ENVIRONMENTAL SANITATION IN RURAL ETHIOPIA

SECTOR REVIEW AND PROPOSALS FOR ACTION

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LIST OF ACRONYMS

AAU	Addis Ababa University
BSF	Belgian Survival Fund
CDD	Control of Diarrhoeal Diseases
CHA	Community Health Agent
CIDA	Canadian International Development Agency
CPAR	Canadian Physicians for Aid and Relief
CPPO	Community Participation Promotion Officer
CPPS	Community Participation Promotion Service
CRDA	Christian Relief and Development Association
EB	Ethiopian Birr
EEC	European Economic Commission
EECMY	Ethiopian Evangelical Church (Mekane Yesus)
EHD	Environmental Health Department
EPI	Expanded Programme of Immunization
ESS	Education and Social Services (UNICEF)
EWWCA	Ethiopian Water Works Construction Authority
FHI	Food for the Hungry International
FINNIDA	Finnish International Development Agency
GNP	Gross National Product
GOE	Government of Ethiopia
HA	Health Assistant
IDWSSD	International Drinking Water Supply and Sanitation Decade
IFAD	International Fund for Agricultural Development
IRD	Integrated Rural Development
JNSP	WHO/UNICEF Joint Nutrition Support Programme
KAP	Knowledge, Attitudes and Practices
LVIA	Lay Volunteers International Association
MOA	Ministry of Agriculture
MOE	Ministry of Education
MOH	Ministry of Health
MUHD	Ministry of Urban Housing and Development
NGO	Non-Governmental Organization
NOCMVD	National Organization for the Control of Malaria and Other Vector-Borne
ONCCP	Office of National Council for Central Planning
PA	Peasants' Associations
PHC	Primary Health Care
REWA	Revolutionary Ethiopian Women's Association
REYA	Revolutionary Ethiopian Youth Association
RIBS	Rural Integrated Basic Services (UNICEF)
SIDA	Swedish International Development Authority
TYPP	Ten-Year Perspective Plan
UIBS	Urban Integrated Basic Service
UNDP	United Nations Development Programme
UNICEF	United Nations Childrens' Fund
VIP	Ventilated Improved Pit Latrine
WES	Water and Environmental Sanitation
WHO	World Health Organization
WRC	Water Resources Commission
WSSA	Water Supply and Sewerage Authority

EXECUTIVE SUMMARY

I. RURAL SANITATION IN ETHIOPIA

Environmental sanitation activities investigated in this report include health education, latrine construction, integration with water supply and, to a lesser extent, water quality.

No accurate study has carried out on sanitation coverage in Ethiopia, but most sources agree that less than 5% of the population has access to safe excreta disposal facilities.

The goal of the Ten Year Perspective Plan (1984/85 - 1994/95) was to provide 80% of rural Ethiopians with proper excreta disposal facilities. This would have required construction of approximately 6 million latrines, at a cost of EB120 million/year. However, no government funding was allocated for this activity.

Many government agencies and NGOs are involved in environmental sanitation activities. The Ministry of Health is the main government body responsible, through its Health Education and Environmental Health (EHD) Departments.

In the past, UNICEF funds for environmental sanitation have been channeled through the EHD, as well as several projects funded by other sections, such as Nutrition, Health, Education, Rural Integrated Basic Services and Urban Integrated Basic Services.

Despite the involvement of many agencies, progress in improving environmental sanitation in Ethiopia has been limited, for the reasons outlined below.

II. LIMITATIONS OF THE SANITATION SECTOR

1. There is little recognition at national or local level of the importance of environmental sanitation and health education. Sanitation is given low priority and limited funding.

2. Although numerous UNICEF projects have some input into environmental sanitation activities, there has been little collaboration and coordination between them. Until recently, there has been minimal technical input by the Water and Environmental Section into projects not funded by them.

3. Collaboration and coordination is lacking between government agencies, between NGOs and government, and between NGOs themselves.

4. There is no comprehensive, realistic sanitation sector plan.

5. Although health education materials have been developed, they are considered by many to be inappropriate and teaching methods ineffective.

6. Although some research has been carried out on appropriate pit latrine design, results have not been widely disseminated and there is still a misconception that VIP latrines are too expensive.

7. Many agencies (including UNICEF RIBS and JNSP programs) are constructing "traditional pit latrines", which may be causing more health hazards than they reduce. There is little understanding of the reasons for the design of the VIP, which results in no flies and no smells and therefore increased safety and latrine use.

8. Water quality surveillance is limited.

III. STRATEGY FOR ACTION

Due to the lack of financial, institutional and community commitment, a major programme of latrine construction is not appropriate in Ethiopia at this time. The focus in the next few years should be on collecting additional information for planning and monitoring purposes, development of a detailed sector plan and establishment of demonstration projects.

IV. GUIDELINES FOR ACTION

Recommendations for UNICEF's input into the sanitation sector include activities which can be carried out by short-term consultants, to be followed up and continued by the Sanitation Project Officer.

1. Advocacy - Increase recognition of the importance of an integrated approach to water and sanitation through informal discussions with government officials and attendance and presentations at workshops and seminars.

2. Increase collaboration and coordination among all concerned agencies:

- Increase coordination within UNICEF by improving technical inputs of the WES Section into project activities of all sections.

- Set up an information-sharing committee of donor agencies

- Encourage the establishment of a National Coordinating Committee for water and sanitation activities.

- Establish an information-sharing Technical Committee with representatives from government agencies.

- Assist in the establishment of a Women's Unit in the Water Resources Commission (WRC) and assess how UNICEF can strengthen WRC's Community Participation Promotion Service.

3. **Improve planning, monitoring and evaluation:**

- Promoting further research and evaluation, including documentation of existing projects, investigation of appropriate VIP technology, assessing present sanitation coverage, and evaluation of health education materials and methods.

- Develop appropriate training materials for latrine construction, use and maintenance.

- Support a study on the incidence of guinea worm in Ethiopia.

- Set up a documentation center to serve as a resource for those interested in obtaining information on water and sanitation in Ethiopia.

- Investigate how monitoring and evaluation methods, especially those of the EHD/MOH, can be improved

Two additional activities should commence upon completion of information collection as outlined above and when the Sanitation Project Officer has been hired by the WES Section:

4. **Develop a detailed sector plan in collaboration with the responsible government agencies.**

5. **Set up demonstration projects in at least one rural area and within Addis Ababa.**

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1. INTRODUCTION

Although several UNICEF programmes have some input into environmental sanitation activities, the only programme devoted specifically to environmental sanitation has been an allocation of approximately US$200,000/year for construction of demonstration pit latrines and training of sanitarians and community health workers.

In most UNICEF country programmes, environmental sanitation comes under the "Water and Environmental Sanitation Section (WES)". In Ethiopia, funds allocated specifically for this sector have until recently been administered by the Health Section.

In 1990, environmental sanitation was transferred to the Water Section, which is now has main responsibility for this sector, and is called the WES Section. Although several other UNICEF sections still retain their involvement in this sector, the WES Section will take on greater responsibility for promoting environmental sanitation activities, including health education and integration with water supply.

To this end, job descriptions have been posted and are now under approval for a Project Officer (International Post), and a Technical Assistant to devote their time primarily to sanitation and health education activities. Since it may be several months before these people are in place, the consultant was hired to carry out an initial study of sanitation activities in Ethiopia with a view to providing recommendations which could be used to formulate a more detailed plan of action for the environmental sanitation sector in Ethiopia (see Annex 1 for Terms of Reference).

The report focuses mainly on rural sanitation activities, although information collected about urban activities is also presented in this report. The main purposes of this study have been as follows:

1. To provide background information on the sector which should be of use to anyone wishing to work in environmental sanitation in Ethiopia.

2. To identify additional information and studies which must be conducted in order to strengthen reporting and knowledge of the sector.

3. To identify strengths and weaknesses of present environmental sanitation activities.

4. To identify and provide guidelines for activities which UNICEF should consider funding and supporting which would be most beneficial to establishing a sustainable and replicable environmental sanitation programme in Ethiopia.

In the time given, it has not been possible to collect all information related to the sector. Focus has been on activities of the Ministry of Health, which will continue to receive funding from the UNICEF WES Section, other UNICEF-funded projects, and, to a lesser extent, activities of NGOs and other agencies.

The emphasis is on an integrated approach to water and sanitation activities, including a strong health education/community participation component. Generally, WESS activities in UNICEF cover the following major categories:

1. water supply for domestic use
2. water quality control
3. health and hygiene education
4. promotion of sanitation activities, including as construction of VIP latrines and refuse disposal

Although this report will not directly address water supply activities in Ethiopia, they will be discussed in the context of the need for greater integration of water supply and sanitation activities. Water quality control will be discussed briefly, but the main focus of this report is on sanitation and health education.

It should be pointed out that, in this report, reference to "environmental sanitation" does not mean only construction of pit latrines. It also includes general household and community hygiene, community education activities and development of "social marketing" techniques to promote latrine construction and other hygiene-related activities. Social marketing places greater emphasis on using marketing and advertising strategies for promoting development activities and can be much more effective in encouraging acceptance for new ideas and activities than health education alone.

2. ENVIRONMENTAL SANITATION IN RURAL ETHIOPIA

2.1 Background - Rural Ethiopia

With an estimated GNP per capita of only U.S. $110, Ethiopia is one of the poorest countries in the world. The population growth rate is high, 2.9%, and average life expectancy is only 45 years. Infant mortality and morbidity rates are high: 144/1000 and 237/1000 respectively. According to a Ministry of Health report (1983), "diarrhoeal diseases are one of the top 5 causes of morbidity and probably one of the highest of mortality in children below the age of 5."

Nearly 90% of the total population (47.1 million) of Ethiopia lives in rural areas. Population densities range from 57 persons/sq.km. in the more populated highlands to 7 persons/sq.km in the lowlands. Culturally, there are 70 languages spoken and two major organized religions, Christianity and Islam.

According to 1985 World Bank report "...population growth presents Ethiopia with its most serious long-term economic problem (p. iv)". Progress in almost all development activities is outstripped by this rapid population growth.

2.2 Administrative Structure

Ethiopia is divided into planning zones, administrative regions and awrajas. In the rural areas, farmers are organized into Peasants' Associations (PAs), which consist of an average of 300 families and area of approximately 800 ha. There are approximately 20,000 PAs in Ethiopia (WSSA, 1988).

Other, government-organized mass organizations such as the Revolutionary Ethiopian Women's Association (REWA) and the Revolutionary Ethiopian Youth Association (REYA) are also organized at the village level. These are used to promote "mass mobilization" of the community for various development activities. In many areas, one still finds the traditional, community-based, mutual assistance groups, although the extent of their activities varies.

Various development committees also operate at village level, depending on which agencies have been active there. Development Committees are common in many areas. Ministry of Health (MOH) staff organize Health Committees, sometimes called Primary Health Care (PHC) Committees. Water Committees are formed by the Water Supply and Sewerage Authority (WSSA). In order to better integrate community efforts, some agencies have formed Water and Health Committees, or Water and Sanitation Committees. At a recent workshop in Nazareth, WSSA and MOH officials agreed to change the name of Water Committees to Water and Sanitation Committees.

The rural areas can be distinguished between "villagized" and "scattered rural" areas. The government policy of villagization resulted in many scattered rural communities living in organized, more densely populated villages, in many cases without appropriate

water and sanitation services. Although no statistics are readily available, most people interviewed agreed that the danger of disease due to closer living conditions is much greater in villagized areas than in the scattered rural communities. However, due to recent changes in government policy, many villagers are now moving back to their original land, resulting in uncertainty about the stability of villagized areas.

Besides the nomadic population, most rural Ethiopians are farmers. They have many demands on their time and, depending on their location, are constantly working against the danger of drought and famine. Women, especially, live under harsh conditions, walking great distances for water, grinding teff for several hours a day, and otherwise managing their agricultural activities and households.

2.3 Water and Sanitation Coverage

As with all basic services, safe and convenient water supply and adequate sanitation are available to few rural Ethiopians. Water supply for at least 90 percent of rural Ethiopians consists of traditional, unprotected sources, often at great distances from the homes.

For most Ethiopians, rural or urban, open defecation is still the norm for excreta disposal. Although it is generally agreed that sanitation coverage nationwide is less than 10 percent, available figures on sanitation coverage are not only unreliable, but base "coverage" only on the number of households with access to pit latrines. No assessment is made of the type or condition of a latrine or patterns of use—if they are used at all.

