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CONCEPT PAPER

Promotion of Sanitation in Uganda

Ministry of Health

with support by

WES Programme of the GoU/UNICEF Country Programme

June 1997

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CONCEPT PAPER - SANITATION

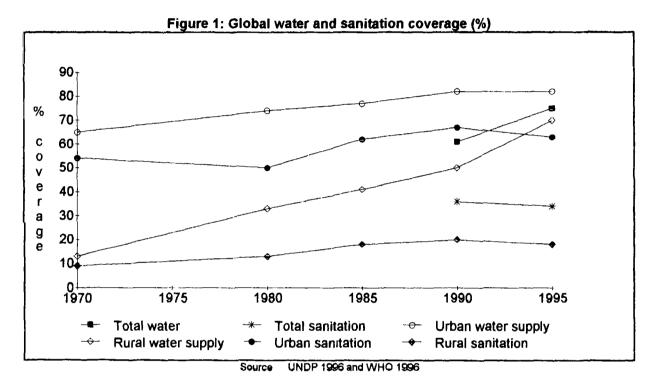
June 1997

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During the decade, perceptions of the roles of technology and engineering have changed and there has been a realisation of the importance of organisation, finance, training, sustainability and user decision making in the process of improving sanitation. In 1990, the New Delhi Statement called for a renewed commitment to sustainable water supply and sanitation and for a new approach based on the lessons learned from the previous decade. The guiding principles were to protect the environment and safeguard health through the integrated management of water resources and sanitation. Further international assemblies including the Water Supply and Sanitation Collaborative Council have endorsed these principles, urging governments to prioritise water and sanitation (particularly low-income urban and rural areas), encouraging private investment and integrating the sector within the overall development planning process. The Collaborative Council established a working group to raise the profile of sanitation.



The Working Group identified that advocacy alone would not raise the status of sanitation and concluded that to do so, three imperatives need to be met:

- · people-centred, principle-based programmes,
- · increased political commitment,
- more rigorous professionalism and science.

This would constitute a sanitation revolution. Activities in the three areas should take place simultaneously. Sanitation professionals must be the driving force to make the three imperatives happen, while users are key actors in designing better sanitation programmes and services. To reverse the downward trend in sanitation, massive efforts are required.

Promoting hygiene and individual action for change

Working in collaboration with people and allowing them to take more control in the design, implementation and management of sanitation systems is central to the aims of sanitation and hygiene promotion. In this context, hygiene promotion is an umbrella term used to cover a range of strategies which aim to prevent sanitation related diseases and thus optimise the effect of sanitation interventions. This includes the use of education and learning strategies. It can also encompass community management of installations which is important if some degree of sustainability is to be achieved.

Hygiene promotion has traditionally been seen as the provision of information to induce behaviour change. Traditional didactic approaches do not attempt to empower people to make decisions nor take account of the context or culture of their target population. For example, the "knowledge,

attitude and practice" (KAP) model underpins this didactic approach and was founded on the belief that if people were only told about the causes of ill health, then they would automatically change their attitudes towards damaging practices and ultimately change their behaviour. It assumes that when people understand how sanitation related diseases are transmitted, unhygienic practices will be dropped and improved ones adopted. Whilst changes in behaviour often require access to knowledge and frequently a change in attitudes, this is not always the case. It is also important to realise that individuals are not solely responsible for their own health and many factors such as poverty, housing, cultural values and norms may compromise their capacity to accept and act upon health messages (Ferron et al, 1997).

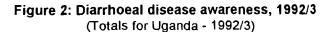
Health and hygiene promotion are currently being redefined to emphasise a more facilitative and enabling approach to promoting health. Thus recognising that control over one's life and the capacity and confidence to make one's own decisions are crucial to promoting and maintaining health. Hygiene promotion cannot only be a matter of providing information and persuading people to change their behaviour, but has to be part of a broader health promotion framework. Such a framework attempts to address the structural determinants for health like the provision of adequate quantities of safe water, the provision of latrine and waste disposal facilities and access to soap. At the same time, health promotion should facilitate individual action within the existing constraints by supporting people's capacity to control the factors that determine their own health and the health of others.

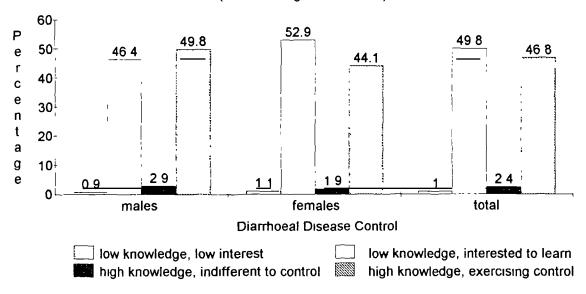
Sanitation situation in Uganda

Sanitation related activities have not received the attention required to adequately address the problem. Poor sanitation in Uganda impacts on health status, education, trade and employment. In this way, poor sanitation is a drain on the National economy and slows down Uganda's poverty reduction process. Sanitation promotion is marginalised in Uganda (as it has been globally). This has not always been the case. In the 1960's sanitation was better than it is at present. At that time the population was smaller (9.535 million in 1969), the economy was more healthy, the Public Health Act was applicable, law enforcement was strong, tribal leaders and chiefs were respected, there was a higher ratio of preventive health staff to the population and home and environment campaigns were undertaken annually. Also, the term "sanitation" traditionally in Uganda had a broad conceptual meaning including social benefits (esteem and admiration from the community) and health benefits. However, recent sanitation initiatives have focused on latrines which promoted a narrower concept than the community themselves already had (Munroe, in GoU/UNCC, 1994).

