

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

childinfo.org

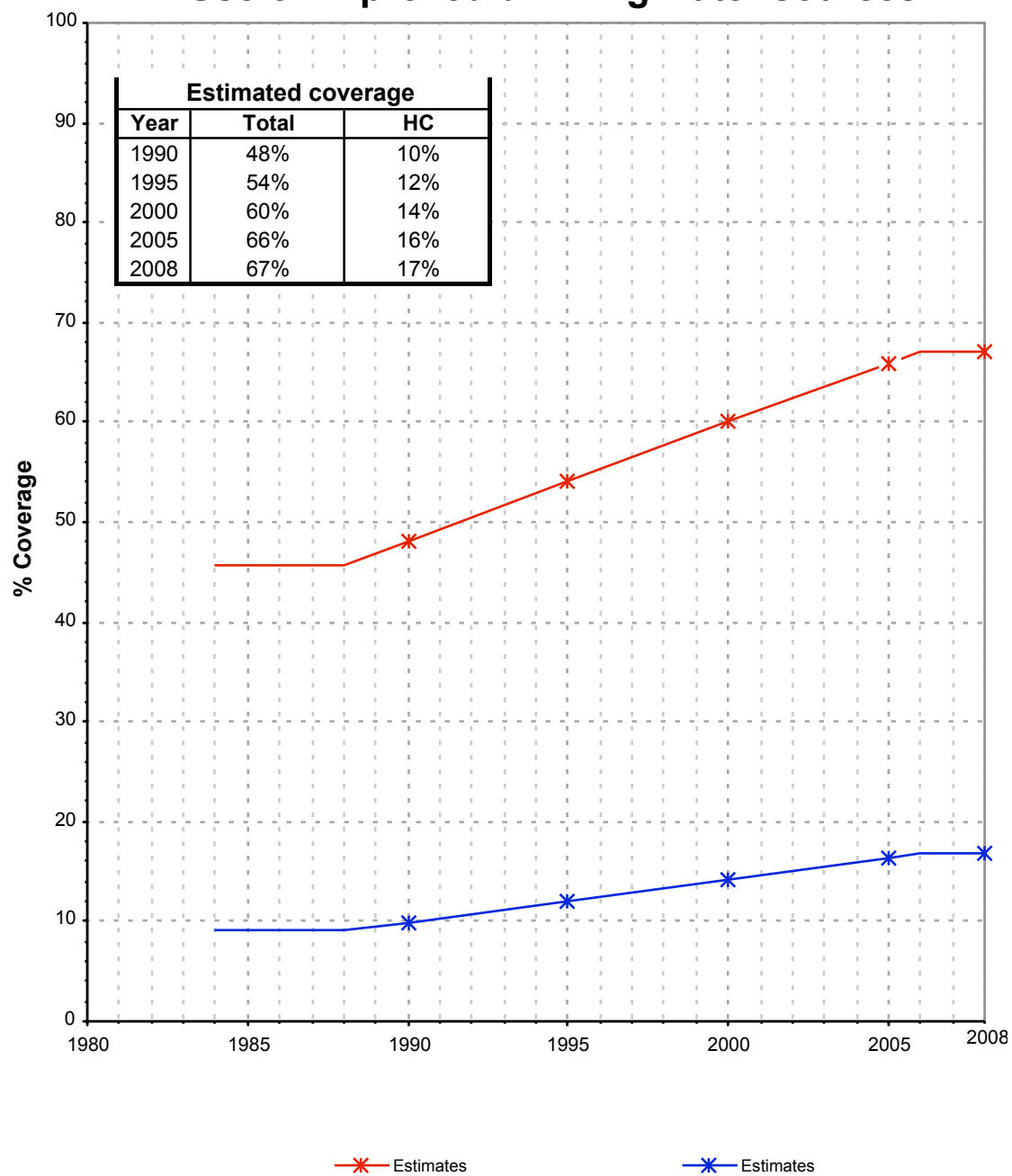
Access to drinking water sources		JMP99			Chad			Access to drinking water sources		MICS00			Chad						
Global Water Supply and Sanitation Assessment 2000.					Enquete de grappes a indicateurs multiples														
Water Supply and Sanitation Sector Questionnaire - 1999. Form 6 sent to WHO.					1999					Multiple Indicator Cluster Survey					2000				
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total					
Population served with household connection	Tap water	9.7	0.0		Eau du robinet	Tap water	37.6	2.8											
	House connections	9.7	0.0			House connections													
	Piped water into dwelling					Piped water into dwelling													
	Piped water to yard/plot					Piped water to yard/plot													
	Public tap, standpipe					Public tap, standpipe													
	Other					Other													
Population without household connection but with reasonable access to a public	Ground water	38.5	17.0			Ground water	37.3	81.1											
	Protected ground water	38.5	17.0			Protected ground water	8.0	24.0											
	Unprotected ground water					Unprotected ground water													
	Protected wells or springs					Protected wells or springs	8.0	24.0	0.0										
	Private					Private													
	Public					Public													
	Other					Other													
	Unprotected wells or springs					Unprotected wells or springs	0.0	0.0	0.0										
	Private					Private													
	Public					Public													
	Other					Other													
	All wells					All wells	37.3	81.1											
	Private					Private													
	Public					Public													
	Other					Other													
	Tubewell, borehole				Puits moderne/forage	Tubewell, borehole	8.0	24.0											
	Private					Private													
	Public					Public													
	Other					Other													
	Traditional wells				Puits traditionnel protégé ou non protégé	Traditional wells	29.3	57.1											
	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					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				Eau de surface	Surface water	1.2	14.2											
	River					River													
	Lake					Lake													
	Dam					Dam													
	Pond					Pond													
	Stream					Stream													
	Irrigation channel					Irrigation channel													
	Other					Other													
	Other improved sources					Other improved sources													
	Other					Other													
	Other					Other													
Total population unserved	Other non-improved	51.8	83.0			Other non-improved	23.9	1.9											
	Cart with small tank/drum					Cart with small tank/drum													
	Tanker truck provided				Camion citerne, vendeur d'eau	Tanker truck provided	23.8	0.6											
	Other				Autres	Other	0.1	1.3											
	Other					Other													
	DK/missing				Pas de réponse/NSP	DK/missing	0.0	0.1											
	Total	100.0	100.0			Total	100.0	100.1											
Calculations						Calculations													
Estimations						Estimations	Improved traditional Wells based on ECSI03	16.3	15.2										
							HC, based on DHS97	18.7	0.1										
Access to improved drinking water sources :		48%	17%		Access to improved drinking water sources :		62%	42%		Access to improved drinking water sources :		62%	42%						
Access to house connections :		10%	0%		Access to house connections :		19%	0%		Access to house connections :		19%	0%						
