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Review of Irish Aid Involvement in the WSS sector in sub-Saharan Africa

Water and Environmental Sanitation Sector Policy and Guidelines

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1.0 Introduction

Kumi District is situated in eastern Uganda surrounded, by lakes Kyoga and Bisina in the west and north respectively. This area lies in a comparatively drier belt of Uganda with modest annual rainfall and long dry spells. It lies on the basement complex with few fractures and fissures. There are outcrops of weathered chrysaline rocks seen particularly in the west and north of the district. Lateritic soils abound in many parts of the district. Generally, ground water yields from deep wells are low. There are several wide shallow valleys with seasonal swamps. Few perrenial springs exist in the district. There are many seasonal springs, some with high yields during the rainy season. The majority of the springs have shallow gradients. Attempts to protect these in the past without careful observation of the behaviour of a particular spring, coupled with poor construction, resulted in the springs silting and drying up altogether. A casual look and the results

from construction of latrines seem to suggest the possibility of shallow wells as a viable option for point sources of rural water supply.

Water and Sanitation featured prominently during project identification for Irish Aid support to Kumi District Development Programme activities. Water supply and sanitation coverage in Kumi district is generally poor with community access to safe and clean water ranging from 19% in the northern part to 56% in the southern part. Of the 290 boreholes drilled in Kumi District less than 51% are working. Of the non working ones, at least 18% can be repaired with a Service Rig truck. A significant proportion of springs which were protected have failed to function due to either incorrect selection of the spring or poor construction work or both (Water and Sanitation report, 1997). Kumi Town water supply is inadequate, with water only obtainable in seven working boreholes for a population of over 15,000 compared to the WHO recommended population of 250 persons per borehole (ibid).

Latrine coverage is estimated at 19% (Water and Sanitation Report, 1997). The most important sanitation system is the simple pit latrine. This is affected by fluctuating water levels and hard rocks which inhibit digging of pits in a few places. There are two concrete slab casting yards in the district run by the Health Department of the district and by Vision Terudo, a local NGO (ibid). The levels of sanitation is particularly appalling in the district and calls for rigorous people centred efforts to reduce the related diseases, protect the environment and promote the overall well-being of the population.

Available statistics on the sector is inadequate or scattered.

Many diseases with direct link to poor water supply and to poor environmental sanitation afflict people of Kumi. Water and sanitation problems also affect economic performance, first as a result of poor health and because of the time women, who are the traditional water carriers, use to collect water. This fact was realised during discussions with the District Health Inspector, the District Water Officer, some of the district councillors and other community leaders as a major concern.

Nationally, the top ten diseases responsible for the largest proportion of the burden of disease are: *malaria, HIV/AIDS, diarrhoeal diseases, tuberculosis, pneumonia, upper respiratory tract infections, malnutrition, anaemia, intestinal worms, measles.*

In Kumi District the main causes of morbidity are: *malaria, upper respiratory tract infections, intestinal worms, trauma, diarrhoeal diseases, eye infections, skin infections, anaemia, ear infections, maternal complications and bilharzia.* Apart from trauma arising from accidents and effects of war as well as maternal complications, all the rest of the diseases are linked to poor environmental sanitation and poor water supply. Sanitation conditions have the most significant effect on water and sanitation related diseases. Improved excreta's disposal and hand washing after defecation and before handling food can reduce mortality due to diarrhoeal diseases by 65%, reduce morbidity by 33-35% and reduce severe and moderate nutritional stunting by 39%. No other single intervention has the potential for such a significant improvement to the health and wellbeing of our people' in Uganda (Ministry of Health Policy statement, 1997/98). Even with this knowledge, unless there is adequate supply of water to households, this basic

hygiene practice cannot be implemented.

