REPORT ON CHILDREN COLLECTING WATER ROUTE MAPS

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Developing an appropriate tool: Voice, measure and intervention in ensuring the sustainability of municipal water services to the poor.

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Introduction:

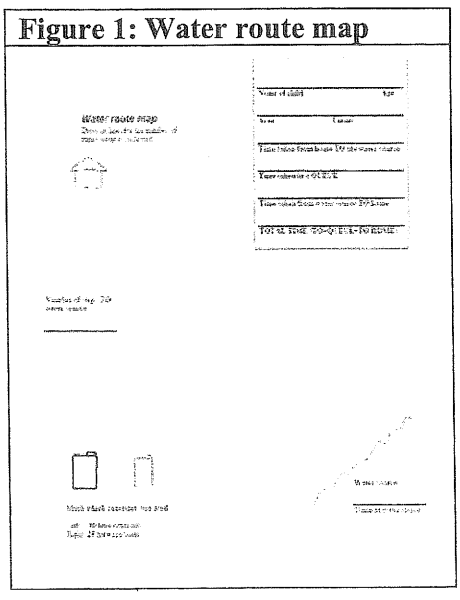
The Child Water Route Map is designed to identify the time taken and distance traveled by children collecting water. This is an important indicator in social policy as excessive time spent by children in household chores could be classified as a "worst form" of child labour work as it could harm the health, safety or morals of children. The National Child Labour Action Programme for South Africa has identified collecting fetching water as by far the most common forms of child work in South Africa It has investigated this form of work in terms of its commitment to the ILO Convention on the Worst Forms of Child Labour Convention, 1999 which South Africa ratified in 2000.

The tool identifies important factors involved in the collection of water such as the distances covered, the time taken, the volume of water collected and the number of times water is collected in a day. The tool is also useful in identifying the main water sources of each village and indicating the distances to water for all. The trainers were taught how the tool should be used, and, as importantly, how the data would be brought together on the analysis sheet. The trainers trained facilitators and youth teams (who constituted the interviewers) in each village on how to use the tool, how to approach the households, and how the distances could be measured without the use of a pedometer

Overview of tool:

The water route map (see figure 1) requests the name and age of the child as well as the area the child resides in. The interviewer fills in the time taken to the water source, the time taken in the queue and then the time taken from the water source home. The use of the tool depends on access to the household, permission from an appropriate adult and willingness to cooperate from the child.

Figure 1: Water route map



The most difficult part is that of counting steps to the water source; in a previous studies fieldworkers were provided with pedometers but, since these had to be carefully set, tended to rely instead on counting steps.

The number of times water is collected is needed to give a figure for the total time taken. The interviewer (or the child) then draws lines from the house to the water source to indicate the number of times water is collected in a day. The interviewer then enters the number of steps to the water source under the appropriate heading. The respondent indicates the size container used by ticking the picture of the 25l litre or 30 litre container. Finally the water source is named.

Figure 2: Water route map analysis sheet

HSRC Community voice: Children collecting water data analysis

No of HH	Name of family	Name of child	Age of child	Water source	Number of time:	Distance TO water	Time taken TO water (A)	Time in QUEUE :B)	Time taken FROM water tC)	Time taken A+B+C

The water route map is similar to the Under Five health survey in that the significant part of the tool lies in the use of the Analysis sheet (see figure 2) which has been designed in such a way that allows for community trainers or facilitators themselves to enter the data and tabulate information based on the findings in their own villages.

The data is taken from the questionnaire sheets and entered systematically into the analysis sheet. The name of the family, household and child is entered first. The water source is then identified followed by the number of times water is collected. The time taken is then entered according to the time taken to the water source (A), the time taken in the queue (B) and the time taken to return from the water source (C).

The total time is then calculated by adding A+B+C. It is in this way that an indication of the amount of effort and hardship of the task is revealed.

It is in this way that the tool itself and the analysis sheet can be used at a local level, allowing communities to assess their own situation through the gathering of information and statistics.