Used for the estimates :		No	No		Used for the estimates :		Yes	Yes		Used for the estimates :		Yes	Yes						
Used for the estimates :		No	No		Used for the estimates :		Yes	Yes		Used for the estimates :		Yes	Yes						
Ratios	HC / Tap water	100%	#DIV/0!		Ratios	HC / Tap water													
	Public tap / Tap water					Public tap / Tap water													
	Tubewell + protected well / All wells					Tubewell + protected well / All wells													
	Protected wells / Traditional wells					Protected wells / Traditional wells													
	Tubewell / All wells					Tubewell / All wells	21%	30%											
	Protected springs / All springs					Protected springs / All springs													
	Protect. well & spring / well & spring					Protect. well & spring / well & spring	100%	100%											
	Number of people covered by the survey:	1324.6	4869			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		WHS03		Chad	
World Health Survey				2003	
Original denomination	Classification	Urban	Rural	Total	
	Tap water	66.7	15.2		
Piped water through house connection or yard	House connections	9.9	1.5		
	Piped water into dwelling				
	Piped water to yard/plot				
Public standpipe	Public tap, standpipe	56.8	13.7		
	Other				
	Ground water	27.9	74.9		
	Protected ground water	14.6	23.4		
	Unprotected ground water	13.3	51.4		
Protected dug well or protected spring	Protected wells or springs	7.7	12.8	0.0	
	Private				
	Public				
	Other				
Unprotected dug well or spring	Unprotected wells or springs	13.3	51.4		
	Private				
	Public				
	Other				
	All wells	6.9	10.6		
	Private				
	Public				
	Other				
Protected tube well or bore hole	Tubewell, borehole	6.9	10.6		
	Private				
	Public				
	Other				
	Traditional wells				
	Private				
	Public				
	Other				
	Protected well				
	Private				
	Public				
	Other				
	Unprotected well				
	Private				
	Public				
	Other				
	All springs				
	Private				
	Public				
	Other				
	Protected spring				
	Private				
	Public				
	Other				
	Unprotected spring				
	Private				
	Public				
	Other				
	Rainwater	0.1	2.2		
Rainwater (into tank or cistern)	Covered cistern/tank	0.1	2.2		
	Uncovered cistern/tank				
	Bottled water				
	with other improved				
	without other improved				
Water taken directly from pond-water or stream	Surface water	5.2	0.3		
	River				
	Lake				
	Dam				
	Pond				
	Stream				
	Irrigation channel				
	Other				
	Other improved sources				
	Other				
	Other				
	Other non-improved	0.2	7.4		
	Cart with small tank/drum				
Tanker-truck, vendor	Tanker truck provided	0.2	7.4		
	Other				
	Other				
	DK/missing				
	Total	100.0	100.0		
Calculations					
	Protected wells, based on DHS04	7.1	10.6		
	Protected springs based on DHS04	0.6	2.2		
Estimations					
	corrected for urban vendor provided water, based on DHS04	-16.9	0.0		
Access to improved drinking water sources :		64%	41%		
Access to house connections :		10%	2%		
Used for the estimates		Yes	Yes		
Used for the estimates		Yes	Yes		
Ratios	HC / Tap water	15%	10%		
	Public tap / Tap water	85%	90%		
	Tubewell + protected well / All wells				
	Protected wells / Traditional wells				
	Tubewell / All wells	100%	100%		
	Protected springs / All springs				
	Protect. well & spring / well & spring	37%	20%		
Number of people covered by the survey:					
Number of households covered by the survey:					
Total population:					
Comments					

