

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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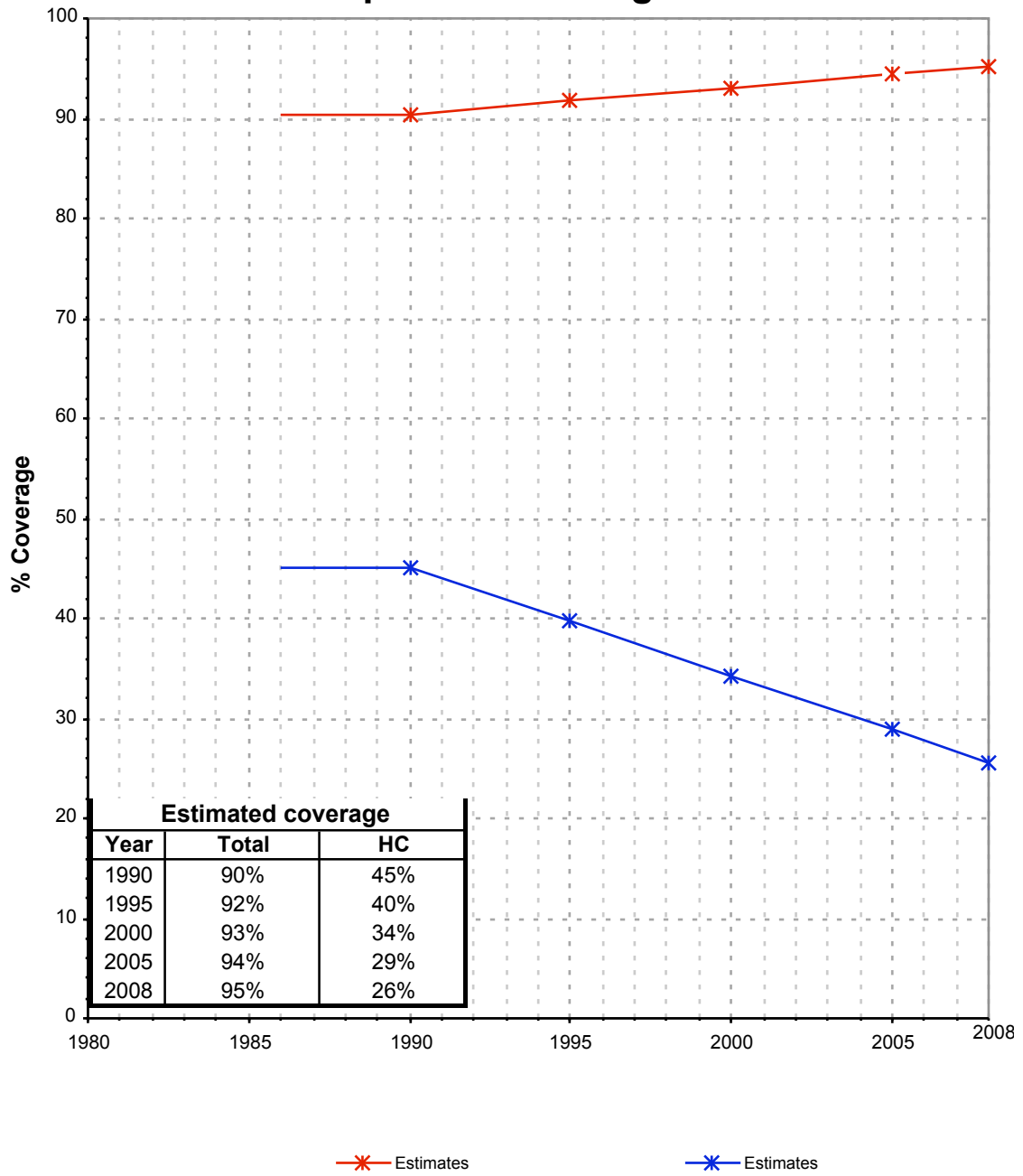
Access to drinking water sources		DHS96			Malawi			Access to drinking water sources		JMP99			Malawi		
Demographic and Household Survey					1996			Global Water Supply and Sanitation Assessment 2000. Water Supply and Sanitation Sector Questionnaire - 1999. Form 6 sent to WHO.					1999		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Tap water	84.4	72.8			Tap water	61.2	0.0							
	House connections	41.9	2.2			House connections	61.2	0.0							
Piped into Residence	Piped water into dwelling	12.1	0.4			Piped water into dwelling									
Piped into Yard/Plot	Piped water to yard/plot	29.8	1.8			Piped water to yard/plot									
Public Tap	Public tap, standpipe	42.5	10.6			Public tap, standpipe									
	Other					Other									
	Ground water	13.3	66.5			Ground water	25.9	47.6							
	Protected ground water	10.1	27.3			Protected ground water	25.9	47.6							
	Unprotected ground water	3.2	39.2			Unprotected ground water									
	Protected wells or springs	10.1	27.3	0.0		Protected wells or springs									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected wells or springs	3.2	39.2	0.0		Unprotected wells or springs									
	Private					Private									
	Public					Public									
	Other					Other									
	All wells	13.3	66.5			All wells									
	Private					Private									
	Public					Public									
	Other					Other									
	Tubewell, borehole					Tubewell, borehole									
	Private					Private									
	Public					Public									
	Other					Other									
	Traditional wells	13.3	66.5			Traditional wells									
	Private					Private									
	Public					Public									
	Other					Other									
Protected Well/ borehole	Protected well	10.1	27.3			Protected well									
	Private					Private									
	Public					Public									
	Other					Other									
Unprotected Well	Unprotected well	3.2	39.2			Unprotected well									
	Private					Private									
	Public					Public									
	Other					Other									
	All springs					All springs									
	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									
	Covered cistern/tank					Covered cistern/tank									
	Uncovered cistern/tank					Uncovered cistern/tank									
	Bottled water					Bottled water									
	with other improved					with other improved									
	without other improved					without other improved									
	Surface water	0.7	20.7			Surface water									
River/Stream/Spring	River	0.4	18.9			River									
Lake/Pond/Dam	Lake	0.3	1.8			Lake									
	Dam					Dam									
	Pond					Pond									
	Stream					Stream									
	Irrigation channel					Irrigation channel									
	Other					Other									
	Other improved sources					Other improved sources									
	Other					Other									
	Other					Other									
	Other non-improved	1.6	0.0		Total population unserved	Other non-improved	12.9	52.4							
	Cart with small tank/drum					Cart with small tank/drum									
	Tanker truck provided					Tanker truck provided									
Other	Other	1.6	0.0			Other									
	Other					Other									
	DK/missing					DK/missing									
	Total	100.0	100.0			Total	100.0	100.0							
Calculations					Calculations										
Estimations					Estimations										