Hygiene practices

Knowledge and attitude to diarrhoea was included in the Uganda National Household Survey, 1992-3 Responses to the questions about knowledge and attitude indicated that most people either knew about diarrhoeal disease control and were actively practising those strategies, or that they did not know about diarrhoeal diseases control but were interested in finding out about it (Figure 2). This encouraging statistic implies that low awareness and attitudes towards sanitation simply require the provision of information. However, it is not clear whether this question was focused on treatment of diarrhoea (oral rehydration), or on prevention (sanitation and hygiene practices). It is possible that respondents would have been biased by the interviewer, giving responses they thought were expected rather than a more genuine picture. Knowledge about the hazards of the excreta of young children is not widely known in Uganda. Many Ugandans do not consider the excreta of young children to be harmful, disposing of it indiscriminately around the compound or with the general refuse.





Source Report of Uganda National Household Survey, 1992/3

Findings from sentinel community surveillance sites showed that 4 out of every 10 household latrines were not well maintained and were not clean. Also, on average, 49% of children started using the latrines when they are 1-3 years of age, while 29% started using latrines at 4-5 years of age. This suggests that of those people convinced enough to build latrines, many are not keeping them in a sanitary condition, and many are not teaching their children to use them as early as they could. Many Ugandan's believe that the faeces of young children are safe and not infectious (GoU/UNCC, 1994). The study then linked the incidence of diarrhoea with latrine coverage and found that a child from a household with no latrine was 41% more at risk of getting diarrhoea than a child from a household with a latrine. The source of drinking water, the sex of the head of household, the level of education of the household head, the sex of the child and the number of people living in the household all had an effect on the occurrence of diarrhoea. The study results concluded that diarrhoea is primarily linked to:

- unsafe disposal of human excreta (especially infant's excreta),
- inadequate hand washing practices,
- poor collection and handling of water (the safe water chain) (UNICEF, 1996).

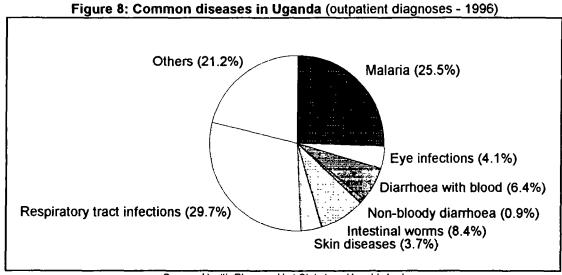
Even within a rural district, sanitation conditions vary widely. Sanitation in remote rural areas tends to be worse than in less remote areas because water and sanitation related development has tended to occur along roads and to serve the more wealthy (Directorate of Gender, 1995). This is true for most development activities and so areas most remote from communication links tend to have the worst health services (including low levels of service from health inspectors and health educators). They also have the strongest held traditional customs and beliefs (including beliefs around bewitching and illness). In the East (Tororo) in-law taboos (obuko) exist where some in-laws are excluded from using the latrine of their host. In the same area, some people believe that persons with diarrhoea should not use a latrine but practice open defaecation instead. Other myths existing around latrine use include fears of causing infertility in women, fear of pregnant women loosing their unborn infants down the latrine, fear of being poisoned or bitten by snakes in the latrine and even fear of catching AIDS by using a latrine (GoU/UNCC, 1994). Rural areas in many parts of Uganda have very sparse populations, because homesteads tend to be scattered over agricultural land rather than clustered in denser village communities Perhaps because there is plenty of empty space and privacy, rural communities generally give a low priority to sanitation. These contribute to the poor levels of sanitation in rural Uganda.

Generally homes in Uganda are kept clean Even in environmentally degraded urban slum areas, interiors of dwellings are kept as clean as possible; people are aware that poor sanitation leads to increased malaria and diarrhoea. There is a high demand for improved sanitation services in urban areas but lack of affordability, lack of land ownership and lack of available facilities are highly

"Privacy issues relating to sanitation are a major factor forcing girls out of school. Lack of food and drink all day and the lack of latrines (especially sex segregated latrines) have been identified as the major factors in poor performance in education" (SUPER, In conversation) The Primary Education Reform Management Committee (an Inter-Ministerial committee comprising of Ministry of Finance, Ministry of Local Government, Ministry of Public Service, Ministry of Education, and the Decentralisation Secretariat) is trying to address this issue, but has no linkage so far with MoH or Ministry of Natural Resources.

Reduced health status

Sanitation related diseases are the major causes of mortality and morbidity. A recent statement from the Ministry of Health (MoH) stated that "about 440 children die of diarrhoea every week" (Programme Manager of Control of Diarrhoeal Diseases, New Vision). The infant mortality rate in Uganda has been dropping rapidly over the last five years from 122 to 97 per 1000 live births. National disease mortality figures are currently not available. The Ministry of Planning and Economic Development is due to undertake a mortality survey in late 1997 to obtain accurate disease mortality statistics. The present national mortality figures are based on hospital data and are therefore not representative of the national picture. In 1993 diarrhoea accounted for 13% of hospital deaths in children under 5 years (GoU/UNCC, 1994). Special studies undertaken for the Burden of Diseases Study (1993) reveal an average diarrhoeal disease mortality figure of 11.7% of deaths in children under 5 years in 13 Districts (MoH, 1996). Morbidity figures available from outpatients diagnoses show that diarrhoea, worm infestations, eye infections and skin diseases accounted for 23.5% of all health unit outpatients in 1996, while malaria (another disease related to poor sanitation) accounted for a further 25.5% (i.e. a total of 49.0% of all outpatients (Figure 8).



