REPORT OF A HEALTH SYSTEM BASELINE SURVEY

MINISTRY OF HEALTH, ETHIOPIA

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PREFACE

This report describes the results of an extensive health service delivery baseline survey carried out in Ethiopia during the months of December 1994 and January 1995. The survey covered six regions and a total of 129 health institutions, both health service delivery and health management institutions. The survey questionnaires included questions on coverage, resource availability, and health service delivery and management support systems. Approximately 200,000 data points were entered into the computer.

The MOH, as the main interested party, wanted to get an overview of current practices, problems and situations prevailing in the Ethiopian health system. The main aim was to use the results of the survey to (re) design the health system, if and where necessary.

One should realize that this report reviews the health system as a whole, i.e. the situation generally found in health units or health management institutions, not as a comparative study among regions. Therefore, data are presented in an aggregated and summarized form. More detailed studies, concerning particular subjects or focussing on specific geographical areas, can be undertaken at a later stage, using this data set or after collecting additional data.

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LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infections
BA	Bachelor of Arts
Bact/Paras	Bacteriology/Parasitology
BASICS	Basic Support for Institutionalizing Child Survival
BS	Bachelor of Science
CDC	Communicable Disease Control
CDD	Control of Diarrheal Diseases
CHP	Community Health Post (see also HP)
EHSDA	Ethiopian Health Systems Design Activity
EPI	Expanded Programme on Immunization
FP	Family Planning
GM	Growth Monitoring
HIS	Health Information System
Keb	Kebele
HB	Hemoglobin Testing
HC	Health Center
HIV	Human Immunodeficiency Virus
HMIs	Health Management Institution
HOSP	Hospital
HP	Health Post (see also CHP)
HS	Health Station
LLB	Bachelor of Law
MCH	Mother and Child Health
MD	Doctor of Medicine
MOH	Ministry of Health
MPH	Master of Public Health
MSc	Master of Science
NGO	Non Governmental Organization
OGO	Other Governmental Organization
OPD	Out Patients Department
ORT	Oral Rehydration Therapy
PA	Peasant Association
PHC	Primary Health Care
RHB	Regional Health Bureau
SEPR	Southern Ethiopia Peoples Region
STD	Sexually Transmitted Diseases

ST/U	Stool and Urine Analysis
TB	Tuberculosis
TFR	Total Fertility Rate
TGE	Transitional Government of Ethiopia
USAID	United States Agency for International Development
WHD	Woreda Health Office (department)
WHO	World Health Organization
ZHD	Zonal Health Department

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Lastly, we wish to state that this report reflects the health sector situation found in the country as well as the views expressed by the different interviewees. It does not necessarily reflect the views of the Government of Ethiopia or of the United States Agency for International Development or its projects. Ultimately the writers are solely responsible for this report.

EXECUTIVE SUMMARY

In 1994, as part of its initiative to correct weaknesses in the health system, the Transitional Government of Ethiopia (TGE) launched the Ethiopian Health Systems Design Activity (EHSDA). The Ministry of Health created a technical sub-committee to plan and carry out one of the major activities of the EHSDA, a baseline survey of the existing health service delivery and management systems in the country. The sub-committee received technical assistance and operational support from USAID through an agreement with the Basic Support for Institutionalizing Child Survival Project (BASICS). BASICS consultant Sjoerd Postma assisted the sub-committee with the development of a survey tool to gather information on five levels of health facilities and three levels of health management (support) institutions.

After a pilot-test of the questionnaires in a separate region, the survey was conducted in six regions during the months of December 1994 and January 1995. Site selection was randomized to the extent possible, allowing for logistical constraints and with some purposive selection of less widely available but very important peripheral institutions and facilities.

Survey findings

The current health care system, designed to parallel the administrative hierarchy, remains incomplete. This system was designed in the late 1970s as a six-level tier system: community health posts, health stations, health centers, rural and regional hospitals, and central referral hospitals. The health station is considered the entry-level facility to the formal health care system. There are zones without hospitals and few functioning community health posts could be located for the survey.

A parallel management support infrastructure, more recently established, was found to be far from complete. Woreda health management offices (WHDs), as the peripheral level health management institutions (HMIs), were not always present. Furthermore, of the 18 WHDs surveyed, two-thirds were located in health facilities. This blending of health facility with management unit (usually staff as well as space) hinders clear definition of roles, of personnel and other resource needs, and of lines of reporting and supervision. In this situation, a hospital may be reporting to/supervised by a woreda health office that is also a health center.

As the country's administrative hierarchy is undergoing changes and census data are not current, the correlation of health service delivery units to population covered is difficult to determine. Estimates of catchment population showed wide variation for each level of health facility. Overall, the health station level was estimated to cover an average population of 27,200 within a six-kilometer walking distance, though individual estimates of the catchment population of health stations surveyed ranged from 2,600 to 91,500. Similar variability was found at all levels, leading to unclear distinctions in the level of service to be provided. There are large health centers functioning as mini-hospitals and some health stations are more like health centers.

The distance from where the population lives to the nearest health facility was roughly estimated from patient registers as a measure of geographic access to health services. This analysis revealed that though 80 percent of patients resided at an average distance of 5.7 kilometers from the health station, five percent of those using the health station lived more than 20 kilometers away.

Health Services Delivery

The new health sector strategy provides guidelines for the types of health services to be offered by each level of health facility; the survey found general concurrence in actual practice. The full package of public health services is offered by three quarters of surveyed health stations, health centers, and rural hospitals and nearly half of health posts, though by less than one third of central hospitals. Health centers provide the most significant outreach services, averaging two full days per week. All levels provide outpatient services; in-patient care is offered mostly by hospitals. However, survey findings confirmed that some health stations, particularly in Addis Ababa, function more like health centers in that they offer more diagnostic and in-patient care than many of the rural health centers.

Diagnostic services at all levels are hindered by a lack of materials and/or equipment, a problem which could be partly resolved by clear guidelines as to which diagnostic tests each level should have available. Guidelines regarding presumptive diagnosis and treatment of some common illnesses and for symptoms demanding referral to a higher level of facility appear to be lacking.

The tiered organization of health facilities should be conducive to a strong referral system, particularly important for the rational use of Ethiopia's limited health care budget. However,

distances between levels of health facilities (e.g., on the average 31 kms. from a health station to the nearest health center and 52 kms. between a health center and the nearest hospital) apparently hinder an effective referral system. Survey teams were unable to find either a clear referral policy or complete records of patients referred and reasons for referral.

Supervision of health facilities is undertaken mainly by health centers (for health stations and posts) and by the zonal health departments (for health centers and hospitals). Woreda health offices, though nominally responsible for the supervision of health centers and rural hospitals, were rarely mentioned as the supervising unit. In this most basic role of a management institution, their frequent dual role as health center apparently impedes the supervisory capacity of WHDs. There is considerable overlap by supervising institutions, with health stations surveyed reporting supervision by an array of nine different institutions. The reported frequency of supervision is good, with 55 percent of surveyed facilities having received a visit in the three months prior to the survey. However, the quality of the supervision, i.e., whether visits constitute mere delivery of supplies or productive feedback, is an important issue that merits further assessment.

Personnel from health management institutions (HMIs) were found to have conducted more than half of the most recent supervisory visits. HMIs also support the health service delivery system through training, supply, monitoring, information, transportation, and maintenance. All facilities generally felt HMIs could improve their support through better coordination of programs, more frequent supervision, and increased resources.

Resources

For health institutions to function effectively, sufficient human, financial and material resources must be allocated, deployed, and appropriately utilized toward the goal of improving the health of the population. The survey assessed the availability of financial, physical, and human resources as well as the general condition of physical infrastructure and transport at both service delivery and management levels.

Health services in Ethiopia rely on annual allotments from the government budget. Fees charged for services are minimal and all money collected at the point of service returns to the Treasury. Fees are not standardized among levels.

Average budget allocations for each type of health facility and management unit were assessed for the last three fiscal years. Most did not know their 1995 allocations. Average budget allocated increased from 1993 to 1994 for all reporting units. The allocated budget for RHBs and ZHDs on average increased at twice the rate as budgets for health facilities. Only eight of 18 WHDs reported having any budget allocation. Even for those, the amount was minimal (Birr 36,000 per year) relative to the average ZHD budget (1.7 million Birr) and relative to the potential responsibility of the WHDs for managerial support to first-line health facilities. Health stations and WHDs were unable to recollect 1993 figures to allow for a comparison with 1994. The majority of all units' budget was allocated to salaries.

Several previous manpower studies in Ethiopia have cited shortages of health personnel. The survey confirmed that heads of health facilities estimate their staffing needs at well above current levels for both technical and administrative staff. On average, they perceived the need for a 35 to 55 percent increase in technical staff.

All levels of HMIs perceived similar under-staffing, though in their case the need has not been substantiated by other studies. The survey revealed two factors that may influence this perception: a lack of standardization in the staffing of HMIs (i.e. the need for clearer delimitation of roles and functions) and the dual role that some WHDs play as both management unit and health facility, such that HMI personnel may also be treating patients. The survey results suggest that this dual role of some WHDs, combined with insufficient numbers of WHDs overall, have caused additional supervisory and reporting duties to fall on higher HMI levels, perhaps contributing to the perception of under-staffing at all HMI levels.

In looking at other resources, the survey findings show that health stations were more likely than other facilities to experience drug stock-outs, although across the board the drug supply situation was reasonably good. Equipment was also, with a few exceptions, available in all facilities according to the MOH standard list. However, what equipment was lacking tended to be essential to basic care (e.g., stethoscopes and scales in peripheral facilities, sterilizers and microscopes in

hospitals). Of note is that the standard equipment list for hospitals and health centers does not include health education materials. Though these materials are considered important for improved caretaker-patient communications in primary health care, they were generally lacking at all levels.

The HMIs consistently lacked basic office equipment. WHDs, perhaps reflecting their low budgets or shared offices, lacked basic room furnishings in all cases. More than half of all equipment considered not available in health facilities and HMIs was old and broken or lacking spare parts. A poor or nonexistent maintenance system was considered responsible for the high levels of equipment out of use.

Great disparity was found among health facilities in the number of vehicles available. Furthermore, many existing means of transport were in disrepair. For HMIs, the most urgent need appears to be for trucks, especially in zones where supplies for large populations need to be distributed. Vehicles out of use due to disrepair comprised a sizable portion of all means of transport. The need for standards for allocating vehicles and improved maintenance and transport management systems was apparent.

Survey results confirmed previous findings that much of the health facility infrastructure is in need of major repair or complete replacement. Most units expressed the need for additional space. HMI level offices were generally in better shape, with the exception of shared offices.

Health Management Information Systems

Three aspects of information and management were reviewed: tools for resource management, the reporting system, and planning systems.

Health facilities were found to employ to a varying degree existing tools for internal management of resources. A standard set of management tools and record-keeping forms was less evident for health management institutions. Tools for maintenance and for equipment and transport management were least available in all units. Two-thirds of HMIs also lacked personnel management tools. Few WHDs had any of the expected tools.

Reporting was found to be highly erratic, both in the types of report and frequency of reporting. Only morbidity reports are sent and received regularly throughout the system. The lower level health facilities considered reported information to be primarily of use for higher levels. Reported use of information at the point of collection rose significantly in higher level facilities and in HMIs.

Planning was reported to be carried out by most facilities and HMIs. However, basic planning tools were found lacking. The problem was especially acute among WHDs, of which only six percent even had a listing of facilities in their area. Most significantly, all units reported that planning is conducted primarily in-house, with little coordination among departments or between management and service delivery levels.

Summary

In conclusion, the current health system is the result of several past initiatives to emphasize primary health care and to increase access by the rural population to appropriate health services. These initiatives have been hindered by the country's recent years of tumult and severely low health budgets as well as by a highly centralized previous government.

Key pieces of the multi-tier system of health facilities and its management/support structure are lacking as are clear standards for catchment area, roles, and resource requirements of each level. The new health sector strategy has begun to address some of these issues, but more detail is needed.

The tier system and parallel management structure in theory appear well-suited to a country with the health profile and limited budget facing Ethiopia today. However, guidelines for quality case management and referral are needed to take better advantage of this health system design. A consistent and significant fee for service structure, with revenue remaining at the point of collection, could help meet some of the many needs enumerated by health personnel interviewed for this survey. However, to make the best use of all available resources, planning needs to become a more cooperative effort between management and facilities as well as among tiers of the health service structure.

This report, and the survey on which it is based, presents a situational analysis of part of the existing Ethiopian health system. Other important elements must also be assessed, including the quality of services provided and the care-seeking behaviors of the population. Despite the weaknesses and problems described in this baseline survey, the EHSDA represents a great step forward in the commitment of the TGE to improve the health system. The information presented here should serve as a benchmark for moving forward.

I. BACKGROUND: the Ethiopian Health System and the Survey

A. Overview of the Existing Ethiopian Health System

1. Ethiopia's Health Status

Ethiopia, with a population of about 56 million, has an area of approximately 1.1 million square kilometres. As reported in the 1995 World Development Report, Ethiopia has a very low per capita GNP of US$ 100 (base year 1993). The annual growth rate is 7.4 percent. Famine and civil war have compounded Ethiopia's problems over the past 20 years. In May 1991 the Transitional Government of Ethiopia (TGE) came into power and promulgated the principles of democratization, pluralism, and regional autonomy leading towards the establishment of federal regions for its multi-ethnic society, approaches that have brought relative peace to the country.

The World Development Report also estimates the health status of the population as among the lowest in the world with an infant mortality rate of 117 per 1000 live births, and under five mortality of 204 per 1000 live births. At the current estimated rate of population increase of 3.1 percent per annum, the population of Ethiopia will double in 24 years. The high mortality rates, combined with a total fertility rate of 7.5, result in an overall life expectancy at birth of about 52 years.

The major health problems in Ethiopia are mainly preventable communicable and nutritional deficiency diseases associated with food insecurity, perinatal mortality, poor hygiene and sanitation, and unsafe and inadequate water supply. The most common causes of death are pneumonia, tuberculosis, diarrhoeal diseases, nutritional deficiencies, and malaria.

2. Development of Health Services in Ethiopia

The history of medicine in Ethiopia can be traced back to the 16th century. However, the growth and development of modern health care in Ethiopia has been very slow. At present the majority of the population still has no access to any form of modern health care.

Since the establishment of the Ministry of Health (MOH) in 1942, the health system in Ethiopia has evolved from hospital-based curative care and vertical disease control programs to primary health care in the 1960s. The second five year development plan (1962-1967) promoted the goal of eventually establishing at least one health center for every 50,000 people and one health station for every 5,000 people. The fourth five year development plan (1974-1979) set a target raising health services coverage from 15 to 30 percent by the end of the plan period, but the plan was not implemented because of the 1974 revolution and change of government.

The goals of these various five year plans were not achieved. However, the reorientation of the health care delivery system in favor of the rural disadvantaged population and the major departure in health care delivery strategy from hospital-based curative care to primary health care through a network of health centers and health stations were major achievements in and of themselves.

The health policy of the military government that came to power in 1974 emphasized disease prevention and control, provision of health care to the rural population, self reliance in health, and community participation. This policy was further consolidated by the adoption, in 1978, of primary health care (PHC) as the strategy for achieving health for all by the year 2000.

Following the 1978 adoption of the PHC approach, Ethiopia began to develop a six tier health delivery system with increasing levels of technical complexity: at its base the community health posts, followed by health stations, health centers, rural hospitals, regional hospitals, and central hospitals at the apex. Theoretically, it was anticipated that strong coordination, a functional referral system and supportive linkages would exist among the different units of this six tier system.

The decentralization of the health system mirrored changes in the country's administrative hierarchy instituted by the TGE in 1991. The highly centralized government was decentralized into a system consisting of 10 regions, about 50 zones, and over 600 woredas (districts). Functions at the central MOH level were decentralized to the newly formed regions; as a result the manpower and other resources at the MOH have been reduced to a bare minimum.

Management support to the health facilities is provided by regional health bureaus (RHB), zonal health departments (ZHD), and woreda health offices or departments (WHD). These health management institutions (HMIs) are intended to parallel the current structure of the administrative decentralized levels.

Years of war and civil strife led to the destruction of many health facilities in the country and loss of trained health manpower. As a result, in the past few years the TGE has been mainly engaged in renovation of health facilities. Currently, there are 72 hospitals with, in total, fewer than 10,000 beds, 153 health centers and about 2000 health stations (TGE 1995, draft Health Sector Strategy).

3. Health Sector Problems

In spite of the political commitments by the military government to achieve PHC, health service coverage remained far below 50 percent and the distribution of the available health facilities continued to be skewed in favor of the urban population. Hospital-based facilities in Addis Ababa and some regional capital cities were provided with 50-55 percent of the total recurrent health budget. The share of the MOH health budget, as a percentage of total government expenditure, declined from over four percent in FY1978. throughout the 1980s to 2.6 percent in FY1989 (World Bank figures from Barbiero, et.al., 1993). Some of the main problems and shortcomings of the hitherto health system are the following:

i. Health service coverage is very low and there is inequitable distribution of available health facilities and health manpower.

ii. The health budget was severely deficient vis-a-vis the demands of the health services. The shortage has especially affected the primary health care facilities, i.e. health centers and health stations.

iii. Health care facilities at each level are not well standardized in terms of catchment population, type of services to be provided, staffing pattern, physical and logistic facilities, budget, and resources.

iv. The health care referral system is not properly designed and enforced. This has led to overcrowding and over-utilization of tertiary level health care facilities by self-referred patients and under-utilization of primary health care facilities.

v. Although prevention and community outreach services are emphasized in theory, most of the health facilities, including health centers and health stations, are heavily engrossed in outpatient curative services while essential public health services are neglected.

vi. The health services management system of the previous government was highly centralized, bureaucratic and autocratic in nature. Planning and decision-making were done mostly at central level in a way which had little relevance to, or positive effect on, operational levels. The district health office did not exist in the official organization or political and administrative divisions of the previous governments and hence was not budgeted for.

vii. Community health services, which form links between the formal health care system and the community, were very weak because of lack of support from both the communities and the government.

viii. Involvement of the private sector and non-governmental organizations in health was very restricted because of the socialist principles of the government. The few existing private and NGO-owned health facilities were not properly organized, regulated, and/or supervised.

ix. Health workers within the health system are demotivated due to a lack of a career structure, poor remuneration, and absence of incentives.

x. Weaknesses in the design of the health information system have hampered meaningful planning, implementation, monitoring, and evaluation of health services.

xi. The health care financing system of the country depends almost exclusively on the government budget and foreign aid. Whatever service charges are collected are channelled to the general government treasury with no retention at health unit level.

4. Ethiopia's Health Policy

The Transitional Government of Ethiopia, aware of the weaknesses in the health system, issued a new national health policy in September 1993. The hallmarks of the TGE health policy are: democratization and decentralization of the health system; development of preventive and promotive health services; development of equitable and acceptable standards of health care; intersectoral collaboration in health; national self reliance in health; regional and international cooperation in health; development of appropriate capacity building; provision of health care on a scheme of payment according to ability, with special assistance to the poor; and promotion of the participation of the private and non-governmental organizations in health. Priorities of the policy and strategies for implementation were also stipulated and defined.

The adoption of the national health policy, along with related policies (drug policy, social policy, population policy; women's policy, economic policy and policies with regard to science and technology) brought to the fore the need to revise and update both health delivery and management systems. To this end, in July 1994, the MOH created a technical committee to undertake the Ethiopian Health Systems Design Activity (EHSDA) and asked the United States Agency for International Development (USAID) for operational and technical assistance. One of the major activities of EHSDA was the assessment of the current situation through a baseline survey of health service delivery and management facilities. USAID provided technical assistance and operating expense support through an agreement with the Basic Support for Institutionalizing Child Survival (BASICS) Project.

B. Survey Methodology

1. Introduction to the Baseline Survey

The first step in designing the new health system was to objectively analyze the prevailing health service delivery and health management systems by means of a baseline survey. The overall preparation for the survey started in July 1994. A sub-committee of the EHSDA technical committee was formed to plan and implement the study. This sub-committee included experts from the various departments of the Ministry of Health. Staff from BASICS met with the sub-

committee in October 1994, and it was agreed that BASICS would provide a consultant to assist in designing and implementing the baseline survey.

2. Objectives of the Survey

General

The overall objective of the baseline survey was to collect data both on health service delivery and the supporting health management systems. The subsequent analysis of the data is to provide an in-depth understanding of the prevailing situation regarding health services in the country and form the basis for the redesign of the health care system(s).

Specific Objectives

The specific objectives of the baseline survey were:

- to review the existing catchment population size, the distance between health care and the population seeking health care;
- to examine the availability and magnitude of resources, such as budget, manpower, medical supplies, equipment, drugs, transport, and physical infrastructure at each type of health facility and managerial unit;
- to examine the prevailing organizational and managerial structures and functions, both in the health care facilities and the health management offices, including an analysis of the availability of tools for managing health services resources (budget, personnel, equipment and supplies, drugs, etc).;
- to examine the type and magnitude of available curative, promotive, supportive and preventive services provided by health service delivery units at the different levels of the health system;
- to examine information, planning and management systems in both the health and managerial units;
- to describe the occurrence, cause, effect and possible solutions to different problems encountered in the provision of health services, in personnel, finance, medical equipment, management, transport, and planning and health information systems.

3. Survey Procedures and Sampling

Following the major objectives of the EHSDA and the more specific ones for the survey, the sub-committee developed seven questionnaires addressing the issues mentioned in the objectives. The seven questionnaires were for each level of care: hospital (HOSP), health center (HC), health station (HS), and health post (HP), as well as for the health management institutions, i.e. regional health bureau (RHB), zonal health department (ZHD), and woreda health office (WHD, to avoid confusion with the acronym of the World Health Organization).[1] After consultation with the USAID technical advisor and BASICS, the number of questionnaires was reduced to three: one addressing HOSP and HC, one for HS and HP, and the third addressing the management units. These were subsequently pilot tested in a separate region and reviewed by the technical committee. The final questionnaires were based on the health system management inputs from the USAID technical advisor, results of the pilot test, and the review of the technical committee members. The questionnaire, however, remained rather long, due to the detail and magnitude of information required.

The survey was initially planned to be carried out in all regions of the country, but for logistical reasons, six regions were selected: Tigray, Afar, Oromia, Addis Ababa, Gambela and SEPR, with pilot testing of the instrument in a seventh region, Amhara. The piloting was done by the USAID/BASICS technical advisor and three experts from the MOH, who later served as the team leaders for the rest of the survey.

The six regions to be included were purposively chosen for the following reasons, in addition to logistical considerations: Tigray was chosen because of the above average functioning of its health infrastructure, Addis Ababa as the major urban region, Oromia as the biggest region in the country, Gambela and Afar as disadvantaged regions, and the SEPR at the request of the USAID mission, as USAID may start a comprehensive program of assistance to the health sector in that region. Within these regions, logistical accessibility influenced whether or not selected units were visited. After omitting inaccessible areas (e.g., marshy areas and very mountainous areas, which prohibited ready access), a cluster and simple random selection was taken from the remaining units. Zones and units were randomly sampled with the assistance of the RHB planning departments.

[1] It should be noted that the Ministry of Health, as the apex management support structure, was not subject to the survey; it conducted the survey.

Data were collected from all levels of the health service delivery system and its corresponding management institutions. The original plan was to collect data from six regional health bureaus (RHB), and from each RHB three zonal health departments (ZHD), three woreda health offices (WHD), three hospitals, five health centers, six health stations, and six health posts. Primarily due to problems of access and non-availability of units, fewer units were visited in the end, especially fewer health posts and woreda health offices. As the latter is (and will be) an important managerial unit, it was decided to visit an additional number of selected woreda offices in Oromia that were known to be functioning. Table 1 provides an overview of the units actually visited.

Table 1: Regions and units included in the baseline survey

	Health Service Management			Health Service Delivery			
Regions	**RHB**	**ZHD**	**WHD**	**HOSP**	**HC**	**HS**	**HP**
Tigray (Region 1)	1	3	0	3	6	6	2
Afar (Region 2)	1	3	0	2	3	6	0
Oromia (Region 4)	1	3	7	3	6	6	0
SEPR (Regions 7-11)	1	3	6	3	6	6	2
Gambela (Region 12)	1	0	5	1	2	6	0
Addis (Region 14)	1	3	0	3	6	6	2
Central				5			
Total in Sample	6	15	18	20	29	36	6
Amhara (Pilot)	1	1	1	1	1	1	1

NB- In the country as a whole there are currently 10 regions (including the SEPR grouping of regions), about 50 zones, and over 600 woredas. Existing health facilities include 72 hospitals, 153 health centers and 2094 health stations (MOH 1995, draft Health Sector Strategy)

It should be noted that overall, given the small numbers of units sampled relative to total facilities in country and the non-random nature of selection due to logistical constraints, this cannot be considered a truly representative sample. Nevertheless, anecdotal evidence suggests that the results translate fairly well to the country as a whole.

4. Data Collection, Compilation, and Analysis

Each survey team consisted of the team leader and two additional experts from various departments of the MOH. Each team visited two regions during two phases (December 10-31, 1994 and January 20-February 5, 1995) as follows:

Team 1: Tigray and Afar

Team 2: Oromia and Addis Ababa

Team 3: Gambela and SEPR

Data collection and validation were completed by mid-February 1995.

In each unit visited, the questionnaire was filled in by interviewing the staff person in charge of the unit. This was usually done by one survey team member. The other two members of the team gathered additional data, such as the equipment list, budget, drug supply checks, or conducted a catchment calculation exercise, often involving other staff members of the unit. The interview took on average three to four hours. Quite often team members had to return to the unit, in cases where staff members needed additional time to pull together the required data. A log sheet was provided to check all units visited.

Upon return from the field, team leaders went through each questionnaire to check, clarify, and validate the answers. Meanwhile screen templates were developed for computer entry; Epi-Info Version 6 was used for data entry and analysis. Due to the magnitude of the data (eventually there would be approximately 200,000 data entry points), 15 different entry field templates (five per questionnaire) were developed, leading to 30 record files. After the initial data entry, which took about four weeks, initial runs of the data revealed that parts of the data needed to be cleaned up; e.g., missing values led to different interpretations during data entry and confused the data analysis. This process took an additional two weeks. The data was therefore finally ready for analysis by early April 1995.

The technical advisor meanwhile developed initial dummy graphs and a data analysis book to serve as the basis for the analyses to be done. Analysis itself was carried out over a three week period. The report drafting started at the middle of April and the first parts of the draft were ready by the end of April 1995. The final draft was completed by the end of July.

5. Limitations

The following limitations were found with regard to the survey, the analysis, and the report.

Limitations of the survey

Limitations of the survey included using a unit sample frame on the basis of proximity and accessibility, potentially biased answers from just one representative of a unit, a tendency of the interviewer to cut answers short due to the sheer length of the questionnaire, and difficulty finding functioning community health posts and woreda health offices. There was very little that could be done about the logistical constraints. Interviewee/interviewer biases were checked and controlled for as much as possible. Occasionally unfilled questionnaires and wrong numbers meant that some data had to be discounted. Due to the above limitations, some analyses had to be completed with less than optimal information. The issue of finding working CHPs was not further pursued. The technical committee felt CHPs were generally non-functioning; their experiences were confirmed during the pilot testing and survey. WHDs, however, were considered an important unit for this survey, as they may become a significant management level in the future. Since few were found functioning during the random sampling procedure, and to ensure sufficient information on this important level, WHDs known to be functioning in Oromia were purposively selected and their functioning assessed.

Limitations with regard to the analysis

The sheer volume of the data led to various analysis limitations. Apart from slower processing time, record files had to be split which made it harder to do cross-cutting analyses. Furthermore, only one computer was available for data analysis (and also for most of the data entry), leading to a long processing time. To describe the health system as a whole, a lot of summary analyses needed to be done, involving manual analyses and manual table development. The ultimate result was a rather time-consuming process, both with regard to the analyses as well as to the report-writing.

Limitations with regard to the report

The volume of the data and the output from the analyses could provide a potentially enormous report with many details. This report, however, has concentrated on the health system as a whole, describing the current situation, standards and problems found, without a further in-depth

analysis of the possible reasons for certain findings. Nor does it compare among regions as the sample frame was not large enough to make significant comparative observations. Lastly, this report concentrates primarily on the main issues and findings rather than reporting on everything that was found. Further analyses, or possibly additional surveys, may need to be carried out in the future.

II. SURVEY FINDINGS

A. Organization of the Health System

1. Health Facilities Coverage

When improvements to the health system were introduced in the early 1970s, the expansion of services was to result in having one health station for each woreda, a health center for each awraja, and a regional hospital for a region while the rural hospitals were serving the awraja population in places where there was no health center; in practice one may find both a health center and a rural hospital. At a later stage (in 1978) with the introduction of PHC, community health posts were set up to serve the kebeles. It should be noted that the administrative setup of the country has been in continuous flux in recent years, making the description of health care delivery units or health facilities according to administrative levels very difficult. The lack of current census data in the midst of a rapidly growing population further complicates an understanding of the access of the population to functioning health facilities.

Nevertheless, the survey attempted to estimate the catchment population for each health facility utilizing three different measurements for comparison:

A - the estimation provided by the interviewee of the facility's potential catchment; i.e. the population within a walking distance of six kilometers;

B - the estimate provided by the interviewee of the number of kebeles/peasant associations served;

C - a standard catchment population per facility using guidelines indicated in the Comprehensive Health Service Directory (1986/87) and which have been updated for health stations in the Report of the National Health Policy Task Force (February 1993).

Table 2: Comparative estimates of health facility catchment population

A- Estimated catchment population as reported by interviewee (note: both central and rural hospitals were combined to increase the number reporting)

Type of Facility	Average Population	Range[1]
Hospitals (n=7)	612,000	204,200>1 million
Health Center (n=26)	91,500	14,800-324,000
Health Station (n=31)	27,200	2,600-91,500
Health Post (n=6)	6,900	2,500-15,000

B- Catchment as calculated by kebeles/PAs served (population calculations based on average 2000 pop/kebele in rural areas, 4000 pop/kebele for hospital locations)

Type of Facility	Kebeles	Population	Woredas	Zones
Hospital	67	268,000	16	2
Health Center	29	58,000	2	-
Health Station	15	30,000	-	-
Health Post	6	12,000	-	-

C- Standard catchment population (government guidelines)

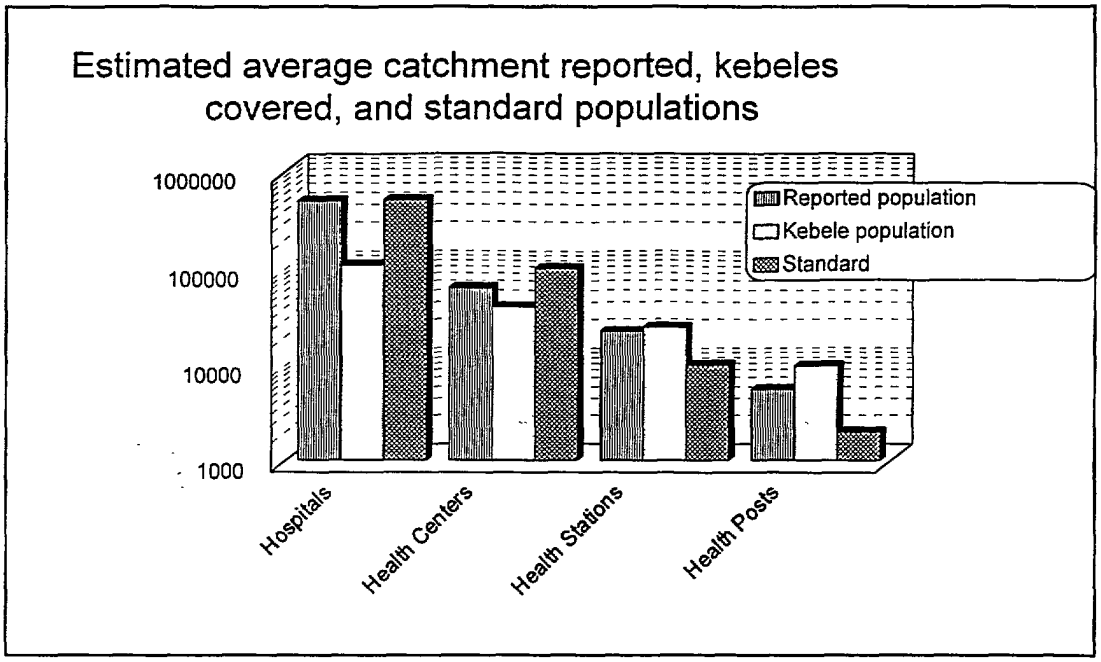
Type of Facility	Population
Rural Hospital	500,000
Health Center	100,000
Health Station*	10,000
Health Post	2,000 (1 kebele)

* estimated coverage radius of 10-12 kms.

[1] Endpoints for each range, as follows:
Ambo Hospital (204, 217) and Metu Hospital (1,128,371)
Mizan HC (14, 766) and Araka HC (324,277)
Shebo Village 8&9 Clinic (2,602) and Gefersa Paulos HS(91,549)
Zanga Awande (2,500) and W13,KO3 CHP (15,000)
NB-These are interviewee reported estimates for randomly selected facilities only and do not represent absolute ranges for the sampled regions.

Figure 1 which follows shows how closely the estimated (perceived) population coverage compares with the government standard.

Figure 1:



There seem to be a number of discrepancies between what is set as a standard catchment population by the MOH and the average number of people, as stated/perceived by the health facilities' managers during the survey; particularly in the case of health stations and health centers, the differences were found to be large. For example theoretically, as mentioned above, one health station is supposed to serve 10,000 people, within an average radius of 10-12 kms, but according to the estimations of the interviewees, one health station has on average 27,000 people within a distance of six kms.

A more striking observation from the interviewees' estimates (Table 2 A) is the range of population covered by the same type of health facility. Though there is only a five- to six-fold difference for hospitals and health posts between the facilities with the smallest and largest catchment populations, the two extremes represent a 22-fold difference for health centers and a 35-fold difference for health stations. This makes planning for resource and support needs of a standard facility very difficult. Nevertheless, these population ranges may explain in part why some health centers function as mini-hospitals and some health stations function as health centers.

Using administrative units (kebeles) to measure service population, the survey revealed that on average one health station serves 15 kebeles, one health center covers 29 kebeles and a hospital serves 67 kebeles. The survey also shows that a health center covers on average two woredas, while a hospital has on average 16 woredas within its catchment area. Whereas the average hospital covers two zones, it should be noted that the survey teams were aware of zones without a hospital. Zones without any hospital were excluded from the survey.

In order to look more closely at actual population access to a health facility, the patient register was examined. By this method, a random sample was taken of 100 entries in the patient register, and from that sample the three patients living farthest from the facility and the three living closest were determined. The villages where those patients resided were used to calculate the number and distance of the nearest and farthest villages within the facility's catchment area. The results are shown in Table 3.