Access to improved drinking water sources :		95%	40%		Access to improved drinking water sources :		87%	48%							
Access to house connections :		42%	2%		Access to house connections :		61%	0%							
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	50%	17%		Ratios	HC / Tap water	100%	#DIV/0!							
	Public tap / Tap water	50%	83%			Public tap / Tap water									
	Tubewell + protected well / All wells	76%	41%			Tubewell + protected well / All wells									
	Protected wells / Traditional wells					Protected wells / Traditional wells									
	Tubewell / All wells					Tubewell / All wells									
	Protected springs / All springs					Protected springs / All springs									
	Protect. well & spring / well & spring	76%	41%			Protect. well & spring / well & spring									
Proportion piped into yard of all taps	41%	15%													
Number of people covered by the survey:					Number of people covered by the survey:		1708	8298							
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		MICS06			Malawi			Access to drinking water sources		IHS97			Malawi		
Multiple Indicator Cluster Survey					2006			INTEGRATED HOUSEHOLD SURVEY					1997		
					National Statistical Office										
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	
	Tap water	77.0	8.5			Tap water	81.3	21.4			Tap water	42.4	1.0		
	House connections	32.2	1.1		own tap	House connections					House connections				
Piped into dwelling	Piped water into dwelling	11.1	0.3			Piped water into dwelling					Piped water into dwelling				
Piped into yard or plot	Piped water to yard/plot	21.1	0.8			Piped water to yard/plot					Piped water to yard/plot				
Public tap/standpipe	Public tap, standpipe	44.8	7.4		public tap	Public tap, standpipe					Public tap, standpipe	38.9	20.4		
	Other					Other					Other				
	Ground water	21.9	84.2			Ground water	10.1	57.9			Ground water	6.6	25.3		
	Protected ground water	18.8	61.8			Protected ground water	6.6	25.3			Protected ground water	3.5	32.6		
	Unprotected ground water	3.1	22.4			Unprotected ground water	3.5	32.6			Unprotected ground water	6.6	25.3		
	Protected wells or springs	18.8	61.8	0.0		Protected wells or springs	6.6	25.3			Protected wells or springs				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
	Unprotected wells or springs	3.1	22.4	0.0		Unprotected wells or springs	3.5	32.6			Unprotected wells or springs				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
	All wells	21.8	83.0			All wells	10.1	57.9			All wells				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
Tubewell/borehole	Tubewell, borehole	16.3	55.1			Tubewell, borehole					Tubewell, borehole				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
	Traditional wells	5.5	27.9			Traditional wells	10.1	57.9			Traditional wells				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
Protected well	Protected well	2.5	6.5		protected well	Protected well	6.6	25.3			Protected well				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
Unprotected well	Unprotected well	3.0	21.4		unprotected well	Unprotected well	3.5	32.6			Unprotected well				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
	All springs	0.1	1.2			All springs					All springs				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
Protected spring	Protected spring	0.0	0.2			Protected spring					Protected spring				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
