

WHO / UNICEF

Joint Monitoring Programme
for Water Supply and Sanitation

Estimates for the use of

**Improved Drinking-Water Sources
and Improved Sanitation Facilities**

Updated March 2010

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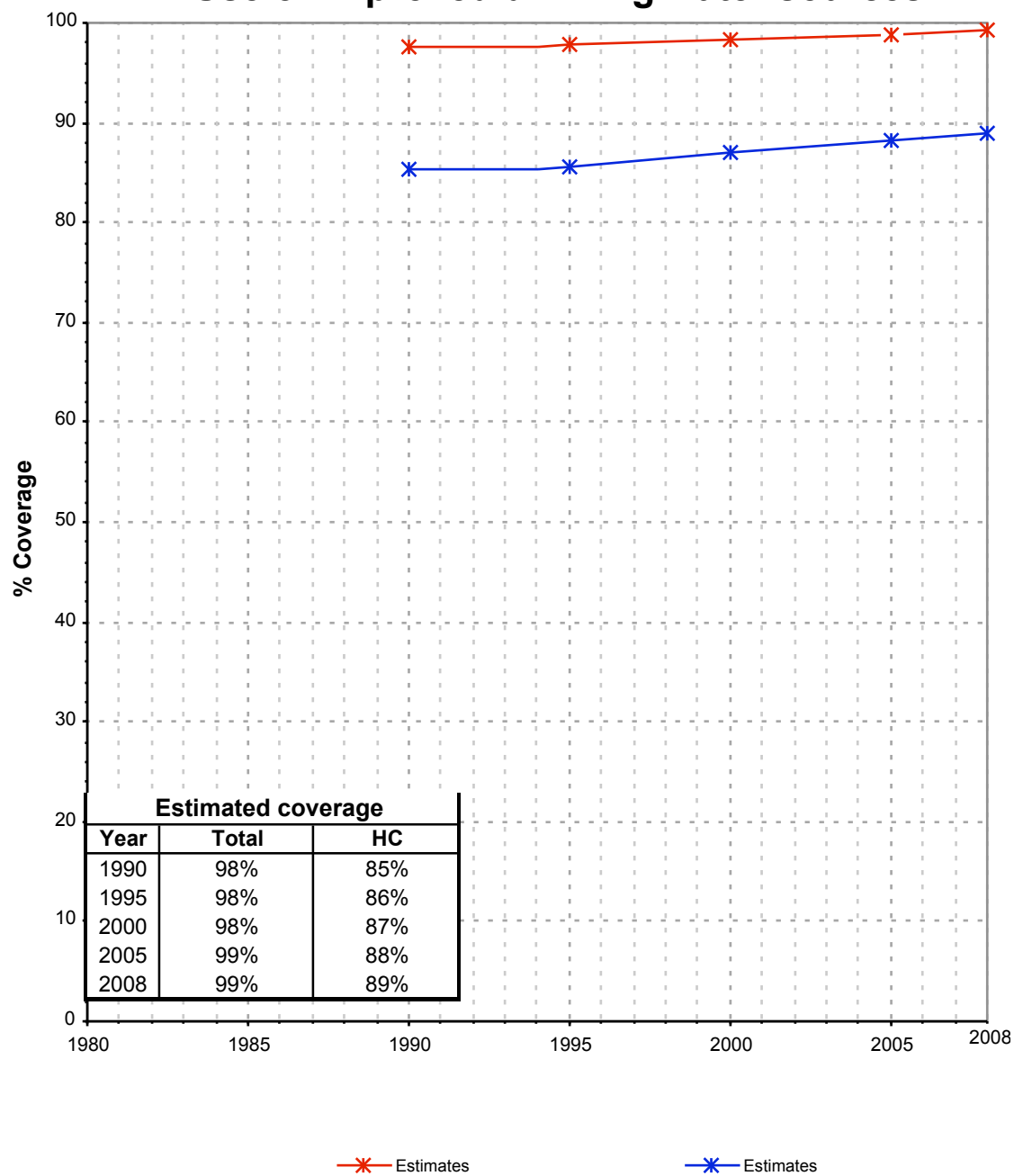
Access to drinking water sources		OHS96			South Africa			Access to drinking water sources		OHS97			South Africa		
October Household Surveys								October Household Surveys							
					1996								1997		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Tap water	98.3	57.3	81.9		Tap water	98.9	56.3	82.2						
	House connections	86.9	25.4	62.2		House connections	88.4	26.7	64.3						
Running tapwater in dwelling	Piped water into dwelling	68.7	10.9	45.5	Running tapwater in dwelling	Piped water into dwelling	63.4	8.2	41.8						
Running tapwater on site/in yard	Piped water to yard/plot	16.2	14.5	16.7	Running tapwater on site/in yard	Piped water to yard/plot	25.0	18.5	22.5						
Public tap	Public tap, standpipe	11.4	31.9	19.7	Public tap	Public tap, standpipe	10.5	29.6	17.9						
	Other					Other									
	Ground water		16.3	6.7		Ground water		17.7	7.0						
	Protected ground water		9.9	4.7		Protected ground water		10.5	4.2						
	Unprotected ground water					Unprotected ground water									
	Protected wells or springs	0.0	9.9	4.1		Protected wells or springs	0.0	10.5	4.2						
	Private	0.0	3.1	1.3		Private	0.0	2.6	1.0						
	Public	0.0	6.8	2.8		Public	0.0	7.9	3.2						
	Other					Other									
	Unprotected wells or springs					Unprotected wells or springs									
	Private					Private									
	Public					Public									
	Other					Other									
Well	All wells	0.0	2.2	0.9	Well	All wells	0.0	2.3	0.9						
	Private	0.0	3.1	1.3		Private	0.0	2.6	1.0						
	Public	0.0	6.8	2.8		Public	0.0	7.9	3.2						
	Other					Other									
	Tubewell, borehole	0.0	9.9	4.1		Tubewell, borehole	0.0	10.5	4.2						
Borehole with handpump on site	Private	0.0	3.1	1.3	Borehole with handpump on site	Private	0.0	2.6	1.0						
Borehole with handpump: Communal	Public	0.0	6.8	2.8	Borehole with handpump: Communal	Public	0.0	7.9	3.2						
	Other					Other									
	Traditional wells					Traditional wells									
	Private					Private									
	Public					Public									
	Other					Other									
	Protected well					Protected well									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected well					Unprotected well									
	Private					Private									
	Public					Public									
	Other					Other									
Spring	All springs	0.0	4.2	1.7	Spring	All springs	0.0	4.9	1.9						
	Private					Private									
	Public					Public									
	Other					Other									
	Protected spring					Protected spring									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected spring					Unprotected spring									
	Private					Private									
	Public					Public									
	Other					Other									
