



**WHO / UNICEF**

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

Estimates for the use of

**Improved  
Drinking-Water Sources**

Updated March 2010

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**Bhutan**

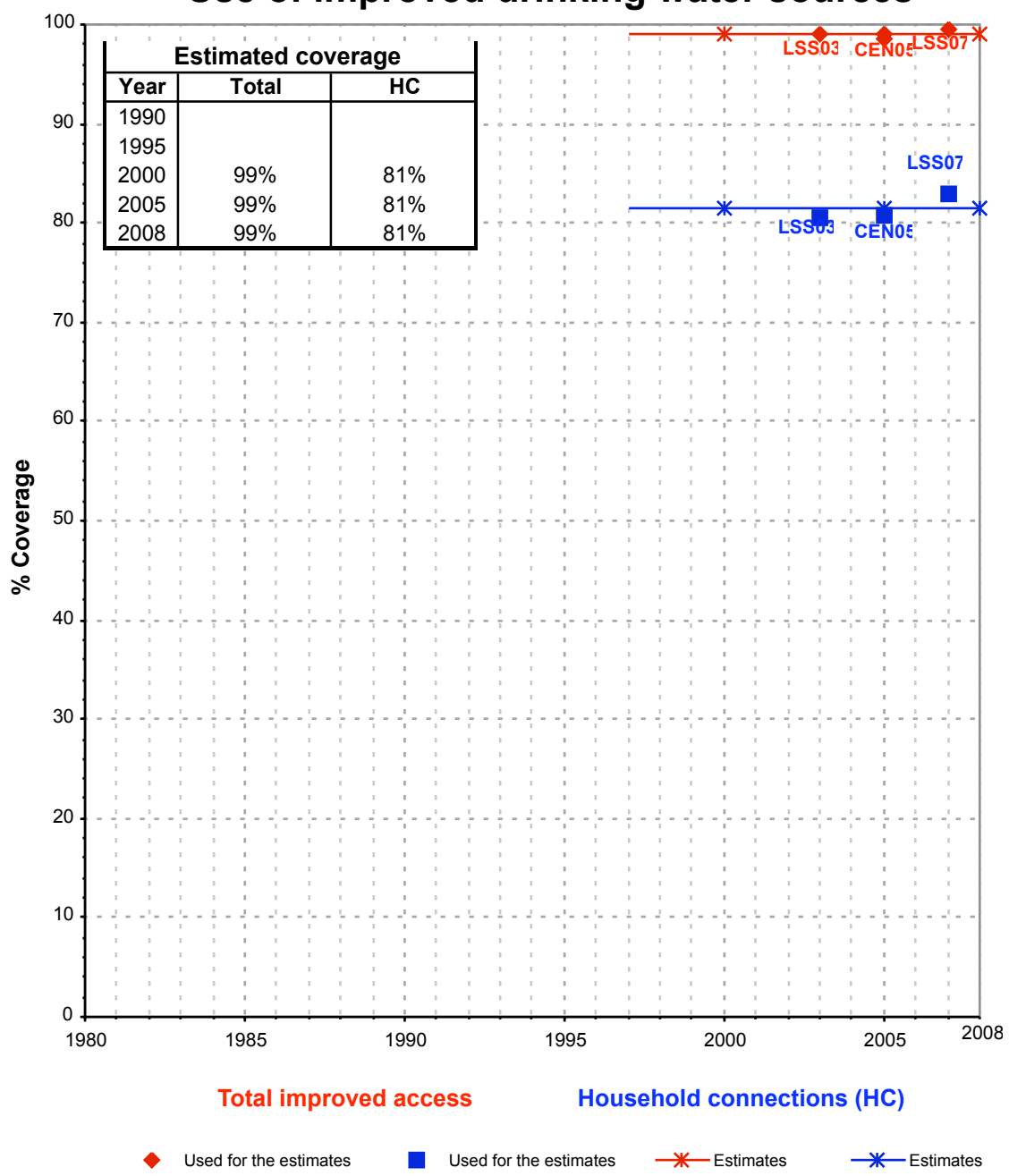
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Access to drinking water sources		CEN05			Bhutan			Access to drinking water sources		LSS03			Bhutan		
National Census					Living Standard Survey					2003					
Original denomination		Classification			Urban	Rural	Total	Original denomination		Classification			Urban	Rural	Total
Piped water within house	Tap water	House connections	53.7	9.2			Pipe in dwelling/compound	Tap water	House connections	80.5	44.3				
		Piped water into dwelling							Piped water into dwelling	80.5	44.3				
		Piped water to yard/plot							Piped water to yard/plot						
Piped water outside house		Public tap, standpipe	44.3	69.0			Public outdoor tap		Public tap, standpipe	13.7	26.3				
		Other					Neighbours pipe		Other	4.4	6.6				
		Ground water	0.1	0.3					Ground water	0.8	17.7				
		Protected ground water	0.1	0.3					Protected ground water	0.1	2.4				
		Unprotected ground water							Unprotected ground water	0.1	1.5				
		Protected wells or springs	0.1	0.3	0.0				Protected wells or springs	0.1	2.4	0.0			
		Private							Private						
		Public							Public						
		Other							Other						
		Unprotected wells or springs							Unprotected wells or springs	0.1	1.5	0.0			
		Private							Private						
		Public							Public						
		Other							Other						
		All wells	0.1	0.3					All wells	0.2	3.9				
		Private							Private						
		Public							Public						
		Other							Other						
Artificial pond/Tube well		Tubewell, borehole	0.1	0.3					Tubewell, borehole						
		Private							Private						
		Public							Public						
		Other							Other						
		Traditional wells							Traditional wells	0.2	3.9				
		Private							Private						
		Public							Public						
		Other							Other						
		Protected well					Protected well		Protected well	0.1	2.4				
		Private							Private						
		Public							Public						
		Other							Other						
		Unprotected well					Unprotected well		Unprotected well	0.1	1.5				
		Private							Private						
		Public							Public						
		Other							Other						
		All springs					Spring		All springs	0.6	13.8				
		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	0.0	0.1					Rainwater						
		Covered cistern/tank	0.0	0.1					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						
Spring/River/pond	Surface water		1.5	19.9			River/lake/pond	Surface water		0.4	4.3				
		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						
		Other non-improved	0.4	1.6					Other non-improved	0.1	0.9				
		Cart with small tank/drum							Cart with small tank/drum						
		Tanker truck provided							Tanker truck provided						
Others		Other	0.4	1.6			Other		Other	0.1	0.9				
		Other							Other						
		DK/missing							DK/missing						
		Total	100.0	100.1					Total	100.0	100.0				
Calculations		Springs, based on LSS03	0.9	15.2				Calculations							
Estimations		50% of springs considered improved	0.5	7.6				Estimations		50% of springs considered improved	0.3	6.9			
		HC, based on LSS03 and LSS07	80.9	43.4											
Access to improved drinking water sources :			99%	86%	Access to improved drinking water sources :			99%	86%						
Access to house connections :			81%	43%	Access to house connections :			81%	44%						
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		55%	12%	Ratios	HC / Tap water		82%	57%						
	Public tap / Tap water		45%	88%		Public tap / Tap water		14%	34%						
	Tubewell + protected well / All wells					Tubewell + protected well / All wells		58%	62%						
	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		58%	62%						
						Springs among groundwater		61%	76%						
Number of people covered by the census:					Number of people covered by the survey:										
Number of households covered by the census:					Number of households covered by the survey:										
Total population:					Total population:										
Comments					Comments										