Table 3: Distance to the health facility as estimated from the patient register

	% population living nearest to the facility	at an average distance of km	% population living farthest from the facility	at an average distance of km
Central Hospital	71	20	3.9	618.8
Rural Hospital	88.5	21.1	7.5	150.8
Health Center	69.1	11.3	5.5	23.1
Health Station	81.7	5.7	5.2	21
Health Post	81	4.7	9.4	5.1

In general, most of those seeking treatment at the health facilities surveyed lived relatively close (more than 80 percent of patients lived within six kilometers of the health station and health post). However, the farthest distance from where people live to health stations exceeds by a great deal the accepted norm for "access." WHO generally defines reasonable geographic access to health services as living within five kilometers or a one-hour walking distance.

2. Health Management Institutions (HMIs)

Various attempts by the previous regime and the TGE to establish health support institutions (HMIs) down to the lowest administrative levels have never fully materialized. The district health management concept for supporting the old awrajas was started in 1976 as part of the earlier regime's revolutionary program. A 1988 evaluation found the approach to be weak

primarily due to lack of managerial capacity at district level. This survey found a persistent gap in support to the woreda level.

Currently functioning as full-fledged management structures are the Central Office (MOH), the regional health bureaus (RHBs), and the zonal health departments (ZHDs). RHBs were only established in 1993. ZHDs have existed longer; they were mostly established in the eighties and early nineties, with one dating back to 1953.

With regard to the woreda health offices (WHDs), the survey revealed four stages of development, from fully functional HMI to nonexistent, as follows:

i) Stand-alone woreda health office organized as supportive management unit for all health facilities in one woreda;
ii) Stand alone woreda health office organized as supportive management unit for two or more woredas;
iii) Health facility designated as woreda health office (dual role), and
iv) Woreda without any type of health office (WHD nonexistent).

Some WHDs were continued from their time as awraja offices, while others only started in the last two years. In some of the regions the survey teams encountered great difficulty finding established and working WHDs (as in iv. above); one must assume that they are still in the process of being established. Having no WHD or a WHD with staff doubling as health service providers (as in iii.) is a rather confusing and undesirable situation, both for the staff as well as the other management levels, in that it impedes standardization of tasks and functions. As ultimately some 600 WHDs may be required, needing a large amount of resource input, it could take a while before the system is completed at the woreda level.

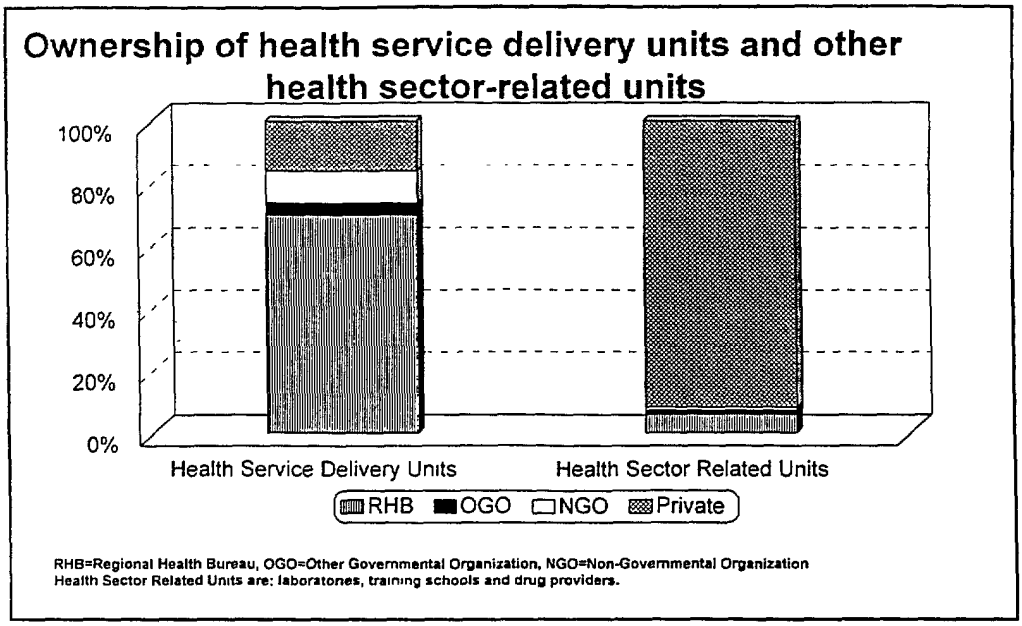
The survey looked at the coverage the HMIs have in their respective areas. It tried to estimate how many facilities were in each HMI's catchment area, including health-related institutions that may not be directly under their jurisdiction, such as laboratories, drug shops, and training schools. Data were easily available on the number of health facilities, but not for the other health-related institutions. A good system of registering those seems to be lacking.

With regard to general coverage or catchment area, a few significant findings emerged. The average estimated health center catchment population of 92,000 (from Table 2A) is slightly below the average woreda catchment population of 114,000. Approximately half of the zones surveyed were sufficiently small to have their needs met by one rural hospital (catchment population around 500,000), while the other half would require more than one. Regional health bureaus had an average of seven zones within their area, and of these 97 percent were zones with a zonal health department. There were an average of 13 woredas per ZHD (48 per RHB surveyed), and of those approximately 49 percent had a woreda health office. There were an

average of 43 PAs/kebeles per WHD surveyed, but only 14 percent of these reported a community health service.[2]

From Figure 2 below it can be seen that the health sector, in terms of health service delivery, is still primarily a public sector. However, drug provision and other support services, such as laboratories, are primarily handled by the private sector.

Figure 2:



3. Organizational Structure

Health facilities

In general, each level of facility in the health service delivery system (health posts, health stations, health centers, rural hospitals, and regional and central hospitals) has several internal organizational units. The organizational unit is the office or division of a given health facility through which a particular service is delivered and managed (technical unit) or where a specific facility management function such as accounting is assured (administrative unit). The types of units available depend on the kinds of services provided by that level of health facility and its

[2] Gambela RHB reported no zones; Separ and Oromia had 11 and 12 zones respectively.
The range for woredas per zone was 4-28 for 16 surveyed zones reporting. Seventeen surveyed woredas reported from 12 to 99 PAs/kebeles in their coverage area.

manpower and material resources. As will be discussed in a later chapter, manpower shortages may play a large role in the provision of essential services.

Table 4: Proportion of health facilities with specified types of organizational units

Technical & Administrative Unit	Central Hospitals (n=5)	Non-Central Hospitals (n=15)	Health Centers (n=29)	Health Stations (n=36)
	% with unit	% with unit	% with unit	% with unit
MCH/EPI/FP/CDD	20 (*)	33	72	34
OPD	40	80	86	33
Environmental	0	20	76	32
Diagnostic Units	40	77	59	-
Pharmacy	40	80	76	19
In-Patient	100	73	21	-
Admin/Personnel	100	73	55	11
Property	80	80	66	0
Finance	100	60	79	0
Other	30	27	34	10

Note: (*) EPI services only

Table 4 above illustrates the absence of consistent standards for each level of the health delivery system. For example, an MCH unit was found in only one-third of all health stations; no single type of organizational unit was found consistently in all health stations. Though separate organizational units for in-patient service existed in all central hospitals, they were found to exist in only three quarters of the other hospitals, and in one-fifth of the health centers. Since a non-central hospital must provide in-patient services to be designated as a hospital, the numbers in Table 4 indicate that 27 percent of non-central hospitals provide in-patient care without the benefit of an organizational unit for that specific purpose. Environmental health as a unit does not exist at all at central hospitals, though it is present in more than three quarters of the health centers and in almost one-fifth of non-central hospitals and health stations. (Note, however, that there are no sanitarians at health stations; the job is done by health assistants). Out-patient and pharmacy departments exist in more than three quarters of non-central hospitals and health centers. Vertical program units, such as EPI, FP, MCH, and CDD exist as organizational units, either separately or as an integrated unit under MCH, in nearly three quarters of the health centers and in one-third of health stations and non-central hospitals. However, these very important units hardly exist in central hospitals which should also have a role to play in promotive and preventive services, especially when they have an OPD, for the population immediately surrounding their facility.

Administrative units are almost non-existent in the health stations; only the Addis Ababa health stations that function more or less as mini health centers may have administrative units. On the other hand, personnel, property and finance units do exist in over 60 percent of the hospitals and health centers. A more detailed overview of the organizational structures of various health care units is provided in Appendix 5.

Health Management Institutions (HMIs)

Each of the HMIs is also organized to have several working units, which in theory reflect its technical and administrative functions. Table 5 shows, in summary, what each health management level contained, in terms of departments, sections, or teams.

Table 5: Proportion of health management institutions with specified type of technical unit

Type of Technical Unit	RHB (n=6) % with unit	ZHD (n=15) % with unit	WHD (n=18) % with unit
Health Service/Training Dept.	100	73	39
Planning/Programming/HIS	67	27	22
Communicable Diseases Control	67	27	6
Environmental Health	50	73	44
Vector Control/Malaria	50	7	0
Family Health Team	50	47	39
EPI Team	17	33	11
Health Education	67	33	6
Pharmacy/Traditional Medicine	67	60	11
Quality Control	17	0	0
Medical/Legal Section	17	0	0

From the above table it is clear that woreda health offices in general had few functional units. Of the 18 woreda health offices surveyed only eight (44 percent) had an environmental health unit, while only seven (39 percent) had health service/training departments and family health teams. None of the WHDs had departments of vector/malaria control, quality control, or a medical/legal section. Only one WHD had a communicable disease control unit, and only one had a health education unit.

Similarly, the zonal health departments had mainly health service/training, environmental health, pharmacy/traditional medicine, and disease prevention departments and family health teams.

Health education, and planning and programming departments only existed in one third of the ZHDs.

The RHBs were found to have a higher average number of functioning departments. All six, for example, had health service/training departments, and four of the six had departments of planning/programming, communicable diseases, health education, and pharmacy/traditional medicine.

Overall, the available technical units did not accurately reflect key aspects of the HMIs' functions. For example, HMIs have significant responsibility for supervision of health facility activities. The survey found that over 90 percent of non-central hospitals, HCs, and HSs offer immunizations (see II.B: Health services delivery and support). It is startling to note that among the HMIs that supervise those facilities, 17 percent of RHBs (only one), one third of ZHDs, and 11 percent of WHDs have EPI teams. Also, half or less of all HMIs surveyed have a family health team and three quarters of ZHDs and WHDs lack units for planning and HIS.

Table 6: Proportion of health management institutions with specified type of administrative unit

Type of Administrative Unit	RHB (n=6)	ZHD (n=15)	WHD (n-18)
	% with unit	% with unit	% with unit
Administration	100	73	72
Personnel	67	87	0
Finance	67	73	6
Property/General Services	67	80	28
Engineering	50	0	0
Archives	50	60	22
Audit	67	87	6

The data suggest that woreda health offices remain insufficiently developed to provide administrative support to an average of ten health facilities. It was surprising to see (Table 6) that no zonal health department had an engineering unit, but it confirms the fact that very few health units had maintenance done to their buildings, transport, or equipment. None of the WHDs visited had a personnel office, and only one had audit and finance departments.

The situation was markedly better at zonal and regional levels, though with great variation by level and type of department. There is a pressing need to standardize the type of departments to

be available at each level, taking into account the current decentralization efforts and reflecting the specific roles of these institutions in the health system.

In addition to the functional units, the survey found that HMIs had a number of ad-hoc and semi-permanent committees to address issues of purchasing, transfers and promotion, drugs, discipline, and others. (Appendix 6 provides an overview of the existence of such committees as well as their frequency of meetings). Half a dozen committees were found in four or more of the RHBs surveyed. Meetings tend to occur on an as-needed basis. The zonal level utilized such committees somewhat less often, with meetings again called only when needed. Woreda health departments were far less likely to have management committees; only eight (44 percent) had a management or transfer committee, and just three (17 percent) had a drug committee.

B. Health Services Delivery and Support

1. Public Health Services

At every health facility the survey established whether public health services were available, and if so, how often they were offered per week in terms of hours. Table 7 below shows the percentage of different levels of health facilities that offer public health services.

Survey data indicate that the package of public health services is provided least often at central hospitals (just 31 percent), but is offered by nearly three quarters of non-central hospitals, health centers and health stations. Health education, family planning, and prenatal care were the services most frequently offered by health posts. Almost all health centers and health stations run public health services five days a week an average of seven hours per day. However, some 'marginal' public health services like school health, TB, AIDS, and malaria control are not commonly available at all health facilities.

Table 7: Proportion of facilities surveyed that deliver each type of public health service

Type of service	Central Hospital (n=5)	Non- Central Hospital (n=15)	Health Center (n=29)	Health Station (n=36)	Health Post (n=6)
	% with service	% with service	% with service	% with service	% with service
Antenatal	20	93	100	97	67
Postnatal	20	73	79	69	33
Under Five	40	80	90	86	17
FP	20	93	83	100	67
ORT Corner	20	80	83	89	33
EPI	40	93	100	92	33
Growth-Monitoring	0	66	90	86	33
Health Education	80	93	97	94	83
School Health	not applicable	20	52	53	0
TB	60	87	76	25	0
AIDS/HIV Testing	20	60	0	0	0
AIDS/HIV Counseling	80	60	10	0	0
Malaria	not applicable	40	17	25	17

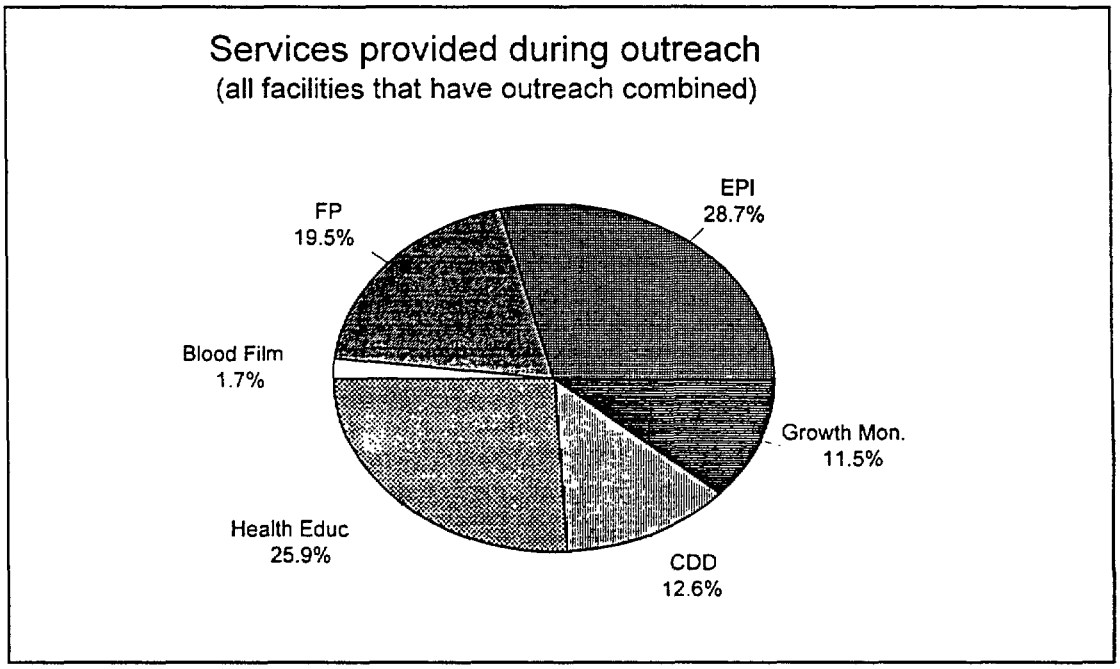
Outreach service as a strategy to achieve a better public health service coverage is not run at all by central hospitals and by fewer than half of non-central hospitals. On the other hand, as seen in Table 8, around 85 percent of health stations and health centers run outreach services, with the latter providing on average seven outreach services each (from 1-22 services provided by a HC) and spending an average of two days per week on this type of activity.

Table 8: Overview of outreach services by facility type

Type of Facility	% of Units Conducting Outreach Services	Average # of Outreach Services Offered	Average # of Days/Week Spent
Central Hospitals	N/A	N/A	N/A
Non-Central Hospitals	47% (7/15)	2	1
Health Centers	86% (25/29)	7	2
Health Stations	83% (30/36)	5	1

The services delivered through outreach are mostly EPI, family planning, and health education, as indicated by Figure 3 below. (The services delivered by the three types of facilities are depicted separately in Appendix 7.) Other activities are rarely conducted, showing that the activities are not well integrated as intended under the newly named family health department which combines FP, CDD, nutrition/growth monitoring, and EPI. The lack of program coordination lessens the potential benefit to clients.

Figure 3:



Furthermore, it was noted during the survey that the malaria control program is still run entirely as a separate entity, with its own laboratory and treatment facilities, and is not integrated with other family health programs. While this may be appropriate for activities such as spraying and surveillance, it is not appropriate for treatment of the disease, which should take place at the ordinary health facilities such as the health center or health station.

Other important health programs need to be expanded, particularly at lower health care levels. For example, health education, including school health and environmental health, is done as outreach by only one-fourth of facilities that conduct outreach at all. Similarly, efforts should be made to assist lower level facilities in addressing important health problems such as tuberculosis and newer diseases like HIV/AIDS.

2. Environmental Health Services

Though effectively part of public health services, the survey looked at environmental health separately, in light of its importance in the prevention of communicable diseases. Environmental health services, including water supply and sanitation, are supposed to be included in the basic health services offered in health centers, health stations, and health posts. In addition, rural hospitals, particularly those staffed with sanitarians, are supposed to run an environmental health services program. The activities to be carried out under this program are: establishment of refuse disposals (latrines and refuse pits); water supply (mainly protection and maintenance of wells and springs); inspection of animals, food, markets, and establishments (including factories and housing) and other. Prison and occupational health services are also included under environmental health services. Most of these activities are supposed to be undertaken as outreach activities.

In practice, as seen in Table 9, it is mostly the health centers that run the environmental health services, while health stations, health posts and rural hospitals are less involved in this important service. In fact, none of the health posts visited had any environmental health activity. Even the health centers, which are supposed to implement the full package of public health activities, including environmental health, are scarcely undertaking activities like market and building inspection, health education at household level, prison health, and occupational health services. Lack of transport also means that outreach services further afield are rarely run.

Table 9: Proportion of health facilities that provide specified type of environmental health service

Type of Environmental Health Activities	Non-Central Hospital (n=15)	Health Center (n=29)	Health Station (n=36)
	% with service	% with service	% with service
Household Inspection	27	62	33
Pit Latrine Inspection	40	83	61
Health Education	47	41	8
Water Inspection	47	76	58
Food Inspection	47	79	44
Establish Inspection	53	72	39
Market Inspection	0	21	8
Refuse Inspection	60	79	58
Prison Health Service	27	55	14
School Health Service	33	62	47
Occupational Health Service	7	24	3

NB- None were found in health posts visited.

3. Clinical Services

Introduction

Clinical services like outpatient services (OPD) are to be run in all health facilities. These clinical services are supposed to be more complex at higher levels and simpler at lower levels. Accordingly, community health posts are theoretically assigned to undertake treatment of common illness and minor injuries rather than other public health activities that require better trained staff. On the other hand, health stations are staffed with health assistants and provided with better, though limited, equipment and are supposed to treat more than 40 diseases as listed in the morbidity report used by these health facilities.

In addition to outpatient services, inpatient services are provided in health centers (though limited) and hospitals. Health centers have a relatively more complex setup than health stations, including a few beds and a basic clinical laboratory. The beds are meant for mothers in labor and after delivery, for handling emergencies, and for observation of critically ill patients on supportive treatments before they are transferred to hospitals for further diagnosis and care. However, health centers' clinical laboratories are usually ill-equipped and suffer in general from scarcity of reagents.

Clinical services rendered at hospitals are supposed to be run on a 24-hour basis both in the form of outpatient and inpatient services. This is because they are staffed with all types of medical personnel except for specialists at the rural hospitals. Besides laboratory, hospitals also have radiology units which provide clinical diagnostic support. High level clinical care and specialized services are supposed to be provided at regional and central hospitals, where all types of medical and surgical specialists are available.

Outpatient Services

In practice, as seen in Table 10 on the next page, all health care units provide outpatient service (OPD), which is run for more than seven hours (excluding emergencies) per day. The services rendered include (selected) public health services as well as curative care, though not necessarily in an integrated manner.

Emergency services that are also part of OPD are run around the clock at almost all health facilities that provide such services. On the other hand, only one of the five central hospitals provides delivery services. Some central referral hospitals, specialized and oriented toward a specific age group (e.g. pediatrics), or a specific disease (e.g. tuberculosis, leprosy, mental illness), do not run all types of general clinical services. Furthermore, special referral clinics/activities like STD, TB, mental, dental and other services (see Table 10) are not necessarily available in all types of health facilities.

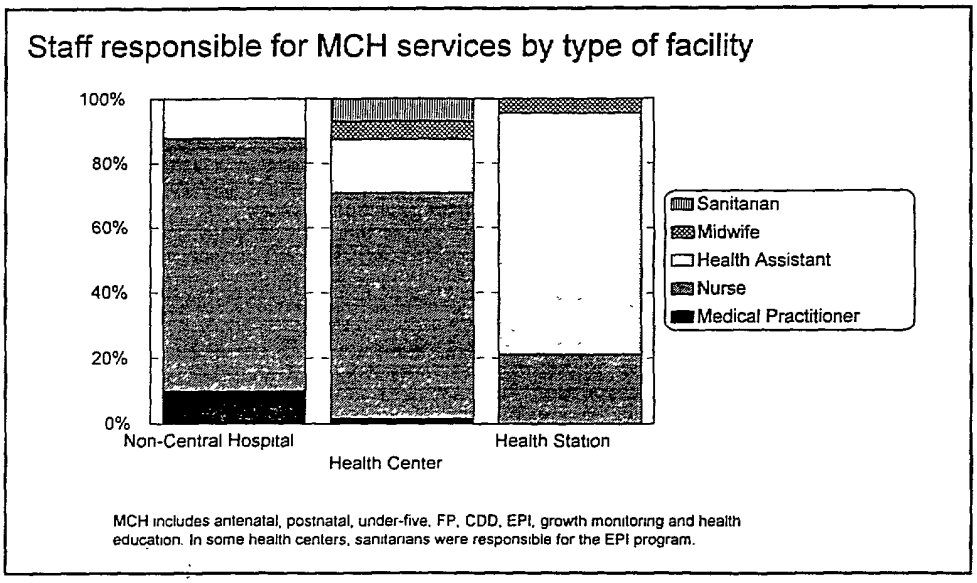
Table 10: Proportion of facilities providing specified type of service

Type of Service	Central Hospitals (n=5)	Non-Central Hospitals (n=15)	Health Centers (n=29)	Health Stations (n=36)
	% with service	% with service	% with service	% with service
OPD	80*	100	86	100
MCH	40	93	97	97
Minor Surgical	40	100	0	19
Delivery	20	93	93	83
Emergency	80	100	100	92
Special Clinics				
STD	N/A	53	31	6
TB	60	93	76	13
Mental	20	47	3	0
Food Handlers**	0	47	28	0
Leprosy	20	20	76	14
Ophthalmic	40	27	7	0
Dental	20	40	3	0
Malaria	0	13	7	11

* At St Peter's Hospital, the OPD service is carried out by the TB demonstration center.
** This is a health/nutrition and hygiene course for food handlers.

The survey also considered the manpower in charge for the specific activities. To provide an example, Figure 4 below depicts the persons found to be in charge of MCH services in the following facilities: non-central hospitals, health centers, and health stations.

Figure 4:



Taking into consideration the existing staffing pattern (see Section C.2, Manpower) and the OPD services to be run, it is clear that job descriptions are not standardized for all levels of health facilities. This will undoubtedly lead to different performance for the same service at the various tiers of the health system.

Lastly, the survey found that an average of 321 (central hospital), 176 (rural hospital), 93 (HC), 36 (HS) and 13 (HP) patients were seen daily in the OPD[3]. Table 11 gives a comparison of the expected and actual levels of outpatient visits by the (rural) population.[4]

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[3] The responses for individual facilities varied widely: for central and non-central hospitals: 115-468 and 35-474 respectively; for health centers: 20-250; and for health stations from 7 to 193 patients per day. Five health posts reported an average of 6-25 patients per day.

[4] To arrive at expected OPD visits per month, the consultant applied an estimate used by the essential drug program in Uganda of five percent of the catchment population per month. The three catchment calculations introduced in Section II.A.2 were used.

Table 11: Actual versus expected OPD visits per facility in one month

Type of Unit	5% of Reported Catchment	5% of Kebele Calculated	5% of MOH Standard Catchment	Actual OPD Visits/Month
Rural Hospital	30,600	13,400	25,000	3,872
Health Center	4,575	2,900	5,000	2,046
Health Station	1,360	1,500	500	792
Health Post	345	600	100	286

Note: Actual OPD visits/month = daily patients times 22 working days

If these calculations closely approximate the real capacity of the health facilities, then survey data, in general, show a range of lower-than-expected OPD visits that varies by the level of unit and also within each level depending on the method used to calculate the number of expected visits. If the MOH standard is used, actual OPD visits are greater than expected for health stations and health posts, but only about half the expected number for health centers. The numbers for all three estimates for rural hospitals do not appear to be realistic, as this would indicate a daily outpatient load of more than one thousand. It should be remembered for all levels of health facility that the number of visits per month is highly dependent on the staff and capacity of the individual facility and the catchment area of the facility, as well as the care-seeking behavior of the covered population. It is also likely that the number of patient visits will vary with the seasons.

Inpatient Services

As mentioned, theoretically only hospitals and to some degree health centers provide in-patient services, with the latter primarily for delivery and emergency services. The survey found that 17 of the 20 surveyed hospitals[5] provided general in-patient services (i.e., other than for deliveries and emergencies), but only 12 of the 29 health centers did so, though they have beds for that purpose. Sixteen of 20 hospitals had delivery services and 18 of 20 offered emergency services, with 22 of 29 health centers providing both delivery and emergency services. The average yearly number of in-patients was approximately 3,000 for a central hospital, 2,500 for a non-central hospital, and about 150 per year for each of 10 health centers that reported having in-patients.[6]

[5] The three surveyed hospitals that do not provide general in-patient services (Sidha Fage National Hospital, Ghandi Memorial Hospital, and Amanuel Mental Hospital) all offer deliver and emergency services.

[6] Central hospitals reported from 1004 to 7383 in-patients for the year 1986 EC; for non-central hospitals the range was more extreme: 601 to 7173. Reporting health centers received from 60 to 470 in-patients in the same year.

Diagnostic Services

Diagnostic services provided by the various health institutions are described in Table 12. As can be seen, health stations do not conduct lab investigations; as mentioned in the health policy document, they are only equipped with modest means of sterilization, a sphygmomanometer, and a stethoscope. Only health stations in Addis Ababa are provided with microscopes and other laboratory materials that may be required for adequately diagnosing and treating some of the 40 diseases listed in the morbidity report. Nevertheless, health centers and hospitals do not conduct much more than the standard stool/urine, hemoglobin, and bacteriology/parasitology tests. Even then, surveyed health centers reported that they (felt they) were ill equipped and suffering from scarcity of reagents. Only the bigger rural hospitals have additional diagnostic services; others are supposed to refer the more complex cases. In practice, this means that some diseases cannot be properly diagnosed which may lead to poly-pharmacy and misuse of resources.

Table 12: Proportion of facilities offering specified types of diagnostic services

Type of Diagnostic Service	Central Hospital (n=5)	Non-central Hospital (n=15)	Health Center (n=29)	Health Station (n=36)
	% with service	% with service	% with service	% with service
Stool/Urine	100	100	90	0
Hematology	100	100	79	0
Bacteriology	100	80	62	0
Parasitology	100	93	69	0
X-Ray	80*	87	0	0
Ultra Sound	20	27	0	0
Surg-Scopy	20	27	0	0
ECG	60	53	0	0
HIV Test	0	60	0	0
Pregnancy Test	40	87	41	0

* Amanuel Hospital, a psychiatric hospital, does not have an x-ray department.

In general, diagnostic services at all levels are hindered by a lack of materials and/or equipment. Clear guidelines as to which diagnostic tests are to be performed by each level would largely facilitate planning for needed equipment and supplies. All facilities could benefit from guidelines

as to common illnesses for which presumptive diagnosis and treatment is recommended, as well as symptoms demanding referral to a facility equipped for more sophisticated diagnosis.

4. Referral

Adequate and appropriate referral is a cornerstone of an effective tier system of health service delivery, ensuring that patients with more complex treatment needs reach the level of facility that has the manpower and equipment to treat them. The survey teams had difficulty assessing referrals since hospitals and health centers only record referrals for in-patients. Reasons for referral were not assessed. The little information that was available suggests a weak referral system; the number of general referrals as reported by hospitals and health centers in in-patient records was minimal. Non-central hospitals reported referring an average of only 100 patients per year, while health centers only referred an average of 34 patients per year, i.e. less than three per month. Health stations reported referring an average of 261 outpatients each year. This constitutes only three percent of their total outpatient load of around 9,000 visits/year.[7] Experience in other countries in the region suggests the number of non-delivery referrals should have been higher than reported.

Table 13: Percentage of patients referred to a higher level by specified facility per year

Type of Referred Patient	Non-Central Hospital (n=15)	Health Center (n=29)	Health Station (n=36)
In-Patient	3.8	15.3	not applicable
Out-Patient	not available	not available	3.3
Delivery	3.6	16.0	20.6

* HS have no in-patients; hospitals and HCs do not record referrals for outpatients.

[7] The range of referrals was for hospitals, 27-276, and for health centers, 1-70 in-patients. Health station referrals of outpatients ranged from a low of six to 2976 in one year.

The survey also looked at the average distance for referral to the next higher level, as reflected in Table 14 below.

Table 14: Average distance for referral to the next higher level of health facility

From Type of Health Facility	Distance in Kms. to Next Referral Health Unit [range]
Non-Central Hospital (n=15)	151 [1-500]
Health Center (n=29)	52 [1-280]
Health Station (n=36)	31 [1-300]
Health Post (n=6)	6 [1-10]

Concerning distance, the survey showed that the health posts are not very far (6 km) from health stations/health centers and health centers are on the average 52 km away from rural hospitals, while the latter are very far (151 km) from referral hospitals. The average distance of 31 km between the health station (entry level health unit), and the health center (next level, where more or less comprehensive health services can be provided), is significant, especially when no means of transport are available. It is important to note that these distances probably are indicative of a theoretical or best-case scenario for the regions surveyed, since the sample was limited to the more accessible (i.e., less isolated) facilities. The survey showed that health workers perceived distance, defined as physical distance with no transport available nearby, to be an important obstacle for people trying to reach the health units (43 percent); other obstacles mentioned were mountains (44 percent), climate, economics, and non-availability of drugs (combined: 13 percent).

From the above information it is clear that there is a need to better define the ideal distances between health care facilities and their referral units to facilitate planning for the construction of new facilities in the future. Furthermore it should be noted that from the interviews with the health management institutions, it was found that no guidelines existed with regard to distances between referral units.

Though not specifically investigated during the survey, there is anecdotal evidence that a significant number of patients from around the country self-refer to central hospitals in Addis Ababa. In light of findings that distance is an important obstacle in referral, this phenomenon of self-referral might warrant further study.

5. Supervision and Other Support Provided to Health Facilities

Technical and administrative supervision of the lower levels of the health delivery system was found to be highly variable. Starting with the lowest level, community health posts were found to be almost all non-functional, possibly due to lack of support and confusion about remuneration problems. Of the few health posts surveyed, it was shown that they are mainly (five out of six) supervised by health centers. Similarly for health stations, 23 of 31 responding were supervised by health center staff, while the other supervisors came from the health management levels. The health centers were primarily supervised by the technical head of the zonal health department (21 out of 26 respondents), while only in three cases were they supervised by the woreda health office, the nominal supervisor. Rural hospitals were supervised by the heads of the technical departments in both zonal and regional health bureaus.

Survey numbers indicate that a facility may receive supervision from more than one source. For example, of the 36 health stations surveyed, 11 mentioned technical supervision by RHBs, 15 by ZHDs, 13 by WHDs, one by the regional hospital, one the zonal hospital, and 15 by health centers. The same health stations received administrative supervision from all of the above in addition to the regional council (one), zonal council (two), and woreda council (ten). At the other extreme, by their own admission, central hospitals, apart from the Leprosy hospital, receive no supervision.

Of note is that ZHDs were mentioned twice as often as WHDs by all facilities surveyed as providing both technical and administrative supervision. Health centers were the next most frequently mentioned for administrative supervision while the RHB level was the second most frequently mentioned technical supervisory level.

The WHDs surveyed had an average supervisory load of approximately eight health facilities (including CHPs, HSs, HCs and rural hospitals in some cases). Zonal health departments oversee the work of the WHDs in their jurisdiction as well as assuring supervision of an average of 47-48 health facilities. Rural health bureaus indicated that they supervise an average of 286 facilities in addition to the ZHDs under them. Non-government health facilities and other health-related institutions were found generally not to be under the direct supervision of any management level (HMI).

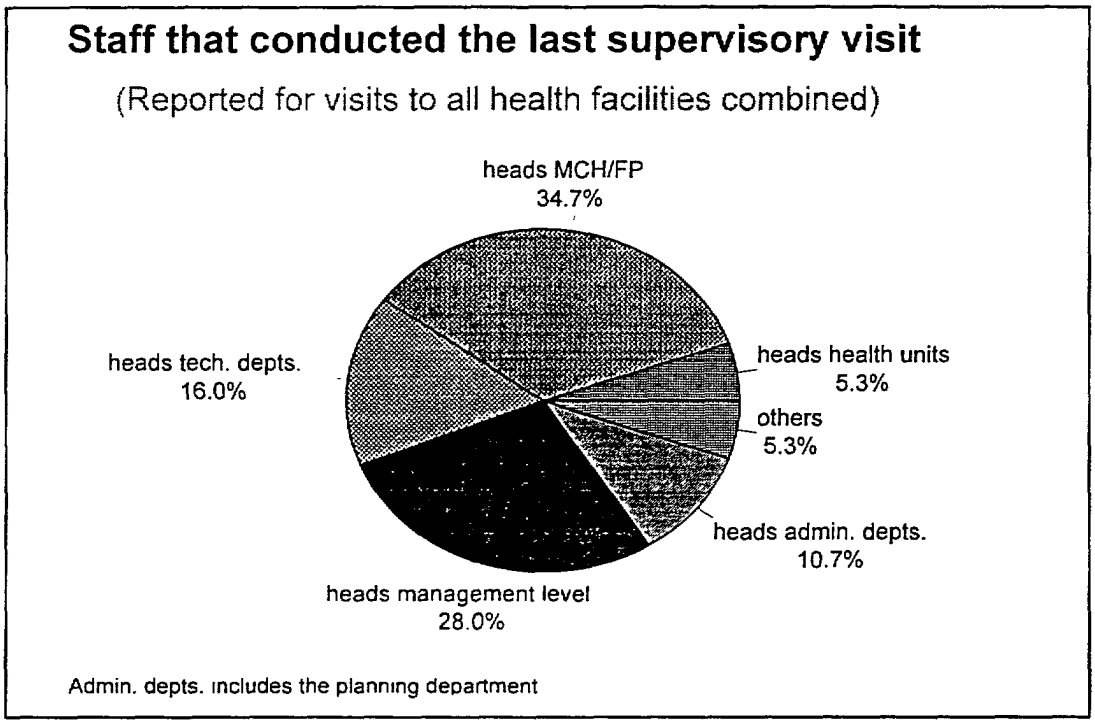
Supervision was found to be regularly undertaken. For example, from Table 15 it can be calculated that of the 88 units that reported being supervised, 55 (63 percent) had been supervised in the three months prior to the survey, while 37 percent had their last supervision more than three months ago. It should be understood that these numbers give no indication of the quality of supervision and feedback. For example, many supervisory visits were reported to consist of little more than the delivery of supplies and the verification of registers.

