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MAXIMIZING THE BENEFITS FROM WATER AND ENVIRONMENTAL SANITATION

Factors influencing equitable distribution of water supply and sanitation services in Uganda

Narathius Asingwire, Dennis Muhangi and John Odolon, Uganda

Inequitable distribution of water and sanitation services has received national recognition and equity has been adopted as a key theme that should be monitored and measured every year as part of the sector's performance review. The study revealed that existing policy prescriptions, strategies and guidelines are largely inclusive of equity provisions. The problem is more of policy translations and application at the district and lower levels. The study concluded that, whereas other factor such as natural occurrence of water, hydro-geological factors and availability of funds combine to dictate the choice of technology for water service delivery, political influence seems to be decisive in actual allocation of water points to be constructed especially where there is no accurate information and uncertainty about the technical criteria to use.

Introduction

WaterAid Uganda in consultation with the Sector Performance Thematic Team¹ (SPTT) carried out this study between May and August 2005 to ascertain factors influencing equitable distribution of water and sanitation services in Uganda. The purpose of the study was to generate information that will contribute to equitable water and sanitation delivery in both rural and urban areas and to identify feasible means by which service provision can be improved. The SPTT developed a Performance Measurement Framework, the basis for annual performance assessment which considers the agreed "Golden Indicators". The indicators require focused and in-depth analysis in order to generate information useful for coherent policy decision-making and for improved performance of the water and sanitation sector. This study is a step in addressing the recommendation of the Sector Performance Report (2004) that highlighted the need to conduct more research and consultation to assess further the factors that contribute to high and low equity and the need to develop district guidelines for the equitable distribution of water sources.

The equity indicator attempts to measure the Mean Parish Deviation (MPD) from the district average in terms of the number of people per water point² (MWLE, 2004). The Sector Performance Report (MWLE, 2004) reveals that there are high levels of inequity of water access in Uganda as measured by differences in people per water point by rural district, small towns and large towns which has existed over a long time.

¹ The SPTT has representatives from MWLE, DWD, NWSC, Civil Society Representatives and Consultant/Private sector.

² Developed by WaterAid.

Ugandan water and sanitation sector in attempting to achieve equity using the principle 'some for all, rather than all for some'. Equity is of paramount importance as it is closely related to poverty reduction, for it is often the poor that are inequitably served with safe water and sanitation services.

This paper is a summary of the whole study. It provided a brief synopsis of the methodology used to generate the data, the main findings and recommendations. The findings were presented to the SPTT in August 2005 in feedback / consultative workshop and have been used in the preparation of this year's Sector Performance Report by MWLE.

Methodology

This study adopted qualitative methods. A purposive sampling technique was employed in selecting the study districts, areas and study participants.

A total of eight (8) districts in Uganda were purposively sampled in consultation with the SPTT for inclusion into this study. The eight districts included: Apac, Nebbi, Sironko, Mayuge, Hoima, Mbarara, Wakiso and Luwero.

Districts were sampled on the basis of the following criteria: Regional representation i.e., a district will at least represent each region: Central, Western, Eastern and Northern; a mixture of districts on the basis of approach regime i.e., demand-driven vis-à-vis supply-driven under which safe and clean water was provided; rural and urban characteristics;

Socio-economic and demographic statuses and characteristics; Hydro-geological factors, which potentially influence the type of water technology adopted; Climatic factors; and other factors such as safe water coverage, dominant technology et cetera.

Data were collected through documentary reviews and interviews at national, district and sub-county levels, as well

as focus group discussions at community level. Within each district, one sub county was purposively selected and two parishes were also selected from each sub county purposively. At the parish level, the study team visited two (2) water user communities/local council 1s/villages.

Study findings

The study revealed that there is wide recognition at all levels of inequitable distribution of water and sanitation services in Uganda despite increased coverage. Increasing national safe water and sanitation coverage levels (estimated at 58.4% and 55.5% respectively) are masking increasing inequities in access within districts, sub-counties and parishes. Water Point Density (WPD) for majority of districts in Uganda fall less the national target of 3.3 per 100 people. The WPD at sub-county level revealed wide variations in coverage across sub-counties, while calculations at parish level revealed even greater disparities.

Safe water and sanitation coverage

National

There is a wide variation in coverage throughout the country ranging from 20% (Pader), in the least served district, to 95% (Rukungiri) in the best served (MWLE/DWD, 2005). In the urban sector, coverage levels stand at 65% (June 2004). However, there are also variations in coverage across towns, with the highest being Mbarara (79%), and the lowest being Soroti estimated at 34% (NWSC, 2004).

There is wide variation of latrine coverage from district to district, with as low as 2% and 2.8% in Kotido and in Nakapiripirit Districts respectively and over 90% in Rukungiri district in the southwest part of the country (MoH, 2004). Coverage of public latrines is also very low (19%) with all located at institutions. most of these latrines located in primary schools, markets and health units.

