

Jibaale

Jamaale Jay

Bander Burani

In addition to these, the following population locations are shown on maps but were not mentioned by Jamaame District or local government officials as being part of the respective beels in the district.

Afar Mudal

Ambago

Axmad Kanafiirey

Araryarey

Baardheere

Baar Qo

Baasaay

Bagdaad

Bansa

Borwaago Weyne

Beey

Boorini Idore

Bourini Sharlifa

Bugeey

Buulo Jaay

Buulo Kero

Buuri Jis

Ceel Aaanta

Cimba

Dhaay Garas

Dhayo

Dhiiref

Dhimbil

Doorusaka

Gaabahu

Baal

Gamdalayo

Garas

Goomeni

Holwadaag

Ifiono

Isaag

Jambarow

Jibey

Jiinis

Jiirerey

Jimaboota

Jitaliijimo

Juwaaley

Kaabsini

Sheegow

Sheikh Caddi Muudey

Shembile

Sinjibaan

S/Woolol

Taxa Wungu

Toro

Tuuni Toofe

Waltugeer

Xaali Haree

Xalimofibaax

Xar

Xididaafe

Yarey

Kabxanley

Kuduud

Laba Garlish

Lakoole

Maama

Maamboy

Maana Sudha

Mabuungo

Majir

Mayoor

Meser

Mookoome

Mugdayaarey

Mukay

Mukoy Gaamila

Munjaan

Muryoole

Mouse Mukuuw

Muuse Xaji

Naslib Bundaw

Qraxley

Quuley

Raxoole

Saagga

Sadex Mudul

Sariirow

Shabeefey

KISMAAYO DISTRICT

TOWNS, VILLAGES, AND SETTLEMENTS ACCORDING TO BEELS

□ Kismaayo District Capital and Administrative Area

Jiifweyn

Jirodey

Buule

Qaarasa

0 Bulo Xaji

Dharkeynley

Stamboul

Beerasi

Bali Sheefare

Saliidey

Usbo

Yamani

Faalagho

0 Buulo Guduud

Kuusovd

Maseer

Onley

0 Canjeel

Jana Cabdille

Golol Shumbi

Beerhani

Haandaraafa

La Helay

7.50

- Goobweyn
  - Iskudar
  - Dhiig
  - Weylood
- Qod Qod
  - Baai Guudde
  - Buymadka
  - Caddulle Birooley
- Yaantoy
  - Makoomani

APPENDIX 5

FIELD SURVEY TABLE

POPULATION AND SERVICES

BY DISTRICT

District: Afmadow

* data obtained by site visit

	POPULATION			HEALTH SERVICES																	OTHER SERVICES				
				MODERN			TRADITIONAL																		
	1985 projection Ministry of Planning	towns/ villages/ settlements	PCT survey estimate	facility	staff	private pharmacy	distance(km) to nearest hlth. fac.	TBAs	herbalist	bone setter	midwives	drilled well	hand dug well	borehole	schools	livestock	agric. ext.	radio	cooperative
District Capital:																									
*1. Afmadow(beel)		Town 8settlements	4000 11,000	hospital lab no drugs-equip	1 doctor 1 midwife 2nurse aux. 5nurses	1	—	X	X	NI	X	2	100	X	X	X	0	X	charcoal making
a. Bibbi		village	500	0	0	0	50	NI	NI	NI	NI	X			0				
b. Miido		village	500	0	0	0	25	NI	NI	NI	NI	X			0				
*2. Hayo(beel)		village 11settlements	180 12,000	0	0	0	20	4	2	1	X			X	0	0	0	0	
*3. Qooqaani(beel)		town 8settlements	1000 1700	dispensary	1 nurse 1 nurse Aux.	1	—	5	2	2	X	2	0	X	X	X	0	X	0
*a. Taabdo		village	150	0	0	0	100	1	0	1	X	X		X	0	0	0	0	0
*b. Cag Libaay		nomadic settlement	25	0	0	N/A	42	NI	NI	NI	NI	X		X	0	X	0	0	0
*4. Libooye(beel)		town 8-10settlements	1800 14,000	dispensary	nurse aux Aux. midewife	2	—	6	10	8	X	3	0	X		X	0	X	
5. Diif(beel)		town	2000	0	0	0	80	NI	NI	NI	NI	2			0				
6. Xagar(beel)		town and 2settlements	1800	0	0	0	—	NI	NI	NI	NI	1			0				
7. Magar(beel)		town and settlements	1500	0	0	0	35	NI	NI	NI	NI								
OTHER		140 and other towns settlements	13,000(estimate)																
TOTAL	68,935		65,155																

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District: Badaadhe
* Site visit

	POPULATION			HEALTH SERVICES									WATER			OTHER SERVICES				
				MODERN			TRADITIONAL													
	1985 projection Ministry of Planning	towns/ villages/ settlements	PCI survey estimate	facility	staff	private pharmacy	distance(Km) to nearest hlth. fac.	TBAs	herbalist	bone setter	traditional midwife	drilled well	hand dug well	ponds	schools	Quranic sch.	Agric. ext.	Radio	cooperatives
In and:																				
*1. Badaadhe(beel)		town 6 settlements	4,000 3,000	district health Ctr. (inpatient)	nurse midwife DHO	2	—	4	NI	2	NI	1	100	X	X	X	0	X		0
2. Hoosweyne(beel)		town 53 settlements	1,400 6,400	dispensary	nurse nurse aux. trainedTBA	drugs sold in shops	—	3	0	3	2	2		X	X	X		X		
*3. Wadajir(beel)		town settlements	1,500 4,200	dispensary not used	0 (nurse left)	1	40	8	NI	NI	NI	0	X	X	X	X	0	X		
*a. Dora		village	600	0	0.	0	45	X	NI	NI	NI	1	0	2	0	0	0	0		0
*b. Garsay Kusu		village	200	0	0	0	49	10	0	6	0	0	0	60	0	0	0	0		0
c. Santero		village	1000	0	0	0	40	X	NI	NI	NI	NI	X	50	X	0	0	0		0
*4. Kolbiyow(beel)		town 15 settlements	3,000 2,000	dispensary	nurse aux. trainedTBA	2	—	2	1	1	1			14	X	X	0	X		
5. Dinsoor(beel)		town settlements	900 1,200	dispensary no trained staff	0 teacher does treatment	0	64	NI	NI	NI	1	0	0	3	X	0	X	0	agriculture	
a. Aburole		village	900	0	0	0		X	NI	NI	NI	0	0	51	0	0	0	0		
b. Yeeel		village and settlements	600	0	0	0	60	1	NI	NI	NI	0	0	17		0	0	0		
6. Dalwayad(beel)		village 6 settlements	300 750	0	0	0	24	1	NI	NI	NI	NI	NI	X	X	X	0	X		
Coast:																				
*1. Kolmiyaal		town	7,000	dispensary MCH center	3 nurses midwife	1	—	2	0	1	1	X	X	X	X	X	0	X		
*a. Tosha		settlement	200	0	0	0	10	NI	NI	NI	NI	X	X	X	0	0	0	0	fishing	
*b. Shoova		settlement	100	0	0	0	16	NI	NI	NI	NI	X	X	X	0	0	0	0		0
c. Haveya		settlement	100	0	0	0	35	X	NI	NI	NI	0	X	X	0	0	0	0		
*2. Kamboni(beel)		village	1,000	dispensary	nurse aux. nurse	drugs sold in shops	—	1				X	X		X	X		X	fishing	
*a. Jundraai		village	300	0	0	0	60	NI	NI	NI	NI	X	X		0	0	0	0	fishing	
b. Ooc		village	300	0	0	0	15	X	NI	NI	NI	X	X		0	0	0	0	fishing	
*c. Burgavo		town	1,200	0	0	0	45	some	NI	NI	NI		X		0	0	0	0	fishing	
	42,500		42,150																	

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District: Jamaame

* data obtained by site visit

	POPULATION			HEALTH SERVICES												OTHER SERVICES				
				MODERN			TRADITIONAL					WATER								
	1985 projection Ministry of Planning	towns/ villages/ settlements	PCT survey estimate	facility	staff	private pharmacy	distance(Km) to nearest hlth. fac.	TBAs	herbalist	bone setter	medicineman	drilled well	hand dug well	ponds-river	schools	literacy	agr. ext.	radio	cooperative
*District Capital:																				
*1. Jamaame		Town	20,000	hospital lab MCH Ctr.	DMO 1 midwife 3 nurses	several 3 private labs	—	some	NI	NI	NI	X			X	NI	NI	X	NI
*2. Deema(beel)		town	1500	dispensary abandoned	0	0	12	X	NI	NI	NI	X	X			C	C		0
*a.Naftaguur		village 5settlements	1500	0	0	0		NI	NI	NI	NI	X							
*3. Turdho(beel)		town 8settlements	6100 5500	dispensary abandoned	0	0	51	NI	NI	NI	NI	X	X	X	X	X	X		
*4. Kamsuuma(beel)		town	4000	dispensary	1 nurse	1	—	many	NI	NI	NI			X	X				
*a.Baardheere Yare		village	26,000	0	0	0								X					
*b.Beled Aamiin		village and 12 other villages		0	0	0								X					
*5. Maana Moofa(beel)		town	2500	0	0	1	2	X	NI	NI	NI				0	C	0		
*a.Koban		town and 16settlements	12,500	dispensary	1 nurse		—	NI	NI	NI	NI								
*6. Mugaambo(beel)		town 4 villages	2500 4900	dispensary	1 nurse		—	X	NI	NI	NI			X	X				
*7. Sunguuni(beel)		town 6 villages	1500 5500	dispensary closed	0	1	32	X	NI	NI	NI			X	X		X		
TOTAL	111,668		94,000																

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District: Kismaayo

*data obtained by site visit

	POPULATION			HEALTH SERVICES								WATER			OTHER SERVICES				
				MODERN			TRADITIONAL												
	1985 projection Ministry of Planning	towns/ villages/ settlements	PCI survey estimate	facility	staff	private pharmacy	distance(km) to nearest hlth. fac.	TBAs	herbalist	bone setter	medicine man	drilled well	hand dug well	ponds	schools	livestock	Ag. ext.	radio	cooperative
Regional Capital: 1. Kismaayo		town 5 settlements	no information	regional hospital MCH Ctr.	RMO, DMO 7 nurses 10 nurse aux. 1 midwife Chinese med. Tm.	20(+)	—	some	NI	NI	NI	X			X	X	X	X	X
2. Caanjeel (beel)		town 1-2settlements	300 200	0	0	0	28	2	0	1	X	1		25	0	2		0	0
a. Beer Xaani		village	135	0	0	1	87	X	0	2	0	0	0	297		C	0	0	0
b. Jana Cabdille		village	150	0	0	0	57	1	0	2	0	0	0	4	0	0	0	0	0
c. La Helay		settlement	50	0	0	0	22	X	NI	NI	NI			X	0	X	0	0	0
d. Golol Shuumbi		settlement	200	0	0	0	70	X	NI	NI	NI			X	0	0	0	0	0
3. Yaantoy (beel)		town village and settlements	3,000 8,000	dispensary	one aux. nurse	0	—	4	2	2	X	X			X	X	X	0	0
4. Goobweyn (beel)		town and 2settlements	2,000	dispensary	nurse	0	—	5	0	0	X	X			X	C	0	0	0
a. Iskudur		village	60				10	NI	NI	NI	NI								
5. Buulo Gucuud (beel)		Town and 3settlements	2,200	dispensary	nurse	0	—	1	1	1	1				X	X	X	0	agriculture
Qod Qod beel: a. Burmadka		village	50	0	0	0	41	3	2	4	X	2		10	0	C	0	0	0
b. Cabdulle Birooley		village	500	0	0	0	42	2	2	10	X	X	20	3	X	C	0	0	0
6. Buulo Xaaji (beel)		town and 5 other settlements	900	dispensary	1 nurse 1 midwife 2 trained TBA	2	—	X	1	3	1		100	X	X	X	0	0	0
a. Beerasi		settlement	300	0	0	0	15	1	NI	NI	NI	0	50	X	0	C	0	0	0
b. Yamani		village	90	0	first aid volunteer	0	25	NI	NI	NI	NI			X	0	0	0	0	0
c. Stambul		village	300	0	0	0	25	X	NI	NI	NI	0	0	X	0	0	0	0	fishing
TOTAL	91.,109																		

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APPENDIX 6

FIELD SURVEY TABLE

PROBLEMS DEFINED BY POPULATION

BY DISTRICT

DISTRICT: Afmadow

Data obtained by site visit

Problems Defined by the Population

Community	General			Livestock			Farming			Human Health									
	water	roads	other	pests tsetse ticks	vet. services	other	short rainfall	insects	other	malaria	shisto.	malnut.	anemia	worms	T.B.	URI	diarrhea	fetal death	other
Afmadow(beel)	X	X	drought	X						X	X		X	X		X			VD snake bite
Hayo(beel)	X		drought			predator				X	X		X			X	X		
Ceeqaani(beel)	X			X		cows get gastroent.				X	X	X			X	X			VD snake bite
Tuabdo			food shortage							X		X	X						
Cag Libaay				X															
Liboove(beel)										X	X		X		X	X	X	X	
EL	3	1	3	2		2				5	4	2	4	1	2	4	2	1	4

DISTRICT: Badaadhe

*site visit

Problems Defined by the Population

Community	General			Livestock			Farming			Human health										
	water	roads	other	pests tsetse ticks	vet. services	other	short rainfall	insects	other	malaria	shisto.	malnut.	anemia	worms	T.B.	URI	diarrhea	fetal death	other
Inland:																			
*1. Badaadhe(beel)	X	X		X	X						X	X	X		X		X	X	
2. Hoosweyne(beel)	X	X									X			X	X				
*3. Wadajir(beel)	X	X					X												
*a. Goba	X									X	X	X	X	X					BURNS
*b. Garsay Kusa	X	X		X	X		X		buffalo eat crops	X	X	X	X	X					
c. Santaro				X						X	X			X			X		
*4. Kolbiyow(beel)	X			X						X	X			X			X		
										X	X		X	X	X		X	X	EYE
*5. Xalimo Cadeey(beel)				X						X	X				X				
a. Abalole	X																		
*b. Yeedi	X		byena lions	X						X			X	X		X			eye
5. Dalaayad(beel)	X	X															X		polio measles
Coast:																			
*1. Kulmis(beel)		X	isolated												X	X			
*a. Tosha		X	isolated																measles
*b. Sheeya		X	isolated																
c. Navava		X	isolated																
*2. Kamboni(beel)		X	isolated												X	X			
*a. Munarani		X	isolated																
*b. Oda		X	isolated																
*c. Burgavo		X	isolated												X	X			
TOTAL	9	1	9	6	2		2		1	7	8	3	5	7	7	4	5	2	5

DISTRICT: Jamaame

*data obtained by site visit

Problems Defined by the Population

Community	General: water	General: roads	General: other	Livestock: pests tsetse ticks	Livestock: vet. services	Livestock: other	Farming: short rainfall	Farming: insects	Farming: other	Human Health: malaria	Human Health: shisto.	Human Health: malnut.	Human Health: anemia	Human Health: worms	Human Health: T.B.	Human Health: URI	Human Health: diarrhea	Human Health: fetal death	Human Health: other
1. Deema(beel)			poor sanitation		X				no technical services	X	X	X	X	X					
a. Naftaguur			poor sanitation							X	X	X	X	X					
2. Turdho(beel)			poor sanitation							X	X	X	X						maternal deaths
3, Kamsuuma(beel)			poor sanitation							X	X		X			X	X		
a. Baardheere Yare																			
b. Beled Aamiin																			
4. Maana Moofa(beel)			poor sanitation							X	X	X		X					
a. Koban																			
5. Mugaambo(beel)			poor sanitation								X	X				X	X		
6. Sunguuni(beel)										X	X		X	X			X		
TOTAL			6		1				1	6	7	5	5	4		2	3		1

DISTRICT: Kis[illegible]ayo

* data obtained by site visits.

Problems Defined by the Population

Community	General			Livestock			Farming			Human Health									
	water	roads	other	pests tsetse ticks	vet. services	other	short rainfall	insects	other	malaria	shisto.	malnut.	anemia	worms	T.B.	URI	diarrhea	fetal death	other
1. Caanjeel(beel)	X					Anthrax thrush, rickets			seasonal problems	X	X				X	X			pertusis measles
*a.Beer xaani	X		education			sheepox cowpox		X		X					X	X			
*b.Jana Cabdille			floods			drought			floods	X	X					X			
*c.La Helay				X						X						X	X		
*d.Golol Shuumbi	X		drought	X						X						X			
2. Yaantoy(beel)					X			X	no pesticides	X	X					X			
3. Goobweyn(beel)			mosquito						stealing fruit	X									
4. Buulo Guduud(beel)	X			X			X			X	X		X			X			post-partum death
Qod Qod beel:																			
*a. Burmadka	X				X					X			X		X	X			
*b. Cabdulle Birooley						camelpox						X	X		X	X	X		
5. Buulo xaaji(beel)				X		cowpox camelpox				X	X		X			X			Measles asthma
*a. Beerasi			no transport							X						X			
*b. Yamani	X	X			X								X				X		
*c. Stambuul	X																		
TOTAL	7	1	5	4	3	5	1	2	4	11	5	1	5		2	11	2		5

APPENDIX 7

MOH HEALTH ASSESSMENT FORM

FOR THE REGION, DISTRICT TOWNS AND VILLAGES

MOH HEALTH ASSESSMENT FORM

This is a composite form for the Region, then District as a whole.

