

The Time Factor in Ghana's Coverage Figures for Drinking Water

Background

Ghana's MDG coverage for drinking water, according to the WHO/UNICEF Joint Monitoring Platform (JMP)¹, is 82% as at 2008 and according to the Ghana Demographic Health Survey (GDHS) report by the Ghana Statistical Service (GSS), the figure is 83.8% for the same period.

Stakeholders in Ghana's Water and Sanitation Sector, together with the public and a section of the media, have always contested MDG coverage figures on improved drinking water describing them as unrealistic compared to the serious water supply situation in the country. People also find it difficult to accept these figures as representing the actual situation especially as provider based coverage figures from CWSA & GWCL rather show much lower figures of approximately 58% for both rural and urban coverage for the same period.

Some international development partners in Ghana have also expressed doubts about Ghana's MDG progress and there is a general feeling that Ghana might not be on track yet contrary to the information provided by the figures. This is summed up in a response to recent coverage figures by a representative of a donor organization in Ghana:

"I am still however confused. Does this mean that we have achieved the MDG for Water? If not (and I suspect not) I find the article very misleading."

¹ The UN body mandated to track global progress on the MDG targets for drinking water and sanitation

At recent workshop on the "data puzzle in Ghana's WASH sector," it was revealed that the computation of use of improved drinking water in Ghana as reported by the GSS and JMP (using user-based data) does not factor in the parameters of distance from facility, time used in obtaining service, sustainability of the service and the amount of water obtained per head per day. This is confirmed by the following statement:

"The Global Water Supply and Sanitation Assessment 2000 Report defines reasonable access as the availability of 20 litres per capita per day at a distance no longer than 1,000 metres. However, access and volume of drinking water are difficult to measure, so sources of drinking water that are thought to provide safe water are used as proxy."

Participants were of the view that this finding may be responsible for the perceived 'unrealistic' coverage figures being reported by the GSS and JMP. It was therefore proposed that all future coverage statistics on improved drinking water coverage should include the elements of distance, time, quantity and sustainability.

A quick study carried out by the WSMP-Ghana shows that although the GSS collects information on time spent in obtaining drinking (return trip) water in its household surveys and censuses, time is not used in computing the proportion of people in Ghana, who use improved drinking water (ref. DHS 2008, MICS 2006). These surveys however do not always capture information on distance, sustainability and quantity.

In the absence of information on distance, sustainability and quantity, studies have shown that time spent in collecting water (return trip) provides an indication of the effort, quantity and sufficiency of water that can be collected by a household. According to a WHO/UNICEF JMP 2008 publication³, studies have found that if the time spent in collecting water is between 3 and 30 minutes, the amount collected is fairly constant and suitable to meet basic needs (defined as between 15 to 20 litres per person per day). Research has also shown that households spending more than half an hour per round trip progressively collect less water, and eventually fail to meet their families' minimum daily drinking-water needs⁴. The JMP report 2010 again confirms that the MDG indicator does not include a measure for time taken to collect water, which is:

"The proportion of the population that uses an improved drinking water source, urban and rural"

² Indicators for monitoring the MDG - 2003

³ Progress on Drinking Water and Sanitation, Special focus on Sanitation, (JMP 2008)

Conclusions

- These findings confirm stakeholder concerns over the fact that Ghana's MDG coverage figures exaggerate the actual water supply situation in Ghana, citing examples of long distances and long hours in search for water in many parts of the country.
- Time (round-trip) to collect water provides a good proxy (in the absence of data on distance and quantity) in measuring how many people are adequately served.
- When the time factor is included in the computation of water coverage, user-based coverage data will drop considerably.
- **The exclusion of the time factor in computing MDG coverage data does not mean Ghana is off-track in meeting its MDG target since it (the exclusion) conforms to the MDG indicator!**

Recommendations

- The sector needs to discuss and agree on the best time limit in a round trip in collecting water, therefore there is need for stakeholder consultations as soon as practicable, by the Water Directorate.
- A more realistic coverage figure would be the one that depicts only the proportion of people using improved water sources AND obtaining water within the agreed time limit in a round trip.
- All future national coverage figures should be computed taking into consideration the time factor.

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It is therefore clear that though reports from the JMP and the GSS truly place Ghana on the path of achieving the MDGs for drinking water, they do not in fact include a measure for the time spent to collect water. It is however argued that, because it is a factor in drinking water use and the quantity made available to users, the time needed (round-trip) should be considered when determining whether a source is 'improved' or not.

Stakeholders in Ghana's WASH sector support this argument as indicated by the proposal at a recent workshop (RCN Learning Alliance Platform April 2010) on the data puzzle in Ghana. In addition, further analysis of data from the 2008 GDHS by the WSMP of the proportion of the population in Ghana that uses improved drinking water obtained in 30 minutes or less resulted in a lesser percentage of national coverage.

Further interrogation is required to know the percentage of people who get drinking water within an acceptable time range as defined and agreed by WASH stakeholders in Ghana.

Interestingly, there seems to be no acceptable or agreed time range by WASH experts in Ghana on the time one has to spend in collecting drinking water (round trip). For time to be factored in the computation of improved water coverage from data collected by the GSS, it would require an agreed standard time by sector stakeholders as acceptable for a round trip to collect drinking water from various sources by households, beyond which the source would be classified as either unimproved or people not having access to them.

Stakeholder discussions are therefore necessary for experts in the WASH sector in Ghana to agree on a "Ghana standard" time range within which one should have access to drinking water from all sources. Such an agreed standard time will then be used to further interrogate GSS data and to provide more realistic data/information on the proportion of the population that uses improved drinking water.

The urgency for these discussions lies in the fact that, the JMP has published and circulated its latest report (2010), indicating to the world that Ghana is on-track to meeting its MDG targets for drinking water by 2015. True as this may be as per the MDG indicator for drinking water, it is likely that stakeholders will rise again to the usual arguments on how realistic the figure is.

In sum, the WSMP has been following these arguments and has researched into the issue and the possible causes of the differences in the figures and stakeholder perceptions and has made the following observations:

1. The GSS/JMP use only the proportion of the population that uses improved drinking water to conclude on their coverage figures.
2. Other factors such as the amount of time to search for water and the distance covered, as well as the quantity of water consumed per day are not used to compute the MDG coverage figures.
3. The Ghana Statistical Service collects data on the time people spend to search for water so data is in fact available.
4. A Preliminary analysis by WSMP, using available data from the GDHS 2008, drastically reduced the reported coverage figure by excluding the percentage of the population that obtains drinking water in more than 30 minutes.

⁴ Hutton G, Haller L, Evaluations of the costs and benefits of water and sanitation improvements at the global level: Geneva, World Health Organization, 2004.