Assessment of use of the tool:

The tool was well received according to the trainers; however they did identify certain parts which were problematic. The measurement of distance, a crucial factor in the understanding of effort being undertaken by children, by the counting of steps was the most problematic.

The tool requires a count of the number of steps taken to the water source. In a previous study, fieldworkers were found to prefer this method rather than use a pedometer which was challenging to use and could give unreliable results. However in these village appraisals this was not generally undertaken and instead an estimate of the distance was made.

Despite this most of the water route maps were diligently completed in other respects and depict clearly the number of times water is collected and the amount of time taken. The tool asked for the name of the water source to be specified and generally local communities have specific names in mind, but in some cases the word 'river', 'dam' or 'spring' was entered.

The tool did prove difficult for some as it required a dispassionate examination, without exaggeration and with careful implementation, of the difficult task undertaken by young children in the collection of water for the household.

The results of the tools are presented below and indicate that there is considerable detailed information gathered which can lead on to the ranking of villages by the burden collecting water places on children.

Additional village by village analysis has been undertaken to review conditions in each village. In Qobo Village, for example, from information gathered from 28 children conditions were found to be most demanding as they fetched water 2 or 3 times, took about 2h30min in the activity to and from the water source, and had children as young as 6 years involved.

For analysis purposes we have decided to classify the villages according to the following criteria:

i) Most demanding: longest distances to water, water collection takes more than 2 hours
ii) Demanding: water collection takes 1-2 hours.
iii) Less demanding: water collection takes less than 1 hour.

Trainers	**Ward**	**Villages trained**	**Water Route Classification**
Team 1: Gloria Mhlehlebana Sindiswe Mphoswa	2	1) Nokhatshile 2) Mkhandlweni 3) Mafadobo 4) Mhlambondaba 5) Mpeni 6) Ngele 7) Thaleni 8) Mkhambathi 9) Goxe 10) Qobo	Demanding Demanding Demanding Demanding Most Demanding Demanding Demanding Demanding Demanding Most Demanding
Team 2: Mbongwa Ngaleka (Robson)	20	1) Lindokuhle 2) Madadana 3) Zwelethu 4) Stanford 5) Ethridge 6) Nongeke 7) Mangqofoza	Demanding Demanding Demanding Less Demanding Demanding Demanding Less Demanding
Team 3: Zibongele Manyaka	19	1) Ntlozelo 2) Mbabazo 3) Thokozani 4) Ilityeni 5) Mqeni 6) Isidanga 7) Kopana 8) Nonja 9) Monti	Less Demanding Demanding Demanding Most Demanding Demanding Most Demanding Demanding Most Demanding Demanding

Team 1: Gloria and Sindi
Ward 2

Mlambondaba Village: Demanding
Total: 14

- Most respondents fetch water 2-4 times. One respondent went 5 times.
- The majority of children are walking approximately 1 hour return.
- The lowest reported age is 10 years.
- Most respondents use 25l container.
- Most respondents walk over 1km to a water source.
- Water source was not filled in on many questionnaires or water source identified as "spring".

Mkhandlweni Village: Demanding
Total: 20

- Most respondents fetch water 3-5 times.
- The majority of children are walking over 1 hour return.
- All respondents use a 25l container.
- The lowest reported age is 6 years.
- Most respondents walk about 800m to a water source.
- Water source identified as "spring".

Nokotshile Village: Demanding
Total: 14

- Most respondents fetch water 1-3 times.
- The majority of children are walking approximately 2 hours return.
- All respondents use 25l container.
- The lowest recorded age is 4 years old.
- Most respondents walk about 600m to the water source.
- Water source not named but identified as spring, River or dam.

Qobo Village: Most demanding
Total: 28

- Respondents fetched water 2 or 3 times.
- The majority of children are walking over 2h30min return.
- All respondents use the 25l container
- The youngest reported age is 6 years.
- Most respondents walk about 1 km to the water source.
- Water Source was not named but identified as spring.

Goxe Village: Demanding
Total: 14

- Respondents fetched water 1-4 times.