Table 15: Time of last supervisory visit to the health facility

When Last Supervised	Central Hospital (n=5)	Other Hospital (n=15)	Health Centers (n=29)	Health Stations (n=36)	Health Posts (n=6)	Total (n=91)
0-1 month	0	7	5	8	5	25
1-2 months	0	1	3	12	0	16
2-3 months	1	2	9	3	0	14
3-6 months	0	1	2	4	0	7
6-12 months	1	2	6	3	0	12
> 12 months	3	2	4	3	1	13
Total units	5	15	29	33	6	88

The survey looked at who actually conducted the last supervision (see Figure 5). Slightly more than half of the supervision was provided by personnel from the health management institutions (heads and technical and administrative departments).

Figure 5:

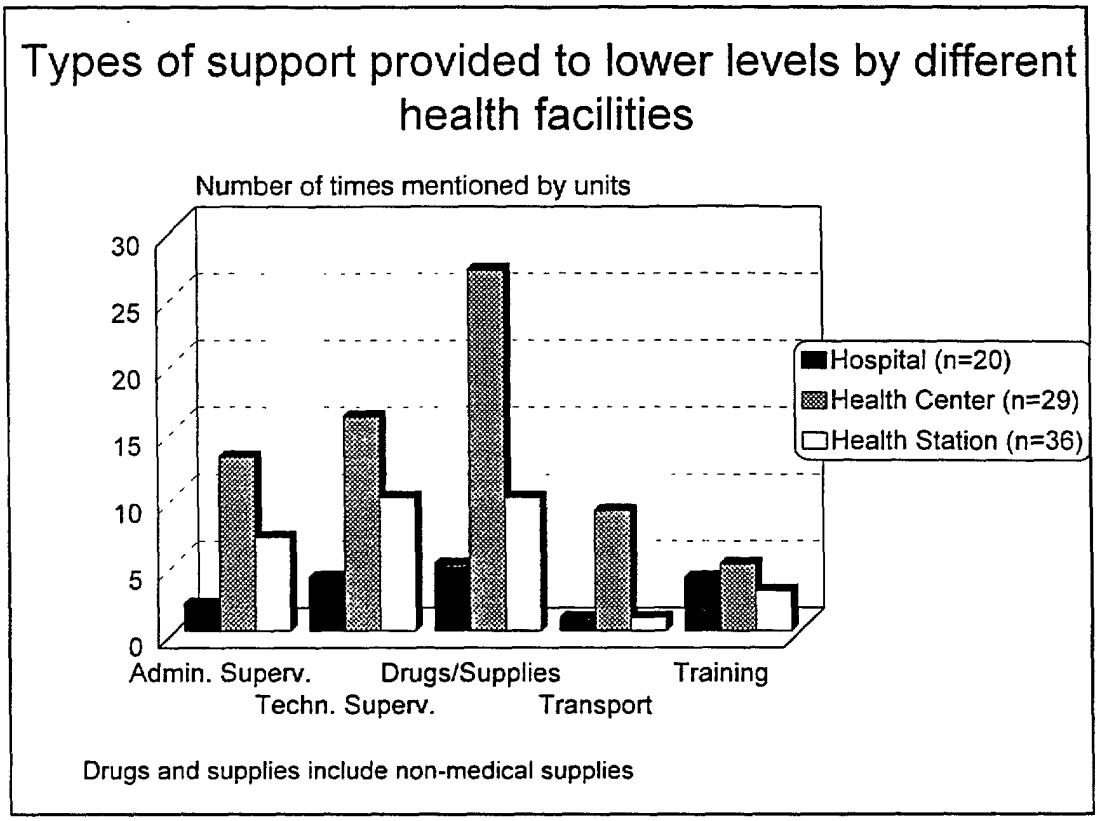


Various methods of supervision were employed, including observation, individual and group interviews, (primarily at health station and health post level), while interviews and document review methods were used at hospitals and health center level.

Feedback in the form of written reports or orally during the next visit is weak. One third of the health stations, half of the health centers, and only one fifth of the hospitals claimed they had regular feedback.

A high proportion (79 percent) of the health centers said that they support lower levels (mostly health stations and community health posts). Figure 6 illustrates the number of each type of facility that reported providing each type of support. As can be seen, hospitals provide little support of any kind to lower levels. These responses give no indication of the frequency or regularity with which support is given, or of the quality of that support.

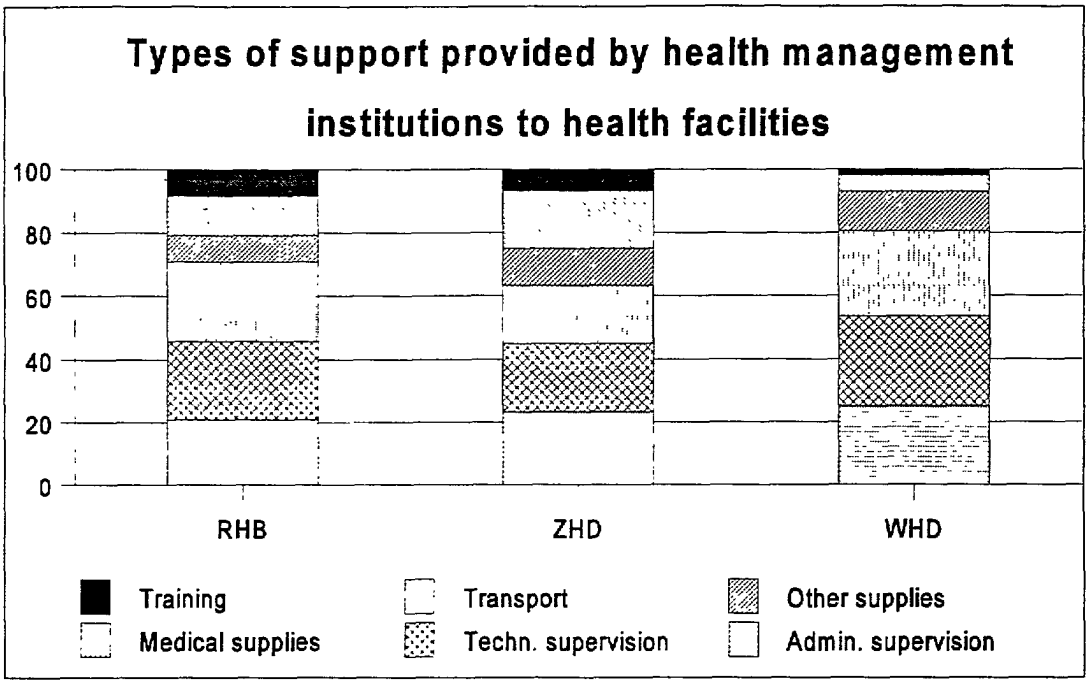
Figure 6:



6. Management Support for Health Service Delivery

Ultimately the HMIs exist to support the health facilities that deliver services. All HMIs surveyed except one (a WHD functioning more as a HC) reported that they were supporting facilities. When HMI staff were asked to mention spontaneously what type of support they were providing to health facilities, it was found that supervision and the provision of medical supplies were their main means of assistance. This was generally true at each level. Training was not mentioned frequently as an important function of the HMIs. Responses are summarized in Figure 7 below.

Figure 7:



The HMIs' roles fall into various tasks and functions, such as training, supervision, supply, monitoring, information, transportation, maintenance, and (possibly) other functions, which, when properly implemented, will further assist the various health facilities to deliver quality services. When each major function is divided into tasks, a series of tools, policies, procedures and guidelines can be identified which enable the unit personnel to adequately fulfill that function. For example, to assess their capacity for personnel management (manpower resource management function), HMIs were asked whether they had:

- a human resource plan for the area;
- local recruitment procedures developed and implemented;

- a vacancy registration;
- a training needs overview;
- a training plan; and
- a process for performance evaluation.

Table 16 below summarizes the existence of some of these functions at the three HMI levels. The complete list of functions and accompanying tools/procedures/etc. can be found in Appendix 8.

Table 16: Proportion of HMIs with tools, procedures, policies, and guidelines necessary for implementing the specified support function

Type of Support Function	RHB (n=6) % where available	ZHD (n=15) % where available	WHD(n=18) % where available
Manpower Resource Management Function	78	56	13
Training Function	56	23	0 *
Supervision Function	83	59	21
Health Management Information Function	60	47	27
Drugs, Medical and Non-Medical Supplies Function	77	57	9
Transportation Function	32	17	0
Facilities and Equipment Function	20	23	2
Finance Function	86	47	38

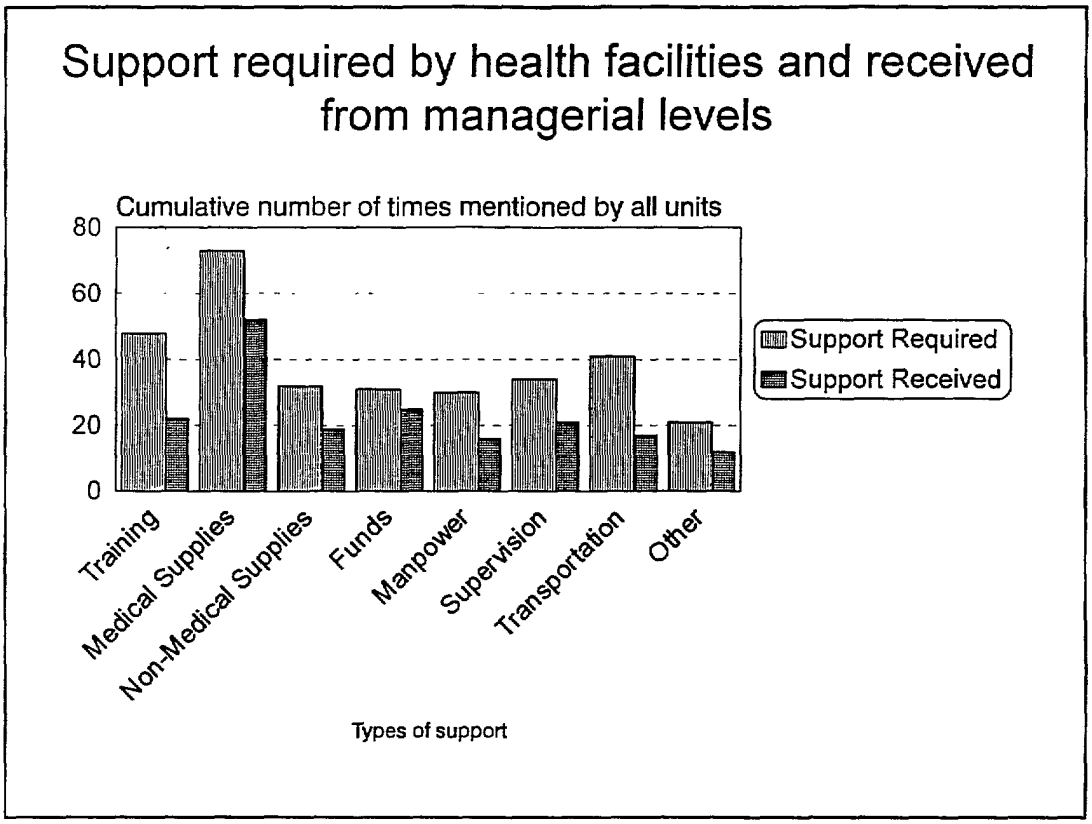
Note. * Actually one reported to have an overview of training needs.

As the figures in this table are summarized for each HMI level, i.e. all the RHBs or ZHDs or WHDs, it may be difficult to find out where the individual discrepancies are. For example, under the manpower resource function both Region 14 (Addis) and Region 1 (Tigray) reported having all the above procedures and tools in place to fully support human resource development in their respective regions. Region 2 (Afar) had only a recruitment procedure in place. Thus some of the lower performing HMIs are hidden behind some of the better ones. Appendix 8 provides an overview of all the individual functions per level, while Appendix 9 provides an overview of the functions by region. On the basis of the latter appendix, it was possible to construct a table of better performing regions in terms of their management support for health service delivery (from better to worse): Addis Ababa (75%), Gambela (63%), Oromia and Tigray (both 60%), SEPR (43%) and Afar (35%). This, however, only reflects the availability of certain procedures and tools and not whether these are appropriately implemented. Again this may be the subject of a detailed study at a later stage, if needed. What the table does indicate is which health care

delivery/management support functions could be improved. It also suggests that the main emphasis for improvement in the immediate future should be on the WHD, being the least developed while nearest to health service delivery.

Health facilities were also asked what support they needed as well as what they actually received from the managerial levels, i.e. RHB, ZHD, and WHD. The results are summarized below in Figure 8. (Since it can be expected that support required will vary by type of health facility, a breakdown of the information in Figure 8 can be found in Appendix 10.)

Figure 8:



Finally, the health facilities were asked to rate the support of their managerial levels, whether technical or administrative. There was a general feeling that support could be improved by providing more resources, having better coordination of programs, more frequent supervision. No central or rural hospital rated the support given by MOH as sufficient.

In conclusion, it can be said that the six tier health system as described above has rather weak links since the referral of patients between levels and the support and supervision provided from higher to lower levels are limited. Further study of support and supervision should address the

quality of contacts made. The initial assumption of having stronger coordination and referral among the six tiers seems not yet to have materialized in practice.

C. Resources

For health institutions to function effectively, it is necessary that sufficient human, financial and material resources be allocated, deployed and utilized for the actual health service delivery. This chapter will describe the availability of such resources in both health facilities and HMIs.

1. Budget Allocations

Health Facility Budgets

The source of recurrent budget is mainly from the government, community contributions, and external assistance. Community contributions through token fees flow back through the Treasury, effectively becoming part of the government budget for health. The amount of external assistance (UNICEF, WHO, GTZ, etc.) for specific zones and woredas was not quantified during the survey. Specific external assistance numbers were not available for all units (HMIs and facilities) within a zone.

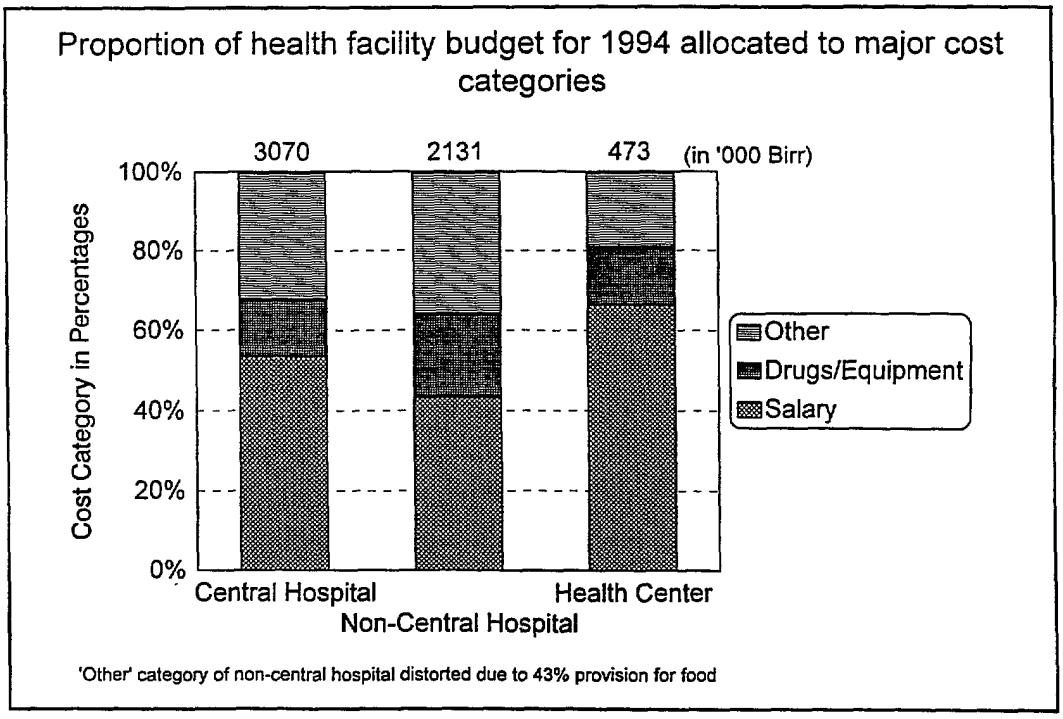
The survey did look at the government budget, which showed yearly increments. As part of the health service assessment, data on budget allocations for the past three years were collected from each type of health facility. However, the information on the budget allocations for 1995 was found to be incomplete in many health facilities. Therefore, data are presented only for 1993 and 1994. It should be noted that facilities generally had little sense of their budget for the new fiscal year, relying instead on actually allocated amounts from the previous year, especially for the first three months of the new year. It was not possible to relate budget allocation and expenditure with the type of service delivered and patient load at individual facilities in this survey. This might be useful information to assess through a separate small scale study.

Table 17: Average budget allocation in '000 Birr for health facilities by budget line

Budget Lines	Central Hospital(5)		Non-Centra		Health Center(29)	
	1993	1994	1993	1994	1993	1994
Salary	1262.6	1643.6	410.1	924.7	244.1	314.6
Allowance	18.9	28.2	29.2	56.5	---	---
Utilities	101	131.6	27.6	53.9	2.5	5.8
Transportation/Per Diem	2.2	5.8	5.1	14.7	7.9	6.9
Transportation Maintenance	---	---	8.7	5.3	1.7	2.5
Printing	16.1	30.0	7.1	32.8	2.8	6.6
Equipment/Building	37.9	52.5	23.0	80.0	5.7	15.6
Contract Services	1.1	0.8	1.3	1.1	0.7	3.9
Food	239	579.9	128.0	321.6	2.1	1.5
Drugs/Medical Equipment	470.0	436.0	205.3	446.9	67.2	68.5
Educational Material	2.1	---	0.7	1.0	1.1	1.0
Uniforms	47.8	84.4	25.0	65.8	6.4	12.6
Fuel/Oil	19.8	27.2	57.8	52.5	2.6	---
Office Supplies	7.6	10.6	6.1	6.6	2.4	2.
Other Supplies	38.2	35.0	20.9	29.3	2.8	9.6
Equipment Purchase	5.9	4.2	5.6	38.7	6.6	21.7
Total	**2270.2**	**3069.8**	**960.5**	**2131.4**	**356.6**	**473.4**

As can be seen from Table 17, funds allocated for 1994 were greater than funds allocated for 1993, in each type of health facility and for all expenditure categories, though non-central hospital budgets increased more than two-fold while the budgets for central hospitals and health centers rose an average of 33 to 35 percent. As seen in Figure 9 below, the proportion of budget allocated for salary tends to be higher than the budget allocated for other operational activities. In 1994, the proportion budgeted for salaries represents 54, 44, 67 percent of the overall budget for central hospitals, non-central hospitals, and health centers, respectively. In the case of the non-central hospitals, this picture gets distorted due to a big proportion being reserved for food provision. However, the money budgeted may not be the money actually spent as such records did not exist. From discussions with the staff during the survey it was found that facility staff would try to spend as much as possible of the budgeted amount, usually in a very short time, as money did not get allocated until the last couple of months of the fiscal year. It is the local Ministry of Finance office that determines whether the money is really available and can therefore be spent.

Figure 9:



Income for Health Facilities

The Ministry of Health policy concerning payment for service is clear: it does not allow free treatment unless the patient produces a certificate from the kebele to get health services free of charge. In addition to a general registry fee, nominal fees are charged for particular services provided.

Table 18 gives an indication of the average fees for various services. It will have to be noted, however, that fees were not standardized among the different levels of health services nor between any two health facilities found at the same level of the health service delivery system. For example, in health centers one could find differences in lab fees: urine tests ranging from Birr 0.15 to 4.50, blood tests ranging from Birr 0.50 to 4; and in routine fees: from Birr 0 to 1 (most people were paying either Birr 0.50 or Birr 1). The variation is even greater among fees for in-patient procedures.

Officially there are no charges for services at health posts. The community is supposed to support health post staff salaries and other expenses. In reality this seldom occurs, and this may be a factor in explaining why many health posts cease to exist.

Table 18: Average rates of user charges in Birr by type of health facility
[ranges appear in brackets]

Type of Service	Central Hospital*	Non-Central Hosp	Health Center	Health Station
Out-Patients				
Regular Routine	3.00 [2,5]	2.90 [1-7]	0.70 [0.5-1]	0.60 [0.5,1]
Regular Outside**	5.00	4.0 [2-5]	2.05 [1-5]	1.00 [0.5-3]
Delivery	20.00	34.30 [1-150]	6.00 [5-10]	---
Lab Urine	2.10 [2,2.25]	1.55 [0.25-4]	1.00 [0.15-4.5]	1.0 [0.5,1.5]
Lab Blood Test	7.00 [3-11]	2.50 [0.5-7]	1.10 [0.5-4]	1.0 [0.5,1.5]
Lab Bacteriology	2.30 [2,3]	2.4 [0.5-8]	1.20 [0.5-3]	---
Lab Parasitology	1.40 [0.75,2]	1.30 [0.5-3]	0.95 [0.25-5.85]	0.5
X-Ray	5.00	6.20 [0.5-30]	---	---
In-Patients				
Minor Procedure	10.00	24.40 [5-150]	7.30 [3-15]	---
Major Procedure	25.50 [25,26]	67.50 [15-250]	3.00	---
Medical Pts. Fee	381.00 [12-750]	94.70 [2-480]	27.30 [2-50]	---
Surgical Fee	381.00 [12-750]	115.70 [2-500]	---	---
Avg monthly income in 1986EC	21,807 [7400-50,259]	38,779 [6-157,011]	7243 [99-66,000]	1022*** [0-7468]

responses (n) variable for all types of health facilities and for individual services

** Reg.-outside: visits outside regular facility hours and/or emergencies

*** Health station income skewed due to high income health stations in Addis (2000-8000 Birr); rural HS (or 60 percent of the HS) would have an average income of approx 400 Birr.

From Table 18 above, it is clear that the inpatient service fee (medical patient's fee) is the most expensive, and this is nearly four times higher at central hospitals than at non-central, i.e. regional and rural, hospitals. However, the price of the routine registration or even the emergency or after-hours registration is almost the same both at central and non-central hospitals, regardless of the type of service they provide. At health centers and health stations the registration fee is smaller than at hospitals. For outside routine (after-hours) registration, the payment at health stations is nearly double, while at the health centers it is more than double, the routine registration. Most laboratory services are more expensive at central hospitals than at non-central hospitals and health centers. Payment for x-ray service is almost the same, on the average Birr 5 at central hospitals and a little more, i.e. Birr 6.20, at non-central hospitals.

The average monthly income from user fees for health stations outside Addis is negligible. To put this in perspective, at approximately 400 Birr/month, it is less than the average 1994 health center budget for printing costs alone. Fees have not been adjusted for inflation and have therefore lost most of their significance, both from an income point of view as well as from the consumer's point of view. Non-central hospitals have a higher average monthly income than central hospitals (Birr 39,000 vs. 22,000), since the unit price of some of the services is higher at non-central hospitals, while there are probably also fewer paying patients in central hospitals; interviewees at national hospitals reported that it was more difficult to charge as a national referral hospital. Furthermore, for all facilities, 'income' is an inaccurate description, as this money flows back to the Treasury rather than being retained at the point of collection.

HMI Budget Allocation: resources for management support of health facilities

As was done for the health facilities, a review was carried out of the budget allocation for the HMIs over the past three years (1993-1995), although complete information on the 1995 budget was not yet available. Moreover, at woreda level 1993 figures were not available, therefore only the 1994 budget was reported. From Table 19 below it can be seen that substantial budget allocation increases (particularly for salaries and drugs) took place between the budget years 1993 and 1994. The total budget increased over four-fold at both the RHB and ZHD levels. The World Bank reports (Staff Appraisal Report, 1994) that health budget increases were possible because of defense budget cuts.

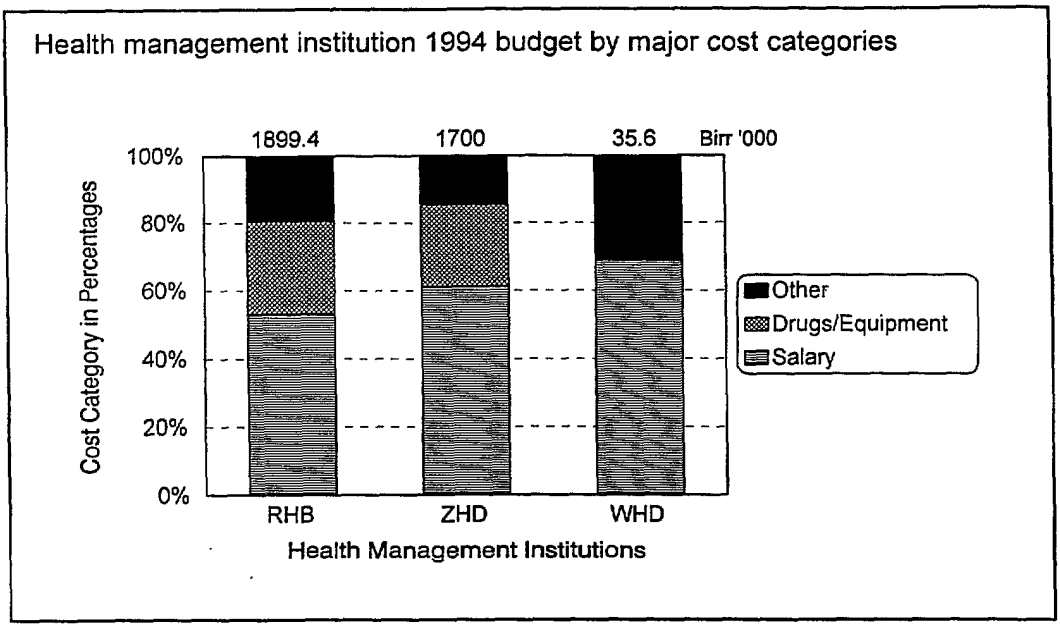
The overall increases to management (support) institutions' budgets were markedly higher than for health facility budgets. Even controlling for two HMI budget categories which show enormous increases (drugs and equipment), total RHB and ZHD budget allocations were up by 200 percent. This should be compared to increases of 33-120 percent for health service delivery units.

Table 19: Average HMI budget allocation in '000 Birr by expenditure category

Categories of Expenditure	RHB (n=6)		ZHD (n=15)		WHD (n=18)
	1993	1994	1993	1994	1994
Salary	365	1012	335.4	1040.0	24.5
Allowance	38.8	67.7	...	15.7	2.9
Utilities	4.1	16	3.5	25.5	0.3
Transport	10.5	12.5	2.8	15.7	1.7
Printing	0.3	7.3	...	20.9	0.5
Equipment	2.4	91.3	2.0	30.7	0.4
Transport Maintenance	8.7	15	8.6	8.7	0.8
Rent	...	4.4	...	2.7	0.4
Contract Service	1.7	3.3	1.3	1.4	0.1
Drugs	3.6	429.6	2.2	415.4	...
Education	0.3	9	0.8	3.6	0.4
Uniforms	5.7	170.1	2.8	40.8	0.4
Fuel	11.7	27.3	9.6	13.7	1.4
Office Supplies	6	13.7	3.7	10.0	0.4
Other Supplies	2.3	2.5	0.9	23.3	0.2
Equipment Purchase	6	17.1	7.3	31.5	1.2
Total	**467.6**	**1899.4**	**380.9**	**1699.6**	**35.6**

Figure 10 on the next page shows the HMIs' budget allocated to major cost categories or groupings of categories. Over half (53 percent) of the RHB budget was allocated for salaries, even more (61 and 69 percent) at ZHD and WHD levels. No drug or equipment allocation was reported for the WHDs, though for the RHBs and ZHDs these combined budget line items went from insignificant in the 1993 budget to over 25 percent of the 1994 budgets. Another interesting observation is that in 1994, almost equal budgets were allocated for an RHB (1.9 million Birr) and a ZHD (1.7 million Birr); the former were recently established, while most of the ZHDs were established as regional health departments over 20 years ago. This implies significant financial power for the ZHD, which has a smaller catchment area than the RHB and none of the new office start-up costs, but with a greater role in decentralization.

Figure 10:



On the other hand, the WHD budget is not yet proportionate to its role in decentralization. Although less than half of the WHDs reported that they had a budget allocation (eight out of 18), the average allocation for a woreda health office was about Birr 36,000 per year. Most of the allocation was for salaries, supplies, equipment, and education. For other categories, only some WHDs had allocations, e.g. for fuel, contract service, etc. Considering the WHD's responsibility for supervision and administration of a number of health facilities, its manpower requirements, and transport and supply needs, these amounts are fairly insignificant. The low or absent budget allocation at WHD level might partially be explained by the fact that some health centers and WHD offices are physically merged, allowing a form of cross-subsidization to take place.

2. Manpower

Health Facilities

Every cadre of health and non-health staff in the health facilities was recorded during the survey according to 24 specific and three general categories (other specialist, other paramedical and other nurses) for technical health manpower, and 25 categories of administrative staff. Findings have been grouped to arrive at average staffing patterns as presented in the tables that follow. The ratio of technical to administrative staff was found to be approximately 2:1 for health centers and stations, but closer to 1:1 for the hospitals surveyed (Table 20).

Table 20: Average total technical and administrative staffing of health facilities
[Range for staffing in brackets]

Type of Health Personnel	Central Hospital (n=5)	Non-Central Hospital (n=15)	Health Centers (n=29)	Health Stations[1] (n=36)
All Type Technical	169 [72-278]	102 [16-275]	25 [8-43]	7 [1-23]
All Type Administrative	199 [133-316]	87 [36-321]	13 [3-26]	4 [1-25]
Total	352 [205-522]	189 [69-596]	38 [14-70]	10 [2-46]

[1]Addis Ababa health stations have not been included as they function basically as health centers, and would distort the picture.

The health post is supposed to be staffed by a trained TBA and a community health worker. Again, since few exist, the survey did not look at actual health post staffing patterns.

Health centers have far fewer medical personnel than hospitals, though they may have equally busy OPDs; furthermore, at quite a few health centers, doctors (and other staff) have to double up as functionaries of the woreda office as well. Only a few health stations have nurses and medical doctors. These are primarily health stations in Addis Ababa which in reality function more as health centers or mini-hospitals. Thus their equipment and staffing needs differ from those of other health stations.

Though there is no definitive staffing pattern for the country currently, health manpower studies conducted in 1978 and in 1992 have indicated that there is a chronic shortage of trained health personnel. At least two PHC review studies (1985 and 1991) have reiterated the problem. The survey recorded the perceived staffing needs, according to the unit staff person in charge of the facility, i.e. hospital director or head of the health center. Although this is subjective, Table 21 which follows indicates available personnel as well as expressed needs for hospitals, health centers, and health stations that significantly exceed current levels of manpower. Technical staff needs to be increased by 35 percent to provide adequate services in non-central hospitals. For health centers, a 50 percent increase in staff allocation would seem to satisfy the needs expressed during the survey.

Table 21: Average number of technical health manpower available and considered necessary at health facilities

Type of Health Personnel	Central Hospital (n=5)		Non-Central Hospital (n=15)		Health Centers (n=29)		Health Stations* (n=36)	
	Avail-able	Total Required	Avail-able	Total Required	Avail-able	Total Required ***	Avail-able	Total Required
General Medical Practitioners	9	10	10	13	2	3	2 (2)	1.4 (7)
Specialized Medical Doctors	8	5	5	10	-	- *	-	-
Midwives	3	3	3	4	1	2	1 (2)	1 (12)
General Nurses	33	19	19	25	5	11	3.4	2.8 (25)
Specialized Nurses**	9	2	2	4	1	2	1.5 (2)	1.2 (13)
Pharmacists	2	2	2	2	-	2	-	-
Pharmacy Technicians, incl. druggists	3	3	3	5	2	2	1 (5)	1 (9)
Lab. Technicians	7	5	5	7	2	2	1.5 (2)	1.2 (19)
X-ray Technicians	3	3	3	4	-	- ****	-	-
Sanitarians	1	1	1	2	2	2	1.3 (4)	1.3 (13)
Health Assistants	38	39	39	48	11	15	4.2	5.1 (33)
Other	16	91					*****	*****

Note: * Numbers in parentheses indicate # of HS responding (i.e. those with the specified type of personnel or requesting it).
** Specialized nurses include: special, MCH, and psychiatric nurses.
*** One health center indicated that it wanted specialists.
**** Three of the bigger health centers (in Addis) wished that x-ray facilities including a technician were made available to health centers.
***** CHAs: 10.5 available (13 HS), 23 required (13 HS)
TTBAs: 15 available (15 HS), 32.6 (14 HS)

As far as administrative personnel in health facilities is concerned, there is a long list of functions, though few are professional posts. Those that are professional posts may be staffed by persons for whom seniority, rather than skill or training, was the primary criterion. Furthermore, it can be seen that particularly the hospitals are heavily staffed with unskilled laborers (cleaners, guards, kitchen and laundry workers). As it was more difficult to group the various professional and clerical staff together, a full table of administrative staff with all categories is presented below (Table 22).

Table 22: Average number of administrative manpower available and considered necessary at hospitals and health centers

Category	Central Hospital (n=5)		Non-Central Hospital (n=15)		Health Center (n=29)	
	available	required	available	required	available	required
Administrator	2	2	1	1	-	1
Archivist	1	1	1	2	1	1
Head of Personnel	1	1	1	1	-	-
Accountant	2	3	1	1	1	1
Cashier	5	6	2	3	1	1
Auditor	1	2	1	1	-	-
Storeman	1	2	1	1	1	1
Property Head	1	1	1	1	-	1
Property Clerk	4	4	1	2	-	1
Purchaser	2	2	1	1	-	1
Carpenter	3	3	1	1	-	-
Registrar	1	2	1	1	-	1
Registration Clerk	7	10	4	5	-	2
Accounting Clerk	3	4	3	3	-	1
Wood Cutter	2	3	2	2	-	-
Plumber	2	2	1	1	-	-
Electrician	2	2	1	2	-	-
Telephone	2	3	1	2	-	-
Driver	6	7	3	3	1	1
Kitchen Worker	17	24	10	12	-	3
Laundry Worker	12	16	5	8	1	2
Cleaner	35	52	20	27	3	4
Guard	24	30	12	13	3	4
Gardener	4	4	3	5	-	1
Messenger	6	8	3	3	1	1

Table 22 also shows a general pattern of perceived under-staffing for administrative staff, although not as critical as for technical manpower. Among the health centers only a third had a separate administrator; such a person was widely recognized as essential to run the administrative affairs of a health center. The only administrative staff at the health station were on average two cleaners and a guard.