Unprotected spring	Unprotected spring	0.1	1.0			Unprotected spring					Unprotected spring				
	Private					Private					Private				
	Public					Public					Public				
	Other					Other					Other				
	Rainwater	0.0	0.0			Rainwater					Rainwater				
Rainwater collection	Covered cistern/tank	0.0	0.0			Covered cistern/tank					Covered cistern/tank				
	Uncovered cistern/tank					Uncovered cistern/tank					Uncovered cistern/tank				
	Bottled water	0.0	0.0			Bottled water					Bottled water				
Bottled water + improved source	with other improved	0.0	0.0			with other improved					with other improved				
Bottled water without improved source	without other improved	0.0	0.0			without other improved					without other improved				
Surface water	Surface water	0.4	6.1		river/lake	Surface water	6.2	12.0			Surface water				
	River					River					River				
	Lake					Lake					Lake				
	Dam					Dam					Dam				
	Pond					Pond					Pond				
	Stream					Stream					Stream				
	Irrigation channel					Irrigation channel					Irrigation channel				
	Other					Other					Other				
	Other improved sources	0.4	1.0			Other improved sources					Other improved sources				
Tubewell with powered pump	Other	0.4	1.0			Other					Other				
	Other					Other					Other				
	Other non-improved	0.2	0.2			Other non-improved	2.3	8.6			Other non-improved				
Cart with small tank/drum	Cart with small tank/drum	0.0	0.2			Cart with small tank/drum					Cart with small tank/drum				
	Tanker truck provided					Tanker truck provided					Tanker truck provided				
Other	Other	0.1	0.0		other	Other	2.3	8.6			Other				
	Other	0.1	0.0			Other					Other				
Missing	DK/missing					DK/missing					DK/missing				
	Total	99.9	100.0			Total	99.9	99.9			Total	99.9	99.9		
Calculations					Calculations					Calculations					
Estimations					Estimations					Estimations					
Access to improved drinking water sources :		96%	71%		Access to improved drinking water sources :		88%	47%		Access to improved drinking water sources :		88%	47%		
Access to house connections :		32%	1%		Access to house connections :		42%	1%		Access to house connections :		42%	1%		
Used for the estimates :		Yes	Yes		Used for the estimates :		Yes	Yes		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	42%	13%		Ratios	HC / Tap water	52%	5%		Ratios	HC / Tap water	52%	5%		
	Public tap / Tap water	58%	87%			Public tap / Tap water	48%	95%			Public tap / Tap water	48%	95%		
	Tubewell + protected well / All wells	86%	74%			Tubewell + protected well / All wells	65%	44%			Tubewell + protected well / All wells	65%	44%		
	Protected wells / Traditional wells	45%	23%			Protected wells / Traditional wells					Protected wells / Traditional wells				
	Tubewell / All wells	75%	66%			Tubewell / All wells					Tubewell / All wells				
	Protected springs / All springs	0%	17%			Protected springs / All springs					Protected springs / All springs				
	Protect. well & spring / well & spring	86%	73%			Protect. well & spring / well & spring	65%	44%			Protect. well & spring / well & spring	65%	44%		
Number of people covered by the survey:					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:		1418	9279		Number of households covered by the survey:		1418	9279		
Total population:					Total population:					Total population:					
Comments					Comments					Comments					