Source Health Planning Unit Statistics, Unpublished

Nutritional stunting has dropped over recent years from 46% in 1989 (Uganda Demographic and Health Survey, 1989) to 38% (Uganda Demographic Health Survey, 1995). It is still among the worst rates of nutritional stunting in Africa, and is attributed to the high incidence of diarrhoea; an average of 5.2 episodes per child under 5 years per year (Uganda Demographic and Health Survey, 1995).

The incidence of diseases related to poor sanitation is highest among residents of low-cost housing in densely populated residential areas (slums). Last year disease outbreaks in slums included a cholera outbreak in Namuwongo and a dysentery outbreak in Wandegeya. Causes identified for the diarrhoeal outbreaks included overcrowding, lack of sanitary excreta disposal facilities, high water table, lack of safe drinking water, poor market food hygiene (vendors and purchasers) and inadequate solid waste disposal. Along with a higher incidence of diarrhoea, slum dwellers in swampy areas suffer a greater incidence of malaria.

Special sanitation needs

Gender considerations

The following gender roles are assigned in Uganda (Ministry of Gender and Community Development, 1995):

- Women and girls in Uganda are the caretakers of the home. In homes they are responsible for cooking (86%), water collection (70%), firewood collection (73%), child care (62%), washing clothes (88%), and care for the sick and elderly (62%).
- In Northern Uganda, women are responsible for constructing homes including latrines. In other parts of Uganda, only men construct houses and latrines.
- Women work an average of 15 hours each day. No comparative figure is available for men, but it
 is estimated to be significantly lower. 70-80% of the agricultural labour force is female, while only
 7% of women cultivate their own land and only 30% have access and control of the proceeds,
 including the resources needed for sanitation services. 20% of formal sector employees are
 women, and those women are mostly in the lowest paid jobs.

No statistics are available for the number of women working in the formal sanitation employment sector. It is likely that most of the health inspectors, health assistants, health educators are male, because until recently almost all of the students were male. One reason given for this was the lack of female accommodation at the school. Recent improvements mean that last year three-quarters of students at the School of Hygiene were male (Duncan, 1997).

Sanitation affects men, women and children to different extents, but generally being worse for women. Problems of privacy for urination and defecation are especially acute for women and adolescent girls in urban areas and are heightened during menstruation. Involvement of women in water and sanitation projects has not been altogether successful. In water committees, the ratio of women is specified to be at least two out of nine. RUWASA reports indicate that women committee members are harassed by other community members when they try to promote improved hygiene. Their advise is felt to be interfering. Women are more responsive to being told about hygiene by male committee members (RUWASA, 1996). Kasente and Kalibala (RUWASA, 1993) found that low levels of education and heavy domestic workloads limited the involvement of women.

Further study and analysis of gender are required to determine the needs of men, women, boys and girls and to determine the optimum course of strategy to involve the active participation of them all.

Emergency sanitation

Uganda and it's surrounding region has been characterised by numerous conflicts in the last 40 years which have given rise to massive population movements. Among displaced communities, females often are the most seriously affected. The harassment of women may be the cause of flight but the continued danger of rape and sexual harassment mark their journeys. Once arriving in the new situation, they continue to be vulnerable to physical and sexual violence even from their own men who may themselves be suffering from acute stress. Fear of physical and sexual attack can keep displaced women confined to their homes. In the course of an emergency, particularly following displacement, normal patterns of water use, excreta disposal and hygiene practices are often disrupted and individuals are rendered more vulnerable than usual to water and sanitation related diseases, especially in overcrowded conditions.

Normal social structures and support networks may also be disrupted or reorganised so that some individuals are more vulnerable to exploitation, insecurity or shortages of basic essentials for survival. Provision of relief goods have in the past almost always targeted at men, leaving women headed households and unaccompanied minors in a very weak position to care for themselves or their families (Wallace, 1990). Sanitation and hygiene promotion are as vital to emergency relief as they are to development work, but are usually ignored for months until other services like curative health care and water supply facilities are established. Interventions in emergencies may adversely affect the displaced, creating a disincentive to self help and hindering appropriate social and political

adjustments (Wallace, 1990). Relief needs to be informed by development theory and practice, emphasising the need to facilitate co-operative actions, participation in decision making and political reform. The provision of emergency relief should support people to cope with change whilst promoting positive change at every level of social organisation (Ferron et al, 1997).

Areas occupied by refugees and displaced people are known to suffer from environmental damage. The severe overcrowding may cause large scale deforestation and severe soil erosion due to high demand for wood (for energy and building materials) and opening up of virgin land for cultivation.

Goals for sanitation

The Uganda National Plan of Action for Children (UNPAC) established a number of wide ranging goals for Uganda to achieve by the year 2000. These were set as priorities for social sector development (Ministry of Finance and Economic Planning, 1992). Improved sanitation would make a significant contribution to each of the following goals:

Health and nutrition

- Reduce stunting from 45% to 20% among the under 5s
- Reduce micro-nutrient deficiencies (Iron deficiency to 1/3 of current rate, eliminate vitamin A deficiency - current levels of both at present unknown)
- Reduce infant mortality rate from 101 to 50 per 1000 live births
- Reduce under 5 mortality rate from 180 to 70/1000 live births
- Reduce malarial mortality in under 5s from 20% to 10% and morbidity by 30%
- Reduce malaria morbidity in pregnant mothers by 60%