HMI Manpower

The survey showed that on average woreda health offices had seven staff, zonal health departments had 28 staff, and regional health bureaus had 80 staff, as indicated in Table 23. For RHBs and ZHDs, the ratio of administrative/support to technical staff is approximately 2:1.

Table 23: Average staffing per health management institution [range in brackets]

Types of Health Personnel	Regional Health Bureau	Zonal Health Department	Woreda Health Office
Total	80 [43-108]	28 [7-63]	7 [1-18]
Technical	26 [9-34]	9 [2-20]	3 [1-6]
Administrative/Support	54 [33-73]	18 [3-43]	4 [1-12]

Table 24 below compares current staffing levels with the expressed requirements of the head of the HMI. The numbers in parentheses in the table indicate how many HMIs of the total surveyed responded for each staffing category;. Findings showed that none of the HMIs surveyed had all of the staff they considered necessary to fulfill their role. More significant is that within the same level of HMI, both the available staffing level and what was considered necessary varied a great deal.

Table 24: HMI technical staff available and considered necessary

Type of Health Personnel	Regional Health Bureau (n=6)		Zonal Health Department (n=15)		Woreda Health Office (n=18)	
	Available	Required	Available	Required	Available	Required
General Medical Practitioners	1	4	1	3	1 (3)	1 (3)
Specialized Medical Doctors	2 (1)	3 (2)	-	-	-	-
Midwives	1(4)	1 (4)	1(4)	1 (4)		
General Nurses	5	6	4	5	1	2
Specialized Nurses	2	3	1 (4)	1 (6)	1 (2)	1 (4)
Pharmacists	3	5	1	2	1 (1)	1 (3)
Pharmacy Technicians, incl. druggists	-	1	1	1	0	1(8)
Lab. Technicians	3 (1)	5 (3)	-	1 (4)	-	1 (3)
X-ray Technicians	-	-	-	-	-	-
Sanitarians	3	4	2	4	1	1
Health Assistants	1	2	2	2	3	5

Though this table suggests a similar perception of understaffing, the needs do not appear to be as acute for most categories as in the health facilities. Furthermore, there do not seem to be standard staffing guidelines for each level.

At the woreda level, the expressed needs for technical staff were less than for the other HMI levels. Consistently expressed as needed by this level was a doubling of the number of general nurses and increasing health assistants by 67 percent. In addition to these general care workers, nearly half of the WHDs expressed the need for a pharmacy technician.

All HMIs desired increased administrative staffing as seen in Table 25 below. In general for the WHDs surveyed, ideal staffing would increase administrative support staff from an average of four to 14.

Table 25: HMI administrative staff available and considered necessary

Category	Regional Health Bureau (n=6)		Zonal Health Department (n=15)		Woreda Health Office (n=18)	
	available	required	available	required	available	required
Administrator	1	1	1	1	1(13)	1(10)
Archivist	3	3	2	2	1 (4)	1(12)
Personnel	1	1	1	1	1 (1)	1 (13)
Accountant	1 (3)	2	1	1	1 (4)	1 (12)
Cashier	1	1	1	1	1	1
Auditor	1	2	1	1	1 (1)	1 (12)
Storeman	1	2	1	1	1 (5)	1 (9)
Cleaner	4	5	2	3	1 (4)	2 (14)
Guard	4	6	2	3	1 (4)	2 (14)
Gardener	1	2	1 (3)	1 (12)	-	1 (12)
Messenger	3	5	2	3	1 (5)	1 (12)
Property Head	1	1	1	1	1 (2)	1 (11)
Property Clerk	1	2	1	1	1 (2)	1 (8)
Purchaser	1	2	1	1	1(1)	1 (11)
Telephone	1	2	1 (4)	1 (10)	-	1 (2)
Driver	5	8	3 (10)	3 (14)	1 (3)	1 (7)
Accounting	4	4	2	2	-	1 (6)
General Clerk	1	2	1 (4)	2 (7)	-	-
Typist	3	6	1	2	1(1)	1 (7)
Legal expert	-	1(2)	-	-	-	-

Note: The number of reporting units was included between brackets, if less than all of total surveyed (6 RHBs, 15 ZHDs, 18 WHDs)

Figure 11:

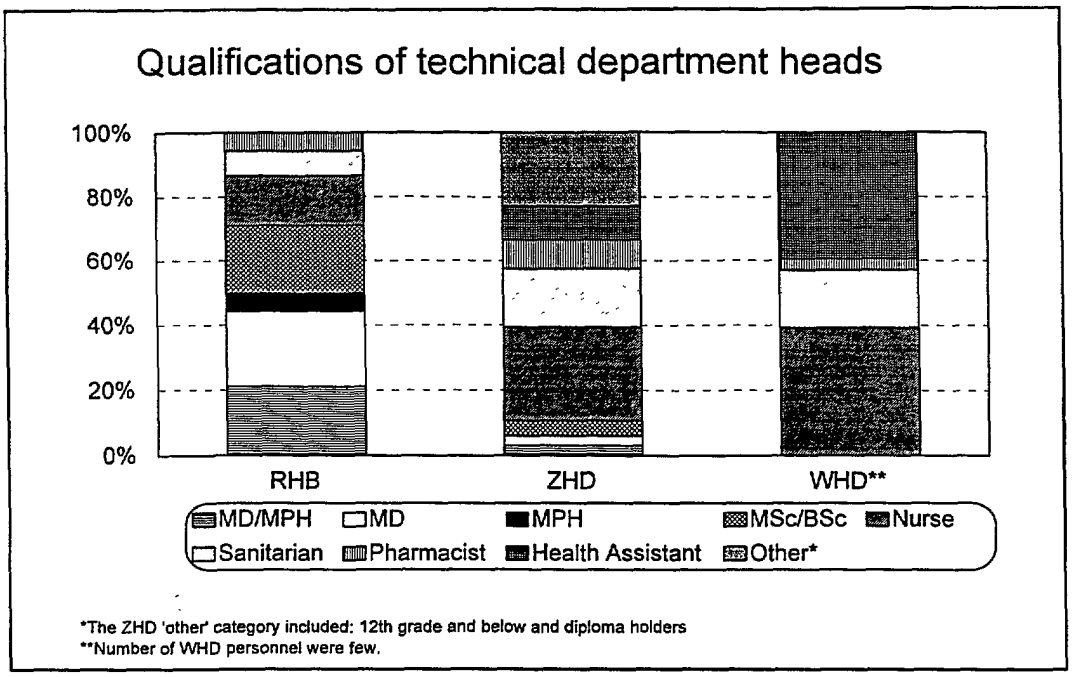
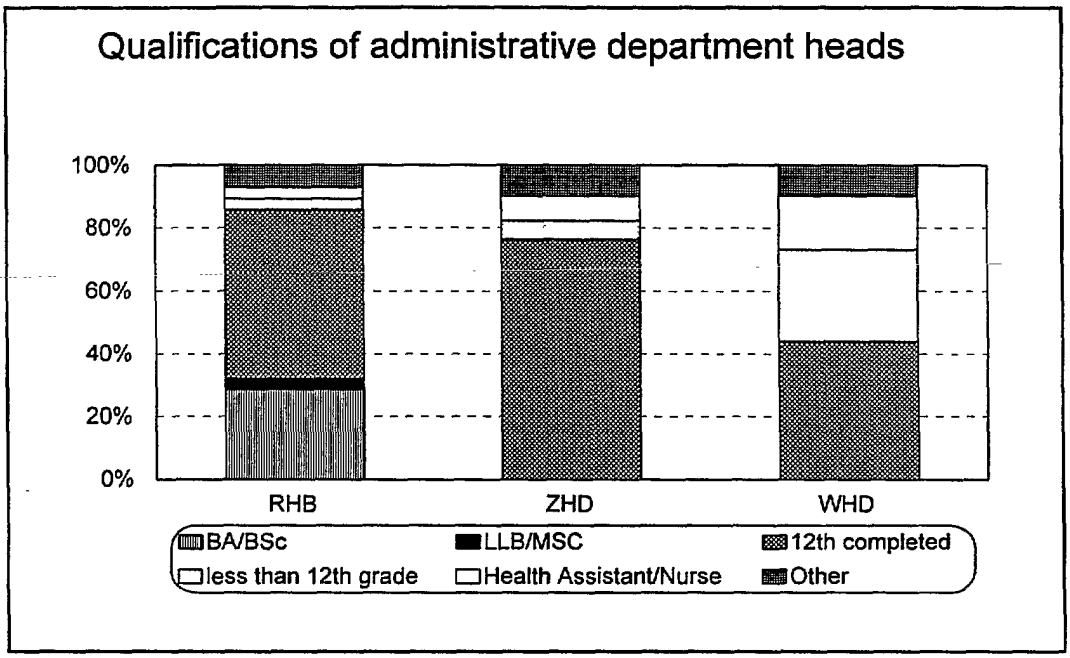


Figure 12:



As can be seen in Figure 11, over 65 percent of RHB technical staff has a master's degree or higher, while at zonal and woreda level more than 50 percent of the heads of departments are nurses or sanitarians. In the woreda or zonal health offices, very few staff with graduate degrees are found. The positions available as head of department or section at the zonal and woreda levels are primarily promotion jobs for senior lower cadre health staff.

With regard to heads of administrative departments, a similar picture emerges (Figure 12): lower cadre staff have progressed into management positions on the basis of (possible) merit linked to their seniority. The survey did not find staff with master's or higher level training working in an administrative capacity at the RHB, ZHD, or WHD levels.

Overall, both health facilities and HMIs believe they are significantly understaffed. Whereas previous manpower studies have confirmed this conclusion for health facilities, it is difficult to know how realistic is the need for additional staff in the HMIs. At all three HMI levels there is high variability in staffing numbers and qualifications, and there are no apparent standards. Overall, WHDs surveyed had very few staff. In cases where the WHD is also acting as a health center, these staff have a dual role in health services delivery, which would place additional constraints on their time. Perhaps because of this conflict, some additional reporting and supervisory duties fall to higher levels. This could contribute to the perception of understaffing at all HMI levels.

3. Drugs and Medical Supplies

In many countries the unavailability of drugs and other medical supplies is the 'Achilles Heel' of the health service; if drugs are not available, health services may not function at all. Ideally, essential drugs and other medical supplies would be available in adequate quantity, variety, and quality based on the national list of essential drugs, giving priority to those products most necessary for PHC programs. It is furthermore required that an effective and efficient drug distribution system function so that rural health care facilities experience few or no stock-outs. The survey looked at current stock, last date delivered, and whether there was a stock-out for a particular item and for how long. This was done for 16 essential items, collectively adequate for about 95 percent of the curative treatments. As the most crucial issue, stock-outs of more than one month are reported in Table 26 below; however, it should be realized that stock-outs of more than two weeks are already not acceptable.

Table 26: Number of health facilities out of stock for a particular drug for more than one month (at the moment of the survey)

Drug	Central Hospital (n=5)	Non-Central Hospital (n=15)	Health Center (n=29)	Health Station (n=36)
Cotrimoxazole			8	4
Proc. penicillin	1	1	1	2
Mebendazole	2	2	2	5
Tetracycline		2	3	2
Aspirin		1		4
Paracetamol		1	2	4
Ferrous sulphate		1	3	7
Metronidazole		1	4	6
ORS		1	1	3
Streptomycin		1		6
Ampicillin				2

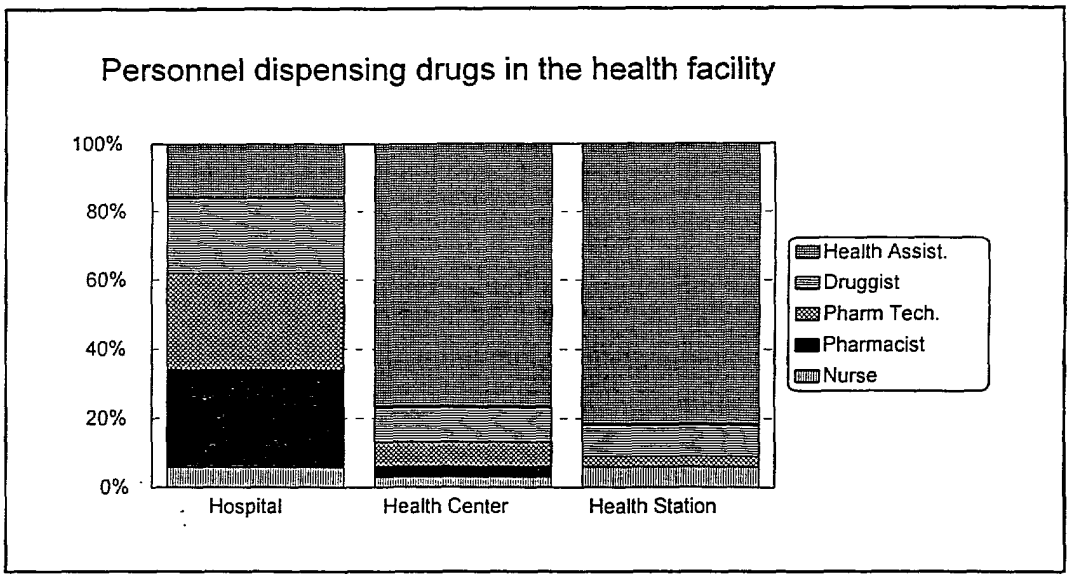
It should be noted that the regular drug supply has been supplemented by the input of emergency drug supplies over the last three years. In particular there was an infusion of drugs through the Emergency Recovery and Reconstruction Program, a multi-donor response initiated as the new government took over.

Of concern is the observation that the health stations and health centers, which are supposed to function as the first point of call for the rural population, were more likely to experience stock-outs across a range of drugs than the other types of facilities. As most health stations rely on drug provision from their apex health center, it may reflect a particularly bad drug availability situation in the rural areas. A similar situation was noted for other medical supplies. Furthermore, it has to be recognized that having no drugs available in the health facility will damage the compliance with, attendance at, or acceptance of preventive health programs as well. Lastly, it was noted that central hospitals do not keep any vaccines for preventable childhood diseases.

The private sector drug providers (pharmacies, drug shops and vendors) were not assessed, as the survey concentrated on the public sector. It is assumed that they would provide the population with additional access to essential drugs.

The survey recorded who was actually dispensing the drugs, as seen in Figure 13:

Figure 13:



It can be concluded that although the pharmacist (in the hospital setting) and the pharmacy technician (in the health center) were considered to be responsible for dispensing, the actual dispensing was mainly done by other cadres, primarily health assistants. Many health stations noted a need for pharmacy technicians in their staffing. It may be possible to address this perceived need by training the health assistants, who are the personnel actually dispensing the drugs at this level.

4. Equipment

Health facilities

Equipment is necessary to perform some of the basic functions in a health facility, whether in the OPD, MCH department, operation theater, laboratory, or administration. The survey requested the interviewees to mention which items of equipment were currently lacking and those currently out of use. In the end, whether equipment is out of use or totally lacking, it is not available to provide required services or perform certain functions. The following table provides an overview of equipment items not available in surveyed health facilities. For reporting purposes the various equipment items are categorized in equipment groups for specific functions, according to the MOH standard equipment list for rural hospitals, health centers, and health stations (IPIG, see Appendix 11.)

Table 27: Average number of items of equipment not available per equipment group

Equipment group	Rural Hospitals (n=15)		Health Center (n=29)		Health Station (n=36)	
	Ipig	not avail.	Ipig	not avail.	Ipig	not avail.
OPD	11	2	16	2	12	0.9
Operation	8	1.3	7	0.6		-
MCH/Gyn	5	0.6	9	0.7	*	-
Laboratory	15	1.3	6	0.5		-
Other**		5		2.5		2

Note: Ipig= Instruments per equipment group (MOH Standard List for rural hospital, health center, and health station)

* MCH items such as weighing scales and cookers to sterilize EPI syringes are included in OPD equipment at the HS level.

** Includes administrative items (typewriters, tables, chairs, duplicating machines) and health education equipment (posters, projectors, recorders, etc.)

The numbers in Table 27 demonstrate a favorable situation: of the recommended (IPIG) equipment items, health centers were lacking only ten percent and health stations eight percent. However, the survey revealed that at the health center and health station level, the missing equipment was critical, e.g. stethoscopes, sphygmomanometers, and adult/infant scales were either out of use or totally lacking. At hospital level, major equipment like sterilizers, refrigerators, boilers, microscopes, and washing machines were quite frequently either out of use or not available. It should be noted that the IPIG list was prepared prior to 1990 and does not reflect the importance now accorded to health communications in primary health care. Health education materials are not on the IPIG list, and perhaps as result of this were notably absent from most health facilities (see 'Other' in the table.) There was little or no change in the small budget accorded to this line item.

The survey further investigated how long certain items were out of use at the moment of the survey (see Figure 14). The results indicate that hospitals have a better maintenance and/or replacement service than lower level units, as there seems to be no immediate out of use equipment (i.e., in the past five months). Equipment out of use longer than a year was assumed (to a large extent) to be completely broken down and irreparable.

Figure 14:

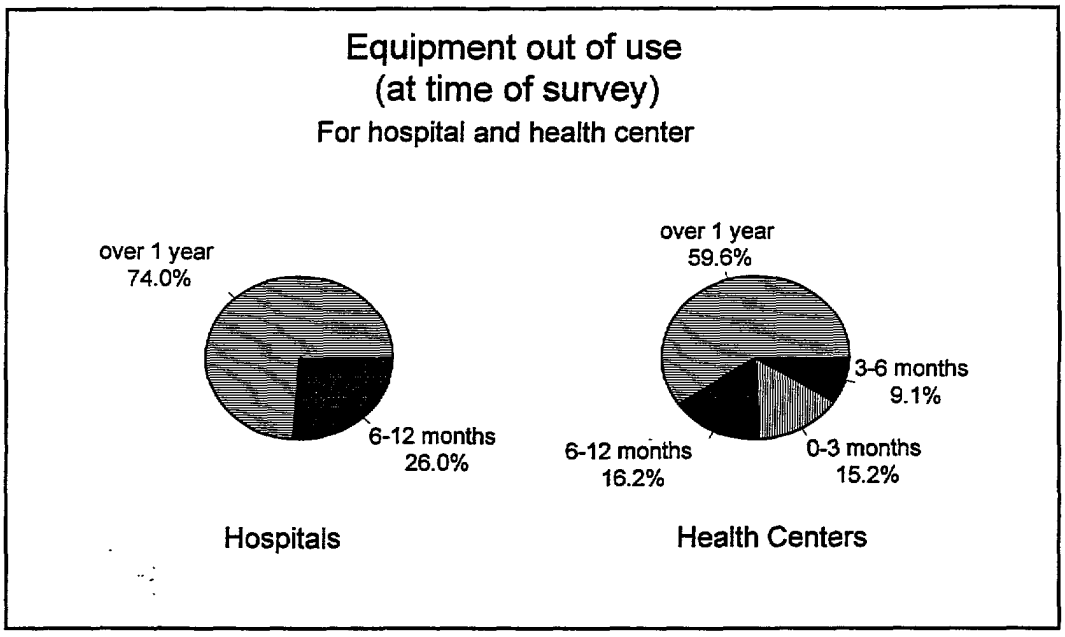


Figure 15:

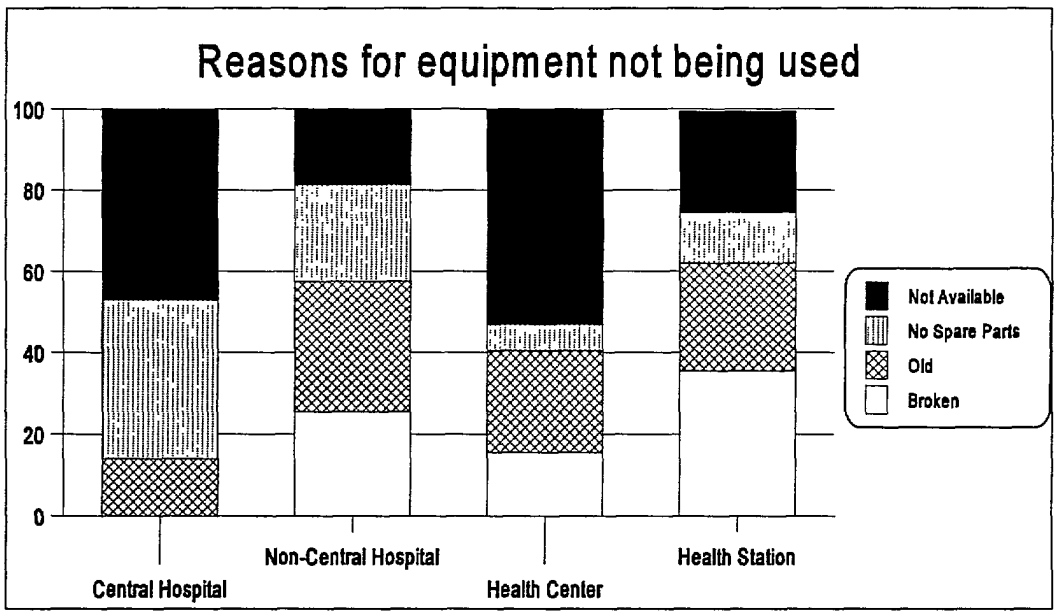


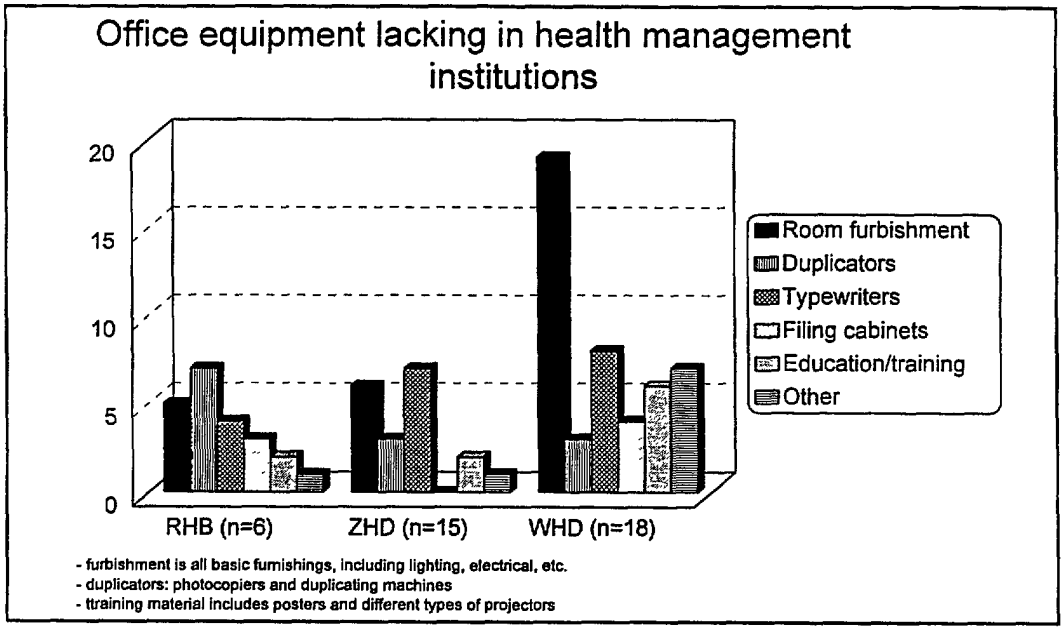
Figure 15 reveals that in hospitals and health centers, much of the non-use of equipment is explained by the fact that it was never made available. Old or broken equipment explains approximately half the non-use of equipment in health stations, health centers, and non-central hospitals.

HMI Equipment

The HMIs surveyed often lacked basic office equipment. For example, five out of six RHBs needed photocopying or duplicating machines, while half of the RHBs did not have enough chairs nor filing cabinets. At ZHD level, five out of the 15 surveyed needed Amharic typewriters as well as duplicating machines. At woreda level, eight out of 18 needed basic tables, chairs and shelves; a quarter did not have English or Amharic typewriters. The reality that some WHDs are really more a health center than a management unit was confirmed by a WHD that asked for examination beds and a refrigerator. Figure 16 gives an overview of the equipment shortages as reported in the survey by the head of each HMI -- the graph depicts the number of times a combined equipment group was mentioned as 'lacking', i.e. not available or in usable condition.

The two main reasons given for a lack of equipment were: 1) the equipment had never been supplied, or 2) the equipment was broken, in which case it was either due to lack of spare parts or just being old/irreparable; again a sign of a poor maintenance system. Only one of the 21 surveyed RHBs and ZHDs reported having a system in place for equipment maintenance. (See Section II.D about resource management.)

Figure 16:



The most striking observation is that all of the WHDs surveyed lacked basic furnishings, in the view of the HMI staff. This is a further indication of the investment that may be required to make this level fully functional.

5. Transport

Health facilities

Each health facility, other than community health posts, is supposed to have functional transport, either cars, motorbikes, or bicycles. Several vehicles have been supplied to the health facilities by donors. Vehicles serve for undertaking the various PHC program activities and for transportation of patients, particularly at higher levels of health service delivery. The survey found the following average transport availability:

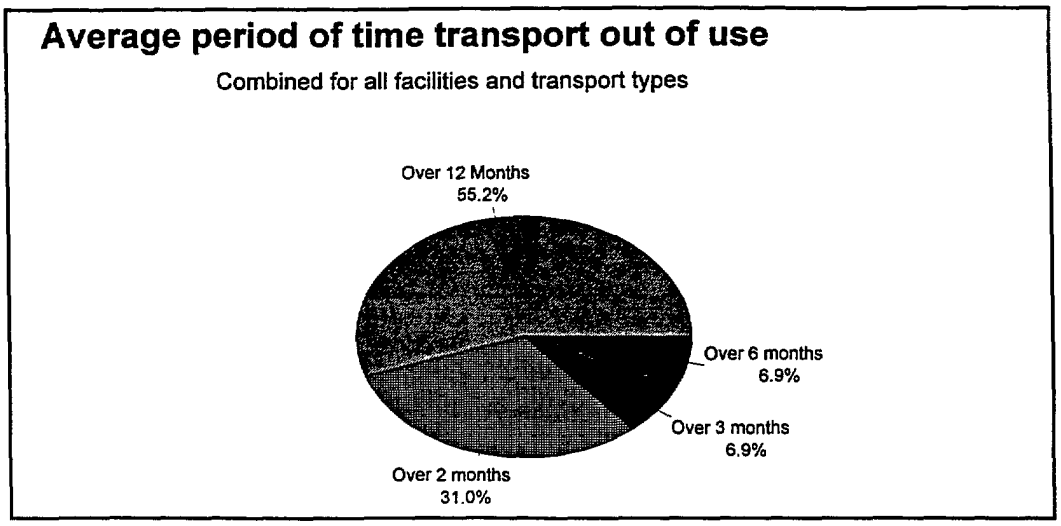
Table 28: Average transport available per health facility

Transport	Central Hospital (n=5)	Non-Central Hospital (n=12)	Health Center (n=18)	Health Station (n=16)
Car	4 (*)	2	1	-
Motor Bike	-	1	1	1
Bicycle	-	2	2	1

Note: (*) one hospital was excluded from this average.

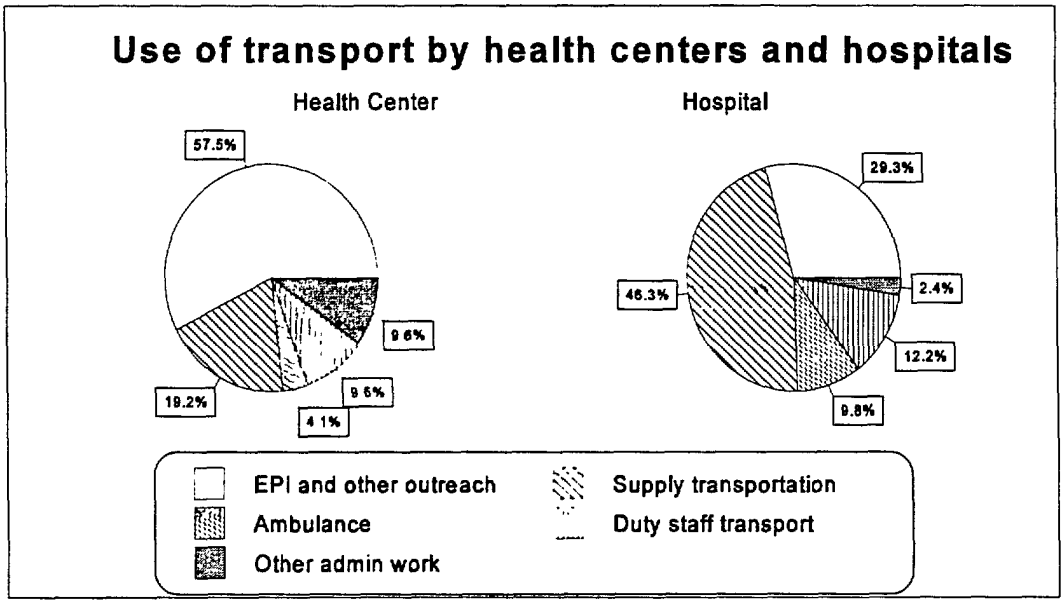
The averages in Table 28 should be viewed in light of two mitigating factors: 1) a somewhat uneven distribution of vehicles, and 2) vehicles in disrepair. For example, 80 percent of the total of surveyed rural hospitals and 62 percent of the health centers reported having a functioning car, while only 44 percent of the health stations had a motor-bike. It is possible that more means of transport were available but were currently out of use: two central hospitals reported four vehicles out of use and one had ten vehicles out of use, while three rural hospitals reported one vehicle out of use and two hospitals reported two vehicles out of use. At health center level this was no better: a total of eight cars in seven hospitals were reported not functioning. The picture was the same for motor bikes and bicycles. Figure 17 depicts the average time these means of transportation had been out of use at the time of the survey. This again results from poorly functioning maintenance systems and general lack of spare parts.

Figure 17:



When in use, the cars and motor bikes were used more than 50 percent of the time for outreach health activities in rural health facilities, while in hospitals they were used to transport supplies. It is worth noting that transportation was rarely used to transport patients. This may be another indication of weaknesses in the referral system.

Figure 18:



HMI Transport

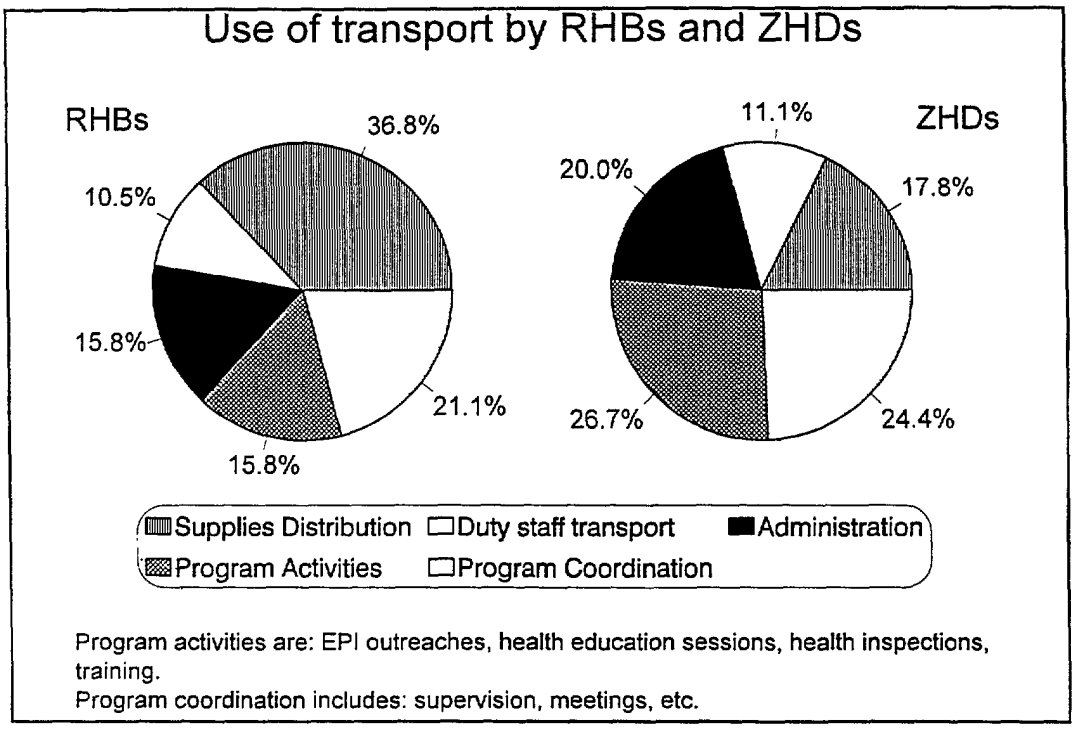
Health management institutions at all levels reported similar transportation difficulties. At the level of the regional health bureau, an average of six cars were available at the time of the survey, with another two out of use, either because they were too old or because there were no spare parts to repair them. Trucks are scarce vehicles at HMIs, in spite of the fact that some of the departments have to provide multi-million populations with supplies for their health facilities. Three regions reported having one truck, two regions had two, while one region (Addis Ababa) reported having none at all. In addition to the cars and trucks, RHBs have on average two motorbikes and eight bicycles.

Of the zonal health departments, only three reported having trucks (one zone reported nine; this was a zone in region 14 which would explain the lack of trucks at regional level). The other zones reported not having any trucks, either currently available or out of use. Considering their size, some zones could use trucks for their supply distribution. On average in the zones, there are three cars, two motorbikes, and two bicycles. Some zones, however, far exceed these averages: two zones each reported 13 cars and one reported 28; one zone reported 22 motorbikes and another 57; and two zones each reported 28 bicycles. In half of the zonal health departments they had at least another car or motor bike available but out of use.

Only four of the 18 woreda health offices reported having one car, none had a truck, six had motorbikes (five with one, one had two), and two had bicycles (one and three, respectively). This poor transport situation for WHDs can again be explained by the fact that most of them (two thirds of those surveyed) are part of health facilities and may use their vehicles. Nevertheless, in light of the WHD's key role in the supervisory network, their need for transport is acute.

As the main role of the HMIs is to support and supervise the health facilities under their jurisdiction, it was interesting to learn the actual use of the various means of transport by each HMI. Only RHBs and ZHDs had sufficient data for this analysis, as shown in Figure 19.

Figure 19:



As can be seen in the above figure, the ZHDs use their transport (cars and motor bikes) for just over 50 percent on health activity supervision, if we consider both program activities and coordination as part of a supervision process. The RHBs use their transport primarily for supplies distribution, while less than 40 percent of use is for supervision. Again this may be explained by the fact that the ZHD level is much more directly involved in supervision of units and activities than the RHB as the apex health management level in the region.

The survey found overall that there exists a general shortage of all means of transportation, particularly vehicles. This has been a major obstacle in the implementation of PHC programs at all levels. Lack of maintenance, overly centralized maintenance facilities, and mismanagement of the available vehicles were also mentioned as regular problems.