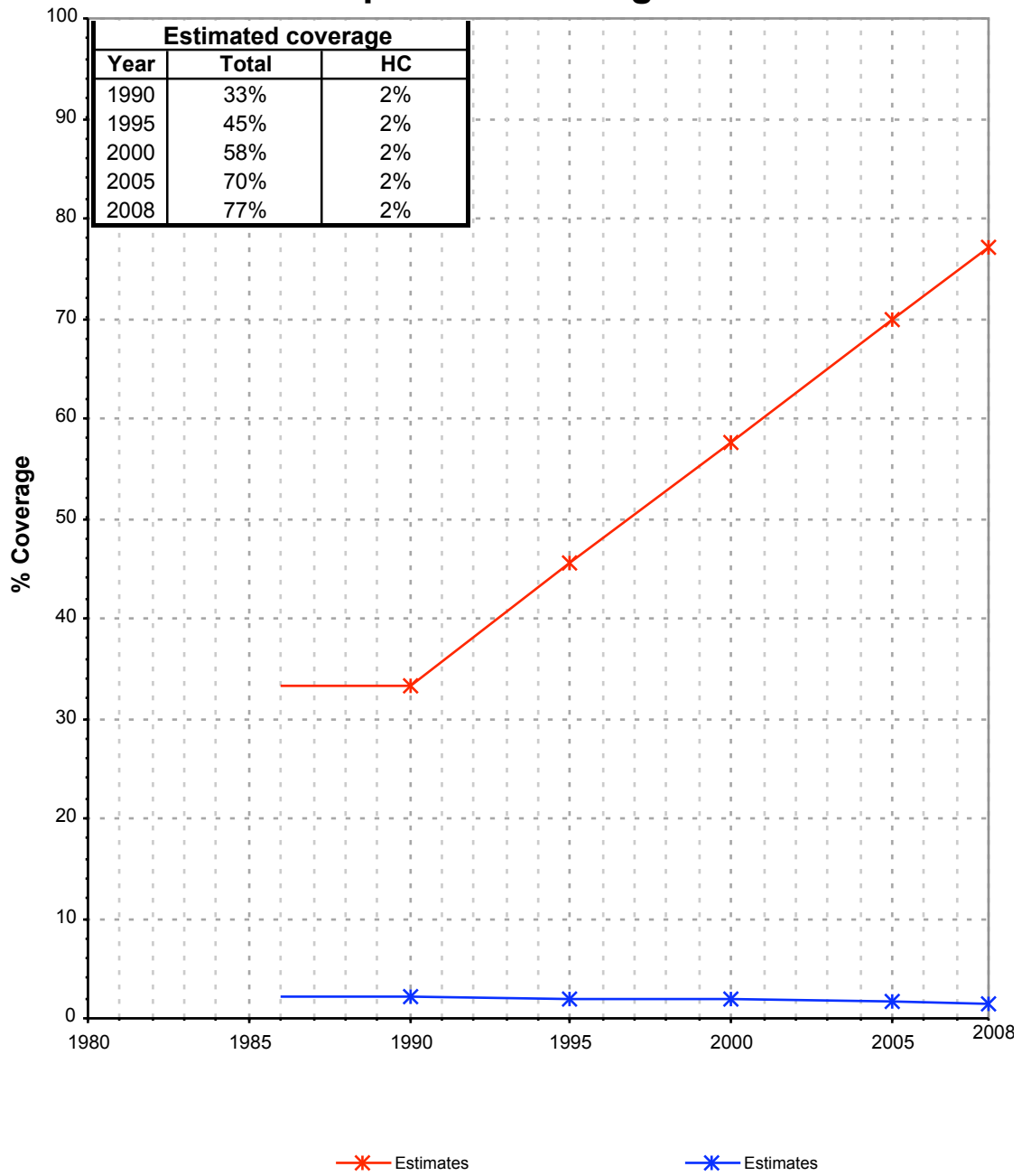
Access to drinking water sources		IHS97b			Malawi			Access to drinking water sources		IHS04			Malawi		
INTEGRATED HOUSEHOLD SURVEY (Question on previous year)					INTEGRATED HOUSEHOLD SURVEY										
National Statistical Office					National Statistical Office					National Statistical Office					
Original denomination		Classification			1996			Original denomination		Classification			2004		
		Urban	Rural	Total			Urban	Rural	Total			Urban	Rural	Total	
		Tap water								Tap water					
own tap		81.8	22.7							76.9	12.8				
	House connections	42.1	1.2							28.1	2.0				
	Piped water into dwelling									12.6	0.8				
	Piped water to yard/plot									15.5	1.2				
public tap	Public tap, standpipe	39.7	20.9							48.8	10.8				
	Other														
	Ground water	10.1	56.5							22.0	79.0				
	Protected ground water	6.5	24.0							10.6	51.4				
	Unprotected ground water	3.6	32.5							11.4	27.6				
	Protected wells or springs	6.5	24.0							10.6	51.4				
	Private									1.2	0.2				
	Public									9.2	50.5				
	Other														
	Unprotected wells or springs	3.6	32.5							11.4	27.6				
	Private									3.1	2.7				
	Public									8.3	24.9				
	Other														
	All wells	10.1	56.5							21.8	78.3				
	Private									4.3	2.9				
	Public									17.5	75.4				
	Other														
	Tubewell, borehole									10.4	50.7				
	Private									1.2	0.2				
	Public									9.2	50.5				
	Other														
	Traditional wells	10.1	56.5							11.4	27.6				
	Private									3.1	2.7				
	Public									8.3	24.9				
	Other														
protected well	Protected well	6.5	24.0												
	Private														
	Public														
	Other														
unprotected well	Unprotected well	3.6	32.5							11.4	27.6				
	Private									3.1	2.7				
	Public									8.3	24.9				
	Other														
	All springs									0.2	0.7				
	Private														
	Public														
	Other														
	Protected spring									0.2	0.7				
	Private														
	Public														
	Other														
	Unprotected spring														
	Private														
	Public														
	Other														
	Rainwater														
	Covered cistern/tank														
	Uncovered cistern/tank														
	Bottled water														
	with other improved														
	without other improved														
river/lake	Surface water	5.7	12.8							0.4	8.1				
	River									0.4	7.7				
	Lake									0.0	0.4				
	Dam														
	Pond														
	Stream														
	Irrigation channel														
	Other														
	Other improved sources														
	Other														
	Other														
	Other non-improved	2.3	8.5							0.6	0.0				
	Cart with small tank/drum														
	Tanker truck provided														
other	Other	2.3	8.5							0.6	0.0				
	Other														
	DK/missing														
	Total	99.9	99.9							99.9	99.9				
Calculations					Calculations										
Estimations					Estimations										
Access to improved drinking water sources : 88%		46%			Access to improved drinking water sources : 88%		64%								
Access to house connections : 42%		1%			Access to house connections : 28%		2%								
Used for the estimates :		No	No		Used for the estimates :		Yes	Yes							
Used for the estimates :		No	No		Used for the estimates :		Yes	Yes							
Ratios	HC / Tap water	51%	5%		Ratios	HC / Tap water	37%	16%							
	Public tap / Tap water	49%	95%			Public tap / Tap water	63%	84%							
	Tubewell + protected well / All wells	64%	42%			Tubewell + protected well / All wells									
	Protected wells / Traditional wells					Protected wells / Traditional wells									
	Tubewell / All wells					Tubewell / All wells	48%	65%							
	Protected springs / All springs					Protected springs / All springs	100%	100%							
	Protect. well & spring / well & spring	64%	42%			Protect. well & spring / well & spring	48%	65%							
Number of people covered by the survey:					Number of people covered by the survey:										
Number of households covered by the survey:		1418	9279		Number of households covered by the survey:		1437	9837							
Total population:					Total population:										
Comments	Not used as the questions was asked during the 1997 about access the previous year 1996.			Comments											