Rainwater tank	Rainwater	0.0	1.7	0.7	Rainwater tank	Rainwater	0.0	0.6	0.3						
	Covered cistern/tank	0.0	1.7	0.7		Covered cistern/tank	0.0	0.6	0.3						
	Uncovered cistern/tank					Uncovered cistern/tank									
	Bottled water					Bottled water									
	with other improved					with other improved									
	without other improved					without other improved									
	Surface water	0.2	21.7	6.9		Surface water	0.0	21.8	8.5						
	River					River									
	Lake					Lake									
Dam/pool/stagnant water	Dam	0.0	5.7	2.3	Dam/pool/stagnant water	Dam	0.0	4.1	1.6						
	Pond					Pond									
Flowing water / stream	Stream	0.2	16.0	6.6	Flowing water / stream	Stream	0.0	17.7	6.9						
	Irrigation channel					Irrigation channel									
	Other					Other									
	Other improved sources					Other improved sources									
	Other					Other									
	Other					Other									
	Other non-improved	1.0	2.7	1.6		Other non-improved	0.6	3.3	1.7						
Water carrier / tanker	Cart with small tank/drum	0.5	1.8	1.0	Water carrier / tanker	Cart with small tank/drum	0.2	2.1	1.0						
	Tanker truck provided					Tanker truck provided									
Other	Other	0.5	0.9	0.6	Other	Other	0.4	1.2	0.7						
	Other					Other									
Unspecified	DK/missing			0.1	Unspecified	DK/missing			0.2						
	Total	99.5	99.7	99.9		Total	99.5	99.7	99.9						
Calculations					Calculations										
Estimations	50% of Wells improved	0.0	1.1		Estimations	50% of Wells improved	0.0	1.2							
	Improved springs based on ratio OHS95	0.0	1.1			Improved springs based on ratio OHS95	0.0	1.2							
Access to improved drinking water sources :		98%	71%	87%	Access to improved drinking water sources :		99%	70%	87%						
Access to house connections :		87%	25%	62%	Access to house connections :		88%	27%	64%						
Used for the estimates :		Yes	Yes		Used for the estimates :		Yes	Yes							
Used for the estimates :		Yes	Yes		Used for the estimates :		Yes	Yes							
Ratios	HC / Tap water	88%	44%		Ratios	HC / Tap water	89%	47%							
	Public tap / Tap water	12%	56%			Public tap / Tap water	11%	53%							
	Tubewell + protected well / All wells					Tubewell + protected well / All wells									
	Protected wells / Traditional wells					Protected wells / Traditional wells									
	Tubewell / All wells	#DIV/0!	82%			Tubewell / All wells	#DIV/0!	82%							
	Protected springs / All springs					Protected springs / All springs									
	Protect. well & spring / well & spring					Protect. well & spring / well & spring									
	Rainwater among rainwater and wells	#DIV/0!	12%												
	Springs among surface water	0%	16%												
	Number of people covered by the survey:					Number of people covered by the survey:									
	Number of households covered by the survey:					Number of households covered by the survey:									
	Total population:					Total population:									
Comments					Comments										