Table 1 shows the variety of figures which have been obtained from various sources, including estimates of nationwide coverage and results from surveys carried out in particular areas. The national figures are from references which do not give the original source of information. No systematic nationwide survey has been carried out. No estimate of present coverage is included in the national Ten-Year Perspective Plan (TYPP) or WSSA's TYPP.

Certainly, most people interviewed agree that the figure is no higher than that included in the Draft Sanitation Sector Strategy Paper (Boydell, 1987):

7% coverage nationwide
4% coverage in rural, villagized areas
1% coverage among the dispersed, rural population

TABLE 1: ESTIMATES OF SANITATION COVERAGE

Reference	Households with Access to Sanitation Facilities
(Nationwide)	
Draft Sanitation Sector Strategy Paper (1987)	7% nationwide 4% in rural villages 1% dispersed rural population
UNICEF/GOE Plan of Operations (1988)	7% nationwide
WHO report	64% rural 44-62% urban
G.E. Teka (personal comm.)	4-5% nationwide
WSSA (1988)	2% maximum in rural areas
CIDA project proposal (1988)	4% rural 54% (rural towns and urban, not inc. Addis)
(In selected areas)	
Tesfaye (case studies)	
Kersa awraja	80%
Aksta awraja	16%
Selassie and Bekele (1982)	
(3 rural areas)	60%
Bishaw and Medhin (1983)	
8 areas	22%
Webster (1990)	
Cheha awraja	18%
Tesfu on UNICEF/RIBS project (1986) (1 awraja/region)	
Bale	55%
Gojam	1%
Illubabor	27%
Jimma	51%
RIBS baseline survey (1989) (1 awraja in each region)	
Agew Midir, Gojam	32%
Debre Markos, Gojam	7%
Gore, Illubabor	53%
Limu, Illubabor	35%
Sorena Geba, Illubabor	27%

As the need for proper excreta disposal facilities is related to population density, the distinction given here between villagized areas and scattered rural settlements is particularly useful. However, the numbers are not considered "definitive" or even accurate.

It is interesting to note the great variety in coverage rates in areas where sample surveys have been carried out. This is partly due to the fact that these surveys are carried out in areas where project intervention has already taken place. However, sample sizes are often quite small and methodology for these studies unclear.

Refuse disposal facilities are also limited in rural areas. According to WHO (1987), 43% of rural households have these facilities. However, this figure is highly unlikely (as is the WHO figure in Table 1 for sanitation coverage). Sample survey results are much lower, usually less than 10%.

As in most countries, water collection and sanitation are almost exclusively the responsibility of women.

Although no data on water quality was collected, various reports (Mesfin, 1983, Solsona, 1985) refer to the high fluoride content of water in Rift Valley areas, causing fluorosis, resulting in serious tooth damage. Generally, water quality is low in rural areas, with emphasis in many water projects on reducing water collection times and increasing amounts used. Guinea worm is also a problem in some areas, but no accurate figures are available on the extent of this particular water-related disease.

2.4 Community and Household Hygiene

Although many people have long experience working in rural Ethiopia, there is little documentation on "knowledge, attitudes and practices" (KAP), with most research focussing on statistics such as number of latrines, distances walked to water points, etc. With a variety of climatic zones, ethnic groups, lifestyles (pastoralists, semi-nomadic, etc.), KAP must be assessed anew for every project area.

For purposes of this study, only a few general comments can be made on this subject, based on the consultant's own field visits, limited literature review and discussions with experienced field workers. These points are outlined below:

(i) Sanitation is generally a low priority among potential development activities.

(ii) Sanitary conditions at water points are generally unsatisfactory, due in part to poor design and construction as well as inadequate maintenance. Provision for washing clothes, bathing and watering animals is usually lacking at water points.

(iii) There is at least some knowledge of the connection between the disease and poor quality water. However, water is often "blamed" for diseases which are due to poor sanitation. Also, people often still use unimproved water sources for

reasons of convenience, cost, or due to breakdown of improved sources.

(iv) Many people are aware of the need for proper household hygiene, but are not able to practice it due to lack of time, inadequate water supply and other factors. (For example, a woman interviewed in Wollo said "Yes, my children learn all about these things at school. They come home and tell me that I must sweep the house and grounds every day; I must keep all rubbish and excreta out of the compound; we must all bathe every day. But how can I do that when I spend 5 hours a day grinding teff?")

(v) There is a common misconception that faeces of children are harmless. Therefore, even in households with latrines, children often do not use them.

(vi) Household and demonstration latrines observed by field workers are often not used. There is a common, and often valid, perception of latrines as dirty, smelly, less private than the bush, and dangerous for children.

(vii) Although some schools do have latrines, they are not always used and are often in unsatisfactory condition. Most schools do not have water available with which to properly clean latrines or carry out other hygiene activities which are being taught.

(viii) Use of human waste for fertilizer is not common in Ethiopia. However, according to one report (Attat Hospital, 1990), it is used in ensete-growing areas.

(ix) Rubbish disposal is considered a problem by some field workers, while others say "there is no rubbish" in rural areas. Generally, it appears that the main problem with rubbish is that it is thrown out within the compound, then swept up with children's faeces, and not disposed of properly.

2.5 National Planning for Rural Sanitation

2.5.1 Sector Plans

According to a UNICEF Report (1982), Ethiopia drew up a plan for the International Drinking Water Supply and Sanitation Decade (IDWSD) with a goal of providing pit latrines and refuse pits for rural and urban areas. No specific targets were set.

In 1984, the Government of Ethiopia published a "Ten Years Perspective Plan (1984/85-1993/94)" (TYPP), with the following targets under environmental sanitation:

(i) construction (with self-help) of latrines for 80% of the rural population. This comes to approximately 6 million latrines, or 600,000/year. At an estimated cost of 200 birr/latrine, this would have required Birr 120 M/year.

(ii) Construction of 30,000 springs and hand-dug wells. (This is in addition to other, major water supply activities covered under the section on water resources.)

(iii) Continuous monitoring of the quality and safety of water supply systems, with a total of 4.5 million water samples to be taken over the 10-year period.

(iv) Health education, including development of educational materials, teacher training, and use of mass media and literacy drives.

According to the Draft Sector Strategy Paper (Boydell, 1987), MOH's original estimate of the costs of the program were not included in the TYPP. In addition, no sanitarians were included in the listing of additional manpower requirements for the health sector.

The TYPP also discusses housing and environmental hygiene as an integral part of PHC, and plans to reorganize the Ministry of Health and improve project targeting, monitoring and evaluation.

In 1986, a Draft TYPP for the water and sanitation sector was produced by WSSA. However, this focusses mainly on urban activities, which come under WSSA's mandate.

In 1987, a "Sanitation Sector Strategy Paper" was written by a World Bank consultant (Boydell, 1987) and discussed at a workshop sponsored by WSSA. Although it discussed the need for health education and "social marketing", the main focus was on the technical and managerial aspects of promoting environmental sanitation activities in Ethiopia. Much of the information provided in this report could be used to devise a more detailed plan for both rural and urban areas. However, most of the recommendations were never carried out.

One of the main recommendations of the report was that a National Action Committee, or Decade Steering Committee, at ministeral level be formed to coordinate water and sanitation activities. Due, in part, to rivarly between the various ministries involved such a committee was never established. Although a committee was set up at the technical personnel level from the MOH and the Water Resources Commission (WRC), even this committee never met.

2.5.2 Sector Investment

Details on investment in the sanitation sector are difficult to obtain, as they are usually lumped with water supply or health activities. Generally, though, they are a small part of either

"water and sanitation" or "health, including sanitation" activities. Everyone interviewed, however, agreed that investment in sanitation activities has received inadequate attention as compared to water supply.

More research is needed to compile a total figure for investment in both water and sanitation. For example, a WSSA document (1988) says that even water and sanitation investment by 1987 reached only 55% of targeted levels. The document lists actual investment for rural sanitation (1984/85-1985/86) as only Birr 400,000, with none projected for 1986/7-1993/4. However, this is presumably only investment through WSSA.

No estimate on the overall amount spent on environmental sanitation can be provided by government, as there are so many agencies working in this field and no one has ever done a comprehensive survey of their activities. Although some

information was obtained from various aid agencies and UNICEF sections, there is not enough yet available to provide any overall assessment of the amount presently being spent on rural sanitation.

2.5.3 Financial policy

According to WSSA (1988), financial policy for sanitation (especially in rural areas) is "not well defined". While there are some donor-funded projects providing subsidized or free latrines, there is no official policy on subsidization of latrine construction. "Rural household ability and willingness to pay for improved sanitation is undetermined, but likely to be very low (WSSA, 1988, p. 9)." There is a need for assessment of these factors and a clear government policy on costs and payment for latrine construction programmes.

3. PRESENT ENVIRONMENTAL SANITATION ACTIVITIES

3.1 Overview

Although the main responsibility for sanitation in Ethiopia lies with WRC and MOH, many other agencies, both governmental and non-governmental, are involved in activities relating to environmental sanitation. In this section, a brief overview will be given of the agencies involved in environmental sanitation, with more detail following on projects of particular interest.

For purposes of this review, investigation focussed on three general categories of agencies, as noted below:

(1) Government agencies

(2) Multilateral and bilateral funding agencies

(3) Non-governmental organizations (NGOs)

As almost all funding from multi- and bi-lateral agencies is through government, comments on their activities will be included with government. NGOs generally operate independently from government, with varying degrees of collaboration/cooperation.

A more detailed review of all sector-related activities is needed in order to estimate present funding and coverage efforts.
The tables included in this section are based partly on detailed interviews, but also on secondary sources.More first hand information needs to be collected in order to verify and complete these tables. The main focus in the following discussion is on health education and latrine construction activities of agencies.

Before going into detail on these programmes, some brief comments will be made about urban sanitation. Detail on urban sanitation activities can be found in the Draft Sector Strategy Paper (Boydell, 1987).

The UNICEF-funded Urban Integrated Basic Service (UIBS) programme spent approximately $500,000 per year from 1988-1990 on sanitation activities, which includes both solid waste and construction of communal latrines. This amount is similar to that spent on the environmental sanitation program as funded by the Health Section.

Almost all NGO staff interviewed were adamant in their feeling that the focus on sanitation, especially latrine construction, should be on urban areas, not rural areas. They felt that the high population densities and lack of sewerage in large cities provided much greater excreta-related health hazards than in rural areas.

3.2 Government and funding agencies

3.2.1 Overview

Table 2 outlines the main government agencies which have some input into water, sanitation and/or health education activities - both rural and urban. Even within these agencies, some have separate departments working on related activities.

In addition to those included in the table, there are a few other organizations which have been mentioned, but are either not directly involved or information was not obtained about their activities. These include:

(i) The Office of the National Council for Central Planning (ONCCP), which is responsible for overall planning of development activities.

(ii) Mass organizations such as REWA and REYA which carry out some development activities.

(iii) A joint Addis Ababa University (AAU)/MOH Community Health Program, which was only briefly mentioned in one project document.

(iv) The Rural Technology Promotion Department, which is part of the Ministry of Agriculture (MOA). This Department was active in villagization programmes, but its present activities were not investigated by the consultant.

There are many agencies working in this sector, with some overlap in the type of work of the various departments and agencies. For example, MOH is responsible for training of sanitarians (a two-year programme) who provide assistance and advice to various ministries and often work closely with NGOs.

It seems that <u>everyone</u> is doing some sort of health/community education - at least on paper. There is little coordination between agencies developing educational materials and no overall assessment has been carried out of the effectiveness of materials or training methods. Target groups for educational materials are too general, and not well-defined. Although there are many agencies involved, the total number of people working in this field is actually very low, according to UNICEF Education Project Officer Barbara Junge. In addition, she feels that there is no one doing particularly innovative work in this field.