INFORMATION TO BE COLLECTED DURING THE VISIT TO THE DISTRICT TOWNS

REGION:

REGION:

POPULATION OF THE REGION .....
" % NOMADIC .....
" % URBAN .....
MAIN ECONOMIC ACTIVITIES: .....

REGIONAL HEALTH FACILITIES: .....
HOSPITAL BEDS: .....
WARDS: .....
X - RAY : .....
LABOROTORIES : .....
STORES : .....
OTHER REGIONAL: .....

DISTRICT: Total for entire district.

POPULATION OF DISTRICT: .....
" % NOMADIC : .....
" % URBAN : .....
" % RURAL SETTLED: .....

NUMBER AND LIST OF REELS: ..... NAMES: .....
POPULATION " ..... MINIMUM AND MAXIMUM
ECONOMY " ..... MAIN ACTIVITY
DISTANCES " ..... FROM DISTRICT CAPITAL
MAPS OF DISTRICTS AVAILABLE .....
ROAD CONNECTIONS WITHIN DISTRICT .....
REGULAR TRAFFIC TO REELS .....

HEALTH FACILITIES

HOSPITAL	NO.	WARDS	
X - RAY	.....		
LABORATORIES	.....		
DISPENSARIES	NO.	LOCATION DISTANCE STAFF	
MCH	"	" "	"
STORES	.....		
TRANSPORT	.....		
OTHERS	.....		

HEALTH PERSONEL.

DOCTORS	NO	.....	LIST OF NAMES
MEDICAL ASSISTANTS	"	.....	LIST OF NAMES
SANITARIANS	"	.....	LIST OF NAMES
NURSES	"	.....	LIST OF NAMES

MIDWIFE	NO	LIST OF NAMES	PLACE OF WORK
X - RAY TECHNICIANS	"	"	
LAB. TECHNICIANS			
AUX. NURSES		"	TRAINING PLACE OF WORK
OTHERS OUX.		"	" "
CHW		"	" "
TBA		"	" "
OTHERS STAFF		"	" "

OTHER DISTIRICT FACILITIES

SCHOOLS	NO	LOCATION	DISTANCE	NO OF STUDENTS
FAMILY LIFE CENTERS	NO	"	"	"
OTHER (wells-location-repair)		"	"	"

ALL DISTRICT LEVEL HEALTH FACILITIES SHOULD BE VISITED

ASSESS ACTIVITY PRESENCE OF STAFF

" GENERAL REPAIR SUFFICIENCY OF SPANCE

" EQUIPMENT, QUALITY AND QUANTITY

" SUPPLIES " "

" QUALITY OF WORK

" HYGIENE OF PREMISES

" FUNCTIONING OF EQUIPMENT

" REPORTING AND RECORDING

COMMENTS OF REGIONAL AND DISTRICT STAFF ON.

FUNCTIONING/ACTIVITIES IN GENERAL

SUPPLIES

TRANSPORT

SUPERVISION

MAIN CONSTRAINTS

NEEDS, PROPOSALS,

COLLECT NAMES OF REGIONAL, DISTRICT AND REEL LEADERS

PREPARE ANOTHER VISIT TO THE VILLAGES WHERE THE FACILITIES OR STAFF ARE

VERTICAL PROGRAMMES: DISTR.

MOH HEALTH ASSESSMENT FORM

DATE

HEALTH ASSISMENT OF REGION

(TUULO BOOL LEVEL)

1. LOCATION

NAME OF VILLAGE .....

IN DISTRICT OF ..... KM TO DISTR. TOWN .....

IN REGION OF ..... KM TO REG. TOWN .....

HEALTH POST - KM TO UNIT..... UNIT KM TO DISTR.....

2. VILLAGE LEADERS, SKILLED PERSONNEL

CHIEF OR HEADMAN .....

SHEIKH .....

TEACHER .....

TBA's TRAINED .....

HALF " .....

TO BE " .....

NURSES .....

MIDWIVES .....

SANITARIAN .....

HERNALIST .....

MEDICINMAN .....

BONESETTERS .....

3. HEALTH COMMITEE MEMBERS, SELF HELP POTENTIAL

1. .....

2. .....

3. .....

POPULATION WILLING FOR SELFHELP .....

LABOUR AVAILABLE MEN .....

WOMEN .....

SKILLED LABOUR:

MASON .....

CARPENTERS .....

MEN WITH EXPERIENCE TO DIG WELL .....

OTHERS .....

HOW DOES COMMUNITY PAY TBA: CASH ..... KIND .....

" " " " SHN: CASH ..... KIND .....

COULD CEN BE FOUND IN VILLAGE.

4. POPULATION ASSESSMENT: MALE FEMALE TOTAL

NO OF INFANTS .....

UNDER 1 YEAR

CHILDREN 1 - 5 YEAR .....

" 6-15 " .....

ADULTS ABOVE 15 YEARS .....

TOTAL POPULATION

WOMEN CH ILD BEARING .....

MONTH WHEN POPULATION CHANGES.....

NO OF POPULA TION AT HIGHT OF SEASON .....

% OF SETTLED POPULATION .....

% OF NOMADIC POPULATION .....

5. NUMBER OF DWELLING: PERMANENT ..... WITH WATER

TEMPORARY .... " "

POWER SOURCES:

GENERATOR .....

GAS .....

WINDMILL .....

OTHERS .....

6. WATER SOURCE AND NUMBER:

HAND DUG WELLS ..... SPRINGS .....

DRILLED WELLS ..... PONDS .....

STREAM ..... STORAGE TANK .....

RIVER ..... GROUND WATER LEVEL .....

WATER QUALITY OF SOURCE .....

DISTANCE TO WATER SOURCE .....

NO OF LATRINES ..... LOCATION ..... DISTANCE TO WATER ...

7. COMMUNICATION MEANS:

RADIO ..... VILLAGE MEETINGS .....

TELEPHONE/T LEGRA E .....

8. TRANSPORTATION MEANS:

FOOT ..... BUS .....

CAR ..... ANIMAL .....

BOAT ..... SUGG FOR TBA .....

IS LORRY TRANSPORT AVAILABLE .....

9. SOURCE OF INCOME:

FARMING ..... COMMERCIAL BUSINESS .....
LIVESTOCK ..... FISHING
CRAFTS ..... INDUSTRIES .....
GOV. WORKERS .....

10. SOCIAL SERVICES

HEALTH SERVICES

DISPENSARIES .....
HOSPITAL .....
VERTICAL HEALTH PROGR. .....

POSSIBLE SITUATION FOR: HEALTH POST .....
" " FOR: PUC U .....
SCHOOLS: PRIMARY .....
SCONDARY .....
HIGHER .....
AGRIC EXTENSION .....
COOPERATIVES .....
VETERINARY STRU. .....
POST OFFICE .....
POLICE POST (EMERGENCIES) .....
OTHERS .....

11. HEALTH STAFF AVALIABLE OR COMMING FROM COMMUNITY

TBA OR CHW MALE FEMALE

NAME .....
AGE .....
EXPERIENCE .....
EMPLOYED .....
UNEMPLOYED .....
PAYMENT BY .....
LOCATION .....

12. AVAILABILITY OF CONSTRUCTION MATERIAL

SAND KM FORM VILLAGE .....
NAT. STONE " " " .....
LIME " " "" .....
GRAVEL " " " .....
LOAM " " " .....

13. PARTICULAR PROBLEMS OF POPULATION

1. .....
2. .....
3. .....
4. .....

14. INTERN: ORG. WORKI NG IN AREA - KIND OF ACTIVITY

1. .....
2. .....
3. .....
.. ..

APPENDIX 8

EXAMPLES OF LESSON PLANS USED FOR INSTRUCTION OF NONLITERATE CHWS

Lesson Number:2	WHAT GERMS ARE AND WHERE THEY ARE FOUND
Time:	
Activity	**Approach**
Introduction	We are going to talk again about germs. Do you remember in the pretraining program period you were taught what germs are and where they are found? Germs are tiny, little creatures which cannot be seen with the naked eye. They can be seen with the help of a machine specially made for this purpose. Germs can be found anywhere around us.
Discussion on what germs are and where they are found	Ask the VHWs to recall what they know about germs: (kurang kesso) - germs are tiny, little creatures which cannot be seen with the naked eyes. - they are found everywhere and all around us - they cause disease - they are less in envirinments which are clean.
How germs get into the body	Ask the VHWs to recall the causes of people getting sick. Explain that germs get into the body through;
Show a picture of how diseases spread through food, water and air.	- food, air, water, and contact. Contact can be directly from one person to another, or indirectly from something like the clothes, plates and cups which have been used by the sick person.
The effect of germs in the body	Ask the VHWs to explain what they feel when they get sick. Germs cause disease and ill health in the body and the effect of germs in the body can happen in many different forms, such as, in the - - head, causing a headache - ear, which may discharge pus - nose, which may be running - throat, which may be sore - mouth, which may be sore and offensive and may cause the sick person to lose his appetite - skin, which may be hot or cold and sweating with rash - chest, which may present as cough with pain - tummy, (abdomen) which may ache or run as in diarrhoea or there may be constipation. - muscles of the body, which may waste, ache or swell - blood, which may become less in quantity and quality - nerve (fasso) which may waste or cause a person to behave in an unusual manner.

Lesson Number: 2

Activity	Approach
Preventive measures against diseases spread through water, food, air and contact Show a picture of cooked food covered properly Show a picture of a protected well Show picture of a man covering his nose and mouth when sneezing or coughing Review pretraining experiences in community diagnosis	Ask the VHWs to explain how they can protect food and drinking water at home. Food: - Cleanliness of hands, cooking, eating and drinking utensils - proper cooking of foods to destroy all germs - keeping food covered to prevent dust and flies setting on the food - preventing flies around the compound Water: - prevent villages from polluting the source of drinking water - protect well from animals, dust and other sources of dirt - protect drinking water in the house from contamination - always keep water pots covered Air: - wet the floor before sweeping - cover nose and mouth when sneezing - cover mouth when coughing - protect young children with immunization - avoid spitting in the street Contact: - practice food personal cleanliness - protection of food sold in the market Let the VHW tell of any changes made in his village since pretraining, to stop the spread of germs.
Reminders	

Lesson Number 8

Activity	Approach
	Explain when referral should be made by looking at chart. Stress the need for VHW/ CHN to examine RHCs on compound visits. The VHW is responsible to attend and assist antenatal and IWC with CHN and TBA.
How to use the mid-arm circumference strip and take patient information	Show the mid-arm circumference strip and explain the colours to the trainees. - green shows a well fed child - yellow indicates borderline nutrition - red shows severe malnutrition
Provide children between 1 – 5 to demonstrate on while explaining to class	Explain to trainees how to use the mid-arm circumference strip. - Find out the age of the child - Explain to mother and child if possible what you are going to do - Talk gently with the child and have him hold the strip to know that it cannot hurt. - Have him hang down either arm. Find the part of his arm which is halfway between his shoulder and his elbow - Wrap the strip around the upper arm. It must be flat against his arm all around - Do not pull tightly. This would squeeze the arm and cause an incorrect measurement. - Find the place on the strip where the single black line reaches and check the colour of that place. - Talk to the mother about child's health while doing this. Good time to practice patient care and history taking skills.
Who to use the mid-arm circumference strip on.	Ask class if they know on which group of children is the mid-arm circumference strip used. Explain that this measurement is only relevant when used on children between 1 - 5 years. Have VHWs explain the other methods of looking at a child's nutritional status.

Instructional Pictures for Nonliterate people

1. How germs are spread by animals.

2. How germs are spread by people.

3. Unprotected water causes illness.

4. Protect water to stay healthy.

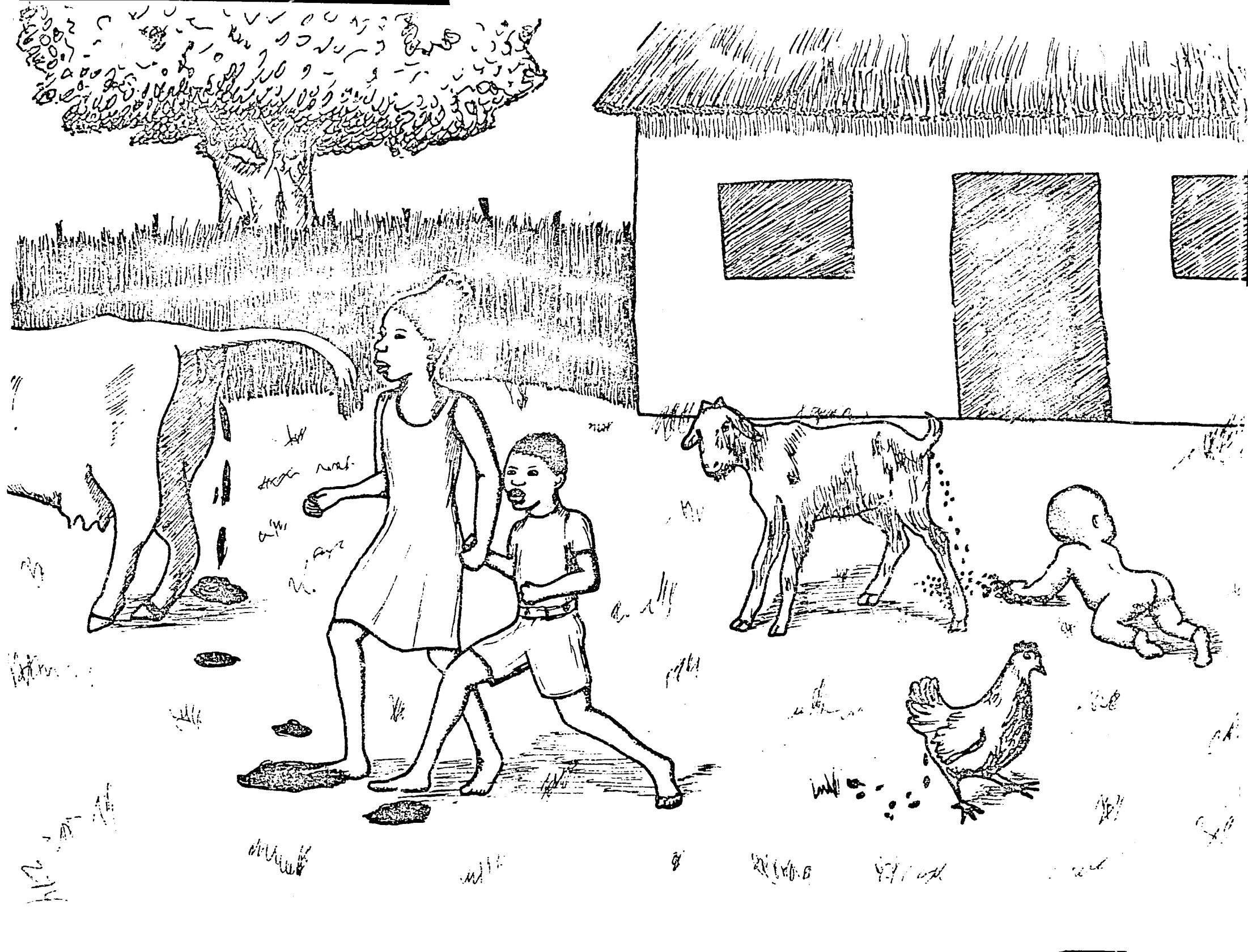
5. Arm circumference measurement to determine nutritional status.

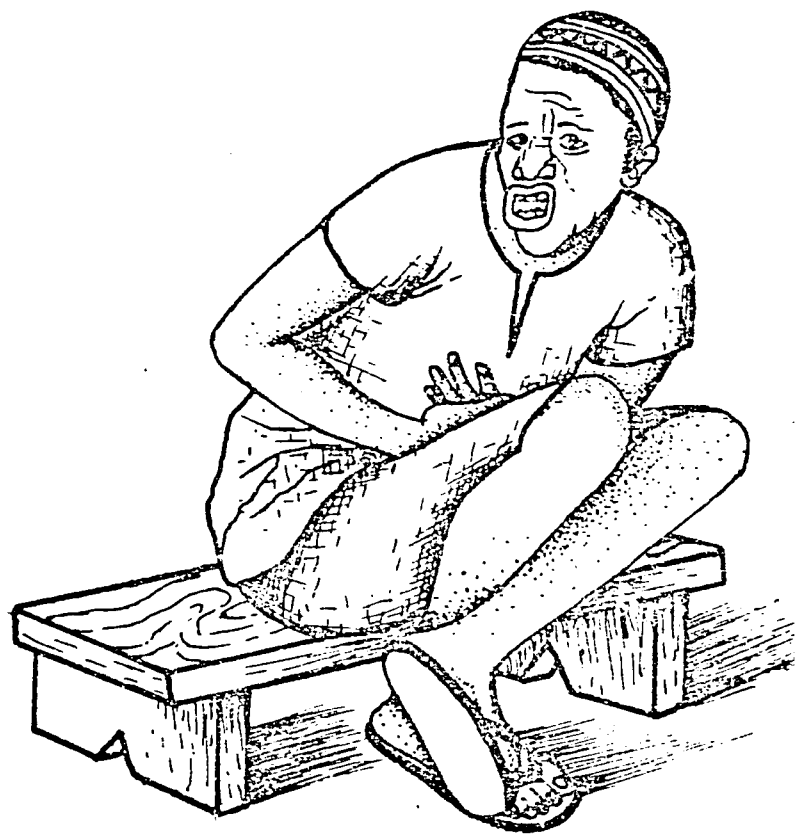
6. Breastfeeding= healthy child; bottle feeding= malnourished child.

