A report on water supply distribution in Kikoni area.

MUGERWA FRED 15/U/7866/PS 215004276 May 21, 2017

1 Abstract.

Water is a fundamental human need. This is the basis for target 10, goal 7 of the Millennium Development Goals which sets to reduce the proportion of people without access to safe water by half by 2018. This study assessed the access to safe water supply in Kikoni area.

2 Introduction.

Water is needed for the maintenance of health. Its importance is not only related to the quantity, but also the quality. Access to water in the required quantity is needed to achieve good personal and domestic hygiene practices; while good quality water ensures that ingested water does constitute a health hazard, even in a life time of consumption.

It is however estimated that much as 1.1 billion people dont have access to water and that those who have there is a possibility of it being contaminated resulting into billion cases of typhoid, malnutrition diseases and over 860000 deaths that result from them each year.

Kikoni being a residential area accommodating many people in Kampala and mostly University students there is a need of access to clean, safe, adequate and affordable water sources. Most areas in Kampala face the problem of poor water supply leading to waterborne diseases and typhoid which had become rampant in most areas of Kampala Kikoni inclusive.

3 Methodology.

This was a descriptive cross-sectional study using structured interviews, questionnaires, filed observations and focus group discussions carried out in most residential areas of Kikoni. A triangulation of the qualitative research techniques were used to help gain a deeper insight into the context of water situation in the study.

The study set to detect a 5% difference in access to safe water, with alpha error of 5%, acceptable error of 20%, and statistical power of 80%; and using national average of access to safe water in other communities of 43.8%. Using the usual formula for sample size determination for descriptive studies, the minimum required sample size was thus determined to be 378.

The data were analyzed according to the standard method, and the results were considered to be significantly contaminated if they were found to be beyond the World Health Organization (WHO) minimum acceptable values.

4 Results.

Interviews, questionnaires were administered and retrieved and it was discovered that the most common source of drinking water was surface water (37.9%), with bottled/sachet water serving the needs of up to 19% of the households.

There were few water supply facilities in the community in accordance to the population of the area. And in these 12.3% of the water facilities provided piped supply, though with very few household connections.

Results of the microbiological analysis of the water sample where collected from the various facilities in the community. More than two third (67.9%) of the samples tested were found to contain significant numbers of Escherichia coli; especially the samples collected from surface water from which members of the community routinely drank from.

5 Conclusion.

The community had easy access to water supply, but most of the facilities were either contaminated or nun-functional. The operation and management of the facilities by members of the community, and the promotion of point-of-use purification systems are hereby advocated.

References

- [1] UN Millenium Development Goals. Available at: http://www.un.org/millenniumgoals
- [2] Federal Ministry of Water Resources. National Water Sanitation Policy
- [3] Water Supply and Sanitation Sector Monitoring bReport 1990. New York, NY: UNICEF; 1992. World Health Organisation, UNICEF
- [4] Guideline manual for water supply and sanitation programmes. London: WEDC/DFID; 1998. WEEL
- [5] Huttly S, Morris S, Pisani V. Prevention of diarrhoea in young children in developing countries. Bulletin of the World Health Organization. 1997;75(2):163-174