Overall, there is little overall coordination and collaboration between government agencies, or with government agencies and NGOs.
Almost all people interviewed felt that rivalry between and within government departments and aid agencies was partly responsible for this. Barbara Junge suggested that, as a start, a documentation system should be set up to register who is actually carrying out

(NB: Information on Urban Activities Incomplete)

Ministry/Agency	Department/Division	rural (R) urban (U) both (B)	Latrine construction	Water Supply	Water quality monitoring	Training	Develop training materials	UNICEF Funding Section	Comments
Ministry of Health	Environmental Health	R	P	P	P		S	WESS	
	Health Education	B				P	P	Health	
	Ethiopian Nutrition Institute	R	P	P				Nutrition	EWWCA/WSSA do water supply and sanitarians supervise latrine construction
	Other Divisions	B						Health	Details on activities and divisions not known-includes training of health personnel, EPI, CDD
Ministry of Education	Primary Education	B				P	P	ESS	
	Non-formal education	B	S				P	ESS	Research on appropriate VIP latrines
	Mass Media & Commu'n	B					P	ESS	"Adult radio listening centres" with trained animateurs
	Dept. of Adult Educ.	R	P				P	—	Women & adult education project-focus on rural women
Water Resources Commission	WSSA/EWWCA	B		P	P	S		WESS	Water & Sanitation, rural water supply, incl. Community Participation Promotion Service
RIBS (UNICEF & Regional Steering Committees with representatives from various ministries		R	P	P		P		RIBS	Integrated services
Ministry of Labour and Social Affairs	MLSA	U				P		ESS	Assist low-income families
	FADEP	R	P	P				Area Dev.	Local NGO working under auspices of MLSA
Ministry of Agriculture	Women's Division	R	S			P		—	Previously received funding from Women in Devel. Section
	Extension Service	R				P		RIBS	RIBS aids agric. activ. Devel. agents do some hygiene educ.
	Rural Technology Promotion	R	S					—	Some work done with latrine construction
Ministry of Urban Housing & Development (and respective city councils)		U	P	P				UIBS	Have city sanitarians (MOH, answerable to City Administration)
Municipalities & Urban Dwellers Association		U	P	P				—	Environmental health, use MOH Sanitarians
Addis Ababa Water & Sewerage Authority		U	P	P	P			—	Water & Sewerage in Addis Ababa
Relief & Rehabilitation Commission		B	P	P				Emergency	RRC implements water and sanitation (RRC has project agreements with NGOs

TABLE 2 - WATER & SANITATION BY GOVERNMENT AGENCIES

(P = PRIMARY, S = SECONDARY)

TABLE 2 - WATER AND SANITATION BY GOVERNMENT AGENCIES

(P = Primary activity, S= Secondary)

which activities in Ethiopia. She also suggested starting with a workshop on "who is doing what" in health education as a way of increasing communication.

There is always great demand for water supply programmes. When it comes to sanitation, many people felt that there was still a need to convince decision makers, as well as rural people, of the need for better household hygiene and sanitation facilities.

UNICEF has some financial input into activities of most of the government agencies listed in Table 2. More details on UNICEF-funded activities can be found in Table 3.

For purposes of this report, investigation focussed on UNICEF-funded projects related directly to rural sanitation. These are:

(i) The Ministry of Health (MOH), particularly UNICEF-funded demonstration projects under the Environmental Health Department (EHD).

(ii) Two UNICEF-funded Integrated Rural Development (IRD) projects: Rural Integrated Basic Services (RIBS) and the WHO/UNICEF Joint Nutrition Support Programme (JNSP).

(iii) The Ministry of Education (MOE).

(iv) The Water Resources Commission which, although not directly involved in sanitation, is funded by the UNICEF WES Section. As there is a need for more collaboration in water and sanitation activities, the WRC has been included here.

3.2.2 Ministry of Health

All MOH activities relate to promotion of PHC in both rural and urban areas. There is a wide network of health personnel, down to the Community Health Assistants (CHAs) at village level. All health personnel receive some training in environmental sanitation, and are involved in health education and latrine promotion. In addition, regional level Sanitarians receive two years training specifically in environmental sanitation. The sanitarians are responsible for supervising latrine construction.

At national level, the Health Education Department develops and produces health training materials. However, this department has no comprehensive list of training materials which are being developed by other agencies.

The Control of Diarrhoeal Diseases (CDD) programme includes a health education component, including community involvement in "making sure that the community constructs and utilizes latrines" (MOH, 1983). There are two aspects of this program - preventive and curative. The UNICEF Health Section sees its role as promoting the curative aspect, including use of Oral Rehydration Therapy, while it is the role of the WES Section to assist with preventive activities such as latrine construction.

UNICEF SECTION	GOVERNMENT AGENCY AND DIVISION	IMPLEMENTATION RESPONSIBILITIES	UNICEF-FUNDED PROJECTS	COMMENTS
Water and Enviornmental Sanitation	1. Water Resources Commission	1. Rural water, urban water & sanitation including health edu. at water points	1. a. construction of new projects; b. rehabilitation of old supplies c. training; d. programme support, monitoring & evaluation	1. Proposed Women's Unit will focus on women's involvement in water and sanitation programme
	2. Ministry of Health Environmental Health Department	2. Rural Sanitation and some water supply .	2. Latrine construction, spring protection, hand-dug wells, training of CHAs & Sanitations. 22 awrajas in regions	2. Until - 1990 was under UNICEF Health Section.
Health and Nutrition	1. Ministry of Health (various divisions)	Health services & education	1. a. Accelerated Child Health Development (inc. Control of Diarrhoea Diseases) b. MCH/Family planning-coordinate/integrate services, including environmental health c. Training for Awraja Health Service-including environmental health, health education d. Health Learning Materials Production & Health Education (HE division) e. Area-based Community Health Services-inc.training in evironmental health & social mobilization.	CDD seen by Health Section as WESS responsibility for preventive measures, Health Section responsibility for corative
	2. Ethiopian Nutrition Institute		2. a. Joint WHO/UNICEF Nutrition Support Programme, incl. latrine construction b. Nutrition education/communication	Latrine are "unimproved" 1989 - built 400 1990 goal - 2000
Education and Social Service (including UIBS)	1. Ministry of Education a. Primary education b. Non-formal education c. Mass Media & Communication	Education	1. a. Develop training materials (including health) and teacher training b. Establish Basic Educ.Dev. Centers incl. funding for Project Officer doing research on appropriate technology, incl. pit latrines c. Radio & TV, incl. health education,	
	2. Ministry of Labour & Social Affairs	assist low-income households	2. Integrated services in some areas as UIBS incl. training of mothers in environmental health and training at MLSA in social mobilization	
	3.Ministry of Urban Housing & Development (in collaboration with relevant Govt. Agencies)	Urban Integrated Basic Services	3. Integrated services, incl. latrine construction, water supply and health education	Latrines are communal VIPs
Area Development RIBS and PADEP	1.RIBS Steering Committees at Regional & Awraja (MOH, WRC, MOA)	Rural Integrated Basic Services	1.Integrated services, incl. community organization, water, latrine construction, PHC	Latrine are "unimproved"
	2. Ministry of Labour & Social Affairs	assistance to low income families	2. Family Development Project (local NGO working under MLSA), focus on women & children, incl. latrine construction, water, health education	Up to 1987 - 8'000 latrines produced (type not known)
Rehabilitation & Disaster Preparedness	WRC (WSSA, EMNCA)	Relief and Rehabilitation	Water - Rehabilitation of existing supplies and provision of new supplies in drought and War - affected areas Sanitation - Sewerage and solid waste for Asmara (inc. communal VIPs)	

TABLE 3 - 1990 - UNICEF ASSISTANCE TO WATER AND SANITATION

TABLE 3 - UNICEF ASSISTANCE TO WATER AND SANITATION

The **Environmental Health Department** is the department with primary responsibility for rural sanitation activities, including provision of "small scale" rural water supplies. Although exact figures were not available, EHD staff say that they receive a very small part of the overall MOH budget which, mainly goes to training, EPI and other PHC activities. According to UNICEF Health Section staff, EHD links with other departments within MOH need to be strengthened and is more important than simply constructing additional latrines.

Despite the lack of staff and funding, the Sanitation Sector Strategy Paper (1987) quoted the MOH as saying that 230,000 latrine were built (presumably since the TYPP started, although this was not stated). However, many of these were reported as collapsed or abandoned.

The main non-governmental, financial assistance received by the Environmental Health Department is from:

(i) SIDA for water supply and sanitation projects in Harerghe

(ii) Belgian Survival Fund (BSF) for water and sanitation projects integrated with IFAD agricultural projects in drought-affected areas, including Wollo, Harerghe, Sidamo and Shoa. BSF provides funds for vehicles, imported materials, pumps and other supplies, but has no staff working on the project or based in Addis Ababa.

(iii) UNICEF for demonstration projects in 11 awrajas, with funds totalling approximately $200,000/year.

(iv) WHO for water quality control laboratory equipment and training.

The main division within EHD responsible for these projects is the Water Quality Control and Waste Control Division, with the following Sections:

- Water Quality Control
- Small Scale Water Supply
- Pit Latrine Management
- Wastewater Control

The UNICEF, SIDA and BSF projects are mainly the responsibility of the Small Scale Water Supply and Pit Latrine Management Sections. Water supply and sanitation activities are generally carried out simultaneously.

There is also a Health Education Department within EHD, but so far it consists of only one staff member. The Department also has a video donated by CIDA and had an expert developing materials and training. However, copies of these materials were not obtained, so no assessment was made. Other EHD staff work with MOH staff in developing radio and TV shows.

At local level, EHD staff work through the PA Executive Committee, unless a Water Committee has already been set up by WSSA. The PA committee organizes a mass

meeting, labour, local materials and other necessary community inputs. The PA Chairman takes responsibility for maintenance of water supplies.

There is some collaboration with WSSA and EWWCA at local and regional level, but only in areas where personal relations between staff members are amicable.

Water supply activities of EHD include only spring protection and hand dug wells. In the past, some India Mark II pumps were provided through UNICEF, but the EHD found that they were constantly breaking down. They prefer the Mono pumps which are provided by BSF, and expressed interest in obtaining these pumps through UNICEF, as well.

In the past five years, the EHD has been promoting the VIP latrine, and conducting research on appropriate and affordable designs. In project areas, this has helped to change the image of latrines as dirty and smelly. Pits are generally only 2-3 meters deep, although in most areas they could be dug deeper. The vent pipe is usually made of corrugated iron or cement blocks. Stainless steel mesh is used as a cover for the vent pipe.

According to EHD reports (EHD/MOH, 1990), over the 18 months preceding December 1989, 606 demonstration latrines were built for 3030 people and 23 sanitarians and 265 CHAs received refresher training. No assessment has been done of the actual use of these latrines, changes in community attitudes or effectiveness of training.

According to some EHD staff, organizing the community is not difficult "since the Revolution". However, others say that in some areas where latrines are not considered a high priority it is difficult to gain community support for activities. As this is a demonstration project, the MOH subsidizes the capital costs of latrine construction, with the community providing labour and local materials. (The only exception to this is in the Debre Zeit project, which is described below.) The cost of materials for latrines ranges from EB 65 to 200.

Constraints identified by MOH in the program include:

- unclear regional project accounts sent to the Finance Division, which hinders obtaining donor funds
- delays in receiving donor funds
- shortage of local construction materials
- lack of truck for transport
- delay of periodical reports from regions
- lack of storage facilities at EHD

Most of these relate to difficulties with management and lack of materials, not to problems with promotion or acceptance within the community.

For 1990, the project goals for UNICEF-funded activities are to:

(1) reduce infant and child mortality by improving VIP latrines to successfully combat excreta-related communicable diseases and
(2) spring protection to provide clean water to villages at reasonable distance to reduce walking time for women and children.

The specific objectives for the project are similar to those in the past:

(1) popularize VIP latrines through pilot projects and demonstrations
(2) provide 59,400 people with potable water supply schemes
(3) provide about 2,200 households with VIP latrines

This includes training of CHAs and sanitarians. Work was originally targeted for 22 awrajas, to correspond with the Awraja Health Management Program, funded by the UNICEF Health Section. However, for this year, only ten awrajas have been targeted to reduce logistic and management problems.

Methods of project monitoring and evaluation are not adequate in the present project document, consisting mainly of periodic field visits and reporting on numbers of latrines built and people trained.

For this report, it was only possible to visit two demonstration villages outside of Debre Zeit, only an hour's drive from Addis Ababa. This is a relatively prosperous farming area, with inputs such as concrete readily available in the nearby town. Villages were chosen because they were known to be active in development activities. Baseline surveys were carried out of these villages before commencement of project activities.

Latrines in this area are square with mud walls and galvanized iron or thatched roofs. Depths range from 1-2 meters. Up to three cement lining rings (EB 15 each) are used, depending on the soil conditions. The slab is made of reinforced concrete, at a cost of approximately 25 birr. Cement blocks are used for the vent pipe (EB 20). The vent pipe, slab and rings are all made on site. Sand and gravel needed for construction are obtained from Mojo (a nearby town) at a cost of approximately EB 20 per latrine. The fly screen (EB 3) comes via Ministry of Health procurement from Addis Ababa. The cost estimates given here are on the high side - staff there say that the total cost of materials is usually approximately EB 65.