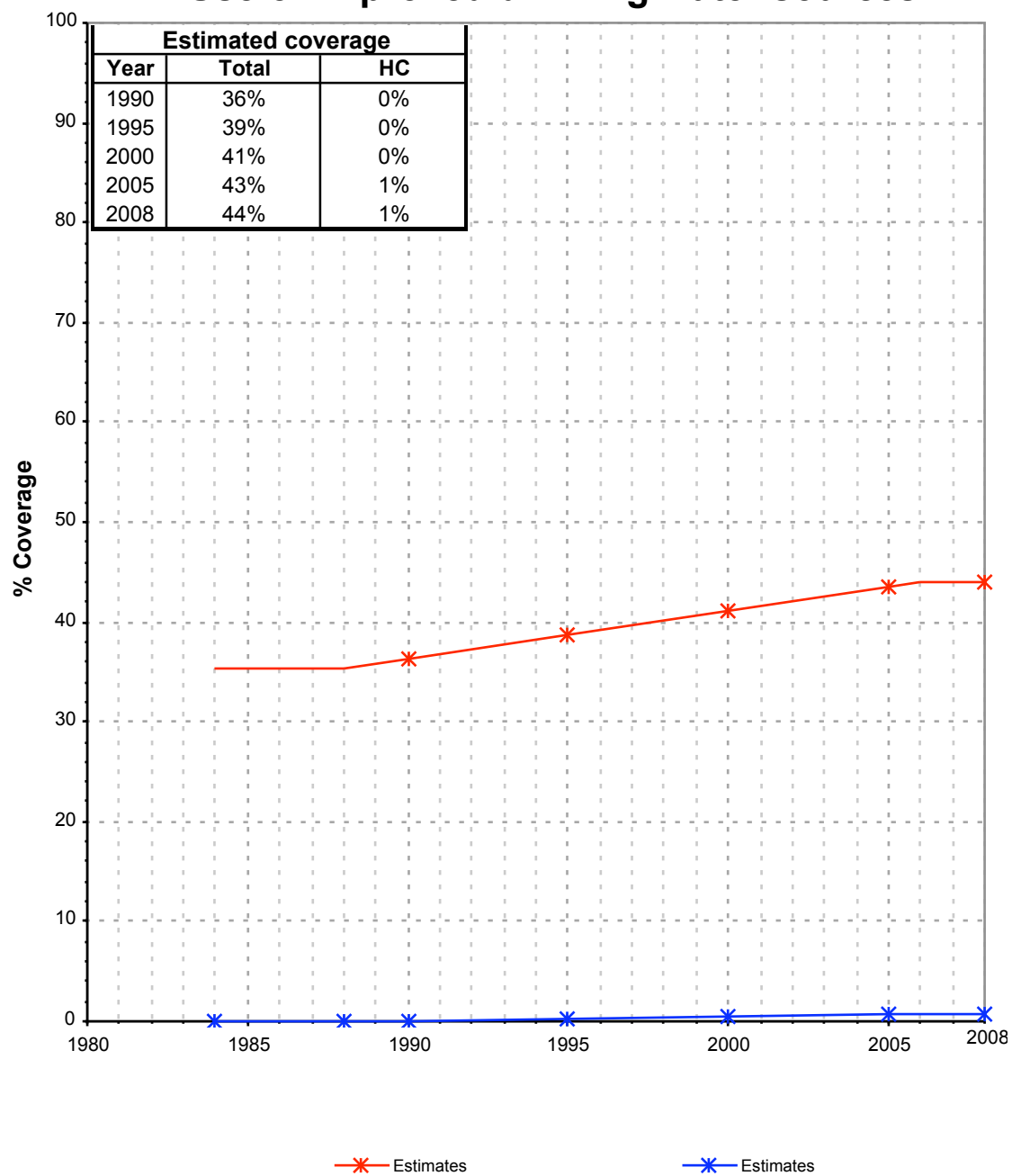
Access to drinking water sources		DHS04		Chad		Access to drinking water sources		ECSI03		Chad		
Demographic and Household Survey				2004		Enquête sur la Consommation et le Secteur Informel				2003		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	Urban	Rural	Total
Robinet dans logement/cour	Tap water	42.0	2.6			Tap water	47.3	7.8				
	House connections	18.6	0.0			House connections	15.5	0.6				
	Piped water into dwelling				eau courante à l'intérieur	Piped water into dwelling	7.5	0.2				
	Piped water to yard/plot				eau courante à l'extérieur	Piped water to yard/plot	8.0	0.4				
Fontaine publique	Public tap, standpipe	23.4	2.6		fontaine publique	Public tap, standpipe	31.8	7.2				
	Other					Other						
	Ground water	35.3	87.8			Ground water	49.5	86.6				
	Protected ground water	14.6	27.8			Protected ground water	31.2	34.1				
	Unprotected ground water	1.4	15.0			Unprotected ground water	18.3	52.5				
	Protected wells or springs	14.6	27.8	0.0		Protected wells or springs	31.2	34.1				
	Private	2.7	0.9			Private						
	Public	10.4	26.5			Public						
	Other					Other						
	Unprotected wells or springs	1.4	15.0	0.0		Unprotected wells or springs	18.3	52.5				
	Private					Private						
	Public					Public						
	Other					Other						
	All wells	32.4	72.4			All wells	48.8	85.7				
	Private	12.4	9.4			Private						
	Public	20.0	63.0			Public						
	Other					Other						
	Tubewell, borehole	13.1	27.4		forage	Tubewell, borehole	7.4	14.2				
	Private	2.7	0.9			Private						
	Public	10.4	26.5			Public						
	Other					Other						
	Traditional wells	19.3	45.0			Traditional wells	41.4	71.5				
	Private	9.7	8.5			Private						
	Public	9.6	36.5			Public						
	Other					Other						
	Protected well				puits aménagé	Protected well	23.1	19.0				
	Private					Private						
	Public					Public						
	Other					Other						
	Unprotected well				puits non aménagé	Unprotected well	18.3	52.5				
	Private					Private						
	Public					Public						
	Other					Other						
	All springs	2.9	15.4			All springs	0.7	0.9				
	Private					Private						
	Public					Public						
	Other					Other						
	Protected spring	1.5	0.4		source aménagée	Protected spring	0.7	0.9				
	Private					Private						
	Public					Public						
	Other					Other						