Access to drinking water sources		OHS99			South Africa			Access to drinking water sources		CEN01			South Africa		
October Household Surveys					1999			Census					2001		
								10% micro dataset from IPUMS							
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Tap water	97.8	60.6	83.0		Tap water	97.6	60.5							
	House connections	89.4	31.1	65.7		House connections	82.7	27.3							
Running tapwater in dwelling	Piped water into dwelling	58.5	8.4	38.7	Piped water (tap) inside dwelling	Piped water into dwelling	48.0	6.4							
Running tapwater on site/in yard	Piped water to yard/plot	29.9	22.7	27.0	Piped water (tap) inside yard	Piped water to yard/plot	34.7	20.9							
Public tap	Public tap, standpipe	9.4	29.5	17.3	Piped water on community stand	Public tap, standpipe	14.9	33.2							
	Other					Other									
	Ground water	0.2	18.8	7.7		Ground water	0.3	11.7							
	Protected ground water	0.1	8.3	3.4		Protected ground water	0.2	6.4							
	Unprotected ground water					Unprotected ground water									
	Protected wells or springs	0.1	8.3	3.4		Protected wells or springs	0.2	6.4	0.0						
	Private					Private									
	Public	0.1	6.1	2.5		Public									
	Other					Other									
	Unprotected wells or springs					Unprotected wells or springs	0.0								
	Private					Private									
	Public					Public									
	Other					Other									
Well	All wells	0.0	3.2	1.3		All wells	0.2	6.4							
	Private	0.0	2.2	0.9		Private									
	Public	0.1	6.1	2.5		Public									
	Other					Other									
	Tubewell, borehole	0.1	8.3	3.4	Borehole	Tubewell, borehole	0.2	6.4							
	Private	0.0	2.2	0.9		Private									
Borehole with handpump on site	Public	0.1	6.1	2.5		Public									
Borehole with handpump: Communal	Other					Other									
	Traditional wells					Traditional wells									
	Private					Private									
	Public					Public									
	Other					Other									
	Protected well					Protected well									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected well					Unprotected well									
	Private					Private									
	Public					Public									
	Other					Other									
Spring	All springs	0.1	7.3	3.0	Spring	All springs	0.1	5.3							
	Private					Private									
	Public					Public									
	Other					Other									
	Protected spring					Protected spring									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected spring					Unprotected spring									
	Private					Private									
	Public					Public									
	Other					Other									
Rainwater tank	Rainwater	0.0	0.9	0.4	Rainwater tank	Rainwater	0.1	1.3							
	Covered cistern/tank	0.0	0.9	0.4		Covered cistern/tank	0.1	1.3							
	Uncovered cistern/tank					Uncovered cistern/tank									
	Bottled water					Bottled water									
	with other improved					with other improved									
	without other improved					without other improved									
	Surface water	0.1	15.9	6.4		Surface water	0.3	21.7							
	River					River									
	Lake					Lake									
Dam/pool/stagnant water	Dam	0.0	3.1	1.2	Dam/pool/stagnant water	Dam	0.1	2.7							
	Pond					Pond									
Flowing water / stream	Stream	0.1	12.8	5.2	River/stream	Stream	0.2	19.0							
	Irrigation channel					Irrigation channel									
	Other					Other									
	Other improved sources					Other improved sources									
	Other					Other									
	Other					Other									
	Other non-improved	1.2	3.6	2.7		Other non-improved	1.8	4.7							
Water carrier / tanker	Cart with small tank/drum	0.3	1.9	0.9	Water vendor	Cart with small tank/drum									
	Tanker truck provided				Other	Tanker truck provided	0.3	1.3							
Other	Other	0.9	1.7	1.2		Other	1.5	3.4							
	Other					Other									
Unspecified	DK/missing	0.4	0.2	0.3		DK/missing									
	Total	99.7	100.0	99.9		Total	100.1	99.9							
Calculations					Calculations										
Estimations	50% of Wells improved	0.0	1.6		Estimations	Improved springs based on ratio OHS95	0.1	1.3							
	Improved springs based on ratio OHS95	0.1	1.9												
Access to improved drinking water sources :		98%	73%	87%	Access to improved drinking water sources :		98%	70%							
Access to house connections :		88%	31%	66%	Access to house connections :		83%	27%							
Used for the estimates :		Yes	Yes		Used for the estimates :		No	No							
Used for the estimates :		Yes	Yes		Used for the estimates :		No	No							
Ratios	HC / Tap water	90%	51%		Ratios	HC / Tap water	85%	45%							
	Public tap / Tap water	10%	49%			Public tap / Tap water	15%	55%							
	Tubewell + protected well / All wells					Tubewell + protected well / All wells									
	Protected wells / Traditional wells					Protected wells / Traditional wells									
	Tubewell / All wells	#DIV/0!	259%			Tubewell / All wells									
	Protected springs / All springs					Protected springs / All springs									
	Protect. well & spring / well & spring					Protect. well & spring / well & spring	100%								
	Springs/Groundwater	50%	39%												
	Number of people covered by the survey:					Number of people covered by the census:									
	Number of households covered by the survey:					Number of households covered by the census:									
	Total population:					Total population:									
Comments					Comments										

