

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

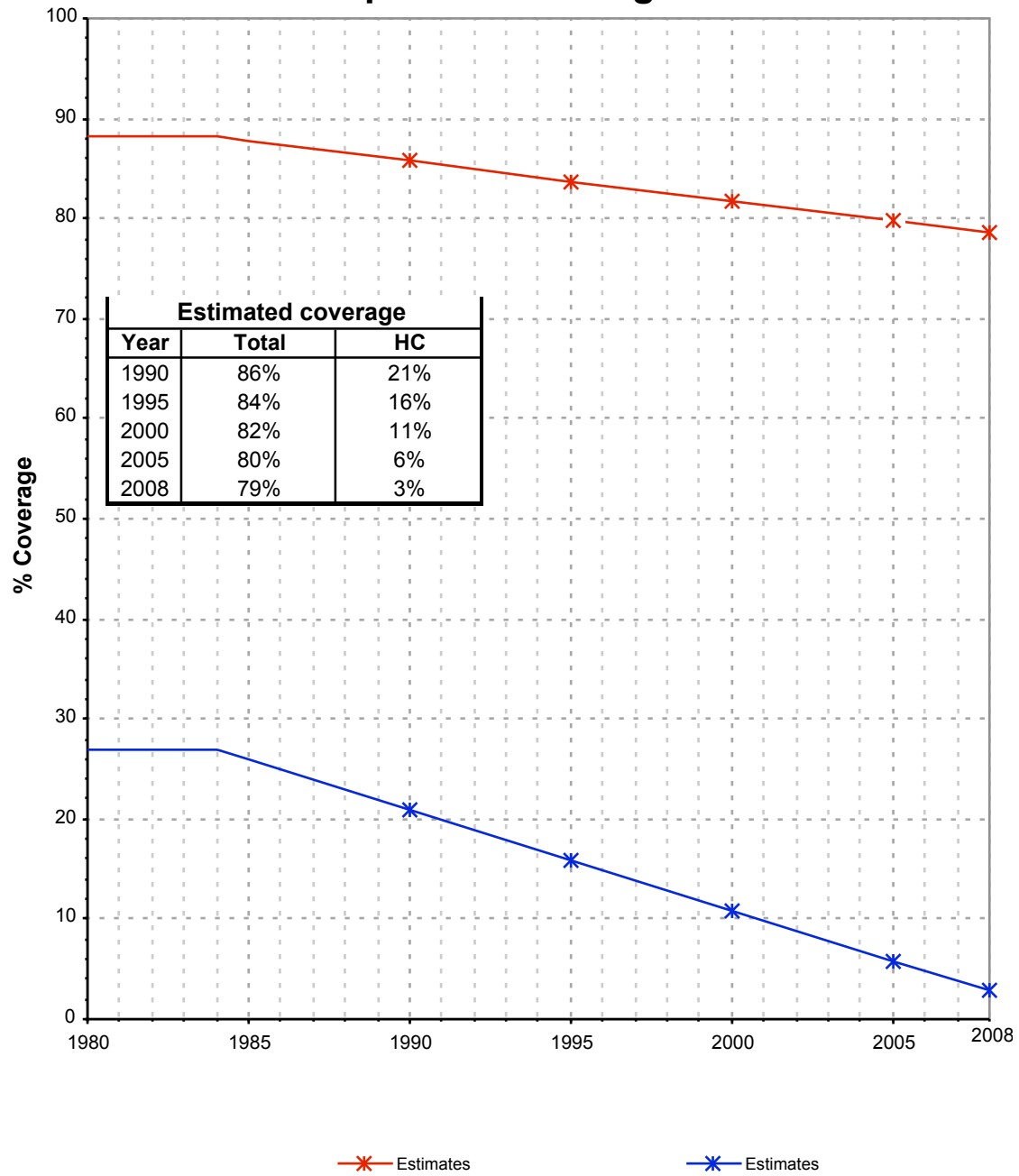
childinfo.org

Access to drinking water sources		DHS86			Liberia			Access to drinking water sources		JMP99			Liberia		
Demographic and Health Survey					1986			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	68.2	11.2			Tap water									
	House connections	27.1	4.3			House connections									
Piped into House	Piped water into dwelling	27.1	4.3			Piped water into dwelling									
	Piped water to yard/plot					Piped water to yard/plot									
Outside Pipe	Public tap, standpipe	41.1	6.9			Public tap, standpipe									
	Other					Other									
	Ground water	29.5	35.8			Ground water									
	Protected ground water	27.6	17.2			Protected ground water									
	Unprotected ground water	7.9	18.6			Unprotected ground water									
	Protected wells or springs	27.6	17.2	0.0		Protected wells or springs									
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected wells or springs	7.9	18.6	0.0		Unprotected wells or springs									
	Private					Private									
	Public					Public									
	Other					Other									
	All wells	29.5	35.8			All wells									
	Private					Private									
	Public					Public									
	Other					Other									
	Tubewell, borehole					Tubewell, borehole									
	Private					Private									
	Public					Public									
	Other					Other									
	Traditional wells	29.5	35.8			Traditional wells									
	Private					Private									
	Public					Public									
	Other					Other									
Well with Cover	Protected well	21.6	17.2			Protected well									
	Private					Private									
	Public					Public									
	Other					Other									
Well without Cover	Unprotected well	7.9	18.6			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	0.0	0.1			Rainwater									
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									
	Surface water	2.1	52.6			Surface water									
River or Stream	River	2.1	52.6			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	0.3	0.4			Other non-improved									
	Cart with small tank/drum					Cart with small tank/drum									
	Tanker truck provided					Tanker truck provided									
Other	Other	0.3	0.4			Other									
	Other					Other									
	DK/missing					DK/missing									
	Total	100.0	100.0			Total									
Calculations					Calculations										
Estimations					Estimations										
Access to improved drinking water sources :		90%	28%		Access to improved drinking water sources :										
Access to house connections :		27%	4%		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	40%	39%		Ratios	HC / Tap water									
	Public tap / Tap water	60%	61%			Public tap / Tap water									
	Tubewell + protected well / All wells	73%	48%			Tubewell + protected well / All wells									
	Protected wells / Traditional wells	73%	48%			Protected wells / Traditional wells									
	Tubewell / All wells					Tubewell / All wells									
	Protected springs / All springs					Protected springs / All springs									
	Protect. well & spring / well & spring	73%	48%			Protect. well & spring / well & spring									
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					Comments										