Latrines inspected were all very clean inside, but most did not have doors. We were told that they were used by all family members, including children. A few flies were evident in some latrines. There were open areas between the slabs and soil in some latrines, allowing light to enter, and potentially dangerous.

In the villages visited, those receiving assistance with latrine construction were chosen on a first-come, first serve basis. This year, villagers will have to pay for latrines, although they will be allowed to pay after their harvests later in the year. Activities are organized through Water and Sanitation Committees. The villages also have separate PHC committees.

Theoretically, the sanitarian for the region inspects latrines twice a week. However, considering her other duties, it is questionable whether this happens in practice. The female sanitarian will soon have further demands on her work, as she will be responsible for sanitation within Debre Zeit town, as well.

3.2.3 UNICEF-funded IRD Projects

RIBS is a UNICEF-funded project which works at local/awraja level to assist the community in identifying and meeting needs, such as forestry projects and provision of water supplies. It is managed through Project Coordinators at regional Level, who work through village-level organizations, and awraja and regional level steering committees with representatives from MOH, MOA, and WRC. At national level, there were plans for a National Steering Committee under the ONCCP, but so far it has not been possible to form such a committee.

According to various reports and interviews, the project is generally successful in achieving its goals. However, the project has operated independently of other UNICEF sections, with no technical input from the WES Section. According to an assessment carried out in 1987 (Maeda, et al), a strong education component is lacking, resulting in misuse of VIP latrines. Exact figures on the number and type of latrines built were unavailable or questionable (see Table 1, Section 3.2.1). A 1987 report (UNICEF) stated that "More than 40,000 pit latrines and 28,000 garbage pits were dug. Education on proper use of latrines was given, both by health workers and RIBS coordinators."

It is not clear whether the technology used in the RIBS programme provides adequate sanitation for rural households. A mid-term review stated that "The VIP latrine is replicable, but is expensive and involved community knowhow, hence constraining the programme (GOE/UNICEF, 1988, p. 85)."

According to K. Daka, RIBS Project Officer, most latrines constructed are "traditional", consisting of an unlined hole with no slab, surrounded by walls of mud or other local materials, with thatched roofs. When questioned as to whether these caused more health problems than they alleviated, he admitted that no studies on this had been done, but that "...at least people are getting the idea that latrines were a good thing to have.

The JNSP, funded by both UNICEF and WHO, also has a sanitation component. This programme is administered by the Ethiopian Nutrition Institute (part of the MOH), with supervision by a National Core Group consisting of ENI, donors and the ONCCP. There are also regional and sub-regional steering committees. The main aim is to improve the nutritional status of children through various community activities such as EPI, agriculture, water and improved sanitation.

The water and sanitation component is funded through WHO, with $50,000 allocated in 1990 for construction of 2,000 latrines. Due to supply problems, only 400 latrines out of a goal of 3,000 were built in 1989.

The JNSP started by promoting VIPS, but they were considered "too expensive", so now use "ordinary pit latrines". Slabs are constructed by one village cooperative and delivered to villagers. (Dr. Nyunt-Nyunt Nyii, Head of Nutrition Section, thought slabs were provided at no cost, but said this needs to be checked.) Construction is supervised by a MOH sanitarian.

Dr. Nyi inspected one latrine, which she found in good condition, although the slab construction was poor.

3.2.4 Ministry of Education

Through the Education and Social Services Section, UNICEF supports development of educational materials, many of which have a health education component. This includes mass media, literacy and school materials.

A full-time UNICEF project officer also works at the MOE's Burayo Basic Technology Centre, doing research on appropriate technology, including VIP latrines. Both NGOs and government draw on the services of this center.

Building technicians are based at Community Skills Training Centres in each awraja to supervise construction of schools and other educational infrastructure, including school latrines. Most schools have poor, if any, sanitation and water facilities. For example, one study showed that although 13 out of 16 schools have latrines, only six are in sanitary condition (Minas and Junge, 1983). As several people pointed out, teaching about hygiene and sanitation in the schools does not have much purpose if there is no water or latrines at schools or homes with which to practice proper hygiene.

The MOE has close links with the Health Education Division of the Ministry of Health in developing training materials, but no overall assessment of health education materials used and their effectiveness has been carried out. MOE also has an administrative structure which reaches to community level, so it can be the right agency through which to establish demonstration projects.
Teachers are usually considered leaders in the community and have close links with other community leaders.

3.2.5 Water Resources Commission

WES Section funding for water activities is almost exclusively through the Water Resources Commission. Until recently, UNICEF inputs have been mainly used for supplies, with reporting based on numbers of meters drilled and population served. At present, there is more direct involvement through the UNICEF Drilling Advisor and Water Project Officer. However, the main focus is still on "hardware" aspects of water projects. A proposal for UNICEF funding has been formulated and discussed with the WRC to establish a "Women's Unit" in order to promote greater involvement of women in both water and sanitation activities.

Two main divisions of the WRC are responsible for implementing programmes:

- WSSA, which is responsible for design, planning, operation and maintenance

- EWWCA, which is responsible for construction

Proper sanitation at water points is the responsibility of both WSSA and EWWCA, as it relates to proper construction as well as design, operation and maintenance. Maintenance of water points is the responsibility of community-level Water Committees.

Under WSSA, there is a Community Participation Promotion Service (CPPS), set up to manage efforts to involve the community in all stages of development of rural water supply. This includes assessment of project areas, establishment of Water Committees and health education. However, the CPPS suffers from lack of funding

and staffing and lack of support within the WRC. Therefore, it is not particularly effective.

Through WRC, two integrated water and sanitation projects are being established. Theoretically, these projects will be carried out in collaboration with the MOH. However, the project agreement for the Southern Region Water and Sanitation Project (funded by CIDA) has not yet been signed due, in part, to disagreement between WRC and MOH over how it should be managed. Theoretically, management will be through two Inter-ministerial Committees, one at policy level and one at technical level. This arrangement, and other project activities could be used as a model for future cooperation. FINNIDA is also funding a project managed through both the WRC and MOH. The status of this project is not known, but perhaps may also provide a model for future work.

3.2.6 UNICEF

Within UNICEF, it appears that there is little collaboration between sections funding work related to sanitation. It is only in the past year, for example, that the WES Section has had any involvement in water activities of the RIBS and UIBS Sections - which is a major component of their programmes. There has been no sanitation specialist within any section of UNICEF. The Health Section has had some input into RIBS and UIBS programmes, but most UNICEF staff interviewed felt that all programmes would be strengthened by increased collaboration.

3.2.7 Other funding agencies

For this report, it was not possible to obtain information on funding by most other agencies. However, it is known that most multi- and bi-laterals have some input into water and health activities, which usually involves some health education or sanitation component. Information from the few agencies contacted is discussed below.

The main focus of WHO activities in Ethiopia is on the AIDS programme. WHO used to have a sanitation specialist in Ethiopia, but the government preferred the funds to be used for training of Ethiopian staff. The WHO Representative is enthusiastic about promoting "environmental sanitation" days similar to those in Nigeria, where everyone spends one day a month cleaning up the city or town where they live. WHO inputs into water, sanitation, CDD and health education total less than $200,000, similar in amount to UNICEF sanitation funding. WHO collaborates with UNICEF on some projects, such as the JNSP.

CIDA's main input into water and sanitation is through the Southern Region Water and Sanitation Project, mentioned above. Through this project they are funding a specialist in community organization, who also is giving a two-week course for water technicians being trained at the Arba Minch Training Institute.

EEC funding is mainly for water activities, including the Western Region Water Supply Projects and Addis Ababa Water Supply. Funding for sanitation is through European NGOs, most of which are not active here, but channel funds through Ethiopian NGOs. Funding for sanitation is not itemized separately. Total funding for water and health-related activities, which includes some latrine construction, was approximately U.S.$1.5 M. Although this appears to be a

substantial amount, further investigation is needed to determine how much of this was spent on environmental sanitation.

SIDA and BSF provide direct funding for environmental sanitation through the Environmental Health Department/MOH. SIDA also provides fund for water supply activities through the WRC.

UNDP supports training of water technicians at Arba Minch Training Institute.

3.3 Non-government organizations

There are over 100 NGOs, both local and foreign, operating in Ethiopia. Most of them are members of the Christian Relief and Development Association (CRDA), which acts as an "umbrella organization" for NGO activities. A CRDA Water Resources Group has about 40 members, many of which are also involved in sanitation activities. Health activities are also encouraged and monitored through a health expert based in CRDA. Although workshops are frequently held on both topics, water and health, they tend to be separate, with "water people" attending water workshops and "health people" attending health workshops.

Most NGOs have their official agreements with the Relief and Rehabilitation Commission (RRC), which, according to some, does not encourage collaboration with government. For example, only ten of those working in water supply are registered with the WRC. Unless there are contacts at local or informal level, the WRC is not informed of other NGO activities. The same applies for other government agencies. NGOs generally avoid working with the government bureaucracy and feel they achieve more by working independently. However, at regional and local level, they often work very closely with government officials, and support training of CHAs, TBAs and other development agents.

Sanitation activities of NGOs are usually limited to health education (usually using MOH-prepared materials) and construction of some demonstration latrines. Construction of latrines is not considered a priority for rural development activities.

Nine NGO staff members were interviewed for this report. A brief summary of their sanitation-related activities can be found in Table 4.

Under latrine construction, if secondary, only build demo latrines

NGO	rural (R) or urban and rural (B)	funding (F) operation (O)	Activities: Latrine construction	Water supply	Support MOH training	Develop training programmes	Direct training by NGO staff	Comments
Lay Volunteers International Association	RURAL TOWNS	O	P	P	P			Focus on rural towns integrated
Food for the Hungry International	R	O	S	S	P	P	P	Work extensively thru schools
EECMY - Mekane Yesus	R	F,O	S	P	P	P	P	Sanitation includes-inspection of tea houses latrines built in some areas
World Vision	R	F,O	S	P	P			Integrated Rural Development
Redd Barna	B	F,O		P		P	P	Integrated Rural Development Large Urban Project
Oxfam	B	F,O		P		P	P	CPPO does limited HE
Terre des Hommes	R	O			P	S	S	Program suspended-in Wollo focus was on orphanage & outreach/clinic
Canadian Physicians for Aid and Relief	R	O	S	P	P			Focus on PHC-CHAs sometimes build latrines

TABLE 4 = RURAL WATER AND SANITATION BY SELECTED NGOs

(P = PRIMARY ACTIVITY, S = SECONDARY ACTIVITY)

TABLE 4 - WATER AND SANITATION BY SELECTED NGO's

(P = Primary Activity, S = Secondary)

Food for the Hungry International (FHI) focuses mainly on health education, with emphasis on school activities. They have developed some drama and songs for sanitation promotion. Since rural communities have higher priorities than sanitation, FHI decided not to have a latrine construction campaign which they felt would ruin their credibility with the communities. However, some demonstration latrines have been built at clinics or the homes of CHAs or TBAs. Whether they are used or not is not know. The VIP spiral or a standard square design is used, with all locally available materials. Even the one bag of cement used to strengthen the slab of logs is available locally, but is sometimes provided at cheaper cost by FHI. The total cost of latrines is around EB 200, which seems high, considering the extensive use of local materials. VIP demonstration latrines inspected by the FHI Health Coordinator are dark inside with no flies.

The Health Coordinator said that monitoring and evaluation techniques of FHI and many other NGOs were weak and needed strengthening. He also expressed the need for practical education for field staff in community education techniques, focusing on active participation of the audience—such as using models, drama, song, etc.

World Vision promotes IRD projects, including PHC, demonstration pit latrines, refuse disposal, CDD and water supply. They carry out baseline surveys and have developed a methodology for monitoring and evaluation. However, the document used was not obtained as it is only available "for internal use". The same applies to health education materials which they have developed themselves to be used by their "Community Based Technical Program".

VIPs are considered too expensive by World Vision, which has no latrine construction programme. They do, however, have a water and sanitation engineer.

Oxfam's rural activities focus mainly on water and agricultural activities, some of which are managed by local NGOs or churches. Oxfam has especially good relations with WRC, which were mainly developed through the Wollo Water Programme, which has now been disbanded due to security reasons. A WRC Community Participation Promotion Officer (CPPO) has been seconded to Oxfam and is now working with them in the Southern Region. Although trained in health education, her education activities focus on sanitation and care of water points.

Redd Barna's main work in sanitation is in urban areas, where they do some construction of pit latrines. The problem is that latrines fill up quickly and the municipality does not have adequate capacity for emptying. They think that UNICEF should concentrate its efforts on urban sanitation, including extending and improving sewerage and drainage in Addis Ababa.