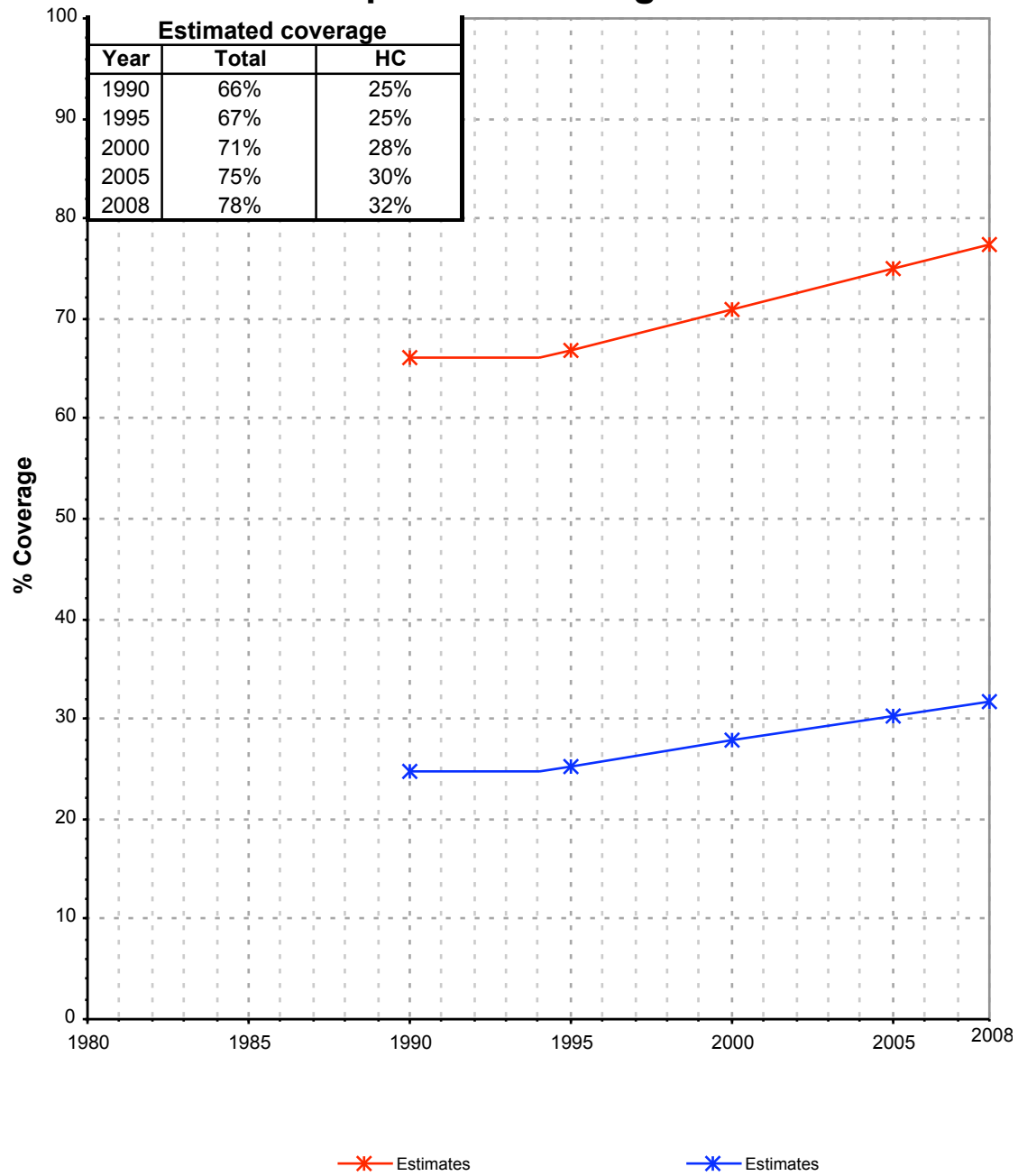
Access to drinking water sources		CEN96			South Africa			Access to drinking water sources		CEN07			South Africa		
Recensement général de la population								Recensement général de la population							
National Census (10% micro dataset from IPUMS)		1996					National Census (10% micro dataset from IPUMS)		2007						
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Tap water	96.1	50.0			Tap water	98.5	63.7							
	House connections	83.8	21.9			House connections	88.6	31.5							
Piped water in dwelling	Piped water into dwelling	64.9	9.0		Piped water inside the dwelling	Piped water into dwelling	64.4	11.7							
Piped water on site or yard	Piped water to yard/plot	18.9	12.9		Piped water inside the yard	Piped water to yard/plot	24.2	19.8							
Public tap	Public tap, standpipe	12.3	28.2		Piped water from access point outside the plot	Public tap, standpipe	9.9	32.1							
	Other					Other									
	Ground water	0.3	11.1			Ground water	0.4	11.0							
	Protected ground water					Protected ground water	0.4	7.4							
	Unprotected ground water					Unprotected ground water									
	Protected wells or springs					Protected wells or springs	0.4	7.4							
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected wells or springs					Unprotected wells or springs									
	Private					Private									
	Public					Public									
	Other					Other									
Borehole/rain-water tank/well	All wells	0.3	11.1			All wells	0.4	7.4							
	Private					Private									
	Public					Public									
	Other					Other									
	Tubewell, borehole				Borehole	Tubewell, borehole	0.4	7.4							
	Private					Private									
	Public					Public									
	Other					Other									
	Traditional wells					Traditional wells									
	Private					Private									
	Public					Public									
	Other					Other									
	Protected well					Protected well									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected well					Unprotected well									
	Private					Private									
	Public					Public									
	Other					Other									
	All springs				Spring	All springs	0.1	3.6							
	Private					Private									
	Public					Public									
	Other					Other									
	Protected spring					Protected spring									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected spring					Unprotected spring									
	Private					Private									
	Public					Public									
	Other					Other									
	Rainwater					Rainwater	0.1	1.9							
	Covered cistern/tank				Rain water tank	Covered cistern/tank	0.1	1.9							
	Uncovered cistern/tank					Uncovered cistern/tank									