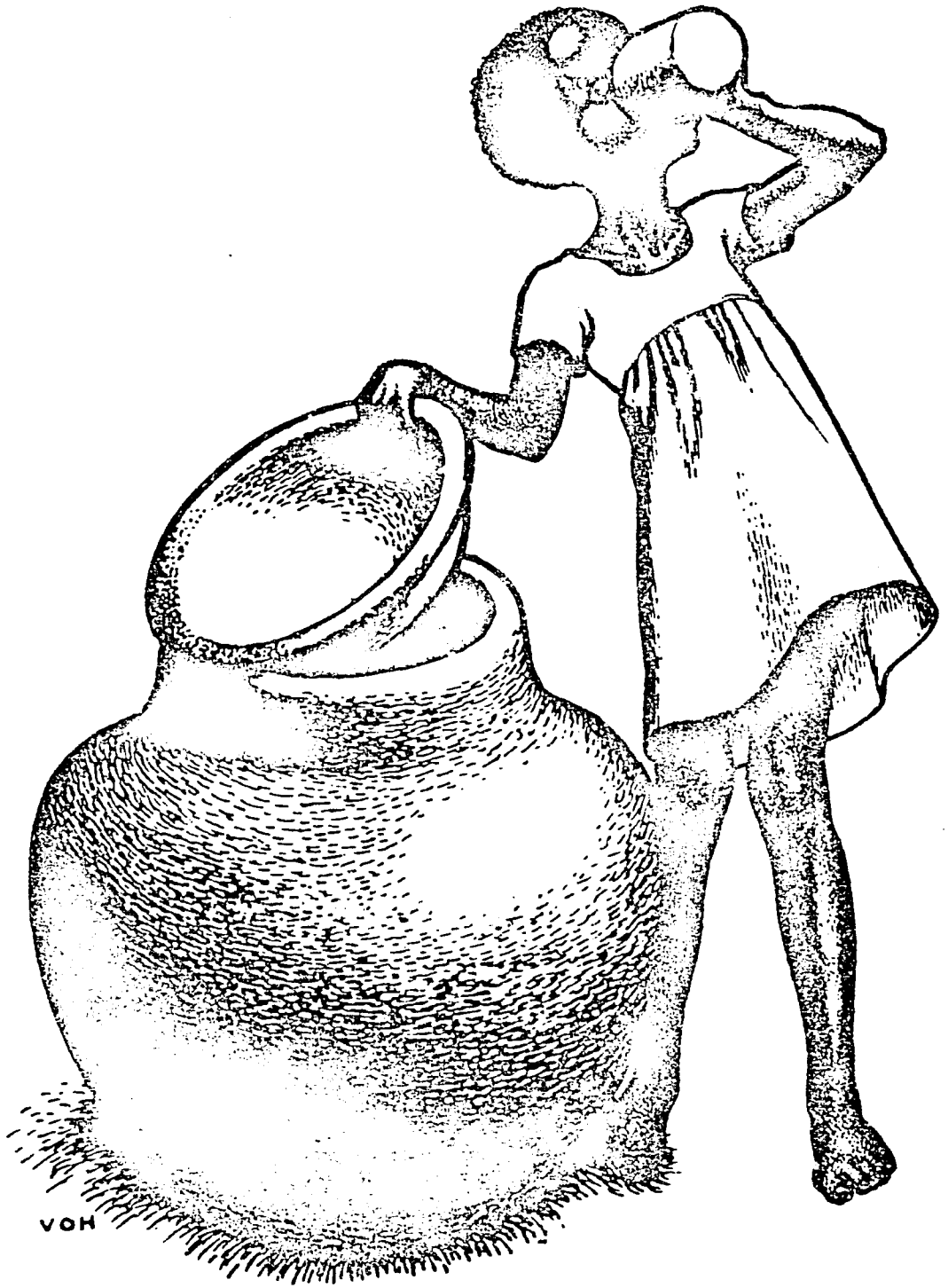
7. The three food groups: disease protection, energy, body building.

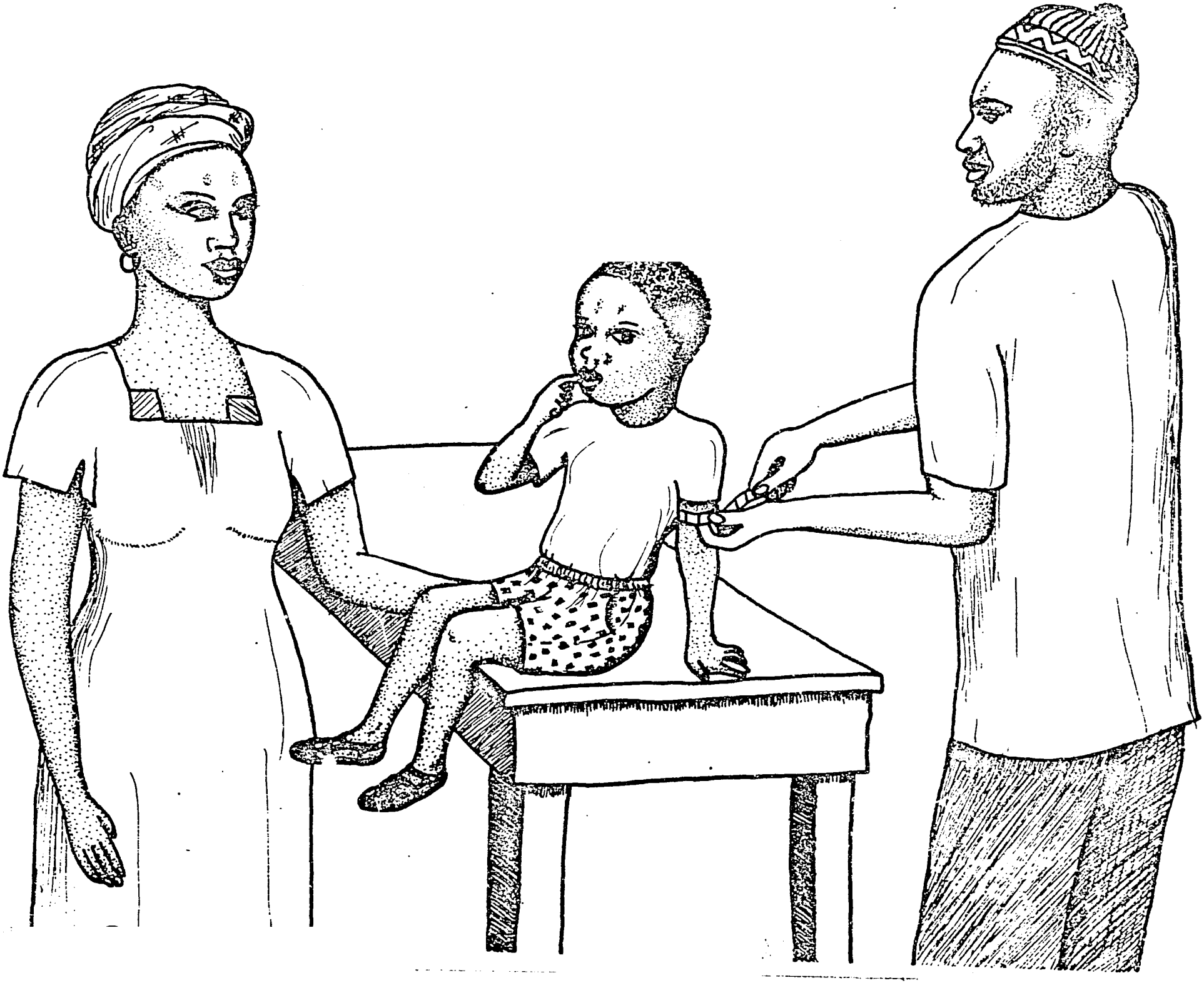
8. Proper treatment of eye infections.

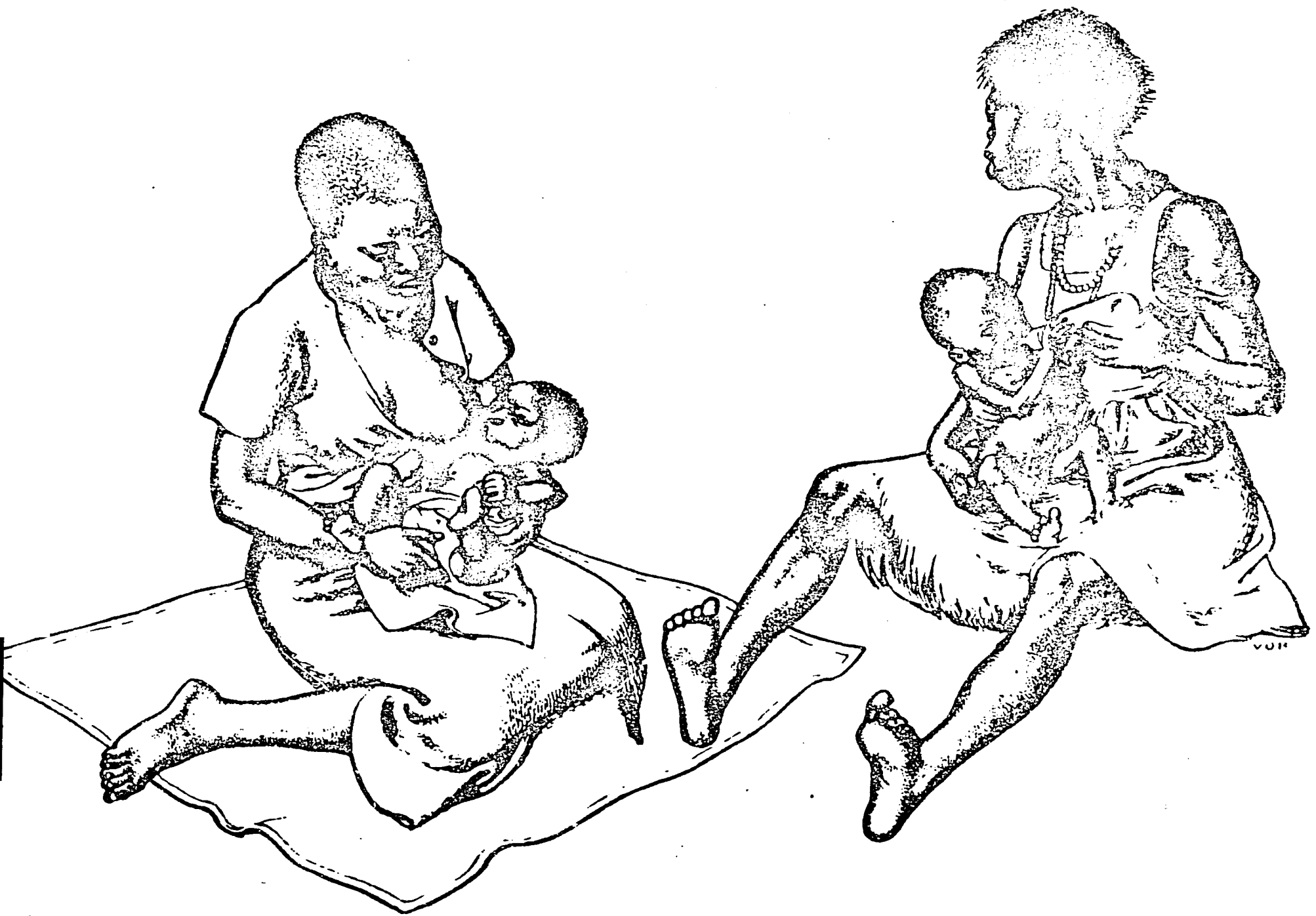
9. Referral and examination for lower respitory problem.