For rural areas, Redd Barna has integrated development projects which sometimes include demonstration latrines. Although field-based project staff are pushing for more latrine construction, the Program Manager thinks the idea is "ridiculous" due to the high cost, which he quoted as EB 300/latrine. Redd Barna studies of rural areas never show latrine construction as a priority, but do indicate interest in improved household hygiene.

The Ethiopian Evangelical Church/Mekane Yesus (EECMY) is involved in integrated rural development activities, including primary health care, water and sanitation. Although they do use the MOH curriculum for some of their training,

they also have two staff members developing training materials and methods. They have found some interest in latrine construction in scattered, rural areas, which they feel should not be neglected completely in latrine promotion campaigns. EECMY has a water division, but there is little collaboration between the water and health staff.

Lay Volunteers International Association (LVIA) has five volunteers working on integrated development projects in two towns (population, 4,500 and 2,500) in North Shoa. After working there for several years, they felt that it was appropriate to introduce latrines. The Director worked with the Burayo Basic Technology Center (funded by UNICEF Education Section) in developing appropriate spiral, VIP latrines. Demonstration latrines were built at the LVIA compound, which generated the interest of local staff members, and, in turn, the community. They have had requests from the community for assistance in constructing over 100 latrines and now have one volunteer working full-time on latrine construction. Latrines cost approximately EB 250 each.

LVIA has introduced the concept that VIP's need 7-10 litres of water per day to accelerate excreta decomposition and increase the life span of the pit. Due to the scarcity of water in the rural areas, this mistaken assumption has reduced the demand for pit latrines. Proper sizing alleviates the problem of short life span of the pit.

Canadian Physicians for Aid and Relief (CPAR) focus on PHC, agriculture and water supply in North Shoa. They work closely with MOH in setting up health posts, clinics and a training center, and training of health assistants. Some demonstration latrines are built at health centers, and the Director was not sure if they were used. Generally, he feels that latrines will not be accepted in rural areas until the perception that they are "dirty, smelly and not private" is changed. He feels that there is potential for setting up latrine construction programmes through private entrepreneurs.

4. NEEDS OF THE SANITATION SECTOR

4.1 Introduction

Worldwide, sanitation has remained the "poor cousin" to water in the International Drinking Water Supply and Sanitation Decade. Health education and community organization efforts have lagged even further behind.

Despite major efforts to increase health education and community mobilization activities, sanitation development in Ethiopia has lagged behind other development activities. Priority at both national and local level is often given to other needs, such as agriculture and water. Increased efforts in health education and "social marketing" must be made before any large-scale latrine construction programme is adopted.

Proper excreta facilities are sorely lacking in both rural and urban areas. Further investigation is needed to assess urban needs, which have not been covered in this report and, according to some people, are where most sanitation activities should be concentrated.

The strengths and weaknesses of the sector are given below and, in most cases, apply to both rural and urban areas. Focus here is on the weaknesses which can be addressed by UNICEF assistance in the next few years, with an ultimate goal of increasing sanitation coverage in both rural and urban Ethiopia.

4.2 Strengths of sanitation sector

The main strengths of the sanitation sector in Ethiopia are in the following areas:

(a) Human resources

There are a number of qualified, experienced, enthusiastic people working in the field of sanitation/health education. With the right resources and support, these abilities could be put to better use.

(b) Community organization

At local level, there are existing organizations through which development activities can be organized. In addition to the Peasant's Association, many villages already have PHC Committees, Water Committees and/or Development Committees.

(c) Appropriate sanitation technology

Some research has already been carried out through MOH, MOE and a few NGOs on a safe, yet inexpensive, pit latrine design.

(d) Health education

Health education is given high priority by the government and is incorporated into many development activities through various ministries.

4.3 Limitations of Sanitation Sector

Despite the accomplishments and lessons learned in the past few years, there are still many weaknesses which need to be addressed before any substantial progress can be made in improving environmental sanitation in rural Ethiopia. These include:

(a) **Lack of recognition of the importance of sanitation/health education** activities - either as separate projects or in conjunction with water supply.

(b) **Lack of collaboration or coordination** between agencies involved in the sanitation sector. This applies to all agencies -government, NGOs, UN and other funding agencies--even within UNICEF itself.

At national, governmental level, this division is partly due to the official division of roles, which gives WRC responsibility for urban water supply and sanitation and rural water supply. The MOH (mainly the Environmental Health Department) is responsible for rural sanitation, and some rural water supplies.

Even at local level, there are usually separate committees for health and for water, resulting in an unnecessary division of activities. For example, sanitation at water points is considered the sole responsibility of Water Committees (and, in turn, WSSA), so is not addressed by MOH personnel or health committees.

(c) **Planning, monitoring and evaluation methods are not well developed**, either by government or by most NGOs. Baseline surveys, reporting and evaluation are usually based on simple statistics, such as numbers of households with latrines and "safe refuse disposal", number of CHAs trained, number of community members "taught", etc. Even these surveys are limited in number, unpublished, and based on small sample sizes.

Therefore, information lacking includes:

- accurate data on rural and urban sanitation coverage
- documented case studies of existing projects, including reasons for success or failure, technology used and other lessons which could be applied to future planning
- in-depth studies on household hygiene, "knowledge, attitudes and practices (KAP)", and present demand for improved sanitation

In addition, there is no system for documenting and disseminating information on the water supply and sanitation sector. Obtaining reports becomes a bit of a "hit and miss" affair, compounded by the fact that permission from higher authorities is often needed to obtain official planning documents.

(d) **There is no comprehensive, realistic sector plan**, including detail on areas to be served, details on project planning, monitoring and evaluation, budgeting and finance, manpower requirements, etc.

The target of providing 80% coverage in rural areas (6 million latrines) as stated in both the National and WSSA Ten-Year Perspective Plans are very general and completely unrealistic.

(e) **Funding** is extremely limited for both rural and urban sanitation. No government funding was allocated for rural sanitation in the TYPP, despite above-mentioned target of 600,000 latrines per year, which would have cost approximately 120 million birr.

The major agency responsible for rural sanitation, EHD in the Ministry of Health, receives limited funds for latrine construction for specific projects from BSF and SIDA, with additional input from UNICEF. Even within the MOH, members of the EHD feel their program is given low priority.

(f) **Health education and "social marketing"** activities are limited. It is questionable whether health education as carried out is having any impact on rural communities. There appear to be several problems with the present system, although further investigation is needed to clarify the situation:

- there is little collaboration between the many agencies (both government and NGOs) which are involved in health education activities

- health education materials are considered by many to be inappropriate (both in reading level and information included) and irrelevant to rural dwellers, therefore ineffective

- teaching methods, in both formal and non-formal education, are generally in a standard, lecture format, with little interaction with the target audience

- "social marketing", the use of advertising and marketing techniques for promoting hygiene and latrine construction, is virtually non-existent

(g) **Community organization and participation** has been given high priority by government. However, success at achieving full involvement and support of the community is not always achieved.

The CPPS in WSSA has been ineffective in carrying out their work. EHD staff members are much more enthusiastic about the success of their efforts, but further analysis is needed as to whether the community has genuinely been committed and remains committed to sanitation projects.

(h) **Women's involvement** in water supply and sanitation projects has been neglected, despite their almost exclusive role in providing adequate water and sanitation for their families. A proposal for a "Women's Unit" within the Water Resources Commission should help to increase women's involvement in water and sanitation projects.

(i) **Appropriate pit latrine design** appears to be missing in some projects. The concept of the VIP latrine, which, when constructed correctly, eradicates smells and flies, is completely misunderstood by many. It is discouraging to find that some projects, including the UNICEF RIBS project, are promoting latrines which may be actually increasing health hazards.

Some research has been, and is being, carried out on appropriate pit latrine design by MOH, MOE and some NGOs. However, there has been little, if any, dissemination of results to others. There are few standard designs or reports on research.

(j) **Water quality surveillance** by both WSSA and MOH has been limited, due to lack of funding and supplies. In addition, responsibility for this aspect of water supply and sanitation is unclear, resting with both the MOH and WSSA.

In many areas of Ethiopia, reducing water collection times and increasing water quantity are the main purposes of installing new water supplies. However, that does not absolve government or NGOs of the responsibility for keeping accurate records on water quality, especially before and after new schemes are installed.

There has been little in-depth investigation of diseases related to poor water quality, such as fluorosis and guinea worm.

Although an overall part of community sanitation, proper protection and sanitation at water points deserves special mention. This is mainly seen by MOH staff as the responsibility of WSSA and local water committees.

Sanitary conditions can reduce the incidence of guinea worm, which, although not a major problem in Ethiopia, is a special focus of UNICEF's worldwide activities and needs further investigation.

5. RECOMMENDATIONS - HOW CAN UNICEF HELP?

5.1 Introduction

The needs in improving the sanitation sector are many, and UNICEF must focus its limited resources (both human and financial) on where it can have the greatest effect. In this section, recommendations are made as to how the UNICEF Water and Sanitation Section can best assist rural sanitation efforts in Ethiopia.

Some of the activities are ongoing, advocacy-type activities, which can commence through discussions (by all WES Section staff) with various government officials by existing WESS staff. However, most activities need full-time input from a person experienced with environmental sanitation issues. Since it may take several months to fill the new post for a Project Officer in Sanitation, it is considered best to identify a consultant who can begin to carry out some of these activities.

The UNICEF consultant and/or sanitation officer should not work in isolation from government agencies, especially the EHD/MOH, which is the main body responsible for rural sanitation. The recommendations given here should be discussed with the EHD and, if possible, personnel from that department allocated some time to work with UNICEF on some of the activities listed below.

Once the sanitation project officer arrives, it is expected that s/he will be based in the Environmental Health Department (MOH), which will greatly facilitate his/her ability to work with department officials. In the meantime, if a short-term consultant is hired, his/her placement in the EHD should also be considered, depending on his/her specific terms of reference.

It must be remembered when considering the recommendations given below that the goal of improved environmental sanitation is to improve health. Thus, it includes not only improved water and sanitation facilities, but a change in health attitudes and practices. Resources are so limited in Ethiopia, areas so isolated and knowledge of "modern" pit latrine technology so limited, that it is best at present to concentrate on improving reporting methods, improving health education and "social marketing" techniques in order to increase awareness of and demand for improved sanitation, at both national and local levels.

Rural latrine construction programmes should concentrate on the more densely populated areas, specifically rural towns. Some villagized areas may also be considered. However, a careful assessment of the stability of these areas should be considered before any project commences, as many villagized areas are becoming "unvillagized" through rural dwellers moving back to their original land.

A greater commitment at national level, greater demand at local level and more information on various subjects is needed before any large-scale promotion of VIP latrines can be considered in Ethiopia. Therefore, the focus in the next few years should be on the following activities:

(a) Advocacy - promoting awareness of the need for sanitation as well as water supply
(b) Improving integration and coordination of sanitation activities
(c) Planning, monitoring and evaluation
(d) Development of a detailed sector plan
(e) Demonstration projects

5.2 Recommended activities

5.2.1 Advocacy

Promotion of the need for an integrated approach to water and sanitation should be carried out at national level, among policy makers, NGOs and funding agencies.

Activities should include:

(a) Promotion of this concept by all WESS staff at all possible opportunities, including discussions with government officials and attendance at workshops.

(b) Attendance and giving of presentations (mainly by sanitation officer) at various workshops, including those focusing on health, water supply, rural development and, of course, sanitation.

(c) Organization of a workshop (perhaps through CRDA) combining health and water personnel.

Participation in these activities would have the added advantage of broadening the knowledge of WESS staff on development activities related to water and sanitation.

5.2.2 Coordination and collaboration of government and aid agencies

In the long-term, there is a need for some form of national coordinating committee for water and sanitation activities. However, before this can be formed, greater collaboration should be established between the WRC and MOH, the main government bodies working in this sector. In addition, there is a need for better coordination between NGOs and government, among NGOs themselves, and within UNICEF Sections.

Recommended activities include:

(a) Starting within UNICEF by increasing information-sharing between sections involved in this sector, and possibly organizing joint projects.

(b) Establishing an committee of donor agencies (including NGOs) to share information on sector activities.

(c) Investigating informally the reasons that a National Action Committee was never formed and recommending on how the constraints to its formation can be resolved.

(d) If agreement can be obtained, establishment of a joint MOH/WRC "Technical Committee" for information-sharing at technical level.