Malawi			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
Demographic and Household Survey	DHS92	1992	33.6		90.9		1.8		41.6	
Multiple Indicator Cluster Survey	MICS95	1995	43.7		92.3		2.1		47.0	
Demographic and Household Survey	DHS96	1996	41.9		94.5		2.2		40.1	
Global Water Supply and Sanitation Assessment 2000. Water Supply and Sanitation Sector Questionnaire - 1999. Form 6 sent to WHO.	JMP99	1999		61.2		87.1		0.0		47.6
Demographic and Household Survey	DHS00	2000	41.7		94.8		1.7		60.5	
CWIQ	CWIQ02	2002	25.0		95.8		1.5		63.6	
World Health Survey	WHS03	2003	22.9		99.0		2.2		77.2	
Demographic and Household Survey	DHS04	2004	29.2		91.2		1.6		59.5	
Multiple Indicator Cluster Survey	MICS06	2006	32.2		96.2		1.1		71.3	
INTEGRATED HOUSEHOLD SURVEY	IHS97	1997	42.4		87.9		1.0		46.7	
INTEGRATED HOUSEHOLD SURVEY (Question on previous year)	IHS97b	1996		42.1		88.3		1.2		46.1
INTEGRATED HOUSEHOLD SURVEY	IHS04	2004	28.1		87.5		2.0		64.2	
Welfare Monitoring Survey	WMS05	2005			92.0				69.0	
Welfare Monitoring Survey	WMS05	2007			98.0				76.0	
Population and Housing Census	CEN98	1998	39.3		92.9		3.3		54.1	