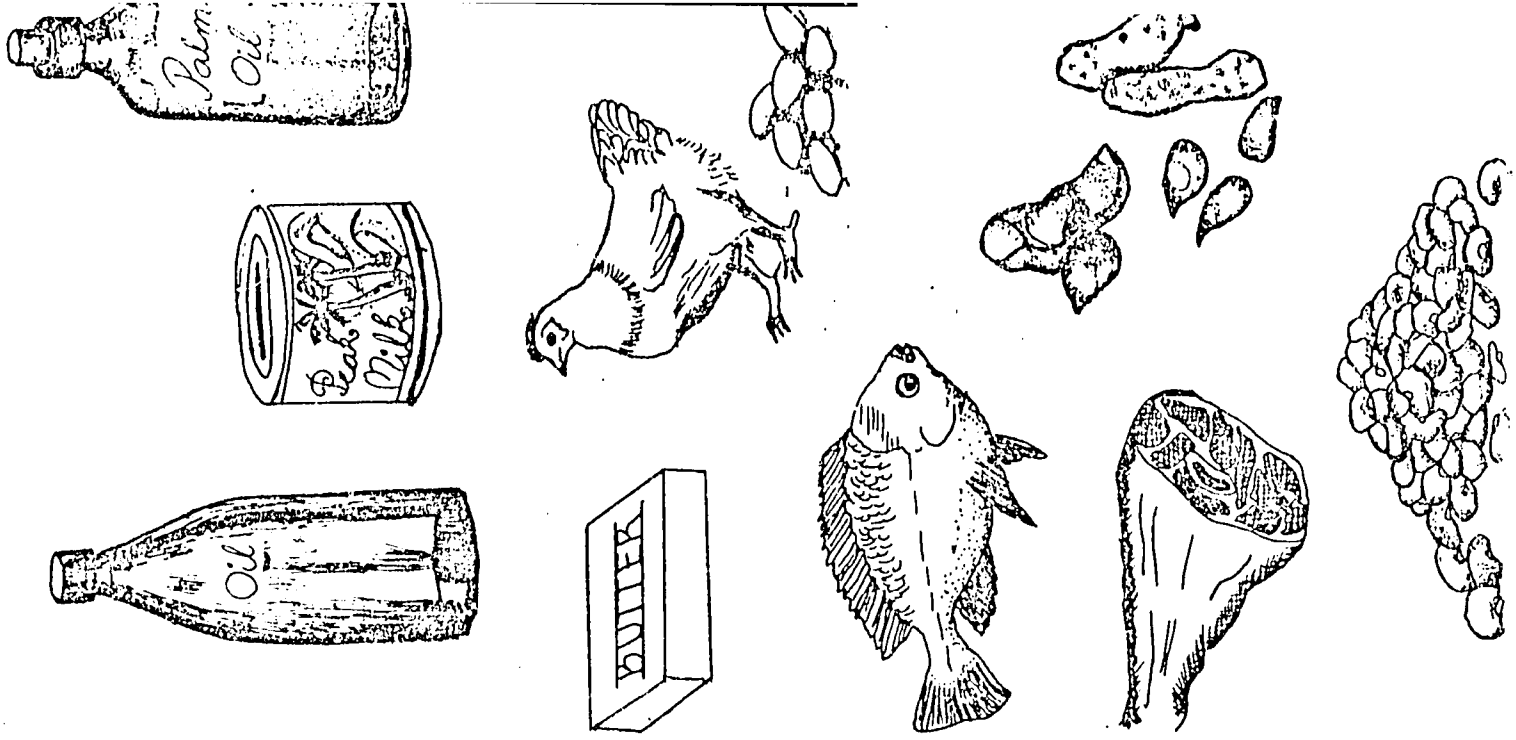


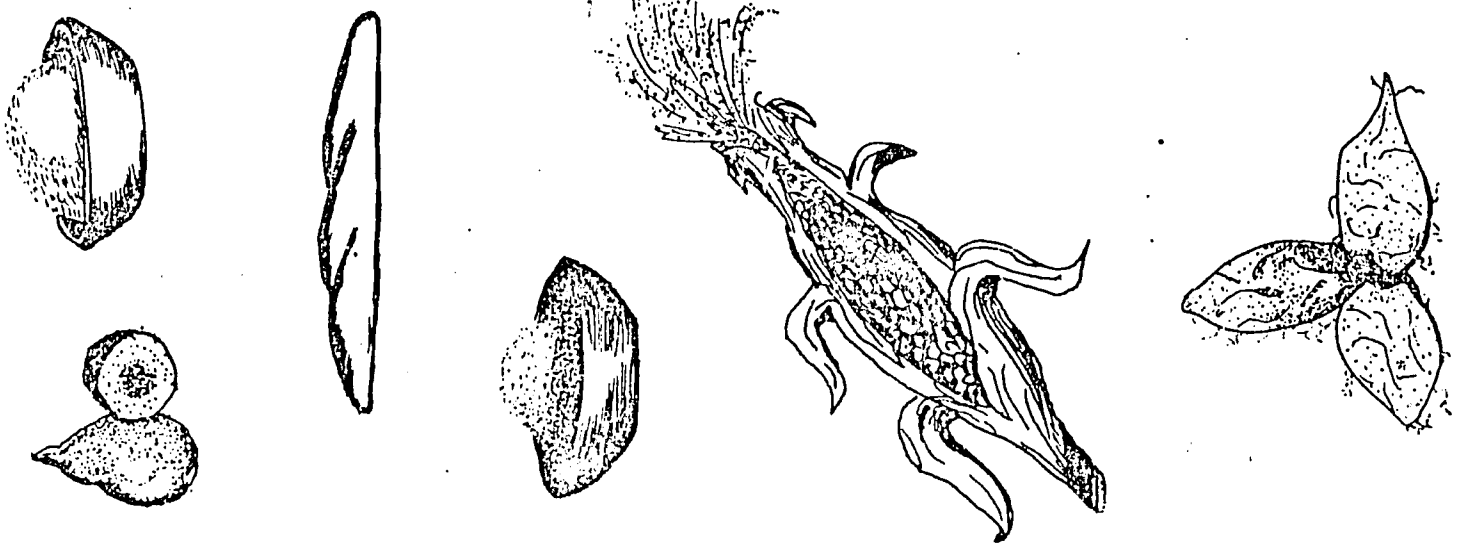


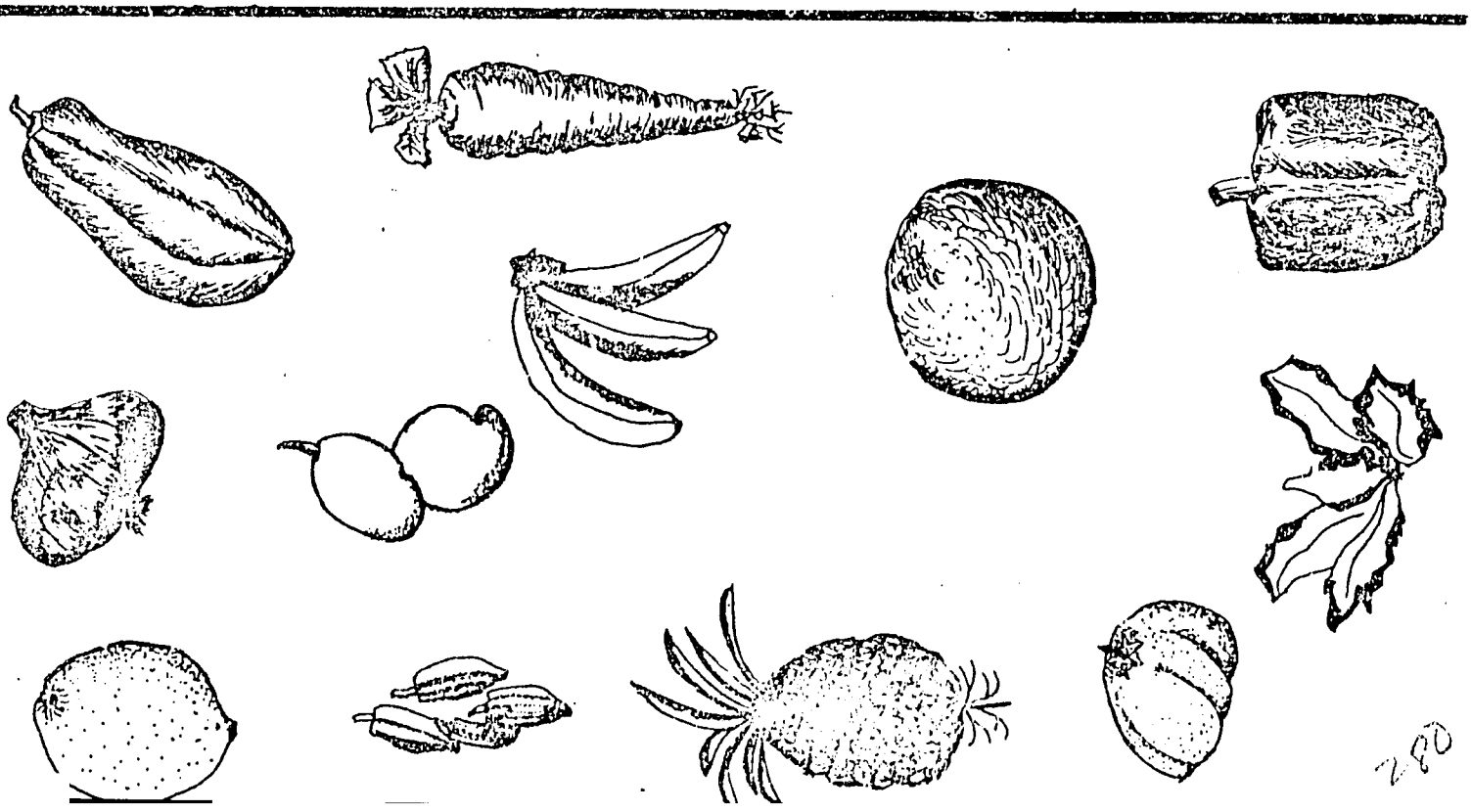

VOH

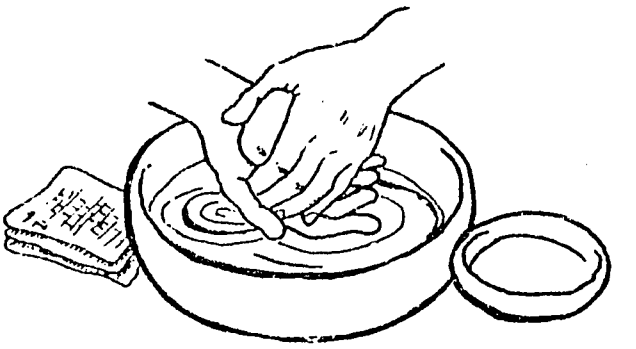


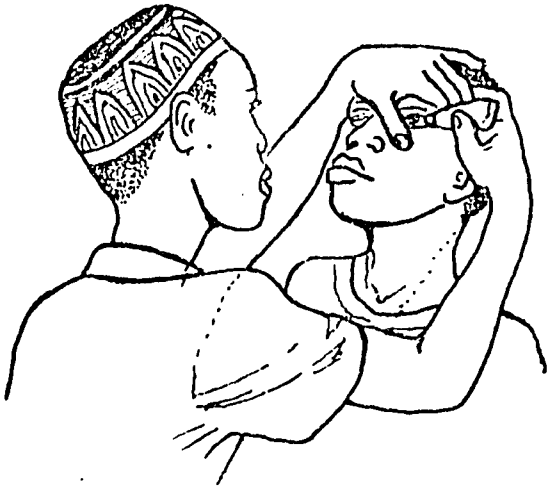


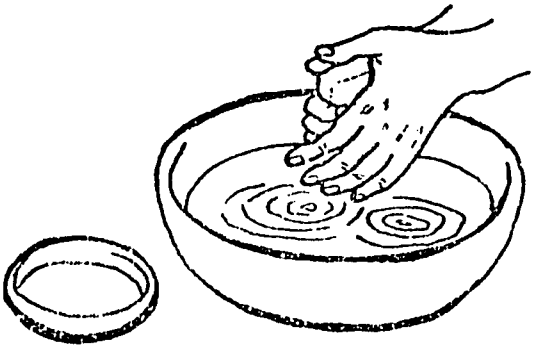

Palm Oil
Oil
BUTTER

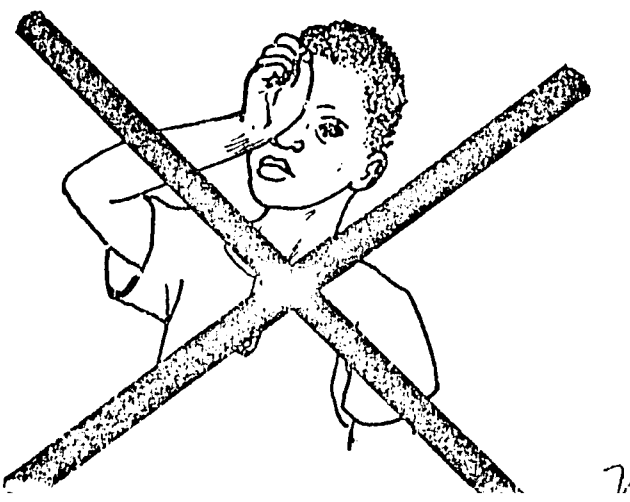


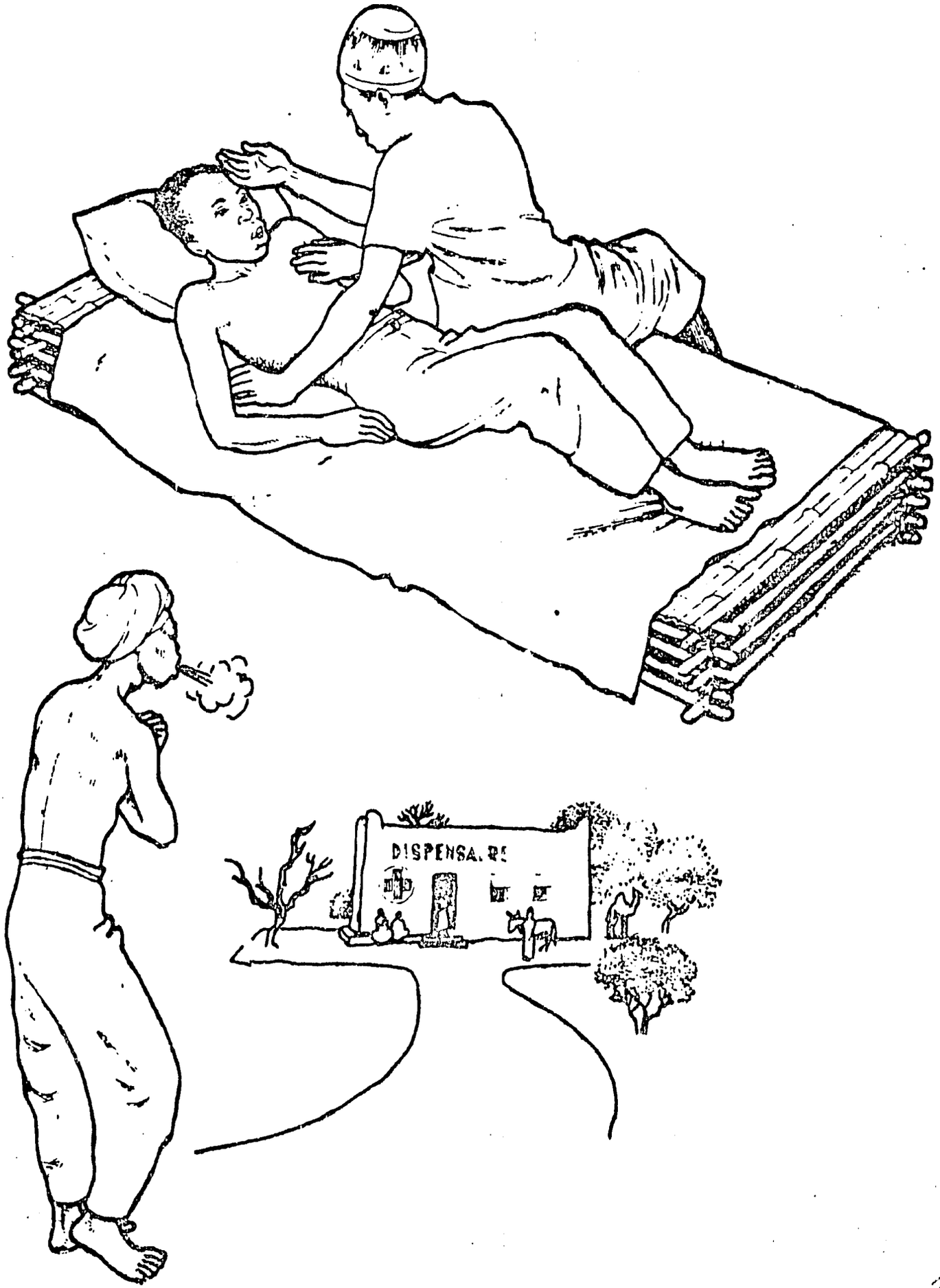











DISPENSA.RE

APPENDIX 9

LOG OF ACTIVITIES

PROJECT CONCERN INTERNATIONAL TEAM TO SOMALIA

LOG OF ACTIVITIES

Thurs., 3/22	Scott Loeliger, Community Organization/Training Specialist Arrived in Somalia
Fri., 3/23 - Wes., 3/28	Scott Loeliger Meetings with AID-Somalia, Primary Health Care National Office, Ministry of Health - arrangements for arrival of full PCI Team
Thurs., 3/29	Scott Loeliger Change order for contract with AID-Somalia signed
Fri., 3/30 - Mon., 4/9	Scott Loeliger Vehicle Procurement in Djibouti and delivery to Mogadishu; procurement of project equipment for field study; recruitment of Somali field staff for field survey
Sun., 4/1	John Wahlund, Community Health Planner/Training specialist Arrival in Somalia
Mon., 4/2	John Wahlund Processing with AID-Somalia
Tues., 4/3	John Wahlund Meeting with Dr. Qasim Adan Egal, Director of Primary Health Care, Ministry of Health
Wed., 4/4	John Wahlund Meetings with Ministry of Local Government and Rural Development: Dr. Ahmed Dahir, Director of Planning; Mr. Abdouli Yussuf, Chief Officer
Thurs., 4/5	John Wahlund Meeting with Director of OXFAM Meeting-Earl Goodyear, Director, CARE-Somalia

Day & Date	Activity
Fri., 4/6 - Sat., 4/7	John Wahlund
	Orientation of Somalia Field Staff
	Feasibility survey for Lower Jubba
Sun., 4/8	John Wahlund
	Meeting with staff at Somali Research Unit for Emergencies and Rural Development (SRUERD).
	Worked on notes
Mon., 4/9	John Wahlund
	Applied for security clearance and letters of introduction from Ministry of Local Government and Rural Development.
	Meeting with Mr. Colin Williams, Director, Action Aid
Tues., 4/10	John Wahlund
	Meeting with Dr. Sandra Gove and Nancy Lamson to discuss evaluation of Rural Health Delivery Project
	Scott Loeliger
	Vehicle registration, etc.
Wed., 4/11	John Wahlund, Scott Loeliger
	Meeting with Dr. Qasim, Director of Primary Health Care, MOH
	Meeting with Noel Brown, Chief of Party, Medical Services Consultants, Inc.
Thurs., 4/12	John Wahlund, Scott Loeliger
	Meeting with UNHCR
	Logistics, banking
Fri., 4/13	John Wahlund, Scott Loeliger
	Team Meeting

Day & Date	Activity
Sat., 4/14	John Wahlund
	Obtain statistics and reports, Ministry of Education
	Review manpower study
	Scott Loeliger
	Logistics and supplies
Sun., 4/15	Scott Loeliger, John Wahlund
	Meeting with Dr. Yussuf, Director of Operations, Central Rangelands Project
	Meeting with Dr. Tony Williams, Office of Population Education, UNESCO.
Mon. 4/16	Scott Loeliger, John Wahlund
	Meeting with Dr. Qasim, Director of Primary Health Care, MOH (attended by John Rose, Health Officer, AID-Somalia)
Tues., 4/17	Scott Loeliger, John Wahlund
	Meeting with Dr. Salim Kamal Dallal, Director, WHO
	Meeting with Dr. Mohamed Ibrahim, Deputy Director of Primary Health Care, MOH
Wed., 4/18	Scott Loeliger, John Wahlund
	Meeting with AID-Somalia:
	Raga Elim, Chief, Social Development Division John Rose, Health Officer Ernie Peterson, Food for Peace Officer
Thurs. 4/19	John Wahlund
	Meeting with Dr. Ali Haji Sani, African Medical and Research Foundation, working in PHC in Luug
	Meeting with Dr. Abdi Guri, Director of Training, Primary Health Care Program, MOH

Day & Date	Activity
Thurs., 4/19	Scott Loeliger
	Procurement of supplies, equipment for field survey
Fri., 4/20	Scott Loeliger, John Wahlund
	Preparations for field survey, rest day
Sat., 4/21	John Wahlund, Scott Loeliger
	Obtain final clearances, letters of introduction for field survey
	Worked on notes of meetings

Day & Date	Activity
Sun., 4/22	Ralph Montee, Rural Development Specialist/Team Leader
	Arrived in Mogadishu
	John Wahlund, Scott Loeliger
	Meeting with Primary Health Care Office
Mon., 4/23	Ralph Montee
	Trip Preparations
	AID Processing
	Ralph Montee, Scott Loeliger, John Wahlund
	Team meeting
Tues., 4/24	Ralph Montee, John Wahlund
	Meeting with Dr. Qasim, Director of Primary Health Care, MOH
	Meeting with AID-Somalia: Raga Elim, Chief, Social Development; John Rose, Health Officer
Wed., 4/25	Ralph Montee, Scott Loeliger, John Wahlund
	Final Planning
	Meeting with Ministry of Health: Dr. Qasim Adan Egal, Director of Primary Health Care Dr. Mohamed Ibrahim, Deputy Director of Primary Health Care
Thurs., 4/26	Ralph Montee, Scott Loeliger, John Wahlund
	Meeting with Ministry of Health: Dr. Mohamed Ali Hassan, Director General Dr. Qasim Adan Egal, Director of Primary Health Care Dr. Abdi Guri, Director of Training, Primary Health Care
Fri., 4/27	Ralph Montee, Scott Loeliger, John Wahlund
	Travel to Kismaayo to begin Lower Jubba Region Survey