(e) Investigating ways in which UNICEF can assist in strengthening the CPPS in WSSA, including improvement of links between CPPOs and extension worker from other government agencies.

5.2.3 Planning, monitoring and evaluation

The main focus in the next six months of the sanitation officer/consultant should be on:

(a) Collection of additional information as outlined below

(b) Strengthening the capacity of UNICEF to monitor its inputs into the sector and, in turn, of the MOH to plan, monitor and evaluate all of its activities.

Activities include:

(a) An overall survey of all funding and activities in the water supply and sanitation sector, including NGOs, all government agencies, bilateral and multilateral funding agencies. This survey would include information such as manpower available, monitoring and evaluation methods, areas of work, past accomplishment and future plans.

(b) Further research and evaluation, including:

- Documentation of existing projects, including a realistic assessment of success and failure, present KAP of rural Ethiopians and evaluation of present pit latrine technology as promoted by UNICEF, government and aid agencies.

- Evaluation of health education materials and methods. If time and/or funding is limited, the study should focus on health education presently funded by the various UNICEF sections.

- Appropriate and affordable VIP latrine technology for different areas of Ethiopia.

- Attempting to achieve a more accurate assessment of sanitation coverage in Ethiopia.

(c) Development of appropriate training materials, focussing on environmental sanitation and VIP construction, use and maintenance.

(d) A study of the incidence of guinea worm in rural Ethiopia as part of a worldwide effort towards eradicating this disease by the mid-1990's.

(e) Setting up a documentation center for information on water supply and sanitation, including compilation of an annotated bibliography.

(f) Development of more systematic and in-depth planning, monitoring and evaluation of projects, especially for environmental sanitation activities carried out by the EHD/MOH (including water quality testing).

5.2.4 Development of a detailed sector plan

In order to obtain external funding and develop long-term plans, a more detailed, sector plan is needed. However, additional information as outlined above must be obtained before a realistic plan can be developed. This includes present available funding, sanitation coverage, health education needs and a well-

developed programme for monitoring and evaluation.

In addition, inter-agency collaboration should improve through the efforts described above, which would make development of a sector plan a more cooperative exercise. If UNICEF is to provide assistance in this work, it is best that the Sanitation Project Officer be involved.

For all of these reasons, it is best to consider writing of a sector plan as a "second stage" to be carried out after the activities described above have been completed.

5.2.5 Demonstration projects

While demonstration projects are an excellent means for promotion of environmental sanitation activities and VIP technology, neither UNICEF nor EHD at present has the capacity to plan and execute a project which includes the necessary inputs, both social and technical. As with a sector plan, demonstration projects should be delayed until more information is available about present projects and the UNICEF sanitation officer is in place.

In the long-term, two types of demonstration activities can be considered:

- demonstration projects encompassing all aspects of water supply and sanitation
- demonstration latrines constructed somewhere in Addis Ababa to be used as demonstration simply of the appropriate technology

5.2.6 Action and Staffing

Detailed guidelines on implementation on these activities can be found in Annex 3. Some of these activities can be carried out by short-term consultants, as outlined in Annex 4. In this way, WES Section input into sanitation can continue immediately from the work of the present consultant, without waiting for the Sanitation Project Officer Post to be filled.

ANNEXES

ANNEX 1

TERMS OF REFERENCE
FOR
A Short-term Consultancy on Sanitation and Community Participation

BACKGROUND

The Water Section has recently taken on responsibility for the sanitation sector on UNICEF's activities in Ethiopia. In order to best utilize the human & financial resources available, a full assessment is needed of past activities and the present situation with regard to sanitation in the 'Rural' areas of Ethiopia. A consultant with training and experience in both the "hardware" and "software" aspects of sanitation projects is needed to carry out this study. This Consultancy is expected to include a review of the Women's involvement in the Sector and come up with a recommendation for an effective integration of Ethiopian Women in all Water and Environmental Sanitation Activities.

In addition, assistance is needed in developing a survey of NGO water and sanitation activities in Ethiopia.

SCOPE OF WORK:

I. Sanitation

I.1 Plan of Action (25 Days)

The main task of the consultant will be to formulate a plan of action for the sanitation sector in UNICEF. To achieve this objective the consultant will:

a. Investigate how UNICEF funds for sanitation have been used in the recent past and evaluate the effectiveness of these projects.

b. Investigate present activities in rural Ethiopia in the sanitation sector, including the work of government agencies, Ethiopia & foreign NGO's, bilateral agencies & UN agencies. All aspects of sanitation programme will be assessed; including:-

-technology used
-community education (inc. health)
-training activities
-personnel & materials available
-integration with water supply and/or other projects
-the level of interest in and support for sanitation at national, regional and local levels.

c. Provide recommendations for a UNICEF sanitation project, including the following:-

1. Recommended activities to be funded by UNICEF, which may include guidelines for demonstration projects, development of a training programme, and a guinea worm eradication programme.

2. Institutions to be involved.

3. Personnel needs - both within UNICEF and in collaborating agencies. This will include assisting in formulating job description for a newly created post in the water section for a specialist in the field of sanitation/health education/community participation.

4. Monitoring & evaluation procedures.

5. Programme budget.

I.2 Guinea Worm Eradication (5 Days)

UNICEF has already received a proposal from the NOCMVD to survey the prevalence of guinea worm in Ethiopia. Although the goal of this proposal is consistent with UNICEF's goals, the methodology is not likely to give the information required.

The consultant will, in consultation with the NOCMVD assess and advise on changes in the proposal. A system of monitoring and evaluation of the project by UNICEF will also be established.

II. Integration of Women in WES (5 Days)

The consultant will review the status of the "Women's Desk" in the WRC and recommend how UNICEF can contribute to its effectiveness. Contacts have to be made to the Community Participation Promotion Services and Planning Department of Water Resources Commission and the Environmental Health Department of the Ministry of Health and relevant organizations when pursuing this assignment.

III. Study of NGO activities (5 Days)

The consultant will design a questionnaire for pre-testing for NGO's on their activities in the water supply sector in Ethiopia.

Outcome of the Consultancy

The consultant will commence work on 30 April, 1990, with a total of 8 weeks (40 work days) allocated to the project. After preparing a detailed work plan and an outline of the reports, the consultant shall submit the following written documents:-

a. Written comments on guinea worm eradication proposal with a recommendation for UNICEF's effective involvement in the programme.

b. Revised proposal for UNICEF's contribution to the establishment of a Women's Desk within the Water Resources Commission.

c. Recommendations for a UNICEF Sanitation programme for rural areas of Ethiopia.as a basis for a Plan of Action.

d. Draft job description for newly created international post.

e. Draft questionnaire for the NGOs.

Above documents are to be submitted to the chief of the Water and Environmental Sanitation Section by or before June 30 upon the schedule to be agreed between the Consultant and the Section.

UNICEF SUPPORT FOR CONSULTANT

In order to facilitate the work of the consultant, UNICEF will provide the following:

1. Access to all relevant reports and other documents.
2. Office space and secretarial support
3. Transport
4. Laptop computer for full-time use of consultant.

ANNEX 2

LIST OF CONTACTS

UNICEF

Zewdie Abegaz, Women in Development Section
Hailu Belay, Head, Urban Integrated Basic Services
Dr. Tewabetch Bishaw, Head, Health Section
Kebebew Daka, Head, Rural Integrated Basic Services
Tekka Gebru, Project Officer, WES Section
Barbara Junge, Project Oficer, Education
Samuel Olana, Head, Education and Social ServicesSection
Rupert Talbot, Head, WES Section
Rioni Aig-Ojehomon, Asmara Sub-Office, (former head, UNICEF WATSAN Project, Imo State Nigeria)
Dr. Nyunt Nyunt Yi, Head, Nutrition Section

GOVERNMENT DEPARTMENTS/UNIVERSITY

Ministry of Health

Environmental Health Department

Dr. Aberra Kumie, Head
Cde. Begna, Deputy Head
Mesheshe Hailu, Head, Water Quality Control and Waste Control Division
Alemwork Getahun, Sanitarian (based in Debre Zeit)
Amara Hailu
Eng. Woldu, former Head
Kassa Kinde, former Deputy Head
Ato Seleshe, in charge of water supply activities
Ato Berhan, in charge of sanitation activities
Terkestebrhan Amine

National Water Commission

Cde. Atnafe, Head, Assistance Coordination Services (check)
Bill Roach, World Bank advisor

Community Health Department, Addis Ababa University

Prof. G.E. Teka, Acting Head of Department

Annex 2 (continued)

DONORS - BILATERALS/EEC/UN AGENCIES

Mr. Sabbatuchi, EEC
Peggy Florida, First Secretary, Development, Canadian Embassy
Michael Woods, CIDA/WSSA Community Participation Service
Dr. U. Shehu, Representative, WHO
Ato Mulugeta, Health Information and Documentation Officer, WHO
Dr. Ay Mgeni, former Representative, WHO

DONORS - NGOs

Andy Meakins, Kale Heywet Church Development Program and
Former Chair, CRDA Water Resources Group
Terry Dutto, Lay Volunteers International Assocation
Ian Shaw, Communications Director, CRDA
Sr. Zewditu Tadesse, Health Division, CRDA
Gerry Garvey, Water Advisor, Oxfam
Chair, CRDA Water Resources Group
David Currie, Representative/Field Director, Canadian Physicians Aid and Reflief
Gabe Hurrish, Health Coordinator, Food for the Hungry International
Helge Espe, Program Manager, Redd Barna
Anni Fjord, Terre des Hommes (Lausanne)
Sister Alemnesh, Ethiopian Red Cross

ANNEX 3

GUIDELINES FOR RECOMMENDED ACTIVITIES

A. ADVOCACY

In general, what is needed is not necessarily another workshop on sanitation -but presentations at workshops which cover a wider audience.

A1. Informing-sharing within UNICEF

Be sure all WESS staff members are well-informed of the need for greater integration and a stronger emphasis on environmental sanitation.

A2. Workshops/Seminars

a. Identify all workshops relating to water, sanitation, primary health care, integrated rural development, which will be taking place within the next six months.

b. Assess, through discussion with workshop organizers, whether UNICEF (or an appropriate MOH/WSSA/NGO staff member) can be allowed to do a presentation. If not, a WESS staff member (usually the sanitation officer) should still make a point of attending at least part of the workshop, if possible.

c. Identify appropriate personnel to do presentations and assist them in preparation, if necessary.

Two types of presentations are envisaged:

- -case studies presented by MOH or NGOs on their particular projects
- -general presentation/discussion on topic

For case studies, information should be included about all aspects of the project (technical, social, managerial) and both progress and problems are discussed. Presentations should be designed to be appropriate for the particular audience/forum, and repetition of presentations at several workshops with the same audience should be avoided.

For a more general presentation, UNICEF consultant/sanitation officer should develop a "teaching methodology" which focuses mainly on guided discussion, not lecture format, including:

- brief presentation of benefits of integration
- brief presentation on VIP - principles and practice (separate, full lectures on VIP can also be given,

depending on audience)
- guided discussion - to collect information and generate interest - presenter asks questions, such as:

Who is doing sanitation/HE and where?
What technology are you using?
Where are needs for assistance greatest?
Problems and successes

Involvement in workshops thus becomes both advocacy and information-sharing.

d. Discuss with CRDA Health and Water Resources personnel (Sister Zewditu and Gerry Garvey) the possibility of holding a joint workshop including both health and water personnel of NGOs, as they usually attend separate workshops. (Obviously, if there are NGO personnel working specifically on sanitation, they should also be included.) Encourage personnel from both sections of NGOs to come, and develop a practical workshop which will both stimulate and give personnel additional tools (such as technical knowledge of VIPs and recommended baseline survey forms) which they can use in the field.

e. Brief reports (1-2 pages) on all workshops attended should be written and circulated among WESS staff - and other UNICEF staff, when appropriate. Of course, workshop documents should be obtained and included in the documentation center; but often such documents are not available until long after the workshop.

B. INTEGRATION AND COORDINATION OF WATER AND SANITATION

B1. Within UNICEF

Provide a working example to government and aid agencies by increasing cooperation and collaboration between UNICEF sections. At this stage, forming "another committee" may not be the answer. Instead, the following actions are suggested:

- The sanitation officer should be assigned responsibility for being fully informed of related activities of other UNICEF sections. This would facilitates collection of information by outsiders and better coordination of activities.

- All written information relevant to the water and sanitation sector should be abstracted and collected in an accessible location (preferably a documentation section as discussed in detail below).