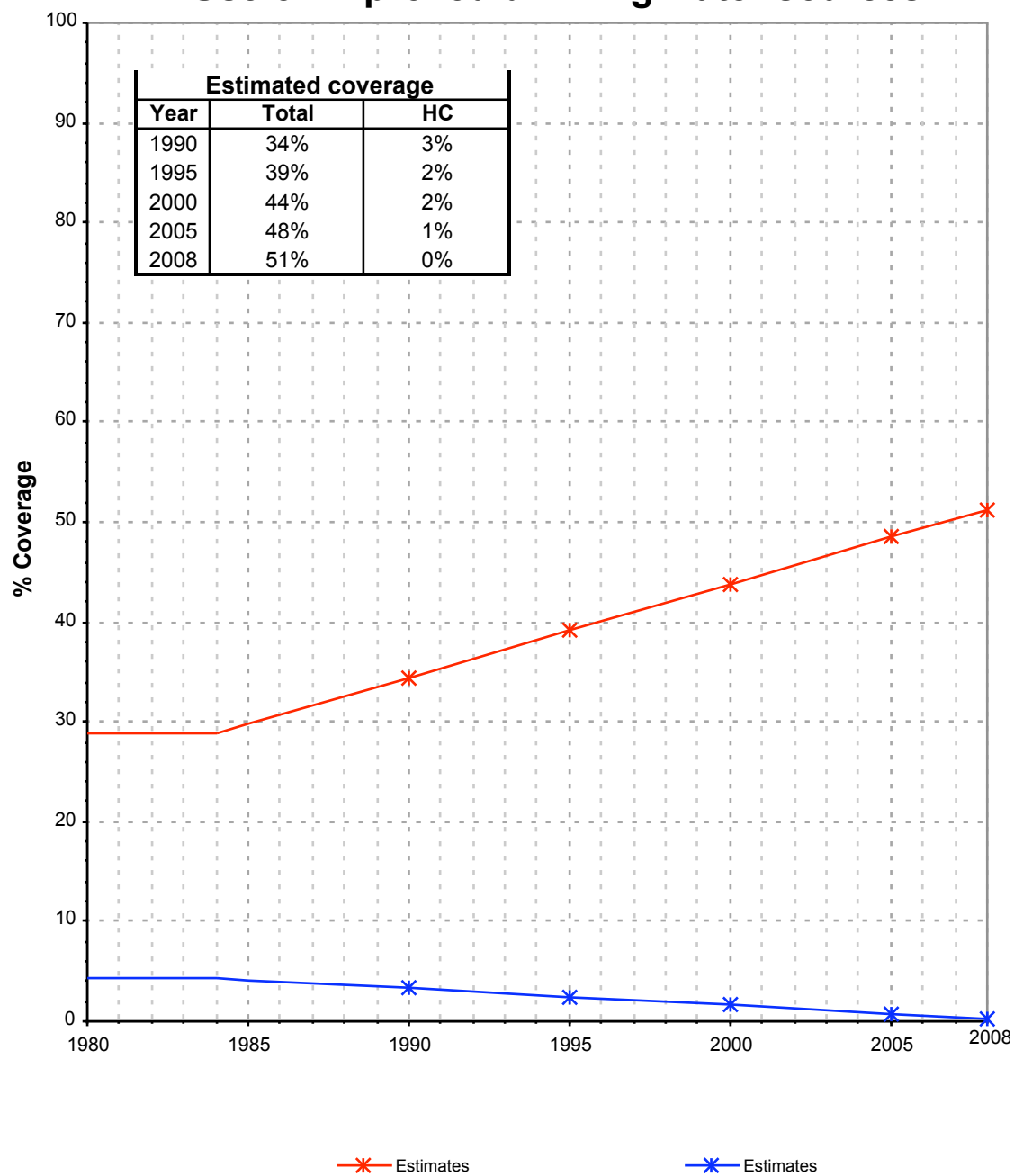
Access to drinking water sources		DHS00			Liberia			Access to drinking water sources		DHS07			Liberia		
Demographic and Health Survey					2000			Demographic and Health Survey					2007		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Tap water	25.1	4.6			Tap water	19.4	0.4	7.5						
	House connections	4.2	0.5			House connections	7.6	0.1	2.9						
Piped in dwelling	Piped water into dwelling	4.2	0.5		Piped water into dwelling	Piped water into dwelling	1.7	0.1	0.7						
	Piped water to yard/plot				Piped water to yard/plot	Piped water to yard/plot	5.9	0.0	2.2						
	Public tap, standpipe				Public tap, standpipe	Public tap, standpipe	11.8	0.3	4.6						
Public tap/tap in neighbouring house	Other	20.9	4.1		Other	Other									
	Ground water	59.7	94.0			Ground water	71.3	79.2	76.2						
	Protected ground water	49.4	44.8			Protected ground water	64.2	55.5	58.7						
	Unprotected ground water	10.3	49.2			Unprotected ground water	7.1	23.7	17.5						
Protected dug well, spring, pond, river	Protected wells or springs	31.8	28.7	0.0		Protected wells or springs	64.2	55.5	58.7						
	Private					Private									
	Public					Public									
	Other					Other									
Unprotected dug wells, spring river pond	Unprotected wells or springs	10.3	49.2			Unprotected wells or springs	7.1	23.7	17.5						
	Private					Private									
	Public					Public									
	Other					Other									
	All wells	17.6	16.1			All wells	70.9	67.6	68.7						
	Private					Private									
	Public					Public									
	Other					Other									
Tube well, borehole	Tubewell, borehole	17.6	16.1		Tubewell, borehole	Tubewell, borehole	4.0	2.5	3.0						
	Private					Private									
	Public					Public									
	Other					Other									
	Traditional wells					Traditional wells	66.9	65.1	65.7						
	Private					Private									
	Public					Public									
	Other					Other									
	Protected well				Protected well	Protected well	60.1	50.9	54.3						
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected well				Unprotected well	Unprotected well	6.8	14.2	11.4						
	Private					Private									
	Public					Public									
	Other					Other									
	All springs					All springs	0.4	11.6	7.5						