Day & Date	Activity
Sat., 4/28	Ralph Montee, Scott Loeliger, John Wahlund Planning Meetings with: Dr. Omar Hersi Mohamed, Acting Regional Medical Officer, Lower Jubba Mr. Abdulahi Haji Hassan Ali, Regional Executive Administrator, Lower Jubba Mr. Ahmed Hassan Saleh, District Commissioner, Afmadow District Col. Ilmi Faran, Regional Police Commander, Lower Jubba
Sun., 4/29	Ralph Montee, Scott Loeliger, John Wahlund Travel to Badhaadhe District Capital Planning meetings with Badhaadhe District Officials: Mr. Salat Abdouli, District Commissioner Mr. Ahmed Ibrahim, Livestock Officer Mr. Ougas Ali Farah, District Health Officer Mr. Ali Abdi Nursi, District Executive Secretary, (Now Ministry of Interior) Mr. Mohamed Elmi Sayan, Veterinary Field Officer
Mon., 4/30	Team 1 (Scott Loeliger, Abdi Guri, Abdi Kadir, Rose S.) Site visit to Kolbiyow Town (Beel) Team 2 (Ralph Montee, John Wahlund, Ahmed Yusuf) Site visit to Badhaadhe Town (District Capital)
Tues., 5/1	Team 1 (Scott Loeliger, et al) Complete site visit to Kolbiyow Town Team 2 (Ralph Montee, John Wahlund, et al) Aborted site visit to Dalaayad Village (road impassible) Completed site visit in Badhaadhe Town Meetings with District Officials
Wed., 5/2	Team 1 and 2 (Scott Loeliger, Ralph Montee, John Wahlund, et al) Travel to Wadajiir Village (Beel) Village meeting in Wadajiir

Day & Date	Activity
Thurs., 5/3	Team 1 (John Wahlund, Abdi Kadir, et al)
	Site visit Wadajiir Village
	Site visit Goba Village
	Team 2 (Ralph Montee, Scott Loeliger, et al)
	Site visit Garsay Kusa Village
	Site visit Yeedi Village
	Team 1 and 2 (Scott Loeliger, Ralph Montee, et al)
	Site visit Yalimo Caadey Town (beel)
Thurs., 5/3	Abby Thomas, Development Anthropoligist/Social Scientist
	Arrived in Mogadishu
Fri., 5/4	Ralph Montee, Scott Loeliger, John Wahlund, et al
	Team meeting in Kismaayo
Sat., 5/5	Ralph Montee, Scott Loeliger, John Wahlund, et al
	Planning meetings in Kismaayo: Dr. Omar Mohamed Hersi, Acting Regional Medical Officer, Lower Jubba; Mr.Mohamed Mohamoud Liban, Governor,Lower Jubba; Mr. Sallah, Director, Fisheries Department, Kismaayo
	Abby Thomas
	Travel to Kismaayo with Mr. Raga Elim, AID-Somalia
Sun., 5/6	Team 1 (Scott Loeliger, John Wahlund, Abdi Kadir, Rose S.)
	Travel to Kulmis (Kudhayo) by boat for coastal survey
	Team 2 (Ralph Montee, Abby Thomas, Abdi Guri, Ahmed Yusuf)
	Accompanied by Mr. Raga Elim, AID-Somalia Site visits in Kismaayo District:

Day & Date	Activity
(Sun., 5/6)	Site visit Buulo Yaaji Town
	Site visit Yamani Village
	Site visit Stambuui Village
	Site visit Beeraasi Village
Mon. 5/7	Team 1 (Scott Loeliger, John Wahlund, et al)
	Site visit Kulmis Town (beel)
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Meetings in Kismaayo with: Mrs. Faduma Ismail, District Midwife, Jamaame District; Mr. Hussein Malin, Hospital Administrator, Kismaayo Regional Hospital; Mr. Jibil Ali Adan, District Commissioner, Kismaayo District; Mr. Ashur Ali Baro, Regional Sanitarian, Lower Jubba
	Site visit Kismaayo Regional Hospital
Tues., 5/8	Team 1 (Scott Loeliger, John Wahlund, et al)
	Travel to Kambon, by boat (Ras Kana boni)
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Site visit to Regional and Kismaayo District MCH Center
	Meeting with: Sido Ilmi, Regional Midwife, Lower Jubba Fadumo Abdilahi, District Midwife, Kismaayo
	Site visit to Caanjeel Village (beel)
	Site visit to Jana Cabdille Village (beel)
	Site visit to Wadaade Grazing Area
	Site visit to Beerhani Village
	Site visit to Lahelay Nomadic Settlement

Day & Date	Activity
Wed., 5/9	Team 1 (Scott Loeliger, John Wahlund, et al)
	Site visit Kamboori Town (beel)
	Site visit Munarani Village
	Site visit Oda Village
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Site visit Goob Weyn Town (beel)
	Meetings with: Dr. Ali Mohmaed Samatar, District Medical Officer, Jamaame District, to plan for Jamaame site visit.
	Site visit Buulo Guduud Town (beel)
	Site visit Yaantoy Town (beel)
Thurs., 5/10	Team 1 (Scott Loeliger, John Wahlund, et al)
	Site visit Burgavo Village
	Travel to Kulmis by boat
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Meetings with: Dr. Abdulrahman Ali Sirhan, District Medical Officer, Afmadow District; Mr. Hussein Ismail, Director of Animal Diagnostic Lab, Kismaayo Region (under the Department of Animal Health, Ministry of Livestock, Range, and Forests); Mr. Abdulahi Haji Hassan Ali, Regional Executive Officer, Lower Jubba; Mr. Sallah, Director, Fisheries Department (to check on progress of Team 1 and give radio message to them).
	Col. Ilmi Faran, Regional Police Commander, Lower Jubba
Fri., 5/11	Team 1 (Scott Loeliger, John Wahlund, et al)
	Site visit Tosha Nomadic Community
	Site visit Sheeya Nomadic Community

Day & Date	Activity
(Fri., 5/11)	Team 2 (Ralph Montee, Abby Thomas, et al)
	Travel to Afmadow District
	Site visit Caq Libaay Nomadic Settlement
Sat., 5/12	Team 1 (Scott Loeliger, John Wahlund, et al)
	Travel to Kismaayo by boat
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Continue travel to Afmadow
Sun., 5/13	Team 1 (Scott Loeliger, John Wahlund, et al)
	Planning meetings in Kismaayo to prepare for Jamaame District visits
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Arrive in Afmadow Site visit to Afmadow District Hospital
	Meetings with District and Government Officials
	(See summary, Attachment 1) Site visit Hayo Village (beel)
	Travel to Libooye
Mon., 5/14	Team 1 (Scott Loeliger, John Wahlund, et al)
	Site visit to Jamaame Town (District Capital)
	Site visit to District Hospital, Jamaame District
	Site visit to District MCH Center, Jamaame District
	Planning meetings with District Medical Officer and District Officials.
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Site visit Libooye Town (beel)
	Site visit Taabdo Village
	Travel to Qooqaani

Day & Date	Activity
Tues., 5/15	Team 1 (Scott Loeliger, John Wahlund, et al)
	Site visit Deema Town (beel)
	Site visit Naftaquur Town
	Site visit Turdho Village (beel)
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Site visit Qoolqaani Town (beel)
	Travel to Afmadow
Wes., 5/16	Scott Loeliger
	Travel to Mogadishu by plane
	John Wahlund
	Attempts to aid Team 2 stranded by rains in Afmadow
	Team 2 (Ralph Montee, Abby Thomas, et al)
	Site visit Afmadow Town
	Locate place for small plane landing.
	Radio contact to Mogadishu and Kismaayo for help in getting out of Afmadow
Thurs., 5/17	Team 2 (Ralph Montee, Abby Thomas, Abdi Guri, Ahmed Yusuf)
	Airlifted out by light plane to Kismaayo
	John Wahlund
	Continue efforts to assist Team 2
Fri., 5/18	John Wahlund, Ralph Montee, Abby Thomas, et al
	Travel to Mogadishu
Sat., 5/19	Ralph Montee, Abby Thomas, Scott Loeliger, John Wahlund
	Full team meeting to review field survey work in Lower Jubba Region

Day & Date	Activity
Sat., 5/19	Meeting with Ministry of Health: Dr. Mohamed Ali Hassan, Director General Dr. Qasim Adan Egal, Director of Primary Health
Sun., 5/20	Ralph Montee
	Reports for U.S.
	Scott Loeliger, John Wahlund, Abby Thomas
	Preliminary report
	Drafting on survey
	Findings
Mon., 5/21	Scott Loeliger, John Wahlund, Abby Thomas
	Complete preliminary report
	Scott Loeliger, Abby Thomas
	Prepare for return to Lower Jubba to complete survey in Jamaame District

Day & Date	Activity
Tues., 5/22	John Wahlund
	Submit first report to AID-Somalia
	Scott Loeliger, Abby Thomas, et al
	Travel to Jamaame District
Wed., 5/23	John Wahlund
	Attended Ministry of Health/AID -Somalia Primary Health Care Workshop - Mogadishu
	Scott Loeliger, Abby Thomas, et al
	Site visit - Muqaambo Town (beel)
Thur., 5/24	John Wahlund
	Attended Ministry of Health/AID-Somalia Primary Health Care Workshop - Mogadishu
	Scott Loeliger, Abby Thomas, et al
	Site visit - Kamsuuma Town (beel)
	Site Visit - Baardhere Yare Village
	Site Visit - Beled Aamin Village
Fri., 5/25	John Wahlund
	Worked on notes
	Scott Loeliger, Abby Thomas, et al
	Site visit - Maana Moofu Town (beel)
	Site Visit - Koban Town
	Site Visit - Sunguuni Town (beel)
Sat., 5/26	John Wahlund
	Meeting at Primary Health Care Office Survey Analysis
	Scott Loeliger, Abby Thomas, et al
	Meeting with: Mr. Mohamed Mohamood Libaan, Governor of Lower Jubba Mr. Abdulahi Haji Hassan Ali Regional Executive Administrator, Lower Jubba
	Travel to Mogadishu

Day & Date	Activity
Sun., 5/27	Scott Loeliger, John Wahlund, Abby Thomas
	Team meeting
Mon., 5/28	Scott Loeliger, John Wahlund, Abby Thomas
	Analysis of data and development of preliminary program design
Tues., 5/29	Scott Loeliger, John Wahlund, Abby Thomas
	Meeting at Primary Health Care office, MOH
	Team meeting
Wed., 5/30 - Fri., 6/1	Scott Loeliger, John Wahlund, Abby Thomas
	Analysis of data and development of preliminary program design
Sat., 6/2	Scott Loeliger, John Wahlund, Abby Thomas
	Meeting with USAID-Somalia: Raga Elim, Chief, Social Development Division John Rose, Health Officer
Sun., 6/3	Scott Loeliger
	Departed for the U.S.
Sun., 6/3 - Tues., 6/5	John Wahlund, Abby Thomas
	Continue work on survey report
Wed., 6/6	John Wahlund
	Departed for U.S.
	Abby Thomas
	Attended planning meetings at MOH for Hargeysa Conference on Primary Health Care
Thur., 6/7 - Wed., 6/20	Abby Thomas
	Continued survey analysis and represented PCI in meetings with AID-Somalia and MOH
Thur., 6/21	Ralph Montee, Rural Development Specialist/Team Leader
	Arrived in Mogadishu
Fri., 6/22	Ralph Montee, Abby Thomas
	Team meeting Read survey reports and draft program recommendations

Day & Date	Activity
Sat., 6/23	Ralph Montee, Abby Thomas
	Meeting with: Dr. Qusim Adan Egal, Director of Primary Health Care Dr. Abdi Guri, Director of Training, Primary Health Care
Sun., 6/24	Henry Sjaardema, Executive Director, PCI
	Arrived in Mogadishu for team consultation and evaluation
Mon., 6/25	Henry Sjaardema, Ralph Montee, Abby Thomas
	Meeting with AID-Somalia, Raga Elim and John Rose Team meeting to discuss implementation strategies
Tues, 6/26	Henry Sjaardema, Ralph Montee, Abby Thomas
	Meeting with MOH: Dr. Mohamed Ali Hasan, Vice Minister Dr. Qasim Adan Egal, Director of Primary Health Care
Wed., 6/27	Henry Sjaardema, Ralph Montee
	Travel to Kismaayo
Thur., 6/28	Henry Sjaardema, Ralph Montee
	Meeting with Mr. Mohamed Mohamoud Libaan, Governor of Lower Jubba Meeting with Col. Ilmi Faran, Regional Commander of Police Travel in Kismaayo District Site visit - Burmadka Village Site Visit - Cabdulle Bikooley Village
Fri., 6/29	Henry Sjaardema, Ralph Montee
	Travel in Kismaayo District Site Visit - Tirooley Village Travel to Mogadishu
Sat., 6/30	Henry Sjaardema, Ralph Montee, Abby Thomas
	Team meeting

Day & Date	Activity
Sat., 6/30 -	Scott Loeliger, John Wahlund, Abby Thomas
	Team meeting
Sun., 7/1	Henry Sjaardema, Ralph Montee, Abby Thomas
	Work on draft report
Mon., 7/2	Henry Sjaardema
	Meeting with Raga Elim and John Rose, AID-Somalia
	Ralph Montee, Abby Thomas
	Work on draft report
Tue., 7/3	Henry Sjaardema, Ralph Montee, Abby Thomas
	Team discussions
	Drafting report
Wed., 7/4	Henry Sjaardema, Ralph Montee, Abby Thomas
	Meeting with AID-Somalia to discuss Lower Jubba feasibility survey and draft proposal: Louis Cohen, Director Raga Elim, Chief Social Development Division John Rose, Health Officer
	Henry Sjaardema and Ralph Montee
	departed for the U.S.
Thur., 7/5	Abby Thomas
	Worked on report for Hargeysa Primary Health Care Conference
Fri., 7/6	Abby Thomas
	Travel to Hargeysa
Sat., 7/7 - Tue., 7/17	Abby Thomas
	Participated in National PHC Conference in Hargeysa
Wed., 7/18	Abby Thomas
	Return to Mogadishu
Thur., 7/19	Abby Thomas
	Meeting with John Rose, Health Officer, AID-Somalia
	Meeting at Ministry of Livestock
	Meeting at Academy of Sciences and Art

Day & Date	Activity
Fri., 7/20	Abby Thomas
	Off day
Sat., 7/21	Abby Thomas
	Meeting with John Rose, Health Officer, AID-Somalia
Sun., 7/22	Abby Thomas
	Departed for U.S.

APPENDIX 10

BOLIVIA

NATIONAL DRUG DISTRIBUTION PROGRAM

BOLIVIA

NATIONAL DRUG DISTRIBUTION PROGRAM

MANUAL FOR

DRUG PURCHASE AND SUPPLY SUBSYSTEM

MEDICAL SUPPLIES COMPONENT

PCI/BOLIVIA

AND

UNIDAD SANITARIA/ORURO

JUNE 1984

FINANCED BY USAID/BOLIVIA PROJECT 511-0821

BOLIVIA

NATIONAL DRUG DISTRIBUTION PROGRAM

MANUAL FOR THE PURCHASE AND SUPPLIES SUBSYSTEM - MEDICAL SUPPLIES COMPONENT

I. INTRODUCTION

This manual has been conceived as a way to assist in the implementation of a subsystem for the purchase and distribution of medical supplies. Attempts have been made to identify the most important parts of the subsystem. At the same time, the manual attempts to identify the basis of the subsystem. Experience is the best teacher, and for this reason, the users of this manual will be able to observe other aspects which impact on the functioning of the subsystem, and which are not included here, therefore, input is invited from other personnel in the health sector on this subject.

II. IDENTIFICATION OF THE PROBLEM

A. Lack of medical supplies

There exists a network of rural, urban and health services whose purpose is to provide services to the people in an opportune and accessible manner. If an infrastructure and personnel exist, what can impede the delivery of services by these establishments?

There exist many factors, such as the lack of equipment, lack of trained personnel, lack of support, etc. One of the most important factors that has been identified is the lack of medical supplies with which personnel could offer more complete and timely services.

If indeed there exists an infrastructure, and personnel to offer these services, and there are no medical supplies, the cycle for compbating disease is incomplete.

B. Lack of Capital

One of the reasons that health services can lack supplies is the lack of capital with which to purchase the necessary supplies to complete the circle of attention. There are many factors that contribute to the lack of capital, and it is necessary to enter into an exhaustive analysis of this problem.

C. Lack of Administrative Organization

Often this capital has existed in the form of donations of supplies

and other materials. Nevertheless, the lack of a well defined policy and administrative organization has resulted in the poor utilization of this capital.

D. Lack of Trained Personnel

When capital has existed in the form of supplies, another important factor has been the lack of trained human resources. In order to take advantage of capital, and not waste it, it is necessary to raise the awareness of all personnel who have contact with the distribution of the supplies, as much in the technical aspects as in the actual use of the pharmaceuticals, and in the administrative aspect, including the management of financial resources.

III. DESCRIPTION OF THE SUBSYSTEM

In order to implement the subsystem, the Ministry of Health first has to obtain the necessary medical supplies.

The subsystem includes three components which are: medicines, supplies and equipment. These components are needed to initiate a system of distribution of medical supplies which address the lack of pharmaceutical products in the health services, establishes rotary national capital, develops an administrative system, and trains personnel in the management of the subsystem. The following is a description of some of the most important characteristics of this drug distribution subsystem.

