

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		MIC95		Myanmar		Access to drinking water sources		FRHS97		Myanmar	
Multiple Indicator Cluster Survey				Monitoring Progress towards the foals of WSC, draft report, November 1995				Fertility and Reproductive Health Survey			
				1995						1997	
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total		
	Tap water					Tap water	23.0	3.1			
	House connections				Piped into residence	House connections	17.2	1.5			
	Piped water into dwelling					Piped water into dwelling					
	Piped water to yard/plot					Piped water to yard/plot					
	Public tap, standpipe				Public Tap	Public tap, standpipe	5.8	1.6			
	Other					Other					
	Ground water					Ground water	62.7	65.1			
	Protected ground water					Protected ground water	37.8	16.1			
	Unprotected ground water					Unprotected ground water					
	Protected wells or springs					Protected wells or springs	37.8	16.1	0.0		
	Private					Private					
	Public					Public					
	Other					Other					
	Unprotected wells or springs					Unprotected wells or springs					
	Private					Private					
	Public					Public					
	Other					Other					
	All wells					All wells	62.7	65.1			
	Private					Private					
	Public					Public					
	Other					Other					
	Tubewell, borehole				Tube Well/Artisan Pump	Tubewell, borehole	37.8	16.1			
	Private					Private					
	Public					Public					
	Other					Other					
	Traditional wells				Protected/Unprotected Well	Traditional wells	24.9	49.0			
	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	0.8	0.4			
	Covered cistern/tank					Covered cistern/tank					
	Uncovered cistern/tank				Rainwater	Uncovered cistern/tank	0.8	0.4			
	Bottled water					Bottled water					
	with other improved					with other improved					
	without other improved					without other improved					
	Surface water					Surface water	11.9	29.6			
	River				River/Canal/Stream/Creek	River	3.6	13.4			
	Lake					Lake					
	Dam					Dam					
	Pond				Pond	Pond	8.3	16.2			
	Stream					Stream					
	Irrigation channel					Irrigation channel					
	Other					Other					
Pipe into the home, public tap, tube well or t	Other improved sources	78.1	49.6			Other improved sources					
	Other					Other					
	Other					Other					
	Other non-improved					Other non-improved	1.6	1.6			
	Cart with small tank/drum					Cart with small tank/drum					
	Tanker truck provided					Tanker truck provided					
	Other				Other	Other	1.6	1.6			
	Other					Other					
	DK/missing					DK/missing					
	Total	78.1	49.6			Total	100.0	99.8			
Calculations	Ponds	1.8	8.2								
Estimations						Traditional wells considered improved, based on MICS00	21.3	33.4			
						Protected rainwater estimated on basis of MICS00	0.6	0.3			
	HC based on FRHS97	16.2	1.4								
Access to improved drinking water sources :		78%	50%		Access to improved drinking water sources :		83%	53%			
Access to house connections :		16%	1%		Access to house connections :		17%	2%			
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					HC / Tap water	75%	48%			
	Public tap / Tap water					Public tap / Tap water	25%	52%			
	Tubewell + protected well / All wells					Tubewell + protected well / All wells					
	Protected wells / Traditional wells					Protected wells / Traditional wells					
	Tubewell / All wells					Tubewell / All wells	60%	25%			
	Protected springs / All springs					Protected springs / All springs					
	Protect. well & spring / well & spring					Protect. well & spring / well & spring	8%	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							