	Bottled water					Bottled water									
	with other improved					with other improved									
	without other improved					without other improved									
Dam/river/stream/spring	Surface water	0.2	33.9			Surface water	0.2	20.5							
	River				River/stream	River	0.2	18.6							
	Lake					Lake									
	Dam				Dam/pool	Dam	0.1	1.9							
	Pond					Pond									
	Stream					Stream									
	Irrigation channel					Irrigation channel									
	Other					Other									
	Other improved sources					Other improved sources									
	Other					Other									
	Other					Other									
	Other non-improved	1.2	3.5			Other non-improved	0.8	2.9							
	Cart with small tank/drum					Cart with small tank/drum									
Water-carrier/tanker	Tanker truck provided	0.5	2.0		Water vendor	Tanker truck provided	0.3	1.9							
Other	Other	0.7	1.5		Other	Other	0.5	1.0							
Unknown	DK/missing	2.2	1.5			DK/missing									
	Total	100.0	100.0			Total	100.0	100.0							
Calculations	Springs, based on OHS96	0.0	5.5		Calculations										
Estimations	Rainwater, based on OHS96		1.4		Estimations										
	Proportion of boreholes based on OHS96	0.3	9.1												
	50% of well considered improved	0.0	0.3			50% of springs considered improved	0.0	1.8							
	50% of springs considered improved	0.0	2.7												
Access to improved drinking water sources :		96%	64%		Access to improved drinking water sources :		99%	75%							
Access to house connections :		84%	22%		Access to house connections :		89%	32%							
Used for the estimates :		Yes	Yes		Used for the estimates :		Yes	Yes							
Used for the estimates :		Yes	Yes		Used for the estimates :		Yes	Yes							
Ratios	HC / Tap water	87%	44%		Ratios	HC / Tap water	90%	50%							
	Public tap / Tap water	13%	56%			Public tap / Tap water	10%	50%							
	Tubewell + protected well / All wells					Tubewell + protected well / All wells									
	Protected wells / Traditional wells					Protected wells / Traditional wells									
	Tubewell / All wells					Tubewell / All wells	100%	100%							
	Protected springs / All springs					Protected springs / All springs									
	Protect. well & spring / well & spring					Protect. well & spring / well & spring									
Number of people covered by the survey:					Number of people covered by the survey:										
Number of households covered by the survey:					Number of households covered by the survey:										
Total population:					Total population:										
Comments					Comments	Urban is an aggregation of urban formal and urban informal Rural is an aggregation of rural formal and tribal area									