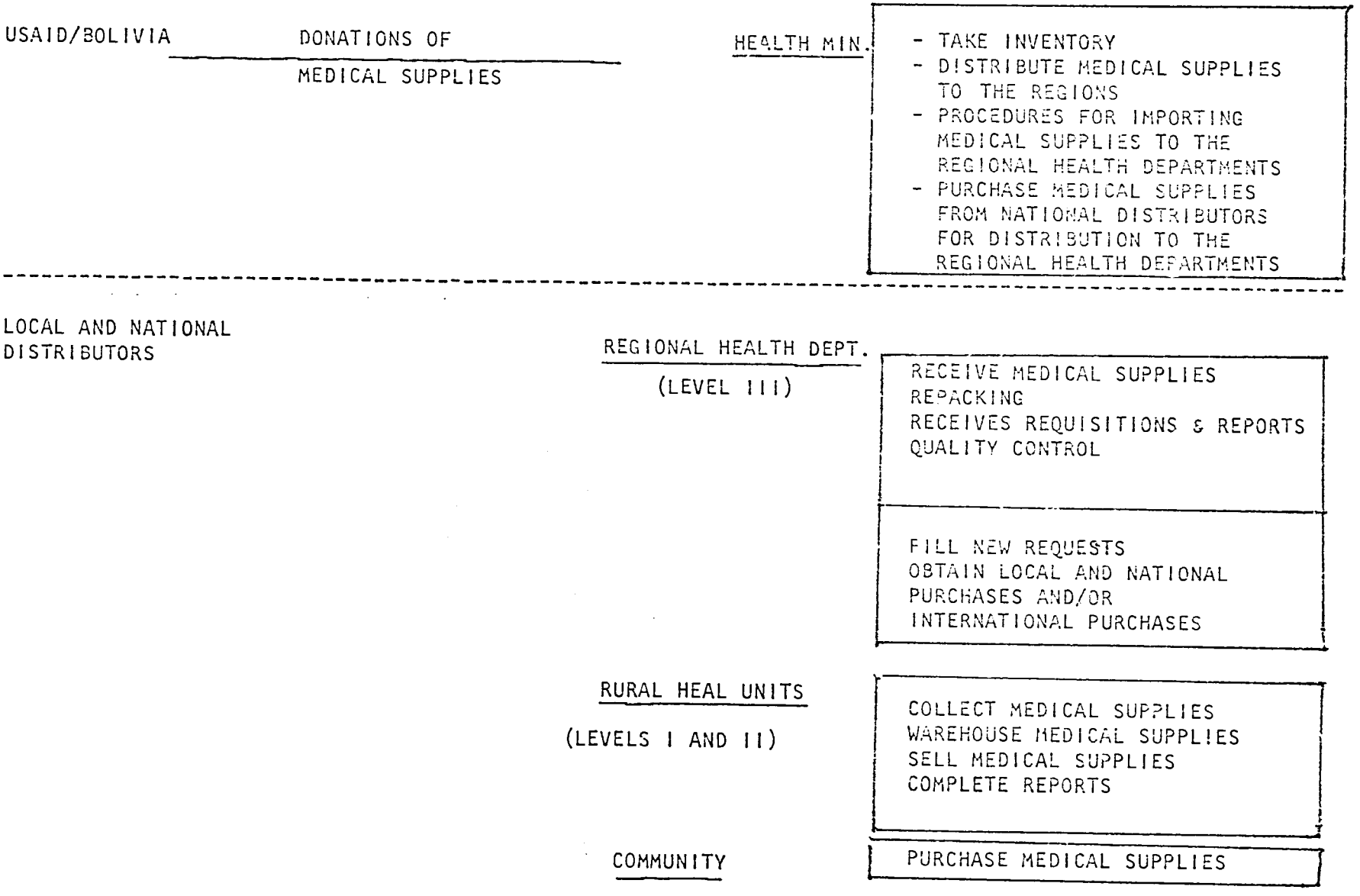
A. The Drug Distribution Model

Due to the donation by USAID/Bolivia, the first purchase of essential products shall be made in the U.S. through USAID. These medical supplies shall be shipped to La Paz where they will be repacked and delivered to the different Regional Health Departments. Once the products arrive in the regions, they will become the capital needed to initiate the subsystem. This aspect of the design of the subsystem proposes that administrative management be decentralized. This is a great advantage that is worth noting, again: Capital is the property of each Regional Health Department.

The flowchart on page 3 describes the operational steps in more detail.

DIAGRAM 2

FLOWCHART FOR DISTRIBUTION OF MEDICAL SUPPLIES



B. Theory and Practice of the Rotation of Capital

It was noted in the introduction that one of the causes of the lack of medical supplies has been the lack of capital. This subsystem proposes to eliminate forever this lack of capital if it is managed with the dynamics of a business. That is to say, that this donation has a monetary value that constitutes the venture of capital for each of the Regional Health Departments. The use of this initial capital is the responsibility of the person in charge of the subsystem who has to maintain, or increase, this capital.

How is capital lost? The simplest way to do this is to give away the medical supplies. However, there are other ways to lose this capital: theft, loss of the medical supplies, or the expiration of the useful life of the medicines, or a monetary devaluation.

The best ways to guard and augment capital are:

- that the pharmaceutical products be handled by responsible personnel to avoid theft or losses;
- that the expiration dates of the medical supplies be acceptable;
- that the pharmaceutical products have a rapid turnover period creating a faster rotation of capital, given the small margin of profit designed in the management of this subsystem; and
- finally, there is a need to reevaluate stocks to adjust for the currency fluctuation.

C. Administrative Organization

USAID/Bolivia's donation is designed to cover all administrative and start up costs during the first year of the subsystem's existence. Moreover, an independent administrative subsystem is proposed. The subsystem is independently flexible in the sense that there exists a fulltime administrator to manage the subsystem. At the same time, the subsystem must be incorporated into the Regional Health Department because the funds generated through the sale of the medical supplies enter into Fiscal Subsystem.

D. Personnel Training

The subsystem design emphasizes the need to train personnel that

will execute the subsystem. These personnel include the person in charge and the other members of the team who have to implement the subsystem plan, including the rural doctors and health auxilliaries in the districts.

The subsystem can be successful only if everybody understands and executes their specific functions well. More emphasis on this point will be given in the section on Educational Components.

IV. BASIC GUIDELINES FOR THE OPERATION OF THE SUBSYSTEM

The guidelines suggested here are the most essential for a well-functioning subsystem. Should other problems which were not foreseen in the implementation phase of this manual develop, it may be necessary to develop additional guidelines.

Nevertheless, as the title indicates, these are guidelines and not regulations because it is believed that flexibility and local administration are the most important factors which contribute to the successful implementation of the subsystem.

A. Personnel Functioning

The importance of trained personnel has been mentioned. From this, we identify the need of having someone in charge of the subsystem, as well as a trained warehouse person. Moreover, specific functions of other personnel who function directly, or indirectly, within the subsystem, must be identified.

B. Identification of Basic Needs

A list of medical supplies has been identified for the implementation of the subsystem; nevertheless, the need for other products may exist. For example, acquisition of serum, which may be needed in the hospitals and other medical units, is not contemplated. To the extent in which the original products are sold, the possibility exists to increase the basic stock of medical supplies only if the use of the original products is properly managed. There are three ways to calculate quantities of required products, but the most important is the prevalent pathology of each region. The subsystem is flexible in this respect because it depends on the pathology of the area and the demand for certain products.

1. Requisition Estimates

a. Based on Population

Study and/or esitmate the prevalence of diverse conditions in the population, and based on the acceptable norms for treatment of those conditions, estimate the medical supplies necessary to treat that population.

b. Based on Services

Determine the number and type of health professionals available, and the disease that must be cured. These estimate quantities are based on the number of services that can realistically be provided.

c. Based on Consumption

Compile information from commercial sources, if available, from private and voluntary organizations, and from governmental programs, on the past utilization of medical supplies.

C. Acquisition of Medical Supplies

The acquisition of medical supplies is one of the most important factors in a system which is based on rotating capital. It is essential that the person in charge of the subsystem be up to date with medical products, be it in the local market, or those established by state entities, or semi-state entities. Moreover, it is vital that the person in charge be aware of the market's stability. If the subsystem seeks only to maintain low prices, it will fail when initial supplies are used up and there is no way to replenish them.

The person in charge has to act in a timely way to anticipate program needs in order to prevent a depletion of supplies, and avoid, in this manner, many negative complications.

1. National Distributors and Importers

Although this source of supplies is usually the most expensive, the pricing model described below takes these sources as the point of reference. In the past, these have been the most stable sources of medical supplies. However, owing to the economic situation, these sources have also suffered depletion of supplies.

2. National Institute of Medical Supplies

This semi-state entity is a new creation. The impact of this source is as yet unknown at this time. Nevertheless, it has the potential to reduce the costs of medical supplies. For the moment, it is recognized that this constitutes another possible source for the acquisition of the essential products. When more exact information can be obtained concerning this organization, information will be given those in charge of the subsystem.

3. Other Institutions

Due to the lack of a national policy regarding the acquisition and distribution of medical supplies, many national and foreign institutions have filled this vacuum, acquiring medical supplies from different sources, distributing them according to their own criteria.

Although this subsystem seeks to fill this vacuum in a more orderly manner, it may be possible to obtain essential supplies through these existing institutions.

There are other donations of medical supplies from other institutions for which the Regional Health Department should assume the responsibility for standardization and coordination. It is essential so that these suppliers become part of the subsystem, and thus, serve as another means of assuring the stabilization of assets.

D. Storage

The storage of pharmaceutical products is very important given that losses through poor handling, or lack of security, can result in the loss of capital for the subsystem. The following are the most important considerations:

1. Coding

Coding of the medical supplies follows the national formulary with some minor modifications. Coding will facilitate various aspects including the standardization of inventories and requisitions. In addition, coding will assist in the physical organization of the warehouse for handling in a more efficient and effective way. Another

advantage of coding is in the evaluation of the subsystem.

The medical supplies are organized in groups; each group of medical supplies has its number. In order to have better control of the utilization of supplies, an additional number has been included which refers to the level within the health system in which the medicine is used. Number two (2) is used to indicate rural health posts; number one (1) for health extension units (CHW's); and numbers three (3) and four (4) are units supervised by a physician. These numbers can be adapted to the criteria used in each region. A medical unit with a physician can utilize any of the drugs and medicines, but health post can use only the products coded with the numbers one and two (1 & 2). This will help clarify the uses of the various medical supplies in the formulary.

2. Inventory

In order to move the medical supplies in a controlled, orderly way, it is necessary to exercise some control over the inventory. This is accomplished through the use of a fiscal and physical Kardex system. This avoids duplication in the acquisition of the most important products. An example of Kardex is shown in Annex C.

3. Basic Conditions of the Warehouse

The warehouse should provide for the basic conditions for the proper handling of pharmaceutical products, taking into account security, conditions of hygiene, humidity and temperature. In addition, the warehouse should have sufficient shelves and an adequate place for the handling of the Kardex system, and for the distribution of the products.

4. Expiration Dates of Medicines

On the average, the expiration dates of medicines should allow at least a one year period between their acquisition and their use. A list should be maintained of medical supplies that have a short shelf life. The various health units should be notified of imminent expiration dates in order to re-distribute usable products. Some suppliers allow replacement of these products, but the responsibility for avoiding major problems lies with the person(s) in charge.

E. Distribution of Medical Supplies

As can be seen in the diagrams 3 and 4, the medical supplies are distributed from the Regional Health Department. In order to receive medical supplies, the district health units must follow the steps indicated in this section. It is worthwhile here to indicate that in the first phase of the implementation of the subsystem, the distribution of the subsystem follows a centralized model in the Regional Health Departments, but as basic services are extended to the rural areas, there can be a decentralization of the system.

1. Requisitions

Each rural health unit wishing to take products from the central warehouse to their respective services has to fill out a requisition form. The requisition should be reviewed to ensure that an appropriate quantity is being taken which is not in excess of the needs of the service population distances, accessibility conditions of the roads, etc.

2. Delivery Records

In order to have a control of medical supplies transferred from the control warehouse to the individual health units, it is important to make a record of delivery at the moment a product is dispatched. An example of a delivery record is shown in Annex E. On the basis of these records, necessary deductions can be made from the Kardex inventory record. This also allows inventory control to be maintained for each health unit. This control may be very necessary in the initial phase of the implementation of the subsystem, but may not be feasible for the long term.

3. Fiscal Kardex

The fiscal Kardex control allows us to know, at any given moment, the value of the medical supplies that any individual health unit has in stock, and the manner in which each unit is making payments for the supplies which they utilize. From the total value of supplies issued to an individual health unit, we deduct the amount of any payment received and we add the value of additional supplies issued to them. If there is an across-the-board increase in prices, an adjustment in values can be easily made in the Kardex system. However, if the price increases are not proportional, the process of readjustment is more complex, and almost impossible to undertake on the basis of the simplified Kardex system described above. Any nonproportional price change would

Diagram 3

STEPS TO FOLLOW FOR THE ACQUISITION AND DISTRIBUTION OF MEDICAL SUPPLIES AND THEIR CONTROL

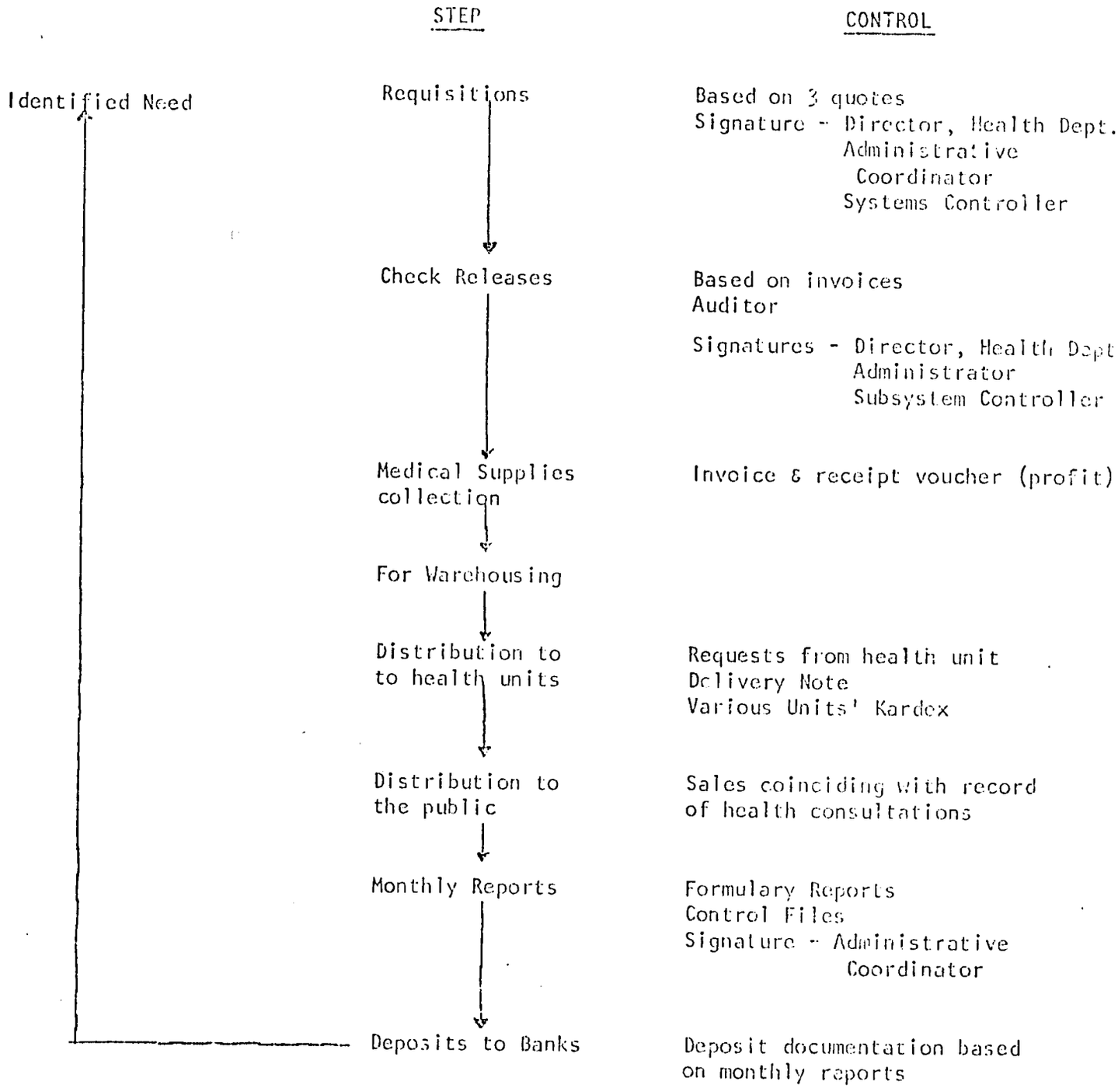


Diagram 4

STEPS TO FOLLOW FOR DISTRIBUTION OF MEDICAL SUPPLIES TO HEALTH SERVICES AND THEIR CONTROL

	STEPS	CONTROLS
Identification of needs of health units in rural areas	Requisition	Department Chief Subsystem Controller
	↓	
	Delivery	Delivery notes from central pharmacy
	↓	
	Storage in the health units	Audited Kardex
	↓	
	Sales to the public	Sales coinciding with record of consultations
	↓	
	Monthly reports	Formulary control file Signature - Administrative Coordinator
	↓	
	Bank Deposits	Deposits documentation based on monthly reports various health units' Kardex

require that each Regional Health Department maintain a separate inventory card for each product in each individual health unit, and adjust the value of stocks every two months.