	Unprotected spring	1.4	15.0			Unprotected spring						
	Private					Private						
	Public					Public						
	Other					Other						
	Rainwater					Rainwater	0.2	0.8				
	Covered cistern/tank				eau de pluie	Covered cistern/tank	0.2	0.8				
	Uncovered cistern/tank					Uncovered cistern/tank						
	Bottled water					Bottled water						
	with other improved					with other improved						
	without other improved					without other improved						
	Surface water	0.3	8.4		Cours d'eau	Surface water	0.2	4.5				
	River					River						
	Lake	0.3	8.4			Lake						
	Dam					Dam						
	Pond					Pond						
	Stream					Stream						
	Irrigation channel					Irrigation channel						
	Other					Other						
	Other improved sources					Other improved sources						
	Other					Other						
	Other non-improved	20.6	0.5			Other non-improved	2.7	0.3				
	Cart with small tank/drum					Cart with small tank/drum						
	Tanker truck provided					Tanker truck provided						
	Other	16.9	0.0		autre	Other	2.7	0.3				
	Other	3.7	0.5			Other						
Vendeur d'eau de puits moderne/forage	DK/missing	1.9	0.9			DK/missing						
Vendeur d'eau d'autres sources	Total	100.1	100.2			Total	99.9	100.0				
Autre/ND												
Calculations					Calculations							
Estimations	Improved traditional Wells based on ECSI03	10.8	12.0		Estimations							
						corrected for urban vendor provided water, based on DHS04	-16.9	0.0				
Access to improved drinking water sources :		67%	42%		Access to improved drinking water sources :		62%	43%				
Access to house connections :		19%	0%		Access to house connections :		16%	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				
Ratios	HC / Tap water	44%	0%		Ratios	HC / Tap water	33%	8%				
	Public tap / Tap water	56%	100%			Public tap / Tap water	67%	92%				
	Tubewell + protected well / All wells					Tubewell + protected well / All wells	63%	39%				
	Protected wells / Traditional wells					Protected wells / Traditional wells	56%	27%				
	Tubewell / All wells	40%	38%			Tubewell / All wells	15%	17%				
	Protected springs / All springs	52%	3%			Protected springs / All springs	100%	100%				
	Protect. well & spring / well & spring	91%	65%			Protect. well & spring / well & spring	63%	39%				
	Springs/Groundwater	8%	18%									
	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							