South Africa			DRINKING WATER							
			URBAN				RURAL			
			House connection		Total		House connection		Total	
Source	Code	Year	Used	Not used	Used	Not used	Used	Not used	Used	Not used
October Household Surveys	OHS94	1994		92.3		99.3		32.5		72.1
October Household Surveys	OHS95	1995		93.9		99.0		37.6		73.5
October Household Surveys	OHS96	1996	86.9		98.3		25.4		71.1	
October Household Surveys	OHS97	1997	88.4		98.9		26.7		69.8	
October Household Surveys	OHS98	1998	87.2		98.5		29.3		70.8	
Demographic and Health Survey	DHS98	1998	86.6		98.1		26.5		66.4	
October Household Surveys	OHS99	1999	88.4		98.0		31.1		73.3	
Census	CEN01	2001		82.7		98.0		27.3		69.5
Census	CEN01	2001	81.1		97.9		28.6		71.8	
World Health Survey	WHS03	2003	87.1		100.0			47.5		86.7
Recensement général de la population	CEN96	1996	83.8		96.4		21.9		63.5	
Recensement général de la population	CEN07	2007	88.6		98.9		31.5		74.8	
General Household Survey	GHS06	2006	89.3		99.2		29.5		78.6	
General Household Survey	GHS07	2007	89.8		98.8		31.2		77.9	
Demographic and Health Survey	DHS03	2003	88.7		98.4		27.6		69.7	

