





Mapping access and quality of water in South Africa: How far have we come?

Furzana Timol*

Supervised by: Professor Dori Posel

Presented at the College of Humanities 2nd Annual Postgraduate Conference 9-10 October 2013









Water: A basic human right

"All people, whatever their stage of development and their social and economic conditions, have the right to have access to an adequate supply of safe drinking water."

• (United Nations, 1977:66)



Delivery Of Water In South Africa

- Following Apartheid: building infrastructure and providing access to basic services to the majority
- Prior to 1994: 30 to 40% of the population did not have adequate water supply services
- Polices and frameworks developed to address water supply:
 - Constitution of South Africa: section 27 (1) (b)
 - The Water Services Act (Act 108 of 1997)
 - National Water Act (Act 36 of 1998)
 - Universal access to potable water and basic sanitation by 2014



Research Methods

- Analysed data from the 2006 and 2010 General Household Surveys (GHS)
- GHS: nationally representative household survey that is conducted annually by Statistics South Africa (Stats SA)
- Weighted data used: results are representative for the whole population.
- Stats SA weights used
- Descriptive statistics and Chi square tests performed on selected indicators.



Access to Piped water (%)

2006 2011

	Piped in the dwelling	Piped in the yard	Neighbour's tap	Communal tap	Total	Piped in the dwelling	Piped in the yard	Neighbour's tap	Communal tap	Total
Western Cape	73.8	19.7	0.6	5.3	99.4	79	12.8	0.8	6.9	99.5
Eastern Cape	29.2	16.7	1.3	23.5	70.7	30.6	13.2	1.5	29.4	74.8
Northern Cape	46.1	32.4	0.8	16.2	95.5	46.8	32.1	1.2	14.8	95.1
Free State	37.3	52.4	1.5	6.3	97.5	43.3	48.4	1.4	3.2	96.2
KwaZulu-Natal	36.4	25.2	2.2	17.9	81.6	36.5	28.3	3.3	16.3	84.5
North West	28.7	39.1	3.2	19.9	90.9	24.4	39.5	4.1	21.7	89.6
Gauteng	54.0	35.2	1.3	7.5	97.9	59.1	29.1	8.0	8.4	97.4
Mpumalanga	28.5	37.8	4.5	18.0	88.9	30.9	38.5	6.9	10.7	86.9
Limpopo	15.8	28.2	4.4	32.5	80.9	12.3	36.2	7.7	26	82.2
Total	41.1	30.1	2.1	15.5	88.6	43.3	28.6	2.7	14.9	89.5



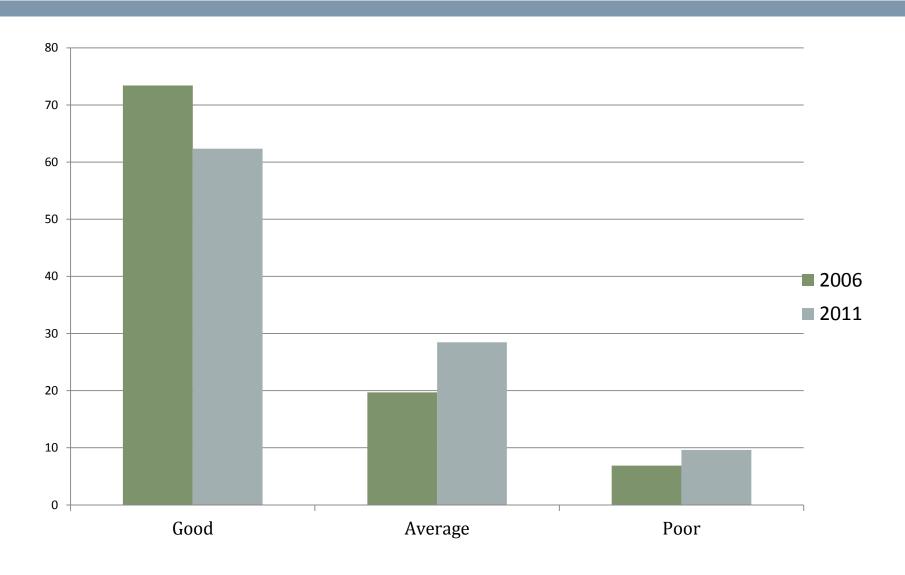
Distance travelled to water source (%)