6. Physical Infrastructure

Health facilities

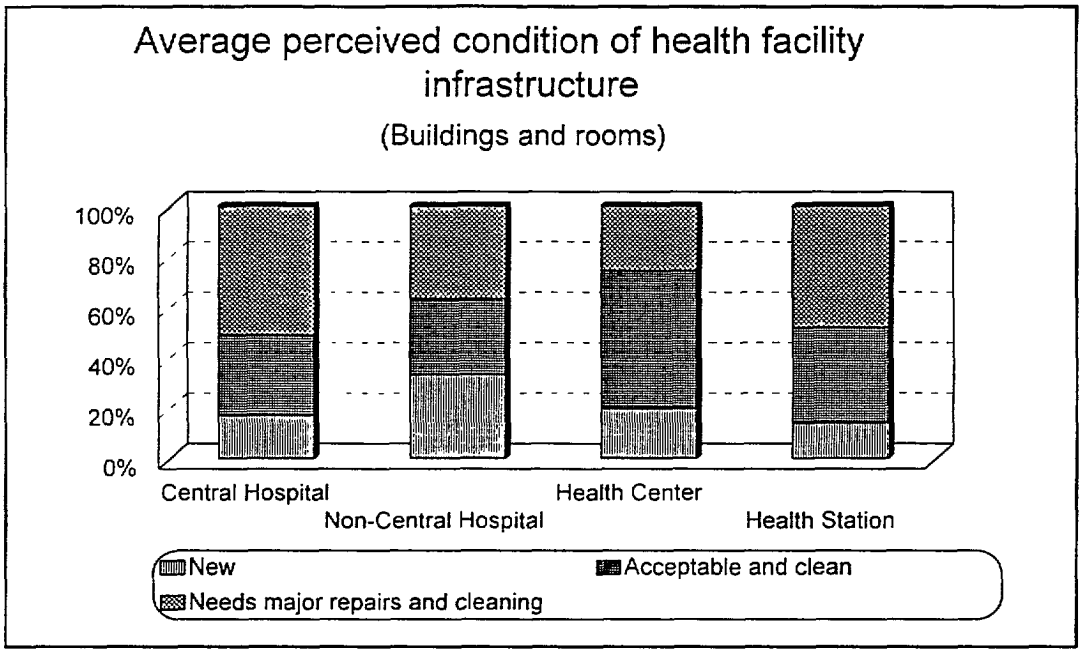
A 1993 policy document (Report of the National Health Task Force) states that the hospitals were established as early as 1894, while many of the basic health service facilities (mainly health

centers and health stations) were built in the 1960s. These facilities are supposed to be built according to standard plans prepared by the MOH. However, as noted during the survey, particularly in the case of hospital infrastructure, the variation is so wide that no two hospitals are alike.

Furthermore, the latest Comprehensive Health Service Directory of the MOH in 1989 indicated 45 percent of the hospitals, 65 percent of the health centers, and 59 percent of the health stations needed minor repair, while only some were in good condition. The rest (more than half of the hospitals and almost one quarter of the health centers and health stations), because of their bad condition, needed complete replacement or a major repair. These figures were generally confirmed for the sample in this survey.

The condition of most of the infrastructure leaves a lot to be desired. The following figure (Fig. 20) depicts people's perceived condition of the rooms and buildings of the health facility. More frequent maintenance, including preventive maintenance as part of an overall maintenance system, is required to keep the infrastructure clean and in good order.

Figure 20:



The baseline survey assessed the adequacy of the space available in terms of specific rooms. This is illustrated in Table 29 below.

Table 29: Setup of health facility infrastructure and perceived need for expansion

Type of Room	Central Hospitals (n=5)		Non-Central Hospitals (n=15)		Health Centers (n=29)		Health Stations (n=36)	
	Avail-able	Add'l needed	Avail-able	Add'l needed	Avail-able	Add'l needed	Avail-able	Add'l needed
OPDs all type	14	8	12	5	9	5	2	2
Inpatient Wards	10	3	5	3	2	3	-	-
Drug Stores	2	1	1	1	1	1	1	1
Laboratory	2	2	2	2	1	1	-	-
X-Ray Room	2	-	1	2	-	-	-	-
Operating Theater	3	-	2	2	-	-	-	-
Delivery Room	2	-	1	3	2	1	1	2

Note: available = rooms currently available,
add'l needed = how many additional rooms needed, as expressed by head of facility.

The rooms found (available) at health stations are few in number and type, i.e. two rooms for OPD (including wound dressing and injection room), one room as a drug store, and one room for delivery and emergency. On the other hand, various types of rooms are found at health centers, such as for OPD (nine rooms), inpatient wards (two rooms), drug store (one room), laboratory (one room), and delivery rooms (two rooms). At hospitals, in addition to the above types of rooms, several inpatient wards, x-ray and operating theaters are found. The number of OPD rooms was deemed to be insufficient at all levels.

In addition to the rooms mentioned in Table 29, the survey found that other rooms and buildings, including workshops, environmental health units, garages, blood banks (in big hospitals) to name but a few, were also required.

Health Management Institutions

For the HMIs, the survey found much variability in where their offices were located. Most of the RHBs have their own building or share their offices with other council departments, and only one region (out of six) rents a building (at a cost of Birr 700). Of the zonal health departments

surveyed, seven are located in a health facility, mostly hospitals, sharing rooms for offices; four have rented buildings (average rent B 365); only three have their own building. Two-thirds of WHDs surveyed are housed in health facilities (ten in health centers, two in hospitals), 'housed' meaning actually having their own offices. Only two had their own building and one was housed in the woreda council building. The WHDs in Gog&Jor and Addis Alem reported to be without an office; they were using offices from other institutions.

Table 30 provides an overview of what type of offices/rooms and functions were found on average at the various levels and whether the number was considered adequate.

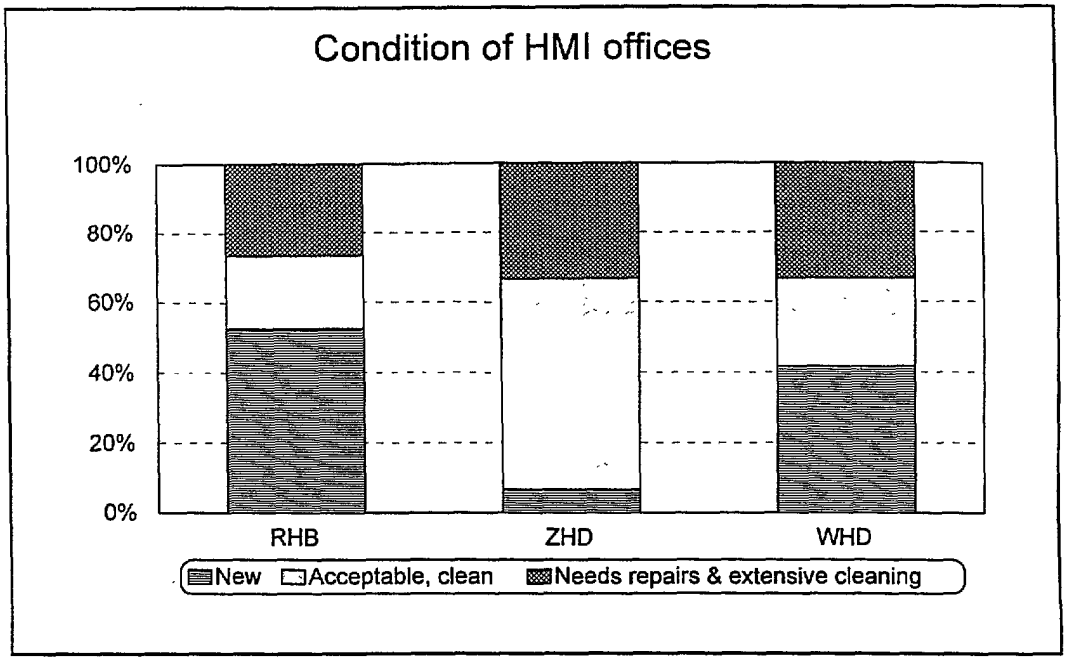
Table 30: Average number of rooms and type of room available, as well as average number of additional rooms required

Type of Rooms	RHB (n=6)		ZHD (n=15)		WHD (n-18)	
	Available	Additional Required	Available	Additional Required	Available	Additional Required
Offices	18	13	11	10	3	8
Drug Store	1	1	1	1	-	1
Supplies Store	1	1	-	1	-	1
Other Store	-	1	-	1	-	-
Meeting Room	-	1	-	1	-	1
Workshop	-	1	-	1	-	1 (7)
Cold room	-	1	-	1	-	1 (8)

Most of the above rooms are offices and at each location one room is used for a drug store. Other functional rooms (storerooms, meeting rooms, workshop, cold room) were not found, but were needed. Other functional offices/areas not found might be needed, e.g. blood banks, drawing or engineering rooms, and a garage. With regard to the latter, it was reported that vehicles were parked at the bureau or department (75 percent) and that most health facilities would have their transport repaired at the nearest HMI (50 percent of health centers and hospitals). To fully assess the adequacy of HMI facilities, the functions of each level need to be better defined.

Survey teams observed and noted the current condition of the premises available. This is depicted in Figure 21.

Figure 21:



As can be seen from the figure above, the majority of offices are in reasonable shape. The rooms in need of major repairs and extensive cleaning tended to be those in rented buildings. Thus, as overcrowding was also reported by the health facilities, providing 'temporary' residence to health management units, primarily in the case of ZHDs and WHDs, may not be appropriate in the long run.

D. Information and Management

A combination of management and information systems guides the health service delivery system in achieving its main function of preventing illness and adequately treating patients. The survey looked at three segments of information and management, which are elaborated below as follows:

1 - management tools - for in-house management of all the resources of the unit (whether health care facility or health management institution). These tools serve to ensure that appropriate and sufficient resources are being used, the right procedures/guidelines are followed, and that appropriate decisions are being made.

2 - health information system - a series of reports among levels of the health system and between health facilities and their management (support) institutions. Effective reporting provides timely information on the illnesses seen within the health system, prevention/promotion activities being carried out, and the health status of the catchment population.

3 - planning and management systems - how health facilities and HMIs utilize information for planning, the types of information available, and how planning is carried out.

1. Resource and Other Management Tools

Resource management tools are procedures and guidelines to administer resources. These tools, which include instructions and recording/reporting forms, ease the administration and tracking of resources. The survey checked whether these resource management tools were available in health facilities, primarily as a means to verify some of the problems found. For example, maintenance has been reported as lacking; the survey found that facilities also lack a regular system to track the various maintenance programs and the procedures to carry out appropriate maintenance. Tools that deal with personnel, finance, medical supplies, equipment, maintenance, and transport were assessed at all levels. In addition to the above resource management tools, there are also general planning and activity tools, such as plans, statistical overviews, and maps. Table 31 below summarizes the availability of the various management tools at different levels of the health service delivery system. Their use will be explored in section D.3.

Table 31: Proportion of health facilities with specified types of management tools

Type of management tools	C. Hospitals (n=5)	Non-C. Hosp. (n=15)	H. Centers (n=29)	H. Stations (n=36)
	% with tools	% with tools	% with tools	% with tools
Personnel management tools	32	50	37	17
Finance management tools	84	76	56	-
Medical & drug supply mgmt. tools	40	58	60	52
Equipment management tools	32	57	28	23
Maintenance management tools	15	18	3	3
Transport management tools	57	33	19	4
Planning management tools	34	55	64	52

Of the above management tools, financial management tools (including the monthly ledger book, bank accounting statements, Ministry of Finance models (e.g. No. 19 to 23), user charge income and user charge submission forms) were most frequently available. On the other hand, some important management tools, such as those that deal with maintenance management (physical structures inventory, preventive maintenance schedule, maintenance responsibility chart and repair activity log), were rarely available at all levels of the health service delivery system. Similarly, equipment management tools (equipment registers, equipment identification, equipment maintenance schedules, and disposal forms) were only available in about one quarter of the health facilities. Planning and other activity tools (e.g. work schedules, performance overviews, health profiles, maps of catchment areas, and annual plans), were available in about a third of the central hospitals and over 50 percent of rural health facilities. Appendix 12 provides a more detailed overview of the resource management tools and their availability in health facilities.

Finally, it must be said that the knowledge and willingness to work with these tools is at least as important as their availability. Frequent turnover of staff hinders the training of personnel in the use of management tools, a problem mentioned by several of the interviewees.

The survey also looked at whether the HMIs have the management tools and systems available to manage their affairs internally. Summarized results are presented in Table 32 below, and in greater detail in Appendix 13.

Table 32: Proportion of HMIs with specified types of management tools available

Type of Management tools	RHB (n=6) % with tools*	ZHD (n=15) % with tools	WHD (n=18) % with tools
Personnel Management Tools	35	31	27
Financial Management Tools	77	55	20
Equipment Management Tools	50	36	10
Maintenance Management Tools	8	5	1
Transport Management Tools	50	54	4
Planning/Management Tools	81	68	37

* % with tools determined for total of all tools in category found in the institutions divided by the total expected tools.

Reading across the table, we see that there is a greater availability of each management tool at RHB level than at ZHD and WHD level, most significantly for financial and planning management tools. In fact, at WHD level most tools are not much in evidence. Deficient at all

levels, though again worse at WHD level, were tools for maintenance, and to a lesser extent equipment and transport management.

For this analysis of the availability of management tools, the survey employed a well-established international model, the MEDEX management analysis modules, in both the health facilities and the HMIs. The HMI personnel interviewed responded very enthusiastically to the organizational framework this model presents. Since the management levels were relatively recently created, HMI staff may benefit from continued use of such a model.

2. Information Systems

The health management information system was assessed in terms of throughput of reports, i.e., whether they were received from lower levels and sent to the next higher level, the frequency of reporting, the use of the information, and the various responsibilities with regard to the collection, compilation, and utilization of data. The results of the assessment show that data is collected at the health facility level from the health station upwards. No forms were found for reporting by the CHP level. Three basic types of reports -- morbidity, MCH, and PHC activity reports -- originate from both HCs and HSs and are sent through to the woreda, where they are compiled and sent on to zone and regional management levels, then on to the MOH. Central hospitals report to the MOH, while rural hospitals should report to the WHD, though they are more frequently reporting to the ZHD or RHD. This may reflect the confusion that arises from WHDs sharing quarters and/or responsibilities with health centers -- hospitals may feel awkward reporting to what is effectively a health center.

The frequency of reporting by the health facilities is mostly monthly, with the exception of the weekly notification of diseases. The compiled reports from the managerial levels are sent on a quarterly basis, apart from the morbidity reports which are sent on a monthly basis through the whole system.

In addition to the three main reports, there are occasional reports on specific activities such as EPI, CDD, or ARI, and epidemic reports, which are a standard requirement of the MOH. Managerial reports on personnel, finance, or administration are hardly ever sent; similarly, AIDS reports do not seem to exist.

Table 33 provides an overview of the various reports the health facilities indicated they compile/send and receive. Reporting is very erratic in terms of the different types of reports sent. This is especially true at health center and health station levels, where every type of report is sent on by one or more of the facilities surveyed, but for most reports a third or less do so. The exception is for morbidity reports, which are compiled and sent on by, on average, over 80 percent of the health facilities.

Table 33: Percent of facilities sending and receiving reports, by report type

Type of reports	C Hospital (n=5)	Non-Central Hosp(n=15)	Health Center (n=29)		Health Station (n=36)		Health Post (n=6)
	Send	Send	Receive	Send	Receive	Send	Send
Morbidity	100	93	41	79	11	86	17
Mortality	60	42	24	10	6	6	17
Activity (PHC)	100	73	41	55	25	64	50
MCH	-	33	31	52	11	33	33
EPI	-	27	24	62	-	42	17
CDD	-		-	10	-	8	-
ARI	-		-	7	-	6	-
Epidemics	-	7	17	24	11	31	33
AIDS	-	7	-	7	-	6	-
TB	-		-	3	-	3	-
Finance	40	47	3	17	-	14	-
Administration	-	7	10	17	-	11	-
Sanitation	-		7	7	6	6	-
Drug	-		3	3	-	6	-
Laboratory	-		-	7	-	-	-
HealthEducation	-		-	-	-	3	17
Avg # of reports per facility	4 [range 3-4]	3 [range 1-8]	3 [2-5]	4 [2-7]	2 [1-3]	3 [1-8]	3 [2-4

Note: - Health posts and hospitals do not receive reports from lower levels.
- The numbers reflect the units that regularly receive and send the various types of reports; the total number of units is mentioned in brackets on the top line.

The survey found that HMIs receive on average three to four different types of reports, with a similar number being sent to higher levels (see Table 34 below). These reports include primarily morbidity and activity reports for RHBs and ZHDs, while for the WHDs these include morbidity, EPI, MCH/FP and CDD reports. Again it was found that administrative or financial reports were rarely prepared, received, or sent on.

Table 34: Percent of HMIs receiving and sending on reports, by report type

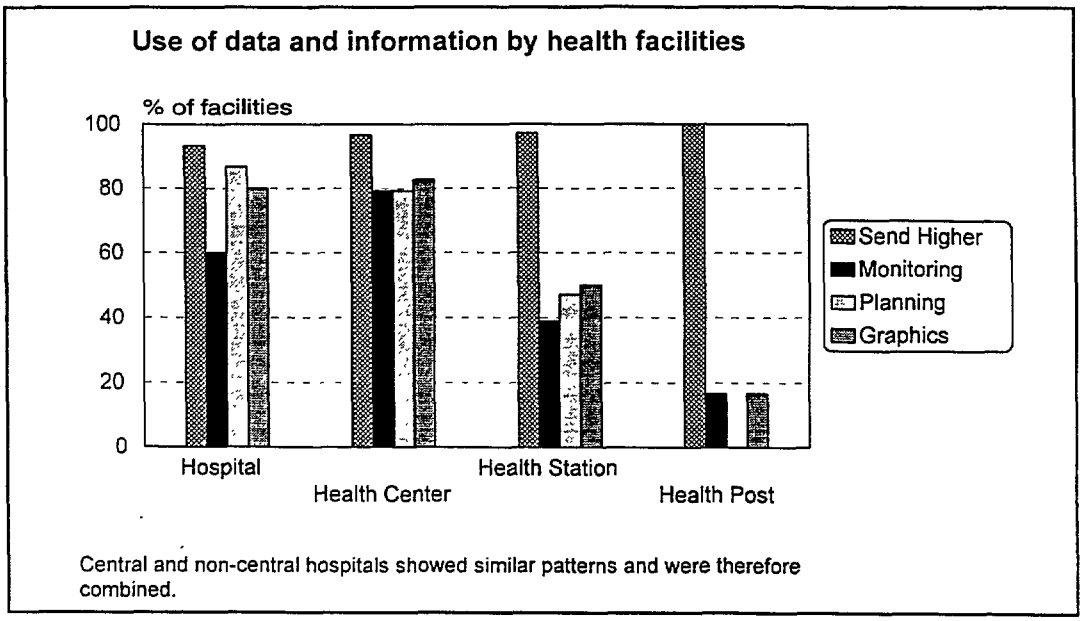
Type of reports	RHB (n=6)		ZHD (n=15)		WHD (n=18)	
	Received	Sent	Received	Sent	Received	Send
Morbidity	100	67	80	73	83	89
Mortality	17	17	-	-	6	6
Activity	83	67	60	67	11	11
MCH/FP	50	33	40	27	83	83
EPI	50	33	33	33	72	72
CDD	-	-	-	-	22	22
AIDS	-	-	7	13	11	6
CDC	-	-	13	20	-	-
Epidemic	-	-	13	13	44	56
Finance	33	33	20	20	17	33
Administration	-	-	13	13	-	-
Environmental Health/sanitation	-	-	33	7	-	-
Health Education	33	17	-	13	11	11
Other	-	33	7	2	6	6
Average # of reports per HMI	4 range[2-5]	3 [1-5]	3 [2-6]	3 [1-8]	4 [2-6]	4 [1-6]

Note: most are monthly except epidemic reports, which are prepared at time of an outbreak; monthly reports are compiled also into quarterly and annual reports.

At the HMI level, the survey found inconsistencies in: the number of reports (ranges were found from two to six); the type of reports (many other reports were indicated -- in-patient, sanitation, CDC, epidemic -- but not consistently for every HMI); and the regularity (apart from the standard reports which were sent monthly, other reports were found to be irregular).

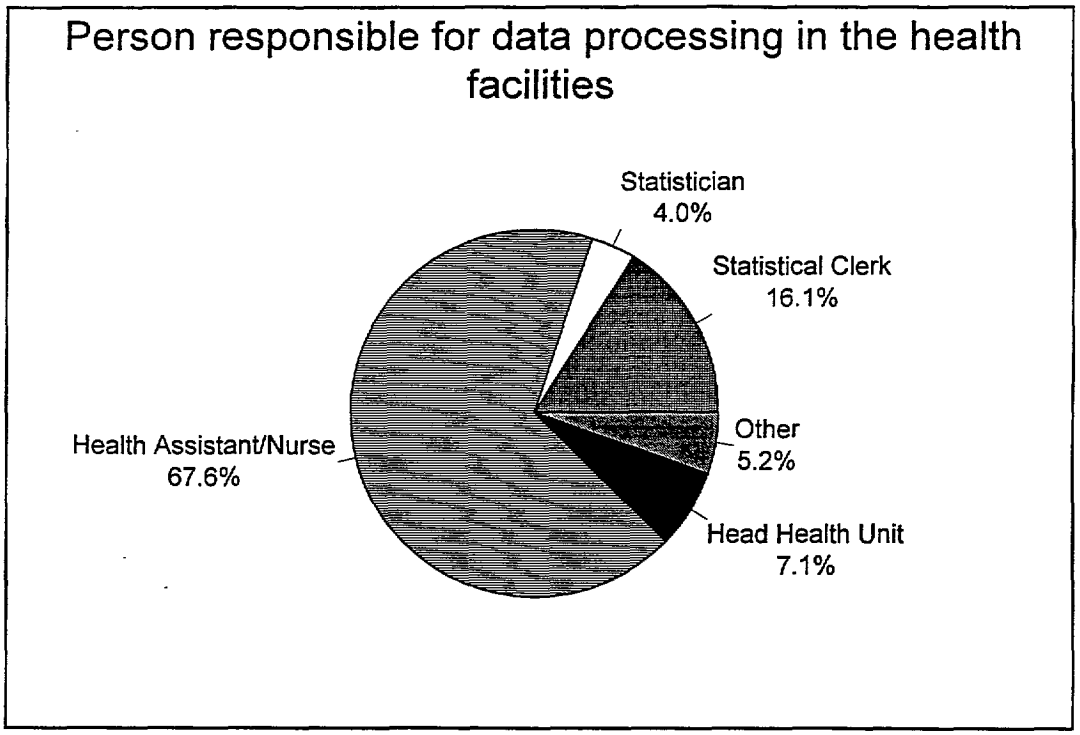
Another important aspect of the health information system is the actual processing and use of the information being generated and compiled at the various levels. The survey asked health personnel to specify how they use the collected information. Figure 22 depicts their spontaneous reaction rather than reflecting a detailed study of actual application of reported information.

Figure 22:



From Figure 22, it appears that information is perceived primarily to serve higher levels, rather than being used at the point of collection. This was markedly so at the HS and HP levels. The smaller the facility, the less the data are analyzed and used for planning and monitoring, or even developing graphical presentations for use in the facility. This may be partially due to the lack of knowledge of the people handling the data. The following figure (Fig. 23) depicts the people responsible for data compilation at the health facility level.

Figure 23:



Only seven health facilities (of the 91 surveyed) had trained people for data collection; only one had a person trained in information use. Therefore the previous conclusion that very little was done with the data at unit level is not so surprising. Most health facilities have either no tools or at most a calculator for data processing; almost one quarter of the hospitals and health centers, and half of the health stations, had no tools at all and processed data manually. One health center and one central hospital had use of a computer.

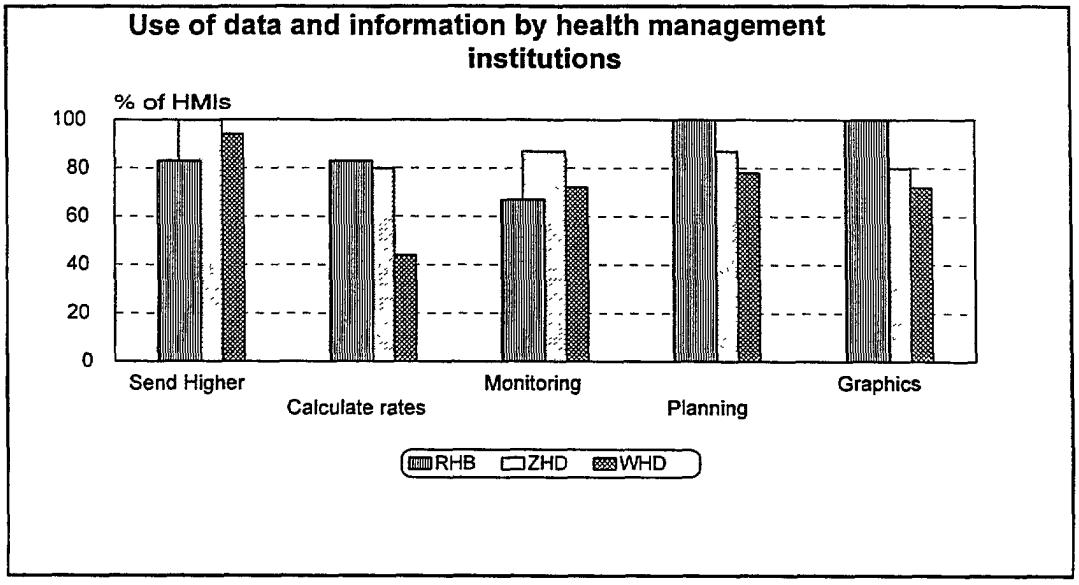
Table 35: Proportion of health facilities with tools for data processing

Instrument	Central Hospital (n=5)	Non-Central Hospital (n=15)	Health Center (n=29)	Health Station (n=36)
none	1	4	5	20
calculator	3	11	23	16
computer	1	4	5	20
total facilities	3	11	23	16

At the HMI level, the survey found the higher levels better prepared for data management: the RHBs have statistical clerks and statisticians, and the ZHDs use statistical clerks or statisticians (where available) in 60 percent of the cases, and otherwise use health personnel from the various departments. At WHD level, about half the time (<55 percent) data processing is done by health personnel (usually health assistants), while in other WHDs heads of departments are responsible for data management. It should be noted, however, that of the staff doing the data handling and processing, only six percent (WHD), 47 percent (ZHD), and 50 percent (RHB) are trained for this task. Those trained are mostly the statistical clerks or statisticians. Data management is primarily done with the aid of a calculator, while 30 percent of the WHDs still do it manually, and one RHB and one ZHD have a computer to assist them.

HMI heads were also interviewed as to how they use the reporting information (Fig. 24). All levels place substantial importance on reporting up through the hierarchy, but also tend to make greater use of the information in-house, for planning and graphics. The least emphasis is placed on the two areas which directly relate to their role in supervision and support of health facilities.

Figure 24:



3. Planning and Management Systems

The planning process was recently decentralized to involve both the health service delivery units (facilities) and the different management levels (HMIs). The availability of planning tools such as health profiles, catchment areas, maps, etc., is one important component of this process. As reported on in Section D.1 (Resource and other management tools), these were found in over half of rural health facilities, but for HMIs, availability ranged from 37 percent of WHDs to 81

percent of RHBs, including work schedules and performance plans. Since planning and management is an inherent part of the HMIs' role, a more detailed look at the long-range planning tools available appears in Table 36 below.

Table 36: Proportion of HMIs with specified planning tools

Planning tool	RHB (n=6)	ZHD (n=15)	WHD (n=18)
Item	%with tool	% with tool	% with tool
Health profile	67	67	11
Health unit listing	67	61	6
Coverage rate table	67	56	8
Manpower data	67	67	8
Project descriptions	50	44	
Maps	67	44	6
Action plans	50	61	8

A good indicator of a regular planning process is the existence of a health profile of the area. Such a profile could contain a listing of health facilities, coverage figures, manpower data, project description, maps, action plans, and annual plans. Table 36 above shows whether such health profiles or parts thereof were available in the HMIs.

The table again points to weaknesses at the WHD level; of the 18 surveyed, only four had health profiles, and other planning information was found in even fewer WHDs. Even at the ZHD and RHB levels, no single planning tool was found in more than two-thirds of all units, including information as basic as a listing of the health facilities under their jurisdiction.

The second planning issue assessed during the survey was how planning was actually carried out, including participation in the planning and budgeting processes and at what level planning was started. The survey tried to measure direct involvement of the health facility staff in the planning and budgeting of their activities. The results were quite encouraging, with at least 67 percent of all facilities having annual plans as well as regular activity plans for the facility. However, involvement in the planning process centered around the facility's own staff, particularly the section heads, with hardly any involvement from outside units, such as the managerial units or lower level facilities. With regard to budgeting, this was primarily done by the head of the facility in the case of the health center, or the administrator in the case of hospitals; occasionally heads of sections and finance/accounting department staff were involved.

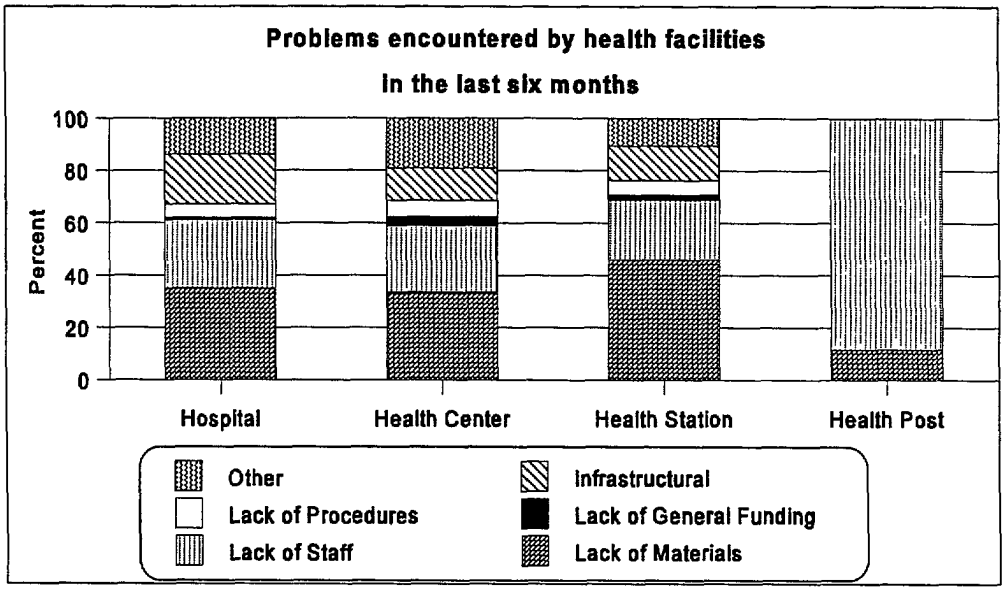
Similarly among the HMIs, the survey found that planning is very much an in-house affair among senior staff, i.e. heads of departments, divisions or sections; only once (out of 55 answers) was the involvement of heads of health facilities mentioned. There was also consistency with regard to where planning started. This was primarily done from within the different sections, rather than working from an overall planning framework.

With regard to budgeting by the HMIs, heads of the administration and finance departments or sections were primarily involved. It was surprising to note the frequent lack of involvement by the heads of programs. Only in 33 percent of the ZHDs were other program heads invited. This possibly has to do with the lack of separate planning and programming departments existing in HMIs, as earlier reported.

E. Problems Expressed by Unit Personnel

All health facility interviewees were asked what problems they had faced in the last six months with regard to managing their services, either general health service problems or specific resource management problems. An overview of these problems is provided in Figure 25 below.

Figure 25:

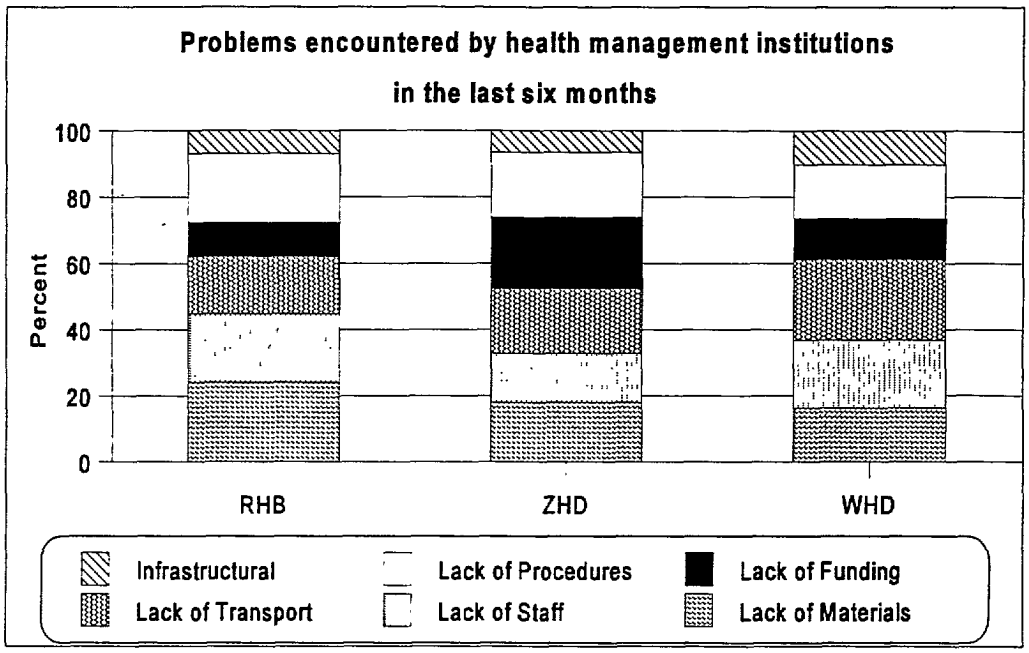


Notes: 'Lack of staff' includes quantity and quality (skills);
'Lack of procedures' includes lack of data;
'Infrastructural problems' include lack of space, communication problems, and general lack of facilities and utilities;
'Other' includes interpersonal and managerial interference problems.

As Figure 25 shows, most problems are related to the availability of adequate human and material resources for the service delivery system or its sub-systems, such as transport. Most notable is the lack of staff -- the major problem for health posts. These problems hinder efforts of the heads of facilities and their staffs to plan and manage their facility and its activities.

Heads or representatives of health management institutions were also asked about the major problems they had encountered during the previous six months. Their responses were drawn from all the various parts of the interview and are summarized in Figure 26 below.

Figure 26:



As can be seen in Figure 26, the major problems that HMIs faced are similar to those of the heath care institutions and reflect a general lack of resources. There also tends to be general lack of procedures to deal with issues, as described earlier. Furthermore, WHDs are generally worse off in terms of having sufficient resources, but as some of them are not yet even officially established, it is difficult to determine exactly what is lacking.