South Africa - urban - Use of improved drinking water sources



South Africa - rural - Use of improved drinking water sources



Drinking Water

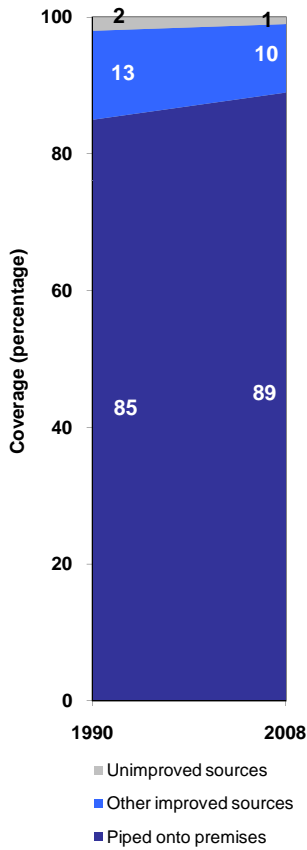
South Africa	Drinking water coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Piped into premises	85	89	25	32	56	67
Other improved source	13	10	41	46	27	24
Unimproved source	2	1	34	22	17	9

Source: WHO/UNICEF JMP, 2010

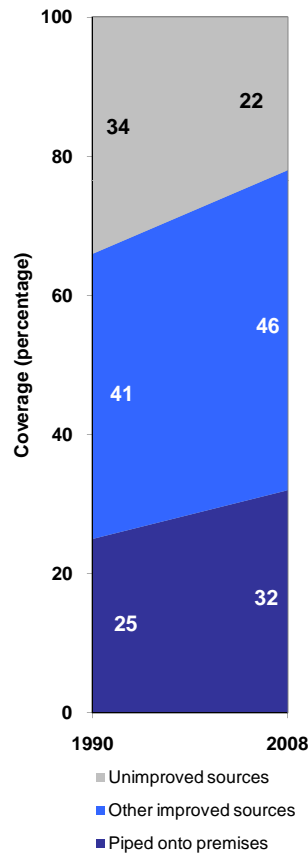
South Africa	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	19121	30164	17624	19503	36745	49668

Source: UN / Population Division, 2008

Urban drinking water trends



Rural drinking water trends



Total drinking water trends