4. Warehousing in the District Units

Medical supplies should be stored in appropriate facilities, well-secured, and under the control of a single individual. This place should meet the minimal conditions for humidity and temperature, and should have sufficient shelf space, as well as a place for the Kardex system, and for the receiving and delivery of supplies. The latter is subject to the existing administrative services, and can be adapted according to the needs of each health unit. In the rural health posts, the products should be stored in a secure place, which can be a cabinet or a room according to the possibilities in the existing facilities.

5. Inventory in the Health Units

In order to control inventory in the individual health units, and to facilitate the preparation of monthly reports, it is necessary that each unit have a Kardex for each product. The Kardex permits personnel to analyze the movement of the different products, and to make adjustments in value in case a devaluation should occur, or in case of other adjustments in prices. Balances can be also be compared with those at the regional level for audit purposes.

F. Economic Outlook

The subsystem in each Regional Health Department is established with a starting capital which permits the permanent and continuous functioning of the subsystem; once the subsystem has produced a margin of profits and has fulfilled the basic supply of products requested, it could possibly cover other financial requests. The profits may be set aside for other budget items such as supervision, stationery, etc. This is why a basic knowledge of administration is so important. Some of the economic administrative aspects deserve to be mentioned in more detail.

1. Price Model

A medicine is an essential benefit, which combined with other conditioning factors, allows us to recuperate our health. To acquire any medicine in the national or international market, certain require-

ments must be taken into consideration:

- Its chemical composition
- Manufacturer's guarantee
- Expiration date and others
- And especially, its price

The price of medicine, at that of other goods, is dependent on many other variables, such as quantity, demand, the price of medical goods, the costs of other ingredients which go into the final product, the individual's income in a given period, and finally, the monopolies; this latter one having the most influence.

The price of medicine produced in Bolivia, at that of the local distributor's is impacted by the above-mentioned factors. The import price is much higher in some cases, but the local price is more easily adjusted since it can be adjusted without the need of foreign exchange, import losses (customs, etc.), and other problems.

However, if its analyzed from the demand side, one can see a potential demand.

a. Demand

A potential demand exists among the residents of the rural areas, and an effective demand exists among all those who use the health services in the rural areas. This effective demand has been drastically influenced by a climate of economic and political tension. The following paragraphs may serve to give us a clearer picture:

The negative growth of the Bolivian product associated to a more-or-less high, positive population growth, results in a constant per capita drop of the product. In 1980, at 1970 prices, the above mentioned indicator shows 382 dollars dropping to 297 dollars in 1983.

The negative growth of this indicator during the period 1981-1983, at less than 22.2%, which compared with Latin America's, at less than 9.5%, clearly shows the disastrous living conditions that exist in the country. In sum, it is obvious that due to the low per capita production in the country, the distribution of family income has concentrated with greater intensity in the more affluent areas of the population...In the same way, the gap between rural and urban incomes, which was already large by the decade of the 70's (more or less, 1-7), is now even larger.

Considering the problems mentioned above, it is expected that the Government will create a mechanism to influence the high cost of imports and other monopolistic factors so that lower prices may be possible for medicines produced in Bolivia (same prices as those of the local distributors) making health more accessible to a greater number of people.

With these considerations in mind, this model sets the price of medicines using the price of the local distributor as a base; 5 to 15% can be added to the price of each medicine, sharing this profit at the regional as well as the rural level.

Rural Area

This percentage of increase is made according to two strictly social criterion:

- The greater the rate of movement of a medicine, the lower the percentage of increase.
- Since Bolivia has one of the highest levels of malnutrition, of the all the essential medicines, vitamins and minerals should be quoted with the lowest increases.

At the regional level, the local market price allows for a re-purchasing of the medicines, and the percentage of increase mentioned above, allows an increase of the initial capital during stable periods, but during an inflationary period, it permits the amortization of lost value.

At the rural area level the price set will maintain the capital, the percentage of increase becomes a profit for the health establishment, which in the end serves to pay a portion of the general operating expenses.

b Managers

Those who will operate the subsystem are the nurses' aides, who are responsible for the administration of a health center, among other functions.

The provincial doctors, and the doctors who run the hospital health centers which offer a different type of attention, constitute the health personnel who are the intermediaries between the regional pharmacy and the community, who in the end, constitutes the demand.

At the regional level, the system's capital will be decentralized given the proper conditions (the existence of banks, and an administrater at the hospital health center level in the district, according to regionalization), and in the respective districts that exist in the region. In this manner, each district will have sufficient capital to allow it to grow together with its own area of influence, and meet its most pressing needs.

2. Monthly Financial Reports

It is imperative that information flows through the monthly financial reports. These reports provide the documentation required to evaluate the short and long-term functioning of the subsystem, at the level of the individual as well as overall services.

At the individual services unit level, the report allows one to control the sale of the medicines, and consequently, to control the payments and flow of capital. It also permits a control of the technical aspect as far as the movement of certain products. Later in this report, in the section on Evaluation, it will be shown how this report is related to medical care.

At the overall level the reports provide the necessary data for the evaluation of the subsystem in relation to financial activity as well as the movement of supplies, it is imperative that the flow of information be controlled through a chart which is included in Addendum D. Before medicines are dispatched again to a health unit, you must make sure that prior sales were recorded.

3. Payments

Payments for the sales of medicines are based on the monthly economic reports and in accordance with the sale prices to the health units; in other words, the price in the Kardex.

Despite the fact that each health unit could deposit directly to the bank, this would contribute to confusion and would allow errors in the report to go undetected.

For this reason, it is recommended that the health units transfer their funds at the time the report is submitted to the regional office, or to any other individual designated for this function. It is important to underline the fact that the amount of payment must agree with the report.

The funds transferred to the individual in charge of the subsystem may be deposited at one time, daily or weekly, depending on the need for cash, but it is recommended that it be done daily. A summary of the payments must be prepared on a weekly basis for the accountant in charge of the bank account, in order to facilitate the control of the bank book and the bank statement, so that the administration office may expedite new purchases.

4. Health Units Profile

There exists a margin of profits for the health units based on the difference between the purchase price from the regional warehouse and the sale price for the public. This profit shall appear in the monthly report, and must agree with the economic report from the administrative office. This profit must be administered directly by each of the health establishments in the rural area because it is one of the aspects that may motivate personnel in the proper management of the subsystem.

5. Special Bank Account

In order to increase the availability of cash generated by the subsystem, and to energize new sales, a bank account must be opened for the exclusive use of the subsystem. An accountant from the regional administration office should be in charge of the control of this account, and should coordinate all pertinent activities with the individual in charge of the project. This account must be balanced monthly and should be subject to an external audit in the future.

6. Utilization of Funds Generated by the Subsystem

During the first two years, the funds generated by the subsystem must be utilized exclusively for the purchase of medicines and other medical supplies. Then, if the existing inventory is sufficient to fulfill the needs of the area, the funds may be utilized to cover other costs such as supervision, printing of forms, etc., provided the original capital of the subsystem is not jeopardized.

This latter aspect will be developed in the future as an additional guide to offer essential guidelines.

7. Devaluation

Taking into consideration the economic situation of the country, one of the conditional factors to maintain and augment capital is monetary devaluation, which also affects existing inventories. If the effects of devaluation are not controlled, the subsystem could be

decapitalized in one stroke. It is for this reason that the individual in charge must reevaluate the existent stocks and inform the individual health units of any change in prices. Nevertheless, it is evident that it is impossible to avoid all losses related to this factor, but it is important to emphasize that timely action by the individual in charge can reduce the impact of this variable.

G. Educational Aspects

It has been mentioned before that the lack of conscientious and trained personnel may have a negative influence in the functioning of the subsystem. In the implementation phase, the subsystem has taken very seriously the training of personnel at all levels. Nevertheless, two very important ways of continuing this education process are personnel follow-up and supervision.

1. Initial Training

In order to begin the implementation of the subsystem, the need to train all personnel involved has been identified. Classes will consist of instructing the personnel in the use of all forms utilized in the subsystem, and they will also receive some technical, medical knowledge in the proper use of medicines.

2. Follow-Up

As the subsystem is implemented, problems will surface as the theory taught in the initial classes is put into practive. There will be some employees who do not properly understand the use of the various forms, or those who have difficulty in preparing the reports. For these reasons, it is very important that during the first months of operation the individual in charge pay special attention to following up on personnel. There will be many opportunities to follow-up, but it is most important to catch the problems at an early stage so that they do not become larger problems in the future.

3. Supervision

Another way to carry out the educational activity is through supervision. There are two very important components here: one of education, and one of control. Regarding the first one, supervision allows one to discover the problems in their place of origin, and to take the necessary measures to correct them. For example, it may be that in a health unit the personnel have not understood the handling

of the Kardex. Through supervision, the proper directions can be given. Supervision also helps to control the use of medicines, and can also serve to identify negative factors in the field such as poor warehousing, the existence of medicines not included in the subsystem, and others.

II. Evaluation

There is a need to evaluate the functioning of the subsystem in a planned, periodic manner. Short and longterm evaluations are done. Periodic monitoring may be done monthly or every three months. This facilitates the decision-making process in areas which influence the functioning of the subsystem.

For example, the number of health units not utilizing their medicines can be determined; how many are reporting, etc. Long-term evaluations give a global view of the functioning of the subsystem - for example, capital rotation, margin of profit, etc.

It is important to understand that evaluation is one of the three most important steps in the implementation of any activity, and that it influences the functioning and design of same.

1. Short-Term Evaluation

In order to carry out the evaluations mentioned above, it is important to establish the criteria, or indicate which allows the data produced by the subsystem to be analyzed. The suggested indicators for short-term monitoring are the following:

a. $\frac{\text{Number of health units utilizing medicines}}{\text{Number of health units}}$ = % of service utilizing the subsystem

b. $\frac{\text{Number of health units reporting}}{\text{Number of health units utilizing medicines}}$ = % of services reporting

c. $\frac{\text{Amount sold of each product}}{\text{Amount carried of each product}}$ = % sold

d. $\frac{\text{Value of Deposits}}{\text{Time (Month, three months)}}$ = $\frac{\text{Income}}{\text{Time}}$

2. Explanations

a. The first indicator is useful in determining how many health units have not moved their medicines. If there is a great number of facilities which are not moving their products, the reason for this must be found and proper action taken in order to rectify the situation.

Just as a reference, after the initial three months of operation, almost 100% of the health units must be using medicines from the subsystem. Thus, this indicator serves to identify those facilities which have moved stock only, and stopped.

b. The second indicator shows how many health units are reporting. Since the units should not make their payments without reporting them, this indicator is doubly as important. The success of the subsystem depends on the rotation of capital, which can only be based on the movement of the products and payments for them.

If this indicator shows that few services are reporting, then they are not making payments; it is important then, to rectify the situation immediately.

c. The third indicator serves to analyze the movement of the products. This allows one to determine demand over a certain length of time, and this data can be used to meet the needs during specific periods (cold weather, an increase in diahrrea cases, etc.).

d. The value of the payments also permits an analysis which can be useful when making projections as to the availability of cash needed to make the purchases required to satisfy the service demands. This is extremely important; perhaps not so much at the beginning, but certainly once the subsystem is functioning on a permanent basis.

3. Long-Term Evaluation

The long-term evaluation may be done internally or externally. Its purpose is to give a global view of the functioning of the subsystem, and at the same time, to identify positive and negative factors. In much the same way as the short-term evaluation, it also requires the establishment of indicators or criteria

The question that this evaluation must answer is whether there exists a relationship between the subsystem and the predominant pathology, through an analysis of both.

Due to the complexity of this evaluation, a guide will be prepared and distributed at the opportune moment.

I. Other Considerations

1. The Ministry of Social Works and Public Health has tried to establish mechanisms for the distribution of medicines through the institutional or popular pharmacies. These mechanisms have functioned in some of the Regional Health Departments, but not in all of them. Furthermore, the system has not proved very efficient, especially in the administrative aspect since there are so many negative factors involved, such as the lack of supply of essential products and the concentration of capital in the central level. There are other organizations which have donated medicines, and in which some cases, have insisted on independent administration of same. This subsystem proposes to establish one model for the distribution of medicines and each region would have to arrive at the best manner in which to integrate the two systems.

2. Other Sources

For many rural health units, the lack of a subsystem for the distribution of medicines has influenced their decision to obtain essential products from other sources, administering them in their own independent way, thus creating a situation which, if not eliminated, will have a negative influence in the early stages of the subsystem. All personnel must be made aware of the fact that the subsystem does not belong to anyone in particular; it belongs to everyone and its success depends on a common effort.

3. Use of Generic Products

The recruiting, the training and the experience of the personnel have great influence on the preference for some pharmaceutical products. For this reason, some of the products included in the subsystem would be rejected.

This situation would be modified by making the personnel more aware at the technical level, and it is here where the professional doctors and laboratory technicians have a very important and difficult task. If this change were to take place, it would substitute pre-

ferential choice with the generic chemical composition of the products, and it would benefit everyone in the future - the health personnel as well as the patient.

4. Change of Personnel

It is of general knowledge that a permanent rotation of personnel exists, especially in the rural areas, and that this has an influence in the services rendered, etc. This may also influence the functioning of the subsystem; it is for this reason that the individual in charge of the subsystem must know of any movement or change of personnel. If there is no control, it may result in the loss of products, or alteration of the existing stock.

ADDENDUM A

DESCRIPTION OF FUNCTIONS

V. INDIVIDUAL IN CHARGE OF REGIONAL PROJECT - RURAL PHARMACY (Level III)

1. Must have a basic knowledge of administration that would permit him/her to make decisions with an open mind and a firmness of character.

2. Minimum experience of one year in the Ministry of Social Works & Public Health.

FUNCTIONS

A. Distribution of medicines

A.1. To receive medicines into inventory from the National Coordinator

A.2. To maintain inventory of the medicines.

A.3. To be responsible for the re-packaging of the medicines.

A.4. To be responsible for the warehousing of the medicines

A.5. To be responsible for all the administrative handling of the distribution of medicines.

A.6. To receive requisitions from the rural health units in level I and Level II.

A.7. To identify additional medicines for the subsystem in collaboration with the Director of Pharmacies and Laboratories.

A.8. To prepare orders for products purchased locally.

A.9. To prepare monthly or trimestrial reports on the movement of medicines for the U.S. Director and the National Coordinator.

B. Financial Management

B.1. To obtain materials and equipment for the implementation of the project.

B.2. To prepare orders for the purchase of materials equipment for the project

B.3. To make local purchases.

B.4. To receive and review monthly financial reports from Levels I and II.

B.5. To keep a record of payments and to deposit money submitted by Levels I and II.

B.6. To prepare documents required for the fiscal control of the subsystem.

B.7. To prepare a list of prices according to needs in collaboration with the Director of Pharmacy and Laboratories

C. Training

C.1. To be responsible for the training courses given to personnel in Levels I and II.

C.2. To participate in the training of personnel from Level I and Level II.

C.3. To prepare reports on the results of training courses.

C.4. To follow-up on trained personnel.

C.5. To coordinate and participate in supervision trips.

C.6. To prepare reports on supervision for the U.S. Director and the National Coordinator.

D. Upgrading of Infrastructure

D.1. To prepare plans for the infrastructure in Level III, and to identify the infrastructure needs in Level I Level II, in coordination with the U.S. Director and the Planning Director.

D.2. To be responsible for the remodeling of Level III's infrastructure.

D.3. To be responsible for the distribution of equipment for Levels I and II.

D.4. To prepare reports according to follow-ups for the U.S. Director, and for the National Coordinator.

VI. Individual in Charge of Warehouse

(Level III)

1. Must have basic knowledge of accounting practices.
2. Must have a sense of responsibility and good interpersonal skills.
3. Must have at least one year of working experience in the Ministry of Social Works and Public Health.

FUNCTIONS

A. Distribution of Medicines

- A.1. Prepare the warehouse to receive medicines
- A.2. To open a Kardex and to prepare cards for the medicines, and to keep these cards up-to-date.
- A.3. To keep a record of accounts receivable
- A.4. To re-package the medicines according to instructions.
- A.5. To prepare delivery orders based on dispatch of medicines.
- A.6. To dispatch medicines to those individuals responsible in Level I and level II.
- A.7. To stock medicines in an orderly fashion.
- A.8. To report to individual in charge of subsystem of any dispatches of medicines.

B. Financial Management

- B.1. To prepare opportune reports based on record of accounts payable.

C. Training

- C.1. To lend support in the training of personnel from Level I and Level II.
- C.2. To support the follow-up of trained personnel.

VII. DISTRICT CHIEF OF PHARMACIES AND LABORATORIES

A. Distribution of Medicines

A.1. To verify quantity and condition of medicines received.

A.2. To prepare a record of the medicines in the project, in collaboration with the other directors, Chiefs of Pharmacies, and laboratories.

A.3. To identify other medicines required in the region according to pathology, and to prepare the respective requisitions in collaboration with the individual in charge of the subsystems.

A.4. To supervise the re-packaging of the medicines according to program standards and instructions.

A.5. To approve all deliveries.

B. Financial Management

B.1. To authorize dispatches of new medicines.

C. Training

C.1. To participate in the training of personnel for Level I and Level II.

C.2. To follow-up on trained personnel.

C.3. To take part in supervision trips of Level I and Level II.