When managers of HMIs were asked to review the six-tier health system, only 31 percent thought that the system needed to be changed. The two main reasons mentioned were the poor referral system and the inability to control community health posts. People who did not think it should change still considered the referral system poor, but felt that it could be improved within the current six-tier system.

III. SUMMARY

This report provides baseline information for use by the technical committee of the EHSDA in its ongoing efforts to assess and reform the Ethiopian health system. Other studies may be required to complete the information presented here and/or to assess other important aspects of the health care system. This might include training assessments, a study of treatment practices, identifying the health-seeking behaviors of the population and self-referral practices, etc. A health facilities survey conducted with USAID assistance in the SEPR and other current studies can complement the information provided here. A brief summary of survey findings as they apply to several areas of health system design is summarized below:

- **organizational levels**: The tier system of health facilities and supporting management institutions theoretically provides an appropriate infrastructure for delivering health care in keeping with the administrative hierarchy of the country. There is a need to resolve issues that have rendered health posts non-functional. The standard catchment population for each level of facility should be clearly determined, taking into account the resources available. Health management levels, especially at the district level, have never been fully functional. To enable them to adequately support the health service delivery units, HMIs, particularly WHDs, need to exist in sufficient numbers.

- **definition of roles:** The new government health sector strategy has begun to define the role of each level of the health system, a process which needs to continue. The survey found that there is a high level of variability among health facilities--health centers that function as hospitals, and health stations that resemble health centers in the type of activity and size of population served. Perhaps the greatest confusion in roles was found at the level of the WHD, where space is often shared with a health facility, and staff takes on the role of both health manager and health service provider.

- **financing health services:** A new health care finance strategy being developed to promote cost-sharing and cost recovery should help alleviate some of the financial problems faced by health units. In the meantime, survey data indicate a need for greater involvement by health facilities, and within the HMIs by heads of technical programs, in the budgeting process. Health personnel require more timely information on budget allocations so that expenditures will match limited available funds. Budgets should reflect the MOH's priorities for decentralization and primary health care, with the greatest increases going to peripheral health facilities and their support units.

- **systems support:** With regard to resources, there is general recognition that additional government funding for the health sector may not be available in the next couple of years. Therefore resources will have to be generated from within and, where possible, used more efficiently and effectively. Once the roles, responsibilities, and capacity of each level of health facility and management institution are clearly defined, guidelines can be established for the rational allocation of limited resources. This includes vehicles, drug and laboratory supplies, equipment and buildings. Improvements in resource controls

(resource management tools) and in resource maintenance should accompany the systematization of resource allocation.

- **health management information systems:** Reporting was found to be highly variable and the total number of report types numerous. Among peripheral health facilities, use of the information at the point of collection is uncommon, though hospitals and health management institutions do better. The type and frequency of information to be reported should be standardized for each level and kept to a minimum. Most specialized information can be collected as needed. Lower level personnel may require training in information use.

- **planning:** Improvements in the planning process are critical to more efficient use of existing limited resources. Planning, budgeting, and other decision-making were found to be carried out mostly in isolation and without sufficient information from the operational level. There is a great need for coordination between health management institutions and the facilities they support as well as within each unit. The information collected through routine reporting should be applied to this process.

- **public health programs:** The expressed goal of the health system to emphasize public health needs to be pursued. Both the scarcity of community health posts and the fact that some health stations are providing the level of care of a health center adversely affect the system's ability to provide community-based preventive and promotional health services. Outreach services are carried out more by health centers than health stations, and no level of facility was found to offer all of the expected public health services. Environmental health services also need to be enhanced. In order to maximize the effectiveness of the tier system of health care, clear guidelines need to be developed and disseminated for correct case management of common illness and for referral to a higher level of facility when needed. This survey did not look at training, and was unable to assess the quality of supervision, though the frequency of contact was good. Both training and supervision will need to address the issues of case management appropriate to the level of the facility, drug management, and appropriate referral.

This report and the survey on which it is based have attempted to provide a situational analysis of the existing health system in Ethiopia. Many of the problems that have been identified, through observation and extensive interviews with health personnel, are the result of the previous government's health system which was highly centralized. However, the system has also benefitted from initiatives during the last 25 years to extend health services to the rural disadvantaged population, and to emphasize primary health care over hospital-based curative care. New initiatives, including the current EHSDA and health care financing work, give an indication of the TGE's dedication to making significant improvements in the health system, even in the face of very limited resources.

APPENDICES

APPENDIX 1

SURVEY QUESTIONNAIRES
A-Hospital and Health Center
B-Health Station and Health Post
C-Health Service Management Assessment

HEALTH SERVICE DELIVERY UNIT ASSESSMENT

FORM 1A: HOSPITAL AND HEALTH CENTRE

Reference No.:

Date: / / (GC) Assessor: _____
Start time: __:__ End time: __:__

Main interviewee: _____

Function/Position: _____

==========

A. General Information

1 Type of unit: ___
1) Regional Hospital
2) Zonal Hospital
3) Rural Hospital
4) Speciality Hospital
5) Health Centre
6) National Referral Hosp.

2 Region: ___
1) Tigray
2) Afar
3) Amhara
4) Oromia
14) Addis Ababa
7) SEPAR
12) Gambela

3 Address of the unit:
Name:_____ Town:_____
P.O. Box:_____ Tel. No.:_____
Woreda:_____ Zone:_____

4 Ownership: ___
1) RHB
2) NGO
3) Private
4) Parastatal
5) Commun. Assoc

5 Estimated Catchment population (in sq km): _____

Source: ___
1) CSA
2) Higher level
3) Estimate
4) Other:_____

6 Administrative levels served:
___ Regions = ___ Zones
___ Zones = ___ Woredas
___ Woredas = ___ Kebeles/PAs
___ Kebeles/PAS

7 Nearest referral Health Unit:
Name:_____ Type:____

Distance in km:___

1) Regional Hospital
2) Zonal Hospital
3) Rural Hospital
4) Speciality Hospital
5) Health Centre
6) Health Station
7) Community Health Post
8) National Referral Hosp

8 Nearest Health Unit:
Name:_____ Type:____

Distance in km:___

1) Regional Hospital
2) Zonal Hospital
3) Rural Hospital
4) Speciality Hospital
5) Health Centre
6) Health Station
7) Community Health Post
8) National Referral Hosp

9 Which level is supervising this unit technically ?
___ and ___

(Only quote two, if the interviewee quotes more than one!)

0) MOH
1) RHB
2) ZHD
3) WHO
4) Regional Hospital
5) Zonal Hospital
6) Rural Hospital
7) Health Centre
8) Health Station
9) National Ref. Hosp.
10) Other:
_____

10 Which level is supervising this unit administratively ?
___ and ___

(Only quote two, if the interviewee quotes more than one!)

0) MOH
1) RHB
2) ZHD
3) WHO
4) Regional council
5) Zonal Council
7) Worada Council
8) Kebele Admin
9) PA
10) Regional Hospital
11) Zonal Hospital
12) Rural Hospital
13) Health Centre
14) Health Station
15) Other:
_____

11 When was this unit last supervised ? ___

1) During the last month
2) more than 1 month ago
3) more than 2 months ago
4) more than 3 months ago
5) more than 6 months ago
6) more than 12 months ago

By whom (position) ? _____ from what level ? _____

12 How was the supervision conducted ? ___, ___, ___.

1) review of records
2) individual interview
3) group interview
4) on-the-job training
5) observation

Was any feedback given ? (y/n) ____

13 Does this unit support lower level units ? (y/n) ____

If yes, what is (are) the <u>main</u> type(s) of support that this unit provides to lower level units ? ___, ___, ___, ___. (NEEDS TO BE SPONTANEOUS)

1) Administrative supervision
2) Technical Supervision
3) Medical supplies, incl drugs
4) Other non medical supplies
5) Transport
6) Training
7) _____
8) _____

14 What support is required from the Regional Bureau ?

_____
_____
_____

15 What support is required from the Zonal Department ?

_____
_____
_____

16 What support is required from the Woreda Health Office ?

_____
_____
_____

17 What support is currently given by the Regional Bureau ?

18 What support is currently given by the Zonal Department ?

19 What support is currently given by the Woreda Health Office?

20 How would you rate this support ? ____
1) OK,
2) could be better, how: _____
3) Not good, explain: _____

B. <u>Organizational Structure and functions in the health unit.</u>

(BE AS DETAILED AS POSSIBLE)

1 List Technical departments/sections:

1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

2 List Administrative departments/sections:

1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

3 Are the following committees in existence:

Committee	Y/N	Meeting when
- health unit management committee	___	___
- transfer committee	___	___
- promotion committee	___	___
- purchasing committee	___	___
- drug committee	___	___
- _____	___	___
- _____	___	___

(meeting: 1)daily, 2)weekly, 3)biweekly, 4)monthly, 5)bimonthly, 6)quarterly, 7) semi-annually 8)annually, 9)irregular, 10) when necessary

4 If there is a health unit management committee, list the composition of this committee ?

1	_____	7	_____
2	_____	8	_____
3	_____	9	_____
4	_____	10	_____
5	_____	11	_____
6	_____	12	_____

C. Health Service Delivery Programme

Provision of curative services

1 Out-patient Services:	Y/N	hours/day	Remark
- OPD	___	___	_____
- MCH	___	___	_____
- minor surgical	___	___	_____
- delivery	___	___	_____
- emergency	___	___	_____

2 Average number of patients seen per day ? _____

3 Who examines mainly the patients in the OPD ? ___
1) Doctor, 2) Nurse 3) Health assistant

4 Who screens the patients for priority in the OPD ? ___
1) Head Nurse, 2) Nurse 3) Health assistant

5 Special/referral clinics:

		Y/N	Hrs/dy	days/week
1	STD			
2	TB			
3	mental			
4	foodhandlers examination			
5	leprosy			
6	ophthalmic			
7	dental			
8	malaria			
9	_____			
10	_____			
11	_____			
12	_____			

6 In-patient Services:

	Y/N	days/week	Remark
- general IP services			
- surgical (emergency)			
- surgical (elective)			
- delivery			
- emergency			

7 How many beds are available for in-patients: ___ (total),
Divided: Male surgical: ___ Female surgical: ___
Male medical: ___ Female Medical: ___
OBS/GYN: ___
Paediatrics: ___
TB/AIDS/Isolation: ___
OPD: ___
Other:_____ ___
Other:_____ ___

8 How many In-Patients in 1986 (EC) ? ____
How many were referred ? ____

9 How many Deliveries in 1986 (EC) ? ____
How many were referred ? ____

10 Diagnostic services:

Available:	Y/N	hours/day	Remark
-Stool/Urine			
-Haematology			
-Bacteriology			
-Parasitology			
-Plain X-ray			
-Ultra-Sound			
-'surgical' scopy			
-ECG			
-HIV test			
-Pregnancy test			

Provision of Public Health Services

11	Available:	Y/N	Hrs/day	dys/wk	Responsible Person	Remarks
	Antenatal:	___	___	___	_____	_____
	Postnatal:	___	___	___	_____	_____
	Under five:	___	___	___	_____	_____
	FP:	___	___	___	_____	_____
	ORT Corner:	___	___	___	_____	_____
	EPI:	___	___	___	_____	_____
	Nutrition:	___	___	___	_____	_____
	Growth Monitoring:	___	___	___	_____	_____
	Health Education:	___	___	___	_____	_____
	School Health[1]:	___	___	___	_____	_____
	TB:	___	___	___	_____	_____
	AIDS/HIV test:	___	___	___	_____	_____
	AIDS/HIV counselling	___	___	___	_____	_____
	Malaria:	___	___	___	_____	_____

[1] School Health, includes: examination, health education and special surveys

Provision of Environmental Health Services

12 EH Activities:

		Y/N	Hrs/dy	days/week
1	Household inspection	__	___	___
2	Pit latrine inspection	__	___	___
3	HH health education	__	___	___
4	water inspection	__	___	___
5	food inspection	__	___	___
6	establishment inspection	__	___	___
7	market inspection	__	___	___
8	building inspection	__	___	___
9	refuse disposal inspect.	__	___	___
10	prison health service	__	___	___
11	school health service	__	___	___
12	occupational health serv	__	___	___
13	_____	__	___	___
14	_____	__	___	___

13 Number of out reaches: _____

How frequently is <u>each</u> out-reach visited: __ dys/wk <u>OR</u>
__ dys/mth

Subjects during outreach ? (y/n): EPI: ___ CDD: ___
FP: ___ GM: ___
Blood film: ___
HE: ___

14 <u>Main</u> Subjects during Health Eduction Programmes:

_____ _____
_____ _____
_____ _____
_____ _____

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15 Coverage if known:

DPT3:___%
TT2: ___ %
Contraceptive Prevalence Rate: ___%
Safe water: ___%
Household latrine: ___%
Bed Occupancy Rate: ____
Average length of stay: ____

16 Intervention Management Protocols/Tools available:
(most of them as posters on the wall)

Available	Y/N
EPI chart	___
ARI chart	___
CDD Chart	___
ORT tools	___
FP chart	___
Pregnancy chart	___
Nutrition chart	___
STD Mgmt Protocol	___
Malaria Control Protocol	___
TB Control Protocol	___

17 Did any major in-patient/out-patient health service delivery problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

Problem B:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

Problem C:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

D. Manpower Resource Management

1 Total Number of personnel in this unit: ___

2 Technical Personnel, active in this unit: ___

3 Administrative personnel, active in this unit: ___

4 Technical personnel available and required by qualification

Qualification	number available	number required	additional budget needed for
1 Surgeon	___	___	___
2 Obstetrician and Gynaecologist	___	___	___
3 Internist	___	___	___
4 Paediatrician	___	___	___
5 General practitioner (doctor)	___	___	___
6 Midwife Nurse	___	___	___
7 Anaesthesia Nurse	___	___	___
8 Psychiatry Nurse	___	___	___
9 MCH Nurse	___	___	___
10 General Nurse	___	___	___
11 Specialized nurses	___	___	___
12 Pharmacist	___	___	___
13 Pharmacy technician	___	___	___
14 Druggist	___	___	___
15 Laboratory Technician	___	___	___
16 X-ray technician	___	___	___
17 Health Assistant	___	___	___
18 Sanitarian	___	___	___
19 Health officer	___	___	___
20 CHA	___	___	___
21 TTBA	___	___	___
22 Ophthalmologist	___	___	___
23 Dentist	___	___	___
24 Other specialists	___	___	___
25 Other para-medics	___	___	___
24 _____	___	___	___
25 _____	___	___	___

5 Administrative and supportive personnel available and required by qualification.

Qualification	number available	number required	additional budget needed for
1 Administrator	___	___	___
2 Archivist	___	___	___
3 Personnel Head	___	___	___
4 Accountant	___	___	___
5 Cashier	___	___	___
6 Auditor	___	___	___
7 Store man	___	___	___
8 Cleaner	___	___	___
9 Guard	___	___	___
10 Gardener	___	___	___
11 Messenger	___	___	___
12 Statistician	___	___	___
13 Property head	___	___	___
14 Property clerk	___	___	___
15 Purchaser	___	___	___
16 Carpenter	___	___	___
17 wood cutter	___	___	___
18 Plumber	___	___	___
19 Electrician	___	___	___
20 Telephone Operator	___	___	___
21 Driver	___	___	___
22 Kitchen Worker	___	___	___
23 Laundry Worker	___	___	___
24 Registrar	___	___	___
25 Registry clerks	___	___	___
26 Accountancy clerks	___	___	___
27 Social Worker	___	___	___
28 _____	___	___	___
29 _____	___	___	___
30 _____	___	___	___

6 Who decides on personnel transfers ?
___ ___ ___

1 RHB
2 ZHD
3 WHO
4 Unit incharge
5 Personnel Head
6 Administrator
7 Other: _____

7 How regular is individual performance of staff reviewed ?___

1 Annually
2 semi-annually
3 quarterly
4 never
5 does not know

8 How is the performance review done ? ___
1) by a team
2) individual assessment by supervisor
3) together with supervisee

9 Are general staff meetings held ? (y/n) ____

If yes, how regular: ___

1)monthly, 2)bimonthly, 3)quarterly, 4) semi-annually
5)annually, 6)irregular, 7) when necessary

Who attends ?_____
_____

10 Are the following personnel management tools available in the Health Unit ? (y/n)

- job descriptions ___ for all cadres? ___
- duty roster ___ for all cadres? ___
- annual leave schedule ___
- leave application forms ___
- vacancy notices ___
- vacancy applications forms ___
- individual personnel files ___ for all cadres? ___
- personnel grievance notice ___
- staff performance checklist ___
- award certificates ___

Remark:_____
_____

11 Did any major personnel problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect:_____
_____
_____

Suggested/Possible Solution:_____
_____
_____

Problem B: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

E. Financial Resources and Expenditures

1 Could the unit provide the Government budget allocations for the current year ? (y/n) ____

2 Could the unit provide the Government budget allocations for the past years ? (y/n) ____

3 If yes, give details below: (in Birr)

Budget Code	Description of line item	1985	1986	1987	(O)ver-allocated (U)nder-allocated
6101	Salary				
6102	Allowances				
6201	Utilities				
6202	Transport/Per Diem				
6203	Printing				
6204	Equipm/build maintce				
6205	transport maintce				
6206	Rent				
6210	Contract Services				
6301	Food				
6302	Drugs and Med. Equipm				
6303	Education material				
6304	Uniforms				
6305	Fuel/oil				
6306	Office supplies				
6307	Other supplies				
6501	Transport purchase				
6502	Equipment purchase				
----	Construction				

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4 List income from other sources and purpose for 1986 (EC):

Source	Amount	Purpose
- _____	_____	_____
- _____	_____	_____
- _____	_____	_____
- _____	_____	_____

5 Are there separate bank accounts for Government and Non-Government allocations (i.e. from donors) (y/n): ____

6 Are there separate voucher books for Government and Non-Government allocations (i.e. from donors) (y/n): ____

7 Who is daily responsible for controlling income and expenditure for the unit?

Responsible: _____

8 List the rates used for service user charges in Birr: (if possible exact rate, otherwise range)

Out-Patient:
- registration, routine: _____
- registration, outside hours: _____
- delivery: _____

- lab: Urine: _____
- lab: Blood tests _____
- lab: Bacteriology _____
- lab: Parasitology _____
- X-ray: _____

In-Patient
- minor procedures: _____
- major procedures: _____
- Medical patient fee: _____
- Surgical Patient Fee: _____

9 What is the average income from the user charges per month over the last year (1986) ? _____

10 Are there exemptions, i.e. patients treated free of charge? (y/n) : _____

If yes, list them below under the specific category:

Disease specific:
_____
_____
_____

Service specific:

_____
_____
_____

Patient specific:

_____
_____
_____

11 Who decides on the provision of letters ? _____

12 Who decides on the exemption in the health unit ? _____

13 If a client comes without a free paper, but could be considered as a free patient, who decides ? _____

14 Are the following financial management tools available ? (y/n)

- monthly ledger (budget line expend.) ____
- bank account statements ____
- Model 19 to 23 ____
- user charge income book ____
- user charge submission forms (mod 14) ____

15 Did any major financial management problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

Problem B: _____
_____

Cause: _____
_____
_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

Problem C: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

F. Medical supplies, including drugs (MSD)

1 When were the last MSD received ? __/__/__

From who: _____

2 When were the last Vaccines received ? __/__/__

From who: _____

3 Check the stock of the following items:

Item	Received	Left	Stock-out since
Co-trimoxazole	_____	_____	___
Proc. Penicillin	_____	_____	___
Mebendazole	_____	_____	___
Tetracycline	_____	_____	___
Aspirin	_____	_____	___
Paracetamol	_____	_____	___
Ferrous sulphate	_____	_____	___
Metronidazole	_____	_____	___
ORS	_____	_____	___
Streptomycin	_____	_____	___
BCG	_____	_____	___
DPT	_____	_____	___
Measles	_____	_____	___
Polio	_____	_____	___
Tetanus Toxoid	_____	_____	___

[fill in stock-out according to following codes: 1) over a week, 2) over two weeks, 4)over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year]

4 What other non drug medical supplies are currently lacking?

Item	Since when	Reason
_____	_____	_____
_____	_____	_____
_____	_____	_____

5 Where are drugs stored ? ____

1) carton box
2) cupboard
3) store room
4) warehouse

6 Where are daily drugs kept ? ____

1) cardboard box
2) wooden box
3) cupboard
4) on table
5) on a shelf

7 Who is responsible for drug dispensing ? ____
1) doctor, 2) nurse, 3) pharmacist, 4) pharmacy technician
5) dispenser 6) druggist, 7) health assistant, 8)_____

8 Who is actually dispensing ? ____
1) doctor, 2) nurse, 3) pharmacist, 4) pharmacy technician
5) dispenser 6) druggist, 7) health assistant 8) _____

9 Are the following Medical and Drug supply management tools available ? (y/n)

- bin cards ___
- stock cards: ___
- stock register: ___
- (re) order forms: ___
- daily vaccine temperature card: ___
- vaccine register: ___

10 Did any major Medical and drug supply management problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect:_____
_____
_____

Suggested/Possible Solution:_____
_____
_____

Problem B:_____
_____

Cause:_____
_____
_____

Effect:_____
_____
_____

Suggested/Possible Solution:_____
_____
_____

G. Equipment

1 List the equipment that is currently out of use, how long it has been out of use, and the possible reason.

Item	How long out out of use ?	Reason
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____

(How long out of use coded as follows: 1) over a week, 2) over two weeks, 4) over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year

2 List equipment and instruments (Medical, office, and teaching Aids) that are essential for this level of care but are currently lacking.

Item	Possible reason for not being there
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3 Who is <u>mainly</u> responsible for the maintenance of the available equipment:____

1) respective user, 2) unit I/C, 3) doctor, 4) nurse, 5) health assistant, 6) property officer, 7) other:_____

4 Are the following equipment management tools available ? (y/n)
- equipment register: ____
- equipment identification: ____
- maintenance schedule: ____
- maintenance and repair record: ____
- equipment disposal form: ____

5 Are spare parts available for most equipment (y/n): ____

6 Are most consumable supplies for use with the equipment available (y/n): ____

7 Did any major equipment problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

Problem B: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

Problem C: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

H. Physical Structure

1 Describe the Unit in terms of rooms/wards/other features

Room/ward	Number	enough	how many more needed	condition (A,B,C)
- office	___	___	___	___
- outpatient rooms	___	___	___	___
- OPD examin. room	___	___	___	___
- OPD treatm. room	___	___	___	___
- inpatient wards	___	___	___	___
- procedure room	___	___	___	___
- drug store	___	___	___	___
- dispensing room	___	___	___	___
- other store	___	___	___	___
- laboratory	___	___	___	___
- X-ray room	___	___	___	___
- operating theatre	___	___	___	___
- delivery rooms	___	___	___	___
- meeting room	___	___	___	___
- workshop	___	___	___	___
- sanitary workshop	___	___	___	___
- morgue	___	___	___	___
- garage	___	___	___	___
- blood bank	___	___	___	___
- _____	___	___	___	___
- _____	___	___	___	___

- Fence (y/n): ___ Permanent [ ] or Natural [ ]

2 What is the area of the unit's compound (in sq mtr) ? ____

3 Are the following utilities available at this moment ?

- electricity: ___
- water: ___
- telephone ___
- radio communication: ___
- stand-by generator: ___
- incinerator: ___
- waste/refuse system: ___, describe: _____
  _____

4 Are there living quarters for staff ? (y/n) ___

If yes, how many quarters ? ____

5 Does the staff living in quarters pay rent ? (y/n) ____

If yes, how much: ____

6 Does the staff living in quarters pay utilities ? (y/n) ___

If yes, Full: [ ] or Subsidized [ ]

7 Who is mainly responsible (in the unit) for the maintenance of the physical structure and the compound ? _____

8 Is there a maintenance budget ? (y/n) ___
Is it sufficient (y/n) ____
If not, how much is needed per annum in Birr: _____
Is necessary equipment available for maintenance ? (y/n) __
Is necessary personnel available for maintenance ? (y/n) __

9 Are the following maintenance management tools available:
- Physical structure inventory: ____
- Preventive maintenance schedule: ____
- Maintenance responsibility chart: ____
- Repair activity log: ____

10 Did any major physical structure maintenance problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

Problem B: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

I. Transport

1 What vehicles are available for the health unit ?

Item	Number available	number out of order	How long ? (see code)
- cars	___	___	___
- motorbike	___	___	___
- bicycle	___	___	___

(How long out of use coded as follows: 1) over a week, 2) over two weeks, 4) over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year

2 Describe general use of car(s), if available:
1 _____
2 _____
3 _____

3 Describe general use of Motorbike(s), if available:
1 _____
2 _____
3 _____

4 Are spare parts available ? (y/n)
- in the store: ___
- in town: ___
- at Regional Bureau stores: ___
- at Zonal Department stores: ___
- at the Woreda Office stores: ___

5 Where are vehicles kept overnight ? _____

6 Who is mainly responsible for maintenance of the transport facilities (in the unit) ? _____

7 Where is maintenance done ? ___
1) in own garage, 2) in private garage,
3) in regional bureau garage, 4) other: _____

8 Are the following transport management tools available:
- Transport facilities inventory: ____
- Transport maintenance and repair record: ____
- Transport daily travel logbook: ____
- Fuel/oil consumption log book: ____
- Spare parts inventory: ____
- transport activity schedule: ____
- transport request forms: ____

9 Did any major transport problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

Problem B: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

K. Planning and Health Management Information

1 Indicate the type of reports and frequency of reporting, which this unit receives from lower levels:

type of report	frequency of report	reporting office	Remark
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____

(Frequency: 1) weekly, 2) monthly, 3) quarterly, 4) annually, 5) when necessary)

Total type of reports: ___

2 Indicate the type of reports and frequency of reporting of this unit to higher levels:

type of report	frequency of report	receiving office	Remark
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____

(Frequency: 1) weekly, 2) monthly, 3) quarterly, 4) annually, 5) when necessary)

Total type of reports: ___

3 Who is responsible for data collection and compilation in this unit ? _____

Who is actually doing it ? _____

4 What is done with the compiled information?
(reactions will have to be spontaneous!)

- send on to higher levels [ ]
- calculate statistics [ ]
- used for monitoring [ ]
- used for planning [ ]
- transformed into graphics [ ]
- other:_____ [ ]

5 Is there a person trained for compilation and analysis of data ? (y/n) ____

If yes, who:
_____, _____, _____, _____.

6 Is there a person trained in the use of information ? (y/n) ____

If yes, who:
_____, _____, _____, _____.

7 What instruments/tools are available for data management ?
___ ___ [1)none, 2)calculator, 3) computer, 4) other:_____]

8 Who is involved in the development of the annual plan in this unit ?

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

9 At what level does the planning start: ____

1) section level, 2) team level, 3) individual level, 4)department level 5) instructions from management office, 6) lower unit 7) other: _____

10 Who is involved in the budgeting process at this level?
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

11 Are the following planning tools available/used in the unit:
- work/activity plan: ___
- map of the catchment area: ___
- health profile: ___
- annual plan: ___

12 Are the following management tools available/used in the unit:
- work schedule: ___
- performance overview of units/departments: ___
- patient register: ___

13 Did any major planning and health information problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

Problem B:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

L. Catchment Calculation

1) Use patient register

2) Sample one hundred continuous cases that were registered during the last month

3) Count the frequency of villages recorded:

village a: 10 times
village b: 12 times
village c: 23 times
etc

4) Name the three most frequently mentioned villages and (look at a map) estimate/state the distance to the health unit

Name	Frequency	Distance
_____	____	_____
_____	____	_____
_____	____	_____

5) Name the three least frequently mentioned villages and (look at a map) estimate/state the distance to the health unit

Name	Frequency	Distance
_____	____	_____
_____	____	_____
_____	____	_____

6) List major physical obstacles that hamper accessibility of this unit (if they are there):

_____
_____
_____

==========

Remarks by interviewee: _____
_____
_____
_____

[PLEASE NOTE THE END-TIME OF THE INTERVIEW ON THE FRONT PAGE]

HEALTH SERVICE DELIVERY UNIT ASSESSMENT

FORM 1B: HEALTH STATION AND HEALTH POST

Reference No.:

Date: / / (GC) Assessor: _____
Start time: __:__ End time: __:__

Main interviewee: _____

Function/Position: _____

==========

A. General Information

1 Type of unit: ___
1) Health station
2) Health Post

2 Region: ___
1) Tigray
2) Afar
3) Amhara
4) Oromia
14) Addis Ababa
7) SEPAR
12) Gambela

3 Address of the unit:
Name:_____ Town:_____
P.O. Box:_____ Tel. No.:_____
Woreda:_____ Zone:_____

4 Ownership: ___
1) RHB
2) NGO
3) Private
4) Parastatal
5) Commun. Assoc

5 Estimated Catchment population (in sq km): _____

Source: ___
1) CSA
2) Higher level
3) Estimate
4) Other:_____

6 Administrative levels served:
___ Woredas = ___ Kebeles/PAs
___ Kebeles/PAS

7 Nearest referral Health Unit:
Name:_____ Type:____
1) Regional Hospital
2) Zonal Hospital
3) Rural Hospital
4) Health Centre
5) Health Station
6) Community Health Post

Distance in km:___

8 Nearest Health Unit:
Name:_____ Type:____

1) Regional Hospital
2) Zonal Hospital
3) Rural Hospital
4) Speciality Hospital
5) Health Centre
6) Health Station
7) Community Health Post
8) National Referral Hosp

Distance in km:___

9 Which level is supervising this unit technically ?
___ and ___

(Only quote two, if the interviewee quotes more than one!)

1) RHB
2) ZHD
3) WHO
4) Regional Hospital
5) Zonal Hospital
6) Rural Hospital
7) Health Centre
8) Health Station
9) Other:

_____

10 Which level is supervising this unit administratively ?
___ and ___

(Only quote two, if the interviewee quotes more than one!)