- The majority of children are walking approximately 1h15min return.
- All respondents use the 25l container
- The youngest reported age is 5 years.
- Most respondents walk approximately 2km to the water source.
- The water source was not named but identified as Spring or River.

Mkhambathi Village: Demanding
Total: 14

- The majority of children are walking approximately 1 hour return.
- The youngest reported age is 5 years.
- Most respondents walk about 1km to the water source.
- The water source was identified as Tap, River or Spring.

Thaleni Village: Demanding
Total: 14

- Respondents collected water 2- 4 times.
- The majority of children are walking 1h30 return.
- All respondents indicated that they use the 25l container.
- The youngest reported age is 10 years.
- Most respondents walk 2km to the water source.
- The water source was identified as a Dam.

Mpeni Village: Most demanding
Total: 28

- Respondents collected water 2-4 times.
- The majority of children are walking over 2 hours return.
- 21 respondents indicated they use the 25l container and 7 use the 30l container.
- The youngest reported age is 6 years.
- Most respondents walk 1 or 2km to the water source.
- The water source was identified as Spring.

Ngele Village: Demanding
Total: 14

- The majority of children are walking 2 hours return.
- The youngest reported age is 2 years.
- Most respondents walk approximately 1km to the water source.
- The water source was identified as Taps or Rivers.

Mafadobo Village: Demanding
Total: 14

- The majority of children walking approximately 1h30 return.
- The lowest reported age is years.

- The majority of children walk 2km to the water source.
- The water source was identified as Kanje or Kabini.

Team 2: Mbongwa Ngaleka (Robson)
Ward 20

Madadana Village: Demanding
Total: 14

- Most respondents fetch water 2-5 times.
- The majority of children are walking over 1h30min return.
- All respondents indicate that they use the 20l container.
- The youngest reported age is 8 years.
- The respondents walk about 1km to a water source.
- The water source is identified as the Mbhashe River.

Zwelethu Village: Demanding
Total: 14

- Most respondents fetch water 1-3 times.
- The majority of children are walking over 1h30min return.
- All respondents indicate that they use the 20l container.
- The youngest reported age is 8 years.
- Most of the respondents walk over 1km to a water source.
- The water source is identified as the Emthwezini stream, Enkosini stream, Ndinabandla stream or the Enkosini stream.

Ethridge Village: Demanding
Total: 14

- Most respondents fetch water 2-4 times.
- The majority of children are walking over 1hr15min return.
- All respondents indicate that they use a 20l container.
- The youngest reported age is 9 years.
- The respondents walk about 800m to a water source.
- The water source is identified as the Mpinda stream.

Mangqofoza Village: Less demanding
Total: 14

- Most respondents fetch water 2 or 3 times.
- The majority of children are walking over 40 mins return.
- All respondents indicated that they use a 20l container.
- The youngest reported age is 9 years.
- The respondents walk over 200m to a water source.
- The water sources are identified as the Mtonjeni, Mfolozi, Mbhodla and the Showe streams.

Lindokuhle Village: Deamanding
Total: 14

- Most respondents fetch water 2-4 times a day.
- The majority of children are walking over 1hour return.
- The youngest reported age is 13.
- The respondents walk about 500m to a water source.
- All respondents make use of the 20l container.
- The water source is identified as the Dabane Stream

Stanford Village: Less demanding
Total: 14

- Most respondents fetch water 3-5 times a day.
- The majority of children are walking over 40mins return.
- All respondents make use of the 20l container.
- The youngest reported age is 9 years.
- The respondents walk about 500m to a water source.
- The water source is identified as the Mtonjeni stream, the Diphini stream or the Mbhodla stream.

Nongeke Village: Demanding
Total: 14

- Most respondents fetch water 3-5 times.
- The majority of children are walking about 1 hour return.
- All respondents make use of a 20l container.
- The youngest reported age is 8 years.
- The respondents walk about 800m to a water source.
- The water source is identified as the Ethondjeni stream, the Diphini stream, the Mthonjeni stream, the Dwaleni stream or the Ndinabandla stream.