Typical required data

	Ngora			Kumi			Bukedea		
water supply	population served (#) (%)			population served (#) (%)			population served (#) (%)		
piped water inside	****		***	***		***	***		***
piped water outside	****		***	****		***	****		***
	units		units	units		units	units		units
boreholes working	****	****	***	****	***	***	****	***	***
borehole not working	*****	****	***	****	***	***	****	***	***
unprotected springs	*****	****	***	****	***	***	****	***	***
protected springs	*****	****	***	****	***	***	****	***	***
protected wells	*****	****	***	****	***	***	****	***	***
open wells	*****	****	***	****	***	***	****	***	***
stream/river	*****	****	***	****	***	***	****	***	***
lake/pond/valley dam sources	*****	****	***	****		***	****	***	***
Total population	*****			*****			****		

toilet	households served	(%)	households served	(%)	households served	(%)
private water borne	***	**	**	**	**	**
communal water borne	***	**	**	**	**	**
private pit latrines	***	**	**	**	***	**
communal pit latrines	***	**	**	**	***	**
no sanitation facility	***	**	**	**	***	**
Total households	***		***		***	

A number of NGOs and international organisations viz. UNICEF, VISION TERUDO, CARE, REDD BARNA, SOCADIDO, ACAV, Youth with a Mission and Irish Aid are involved in the water and environmental sanitation sector within Kumi district, apart from central government support through the Directorate of Water Resources and the Ministry of Health.

2.0 Water and Sanitation Situation policy considerations

The beneficiaries of water and sanitation facilities are individuals, households and villages(communities). Responsibility to provide and to maintain services in the sector will depend mainly on households, villages(communities), the subcounty and the district and their local leaders with support from the national government, NGOs and international agencies. Coverage of the population with adequate sanitation and safe water sources should therefore be assessed at the village(community), subcounty and district levels.

2.1 Community level

Core interrelated problems at the community level include:

- (i) poor hygiene practices
 - low access to safe water
 - low household latrine coverage
 - poor housing standards
 - poor living environment

These have direct link to health

- (ii) lack of basic knowledge about the link of poor health with water and sanitation
 - low literacy rates, especially among women
 - inadequate provision of health education on safe water and adequate sanitation
- (iii) ~~lack of basic knowledge about the link of poor health with water and sanitation~~
sanitation.
- (iv) low household income with which to improve the socioeconomic status of the community
- (v) lack of community participation in the management and maintenance of water sources
 - lack of/or inadequate organisation structures
 - lack of management skills
 - dependence on government and NGOs for the provision and maintenance of safe water sources
- (vi) lack of/inadequate water supply
 - poor ground water yields
 - lack of/inadequate tools for development of safe water sources
 - lack of/inadequate hand pumps and spares
 - lack of/insufficient trained personnel to construct and to repair water sources
 - poor quality of unprotected water sources
 - long distances to safe water sources
 - safe water technologies expensive to implement

remote banking facilities (to keep money collected for implementation and maintenance of water sources at village level)
lack of awareness of community maintenance procedures
women not involved in management and decision making roles
contaminated surface water sources

- (vii) **poor/inadequate sanitation**
poor soil conditions for construction of pit latrines
insufficient tools to construct latrines
latrine construction expensive
poor soil drainage within households
lack of awareness on good hygiene and sanitation practices

2.2 Sub-county level

The central problem at this level is inadequate support to the communities

Major constraints and contributing factors include:

(i) **inadequate staffing**

few trained well masons
few trained pump mechanics
few trained spring fundi
few trained latrine fundi
few trained plumbers
inadequate motivation

poor living conditions
few extension health staffs
few extension community development staffs
inadequate supervision from the district
no refresher training
low staff morale

(ii) **inadequate equipment and supplies**

lack of resources (cement, pipes, reinforcement steel, moulds, pumps, taps, tools, transport)
misuse of available resources
low revenue base
no facilities for rural banking

no communication with external suppliers
no local suppliers

(iii) the lack of management skills

no regular WES management committee meetings
lack of resources for training sub-county staff
inadequate supervision of pump-mechanics and fundi
no record keeping
no inventory of WES village infrastructures
no minutes of management meetings kept