	Private					Private									
	Public					Public									
	Other					Other									
	Protected spring				Protected spring	Protected spring	0.1	2.1	1.4						
	Private					Private									
	Public					Public									
	Other					Other									
	Unprotected spring				Unprotected spring	Unprotected spring	0.3	9.5	6.1						
	Private					Private									
	Public					Public									
	Other					Other									
	Rainwater	0.1	0.2			Rainwater	0.0	0.0	0.0						
	Covered cistern/tank					Covered cistern/tank									
Rain water	Uncovered cistern/tank	0.1	0.2			Uncovered cistern/tank									
	Bottled water					Bottled water	0.2	0.0	0.1						
	with other improved					with other improved									
	without other improved					without other improved									
	Surface water				River/Dam/Lake/Pond/Stream/Canal/Irrigat	Surface water	0.5	20.3	12.9						
	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	15.1	1.2			Other non-improved	8.7	0.2	4.4						
	Cart with small tank/drum					Cart with small tank/drum	1.6	0.1	1.7						
tanker	Tanker truck provided	10.8	0.0		Tanker truck provided	Tanker truck provided	3.5	0.0	1.3						
Others	Other	4.3	1.2		Other	Other	3.6	0.1	1.4						
	Other					Other									
	DK/missing					DK/missing									
	Total	100.0	100.0			Total	100.1	100.1	101.1						
Calculations					Calculations										
Estimations					Estimations										
Access to improved drinking water sources :		75%	49%		Access to improved drinking water sources :		84%	56%	66%						
Access to house connections :		4%	1%		Access to house connections :		8%	0%	3%						
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	17%	11%		Ratios	HC / Tap water	39%	25%							
	Public tap / Tap water					Public tap / Tap water	61%	75%							
	Tubewell + protected well / All wells					Tubewell + protected well / All wells	90%	79%							
	Protected wells / Traditional wells					Protected wells / Traditional wells	90%	78%							
	Tubewell / All wells	100%	100%			Tubewell / All wells	6%	4%							
	Protected springs / All springs					Protected springs / All springs	25%	18%							
	Protect. well & spring / well & spring	76%	37%			Protect. well & spring / well & spring	90%	70%							
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										