C.4. To prepare reports for the Director of the Regional Department of Health and the National Coordinator, in collaboration with the individual in charge of the subsystem.

D. Upgrading of Infrastructure

D.1. To participate in the preparation of plans for the warehouses of Level I, Level II and Level III.

VIII. REGIONAL ADMINISTRATOR - DEPARTMENT OF HEALTH

(LEVEL III)

FUNCTIONS

A. Distribution of Medicines

A.1. To give timely attention to orders for medicines

A.2. To expedite local purchases for the project.

B. Financial Management

B.1. To expedite and authorize the opening of a bank account for the subsystem.

B.2. To supervise the accountant responsible for handling subsystem funds.

B.3. To authorize and make disbursements according to the project's implementation plan.

B.4. To coordinate with all personnel, any information pertinent to earnings from sales of medicines.

C. Training

C.1. To participate in the training of personnel from Level I and Level II.

C.2. To initiate all procedures related to the supervision of Level I and Level II.

D. Upgrading of Infrastructure

D.1. To supervise all the accounting related to remodeling and purchasing of equipment.

D.2. To authorize disbursements for purchasing.

IX. REGIONAL ACCOUNTANT

(LEVEL III)

REQUIREMENTS

FUNCTIONS

A. Distribution of Medicine

A.1. To prepare checks for local purchases of medicines, vouchers for expenditures and receipts, and other necessary transactions.

A.2. To keep a physical count of inventories.

B. Financial Management

B.1. Assume responsibilities for all accounting related to the subsystem, and integrate with regional accounting system of the Department of Health.

B.2. To coordinate with the individual in charge of the subsystem and with the Administrator of the Regional Department of Health.

C. Training

C.1. To help the person in charge of the subsystem in the training of personnel.

ADDENDUM G

CONTROL CHART FOR THE SUBMISSION OF MONTHLY REPORTS

DISTRICT/ SERVICE	1	2	3	4	5	6	7	8	9	10	11	12
DISTRICT I												

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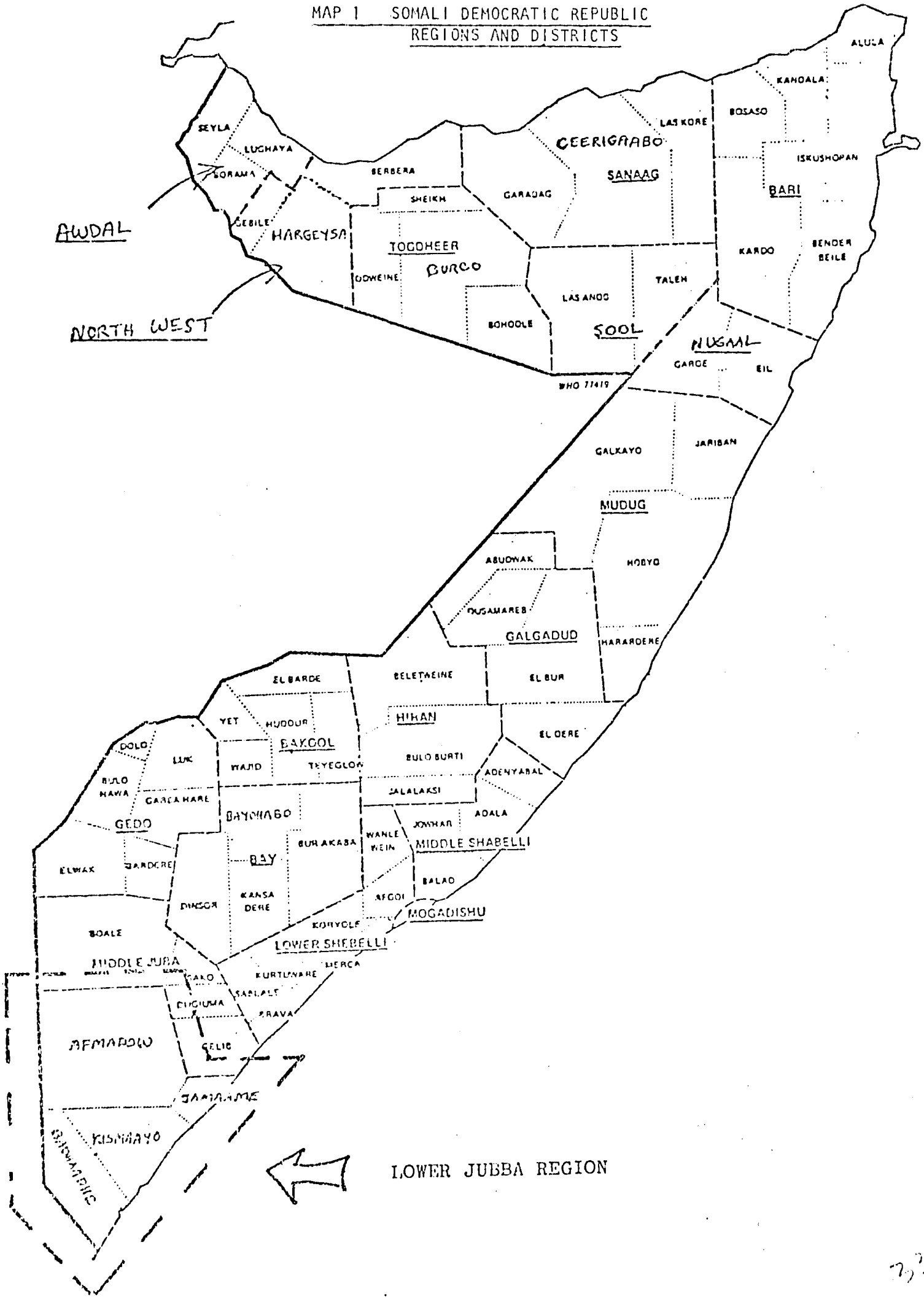
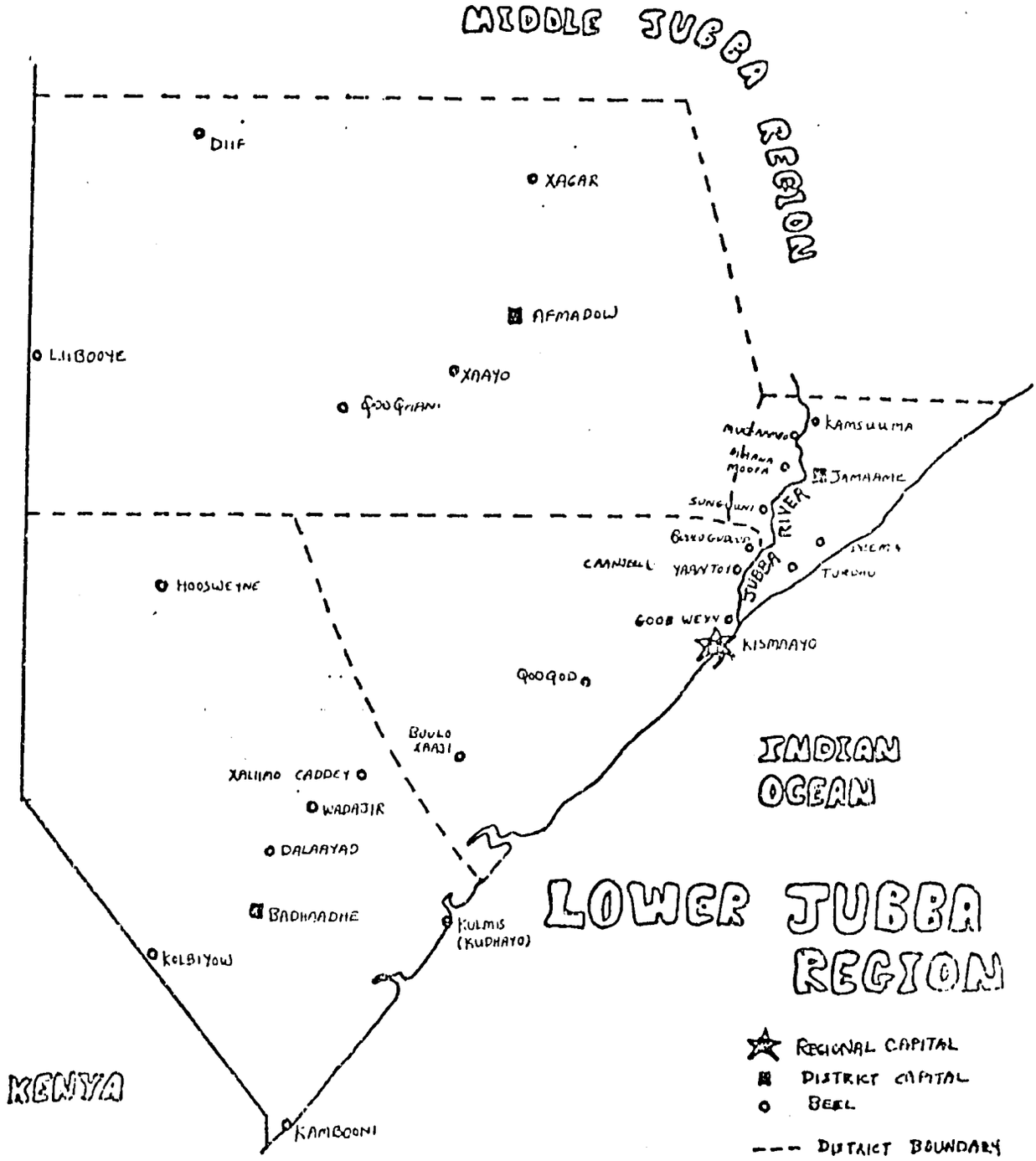
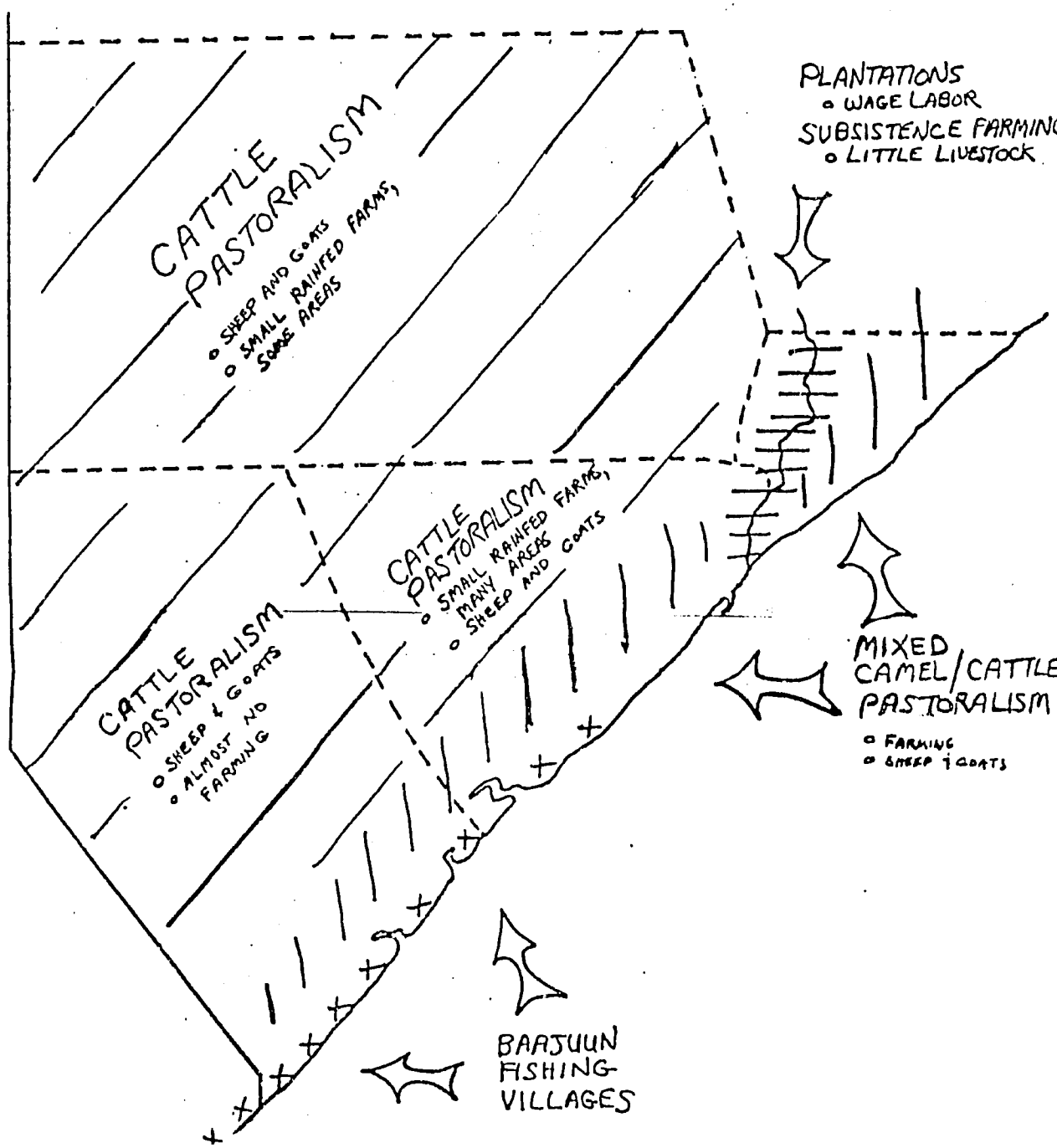
MAP 1 SOMALI DEMOCRATIC REPUBLIC
REGIONS AND DISTRICTS



MAP 2. LOWER JUBBA REGION



MAP 3. SOCIO-ECONOMIC DIVISIONS

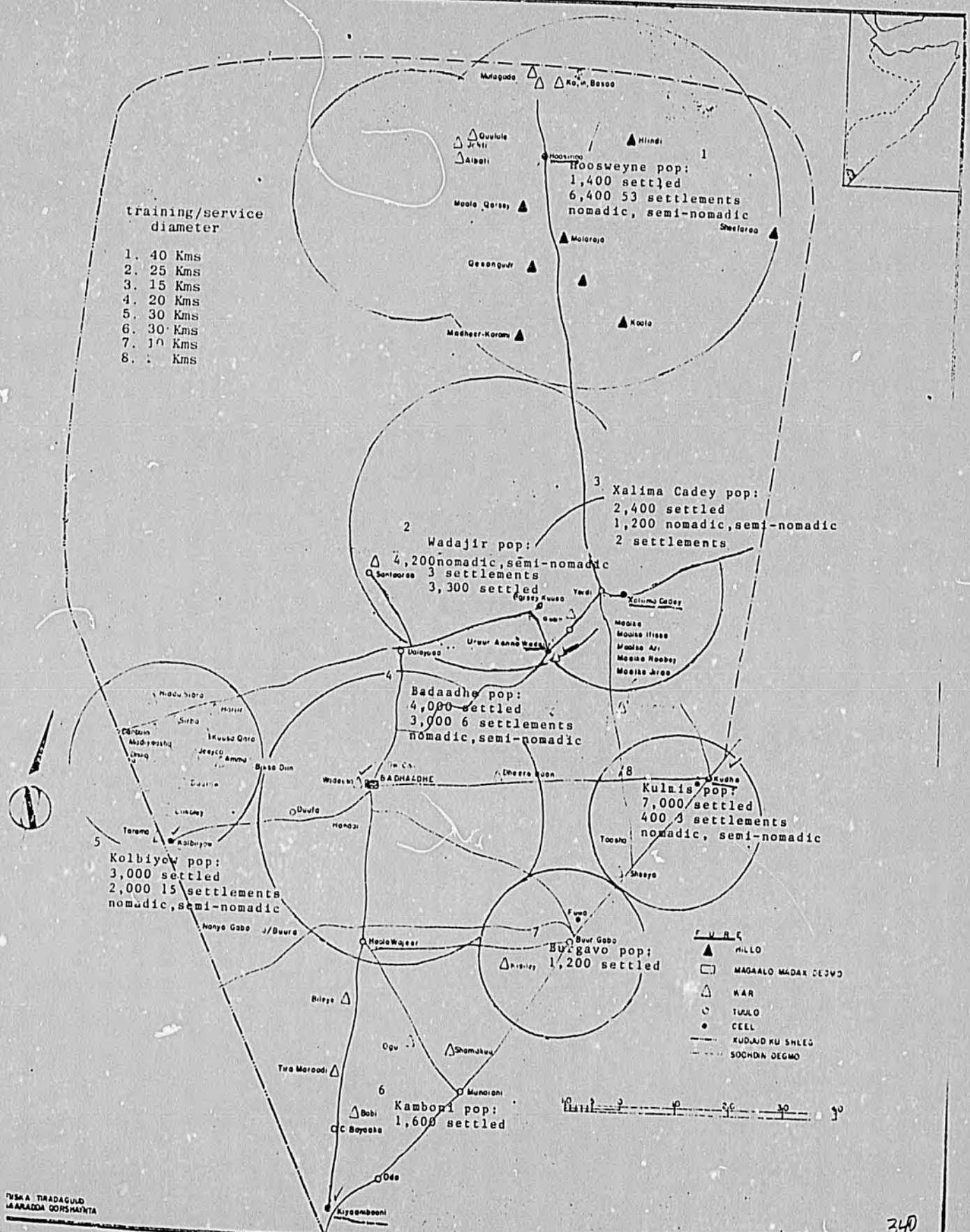


MAPS 4 AND 5

TRAINING AND SERVICE AREAS

Map 4

BADHAADHE



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Map 5