



WHO / UNICEF

**Joint Monitoring Programme
for Water Supply and Sanitation**

Estimates for the use of

**Improved
Drinking-Water Sources**

Updated March 2010

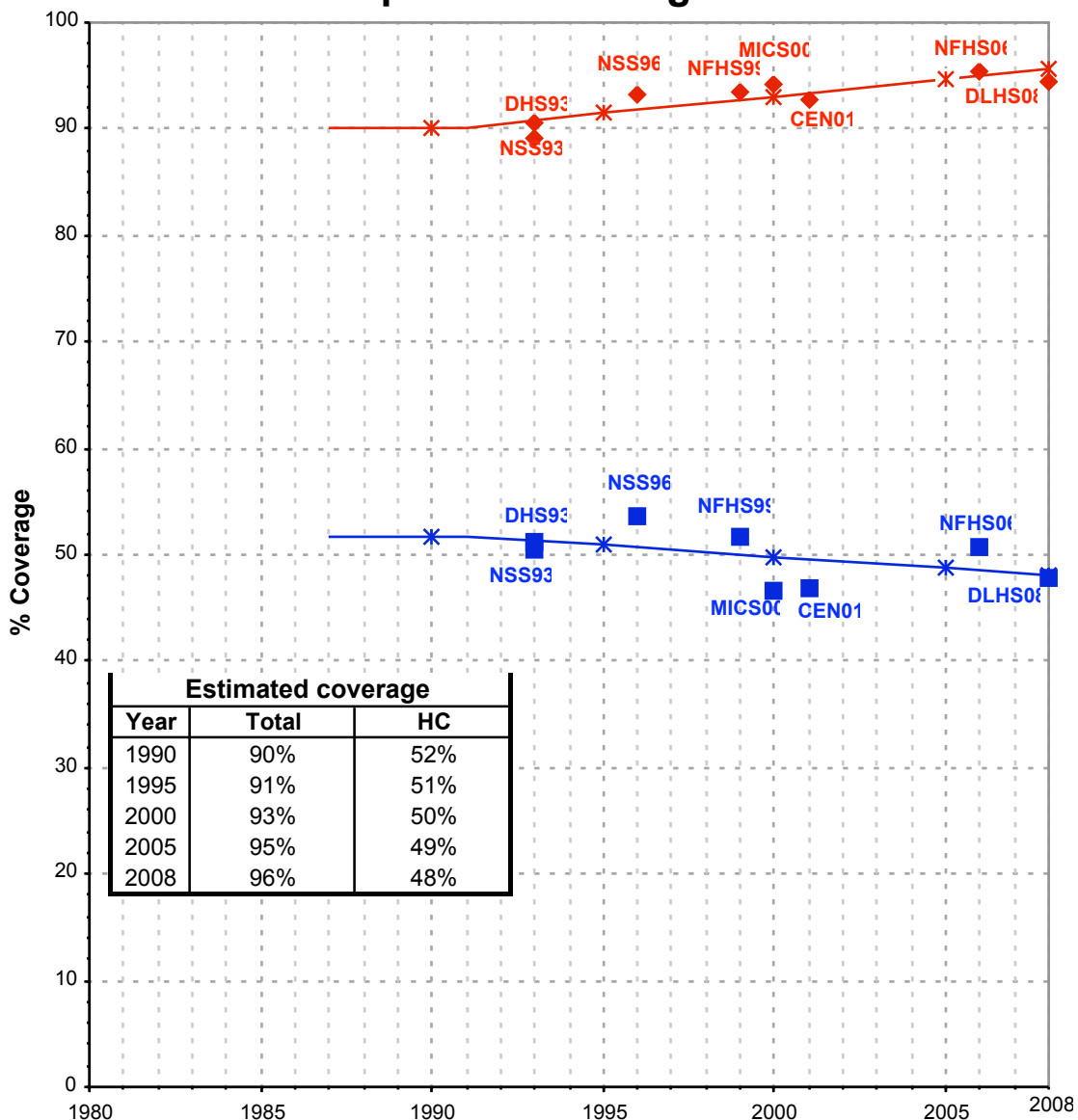
India

Access to drinking water sources		NSS96			India			Access to drinking water sources		NFHS99			India							
National Sample Survey					1996					Demographic and Health Survey					1999					
					Special tabulation of DHS99 (received from Matrix on request)															
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	
Tap	Tap water	73.8	23.2	36.4	Piped into residence/ yard/ plot	Tap water	74.4	25.0	38.6	Piped into residence/ yard/ plot	Tap water	51.7	9.3	21.0	House connections	51.7	9.3	21.0		
	House connections					Piped water into dwelling					Piped water into dwelling				Piped water into dwelling					
	Piped water into dwelling					Piped water to yard/plot					Piped water to yard/plot				Piped water to yard/plot					
	Piped water to yard/plot					Public tap, standpipe					Public tap, standpipe	22.7	15.7	17.8	Public tap, standpipe	22.7	15.7	17.8		
	Public tap, standpipe					Other					Other				Other					
	Other					Ground water	24.0	70.9	58.7	Ground water	Ground water	24.2	71.6	58.5	Protected ground water	19.1	50.0	41.4		
	Ground water	24.0	70.9	58.7		Protected ground water	18.5	49.1	41.1		Protected ground water	19.1	50.0	41.4	Unprotected ground water	5.0	20.9	16.6		
	Protected ground water	18.5	49.1	41.1		Unprotected ground water					Unprotected ground water	5.0	20.9	16.6	Protected wells or springs	19.1	50.0	41.4		
	Unprotected ground water					Protected wells or springs	18.5	49.1	41.1		Protected wells or springs	19.1	50.0	41.4	Private	10.5	19.0	16.6		
	Protected wells or springs	18.5	49.1	41.1		Private					Private	10.5	19.0	16.6	Public	8.6	31.0	24.8		
	Private					Public					Public	8.6	31.0	24.8	Other					
	Public					Other					Other				Unprotected wells or springs	5.0	20.9	16.6		
	Other					Unprotected wells or springs					Unprotected wells or springs	5.0	20.9	16.6	Private	3.1	7.3	6.2		
	Unprotected wells or springs					Private					Private	3.1	7.3	6.2	Public	1.9	13.6	10.4		
	Private					Public					Public	1.9	13.6	10.4	Other					
	Public					Other					Other				All wells	24.1	70.9	58.0		
	Other					All wells	24.0	70.9	58.7		All wells	24.1	70.9	58.0	Private	13.6	26.3	22.8		
	All wells	24.0	70.9	58.7		Private					Private	13.6	26.3	22.8	Public	10.5	44.6	35.2		
	Private					Public					Public	10.5	44.6	35.2	Other					
	Public					Other					Other				Tubewell, borehole	18.1	47.4	39.2		
	Other					Tubewell, borehole	18.5	49.1	41.1		Tubewell, borehole	18.1	47.4	39.2	Private	9.8	17.6	15.4		