- Some research and evaluation, such as that on health education in Ethiopia, should be funded and carried out jointly by all concerned UNICEF sections (Health, Education, etc.), not as a separate WESS project.

- In the longer term, planning of a demonstration water and sanitation project should include inputs from other sections such as Education, Health and RIBS.

- Greater use should be made of the technical expertise of the WES section in planning, monitoring and evaluating RIBS and UIBS projects.

B2. Between donors

Establish an information-sharing committee of all interested donor agencies. This would serve several purposes:

- raise awareness among the donors of the need for greater coordination/integration
- avoid unnecessary overlap in donor activities
- encourage donors to push for greater collaboration between agencies in their project agreements
- increase UNICEF contacts with donors, which might assist efforts to help government obtain project funding

It is possible that setting up a formal committee might be delayed due to some of the same types of rivalries found between and withing government agencies.

Initially, the UNICEF consultant/sanitation offficer should at least sound out donor agencies on the need and interest for this type of committee as part of his/her survey of aid agencies. In addition, the Head of the Water Section can bring up the topic whenever he meets with donors.

B3. Between government agencies

(a) Investigate further the reasons for lack of collaboration and why a National Action Committee was never formed. Discussions with WRC officials are best carried not only by the UNICEF sanitation officer/consultant, but also by WES staff already known to WRC officials. (In addition, CIDA should be contacted on this subject, as they have been trying to negotiate approval for a project to be coordinated by both agencies. Mike Woods, based in Awassa, is a good contact for this information.)

If, through discussion, it appears that there is still interest, then UNICEF should consider trying again to persuade government to set up a National Action Committee on Water and Sanitation. The pressure for this committee would have to come mainly from the Head of the Water Section, not through the sanitation officer.

(b) Once the sanitation officer is in place, the establishment of a joint committee at technical level should be considered, consisting of technical, project personnel who can discuss details of proposed programs, standard designs, etc. This committee would

initially be best composed of MOH and WRC officials, but should be expanded to include other agencies as deemed appropriate.

B4. Community participation and women's involvement

Investigation of possible UNICEF assistance to the CPPS in WSSA may be carried out by a consultant assigned to assist with the establishment of the Women's Unit. The work requires particular expertise and knowledge of community organization and participation, and, preferably, some previous knowledge of Ethiopia. Whether the Women's Unit is established or not, such an investigation shoudl be considered a priority for the WES Section, and an appropriate consultant (local or external) should be identified to carry out this exercise. Terms of reference for such a consultancy have been included with the revised proposal for a Women's Unit (a separate document from this report). It is possible that the consultant could collaborate on other proposed activities, as well, such as evaluation of health education materials.

C. PLANNING, MONITORING AND EVALUATION

Before the sanitation officer arrives, it is best to concentrate on collecting information which can be used for future planning, and for developing a more realistic, systematic method of monitoring and evaluation of rural water supply and sanitation projects. The investigations outlined below will provide not only much more information about the sector, but will include investigation into present methods of monitoring and evaluation used by NGOs and government.

As stated above, present monitoring focuses on sheer numbers. In the future, more emphasis should be given to actual use of latrines, changes in household hygiene practices, accurate and realistic reporting, and constant monitoring <u>in the field</u> of project activities.

Efforts which can begin before the sanitation officer arrives are outlined in more detail below.

C1. Survey of present activities

A draft survey and proposed methodology for a study of NGO activities has been developed as a separate (but related) exercise by the present consultant. An expert in water and sanitation is not needed to carry out this survey, and a potential consultant has already been identified. This survey should commence as soon as possible.

The survey can be modified to collect information on the activities of other aid agencies and government bodies. Although it would be best if this survey was carried out by the sanitation officer in

order to make initial contact with donors and government officials, this would result in considerable delay. Therefore, it is suggested that the consultant carrying out the survey of NGOs be engaged to collect the same information for donors. Contact with government agencies is best left to the sanitation officer, who will need to meet all relevant government officials in the early stages of his/her work.

C2. Further research and evaluation

The various research efforts described below should, ideally, be carried out by one or more consultants simultaneously in order to reduce duplication of efort. Consideration should be given to hiring a team of at least two people (one "technical" and one "social/education" oriented) to jointly carry out the work.

(a) Documentation of existing projects and social factors (KAP)

Collecting information on present knowledge, attitudes and practices of rural Ethiopians can be carried out in conjunction with an analysis of existing water and sanitation projects. However, studies on present practices must be carried out in areas where there has been little or no project intervention, as well as areas where projects have been active for a number of years.

Information needed includes:

- present household hygiene practices and beliefs

- defecation practices - where, when (specified by type of person - man, woman or child)

- awareness of need for change in practices, if any

- household and individual priorities for change in living conditions and community life (ex. water supply, improved agriculture, etc.)

- ability and willingness to pay for improved sanitation

- for existing projects - technology used, a detailed look at community organization methods (who consulted, at what stages in project planning, etc.), acceptance by community of new technology, and problems and successes

(b) Evaluation of health education materials and methods

Evaluation of present health education efforts should be carried out as soon as possible by a consultant (or UNICEF expert presently available in another section) who is hired with the agreement and collaboration of all involved UNICEF sections. The evaluation should focus on coverage of environmental sanitation activities in

educational materials.

If only one consultant is used, s/he must be Ethiopian in order to be able to review materials and observe training activities. However, there is merit in bringing in an expert with long experience in this field in several countries to work with a local consultant.

(Barbara Junge, UNICEF Project Officer, would be a good source for identifying an appropriate consultant, such as Alemayehu Minas, who has done some previous work with her. For an international consultant, the WATSAN Section in New York may be able to identify an appropriate person. One name which comes to mind is Sue Laver, Dept. of Community Medicine, University of Zimbabwe, who has developed most of the training materials used for water and sanitation in Zimbabwe.)

An assessment should include:

- A review of previous reports written on this subject, some of which can be found in the reference list for this report.

- Collection and review of all materials developed with UNICEF funding, including radio and TV broadcasts.

- Visits to training centres to meet trainers and observe classes.

- Field visits to observe training of community members, including organization of community meetings, etc.

- Review of methods used (if any) to assess impact of training on the community or other target groups.

- The potential for using social marketing techniques to promote water and sanitation activities.

- A plan of action for UNICEF assistance in the development of appropriate training materials.

Such an evaluation is a major exercise, especially if it involves collaboration with other sections. If it is not possible to get it underway immediately, the WES Section should have its own consultant/sanitation officer focus on:

- Collection of all available training materials and translation of relevant passages into English for assessment. (The sanitation technical assistant could assist with this.)

- Observation, through field visits, of training at various levels, including CHAs and community members.

(c) Appropriate VIP Technology

This work is best carried out by the sanitation officer or a consultant who has some experience with the technical aspects of sanitation programmes. Information needed includes: design, materials use (specific to project areas), a breakdown of the cost of materials and labour (including costs of project personnel), time needed for construction, and expertise available for construction of various components.

A full review would cover the following:

- Latrines built in both urban and rural areas.

- Identification and documentation of all past research efforts through discussions with NGOs, government and other aid personnel.

- Field visits, starting with UNICEF-funded projects, to assess technology presently being promoted.

- An assessment of whether there is need for further research, or simply for disseminating results of existing research and promotion of the concept of the VIP latrine.

(d) Assessment of sanitation coverage

There are three choices in relation to the "issue" of sanitation coverage:

(i) use existing figures as included in the sanitation sector strategy paper (obviously inadequate);

(ii) investigate further the sources of existing figures and try, through existing government (and aid agency) records to come up with more accurate, documented figures; or

(iii) organize a major data gathering exercise, including sample surveys of a variety of urban and rural areas

The benefits of the third option, which would be costly and time-consuming, are questionable. In the short-term, it is recommended that option (2) be considered by UNICEF, with additional work carried out to plan a more major data gathering exercise.

Investigation of existing figures could be carried out by the new UNICEF technical assistant or another assistant hired on a temporary basis. (A university student or recent graduate would be a possible technical assistant. G.E. Teku, Community Medicine Department of AAU, might be able to help identify an appropriate person. This might be a good way of "trying out" a candidate for the UNICEF TA post.)

C3. Development of training materials/methods

Some work should be done to develop, in collaboration with EHD/MOH, training materials specifically oriented towards latrine construction projects, such as manuals for builders and sanitarians explaining VIP construction, use and maintenance. (Materials developed in Zimbabwe for the VIP are a good example and are available at the EHD.

C4. Study on the incidence of guinea worm in Ethiopia

A proposal for such a study has been submitted to UNICEF and is under consideration. It would be directed by the National Organization for the Control of Malaria and Other Vector-borne Diseases (NOCMVD), with monitoring and assistance from the WES Section.

C5. Setting up a documentation center

(a) Compile a bibliography on all available documents related to water supply and sanitation in Ethiopia. This should include short abstracts on each reference and where the reference can be obtained. In the case of references which are not already avaialble in public libraries (such as the UNICEF library), copies should be obtained and made available for use by others.

(b) Assist in the establishment of a documentation system for reports and materials relating to water supply and sanitation activities. This would include copies of relevant reports, training materials used in Ethiopia, information on agencies involved in the sector, and general references from other countries of use in planning water supply and sanitation.

Initially, anyone doing consulting work on this subject for UNICEF should be encouraged to make copies of all documents obtained and keep them in a space allocated within the WES Section. Establishment of a more permanent document center is best done once the sanitation officer is in place.

There is no need to set up a completely new library. This system should be set up through an existing documentation centre, such as the UNICEF library, Institute for Development Research, or in a government agency. Further investigation would be needed to determine the location, but the following factors must be taken into account:

i) Ideally, this system could be set up in an existing information center in either the WRC or MOH. However, as the two agencies are having difficulties cooperation on various other aspects of their work, it may be considered best to establish the system through a more "neutral" forum, such as the UNICEF library or the Institute

for Development Research at Addis Ababa University.

ii) Information must be readily available to all interested parties, with no bureaucratic procedures needed in order to gain access. This is not always easy with government agencies.

iii) If an existing information center is used, staffing needs should be minimal once the system has been established.

Suggested allocation of work for setting up such a center is as follows:

(i) Collection of information - This work needs the input of the sanitation specialist and can be done in conjunction with other activities, as most reports are obtained through personal contacts.

(ii) Writing of abstracts, assistance with cataloguing - The sanitation specialist should carry out this work as part of his/her duties.

(iii) Cataloguing of information - Ideally, this would be done by the manager of the existing documentation center, if time allows him/her to do the work in addition to her regular duties (for appropriate compensation, of course). Once the system had been established, extra time involved should be, maximum, only a few hours a week.

iv) Dissemination of information - Visitors to the center should be informed of the establishment of the system by the documentation specialist. In addition, the sanitation specialist should provide copies of the initial bibliography to other appropriate people and agencies (such as WRC, MOH, CRDA, UNICEF library, attendees at workshops, etc.) and encourage people to use the center.

D. DEVELOPMENT OF A SECTOR PLAN

As stated earlier development of a detailed sector plan should wait until the new sanitation officer is in place, more information is available, and, if possible, greater collaboration between WRC and MOH has been fostered.

A detailed plan must cover both rural and urban sanitation needs and activities. It also must be prepared and approved by government, not by UNICEF or any other aid agency.

E. DEMONSTRATION PROJECTS

Planning for demonstration projects should be carried out by the sanitation officer in collaboration with the Ministry of Health. The information gathered by interim consultants should facilitate

detailed planning for a demonstration project. In the meantime, some general comments can be made which should facilitate planning

- As stated above, the MOH considers their project in Debre Zeit to be an ideal location for a demonstration project. Certainly, a location within an hour's drive of Addis Ababa should be considered. However, in this particular area, water supply was provided by the WRC long before sanitation. Therefore, it is not an appropriate location for demonstration of integrated water and sanitation activities.

- A clear distinction must be made between "demonstration latrines" and "demonstration projects". Many NGOs and other agencies construct demonstration latrines at community facilities such as health clinics and schools. These latrines are often unused or, if used, are not kept clean. In most cases, no one ever even checks to see if they are used. Although building a few latrines can show the appropriate technology, what is needed is a complete demonstration project, encompassing both household and school latrines, health education and community organization activities and, preferably, provision of water supply. Planning for detailed baseline surveys, monitoring, evaluation and long-term operation and maintenance of facilities must be included in such a project.

- A demonstration project funded by the WES Section should be carried out in collaboration with other sections such as Education, Health and RIBS.

- Demonstration projects can be set up through schools, including construction of school latrines and health education activities. However, for a lasting impact on health, a demonstration project should include other community members, and include construction of household latrines.