Chad			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
Census	CEN93	1990	9.7		50.7		0.0		35.0	
Demographic and Household Survey	DHS97	1997	11.6		50.4		0.2		41.9	
Global Water Supply and Sanitation Assessment 2000.	JMP99	1999		9.7		48.2		0.0		17.0
Enquete de grappes a indicateurs multiples	MICS00	2000	18.7		61.9		0.1		42.0	
World Health Survey	WHS03	2003	9.9		64.4		1.5		40.9	
Demographic and Household Survey	DHS04	2004	18.6		67.4		0.0		42.4	
Enquête sur la Consommation et le Secteur Informel	ECSI03	2003	15.5		61.8		0.6		42.7	

Chad - urban - Use of improved drinking water sources



Chad - rural - Use of improved drinking water sources



Drinking Water

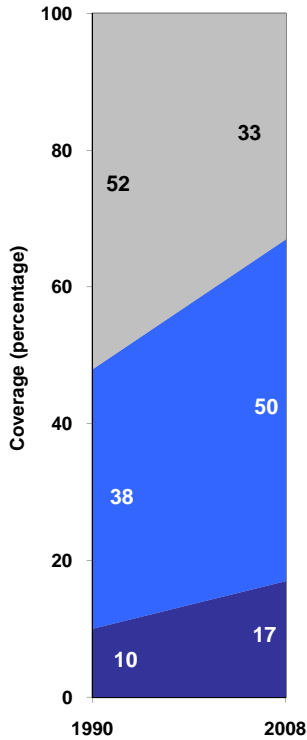
Chad	Drinking water coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Piped into premises	10	17	0	1	2	5
Other improved source	38	50	36	43	36	45
Unimproved source	52	33	64	56	62	50

Source: WHO/UNICEF JMP, 2010

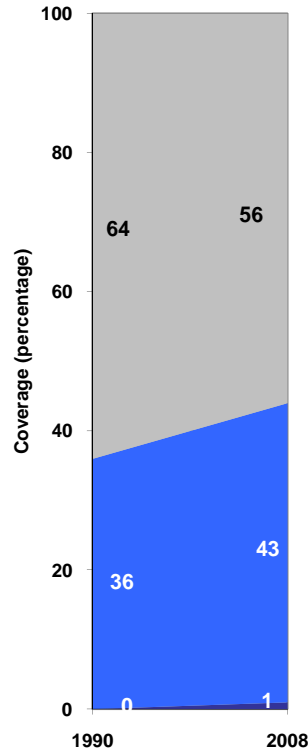
Chad	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	1 271	2 905	4835	8009	6105	10914

Source: UN / Population Division, 2008

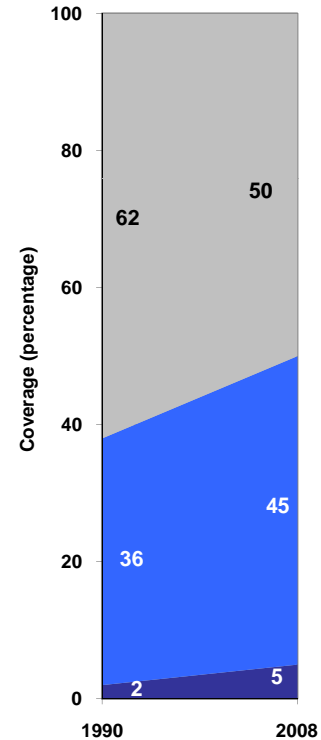
Urban drinking water trends



Rural drinking water trends



Total drinking water trends



■ Unimproved sources
■ Other improved sources
■ Piped onto premises

■ Unimproved sources
■ Other improved sources
■ Piped onto premises

■ Unimproved sources
■ Other improved sources
■ Piped onto premises