Access to drinking water sources		LSS07		Bhutan	
Living Standard Survey				2007	
Original denomination	Classification	Urban	Rural	Total	
	<b>Tap water</b>	99.4	86.4		
	House connections	82.9	46.3		
Pipe in dwelling/compound	Piped water into dwelling	82.9	46.3		
	Piped water to yard/plot				
Public outdoor tap	Public tap, standpipe	10.3	32.0		
Neighbour	Other	6.2	8.1		
Well and Spring	<b>Ground water</b>	0.4	8.7		
	Protected ground water				
	Unprotected ground water				
	Protected wells or springs				
	Private				
	Public				
	Other				
	Unprotected wells or springs				
	Private				
	Public				
	Other				
	<b>All wells</b>				
	Private				
	Public				
	Other				
	Tubewell, borehole				
	Private				
	Public				
	Other				
	<b>Traditional wells</b>				
	Private				
	Public				
	Other				
	Protected well				
	Private				
	Public				
	Other				
	Unprotected well				
	Private				
	Public				
	Other				
	<b>All springs</b>				
	Private				
	Public				
	Other				
	Protected spring				
	Private				
	Public				
	Other				
	Unprotected spring				
	Private				
	Public				
	Other				
	<b>Rainwater</b>				
	Covered cistern/tank				
	Uncovered cistern/tank				
	<b>Bottled water</b>				
	with other improved				
	without other improved				
Others (River/lake/pond)	<b>Surface water</b>	0.3	4.9		
	River				
	Lake				
	Dam				
	Pond				
	Stream				
	Irrigation channel				
	Other				
	<b>Other improved sources</b>				
	Other				
	Other				
	<b>Other non-improved</b>				
	Cart with small tank/drum				
	Tanker truck provided				
	Other				
	Other				
	<b>DK/missing</b>				
	<b>Total</b>	100.1	100.0		
<b>Calculations</b>					
<b>Estimations</b>					
	50% of groundwater considered improved	0.2	4.4		
<b>Access to improved drinking water sources :</b>		<b>100%</b>	<b>91%</b>		
<b>Access to house connections :</b>		<b>83%</b>	<b>46%</b>		
Used for the estimates :		<b>Yes</b>	<b>Yes</b>		
Used for the estimates :		<b>Yes</b>	<b>Yes</b>		
<b>Ratios</b>	HC / Tap water	83%	54%		
	Public tap / Tap water	10%	37%		
	Tubewell + protected well / All wells				
	Protected wells / Traditional wells				
	Tubewell / All wells				
	Protected springs / All springs				
	Protect. well & spring / well & spring				
Number of people covered by the survey:					
Number of households covered by the survey:					
Total population:					
<b>Comments</b>					

Bhutan			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
National Census	CEN05	2005	80.9		98.6		43.4		86.2	
Living Standard Survey	LSS03	2003	80.5		99.1		44.3		86.4	
Living Standard Survey	LSS07	2007	82.9		99.6		46.3		90.8	

# Bhutan - urban - Use of improved drinking water sources



# Bhutan - rural - Use of improved drinking water sources

