## 36th WEDC International Conference, Nakuru, Kenya, 2013

## DELIVERING WATER, SANITATION AND HYGIENE SERVICES IN AN UNCERTAIN ENVIRONMENT

# Water and sanitation in Eastern and Southern Africa: a regional perspective

D.J. Van Rooijen, Kenya

## **BRIEFING PAPER 1826**

The countries located in Eastern and Southern Africa are immensely diverse in geography, culture and standards of living. Despite these diversities, many countries share the prospect of likely not reaching the MDG target for water and/or sanitation, set for 2015. This paper analyses available data on WASH, such as time-to-collect, gender, hand-washing and water quality. Sub-national disparities across regions and between the urban and rural population will be examined. Some reflections on UNICEF's country-level initiatives in urban areas will also be given. The analysis is considered useful for practitioners, researchers and policy makers whom are active in the WASH sector.

## Introduction

The Eastern and Southern African region accommodates countries that are among the highest economic growth rates in the world. Continuing discoveries of large resources of minerals under African soils provide opportunities for increased government investments needed for socio-economic development, for example in education and health infrastructure and services. While on average, most of the population is living in rural areas, in South Africa, Botswana and Angola, the majority of the population is living in urban areas. Urban growth rates across the region make it more difficult to increase water and sanitation coverage in urban areas.

The region also has one of the highest rates of population using water from unimproved sources, practising open defecation and use of unimproved sanitation facilities. This paper aims to give an overview and analysis of data in the region based on most recent country data from the Joint Monitoring Programme (JMP). The types of data being analysed are:

- Water and sanitation coverage; urban vs. rural
- Time-to-source (water supply)
- Hand washing data by wealth quintile

This paper relies heavily on data presented in the JMP reports published jointly by WHO and UNICEF that report progress on access to drinking water and sanitation. One of the key tasks of the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation is to provide estimates that are comparable among countries and across time. The country data presented in the report are derived from most recent national household surveys; however the national JMP data may differ from national estimates, since different data and definitions may be used. According to the JMP, an improved drinking water source is one that, by the nature of its construction, adequately protects the source from outside contamination, particularly fecal matter. An improved sanitation facility is one that hygienically separates human excreta from human contact (WHO & UNICEF 2012).

#### Water and sanitation coverage; urban and rural

While access to an improved water source has been relatively high, varying between 85 and 88%, the region has seen a steady increase in access to drinking water in rural areas, from 35% in 1990 to 50% in 2010 (see

#### VAN ROOIJEN

figure 1). Access to improved sanitation has been much lower compared to water supply, however a similar gap in access between urban and rural population can be observed. Access to sanitation in rural areas has increased only a few percentage points, from 20 to 27%, during 1990-2010 (see figure 2). Access in urban areas has remained fairly constant, just above 50% over the same period.



The reason for slow progress in sanitation overage has been the lack of priority given by governments as well as lack of financial and staff capacities. Also, in contrary to water supply, sanitation has traditionally been seen as non-profitable. Fortunately this is changing, which can be seen for example in people's willingness to pay for using public toilets. UNICEF a related approach called sanitation marketing, which uses a market approach to sanitation facilities and infrastructure.

Regional averages on use of an unimproved water source show a significant reduction in the region, which is reflected in rural and total population (Figure 3). This is great progress made during 1990 and 2010 and a similar trend is expected in the coming decades.



The latest JMP data published by WHO & UNICEF (2012) suggest that open defecation in Eastern and Southern Africa is below 5% of population in urban areas and 32% in rural areas, with 24% for the total population in the region (Figure 4). More than 90% of those defecating in the open live in rural areas. This

#### VAN ROOIJEN

reemphasizes the need to continue efforts to reduce open defecation in rural areas. Even though the fraction of population defecating in the open has reduced halved over the past 20 years (Figure 4), the number of people in urban areas practicing open defecation has remained constant in the same period (Figure 5). This can be explained by urban growth trends. Given the trend in continues urbanization in the region, the challenge to reduce open defecation in cities and towns. Community Led Total Sanitation (CLTS) is one of the approaches currently being used in some countries in the region, aiming to move more people up the sanitation ladder.