Districts

There is concern that whereas the national safe water coverage has been showing an increasing trend, water services are inequitably distributed within districts. According to data obtained from DWD, Kanungu District has the most equitable distribution of water points with an average sub-county deviation of 44 (i.e., the average sub-county is within 44 people per water point of the district average). On the other hand, the district with the most inequitable distribution of water points is Kotido with a sub-county deviation of 1,015—Kotido where some sub-counties have many water points and other with very few.

Sanitation coverage within districts like safe water coverage varies widely. For instance, latrine coverage in the sub-counties of Luwero district is over 80% in the 3 Town Councils (Luwero, Wobulenzi and Bombo), but less than 50% in the sub-counties of Kamira, Kikyusa, and Wakyato (Data of July 2004 from Luwero District). In Apac, it was reported that areas near the lakeshores have low latrine coverage compared to other areas.

National policies, strategies and guidelines

Uganda's water and sanitation sector is based on an institutional and legal framework that has been continuously revised and updated since the early 1990s. Reforms have been implemented in the various sub-sectors, aimed at improving the performance of the sector. There are different policies, strategies and guidelines developed for the different sub-sectors, which potentially have implications on equitable distribution of water and sanitation services. Overall, the National Water Policy (1999) provides an elaborate set of strategies and approaches to be used in the sector.

In the rural water supply and sanitation sub-sector, the goal and targets are: Sustainable safe water supply and sanitation facilities, based on management responsibility and ownership by the users, within easy reach of 77% of the rural population by the year 2015, with an 80%-90% effective use and functionality of facilities. The objective is to reduce the walking distance to improved water sources in rural areas to 1.5 km so as to enable people devote the rest of the saved time to increasing their incomes as well as improving the quality of their lives. Sanitation in rural households, is a responsibility of individual households, while the government's role is to provide hygiene education and sanitation promotion messages. Local governments have responsibility for construction of latrines in public places and institutions such as primary schools, and markets. The objective of the urban water supply is to reduce the walking distance in urban areas to 0.2 km for common/ public point sources thereby allowing the people a chance to devote the time saved into increasing their incomes as well as improving the quality of their lives. The goal and targets are: to expand the service coverage to give 100%, to achieve sustainability of service delivery, to ensure that a basic adequate level of service is affordable via low-cost service delivery and the implementation of a subsidy and tariff system, which is equitable and beneficial to the poor, and to ensure that water, as a social and economic good, is managed in the best way

Demand responsive approach and equity

One of the key policy requirements in the provision of safe water and sanitation services is the demand-driven approach (DRA). However adherence to the principles of DRA means that communities that fail to express effective demand are left un-served. These are usually the low income groups, with less influential politicians and many times lack information. Actual adherence to demand responsiveness is also sometimes hampered by late release of funds and the pressure to spend funds in time. Overall DRA is partially abused in order to fit in the existing circumstances which leads on to inequitable resource distribution.

Interpretation and understanding of sector strategies and policies

The district and sub-county technical staff are aware of the policies and guidelines from the center. On the other hand,

the politicians are averagely aware of the broad guidelines from the line ministries and not specifically how they should be applied. Equity is affected by limited or lack of knowledge of procedures that have to be followed in acquiring new water sources from the districts or sub-counties by the communities.

Applicability of policies and guidelines

Although there is wide knowledge of the guidelines especially among the technical staff of local governments, the district and sub county officials only partially apply these guidelines, or ignore them altogether.

The interplay of political influence, lack of full knowledge by politicians, and inadequacy of resources undermines their application. The strategies and guidelines for the urban sub-sector emphasize financial viability, sustainability and water as an economic good. Majority of the low-income earners in urban areas actually pay more per unit of water than consumers with house connections.

Resource allocation

Existing resource allocation mechanisms at the center, though based on a worked formulae that considers population and coverage, have continued to lead to substantial amounts of

distribution of the services. In an attempt to ensure fairness across all sub-counties as a result of political pressures, some districts promote more inequity in the distribution of water services. With respect to resource allocations for sanitation, a higher proportion of the on-budget funds (between 37% to 63%) go to latrine construction in schools, 13% to 21% go to piped urban sewerage, while only 20% to 27% go to hygiene education in communities. Household sanitation is basically a matter of each individual household and hence often relegated to the periphery by decision-makers. There is lack of prioritization of sanitation both in terms of financing by central government as well as implementation and enforcement by district and lower level implementers.

Donor and NGO funded projects

Donor funds meant for projects as well as funds brought in by NGOs are channeled to specific districts or localities without necessarily following an equity criteria, although overall, it can be argued that donor projects and NGOs tend to target districts or areas that are deemed to be underserved or unserved with watsan facilities. There are no formal mechanisms at national level to direct the activities of projects and NGOs to the most deserving districts. Inequities tend to result in cases where some districts that were previously under-served have continued to receive project and NGO support for a very long time.

Water coverage and monitoring data

Calculation of safe water coverage based on estimated number of users per improved water source alone is not adequate to reveal the equity situation. The efforts at DWD to improve on this method of calculating coverage by including the walking distance to the water source are anticipated to improve the equity sensitivity of this procedure. There are also problems related to consistency in data between the districts and the center. At national level, calculations of coverage stop at district level, covering up inequities at lower levels. In turn, district calculations of coverage for sub-counties obscures the inequities existing at parish and community level. Validity of data is also affected by non-functionality, due to lack of a proper mechanism to report non-functional water sources. Validity of data on sanitation is more challenging due to complexity of sanitation.