Liberia			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	DHS86	1986	27.1		89.7		4.3		28.5	
Global Water Supply and Sanitation Assessment 2000.	JMP99	1999								
Demographic and Health Survey	DHS00	2000	4.2		74.5		0.5		49.4	
Demographic and Health Survey	DHS07	2007	7.6		83.6		0.1		55.9	
Liberia National Population and Housing Census 2008	CEN08	2008	3.6		78.7		1.2		42.4	

Liberia - urban - Use of improved drinking water sources



Liberia - rural - Use of improved drinking water sources



Drinking Water

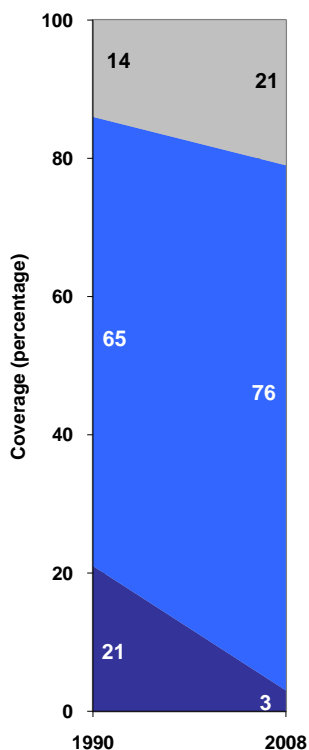
Liberia	Drinking water coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Piped into premises	21	3	3	0	11	2
Other improved source	65	76	31	51	47	66
Unimproved source	14	21	66	49	42	32

Source: WHO/UNICEF JMP, 2010

Liberia	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	981	2283	1186	1511	2167	3793

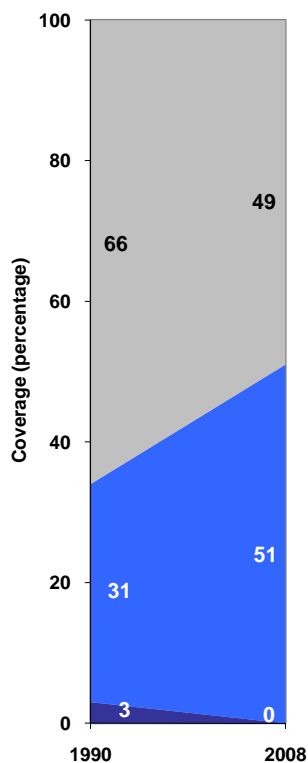
Source: UN / Population Division, 2008

Urban drinking water trends



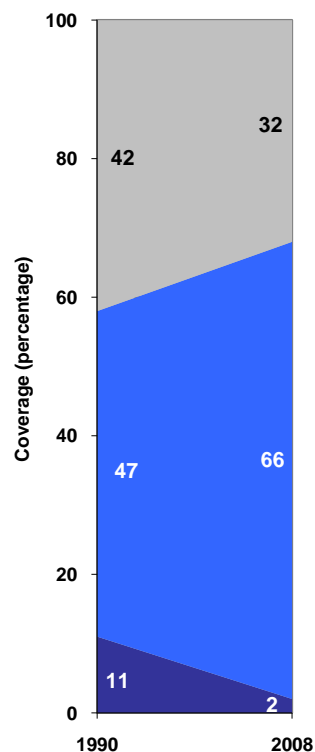
■ Unimproved sources
■ Other improved sources
■ Piped onto premises

Rural drinking water trends



■ Unimproved sources
■ Other improved sources
■ Piped onto premises

Total drinking water trends



■ Unimproved sources
■ Other improved sources
■ Piped onto premises