Malawi - urban - Use of improved drinking water sources



Malawi - rural - Use of improved drinking water sources



Drinking Water

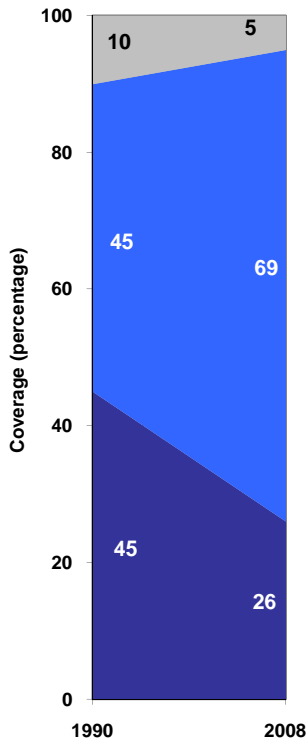
Malawi	Drinking water coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Piped into premises	45	26	2	2	7	7
Other improved source	45	69	31	75	33	73
Unimproved source	10	5	67	23	60	20

Source: WHO/UNICEF JMP, 2010

Malawi	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	1 093	2 785	8359	12061	9451	14846

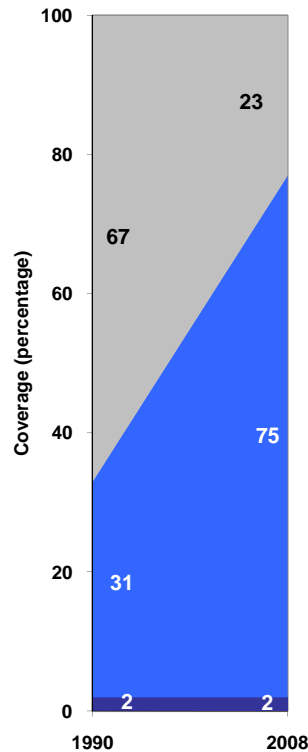
Source: UN / Population Division, 2008

Urban drinking water trends



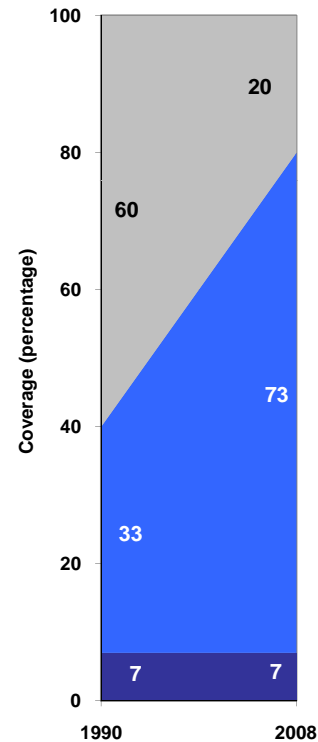
■ Unimproved sources
■ Other improved sources
■ Piped onto premises

Rural drinking water trends



■ Unimproved sources
■ Other improved sources
■ Piped onto premises

Total drinking water trends



■ Unimproved sources
■ Other improved sources
■ Piped onto premises