1) RHB
2) ZHD
3) WHO
4) Regional council
5) Zonal Council
7) Worada Council
8) Kebele Admin
9) PA
10) Regional Hospital
11) Zonal Hospital
12) Rural Hospital
13) Health Centre
14) Health Station
15) Other:

_____

11 When was this unit last supervised ? ___

1) During the last month
2) more than 1 month ago
3) more than 2 months ago
4) more than 3 months ago
5) more than 6 months ago
6) more than 12 months ago

By whom (position) ? _____ from what level ? _____

12 How was the supervision conducted ? ___, ___, ___.

1) review of records
2) individual interview
3) group interview
4) on-the-job training
5) observation

Was any feedback given ? (y/n) ____

13 Does this unit support lower level units ? (y/n) ____

If yes, what is (are) the main type(s) of support that this unit provides to lower level units ? ___, ___, ___, ___. (NEEDS TO BE SPONTANEOUS)

1) Administrative supervision
2) Technical Supervision
3) Medical supplies, incl drugs
4) Other non medical supplies
5) Transport
6) Training
7) _____
8) _____

14 What support is required from the Zonal Department ?

_____
_____
_____

15 What support is required from the Woreda Health Office ?

_____
_____
_____

16 What support is currently given by the Zonal Department ?

_____
_____
_____

17 What support is currently given by the Woreda Health Office?

_____
_____
_____

18 How would you rate this support ? ____
1) OK,
2) could be better, how: _____
_____
3) Not good, explain: _____
_____

B. Organizational Structure and functions in the health unit.

(BE AS DETAILED AS POSSIBLE)

1 List Technical departments/sections:

1	_____	4	_____
2	_____	5	_____
3	_____	6	_____

2 List Administrative departments/sections:

1	_____	4	_____
2	_____	5	_____
3	_____	6	_____

3 Are the following committees in existence:

Committee	Y/N	Meeting when
- health unit management committee	___	___
- drug committee	___	___
- _____	___	___

(meeting: 1)daily, 2)weekly, 3)biweekly, 4)monthly, 5)bimonthly, 6)quarterly, 7) semi-annually 8)annually, 9)irregular, 10) when necessary

4 If there is a health unit management committee, list the composition of this committee ?

1	_____	4	_____
2	_____	5	_____
3	_____	6	_____

C. Health Service Delivery Programme

Provision of curative services

1	Out-patient Services:	Y/N	hours/day	Remark
	- OPD	___	___	_____
	- MCH	___	___	_____
	- minor surgical	___	___	_____
	- delivery	___	___	_____
	- emergency	___	___	_____

2 Average number of patients seen per day ? _____

3 Who examines mainly the patients in the OPD ? ___
1) Doctor, 2) Nurse 3) Health assistant

4 Who screens the patients for priority in the OPD ? ___
1) Head Nurse, 2) Nurse 3) Health assistant

5	Special/referral clinics:	Y/N	Hrs/dy	days/week
	1 STD	___	___	___
	2 TB	___	___	___
	3 leprosy	___	___	___
	4 malaria	___	___	___
	5 _____	___	___	___
	6 _____	___	___	___

7 How many beds are available for temporary in-patients: ___

8 How many Patients were reffered in 1986 (EC) ? ____

9 How many Deliveries in 1986 (EC) ? ____
How many were referred ? ____

Provision of Public Health Services

10	Available:	Y/N	Hrs/day	dys/wk	Responsible Person	Remarks
	Antenatal:	___	___	___	_____	_____
	Postnatal:	___	___	___	_____	_____
	Under five:	___	___	___	_____	_____
	FP:	___	___	___	_____	_____
	ORT Corner:	___	___	___	_____	_____
	EPI:	___	___	___	_____	_____
	Growth Monitoring:	___	___	___	_____	_____
	Health Education:	___	___	___	_____	_____
	School Health[1]:	___	___	___	_____	_____
	TB:	___	___	___	_____	_____
	AIDS/HIV test:	___	___	___	_____	_____
	AIDS/HIV counselling	___	___	___	_____	_____
	Malaria:	___	___	___	_____	_____

[1] School Health, includes: examination, health education and special surveys

Provision of Environmental Health Services

11	EH Activities:	Y/N	Hrs/dy	days/week
1	Household inspection	___	___	___
2	Pit latrine inspection	___	___	___
3	HH health education	___	___	___
4	water inspection	___	___	___
5	food inspection	___	___	___
6	establishment inspection	___	___	___
7	market inspection	___	___	___
8	building inspection	___	___	___
9	refuse disposal inspect.	___	___	___
10	prison health service	___	___	___
11	school health service	___	___	___
12	occupational health serv	___	___	___
13	_____	___	___	___
14	_____	___	___	___

12 Who conducts the environmental health activities ? _____

13 Number of out reaches: _____

How frequently is <u>each</u> out-reach visited: __ dys/wk <u>OR</u>
__ dys/mth

Subjects during outreach ? (y/n): EPI: ___ CDD: ___
FP: ___ GM: ___
Blood film: ___
HE: ___

14 <u>Main</u> Subjects during Health Eduction Programmes:

_____ _____
_____ _____
_____ _____

15 Coverage if known:

DPT3:___%
TT2: ___ %
Contraceptive Prevalence Rate: ___%
Safe water: ___%
Household latrine: ___%

16 Intervention Management Protocols/Tools available:
(most of them as posters on the wall)

Available	Y/N
EPI chart	___
ARI chart	___
CDD Chart	___
ORT tools	___
FP chart	___
Pregnancy chart	___
Nutrition chart	___
STD Mgmt Protocol	___
Malaria Control Protocol	___
TB Control Protocol	___

16 Did any major in-patient/out-patient health service delivery problem(s), occur in the last six months ?
Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect:_____
_____
_____

Suggested/Possible Solution:_____
_____
_____

Problem B:_____
_____

Cause:_____
_____

Effect:_____
_____

Suggested/Possible Solution:_____
_____
_____

D. Manpower Resource Management

1 Total Number of personnel in this unit: ___

2 Technical Personnel, active in this unit: ___

3 Administrative personnel, active in this unit: ___

4 Technical personnel available and required by qualification

Qualification	number available	number required
1 General practitioner (doctor)	___	___
2 Midwife Nurse	___	___
3 MCH Nurse	___	___
4 General Nurse	___	___
5 Pharmacy technician	___	___
6 Druggist	___	___
7 Laboratory Technician	___	___
8 Health Assistant	___	___
9 Sanitarian	___	___
10 CHA	___	___
11 TTBA	___	___
12 _____	___	___
13 _____	___	___

5 Administrative and supportive personnel available and required by qualification.

Qualification	number available	number required
1 Administrator	___	___
2 Cashier	___	___
3 Store man	___	___
4 Cleaner	___	___
5 Guard	___	___
6 Gardener	___	___
7 Messenger	___	___
8 Statistician	___	___
9 Driver	___	___
10 _____	___	___
11 _____	___	___

6 Who decides on personnel transfers ?

___ ___ ___

1 RHB
2 ZHD
3 WHO
4 Unit incharge
5 Administrator
6 Other:

_____

7 How regular is individual performance of staff reviewed ?___
1 Annually
2 semi-annually
3 quarterly
4 never
5 does not know

8 How is the performance review done ? ___
1) by a team
2) individual assessment by supervisor
3) together with supervisee

9 Are general staff meetings held ? (y/n) ____

If yes, how regular: ___

1)monthly, 2)bimonthly, 3)quarterly, 4) semi-annually
5)annually, 6)irregular, 7) when necessary

Who attends ?_____
_____

10 Are the following personnel management tools available in the Health Unit ? (y/n)

- job descriptions ___ for all cadres? ___
- duty roster ___ for all cadres? ___
- annual leave schedule ___
- leave application forms ___
- individual personnel files ___ for all cadres? ___
- personnel grievance notice ___
- award certificates ___

Remark:_____
_____

11 Did any major personnel problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect:_____
_____

Suggested/Possible Solution: _____

Problem B: _____

Cause: _____

Effect: _____

Suggested/Possible Solution: _____

E. Financial Resources and Expenditures

1 List income from other sources and purpose for 1986 (EC):

Source	Amount	Purpose
-		
-		
-		
-		

2 Who is daily responsible for controlling income and expenditure for the unit?

Responsible: _____

3 List the rates used for service user charges in Birr: (if possible exact rate, otherwise range)

Out-Patient:
- registration, routine: _____
- registration, outside hours: _____

- lab: Urine: _____
- lab: Blood tests _____
- lab: Bacteriology _____
- lab: Parasitology _____

- delivery: _____

4 What is the average income from the user charges per month over the last year (1986) ? _____

5 Are there exemptions, i.e. patients treated free of charge? (y/n) : _____

If yes, list them below under the specific category:

Disease specific:

_____
_____
_____

Service specific:

_____
_____
_____

Patient specific:

_____
_____
_____

6 Who decides on the provision of letters ? _____

7 Who decides on the exemption in the health unit ? _____

8 If a client comes without a free paper, but could be considered as a free patient, who decides ? _____

9 Did any major financial management problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

Problem B: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

F. <u>Medical supplies, including drugs (MSD)</u>

1 When were the last MSD received ? __/__/__

From who: _____

2 When were the last Vaccines received ? __/__/__

From who: _____

3 Check the stock of the following items:

Item	Received	Left	Stock-out since
Co-trimoxazole	_____	_____	___
Proc. Penicillin	_____	_____	___
Mebendazole	_____	_____	___
Tetracycline	_____	_____	___
Aspirin	_____	_____	___
Paracetamol	_____	_____	___
Ferrous sulphate	_____	_____	___
Metronidazole	_____	_____	___
ORS	_____	_____	___
Streptomycin	_____	_____	___
BCG	_____	_____	___
DPT	_____	_____	___
Measles	_____	_____	___
Polio	_____	_____	___
Tetanus Toxoid	_____	_____	___

[fill in stock-out according to following codes: 1) over a week, 2) over two weeks, 4)over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year]

4 What other non drug medical supplies are currently lacking?

Item	Since when	Reason
_____	_____	_____
_____	_____	_____
_____	_____	_____

5 Where are drugs stored ? ____

1) carton box
2) cupboard
3) store room
4) warehouse

6 Where are daily drugs kept ? ____

1) cardboard box
2) wooden box
3) cupboard
4) on table
5) on a shelf

7 Who is responsible for drug dispensing ? ____
1) doctor, 2) nurse, 3) pharmacist, 4) pharmacy technician
5) dispenser 6) druggist, 7) health assistant, 8)_____

8 Are the following Medical and Drug supply management tools available ? (y/n)

- bin cards ___
- stock cards: ___
- stock register: ___
- (re) order forms: ___
- daily vaccine temperature card: ___
- vaccine register: ___

9 Did any major Medical and drug supply management problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect:_____
_____
_____

Suggested/Possible Solution:_____
_____
_____

Problem B: _____
_____

Cause: _____
_____
_____

Effect: _____
_____
_____

Suggested/Possible Solution: _____
_____
_____

G. **Equipment**

1 List the equipment that is currently out of use, how long it has been out of use, and the possible reason.

Item	How long out out of use ?	Reason
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____
_____	___	_____

(How long out of use coded as follows: 1) over a week, 2) over two weeks, 4) over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year

2 List equipment and instruments (Medical, office, and teaching Aids) that are essential for this level of care but are currently lacking.

Item	Possible reason for not being there
_____	_____
_____	_____
_____	_____

3 Who is mainly responsible for the maintenance of the available equipment: ____

1) respective user, 2) unit I/C, 3) doctor, 4) nurse, 5) health assistant, 6) other: _____

4 Are the following equipment management tools available ? (y/n)
- equipment register: ____
- equipment identification: ____
- maintenance schedule: ____
- maintenance and repair record: ____
- equipment disposal form: ____

5 Are spare parts available for most equipment (y/n): ____

6 Are most consumable supplies for use with the equipment available (y/n): ____

7 Did any major equipment problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

Problem B: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

H. Physical Structure

1 Describe the Unit in terms of rooms/wards/other features

Room/ward	Number	enough	how many more needed	condition (A,B,C)
- office	___	___	___	___
- outpatient rooms	___	___	___	___
- OPD examin. room	___	___	___	___
- OPD treatm. room	___	___	___	___
- drug store	___	___	___	___
- dispensing room	___	___	___	___
- other store	___	___	___	___
- laboratory	___	___	___	___
- delivery rooms	___	___	___	___
- meeting room	___	___	___	___
- workshop	___	___	___	___
- sanitary workshop	___	___	___	___
- _____	___	___	___	___
- _____	___	___	___	___

- Fence (y/n): ___ Permanent [ ] or Natural [ ]

2 What is the area of the unit's compound (in sq mtr) ? ____

3 Are the following utilities available at this moment ?
- electricity: ___
- water: ___
- telephone ___
- radio communication: ___
- stand-by generator: ___
- waste/refuse system: ___, describe: _____
  _____

4 Are there living quarters for staff ? (y/n) ___

If yes, how many quarters ? ____

5 Does the staff living in quarters pay rent ? (y/n) ____

If yes, how much: ____

6 Does the staff living in quarters pay utilities ? (y/n) ___

If yes, Full: [ ] or Subsidized [ ]

7 Who is mainly responsible (in the unit) for the maintenance of the physical structure and the compound ? _____

8 Are the following maintenance management tools available:
- Physical structure inventory: ____
- Preventive maintenance schedule: ____
- Maintenance responsibility chart: ____
- Repair activity log: ____

9 Did any major physical structure maintenance problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____

Cause: _____

Effect: _____

Suggested/Possible Solution: _____

Problem B: _____

Cause: _____

Effect: _____

Suggested/Possible Solution: _____

I. Transport

1 What vehicles are available for the health unit ?

Item	Number available	number out of order	How long ? (see code)
- motorbike	___	___	___
- bicycle	___	___	___

(How long out of use coded as follows: 1) over a week, 2) over two weeks, 4) over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year

2 Describe general use of Motorbike(s), if available:
1 _____
2 _____
3 _____

3 Are spare parts available ? (y/n)
- in the store: ___
- in town: ___
- at Regional Bureau stores: ___
- at Zonal Department stores: ___
- at the Woreda Office stores: ___

4 Where are vehicles kept overnight ? _____

5 Who is mainly responsible for maintenance of the transport facilities (in the unit) ? _____

6 Where is maintenance done ? ___
1) in own garage, 2) in private garage, 3) other:_____

7 Are the following transport management tools available:
- Transport facilities inventory: ____
- Transport maintenance and repair record: ____
- Transport daily travel logbook: ____
- Fuel/oil consumption log book: ____
- Spare parts inventory: ____
- transport activity schedule: ____
- transport request forms: ____

8 Did any major transport problem(s), occur in the last six months ?
Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

Problem B: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

K. <u>Planning and Health Management Information</u>

1 Indicate the type of reports and frequency of reporting, which this unit receives from lower levels:

type of report	frequency of report	reporting office	Remark
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____

(Frequency: 1) weekly, 2) monthly, 3) quarterly, 4) annually, 5) when necessary)

Total type of reports: ___

2 Indicate the type of reports and frequency of reporting of this unit to higher levels:

type of report	frequency of report	receiving office	Remark
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____

(Frequency: 1) weekly, 2) monthly, 3) quarterly, 4) annually, 5) when necessary)

Total type of reports: ___

3 Who is responsible for data collection and compilation in this unit ? _____

Who is actually doing it ? _____

4 What is done with the compiled information?
(reactions will have to be spontaneous!)

- send on to higher levels [ ]
- calculate statistics [ ]
- used for monitoring [ ]
- used for planning [ ]
- transformed into graphics [ ]
- other:_____ [ ]

5 Is there a person trained for compilation and analysis of data ? (y/n) ____

If yes, who:
_____, _____, _____, _____.

6 What instruments/tools are available for data management ?
___ ___ 1)none, 2)calculator, 3) computer,
4) other:_____

7 Who is involved in the development of the annual plan in this unit ?

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

8 At what level does the planning start: ____

1) section level, 2) team level, 3) individual level, 4)department level 5) instructions from management office, 6) lower unit 7) other: _____

9 Are the following planning tools available/used in the unit:
- work/activity plan: ___
- map of the catchment area: ___
- health profile: ___
- annual plan: ___

10 Are the following management tools available/used in the unit:
- work schedule: ___
- performance overview of units/departments: ___
- patient register: ___

11 Did any major planning and health information problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

Problem B:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

L. Catchment Calculation

1) Use patient register

2) Sample one hundred continuous cases that were registered during the last month

3) Count the frequency of villages recorded:

village a: 10 times
village b: 12 times
village c: 23 times
etc

4) Name the three most frequently mentioned villages and (look at a map) estimate/state the distance to the health unit

Name	Frequency	Distance
_____	____	_____
_____	____	_____
_____	____	_____

5) Name the three least frequently mentioned villages and (look at a map) estimate/state the distance to the health unit

Name	Frequency	Distance
_____	____	_____
_____	____	_____
_____	____	_____

6) List major physical obstacles that hamper accessibility of this unit (if they are there):

_____
_____
_____

==========

Remarks by interviewee: _____
_____
_____
_____

[PLEASE NOTE THE END-TIME OF THE INTERVIEW ON THE FRONT PAGE]

FORM 2: HEALTH SERVICE MANAGEMENT ASSESSMENT

Reference No.:

Date: / / (GC) Assessor: _____
Start time: __:__ End time: __:__

Main interviewee: _____

Function/Position: _____

==========

A. General Information

1 Type of management level: ____
1) RHB
2) ZHD
3) WHO

2 Region: ___
1) Tigray
2) Afar
3) Amhara
4) Oromia
14) Addis Ababa
7) SEPAR
12) Gambela

3 Address of the unit:
Name:_____ Town:_____
P.O. Box:_____ Tel. No.:_____
Woreda:_____ Zone:_____

4 Year of establishment: 19___ (EC [] or GC [])

5 Area covered by this management level (in Sq Km):_____

6 Estimated Catchment population: _____

Source: ___
1) CSA
2) Higher level
3) Estimate
4) Other:_____

7 Administrative divisions:

Number of zones: _____
Number of zones with Health Dept office: _____
Number of zones without Health Dept office: _____

Number of woredas: _____
Number of woredas with Health Dept office: _____
Number of woredas without Health Dept office: _____

Number of kebeles/PAs: _____
Number of kebeles/PAs with Community Health Service:____
Number of kebeles/PAs without Community Health Service:___

8 Health institutions by type, number and ownership

Type	Ownership (specify number)	Total
central ref hosp.	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
regional hospital	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
zonal hospital	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
rural hospital	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
Speciality hosp.	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
health centre	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
health station	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
health post	RHB[ ] OGO[ ] NGO[ ] PA/Keb[ ]	___

9 Other institutions by type, number and ownership

Type	Ownership (specify number)	Total
Pharmacies	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
Drug shops	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
rural drug shops	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
Malaria laboratories	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
other laboratories	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
training institution	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___
health post	RHB[ ] OGO[ ] NGO[ ] Priv[ ]	___

10 Specify training schools/institutions [ASK ONLY RHB]:

type	Number
_____	___
_____	___
_____	___
_____	___
_____	___

11 Indicate the type and number of health workers in the Region/Zone/Woreda (Excluding RHB/ZHD/WHO staff Members)

Qualification	Number	number required
General Practitioners	___	___
Internist	___	___
Surgeon	___	___
Gynea/Obs specialist	___	___
Paediatrician	___	___
Community Health Spec.	___	___
Other spec._____	___	___
Other spec._____	___	___
Other spec._____	___	___
Other spec._____	___	___
Dentist	___	___
General nurse	___	___
MCH Nurse	___	___
Nurse Midwife	___	___
Specialized nurse	___	___

Pharmacist	___	___
pharmacy technician	___	___
druggist	___	___
Lab technician	___	___
X-ray technician	___	___
Public Health Practit.	___	___
Health officer	___	___
health assistant	___	___
CHA	___	___
TTBA	___	___
Vector Control Officer	___	___
Sanitarian	___	___
_____	___	___
_____	___	___

12 Which level is supervising this unit technically ?
___ and ___

(Only quote two, if the interviewee quotes more than one!)

1) RHB
2) ZHD
3) MOH
4) Other: _____

13 Which level is supervising this unit administratively ?
___ and ___

(Only quote two, if the interviewee quotes more than one!)

0) MOH
1) RHB
2) ZHD
3) WHO
4) Regional council
5) Zonal Admin. Office
7) Woreda Council
8) Other: _____

14 Are there health facilities under this management level's supervision? (y/n) ____

If yes, How many by type:
- rural hospital: ____
- health centre: ____
- health station: ____
- health post: ____

15 Does this unit support lower level units ? (y/n) ____

If yes, what is (are) the <u>main</u> type(s) of support that this unit provides to lower level units ? ___, ___, ___, ___.
(NEEDS TO BE SPONTANEOUS)

1) Administrative supervision
2) Technical Supervision
3) Medical supplies, incl drugs
4) Other non medical supplies
5) Transport
6) Training
7) _____

B. Organizational Structure of the Bureau/Department/Office

(BE AS DETAILED AS POSSIBLE; PROVIDE ORGANOGRAMS OF THE BUREAU/DEPARTMENT/OFFICE, IF AVAILABLE !)

1 List Technical departments/ sections/teams: Qualification of Head

1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____

2 List Administrative departments/ sections/teams: Qualification Head

1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____

3 Are the following committees in existence:

Committee	Y/N	Meeting when
- management committee	___	___
- transfer committee	___	___
- promotion committee	___	___
- purchasing committee	___	___
- drug committee	___	___
- _____	___	___
- _____	___	___

(meeting: 1)daily, 2)weekly, 3)biweekly, 4)monthly, 5)bimonthly, 6)quarterly, 7) semi-annually 8)annually, 9)irregular, 10) when necessary

4 If there is a management committee, list the composition of this committee ?

1	_____	7	_____
2	_____	8	_____
3	_____	9	_____
4	_____	10	_____
5	_____	11	_____
6	_____	12	_____

C. Manpower Resources

Only those working within the RHB/ZHD/WHO (the interviewed level)

1 Total Number of personnel: ___

2 Technical Personnel: ___

3 Administrative personnel: ___

4 Technical personnel available and required by qualification

Qualification	number available	number required	additional budget needed for
1 General Med.practitioner	___	___	___
2 Specialist	___	___	___
3 Midwife Nurse	___	___	___
4 MCH Nurse	___	___	___
5 General Nurse	___	___	___
6 Specialized nurses	___	___	___
7 Pharmacist	___	___	___
8 Laboratory Technician	___	___	___
9 Health Assistant	___	___	___
10 Sanitarian	___	___	___
11 Health officer	___	___	___
12 Specialist	___	___	___
13 Other para-medics	___	___	___
14 _____	___	___	___
15 _____	___	___	___

5 Administrative and supportive personnel available and required by qualification.

Qualification	number available	number required	additional budget needed for
1 Administrator	___	___	___
2 Archivist	___	___	___
3 Personnel Head	___	___	___
4 Accountant	___	___	___
5 Cashier	___	___	___
6 Auditor	___	___	___
7 Store man	___	___	___
8 Cleaner	___	___	___
9 Guard	___	___	___
10 Gardener	___	___	___
11 Messenger	___	___	___
12 Statistician	___	___	___
13 Property head	___	___	___
14 Property clerk	___	___	___
15 Purchaser	___	___	___
16 Telephone Operator	___	___	___
17 Driver	___	___	___
18 Accountancy clerks	___	___	___
19 Social Worker	___	___	___
20 _____	___	___	___
21 _____	___	___	___
22 _____	___	___	___

6 Who decides on personnel transfers ?

____ ____ ____

1 RHB
2 ZHD
3 WHO
4 Unit incharge
5 Personnel Head
6 Administrator
7 Other: _____

7 How regular is individual performance of staff reviewed ?___

1 Annually
2 semi-annually
3 quarterly
4 never
5 does not know

8 How is the performance review done ? ___

1) by a team
2) individual assessment by supervisor
3) together with supervisee

9 Are general staff meetings held ? (y/n) ____

If yes, how regular: ___

1)monthly, 2)bimonthly, 3)quarterly, 4) semi-annually
5)annually, 6)irregular, 7) when necessary

Who attends ?_____
_____

10 Are the following personnel management tools available in the Health Unit ? (y/n)

- job descriptions ___ for all cadres? ___
- duty roster ___ for all cadres? ___
- annual leave schedule ___
- leave application forms ___
- vacancy notices ___
- vacancy applications forms ___
- individual personnel files ___ for all cadres? ___
- personnel grievance notice ___
- staff performance checklist ___
- award certificates ___

Remark:_____
_____

11 Did any major personnel problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect:_____
_____
_____

Suggested/Possible Solution:_____
_____
_____

Problem B: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

D. Financial Resources and Expenditures

1 Is there a Government allocation for this management level? (y/n) ____

2 Could the bureau/department/office provide the Government budget allocations for the current year ? (y/n) ____

3 Could the bureau/department/office provide the Government budget allocations for the past years ? (y/n) ____

If yes, give details below: (in Birr)

Budget Code	Description of line item	1985	1986	1987
6101	Salary			
6102	Allowances			
6201	Utilities			
6202	Transport/Per Diem			
6203	Printing			
6204	Equipm/build maintce			
6205	transport maintce			
6206	Rent/contracts			
6210	Contract services			
6301	Food			
6302	Drugs and Med Equip			
6303	Education material			
6304	Uniforms			
6305	Fuel/oil			
6306	Office supplies			
6307	Other supplies			
6501	Transport purchase			
6502	Equipment purchase			
----	Construction			

4 List income from other sources and purpose for 1986 (EC): [ONLY FOR OFFICE AND MANAGEMENT ACTIVITIES]

Source	Amount	Purpose
- _____	_____	_____
- _____	_____	_____
- _____	_____	_____
- _____	_____	_____

5 Are there separate bank accounts for Government and Non-Government allocations (i.e. from donors) (y/n): ____

6 Are there separate voucher books for Government and Non-Government allocations (i.e. from donors) (y/n): ____

7 Who is daily responsible for controlling income and expenditure for the Bureau/department/office ?
Responsible: _____

8 Are the following financial management tools available ? (y/n)
- monthly ledger (budget line expend.) ____
- bank account statements ____
- Model 19 to 23 ____
- user charge income book ____
- user charge submission forms (mod 14) ____
- written financial regulations ____

9 Did any major financial management problem(s), occur in the last two months ?

Occurred ? (Y/N) ____ , if so:

Problem A: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

Problem B: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

E. Equipment

1 List the equipment that is currently out of use, how long it has been out of use, and the possible reason.

Item	How long out out of use ?	Reason

(How long out of use coded as follows: 1) over a week, 2) over two weeks, 4) over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year

2 List equipment and instruments (Medical, office, and teaching Aids) that are essential for this level of management, but are currently lacking.

Item	Possible reason for not being there

3 Who is mainly responsible for the maintenance of the available equipment:____

1) respective user, 2) unit I/C, 3) doctor, 4) nurse, 5) health assistant, 6) property officer, 7) other:_____

4 Are the following equipment management tools available ? (y/n)
- equipment register: ____
- equipment identification: ____
- maintenance schedule: ____
- maintenance and repair record: ____
- equipment disposal form: ____

5 Are spare parts available for most equipment (y/n): ____

6 Are most consumable supplies for use with the equipment available (y/n): ____

7 Did any major equipment problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____

Cause:_____

Effect:_____

Suggested/Possible Solution:_____

Problem B:_____

Cause:_____

Effect:_____

Suggested/Possible Solution:_____

Problem C: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

F. Physical Structure

1 Where is the bureau/office located ?
1 own building
2 council building
3 health institution
4 rented, How much per month: _____
5 other: _____

2 Describe the Bureau/Department/Office in terms of rooms

Room/office	Number	adequate y/n	How many more needed	Condition (A,B,C)
- offices	____	___	___	_____
- drug store	____	___	___	_____
- supplies store	____	___	___	_____
- other store	____	___	___	_____
- meeting room	____	___	___	_____
- workshop	____	___	___	_____
- cold room	____	___	___	_____
- _____	____	___	___	_____
- _____	____	___	___	_____

3 Are there plans to improve the current physical structure ? (y/n) _____

if yes, please describe: _____

_____

_____

Who will finance this ?: _____

4 Are the following utilities available at this moment ?)
- electricity: ___
- water: ___
- telephone ___
- radio communication: ___
- stand-by generator: ___
- waste/refuse system: ___, describe: _____

5 Who is mainly responsible (in the unit) for the maintenance of the physical structure and the compound ? _____

6 Is there a maintenance budget ? (y/n) ___
Is it sufficient (y/n) ____
If not, how much is needed per annum in Birr: _____
Is necessary equipment available for maintenance ? (y/n) __
Is necessary personnel available for maintenance ? (y/n) __

7 Are the following maintenance management tools available:
- Physical structure inventory: ____
- Preventive maintenance schedule: ____
- Maintenance responsibility chart: ____
- Repair activity log: ____

8 Did any major physical structure maintenance problem(s), occur in the last two months ?

Occurred ? (Y/N) ____ , if so:

Problem A: _____

Cause: _____

Effect: _____

Suggested/Possible Solution: _____

Problem B: _____

Cause: _____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

G. Transport

1 What vehicles are available for the Bureau/Department/ office ?

Item	Number available	number out of order	How long ? (see code)
- truck	___	___	___
- cars	___	___	___
- motorbike	___	___	___
- bicycle	___	___	___

(How long out of use coded as follows: 1) over a week, 2) over two weeks, 4) over a month, 4) over two months, 5) over three months, 6) over six months) 7) more than a year

2 Describe general use of car(s) if available:
1 _____
2 _____
3 _____

3 Describe general use of Motorbike(s), if available:
1 _____
2 _____
3 _____

4 Are spare parts available ? (y/n)
- in the store: ___
- in town: ___
- at Regional Bureau stores: ___
- at Zonal Department stores: ___
- at the Woreda Office stores: ___

5 Where are vehicles kept overnight ? _____

6 Who is mainly responsible for maintenance of the transport facilities (in the unit) ? _____

7 Where is maintenance done ? ___
1) in own garage, 2) in private garage,
3) in regional bureau garage, 4) other: _____

8 Are the following transport management tools available:
- Transport facilities inventory: ____
- Transport maintenance and repair record: ____
- Transport daily travel logbook: ____
- Fuel/oil consumption log book: ____
- Spare parts inventory: ____
- transport activity schedule: ____
- transport request forms: ____

9 Did any major transport problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

Problem B: _____

_____

Cause: _____

_____

_____

Effect: _____

_____

_____

Suggested/Possible Solution: _____

_____

_____

H. Planning and Health Management Information

1 Indicate the type of reports and frequency of reporting, which this management unit receives from lower levels:

type of report	frequency of report	reporting office	Remark
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____

(Frequency: 1) weekly, 2) monthly, 3) quarterly, 4) annually, 5) when necessary)

Total type of reports: ___

2 Indicate the type of reports and frequency of reporting of this management unit to higher levels:

type of report	frequency of report	receiving office	Remark
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____
_____	___ ___ ___	_____	_____

(Frequency: 1) weekly, 2) monthly, 3) quarterly, 4) annually, 5) when necessary)

Total type of reports: ___

3 Who is responsible for data collection and compilation in this unit ? _____

Who is actually doing it ? _____

4 What is done with the compiled information?
(reactions will have to be spontaneous!)

- send on to higher levels [ ]
- calculate statistics [ ]
- used for monitoring [ ]
- used for planning [ ]
- transformed into graphics [ ]
- other:_____ [ ]

5 Is there a person trained for compilation and analysis of data ? (y/n) ____

If yes, who:
_____, _____, _____, _____.

6 Is there a person trained in the use of information ? (y/n) ____, If yes, who:
_____, _____, _____, _____.

7 What instruments/tools are available for data management ?
___ ___ [1)none, 2)calculator, 3) computer,
4) other:_____]

8 What are the sources of information used for planning and management of health services in your area of responsibility, i.e. region, zone or woreda?
[NEEDS TO BE SPONTANEOUS]

1 _____
2 _____
3 _____
4 _____
5 _____

9 Is there a regional/zonal/woreda health/social sector committee ? (y/n) ____

If yes, what is the composition of the committee:
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

How often does the committee meet:_____

10 What health sector issues were raised/discussed during the committee meetings in the last six months?
1 _____
2 _____
3 _____
4 _____

11 Who is involved in the annual planning process at this level?
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

12 At what level does the planning start: ____
1) own level, 2) zonal level, 3) woreda level, 4) health unit level, 5) community level, 6) council level,
7) other:_____

13 Who is involved in the budgeting process at this level?
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

14 Is there a health profile of the area available ? (y/n)
____

if yes, what does it contain ? (y/n)

- Listing of health institutions ___
- coverage figures ___
- manpower data ___
- project descriptions (externally funded) ___
- Map ___
- Plan of action for the current year ___
- other: _____

15 Are the following planning tools available/used in the unit:
- work/activity plan: ___
- map of the catchment area: ___
- health profile: ___
- annual plan: ___

16 Are the following management tools available/used in the unit:
- work schedule: ___
- performance overview of units/departments: ___
- supervision checklist

17 Did any major planning and health information problem(s), occur in the last six months ?

Occurred ? (Y/N) ____ , if yes:

Problem A:_____
_____

Cause:_____
_____
_____

Effect:_____
_____
_____

Suggested/Possible Solution:_____

_____

_____

Problem B:_____

_____

Cause:_____

_____

_____

Effect:_____

_____

_____

Suggested/Possible Solution:_____

_____

_____

I. Health Care Management Support Functions.

The following section is about the functions available providing support to the health care delivery units.

a) Manpower resource management.

Function	Available(y/n)	Remark
-Manpower plan for area	___	_____
-recruitment procedures	___	_____
-vacancy registration	___	_____
-training needs overview	___	_____
-training plan	___	_____
-performance evaluation proc.	___	_____

b) Training.

Function	Available(y/n)	Remark
-training needs overview	___	_____
-basic training plan	___	_____
-Continuing Education plan	___	_____
-distance learning scheme	___	_____
-overseas training procedures	___	_____
-workshops schedule	___	_____
-training capacity development plan	___	_____
-trainers/tutors in RHB/ZHD/WHO	___	_____

c) Supervision.

Function	Available(y/n)	Remark
-techn. supervision schedule	___	_____
-admin. supervision schedule	___	_____
-individual performance checklist	___	_____
-supervision checklists	___	_____
-technical supervisors	___	_____
-administrative supervisors	___	_____
-private clinic performance list	___	_____

d) Health Management Information.

Function	Available(y/n)	Remark
-recording procedures	___	_____
-reporting procedures	___	_____
-data compilation capacity	___	_____
-data analysis capacity	___	_____
-computer facilities	___	_____
-filing systems	___	_____
-information use training capacity	___	_____
-area wide statistics	___	_____
-resource use overviews	___	_____
-financial statements	___	_____

e) Drugs, medical and non-medical supplies

Function	Available(y/n)	Remark
-standard stock lists	___	_____
-needs quantification proc.	___	_____
-stock-monitoring procedure	___	_____
-storage plans	___	_____
-distribution lists	___	_____

f) Transportation

-transport inventory	___	_____
-maintenance schemes	___	_____
-spare parts inventory	___	_____
-fuel supply guidelines	___	_____
-lubricants supply guidelines	___	_____
-driver training/CE plans	___	_____
-mechanics training/CE plans	___	_____
-transport workshop	___	_____
-transport storage guidelines	___	_____
-personal use guidelines	___	_____

g) Facilities and equipment

Function	Available(y/n)	Remark
-facilities inventory	___	_____
-equipment inventory	___	_____
-maintenance schemes	___	_____
-repair schemes	___	_____
-maintenance/repair workshop	___	_____

h) Finance

Function	Available(y/n)	Remark
-budgeting guidelines	___	_____
-disbursement procedures	___	_____
-accounting guidelines	___	_____
-procurement guidelines	___	_____
-reporting guidelines	___	_____
-user fee collection registration	___	_____

i) Patient referral

Function	Available(y/n)	Remark
-unit level function description	___	_____
-referral criteria	___	_____
-referral mechanisms	___	_____
-patient record guidelines	___	_____

J **Health Service Delivery Tier Evaluation**

1 Do you think that the current six tier system should be changed ? (y/n) ___

If yes, what are the drawbacks of the current system ?

_____

_____

_____

2 What should be the tiers in the system?

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

==========

Remarks by interviewee: _____

_____

_____

_____

[PLEASE NOTE THE END-TIME OF THE INTERVIEW ON THE FRONT PAGE]

APPENDIX 2

Appendix 2: **Scope of Work for the Health Services Delivery Specialist for the Ethiopia health Systems Design Activity**

The consultant will:

(a) provide technical assistance related to the design of a decentralised health service delivery system for Ethiopia;

(b) facilitate the efforts of the Ministry of Health to prepare System Design standards; and

(c) Assist the Ministry of Health, USAID and BASICS with workshops and publication(s) to promote discussion and dissemination of these System Design standards throughout Ethiopia.

During his/her first three week visit to Ethiopia the consultant will assist USAID, BASICS and the Ministry of Health in the selection of an Ethiopian public health professional who will serve as the Health System Design Coordinator. The consultant will then work with the Technical Committee and the Coordinator to carry out the following tasks:

1. Organise and facilitate one or more meetings between the Technical Committee and the Standing Policy Committee of the Ministry of Health (the heads of each department and various related institutions). Out of this will come guidance from senior officials on issues to consider and steps to follow in developing the System Design proposals.

2. Organise and facilitate meetings between the Technical Committee and major donors and development assistance agencies such as WHO.

3. Develop a set of questionnaires that will help guide Committee members during their exploratory visits to each of the regions of Ethiopia and to various health facilities.

4. Organise travel and logistics for the initial regional field visit.

5. Disburse funds for the initial regional field visit.

6. Travel to one region for the initial regional field visit.

7. Following the initial field visit, revise the set of questionnaires and develop a scope of work, a timetable and a budget for subsequent field visits to each of the regions and to various offices and health facilities throughout Ethiopia.

8. Develop strategies and plans for

   - analysing the findings of the field visits and the interviews with key officials;

- collaborating with the BASICS Technical Assistants to examine issues such as the cost of alternative designs and defining the essential clinical and public health services: and

- developing System Design proposals based upon the findings of the Technical Committee.

9. Select three African countries for visiting during a two week study tour (two first choice countries and one alternate country).

10. Set a time and develop a plan for a Workshop for Experts and Professionals to which will be invited heads of departments, other representatives from the MOH and Regional Health Bureaux and other resource persons. At this workshop, System Design proposals will be presented by the Technical Committee and discussed by the various officials and professionals.

12. Set a time and develop a plan for a Workshop for Policy and Decision Makers. At this workshop, System Design proposals will be presented by the Technical Committee and discussed by the various policy and decision makers.

During subsequent visits to Ethiopia, the Health Services Delivery Specialist will work with the Technical Committee, the Coordinator and other BASICS consultants to:

(a) prepare System Design proposal(s);

(b) assess the feasibility and affordability of the proposal(s);

(c) present and facilitate discussion of the proposal(s) at each of the two workshops; and

(d) produce a written summary of the deliberations and the conclusions of each of the two workshops. The summary of the conclusions of the Workshop for Policy and Decision Makers will subsequently be published and disseminated.

Qualifications: The Consultant must have a doctorate level degree in public health or a related field and have extensive experience working with the planning of national or regional systems for health services delivery. A demonstrated ability to work effectively with government officials in a developing country, and through patience, respect, understanding and professional competence earn their confidence and trust. A demonstrated ability to facilitate the exchange of ideas and opinions and to promote the formation of a widely accepted consensus among persons with differing perspectives.