	Tubewell, borehole	18.5	49.1	41.1		Private					Private	9.8	17.6	15.4	Public	8.3	29.8	23.8		
	Private					Public					Public	8.3	29.8	23.8	Other					
	Public					Other					Other				Traditional wells	6.0	23.5	18.8		
	Other					Traditional wells	5.5	21.8	17.6		Traditional wells	6.0	23.5	18.8	Private	3.8	8.7	7.4		
	Traditional wells	5.5	21.8	17.6		Private					Private	3.8	8.7	7.4	Public	2.2	14.8	11.4		
	Private					Public					Public	2.2	14.8	11.4	Other					
	Public					Other					Other				Protected well	1.0	2.6	2.2		
	Other					Protected well					Protected well	1.0	2.6	2.2	Private	0.7	1.4	1.2		
	Protected well					Private					Private	0.7	1.4	1.2	Public	0.3	1.2	1.0		
	Private					Public					Public	0.3	1.2	1.0	Other					
	Public					Other					Other				Unprotected well	5.0	20.9	16.6		
	Other					Unprotected well					Unprotected well	5.0	20.9	16.6	Private	3.1	7.3	6.2		
	Unprotected well					Private					Private	3.1	7.3	6.2	Public	1.9	13.6	10.4		
	Private					Public					Public	1.9	13.6	10.4	Other					
	Public					Other					Other				All springs	0.1	0.7	0.5		
	Other					All springs					All springs	0.1	0.7	0.5	Private					
	All springs					Private					Private				Public					
	Private					Public					Public				Other					
	Public					Other					Other				Protected spring					
	Other					Protected spring					Protected spring				Private					
	Protected spring					Private					Private				Public					
	Private					Public					Public				Other					
	Public					Other					Other				Unprotected spring					
	Other					Unprotected spring					Unprotected spring				Private					
	Unprotected spring					Private					Private				Public					
	Private					Public					Public				Other					
	Public					Other					Other				Rainwater	0.0	0.1	0.0		
	Other					Rainwater					Rainwater	0.0	0.1	0.0	Covered cistern/tank	0.0	0.1	0.0		
	Rainwater					Covered cistern/tank					Covered cistern/tank	0.0	0.1	0.0	Uncovered cistern/tank					
	Covered cistern/tank					Uncovered cistern/tank					Uncovered cistern/tank				Bottled water					
	Uncovered cistern/tank					Bottled water					Bottled water				with other improved					
	Bottled water					with other improved					with other improved				without other improved					
	with other improved					without other improved					without other improved				Surface water	0.4	2.7	2.1		
	without other improved					Surface water	0.4	2.9	2.3		Surface water	0.4	2.7	2.1	River	0.1	1.4	1.1		
	Surface water	0.4	2.9	2.3		River	0.1	1.4	1.1		River, stream	0.1	1.4	1.1	Lake					
	River	0.1	1.4	1.1		Lake					Lake				Dam					
	Lake					Dam					Dam	0.0	0.1	0.1	Pond	0.3	1.5	1.2		
	Dam					Pond	0.3	1.5	1.2		Pond, lake	0.3	1.5	1.2	Stream					