Water and environmental sanitation

- 75% of population to have access to safe drinking water
- 75% of population to have access to sanitary means of excreta disposal
- Improvement in means of disposal of solid and liquid waste
- Eradication of guineaworm disease
- Reduction by 50% deaths due to diarrhoea and by 25% the incidence of diarrhoea in under 5s and 25% reduction in general diarrhoea incidence rate
- Reduction by 50% in deaths caused by malaria in under 5s and 30% reduction in morbidity
- Reduction of 60% of malaria morbidity among pregnant mothers

Basic education

- Achieve 95% access to basic education (i.e entry to P1) and 50% completion rate of the basic education cycle for the under 15s
- Survival rate of enrolment in P5 from enrolment in P1 should be 60%
- 40% of those who attain P5 but do not complete the primary education cycle should complete P7
 equivalent
- The survival rate of girls entering P1 and reaching P5 should be 60%
- Successful completion rate for girls in primary schools should be at 75% by 1995 and 90% by the year 2000

Sanitation has the potential to make significant improvements towards all of these goals. Reductions larger than these goals may be achieved, for example the goal of reduced under 5 year mortality may reduce from the 1996 level of 97 to as low as 66 per 1000 live births¹ while nutritional stunting for the under 5 year age group may reduce from 38% to 30.3%².

assuming a 60% reduction in the general under 5 mortality rate for the 53.3% of population without access to adequate excreta disposal facilities

assuming a 38% reduction in stunting for the 53 3% of under 5s without access to adequate latrine facilities

Marginalisation of sanitation in Uganda

The importance of improved sanitation is not reflected in the Government of Uganda legislation, policies or expenditure profile. Sanitation lags behind most other sectors. Sanitation has suffered from a lack of both political commitment until recently when the 1996 National Manifesto referred to the importance of improved sanitation for Uganda and both The President and the Minister of Health started to include aspects about sanitation in some of their public speeches. Sanitation has lacked bureaucratic and technical support and has suffered from inadequate leadership and direction, which has complicated collaboration and co-ordination. The Environmental Health Division and environmental health staff within Districts have had low morale due to inadequate financial and human resources and insufficient logistical support. Consequently sanitation research to solve certain technical problems and refinements for hygiene promotion techniques and follow-up with the community have only been carried out in an ad hoc manner.

Many consultancies have analysed aspects of the problem and recommended solutions, but no real action has been taken. Kampala provides a good example. In 1990 a consultancy report was produced on solid waste disposal (MoWMD/LoLG, 1990), in 1994 World Bank produced the final report of the Kampala Urban Study (World Bank 1994) In 1996 the MoH/World Bank financed a consultant to undertake the Kampala Strategic Health plan (District Health Service Project, 1997) Each of these reports contained significant analysis of the Kampala sanitation situation and identified possible solutions. Some options were based on encouragement of private investment rather than heavy financial inputs from Central or Local Government. No action has been taken and the Kampala Strategic Health Plan remains a draft. The challenge is to make sure that some action comes out of the efforts invested in sanitation - including this concept paper!

Legislation

National legislation for sanitation is mainly encompassed in the Public Health Act (1964) and related public health regulations such as the Public Health (Rural Areas) (Health and Sanitation) Rules, 1968. Under the Public Health Act (1964), every citizen in Uganda is obliged to have access to a latrine or toilet facility at their residence, (Chapter 269). The law also obliges all work premises to have latrine or toilet facilities. It further requires these latrines or toilets to be of an approved standard. However, the law is now outdated and fines for failure to comply range from only 2-10 UgSh are insufficient to act as deterrents against law breaking nor to cover the costs of inspection or prosecution. Law enforcement officers on low or irregular wages may be more easily influenced by defaulters who are "willing to pay them a living wage" rather than their employer (District Health Service Project, 1996) Law breakers themselves (i.e. landlords), are well connected or hold political positions which help them to escape prosecution. In certain Districts, bye-laws have been used to ensure that sanitation facilities are provided at certain locations. Legislation needs to encourage private sector involvement in the sector.

Policy

Currently there is no national sanitation policy although various policies and guidelines do encompass sanitation

Constitution

The Constitution of the Republic of Uganda 1995 Chapter 3 (Article 17 J) states that it is the duty of every citizen in Uganda to create and protect a clean and healthy environment

Ministry of Health

The MoH Draft Health Policy (Draft VIII, 1997) prioritises six primary health care areas including environmental health and health education to address the major conditions contributing to the national disease burden. Unfortunately, the document fails to detail the

1994) Redirecting more money on sanitation and hygiene education would recover costs of diarrhoeal disease treatment.

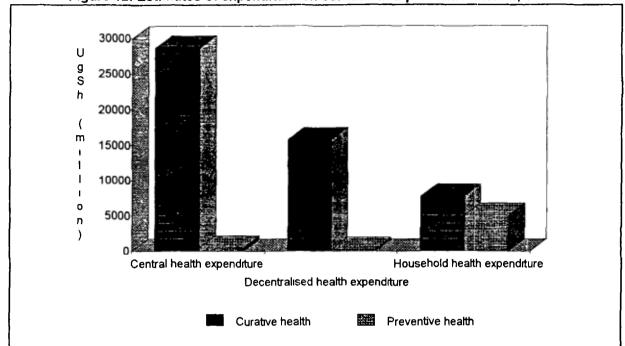


Figure 12: Estimates of expenditure on curative and preventive health, 1994/5

Source Ministry of Planning and Economic Development

Household expenditure figures show a more balanced profile between expenditure on curative and preventive health (Figure 12) (Report on Uganda National Household Survey, 1993/4). In 1993/4 Ugandan households spent a total of 8,276 9 million UgSh on health and medical care (3 84% of rural and 2 38% of urban household expenditure) and 5,035.0 million UgSh on water and soap (1.95% or rural and 2 22% of urban household expenditure). Household expenditure was not gathered for excreta disposal or solid and liquid waste disposal and thus the total figure for sanitation is likely to be substantially higher (especially in urban households) Household expenditure on health and medical care accounted for approximately 15% of the total national expenditure on health in 1994.