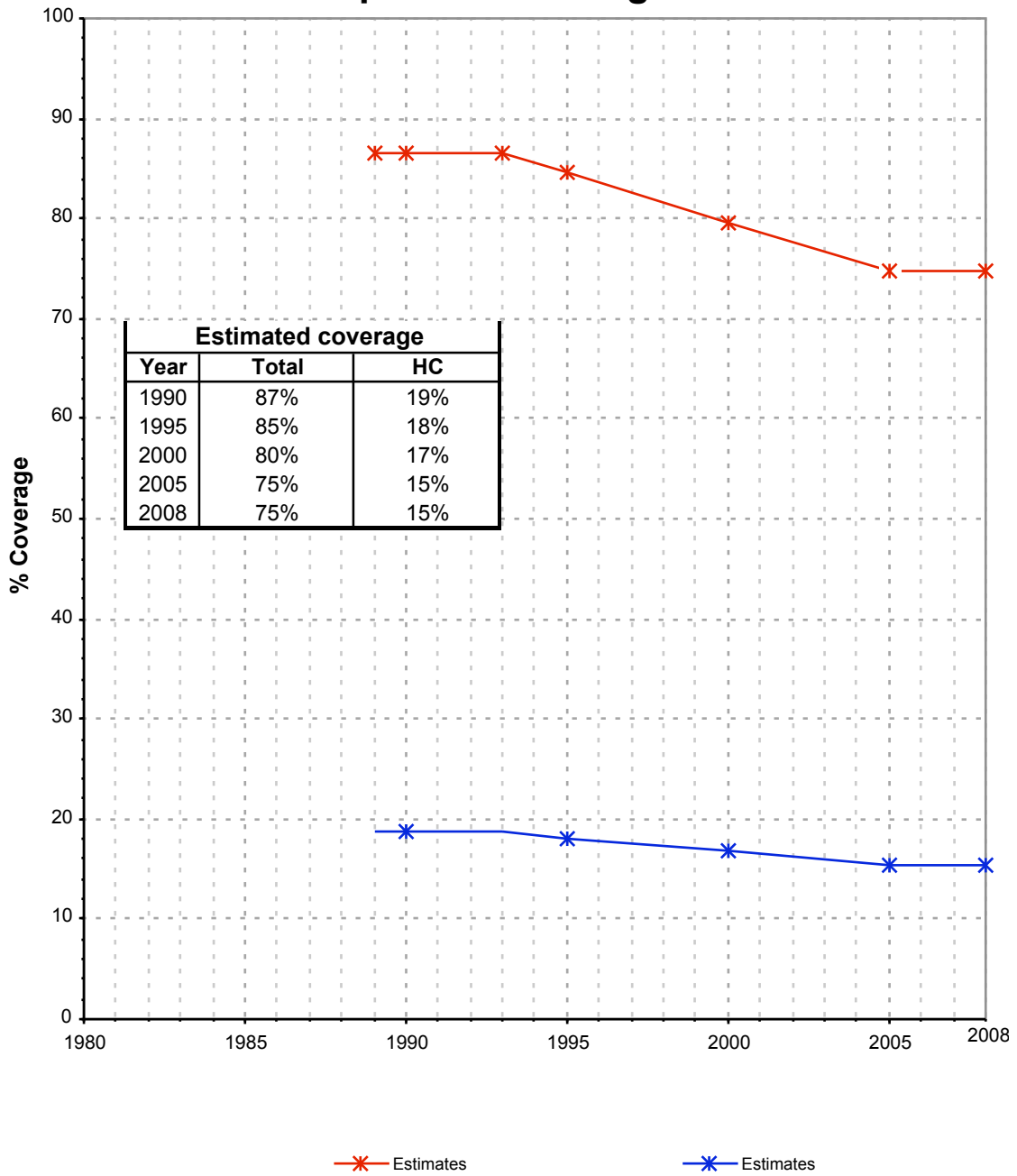
Access to drinking water sources		MICS97			Myanmar			Access to drinking water sources		JMP99			Myanmar						
Multiple Indicator Cluster Survey					1997					Global Water Supply and Sanitation Assessment 2000.					1999				
Monitoring Progress Toward the Goals of National Programme for Myanmar's Children										Water Supply and Sanitation Sector Questionnaire - 1999. Form 6 sent to WHO.									
Original denomination	Classification				Urban	Rural	Total	Original denomination	Classification				Urban	Rural	Total				
	Tap water								Tap water				24.5	0.0					
	House connections							Population served with household connection	House connections				24.5	0.0					
	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										
	Ground water								Ground water				45.3	46.8					
	Protected ground water							Population without household connection that wells accessible, protected, tap or public	Protected ground water				45.3	46.8					
	Unprotected ground water								Unprotected ground water										
	Protected wells or springs								Protected wells or springs										
	Private								Private										
	Public								Public										
	Other								Other										
	Unprotected wells or springs								Unprotected wells or springs										
	Private								Private										
	Public								Public										
	Other								Other										
	All wells								All wells										
	Private								Private										
	Public								Public										
	Other								Other										
	Tubewell, borehole								Tubewell, borehole										
	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								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								Surface water										
	River								River										
	Lake								Lake										
	Dam								Dam										
	Pond								Pond										
	Stream								Stream										
	Irrigation channel								Irrigation channel										
	Other								Other										
Pipe in dwelling, public tap, tube well, prote.	Other improved sources				87.9	59.9			Other improved sources										
	Other								Other										
	Other								Other										
	Other non-improved							Total population unserved	Other non-improved				30.2	53.2					
	Cart with small tank/drum								Cart with small tank/drum										
	Tanker truck provided								Tanker truck provided										
	Other								Other										
	Other								Other										
	DK/missing								DK/missing										
	Total								Total				100.0	100.0					
Calculations																			
Estimations																			
	HC based on FRHS97				18.3	1.7													
Access to improved drinking water sources :					85%	60%		Access to improved drinking water sources :					70%	47%					
Access to house connections :					18%	2%		Access to house connections :					25%	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								HC / Tap water				100%	#DIV/0!					
	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										
	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:					13973	34150				
Number of households covered by the survey:									Number of households covered by the survey:										
Total population:									Total population:										
Comments	Figures not available for each categorie used,only total figure for improved sources							Comments											