2.3 District Water and Environmental Sanitation

The core problem at this level is low capacity to manage WES activities

(i) Inadequate supervision

inadequate funds and logistics
lack of substantive district staff (District Water Officer)
lack of funds (low local revenue base)
inadequate technical skills in the district
inadequate coordination of NGOs and other key players in the sector leading to
duplication, inconsistent policy implementation, irrational distribution of
resources
poor management of available resources
inadequate records/data base
lack of facilities to monitor water quality
link between health and WES not specifically verified by data from District Medical Office
infrequent district steering and management committee meetings
no records of meetings
no clear sector policy

(ii) Uneven distribution of resources

Uneven distribution of water resources (especially ground water)
unfavourable ground conditions for latrine construction in some parts of the district
scattered households make resource allocation difficult
no literature on sector activities

3.0 Opportunities

(i) Central Government

(a) Directorate of Water Development (DWD)

The directorate is responsible for national policy, planning, coordination of external support, training, water resources' management, quality assurance, inspection and support services. The directorate maintains a link to the district through the District Water Officer/Engineer. It plays a leading national role in water development.

(b) Ministry of Health

The ministry is responsible for national policy on health, planning, coordination, external support, training, health inspectorate, health education, quality assurance, treatment of cases, surveillance of health related problems and environmental sanitation. The ministry maintains a link with the districts through the District Medical Officer, District Health Educator, District Health Inspector and District Health Visitor. It plays a leading national role in sanitation and hygiene education.

(c) Ministry of Gender and Community Development

The ministry is responsible for community mobilisation, sensitisation, promotion of gender issues and grass-roots training in all aspects of development including WES activities. The ministry maintains a link with the districts through the District Community Development Officer. It plays a leading role in community mobilisation, sensitization and training.

(d) Ministry of Local Government

Has overall responsibility over policy and functioning of decentralised districts. Has the Resident District Commissioner as the Central government representative. The Chief Administrative Officer (CAO) is the Chairperson District WES Management Committee and coordinates all WES activities in the district. The CAO through one of her assigned assistants monitors and supervises implementation of sector activities in the district. The political head of the district is the Chairman LC5. The Chairman and the CAO provide very strong leadership in Kumi district.

Apart from the linkage of the central government through the district department heads, there is a national steering committee known as the WES Inter-ministerial Committee where all relevant ministries and the main donors of the sector, including -UNICEF are represented.

(ii) International Agencies and local NGOs

(a) UNICEF

is the single most important external donor for WES nationwide. UNICEF provides funds and other resources for protecting springs, drilling boreholes, constructing shallow wells, paying allowances for district WES technical staff, provision of materials such as cement and pipes, provision of logistical support and training. UNICEF has capacity to provide funds and materials on quarterly basis as long as it can receive acceptable accountability for resources disbursed in the preceding quarter.

UNICEF also supports primary education under its BECCAD (Basic Education, Child Care, and Adolescent Development) programme and a health programme including immunisation.

(b) Irish Aid

Provides support to Kumi District Development Programme as a whole including support to the WES sector based on district plans. It is the single most important donor for Kumi district.

(c) CARE International/DFID

The British DFID is assisting Kumi district in areas of health and natural resources.

Approval for the four-year district health project was given in 1996 and CARE Uganda, the implementing agency, has started the implementation. The objective of the project is to restore access to essential primary health and referral services, with emphasis on reproductive health. The project includes:

Upgrading and remodelling of a number of health units including, on a limited scale, two of the three hospitals in the district.

Extensive training of the district health management team, health workers and other district officials.

Community involvement in key decisions affecting the health services, such as repairs and maintenance of local units.

The project will also attempt to assist the district to establish realistic and affordable user charges for health services.

A feasibility study for possible DFID support to natural resource development in Uganda was completed in 1996 and approval for the design phase was received in early 1997. It is proposed that a portion of this national programme will assist the development of agricultural

research and extension services at Serere Agricultural Research Station, located in neighbouring Soroti district.