In order to address the health needs of Uganda, the health system needs reorientation towards more cost effective interventions of health promotion and disease prevention using the primary health care strategy. Components within the existing primary health care strategy also need reorientation towards prevention of sanitation related diseases. Additional/alternative financing mechanisms such as community contributions, NGOs, external donors and the private sector should also be explored.

Institutional arrangements

Various institutions have the following responsibilities for sanitation:

National institutions

- Central Government is responsible for making national plans for the provision of services and co-ordination of plans made by local government. It is also responsible for control and management of epidemics and disasters and for formulating national policy.
- Ministry of Health (MoH) has overall responsibility for health including public and environmental health. The Environmental Health Division is responsible for policy making, preparation of guidelines, setting of standards and provision of support to the Districts. The Division was significantly strengthened over the last two years with one Assistant Commissioner of Health Services, one senior Principal Health Inspector, four Principal Health Inspectors and three Senior Health Inspectors plus assorted support staff (mostly typists and office attendants). EHD was also divided into sections covering institutions, research and applied technology (technical and social), rural, urban and policy. However EHD requires

- further resourcing both in terms of information, financial and human resources in order to carry out it's role effectively.
- Ministry of Local Government (MOLG) is responsible for all the decentralised institutions, including implementation of sanitation activities within the Districts. They are responsible for recruitment, supervision and retrenchment of health inspectors and health assistants through the District Administrations.
- Ministry of Gender and Community Development (MGCD) is responsible for preparation
 and implementation of policy and guidelines on gender and community development to be
 used in all planning and implementation activities at all levels (including mobilisation for
 sanitation within Districts). The Community Development Department are responsible for
 promotion of social mobilisation for the purpose of gender, including capacity building and
 community empowerment.
- Ministry of Planning and Economic Development (MPED) is responsible for planning of activities, including planning of social activities and includes some elements of sanitation and social mobilisation at District level.
- Ministry of Natural Resources Department of Water Development (DWD) has responsibility for water supply and is the umbrella organisation for a number of water and sanitation programmes.
- National Water and Sewerage Corporation (NWSC) are responsible for the provision of water supplies and sewerage facilities for 9 towns (Kampala, Jinja, Entebbe, Mbarara, Masaka, Tororo, Mbale, Gulu and Lira).
- National Environmental Management Agency (NEMA) has responsibilities for environmental protection and pollution control (including water pollution control).

Decentralised institutions

- District Councils have responsibility for medical and health services including the control of
 communicable diseases, control of the spread of diseases in the district, primary health care,
 vector control, environmental sanitation and health education. They may also include
 entomological services and vermin control, human resources management and development,
 recurrent and development budget, district statistical services, district project identification and
 district planning. There are five cadres of district level staff with responsibilities for sanitation;
 District Medical Officer, Health inspector, Health Educator³, Health Visitors/Nursing Officer,
 Community Development Officer.
- City/Urban Councils are responsible for promotion of housing, health education and road safety schemes in addition to constructing, maintaining and controlling cemeteries, mortuaries, slaughter houses, dairies, tanneries, markets, jetties, public bathing areas, public toilets, removal and disposal of excreta and solid waste and all kinds of rubbish and effluent. City Councils also have functions and powers similar to District Councils.
- Lower local government councils are instructed to provide hygiene services and health units
 other than private health units, adult education and community based health care. They are
 also charged with responsibilities for enforcement of building standards (including residences,
 latrines and kitchens), the proper disposal of refuse, water supply, control of trading centres
 and maintenance of community infrastructure.
- Municipal councils are responsible for setting service delivery standards, provision of
 mortuaries and cemeteries, procurement and management of refuse tipping sites, construction
 and maintenance of major drains and approval of building plans, staff recruitment,
 remuneration and training.
- Municipal council divisions are responsible for poverty eradication, health education and visiting, vector control, secondary drains, food and drug inspection, control of development/building code enforcement and payment of support staff.
- Sub-counties (LC3) are represented by councillors, some of whom are members of a health committee. They are supported by a Health Assistant or Nursing Aid and assisted by a Community Development Assistant. Their responsibilities include resource mobilisation, allocation of resources, including sanitation promotion and construction of public sanitary facilities.
- Parishes (LC2) are each structured with a parish development committee, which has
 responsibilities for providing sanitation facilities in communal places including institutions like

³ Health Educators are not a recognised cadre of staff by the MoH

markets and schools. They are also charged with responsibilities for organising and conducting sanitation improvement campaigns. A Health Orderly is the health worker supporting this level.

- Community level (LC1) committees each include a member responsible for mass mobilisation, and their role includes promotion and facilitation of communal labour for construction of latrines and organising home and village sanitation campaigns as well as identifying local masons/fundis for training in latrine construction. Community Health Workers (CHWs) are responsible for health at village level.
- Water User groups operate through sanitation committees and are the executive management group to oversee water supply and reasonable sanitation (including hygiene) in the area.
- NGOs, both local and international are undertaking water supply work with a few also undertaking sanitation and hygiene promotion activities. A complete list of NGOs and their activities is not centrally available, but a significant number are listed in Annex 1. In early in 1997 DWD organised an NGO forum for NGOs active in the water sector and three NGOs were nominated as the lead organisations to co-ordinate water activities with DWD (WaterAid, ACORD and Vision Terudo). These NGOs also consider that they have a mandate to co-ordinate hygiene and sanitation related activities with DWD.