Access to drinking water sources		MICS00		Myanmar		Access to drinking water sources		MICS03		Myanmar	
Multiple Indicator Cluster Survey				Multiple Indicator Cluster Survey				Multiple Indicator Cluster Survey			
Report				2000				2003			
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total		
	Tap water	30.6	7.7			Tap water					
	House connections	21.2	2.0			House connections					
Piped into dwelling	Piped water into dwelling	21.2	2.0			Piped water into dwelling					
	Piped water to yard/plot					Piped water to yard/plot					
Public tap	Public tap, standpipe	9.4	5.7			Public tap, standpipe					
	Other					Other					
	Ground water	58.5	61.9			Ground water					
	Protected ground water	55.3	48.5			Protected ground water					
	Unprotected ground water	3.2	13.4			Unprotected ground water					
Protected dug well/spring	Protected wells or springs	19.0	28.6			Protected wells or springs					
	Private					Private					
	Public					Public					
	Other					Other					
Unprotected dug well/spring	Unprotected wells or springs	3.2	13.4			Unprotected wells or springs					
	Private					Private					
	Public					Public					
	Other					Other					
	All wells	36.3	19.9			All wells					
	Private					Private					
	Public					Public					
	Other					Other					
Tubewell/ borehole with pump	Tubewell, borehole	36.3	19.9			Tubewell, borehole					
	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					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	0.4	0.9			Rainwater					
Protected rain water	Covered cistern/tank	0.3	0.7			Covered cistern/tank					
Unprotected rain water	Uncovered cistern/tank	0.1	0.2			Uncovered cistern/tank					
	Bottled water					Bottled water					
	with other improved					with other improved					
	without other improved					without other improved					
	Surface water	4.9	19.9			Surface water					
River/ Creek	River	1.8	10.0			River					
	Lake					Lake					
	Dam					Dam					
Unprotected pond	Pond	3.1	9.9			Pond					
	Stream					Stream					
	Irrigation channel					Irrigation channel					
	Other					Other					
	Other improved sources					Other improved sources					
	Other					Other					
	Other non-improved	5.7	9.6			Other non-improved					
	Cart with small tank/drum					Cart with small tank/drum					
	Tanker truck provided					Tanker truck provided					
Other	Other	2.6	0.7			Other					
Protected pond	Other	3.1	8.9			Other					
Missing/DK	DK/missing	0.0	0.0			DK/missing					
	Total	100.1	100.0			Total					
Calculations					Calculations						
Estimations					Estimations						
Access to improved drinking water sources :		86%	57%		Access to improved drinking water sources :						
Access to house connections :		21%	2%		Access to house connections :						
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	69%	26%		Ratios	HC / Tap water					
	Public tap / Tap water	31%	74%			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	100%	100%			Tubewell / All wells					
	Protected springs / All springs					Protected springs / All springs					
	Protect. well & spring / well & spring	86%	68%			Protect. well & spring / well & spring					
	Ratio of "Protected pond"	0%	0%								
	Ratio of "Protected rain water"	75%	78%								
	Ratio protected pond/all ponds + river creek	0%	0%								
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						