(d) Red Barnet (Save the Children - Denmark)

This Danish NGO assists disadvantaged children in education and other areas. It is assisting communities of Malera and Kolir sub-counties with building schools. They also support the District Education Office to run workshops for teachers to highlight the problems of disadvantaged children.

(e) Red Barna (Save the Children Norway)

Red Barna supports the District Probation and Welfare office to develop their action plan for children.

(f) DED (German Voluntary Development Service)

This German development organisation has been implementing a child welfare project in neighbouring Soroti District on a pilot basis. In 1997 they had planned to expand to Kumi District.

(g) The Word Bank

Two government-managed programmes funded by soft loans from the World Bank were assisting Kumi: the Northern Uganda Reconstruction Programme (NURP) and the Programme for the Alleviation of Poverty and Social Costs of Adjustment (PAPSCA). Both programmes assisted local rehabilitation on a cost-sharing basis with the district and communities. To date a total of 53 schools have been constructed with support from both PAPSCA and NURP. NURP has also assisted improvements to the Kumi Town water supply, borehole drilling in rural areas, highway component (Serere - Kumi road) and to urban access roads.

(h) African Development Bank (AfDB)

AfDB is providing Uganda with a soft loan for the rehabilitation of rural feeder roads in several districts, including Kumi. So far the AfDB support has covered some training for Kumi Department of Works personnel and preliminary technical studies on the roads.

(i) VISION TERUDO

is a local NGO operating in the district concentrating in Ngora county. It is mainly concerned with latrine slab construction, springs protection and hygiene education in the Water and

Environmental Sanitation sector, in Agriculture including cattle restocking, Education including support to needy children with school fees, and rural credit facilities.

(j) Religious Organisations

The Dioceses of the Church of Uganda(Anglican) and the Catholic Church implements a wide range of social sector development activities in the district.

(iii) Water Resources

Kumi district is bounded by lakes Kyoga, Bisina(Salisbury) and Opeto.

Several swamps and valleys abound in which to construct shallow wells

Several boreholes have been drilled and can be repaired

There are few protect able springs in the district

There are opportunities for rainwater harvesting in schools and other buildings with impermeable roofs

There is good ground water yield for exploitation with hand pumps

(iv) Latrine Construction

Soil conditions in households are generally good for latrine construction except isolated cases of high water table and hard laterritic rocks.

4.0 Kumi District's Strategies in the WES Sector

(i) General Policy Statement

Support to Kumi district in the WES sector should focus mainly at the community level and front line service levels. Emphasis should be put on developing a preventive maintenance system for all protected water sources and for improving household sanitation and hygiene education. WES related skills are to be imparted to community members in order to promote self determination and improve sector activities, facilities and coverage.

Increased involvement of women in the sector is to be promoted owing to their leading role in the use of water and management of homes.

Service delivery capacity at the subcounty and by local development agencies is to be strengthened.

Community members are to be encouraged to take a more pro-active role in preventive maintenance of water sources, improvement of sanitation, hygiene practices, and water supply facilities and increasing coverage.

Kumi district is to strengthen linkages, coordination, and collaboration between communities and WES services including local NGOs, financial institutions and government agencies.

(ii) Guiding principles

Water resources should be sustainably managed at the lowest appropriate institutional or community level;

Water resources' users: particularly women, should be involved in design, implementation and management. They should be involved in formulation of water policies, programme development and monitoring.

Guidelines should be developed and provided to appropriate institutions and communities in local languages to enable them to manage water resources efficiently in a transparent and accountable manner.

Cross-sectoral mechanisms for integrated water management such as linkages between land and water management, irrigated agriculture, drainage, wetlands, forestry, fisheries, animal husbandry and environmental management should be developed and encouraged.

Soil contamination by human waste and other hazardous matter likely to harm human and animal health by direct contact, wind propagation or through water shall be prevented by appropriate collection and disposal methods.