	Pond	0.3	1.5	1.2		Stream					Stream				Irrigation channel					
	Stream					Irrigation channel					Irrigation channel				Other					
	Irrigation channel					Other					Other				Other improved sources					
	Other					Other improved sources					Other improved sources				Other					
	Other improved sources					Other					Other				Other					
	Other					Other non-improved	1.7	2.9	2.6		Other non-improved	1.0	0.6	0.7	Cart with small tank/drum					
	Other non-improved	1.7	2.9	2.6		Cart with small tank/drum					Cart with small tank/drum				Tanker truck provided	0.8	0.4	0.5		
	Cart with small tank/drum					Tanker truck provided	0.8	0.4	0.5		Tanker truck	0.8	0.4	0.5	Other	0.9	2.5	2.1		
	Tanker truck provided	0.8	0.4	0.5		Other	0.9	2.5	2.1		Other	0.9	2.5	2.1	DK/missing					
	Other	0.9	2.5	2.1		DK/missing					DK/missing				Total	100.0	100.0	99.9		
	DK/missing					Total	100.0	100.0	99.9		Total	100.0	100.0	99.9	Calculations					
	Total	100.0	100.0	99.9		Calculations					Calculations				protected wells using proportion of NFHS99	0.9	2.4			
	Calculations					protected wells using proportion of NFHS99	0.9	2.4			protected wells using proportion of NFHS99	0.9	2.4		house connection based on NSS93	53.7	10.0			
	protected wells using proportion of NFHS99	0.9	2.4			house connection based on NSS93	53.7	10.0			house connection based on NSS93	53.7	10.0		Access to improved drinking water sources :	93%	75%			
	house connection based on NSS93	53.7	10.0			Access to improved drinking water sources :	93%	75%			Access to improved drinking water sources :	94%	75%	80%	Access to house connections :	54%	10%			
	Access to improved drinking water sources :	93%	75%			Access to house connections :	54%	10%			Access to house connections :	52%	9%	21%	Used for the estimates :	Yes	Yes			
	Access to house connections :	54%	10%			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		HC / Tap water					
	Used for the estimates :	Yes	Yes			HC / Tap water					HC / Tap water	69%	37%		Public tap / Tap water					
	HC / Tap water					Public tap / Tap water					Public tap / Tap water	31%	63%		Tubewell + protected well / All wells					
	Public tap / Tap water					Tubewell + protected well / All wells					Tubewell + protected well / All wells	79%	71%		Protected wells / Traditional wells					
	Tubewell + protected well / All wells					Protected wells / Traditional wells					Protected wells / Traditional wells	17%	11%		Tubewell / All wells					
	Protected wells / Traditional wells					Tubewell / All wells	77%	69%			Tubewell / All wells	75%	67%		Protected springs / All springs					
	Tubewell / All wells	77%	69%			Protected springs / All springs					Protected springs / All springs									