2006 2011

	Less than 200m	Between 201m and 500m	Between 501m to 1 km	More than 1 km	Total	Piped in the dwelling	Piped in the yard	Neighbour' s tap	Communal tap	Total
Western Cape	3.4	2.3	0.1	0.0	5.7	6.0	1.3	0.0	0.1	7.4
Eastern Cape	22.2	15.0	9.0	4.3	50.5	25.9	14.4	5.1	3.7	49.1
Northern Cape	13.5	4.7	0.7	0.5	19.4	13.4	3.4	0.4	0.0	17.2
Free State	5.1	2.5	0.4	0.1	8.1	4.9	1.5	0.1	0.0	6.6
KwaZulu-Natal	12.3	13.1	5.5	3.4	34.3	10.7	10.8	5.4	4.1	31.0
North West	14.9	9.6	2.7	1.0	28.1	17.6	8.3	2.7	0.7	29.2
Gauteng	6.3	2.0	0.5	0.1	8.8	7.4	0.8	0.1	0.0	8.4
Mpumalanga	12.8	10.8	4.8	1.1	29.5	15.8	5.9	2.9	0.4	25.1
Limpopo	27.3	14.6	5.2	1.9	49.0	19.5	15.3	4.0	0.8	39.6
Total	12.3	8.2	3.4	1.6	25.5	12.6	6.8	2.5	1.4	23.3



Rating of municipal water services (%)





Households ratings of water quality (%)

		GHS 2006	GHS 2011
Safe to drink	Yes	97.4	97.1
	No	2.6	2.9
Clear	Yes	96.6	96.3
	No	3.4	3.7
Good in taste	Yes	96.1	95.8
	No	3.9	4.2
Free from bad smells	Yes	96.8	97.1
	No	3.2	2.9



Interruptions to water supply

Water	supply in	nterruption in t year					
			Piped (house)	Piped (yard)	Neighbours tap	Communal Stand Pipe	Total
	Yes	Row%	37.85	41.17	2.19	18.80	100.00
2006		Column%	28.46	45.52	68.34	61.46	38.88
2006	No*	Row%	60.51	31.34	0.64	7.50	100.00
		Column%	71.54	54.48	31.66	38.54	61.12
		Row%	36.37	37.74	3.13	22.76	100.00
2011		Column%	28.85	45.30	40.68	53.28	38.49
2011	No*	Row%	56.14	28.51	2.86	12.49	100.00
		Column%	71.15	54.70	59.32	46.72	61.51

^{*}No includes those who responded almost never



Where do we stand in terms of Progress?

- Access to piped water has increased only marginally since 2006.
 - Improvements were noted in four of the nine provinces.
 - Limpopo and the North West substantial decrease piped water in the house.
- A smaller percentage of households travelled longer distances to obtain their drinking water.
 - Although substantial decreases noted in provinces such as Limpopo, 40% of households still travel to their primary water source
- Most households continue to rate their water quality as being safe to drink, clear in colour, free from bad smells and good in taste. However there has been an overall decrease in ratings of the quality of municipal water services.
- Marginal improvement in the overall occurrence of water interruptions.
 - Households which had water access in the yard still experienced the greatest portion of these interruptions
- Overall numbers mask provincial inequalities

Recommendations

- Focus on addressing the needs of the most vulnerable
- Access must not just be access overall but for developmental improvements: focus on source of piped access.
- Discussions around access must be reflect this disparity in sources of access to potable water.
- Access is key but quality of access is equally important.