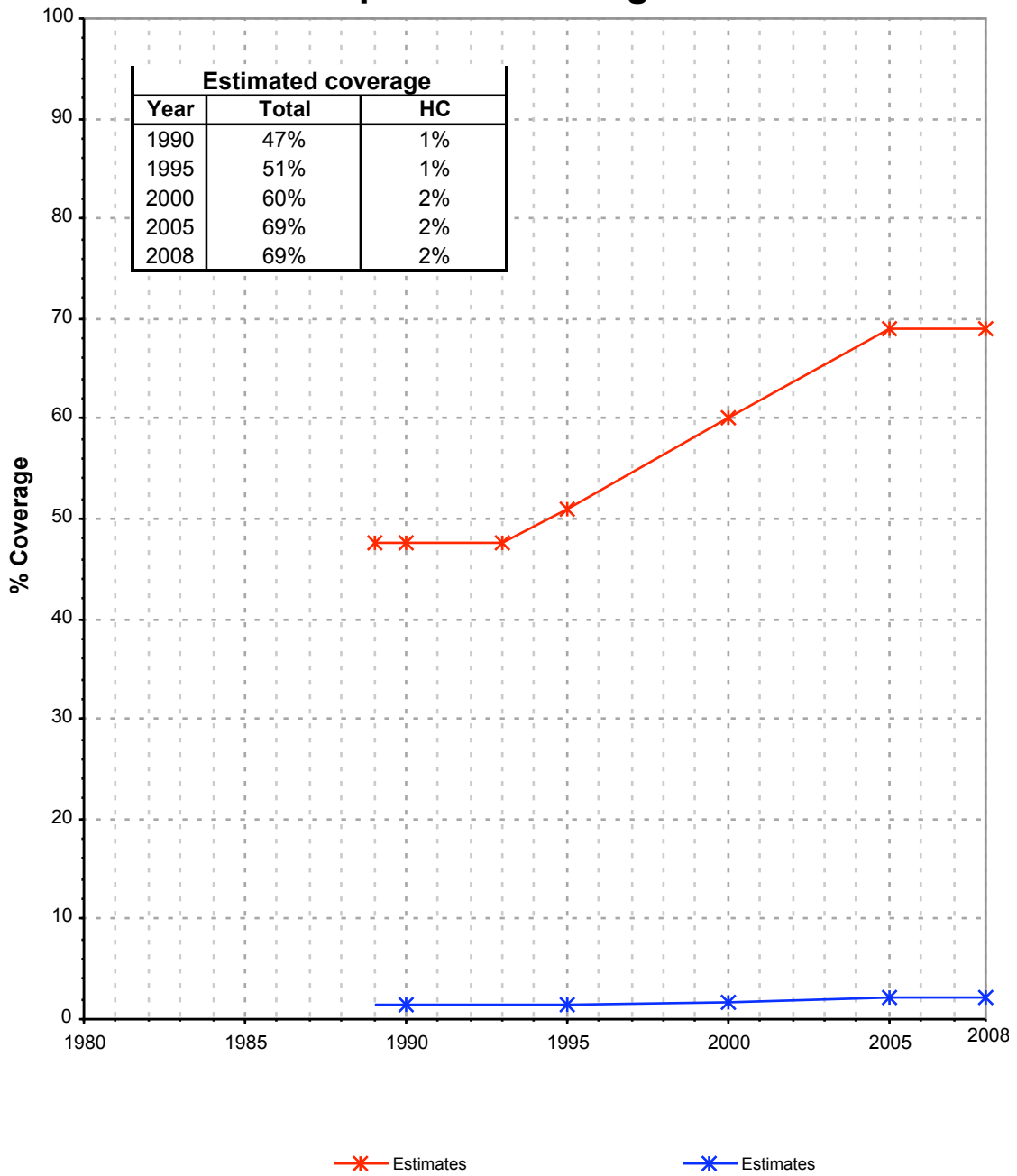
Access to drinking water sources		WHS03		Myanmar	
World Health Survey				2003	
Original denomination	Classification	Urban	Rural	Total	
	Tap water	25.4	8.5		
Piped water through house connection or yard	House connections	13.1	1.9		
	Piped water into dwelling				
	Piped water to yard/plot				
Public standpipe	Public tap, standpipe	12.3	6.6		
	Other				
	Ground water	46.0	64.9		
	Protected ground water	44.0	56.4		
	Unprotected ground water	2.0	8.5		
Protected dug well or protected spring	Protected wells or springs	13.1	25.2	0.0	
	Private				
	Public				
	Other				
Unprotected dug well or spring	Unprotected wells or springs	2.0	8.5		
	Private				
	Public				
	Other				
	All wells	30.9	31.1		
	Private				
	Public				
	Other				
Protected tube well or bore hole	Tubewell, borehole	30.9	31.1		
	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	2.4	2.1		
	Covered cistern/tank				
Rainwater (into tank or cistern)	Uncovered cistern/tank	2.4	2.1		
	Bottled water				
	with other improved				
	without other improved				
Water taken directly from pond-water or stream	Surface water	10.3	24.6		
	River				
	Lake				
	Dam				
	Pond				
	Stream				
	Irrigation channel				
	Other				
	Other improved sources				
	Other				
	Other				
	Other non-improved	15.8	0.0		
	Cart with small tank/drum				
Tanker-truck, vendor	Tanker truck provided	15.8	0.0		
	Other				
	Other				
	DK/missing				
	Total	100.0	100.0		
Calculations					
	Protected wells, based on other surveys	13.1	25.2		
	Protected springs based on other surveys	0.0	0.0		
Estimations					
	Protected rainwater estimated on basis of MICS00	1.8	1.6		
Access to improved drinking water sources :		71%	86%		
Access to house connections :		13%	2%		
Used for the estimates:		Yes	Yes		
Used for the estimates:		Yes	Yes		
Ratios	HC / Tap water	51%	22%		
	Public tap / Tap water	49%	78%		
	Tubewell + protected well / All wells				
	Protected wells / Traditional wells				
	Tubewell / All wells	100%	100%		
	Protected springs / All springs				
	Protect. well & spring / well & spring	87%	75%		
Number of people covered by the survey:					
Number of households covered by the survey:					
Total population:					
Comments					