APPENDIX 3

APPENDIX 3:
List of Technical Participants in the Ethiopian Health Systems Design Activity

Dr. Messeret Shiferaw	Director Training and Health Services Department
Dr. Ahmedin Nurhussein	Health Services Management Team; EHSDA Liaison Officer
Ato Fesseha Mahary	AIDS/Epidemiology Department
Ato Dagnew Tadesse	Environmental Health Department
Ato Amanual Estephanos	Statistician, Planning Department
Ato Haile M. Manorie	Health Services Department
Ato E. Woredework Balineh	Family Health Department
Ato Alemayehu Seifu	CE Training Department
Ato Gabre Madebo	
Dr. Kassahun Abate	

APPENDIX 4

APPENDIX 4: LIST OF DOCUMENTS CONSULTED

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APPENDIX 5

APPENDIX 5: ORGANIZATIONAL STRUCTURE OF HEALTH SERVICE DELIVERY UNITS: AVERAGE AVAILABILITY OF TECHNICAL AND ADMINISTRATIVE UNITS AND COMMITTEES

Technical and Administrative Units & Committees	Central Hospitals (5)	Other Hospitals (15)	Health Centers (29)	Health Station (36)
	Yes	Yes	Yes	Yes
Technical Units				
OPD	2	12	25	12
MCH/FP	0	11	28	17
EPI	1	2	27	16
CDD	0	2	8	4
Environment	0	3	22	8
Pharmacy	2	12	22	7
Laboratory	2	12	17	3
X-Ray	2	11	1	0
Inpatients	5	11	6	0
ARI	0	1	0	1
Physio/TB	1	8	0	1
Administrative units				
Personnel	5	11	16	4
Property	4	12	19	0
Finance	5	9	23	0
Cashier	0	4	20	7
Clerical	2	3	19	7
Administrator	1	2	0	0
Other Administrative Units	3	7	0	0
Committees				
Committee Manager	4	13	21	8
Transfer	0	9	13	0
Promotion	5	8	10	0
Purchase	4	8	10	0
Drugs	2	13	14	6
Discipline	0	3	0	2

APPENDIX 6

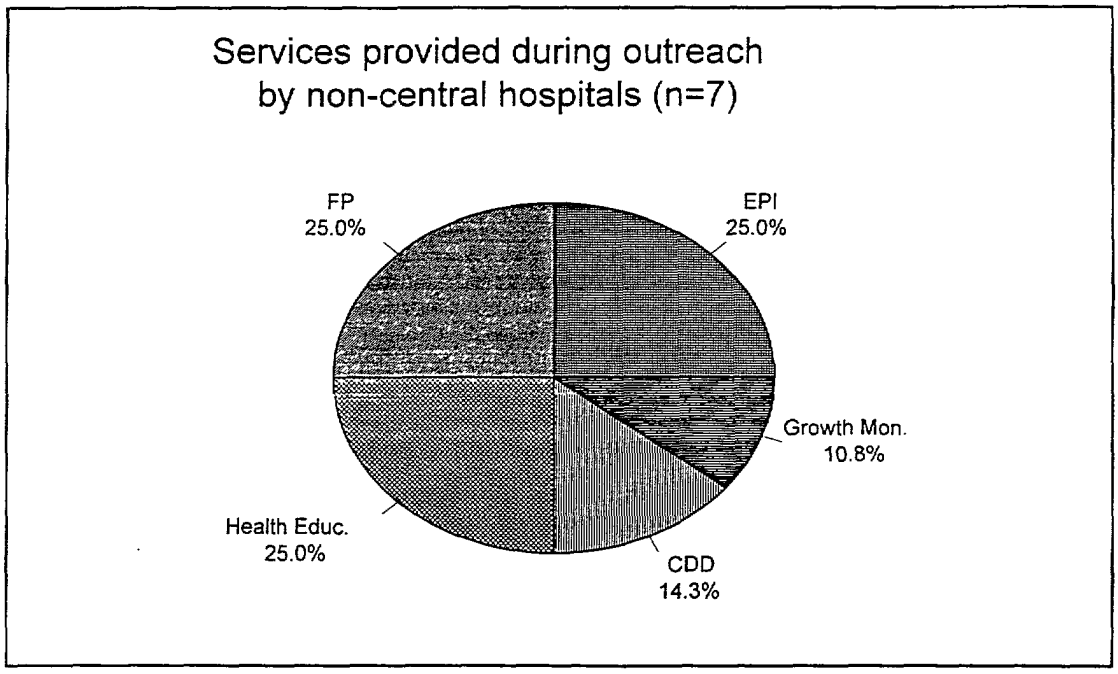
APPENDIX 6: AD-HOC AND SEMI-PERMANENT COMMITTEES IN HEALTH MANAGEMENT INSTITUTIONS: Existence of Management Committees by Type and Frequency of Their Meetings at RHBs, ZHDs, and WHDs

Type of Committees	# of HMIs with committee	%	Frequency of Meetings		
			Regular	Irregularly	As Needed
Management					
6 RHB	5	83	3		2
15 ZHD	13	87	4	1	8
18 WHD	8	44	5		3
Transfer					
6 RHB	4	67			4
15 ZHD	13	87	2	1	10
18 WHD	8	44		1	7
Promotion					
6 RHB	5	83			5
15 ZHD	11	73		1	10
18 WHD	6	33	2		4
Purchasing					
6 RHB	4	67			4
15 ZHD	11	73	2	1	8
18 WHD	4	22	2		2
Drug					
6 RHB	5	83	1		4
15 ZHD	11	73	2	1	8
18 WHD	3	17			3
Discipline					
6 RHB	5	83			5
15 ZHD	9	60			9
18 WHD	4	22			4

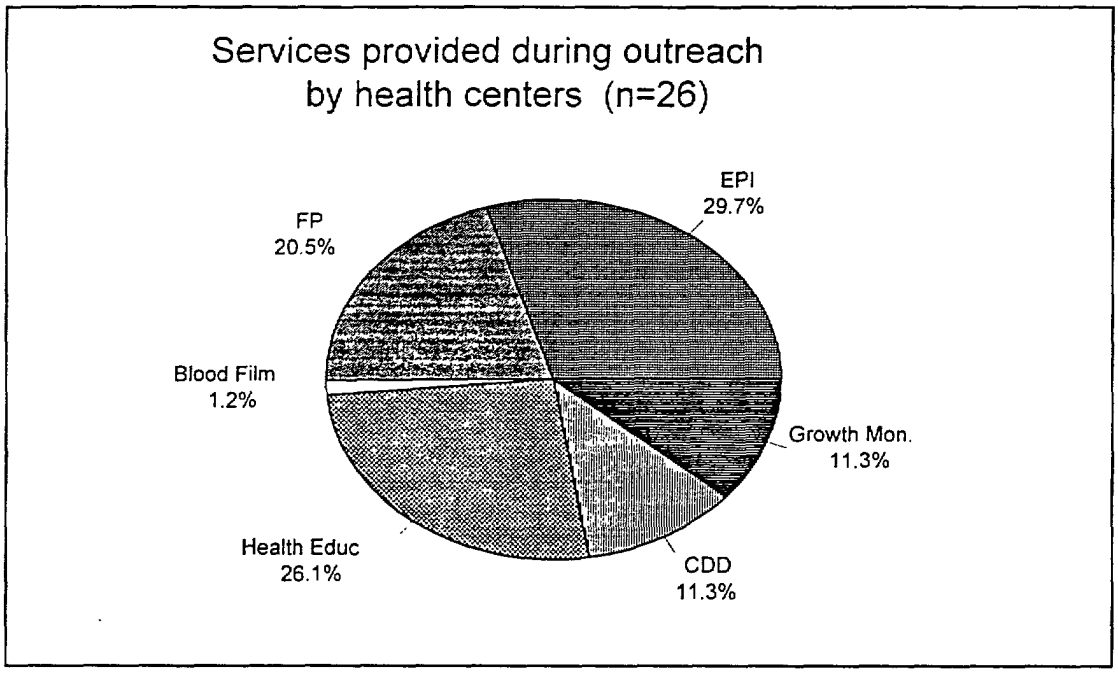
Note: Regular is either daily, (bi)weekly, (bi) monthly

APPENDIX 7

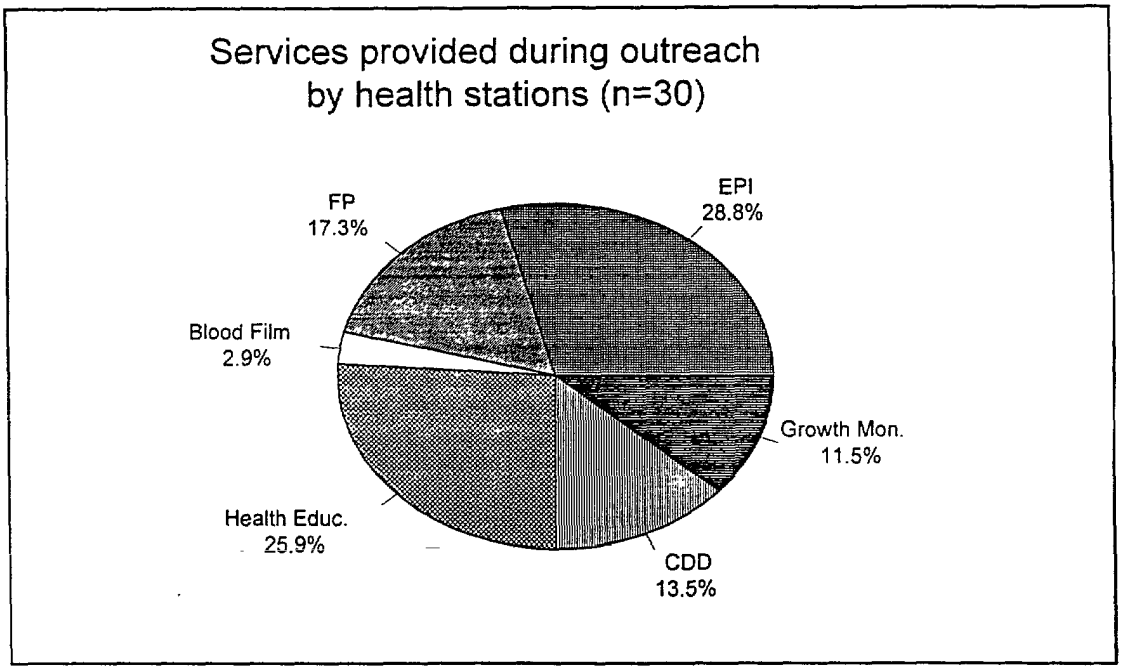
APPENDIX 7a:



APPENDIX 7b:



APPENDIX 7c:


Services provided during outreach by health stations (n=30)
EPI 28.8%
FP 17.3%
Blood Film 2.9%
Growth Mon. 11.5%
Health Educ. 25.9%
CDD 13.5%

APPENDIX 8

APPENDIX 8: AVAILABILITY OF MANAGEMENT FUNCTIONS/TOOLS AT HEALTH MANAGEMENT INSTITUTIONS

Type of Supporting Functions/Tools	RHB (6)	ZHD (15)	WHD (18)
	No. of units that have	No. of units that have	No. of units that have
Manpower Resource Management Functions			
Manpower Plan for Area	5	9	6
Recruitment Procedure	6	9	1
Vacancy Registration	4	8	1
Training Needs Overview	5	6	0
Training Plan	4	8	0
Performance Evaluation	4	10	6
Training Functions			
Training Needs Overview	4	6	1
Basic Training Plan	4	6	0
Continuing Education Plan	3	4	0
Distance Learning Schedule	1	0	0
Overseas Training Procedure	2	4	0
Workshop Schedule	5	4	0
Training Capacity Development Plan	2	3	0
Trainers/Tutors	4	0	0
Supervision Functions			
Technical Supervision Schedule	6	10	6
Administrative Supervision Schedule	5	10	5
Individual Performance Check List	2	5	1
Technical Supervisors	6	12	4
Administrative Supervisors	5	12	4
Private Clinic Performance List	5	4	1

Health Management Information Function			
Recording Procedure	6	11	13
Reporting Procedure	6	13	15
Data Compilation Capacity	6	9	10
Data Analysis Capacity	3	6	1
Computer Facilities	2	1	0
Filing System	5	14	9
Information Use Training Capacity	0	4	0
Area Wide Statistics	2	3	0
Resource Use of Overviews	3	4	0
Financial Statements	3	5	0
Drugs, Medical and Non-Medical Supplies Function			
Standard Stock List	5	10	3
Needs Quantification Process	4	7	1
Stock Monitoring Process	5	9	2
Storage Plans	4	8	0
Distribution Lists	5	9	2
Transportation Functions			
Transport Inventory	4	10	0
Maintenance Schemes	1	2	0
Spare Parts Inventory	1	6	0
Fuel Supply Guidelines	2	3	0
Lubricant Supply Guidelines	3	2	0
Driver Training/CE Plans	1	0	0
Mechanics Training/CE Plans	1	0	0
Transport Workshop	1	0	0
Transport Storage Guidelines	2	1	0
Personal Use Guidelines	3	0	0

Facilities and Equipment Functions			
Equipment Inventory	4	8	1
Maintenance Scheme	0	0	0
Repair Scheme	0	0	0
Maintenance/Repair Workshop	0	1	0
Finance Functions			
Building Guideline	6	6	7
Disbursement Procedure	6	8	8
Accounting Guidelines	6	8	7
Procurement Guidelines	4	7	7
Reporting Guidelines	6	9	9
User Fee Collect Register	3	4	3
Patient Referral Function			
Unit Level Function Description	1	4	1
Referral Criteria	1	1	0
Referral Mechanism	2	1	2
Patient Records Guidelines	2	3	2

APPENDIX 9

APPENDIX 9: AVAILABILITY OF MANAGEMENT FUNCTIONS/TOOLS IN REGIONAL HEALTH BUREAUS

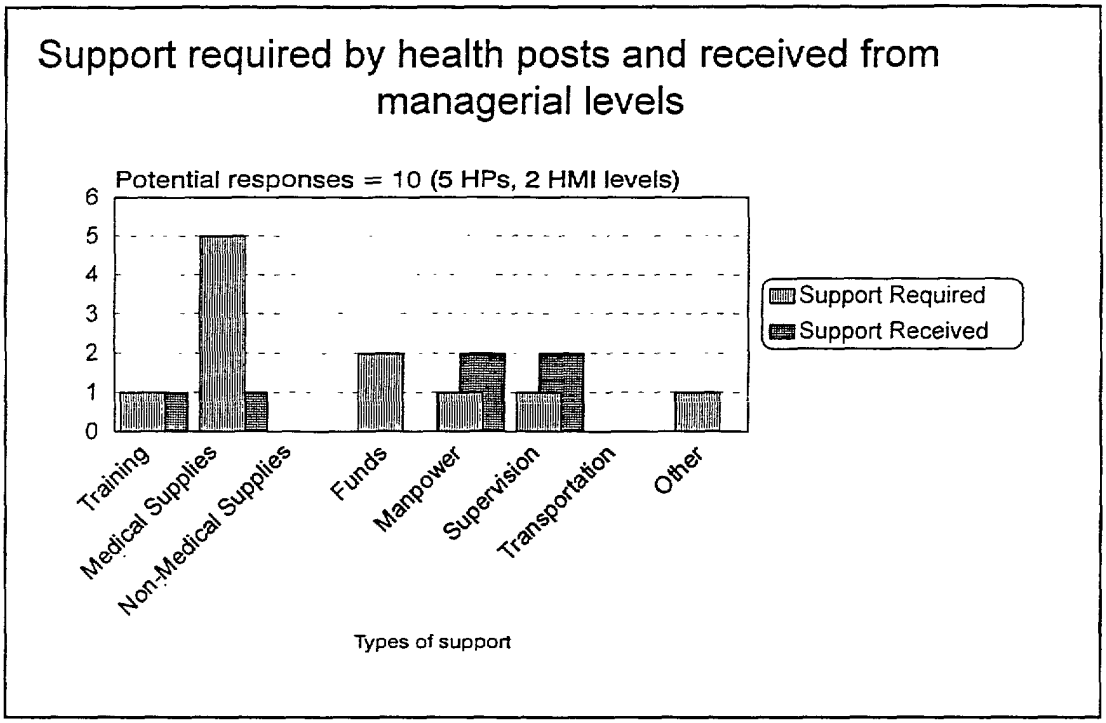
Type of Supporting Functions	SEPR	Gambela	Addis	Tigray	Oromia	Afar
Manpower Resource Management Functions						
Manpower Plan for Area	Y	Y	Y	Y	Y	N
Recruitment Procedure	Y	Y	Y	Y	Y	Y
Vacancy Registration	Y	Y	Y	Y	N	N
Training Needs Overview	Y	Y	Y	Y	Y	N
Training Plan	Y	N	Y	Y	Y	N
Performance Evaluation	Y	Y	Y	Y	N	N
Training Functions						
Training Needs Overview	Y	N	Y	Y	N	N
Basic Training Plan	Y	N	Y	Y	N	Y
Continuing Education Plan	Y	N	Y	Y	N	N
Distance Learning Schedule	N	N	Y	N	N	N
Overseas Training Procedure	N	N	Y	N	Y	N
Workshop Schedule	Y	Y	Y	Y	N	Y
Training Capacity Development Plan	Y	N	Y	N	N	N
Trainers/Tutors	Y	Y	Y	Y	Y	Y
Supervision Functions						
Technical Supervision Schedule	Y	Y	Y	Y	Y	Y
Administr. Supervision Schedule	Y	Y	Y	Y	Y	N
Individual Performance Check List	N	N	Y	N	Y	N
Technical Supervisors	Y	Y	Y	Y	Y	Y
Administrative Supervisors	Y	Y	Y	Y	Y	N
Private Clinic Performance List	Y	Y	Y	Y	N	Y

Health Management Information Function						
Recording Procedure	Y	Y	Y	Y	Y	Y
Reporting Procedure	Y	Y	Y	Y	Y	Y
Data Compilation Capacity	Y	Y	Y	Y	Y	Y
Data Analysis Capacity	N	N	Y	Y	Y	N
Computer Facilities	N	N	Y	N	Y	N
Filing System	Y	Y	Y	Y	Y	N
Information Use Training Capacity	N	N	N	N	N	N
Area Wide Statistics	N	Y	N	N	Y	N
Resource Use of Overviews	N	Y	N	Y	Y	N
Financial Statements	N	Y	N	Y	Y	N
Drugs, Medical and Non-Medical Supplies Function						
Standard Stock List	N	Y	Y	Y	Y	Y
Needs Quantification Process	N	Y	Y	N	Y	N
Stock Monitoring Process	N	Y	Y	Y	Y	Y
Storage Plans	N	N	Y	Y	Y	Y
Distribution Lists	N	Y	Y	Y	Y	Y
Transportation Functions						
Transport Inventory	N	Y	Y	N	Y	Y
Maintenance Schemes	N	Y	N	N	N	N
Spare Parts Inventory	N	N	Y	N	N	N
Fuel Supply Guidelines	N	N	Y	N	Y	N
Lubricant Supply Guidelines	N	Y	Y	N	Y	N
Driver Training/CE Plans	N	N	Y	N	N	N
Mechanics Training/CE Plans	N	Y	N	N	N	N
Transport Workshop	N	Y	N	N	N	N
Transports Storage Guidelines	N	Y	Y	N	N	N
Personal Use Guidelines	N	Y	Y	Y	N	N

Facilities and Equipment Functions						
Facilities Inventory	N	Y	Y	N	N	N
Equipment Inventory	N	Y	Y	N	Y	Y
Maintenance Scheme	N	N	N	N	N	N
Repair Scheme	N	N	N	N	N	N
Maintenance/Repair Workshop	N	N	N	N	N	N
Finance Functions						
Building Guideline	Y	Y	Y	Y	Y	Y
Disbursement Procedure	Y	Y	Y	Y	Y	Y
Accounting Guidelines	Y	Y	Y	Y	Y	Y
Procurement Guidelines	Y	Y	Y	N	Y	N
Reporting Guidelines	Y	Y	Y	Y	Y	Y
User Fee Collect Register	N	Y	N	Y	N	N
Patient Referral Function						
Unit Level Function Description	N	N	N	N	N	N
Referral Criteria	N	N	N	Y	N	N
Referral Mechanism	N	N	N	Y	N	Y
Patient Records Guidelines	N	N	N	Y	Y	N

APPENDIX 10

APPENDIX 10a:



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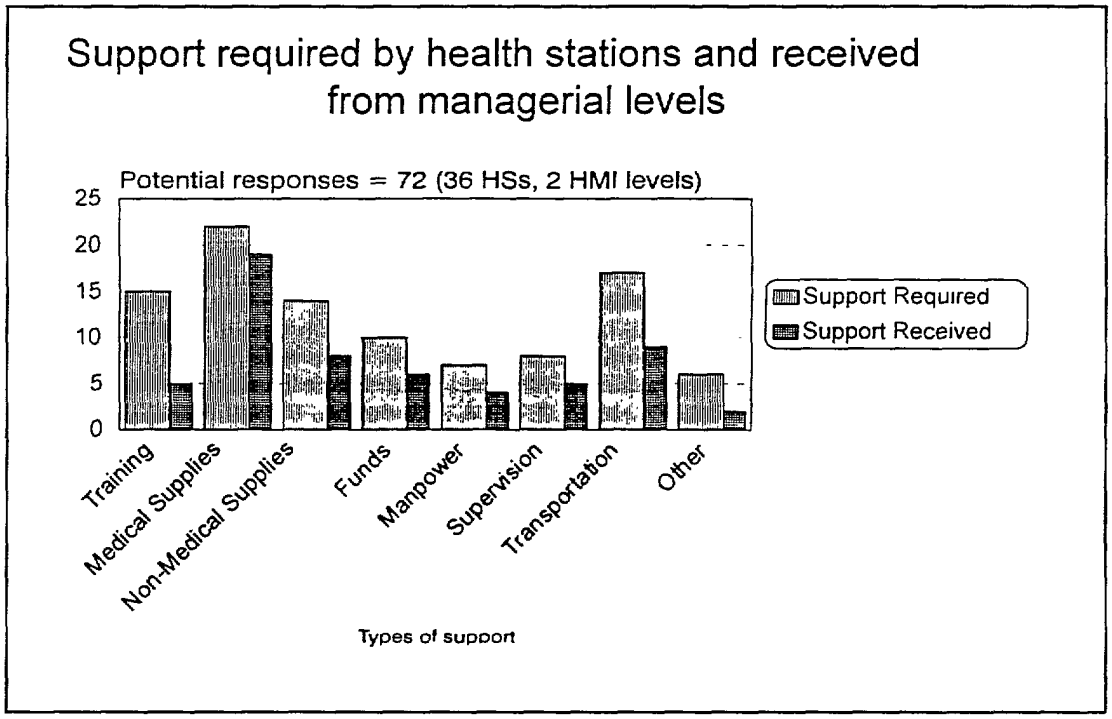

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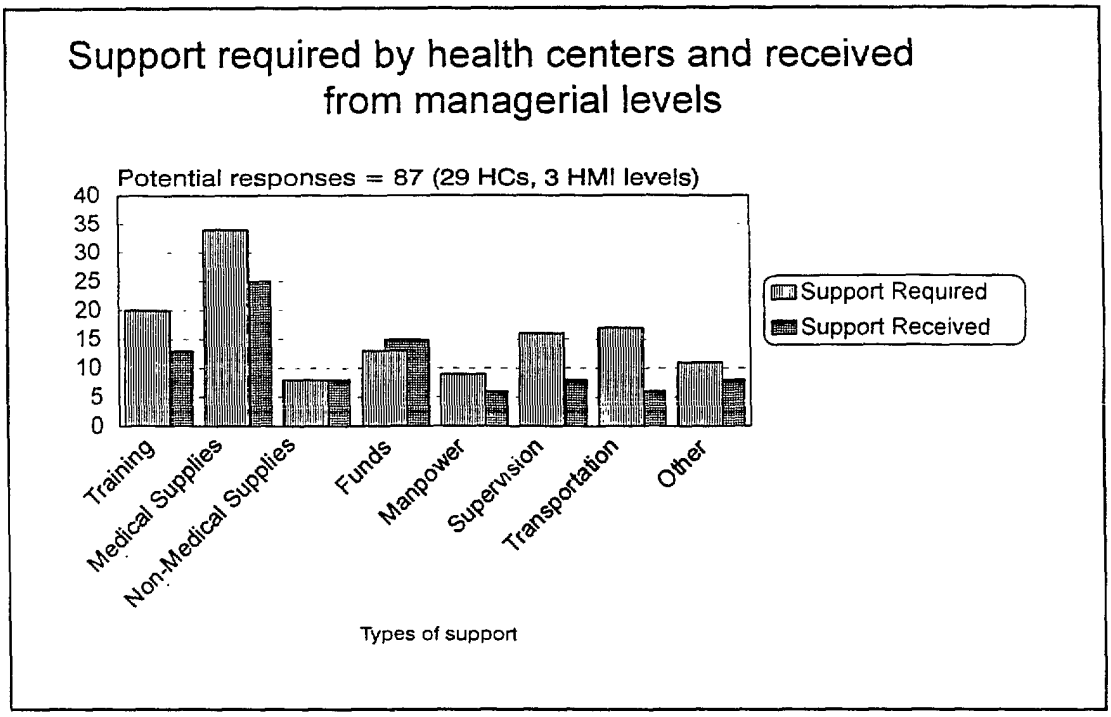

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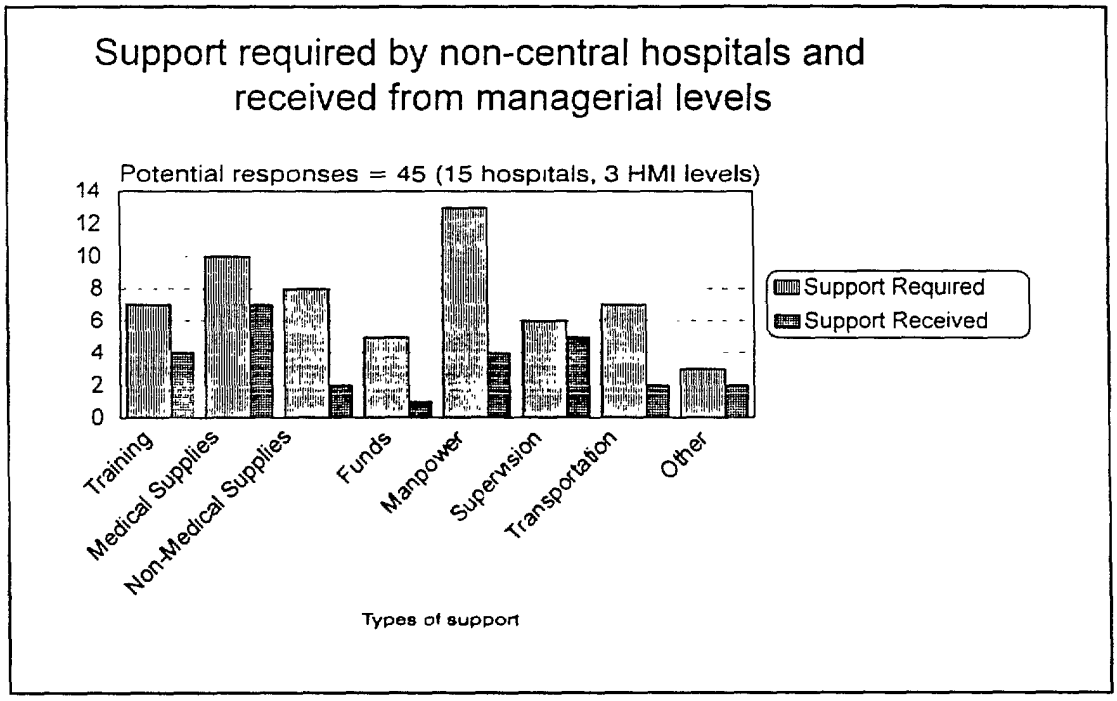

APPENDIX 11

EQUIPMENT LIST FOR HEALTH CENTERS

ITEM NO.		DESCRIPTION	QTY
1.		LABORATORY	
	1.1	Microscope binocular	2
	1.2	Centrifuge bench type electrical	1
	1.3	Differential Counter	1
	1.4	Hot air sterilizer (dryer)	1
	1.5	Centrifuge manual	1
	1.6	Stop watch with alarm	2
2.		MINOR OPERATION ROOM	
	2.1	Manual operation table	1
	2.2	Emergency operation light	1
	2.3	Suction machine	2
	2.4	Surgical instrument set	3
	2.5	Table top type autoclave	1
	2.6	Boiler for instrument	1
	2.7	Sphygmomanometer	2
3.		GYNECOLOGY	
	3.1	Delivery bed	1
	3.2	Vacuum extractor electrical	1
	3.3	Vacuum extractor manual	2
	3.4	Suction Apparatus	1
	3.5	Infant Scale	1
	3.6	Room heaters	3
	3.7	Delivery sets	5
	3.8	Examination Lamp	2
	3.9	Resuscitator set	2
4.		O. P. D.	
	4.1	Sphygmomanometer	4
	4.2	Examination table	2
	4.3	Examination lamp	2
	4.4	Suction Apparatus	1
	4.5	Scale for adult	1
	4.6	Refrigerator	1
	4.7	Stethoscope	4
	4.8	Diagnostic Set	2
	4.9	Dental extraction set	2

4.10	Instrument Boiler	1
4.11	Dressing Instrument Set	3
4.12	Clinical Thermometer	10
4.13	Stretcher	2
4.14	Scale Infant	2
4.15	Oxygen cylinder with regulator	1
4.16	Mobile X-Ray machine	1
4.17	Complete set of dark room equipment	1

EQUIPMENT LIST FOR HEALTH STATIONS

ITEM NO.	DESCRIPTION	QTY
1.	Sphygmomanometer	2
2.	Clinical Thermometer	3
3.	Stethoscope	2
4.	Instrument boiler	2
5.	Stretcher	1
6.	Small Stove Electrical	1
7.	Stove gas	1
8.	Scale for Adult	1
9.	Dressing Instrument set	2
10.	Diagnostic Set	2
11.	Examination Table	1
12.	Examination Lamp	1

APPENDIX 12

APPENDIX 12: AVAILABILITY OF HEALTH RESOURCES MANAGEMENT TOOLS IN HEALTH FACILITIES

Type of Management Resource Tools	Central Hospital (5)	Non- Central Hospital (15)	Health Center (29)	Health Station (36)
	No. of units that have	No. of units that have	No. of units that have	No. of units that have
Personnel Management Tools				
Job Description	2	14	15	11
Duty Roster	0	9	11	11
Annual Leave School	3	9	7	0
Leave Application Form	1	3	8	2
Individual Performance File	5	15	26	25
Personnel Grievance Notice	0	3	4	0
Staff Performance Check List	1	7	12	0
Ward Certificate	0	0	3	0
Financial Management Tools				
Monthly Ledger	5	11	16	-
Bank Accounts Statement	5	9	4	-
Model 19 to 23	5	12	25	-
User Charge Income	3	14	20	-
User Charge Submission	3	11	16	-
Medical and Drug Supplies Management Tools				
Bin Card	2	3	6	3
Stock Card	4	14	25	26
Stock Register	0	8	13	20
(Re) Orderer Form	4	8	12	7
Vacc. Temp. Cards	2	9	22	28
Vacc. Register	0	10	26	29

Equipment Tools				
Equipment Register	3	11	23	28
Equipment Identification	3	8	14	11
Maintenance Schedule	1	3	2	1
Maintenance & Repair Rec.	1	2	0	1
Equipment Disposal Form	0	4	1	1
Maintenance Management Tools				
Physical Structure inventory	1	6	4	4
Preventive Maintenance Schedule	1	2	0	0
Maintenance Response Chart	0	1	0	0
Repair Activity Log	1	2	0	0
Transport Management Tools				
Transport Facility Inventory	3	8	8	4
Transport Maintenance & Repair	3	5	4	1
Transport Daily Travel Log	5	7	8	1
Fuel/Oil Consumption Log	2	0	0	1
Spare Parts Inventory	0	3	7	0
Transport Activity Schedule	2	2	0	2
Transport Register Form	5	10	12	1
Planning Tools				
Work/Activity Plans	3	12	17	22
Map of the Catchment Area	0	4	11	12
Health Profile	1	4	13	6
Annual Plan	4	11	21	22
Other Management Tools				
Work Schedule	2	12	21	25
Performance Overview of Units	1	10	18	9
Patient Register	1	5	28	35

APPENDIX 13

APPENDIX 13: AVAILABILITY OF HEALTH RESOURCES MANAGEMENT TOOLS AT HEALTH MANAGEMENT INSTITUTIONS

Type of Management Resource Tools	RHB (6)	ZHD (15)	WHD (18)
	No. of units that have	No. of units that have	No. of units that have
Personnel Management Tools			
Job Description	6	9	13
Duty Roster	0	4	6
Annual Leave School	1	2	0
Leave Application Form	1	0	1
Individual Performance File	6	15	16
Personnel Grievance Notice	1	1	0
Staff Performance Check List	1	5	3
Ward Certificate	1	1	0
Financial Management Tools			
Monthly Ledger	6	11	7
Bank Accounts Statement	6	12	2
Model 19 to 23	6	14	9
User Charge Income	2	0	0
User Charge Submission	3	4	0
Equipment Tools			
Equipment Register	6	12	5
Equipment Identification	4	8	2
Maintenance Schedule	0	1	1
Maintenance & Repair Rec.	2	2	1
Equipment Disposal Form	3	4	0

Maintenance Management Tools			
Physical Structure inventory	1	3	1
Preventive Maintenance Schedule	1	0	0
Maintenance Response Chart	0	0	0
Repair Activity Log	0	0	0
Transport Management Tools			
Transport Facility Inventory	5	13	0
Transport Maintenance & Repair	2	4	0
Transport Daily Travel Log	3	6	2
Fuel/Oil Consumption Log	3	9	2
Spare Parts Inventory	2	4	0
Transport Activity Schedule	1	7	0
Transport Request Form	5	13	1
Planning Tools			
Work/Activity Plans	4	13	8
Map of the Catchment Area	6	10	7
Health Profile	4	11	3
Annual Plan	6	14	15
Other Management Tools			
Work Schedule	5	12	8
Perform. Overview of Units	5	11	5
Patient Register	0	0	0

APPENDIX 14

APPENDIX 14: HEALTH CARE MANAGEMENT SYSTEMS
(a MEDEX model for designing and assessing management systems)

SYSTEMS	DESCRIPTION OF ELEMENTS
Supervision	Supervision, guidance, and support of personnel at all levels of the health system. Helps identify problems and upgrade both levels.
Personnel	Manpower planning, recruitment, employment, training, and performance evaluation of health workers
Health information	Collection, organization, reporting, storage and use of data for planning and managing health care services
Training	Planning, arranging, conducting, monitoring the various types of training programs for health workers: pre-service, continuing education, distance learning, workshops, on-the-job training, overseas training, etc.
Drugs and Medical Supplies	Procurement, storage, distribution and control of drugs and medical supplies
Transportation	Procurement, protection and control of transportation resources needed to move health workers, patients and supplies
Communication	Use, protection, and control of communication resources which link health workers to each other, to their supervisors and to patient referral centers
Facilities and Equipment Maintenance	Protection of facilities and equipment from deterioration and prolonging their useful life through regular preventive maintenance and repair
Finance	Planning, budgeting, procurement, control, disbursement and accounting of financial resources
General Supplies	Procurement, storage, distribution and control of administrative, office, fuel and other supplies and equipment
Patient referral	Usage, storage, and control of basic patient records; systems and procedures for the effective referral of patients.

Note: Taken from MEDEX Management Development Program