## Time-to-source

The current JMP does not take into account the time needed to collect water, in its definition of access to a water source. Coverage of improved drinking water would drop with 8% when time-to-source would be included as an indicator of access (UNICEF & WHO 2011). On average a quarter of the population in the region takes more than 30 minutes to collect water, which is common across sub-Saharan Africa. Time-to-collect is strongly determined by the type of water facility people are using, which in turn is often determined by wealth (Figure 6). Most of the richest part of the population has a water connection on their premises, against a merely 3% in the poorest quintile. 37% of the poorest households spend more than 30 minutes to collect, against 12% among the rich.

In the ongoing post-2015 development agenda discussions, sustainability indicators such as time-to-source are considered for inclusion in new monitoring framework, in order to better capture access to water.



#### VAN ROOIJEN

## Hand washing by wealth quintile

Hand washing with soap is the most effective way to reduce human transmission of pathogens, hereby significantly contributing to reducing the burden of water-borne diseases and child mortality. Data on handwashing with water and soap are not always included in national household surveys. Recent data from four countries in the region suggest that handwashing with water and soap varies a lot by country and generally varies by the relative level of people's wealth (Figure 7). In Zimbabwe and Swaziland, the majority of the richest population is likely to wash their hands with water and soap. In the poorer quintiles, handwashing seems to be practised much less. In Rwanda and Malawi, less than 10% of people in across all wealth quintiles are likely to wash their hands with water and soap.

UNICEF is carrying out hygiene promotion activities that aim to make more people wash their hands at critical times; such as after using the toilet and before food preparation. When water is scarce and/or soap is not available in the household, ash is also a good alternative way to clean hands.



## Conclusions

While at the global level, the water target has already been met, in Eastern and Southern Africa (and sub-Saharan Africa as a whole), progress has been insufficient to meet the water target in most countries (WHO & UNICEF, 2012). In the global WASH development sector, much of official development assistance has targeted their financial support countries with a middle-income status (WHO 2012). In East and Southern Africa many countries such as Somalia and Madagascar have a low-income status and may not get the financial assistance that is needed to improve access to water and sanitation.

The analysis of the JMP data reflects that most countries in the Eastern and Southern region face challenges to increase coverage in access to improved water and sanitation. Only a few countries are on track to meet the goals set for water and sanitation. Large numbers of population are practising open defecation and other unsafe hygienic behaviour such as lack of handwashing with water and soap. This continues to be health burden and undermines the development of societies.

With increasing urbanisation, progress in improving access to water supply and sanitation in urban areas will be a challenge and therefore needs more attention by governments and the overall development sector. A few countries have reached the middle-income status, which should give governments more financial resources generated from taxes, to invest in improving water and sanitation infrastructure services. The largest numbers of people using untreated surface water and practising open defecation are still found in rural areas. Efforts to increase national coverage levels should therefore continue in rural areas. Water and sanitation remain critical in the development of societies in low and middle income countries.

#### Acknowledgements

The author would like to thank the Statistics and Monitoring Section of UNICEF Headquarters, New York, in the supply of some of the data.

#### References

- UNICEF & WHO (2011) Drinking water. Equity, safety and sustainability. Thematic report on drinking water 2011. WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP). Available at: www.unicef.org/media/files/JMP\_Report\_DrinkingWater\_2011.pdf
- UNICEF & WHO (2012) *Progress on drinking water and sanitation. 2012 Update*. WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP). Available at: www.who.int/water sanitation health/publications/2012/jmp report/en/index.html

WHO (2012) UN-water global annual assessment of sanitation and drinking-water (GIAAS) 2012 report: the challenge of extending and sustaining services. http://www.un.org/waterforlifedecade/pdf/glaas report 2012 eng.pdf

#### **Contact details**

Dr. Daniel Van Rooijen Water Sanitation and Hygiene Unit Young Child Survival and Development Section UNICEF Regional Office for Eastern and Southern Africa, UN Gigiri, P.O. Box 44145, Nairobi, Kenya Tel: 00254-20 762 2164 Email: dvanrooijen@unicef.org www.unicef.org/esaro