Team 3: Zibongele Manyaka
Ward 19

Thokozani Village: Demanding
Total: 29

- Most respondents fetch water 1-3 times.
- The majority of children walk about 2 hours return.
- Most respondents indicated that they use a 25l container.
- The youngest reported age is 10 years.
- The respondents walk approximately 250m to the water source.
- Water source has been identified as the Isibhobeni stream, the Magebula stream, the Zubukweni stream and the Peyi stream.

Mbabazo Village: Demanding
Total: 30

- Most respondents fetch water 2-6 times.
- The majority of children walk over 1h30min return.
- Most respondents indicated that they use a 25l container.
- The youngest reported age is 10 years.
- The respondents walk about 350m to a water source. .
- The water source has been identified as Hantweni stream, the Chiso stream or the Skhilikindi stream.

Ntlozelo Village: Less Demanding
Total: 28

- All respondents fetch water 2 times a day.
- The majority of children walk about 10minutes return.
- Most respondents indicated that they use a 25l container.
- The youngest reported age is 8.
- There is no indication of distance.
- The water source has been identified as Diphini stream, Igaeba stream or Irhomba stream.

Monti Village: Demanding
Total: 29

- Of the lines clearly marked, most respondents collect water 2 or 3 times a day.
- The majority of children walk approximately 2hours return.
- Most respondents indicated that they use the 20l container.
- The youngest reported age is 11.
- The respondents walk about 250m to a water source.

- The water sources are identified as the Thathabe stream, Mavaba stream, Eya stream, Eltyeni stream, Manaba stream, Chagi stream, Mncocosa stream or the Zansoja stream.

Nonja Village: Most demanding
Total: 14

- The respondents fetch water 2 or 3 times.
- The majority of children walk over 3hours return.
- Most respondents (10) indicated that they 25l container.
- The youngest reported age is 12.
- The respondents walk about 300m to a water source.
- The water sources are identified as Mngcunubeni stream, Gaqu stream, Mthonjeni stream, Bexake stream or the Lusizini stream.

Kopana Village: Demanding
Total: 32

- The respondents fetch water 3 or 3 times.
- The majority of children walk over 1hour return.
- 10 respondents indicated that they use the 25l and the remaining 22 indicated that they use a 20l container.
- The youngest reported age is 12.
- The respondents walk about 100m to the water source.
- The water source was identified as Lulwala stream, Mfeneni stream, Ngqongweni stream, Chiliza stream or the Nixila stream.

Isidanga Village: Most Demanding
Total: 20

- The respondents fetch water 1-3 times.
- The majority of children walk over 2hours return.
- All respondents indicated that they use the 25l container.
- The youngest reported age is 12.
- The respondents walk about 350m to the water source.
- The distance traveled ranged between 150m to 450m.
- The water source was identified as Nonoti stream, Mgcakweni stream, Mzara stream, Gcabelo stream, Phelepele stream, Itlotteni stream or the Sodane stream.

Mqeni Village: Demanding
Total: 16

- The respondents fetch water 1-3 times.
- The majority of children walk over 1h30min return.
- All respondents indicated that they use the 25l container.
- The youngest reported age is 11.
- The respondents walk about 300m to the water source.

- The water source has been identified as the Mpuza stream, Nxila stream, Thikane stream, Gqebeni stream or the Mthavun stream.

Ilityeni Village: Most demanding
Total: 21

- The respondents fetch water about 4 times a day.
- The majority of children are walking over 2 hours return.
- The youngest reported age is 8 years.
- The water source has been identified as Emlanjeni stream.

Assessment of the use of the Water Route Map

From the overview of the Water Route Map tool used in the villages, we are able to make the following conclusions:

- The measuring of the number of steps taken to the water source was not used, rather some respondents estimated distances in meters/kilometers. It is unclear how accurate this estimation is.
- There are some data analysis sheets which have not been filled in correctly.
- There are some water route maps which are unclear in depicting the number of times water is collected.
- In identifying the water source, some respondents named the river or spring whereas others stipulated whether it was a river, spring or tap.

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