Waste water disposal in households shall be in a manner that will not be hazardous to health. Proper drainage of compounds shall be emphasized.

Continuous hygiene education shall be implemented and emphasized in households. This shall cover all aspects of water collection, storage, use and sanitation. Women groups, schools, and health units will be targeted for effective hygiene education.

Technologies that are appropriate for increasing service coverage shall be promoted and encouraged.

(iii) Detailed Strategies

These strategies are derived from an Irish Aid general policy statement and the above guiding principles. They elaborate ways in which the policy can be implemented, by suggesting activities which can be performed at various levels. It is important to note that solutions to problems must be devised at the local level, in conjunction with the appropriate grass root authorities.

Strategy 1 Improving quality of water sources and increasing coverage

1. carry out a survey of safe water sources by village (within 1.6Km walking distance) and compare with population served
2. train spring fundis, equip them as village contractors

3. carry out training in shallow well construction, borehole repair and rehabilitation and auger drilling
4. carry out survey for potential sites for springs' protection and shallow well construction
5. develop certification system for protected water sources including quality testing
6. support community initiatives to construct rain water tanks including ferrocement tanks
7. link communities to local financial institutions to safeguard local contributions for maintenance and to potential donor agencies for capital intensive water supply technologies
8. promote an integrated approach by concerned government agencies, NGOs, etc. operating in the sector to maximise impact.
9. initiatives to avail simple construction equipment and materials for improving water sources in communities.
10. involvement of small contractors including development of tendering, inspection(supervision), certification.

Priority activities include the following:

1. Strengthening and developing a community maintenance system through training of water committees
2. Supporting the District Water Office in transport, training of staff, renovation of office premises and provision of office equipment.
3. Supporting the District Health Inspectorate Office to carry out community outreach and hygiene education activities through village health, hygiene, and sanitation campaigns.
4. Supporting training of casting yard masons, shallow well masons, spring ffundis and pump mechanics.
5. Supporting purchase of basic tools and spare parts for District Water Office.
6. Supporting slabs casting and decentralisation of casting yards to lower levels of Kumi, Ngora and Bukedea.
7. Repairing service rig truck.

Strategy 2 Management, sustain ability and maintenance of water sources.

1. develop local capacities for user/community management and maintenance of water sources
2. strengthen the capacity of communities, CBOs, subcounty and districts to hold regular scheduled meetings on WES sector activities (at least monthly).
3. strengthen record keeping and accountability for community initiatives in the sector
4. ensure all water sources have active caretakers
5. ensure all water sources have functioning water and sanitation committees
6. ensure there are functioning subcounty WES committees
7. ensure water source committees have bank accounts for maintenance of water sources
8. ensure sub-county committees have bank accounts for sector activities.
9. development of user fees for purchase and maintenance of tools

Strategy 3 Improve latrine coverage and other sanitation components

1. train latrine fundis
2. train groups to produce latrine slabs
3. improve availability to communities of tools to construct latrines, viz. pickaxes, spades, wheelbarrows
4. encourage construction of garbage pits in every household
5. encourage construction of bath shelters with soak pits in every household
6. encourage construction of washing bays at water sources
7. encourage construction of dish racks in every household
8. encourage construction of separate houses for domestic animals and poultry
9. encourage slashing and draining of compounds of households

Strategy 4 Community Mobilisation and Hygiene Education

1. regular training of CBOs
2. production of manuals on sector activities
3. development of relevant plays(drama) and songs on sector activities
4. development of relevant radio messages on sector activities in local languages
5. acquisition and distribution to communities of relevant posters on sector activities
6. encourage regular debates in schools on sector activities
7. demonstration of relevant pilot sanitary facilities

Strategy 5 Watershed Management and Environment Protection

1. encourage tree planting around water sources
2. encourage protection of river/stream channels and banks
3. encourage construction of fish ponds below springs
4. maintain drainage channels and catchment areas
5. provide separate animal watering troughs away from domestic water collection points.