None of these institutions have prioritised sanitation, including the MoH. The lead role of the MoH has not been adequately facilitated to make their role of leadership and direction function adequately. WHO recently reviewed the institutional arrangements of the Environmental Health Division and identified major gaps particularly in the recruitment and training of health inspectors and assistants in the districts. The current staffing standard is one health inspector in each county and one health assistant in each sub-county. In 1996, one report suggests that there were 176 health inspectors filling 178 posts, but only 309 health assistants filling the 661 sub-county level posts (Shipp, 1996). Environmental Health Division believe that the numbers of health inspectors is lower than this report suggests, with perhaps 120 filled posts. The number of community development assistants working at sub-county level is thought to be similar to the number of heath assistants. Retrenchment has most seriously affected the sub-county level staff; i.e, the staff who directly work with the community.

Last year, many of the newly trained health inspectors and health assistants did not obtain relevant employment. The exact figures are not available because the School of Hygiene does not keep records on deployment of former students. Health inspectors and health assistants in post lack the motivational factors of job security and sufficient or regular salary payments. In addition, most health inspectors are trained at the School of Hygiene (Mbale or Nakesero Annex), with no follow up or refresher training. Consequently the staff in the Districts are out of date with current thinking in sanitation and hygiene promotion. Training courses available in Uganda are only up to diploma level, and any higher level training must be undertaken outside the country. Establishing a degree course (BSc) in environmental health sciences at Makerere University, Kampala has been suggested (estimated cost of 2 million US Dollars). There is also a need for a national information centre to gather and share information (Duncan, 1997).

Technical considerations

Matching technology with the user is often the most serious technical problem related to sanitation. No amount of hygiene promotion should compensate for inadequate or unsuitable engineering design. It is vital that sanitation facilities are suitable to the culture and practices of the user. In this way, user choice is a critical technical consideration. Some unsuitable technical sanitation options have been promoted in Uganda. Even pit latrine constructions have technical problems which have yet to be solved. For example:

- In rural areas, deep pits (up to 15 meters) are dug for latrines, which makes the digging of pits a specialist activity requiring substantial payment. These pits are often spanned by timber latrine slabs, which usually become unsafe and require replacement within three years because of termite destruction Small (0.5m x 0.5m) concrete "sanplats" are heavily promoted for installation over the squatting area of the wooden slabs. They make cleaning the latrine easier but contributes nothing to longevity of the slab and therefore to safety. Demolition and reconstruction of the latrine superstructure and slab must then be carried out over a used pit, possibly salvaging a soiled "sanplat"
- In densely populated areas, land is expensive. Communal latrines may be constructed with permanent superstructures and concrete slabs directly over the pits. These fill up relatively rapidly and have problems associated with emptying. Suction trucks for emptying latrines are

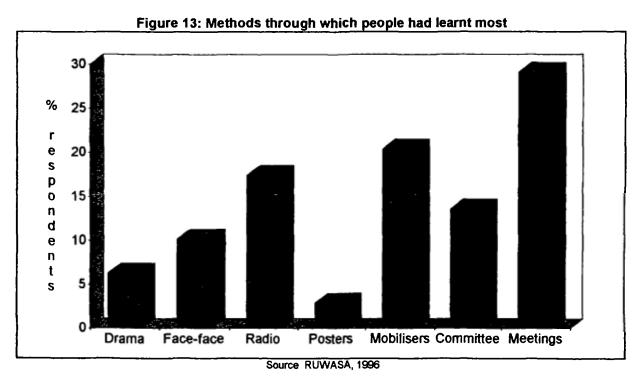
scarce and expensive to hire, and often are not able to gain access to the latrines so the latrine must be abandoned. When latrine pits can be accessed but are not adequately lined, sludge removal can destabilise the pit and lead to latrine collapse.

- Latrines are constructed without handwashing facilities and away from homes. This increases the inconvenience of handwashing after latrine use and makes hygiene promotion more difficult.
- Sanitation options in emergencies have severe limitations. Defecation fields may be quick to establish but extremely complicated to manage. Trench latrines may also be constructed rapidly, but require rigorous cleaning and management. Special smaller squat holes may be necessary for children. Shared family latrines are usually the best option (particularly for women and adolescent girls), but their construction requires massive logistical effort to organise materials and tools necessary for construction. Few guidelines are available on solid and liquid waste disposal, including disposal of animal slaughter wastes. Further research and development work needs to be done to assess the suitability of the various options and to organise resources (human and materials) at strategic locations in preparation for an emergency.

Inadequate research and development has been carried out to solve some of the technical problems. Areas in need of significant research include low cost sanitation options for densely populated areas, low cost pit linings for areas of high water table or collapsing soils, pit excavation in hard-rock areas, termite resistant timbers or timber treatments, suitability of composting and recycling of excreta and solid waste.