Other factors affecting equity

There are other factors that potentially affect the equitable distribution of water and sanitation services. These include, population distribution and mobility, under-prioritization of community software activities as opposed to hardware, community socio-economic status, leadership and commitment in relation to promoting sanitation, people's attitudes and values, and insecurity. It is important to consider natural hydro-geological factors, cost of water technology and political influence (real and perceived), natural resource endowments.

Strengths and Weaknesses of National Policies and Guidelines

Strengths

The guidelines spell out the roles of different stakeholders, thus enhancing participation and avoiding role conflicts.

The guidelines promote coordination and collaboration in the sector.

The guidelines promote a bottom-up participatory approach which enhances participation, with high chances of meeting people's needs including equitable distribution.

Weaknesses

They allow decision-making by politicians, which provides room for ignoring or influencing the technical considerations.

The politicians are not fully aware of the guidelines.

Some communities are not aware of the guidelines, and do not have mechanisms for monitoring or demanding their enforcement.

Parish Development Committees are not functional in all communities.

grants disbursed to districts whose coverage levels are well above the national average, even above the 77% target for 2015. Planning and budgeting within ceiling limits also means that districts receive inadequate resources to meet their needs in a given year, leaving some deserving areas unserved. The districts use various criteria with varying degrees of inclination to one or the other, with no weights assigned to each factor and no clear ranking schemes, which impacts on equitable

Recommendations

The recommendations for the improvement of equitable distribution of watsan services are so interrelated, and hence they need to be implemented as an integrated package instead of prioritizing them. These range from policy matters, planning, resource allocation at all levels; data collection and monitoring; and balancing of expenditure between hardware and software.

Policy planning and resource allocation at national level

Develop, disseminate and implement equity guidelines at national level and oversee that these are adhered to by local governments.

More resources should be earmarked to support construction of water sources in underserved areas. This might require channelling more funds to alternative technologies that are feasible in such areas..

The centre should direct and devote special attention and financial support to un-served areas with limited water technology options (water scarcity/water stressed) instead of leaving it to districts till certain time when the coverage levels of such places have also picked up.

Planning and resource allocation at district level

At district level, calculation of coverage figures should be at parish level, rather than stopping at sub-county level. This could be improved further by introducing other methods of determining need, as the Water Point Density (WPD) method, applied at parish level, calculated by the district water office annually. Districts with high Mean Parish Deviations (MPDs) should be required to allocate new water points to those parishes with the highest number of people per water point..

Strengthen the practice of participatory planning and adherence to it. Allow time for the demand-driven approach to be applied.

Institute mechanisms/procedures that increase the transparency of decision-making at district level, regarding water sources allocation.

Data collection and monitoring systems

Tools should be developed that can assist to collect, analyze and present data on coverage and equity. This may include water resources maps, population density maps, table formats and other means of demonstrating the magnitude of inequity. Information should be used as an advocacy tool. Improve data collection and information flow about non-functional water sources so that accurate calculation of coverage can be achieved. District data on number of people per water point by parish should regularly (annually) be published or made available to all councilors and all sub-counties as a means of promoting transparency. When this data is used to make decisions on water source allocation, then the leaders of the disadvantaged areas can question or understand the basis of the decisions. Decision-makers should in this respect

be regularly furnished with equity data to enable them take informed and poverty sensitive decisions. Finalize work to revise procedures for calculation of safe water coverage levels, including the walking distance variable

Balance between hardware and software activities

Increase software budget for both water and sanitation, Promote closer integration of sanitation activities of MoH with those of DWD/DWO

District software activities should go beyond communities selected for water source construction (or at least pay similar attention) to even communities that are not yet served with water sources. Software activities for un-served communities should include information about available support at district and sub-county, procedures and requirements for getting a water source, requirements and conditions for different water technologies, and hygiene and sanitation.

NGO Involvement and Advocacy

Equity should form an important element on the agenda of the NGOs in the sector for advocacy especially at district level. Develop or institute formal mechanisms for other actors such as NGOs to feed data to districts and vice versa to enable accurate and comprehensive data collection and use.

References

- Centre for Basic Research (2005):* The impact of Political corruption on resource Allocation and service delivery in local Governments in Uganda.
- Ministry of Health, Environmental Health Division (2002):* Report of the Annual Sanitation Review Meeting for Environmental Health Officers, 9-13 Dec 2002
- Ministry of Health/National Sanitation Forum (1997):* The Kampala Declaration on Sanitation, 1997.
- Ministry of Health/Water and Sanitation Program (2004):* Strengthening budget mechanisms for sanitation in Uganda
- Executive Summary. Sector Finance Working Papers, July 2004*
- Ministry of Water, Lands and Environment (2003):* Water and Sanitation in Uganda: Measuring Performance

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