- Simple "demonstration latrines" could be built within the environs of Addis Ababa in order to demonstrate to NGO and other staff that the VIP latrine is not more expensive, and is much more sanitary, than traditional latrines. The location should be easily accessible to all who wish to see them, with appropriate educational materials displayed in order to generate interest and provide information without need for full-time educational staff. Although such a demonstration should be carried out after further research into appropriate local VIPs, and when the sanitation officer is available, an interim consultant and other WES staff could begin to think about possible locations.

Ideally, such a demonstration would be set up at an institution like CRDA, which is visited by many NGO and government officials, at the Ministry of Health, or perhaps at an institution in Addis Ababa (such as a school or rehabilitation center) which is in need of appropriate sanitation.

ANNEX 4

STAFFING NEEDS FOR RECOMMENDED ACTIVITIES

Table A3 briefly outlines the staffing needs in order to carry out the recommended activities related to environmental sanitation, community participation and establishment of a Women's Unit within the WRC.

Activities are divided in the same order as in the guidelines.

Explanation of table and abbreviations:

Columns 1-2, Before Project Officer starts:

The first two columns relate to whether a particularly activity can be started (S) and/or completed (C) before the Sanitation Project Officer is in place. If the presence of the project officer is needed, a dash (-) is put in these two columns.

Column 3 - Main Responsibility

This column refers to who will be assigned responsibility for carrying out the described tasks. The general categories abbreviated here include:

- PO - Sanitation Project Officer
- STC - Short-term consultant
- TA - Sanitation Technical Assistant

Short-term consultants have been numbered 1-4, with general expertise of each outlined below:

1. Experience with design, implementation, monitoring and evaluation of sanitation projects, including social and technical aspects
2. Knowledge of Ethiopian aid agencies, ability to interview, analyze and write
3. Experience with community education, development of training materials and methods, focussing on health education, environmental sanitation, and "social marketing" techniques
4. Experience with community participation, women's involvement - ability to conduct social science research

Input from others

This refers to other staff members who might assist with the activity. The category "other WESS staff" includes long-term staff and any other consultants.

Particular expertise needed

Brief notes on expertise needed are included.

The suggested scenario included here is based on finding available consultants with experience categorized as above. Exact duties of any one consultant will depend on several factors, including their prior experience, their availability, and funding. It may be that consultants could work as teams on particular aspects (such as field visits to assess KAP, evaluate existing projects and latrine technology). In addition, a technical assistant (whether temporary or long-term could be used to assist with much of the work).

It is envisaged that Short-Term Consultant 1 (STC1) would provide overall supervision for all sanitation activities before the arrival of the long-term project officer.

ACTIVITY	Before PO arrives		Main Responsibilities	Inputs from Others	Particular expertise needed (if consultant)
ADVOCACY					
1. Informing WESS and other UNICEF staff of ES activities	S		PO	Other WESS staff	
2. Workshops/seminars a. Identification of appropriate workshops	S		STC1	Other WESS staff	
b. Obtain agreement for presentation at workshop or make sure someone will attend as participant	S		STC1		
c. Identify appropriate personnel to do presentations	S		STC1	MOH/MRC/ other Govt. Agencies or NGOs	Knowledge of projects - good presentation skills
d. Development presentations and assist other personnel to do so, when needed	S		STC1		
e. Organize joint workshop with CRDA	-	-	PO	NGOs & Gov'nt	
f. Make sure short reports on each workshop written and circulated	S		STC1	Whoever attends workshop	
INTEGRATION AND COORDINATION					
1. Within UNICEF					
a. Collect more information and keep informed of ES activities of all UNICEF sections	-		PO	Other UNICEF staff	although STC will have some input here, best to wait for PO so long-term knowledge and contact is established
2. Between donors					
a. Assess donor interest in information-sharing committee	S		STC2	Other WESS staff	
b. Establish donor information-sharing committee	S		Chief, WESS	PO	
3. Between government agencies					
a. Assess government interest in National Action Committee	S		STC1	Other Wess staff	
b. Assist in establishment of National Action Committee	-		Chief, WESS		
4. Women's Involvement and Community Participation Activities					
a. Assist in establishment of Women's Unit	S	C	P. Officer (water)	Chief, WESS	experience with community participation women's involvement-social science research methodology, monitoring & evaluation
b. Assess present involvement of women and how it can be encouraged and improved	S	C	STC4 and/or Women's Unit	WESS & WID Staff	
c. Assess how UNICEF can help strengthen CPPS/WSSA	S	C	STC4	WESS Staff	

ANNEX 4 - SUMMARY OF RECOMMENDED ACTIVITIES & RESPONSIBILITIES

ACTIVITY	Before P.O arrives		Main Responsibilities	Inputs from Others	Particular expertise needed (if consultant) - notes
PLANNING, MONITORING AND EVALUATION					
1. Detailed survey of present activities					
a. NGOs	S	C	STC2		Knowledge of aid agencies in Ethiopia - good analytic & writing skills
b. Other aid agencies	S	C	STC2		
c. Government agencies	S	-	STC1		Consultant will collect some info. in course of work, but P.O should do more detailed study
2. Further research and evaluation					
a. Documentation of existing projcts and KAP					
a1. Identify appropriate projects to visit (inc. UNICEF-funded projects)	S	C	STC1		
a2. Collect information at head office - baseline surveys, M&E methods, etc.	S	C	STC1		-some of this information will be collected by consultancy doing NGO survey-but more "searching" will be needed by sanitation cons.
a3. Field visits, including assessment of project and KAP of people	S	C	STC1	Sanitation TA	Social survey expertise, project evaluation
b. VIP technology					
b1. Identification and documentation of past research efforts	S	C	STC1	Sanitation TA	technical expertise/knowledge needed--ideally, this work is combined with other combined with other project
b2. Field visits	S	C	STC1	"	assessmentsand does not have to wait until arrival of project officer
b3. Assessment of need for future research	S	C	STC1	"	
c. Sanitation Coverage					
c1. Investigate existing figures	S	C	STC1	Sanitation TA	Knowledge of S.S. research methodology (university student could be used)
c2. Write proposal for major data-gathering exercise	S	C	STC1		
d. Health education materials and methods					
d1. Obtain agreement and support of other UNICEF sectio	S	C	Chief, MESS		for consultancy, community education & social marketing" Knowledge of Amharic
d2. Carry out evaluation	S	C	STC3	Sanitation TA	Ideally, a consultants - one experienced Ethiopian and one highly experienced international consultant

SUMMARY OF RECOMMENDED ACTIVITIES AND RESPONSIBILITIES (continued)

ACTIVITY	Before P.O arrives		Main Responsibili	Inputs from Others	Particular expertise needed (if consultant)
PLANNING, MONITORING AND EVALUATION (continued)					
e. Development of additional training materials	-	-	PO	Possibly Consultant	Consultant who assesses present health education may do some work on this
f. Study on incidence of guinea worm					
f1. Finalize proposal in consultation with MOH	S	C	STC1	Chief, WESS	
f2. Carry out reserach	S		NOCMVOL MOH	UNICEF, WESS	experience with epidimeological research
f3. Monitor project activities	S		STC1		
g. Setting up Documentation Center					
g1. Collect documents (initially, to be kept in WESS)	S		STC1	Other WESS sttaf	
g2. Identify appropriate location for center	S	C	STC1		
g3. Write abstracts of documents	S		STC1	Other WESS staff	
g4. Set up center	S		STC1	Other WESS staff	
g5. Cataloguing and organization of materials	S		Documentatio Expert	PO supervises monitors	
g6. Encourage use of center	S		PO	Other WESS staff	
DEVELOPMENT OF DETAILED SECTOR PLAN	-	-	PO	Other WESS staff	
DEMONSTRATION ACTIVITIES					
a. Integrated water and sanitation project					
a1. Identify appropriate location	S		STC1		PO may make final decision on location
a2. Write general recommendations	S	C	STC1		
a3. Design, planning and implementation	-	-	PO		
b. Demonstration of VIP technology					
b1. Identify appropriate location	S		STC1		
b2. Design, planning and implementation	-	-	PO		

SUMMARY OF RECOMMENDED ACTIVITIES AND RESPONSIBILITIES (continued)

ANNEX 5

REFERENCES

Bishaw, Makonnen and Medhin, Zenebech Gebre (1983) Some Socio-economic Factors Related to Rural Water Use, Institute of Development Research, Addis Ababa University

Boydell, R.A. (1987) Draft Sanitation Sector Strategy Paper National Water Resources Commission (NWRC), Addis Ababa

Environmental Health Department, Ministry of Health (1990)UNICEF-Assisted (Area Based Health Project) Sanitation/Community Self-Help Water Supply, 1 1/2 year report, July 1988-Dec. 1989, Addis Ababa

Environmental Health Department, Ministry of Health (1990) Plan of Operations 1988-93 and Plan of Action 1990, Addis Ababa

Government of Socialist Ethiopia (1984) Ten-Year Perspective Plan, 1984/85-1994/95 Addis Ababa

Government of Socialist Ethiopia and UNICEF (1988) Mid-Term Implementation Review of UNICEF-assisted projects (1983-1988) Addis Ababa

Government of Socialist Ethiopia and UNICEF (1988) Plan of Operations Services for Children and Women in Ethiopia

Hagos, Meaza (1988) Community Participation: The Case of Simple Water Supply Development in Bahir Dar Awraja Unpublished B.A. Essay, Addis Ababa University

Maeda, J., Moharran, S.; Getahun, A. (1987) Rapid Assessment of Rural Integrated Basic Services Addis Ababa

Minas, A.; Michael, E.G.; Kibret, A. (1990) Country Paper on Basic Education for Health in Ethiopia: 1985-1990 Presented to Regional Seminar on Basic Education for Health, Arusha, Tanzania

Minas, A. and Junge, B. (1988) Planning for Practical Health Education in Primary Schools in Bahir Dar Awraja, UNICEF and Curriculum Evaluation and Educational Research Division, Ministry of Education, Addis Ababa

Ministry of Health, Government of Ethiopia (1983) Guidelines and Strategies for the Control of Diarrhoeal Diseases in Ethiopia, Addis Ababa

ONCCP/UNICEF (June 1989) Baseline Survey Report on RIBS, Addis Ababa

Selassie, A.G. and Bekele, F. (1982) Evaluation of the Integrated Family Life Education Project (IFLE) UNICEF, Addis Ababa.

Solsona, Felipe (1985) Final Report on Water Defluoridation in the Rift Valley, Ethiopia (for UNICEF), Addis Ababa

Teka, Gabre-Emanuel (1984) Human Wastes Disposal - Ethiopia: A Practical Approach to Environmental Health Planning and Programming Bureau, Ministry of Health, Addis Ababa

Tekeste, Yemane (rapporteor) (1986) Report on Proceedings of the Workshop on Community Partipation in Water Supply and Sanitation Projects, March 17-21, 1986, Nazareth Addis Ababa

Tesfaye, A.; Selassie, S.G.; Bishaw, M. (1982) Basic Needs and Services in Rural Ethiopia: Case Studies of Six Peasants Associations in Gama Gofa, Kaffa and Wollo UNICEF, Addis Ababa

Tesfu, Dinka (1986) Baseline Survey Report on RIBS Central Statistics Office/UNICEF, Addis Ababa

UNICEF (1982) Situation Analysis of Children and Women in Ethiopia. Addis Ababa

UNICEF (1987) Proceedings of the Workshop on the Approach of RIBS/Urban Services, Jan. 13-16, 1987 Nazareth, Ethiopia

UNICEF (1988) Programme Guidelines - Water supply and sanitation and Hygiene Vol. 3

Webster, Sr.Dr. Francis (1990) Evaluation of the Public Health and Development Program, Attat Hospital, 1982-1989

World Health Organization Regional Office for Africa (1987) Evaluation of the Strategy for Health for All by the Year 2000, Seventh Report on the World Health Situation, Vol 2, Africa Region. Brazzaville.

World Bank (1985) Sector Review: Ethiopia, Population, Health and Nutrition Report No. 5299-ET

World Bank (1988) Ethiopia Public Investment Program Review Report No. 6859-ET

WSSA, NWRC (1988) Draft Project Proposal: Demonstration Project for Integrated, Community-Based Rural Low-Cost Sanitation, Health Education and Social Marketing (funded by CIDA, to be executed by Environmental Health Department, Ministry of Health)

WSSA, NWRC (1986) The Ten-Year Perspective Plan (Water Supply and Sanitation Sub-Sector) - Draft. Addis Ababa.