Hygiene promotion

In general people in Uganda have the knowledge about sanitation and hygiene and yet practice remains poor. The provision of information alone will be ineffective without addressing the structural determinants of health (such as the provision of suitable sanitation facilities). At the same time, hygiene promotion should facilitate individual action. Uganda was involved in the early stages of the development of highly effective participatory health education, including the participatory learning and action techniques of mapping, diagramming and voting. Since then, other countries have taken these initiatives and refined them into effective national hygiene promotion programmes and have been promoted under various titles such as PHAST (WHO), and PROWESS (UNDP/World Bank) etc. Individual programmes and projects in Uganda have incorporated these methodologies into their operation, i.e. RUWASA, WaterAid and the former South West Integrated Programme (SWIP). Most other hygiene education activities (including Government hygiene promotion activities) concentrate on the didactic methodologies which provide information to individuals or a community in the expectation that their practices will automatically change.



complex health disorders. Increased numbers and standards of school latrine facilities would decrease the dropout rates from and standards achieved in schools (especially for adolescent girls). Linkages between improved sanitation and reduced environmental degradation would foster potential improvements to fisheries production, agriculture and tourism; and reduce the need for expenditure on various environmental clean-up campaigns. Together, these improvements would also result in increased personal dignity and a greater sense of national pride. No other single intervention could do so much to improve health and socio-economic development.

More research is needed to solve the following problems:

- technical designs for difficult sanitation conditions, such as low cost drainage and excreta
 disposal options for high populated areas, low-cost pit linings for areas with collapsing soils,
 excreta disposal options for areas with high water tables, construction of latrines in hard-rock
 areas, termite resistant timbers or timber treatments, recycling options for excreta, solid wastes
 and liquid wastes.
- hygiene promotion techniques which emphasise a more facilitative and enabling approach to promoting health, particularly ways which support people's capacity to control the factors that determine their own health.

Mechanisms must be found to share knowledge and experiences from the communities and create an accessible bank of information relating to sanitation.

Institutional development is required to facilitate the leadership role of the MoH, particularly the Environmental Health Division in it's role to develop policies, guidelines, standards of service and support to the districts. Further capacity building is required to develop the training institutions to deliver appropriate refresher and follow-up trainings so that cadres of district staff with responsibilities for sanitation are fully informed and involved in the promotion of sanitation. Mechanisms to strengthen the capacity of the private sector to facilitate sanitation service provision and hygiene promotion must also be developed.

National level work on legislation, policy and guidelines should include:

- designation of a lead institution for sanitation to ensure inter-sectoral collaboration and coordination, including research and development of community mobilisation, hygiene promotion and engineering design.
- developing appropriate minimum standards of service,
- reorientation of expenditure towards sanitation for all health, schools, institutional, water and environmental sanitation programmes; for both government and donors.

An accelerated and comprehensive approach to improved sanitation is required urgently. All sectors of Ugandan society need to be mobilised to improve their own sanitation situation. Political support from the highest level is required to activate the process of improved sanitation.

	The Plan of Action	
	Concept Paper	(May 1997)
•	Cabinet Memorandum on Sanitation	(May 1997)
•	National Working Group on Sanitation	(July 1997)
	National Sanitation Forum	(October 1997)
•	Finalisation of National Sanitation Policy	(December 1997)
•	Launching of National Policy and Strategic Programme	•
	by The President of Uganda	(January 1998)
•	Donor Pledging Conference	(January 1998)
•	Implementation of the National Sanitation Programme	(1998-2010)

The real challenge is to initiate action on sanitation!

Sanitation fact sheet

No other single intervention has the potential for such significant improvements to the health and well-being of a nation (Esrey, 1994).

Key sanitation elements for health

- Clean, convenient and safe means of excreta disposal
- Washing of hands with soap or ash after defecation and before handling food
- Safe collection, handling and storage of water

Global potential

- Improved health status by reducing under 5s mortality rate by as much as 60% and the overall diarrhoeal mortality rate by as much as 66%. Other diseases are also reduce, such as schistosomiasis (77%), ascariasis (29%) and trachoma (27-50%). Severe and moderate stunting may be reduced by 39%. The health effects are greater for sanitation than they are for water.
- Social benefits of improved sanitation affect everyone, especially females
- Rapid cost recovery of sanitation investments from reduced curative health expenditure and increased revenue generation
- Significant reduction of deaths and disease (more than for water provision)
- Hygiene promotion can facilitate people to take action to improve sanitation and then other factors which determine their own health and well-being

Ugandan potential

- Diarrhoeal morbidity rates could reduce by as much as 36% with improved excreta disposal and 33% with improved hygiene (notably handwashing) i.e. to as low as 66 per 1000 live births
- Under 5s nutritional stunting rates could reduce to 30%
- . Universal Primary Education would be enhanced, particularly for girls
- 39.51 million work days would be saved each year from reduced morbidity
- Government and households would save billions of shillings annually from savings on curative health expenditure, releasing health resources for other diseases
- Billions of Shillings spent on environmental clean-up could be invested in commercial industries which utilise "waste" products and generate revenue
- Potential for increased revenue generation from tourism and fisheries industries

Challenges to be met

- International Water and Sanitation Decade (1981-90) saw overall deterioration of sanitation conditions
- · Continued political commitment at all levels
- Lead institution providing leadership and direction
- Appropriately trained and motivated human resources
- Strong policies and clear guidelines to include minimum standards of service
- Adequate financing to achieve those minimum standards
- Research and development into appropriate technologies for problem areas
- Adoption of innovative and enabling hygiene promotion approaches
- Relevant legislation with adequate inspection and control

Annex 1 - Agencies/Organisations working in water/sanitation sector (1997)