Access to drinking water sources		NFHS06		India		Access to drinking water sources		DLHS08		India	
Demographic and Health Survey				District Level Health Survey							
				2006				2008			
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total		
	Tap water	69.7	24.9			Tap water	67.1	28.0	40.7		
	House connections	50.7	11.2		Piped water into dwelling/yard/plot	House connections	47.8	12.1	23.7		
Piped into dwelling	Piped water into dwelling	32.4	3.7			Piped water into dwelling					
Piped to yard/plot	Piped water to yard/plot	18.3	7.5			Piped water to yard/plot					
Public tap/standpipe	Public tap, standpipe	19.0	13.7		Public tap/standpipe	Public tap, standpipe	19.3	15.9	17.0		
	Other					Other					
	Ground water	27.8	72.3			Ground water	6.3	10.7	9.2		
	Protected ground water	24.9	58.9			Protected ground water	6.3	10.7	9.2		
	Unprotected ground water	2.9	13.4			Unprotected ground water					
	Protected wells or springs	24.9	58.9	0.0		Protected wells or springs	6.3	10.7	9.2		
	Private					Private					
	Public					Public					
	Other					Other					
	Unprotected wells or springs	2.9	13.4	0.0		Unprotected wells or springs					
	Private					Private					
	Public					Public					
	Other					Other					
	All wells	27.6	71.2			All wells	6.3	10.7	9.2		
	Private					Private					
	Public					Public					
	Other					Other					
Tube well or borehole	Tubewell, borehole	23.0	56.0		Tubewell/borehole	Tubewell, borehole	6.3	10.7	9.2		
	Private					Private					
	Public					Public					
	Other					Other					
	Traditional wells	4.6	15.2			Traditional wells					
	Private					Private					
	Public					Public					
	Other					Other					
Protected well	Protected well	1.8	2.6			Protected well					
	Private					Private					
	Public					Public					
	Other					Other					
Unprotected well	Unprotected well	2.8	12.6			Unprotected well					
	Private					Private					
	Public					Public					
	Other					Other					
	All springs	0.2	1.1			All springs					
	Private					Private					
	Public					Public					
	Other					Other					
Protected spring	Protected spring	0.1	0.3			Protected spring					
	Private					Private					
	Public					Public					
	Other					Other					
Unprotected spring	Unprotected spring	0.1	0.8			Unprotected spring					
	Private					Private					
	Public					Public					
	Other					Other					
	Rainwater	0.0	0.2			Rainwater					
Rainwater	Covered cistern/tank	0.0	0.2			Covered cistern/tank					
	Uncovered cistern/tank					Uncovered cistern/tank					
	Bottled water	0.7	0.1			Bottled water					
Bottled water	with other improved	0.7	0.1			with other improved					
	without other improved					without other improved					
River/dam/lake/ponds/stream/canal/irrigati	Surface water	0.7	1.9			Surface water					
	River					River					
	Lake					Lake					
	Dam					Dam					
	Pond					Pond					
	Stream					Stream					
	Irrigation channel					Irrigation channel					
	Other					Other					
	Other improved sources				Other improved	Other improved sources	21.0	41.0	34.5		
	Other					Other					
	Other					Other					
	Other non-improved	1.1	0.5		Non improved source	Other non-improved	5.6	20.4	15.6		
Cart with small tank	Cart with small tank/drum	0.0	0.2			Cart with small tank/drum					
Tanker truck	Tanker truck provided	0.9	0.2			Tanker truck provided					
Other	Other	0.2	0.1			Other					
	DK/missing					DK/missing					
	Total	100.0	99.9			Total	100.0	100.1	100.0		
Calculations					Calculations						
Estimations					Estimations						
Access to improved drinking water sources :		95%	84%		Access to improved drinking water sources :		94%	80%	84%		
Access to house connections :		51%	11%		Access to house connections :		48%	12%	24%		
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	73%	45%		Ratios	HC / Tap water	71%	43%			
	Public tap / Tap water	27%	55%			Public tap / Tap water	29%	57%			
	Tubewell + protected well / All wells	90%	82%			Tubewell + protected well / All wells					
	Protected wells / Traditional wells	39%	17%			Protected wells / Traditional wells					
	Tubewell / All wells	83%	79%			Tubewell / All wells	100%	100%			
	Protected springs / All springs	50%	27%			Protected springs / All springs					
	Protect. well & spring / well & spring	90%	81%			Protect. well & spring / well & spring					
	Springs/Groundwater	1%	2%			Springs/Groundwater					
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	NFHS (= DHS)			Comments							

India			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 Health Survey	DHS93	1993	50.5		89.1		8.3		64.5	
National Sample Survey	NSS93	1993	51.3		90.5		8.1		67.3	
National Sample Survey	NSS96	1996	53.7		93.3		10.0		74.8	
Demographic and Health Survey	NFHS99	1999	51.7		93.6		9.3		75.5	
Global Water Supply and Sanitation Assessment 2000.	JMP99	1999		56.4		90.1				
Multiple Indicator Cluster Survey	MICS00	2000	46.5		94.3		7.5		79.2	
National Census	CEN01	2001	46.9		92.7		8.4		78.1	
World Health Survey	WHS03	2003		59.6		98.5		19.0		85.3
Demographic and Health Survey	NFHS06	2006	50.7		95.3		11.2		84.1	
District Level Health Survey	DLHS08	2008	47.8		94.4		12.1		79.7	

India - urban - Use of improved drinking water sources



Total improved access

Household connections (HC)

◆ Used for the estimates
 ■ Used for the estimates
 ✱ Estimates
 ✱ Estimates

India - rural - Use of improved drinking water sources