Myanmar			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
Multiple Indicator Cluster Survey	MICS95	1995	16.2		78.1		1.4		49.6	
Fertility and Reproductive Health Survey	FRHS97	1997	17.2		82.7		1.5		52.9	
Multiple Indicator Cluster Survey	MICS97	1997	18.3		87.9		1.7		59.9	
Global Water Supply and Sanitation Assessment 2000.	JMP99	1999		24.5		69.8		0.0		46.8
Multiple Indicator Cluster Survey	MICS00	2000	21.2		86.2		2.0		56.9	
Multiple Indicator Cluster Survey	MICS03	2003								
World Health Survey	WHS03	2003	13.1		71.2		1.9		66.4	

Myanmar - urban - Use of improved drinking water sources



Myanmar - rural - Use of improved drinking water sources



Drinking Water

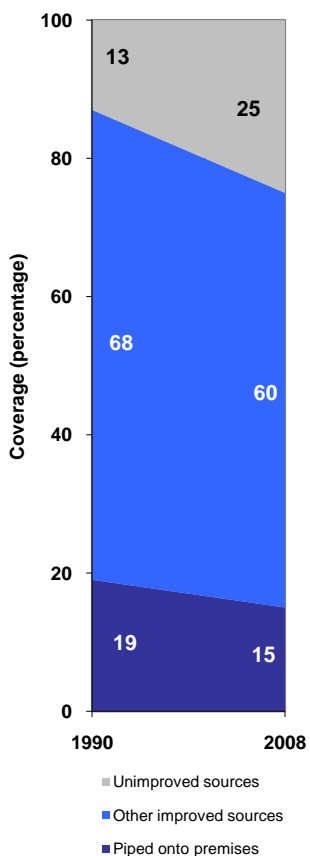
Myanmar	Drinking water coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Piped into premises	19	15	1	2	5	6
Other improved source	68	60	46	67	52	65
Unimproved source	13	25	53	31	43	29

Source: WHO/UNICEF JMP, 2010

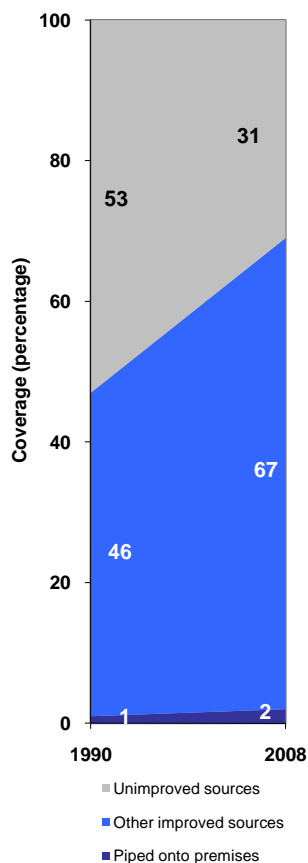
Myanmar	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	10159	16145	30685	33418	40844	49563

Source: UN / Population Division, 2008

Urban drinking water trends



Rural drinking water trends



Total drinking water trends