Acronym	Agencies/Organisations	Address	Telephone
ABP	Aboke Braintree Project	Box 457, Lira	
ACAV	Associazione Centro Aiuti Voluntari	Box 21324, Kampala	041 221426
ACORD	Agency for Co-operation & Research in Development	Box 280, Kampala	041 267668
ACT-U	Association for the co-operation between Ticion and Uganda	Box 255, Iganga	
ActionAid	ActionAid - Uganda	Box 676, Kampala	041 267738
ADRA	Adventist Development and Relief Agency	Box 9946, Kampala	041 530865
AMREF	African Medical Relief Emergency Fund	Box 51, Entebbe	042 20217
AVSI	Associazione Voluntari per il Servizio Internazionale	Box 6785, Kampala	041 268049
BIDA	Bufumira Island Development Association	Box 11164, Kampala	
BSF	Hoima/Kibaale Integrated Development Programme	Hoima	
BUSO	BUSO Foundation	Box 16044, Kampala	
Busoga Trust	Busoga Diocese, Jinja	Box 1193, Jinja	043 20999
C of U	Church of Uganda	Box 14123, Kampala	041 270218
CAFO	Community Aged Foundation	Box 140, Kasese	
CARD	Community Association for Rural Development	Box 544, Iganga	
CARDA	Community Action for Rural Development Association	Box 148, Arua	
CARE	CARE International in Uganda	Box 7280, Kampala	041 258568
CASEDEV	Cultural Agency for Social and Environment	Box 12116, Kampala	041 531521
CCF	Christian Children's Fund	Kiboga	041 256923
CIPS	Christian International Peace Service	Soroti	Ì
CIS	Committee for International Self Reliance	Box 2923, Kampala	041 272158
CPAR	Canadian Physicians for Aid and Relief	Box 7504, Kampala	041 267124 (res)
cs	Cooperazione e Sviluppo	c/o Box 4646, Kampala	c/o 041 233775
DANIDA	Danish International Development Agency	RUWASA, Mbale	34571
DfID	Department for International Development (formerly ODA)	Box 7070, Kampala	041 267939
DGCS	Direzione Generale della Vooperazione allo Sviluppo	Box 4646, Kampala	041 233775
DoNK	Diocese of North Kigezi	Rukungiri	
FHI	Food for the Hungry International (Uganda)	Box 12167	041 270800
Global 2000	Global 2000	Box 21120, Kampala	041 235492
GTZ	German Technical Co-operation	Box 5680, Kampala	041 567373
IA	International Aid (Sweden)	Box 7549, Kampala	041 271621
IFAD	International Fund for Agricultural Development	Hoima	
IICD	Italian Institute for Co-operation and Development	Box 7205, Kampala	041 233402
ILO	International Labour Organisation	Box 7184, Kampala	041 254489
InterAid	InterAid Uganda	Box 737, Kampala	041 267338
ISS	Istituto Superiore della Sanita	Box 26652, Kampala	041 223014
JICA	Japanese International Co-operation Agency	Box 60202, Nairobi	(02) 332955
KDDP	Kibaale District Development Programme	Kıbaale	·
KDF	Kyakulumye Development Foundation	Box 489, Kampala	
K I W	German Development Bank	Frankfurt, Germany	0049 69 74310
КНСР	Kalungamı Health Care Programme	Box 17, Kalıro	
LWF	Lutheran World Federation	Box 5827, Kampala	041 221426
MRC	Medical Research Centre		1
NARUDA	Nakisunga Rural Development Association	Box 40, Mukono	
ND	Namirembe Diocese AIDS Programme	Box 14297, Kampala	041 244347
NWSC	National Water and Sewerage Corporation	Box 7053, Kampala	041 256761
OED	Austrian Service for Development Cooperation	Box 9719, Kampala	041 245253
OXFAM	Oxford Committee for Famine Relief (UK & Ireland)	Box 6228, Kampala	041 267425

Annex 1 - Agencies/Organisations working in water/sanitation sector (1997)

Acronym	Agencies/Organisations	Address	Telephone
PIED FARME	Produce for Income Employment and Development Farmers Group	Box 619, Iganga	0495 2359
PI	Plan International (Uganda)	Box 12075, Kampala	041 221495
Red Barnet	Danish Save the Children - Uganda	Box 11857, Kampala	041 257906
SCF	Save the Children Fund (UK)	Box 1124, Kampala	041 235515
SFHP	Soroti Family Helper Project	Box 256, Soroti	j
SNV	Dutch Development Agency	Kampala	041 220582
SOCADIDO	Soroti Catholic Diocese Organisation	Box 340, Soroti	
SVI	Servizio Voluntario Internazionale	Moroto	C/o 041 220469
T des H	Terres des Hommes	Box 888, Kampala	
UHFH- IBAND	Uganda Habitat for Humanity Ibanda Project	Box 46, Kasese	1
UNHCR	United Nations High Commissioner for Refugees	Box 3813, Kampala	041 231231
UNICEF	United Nations Children's Fund	Box 7047, Kampala	041 234589
URDT	Uganda Rural Development Trust	Kıbaale	
UWESO	Uganda Womens Effort to Save Orphans (Bulambuli County)	Box 1810, Mbale	
VEDCO	Voluntary Efforts for Development Concerns	Box 1244, Kampala	041 270598
Vision Terudo	Vision Teso Rural Development Organisation	Box 116, Ngora	'
vso	Voluntary Service Overseas	Box 2381, Kampala	041 268984
VSTM	Voluntary Service Team Mubende	Box 222, Mityana	040 2392
WaterAid	WaterAid	Box 11759, Kampala	041 220108
WVI	World Vision International	Box 5319, Kampala	041 245758
YWAM	Youth With A Mission	Box 792, Soroti	043 21740

