

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		CEN82			Morocco			Access to drinking water sources		CEN94			Morocco		
Recensement Général de la Population et de l'Habitat					Recensement Général de la Population et de l'Habitat					Direction de la Statistique, Haut-Commissariat au Plan					
Direction de la Statistique, Haut-Commissariat au Plan					1982					1994					
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
Eau courante	Tap water	62.9	2.2		Eau courante	Tap water	74.2	4.0							
	House connections	62.9	2.2			House connections	74.2	4.0							
	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									
Source ou Puits	Ground water	8.7	20.1		Source ou Puits	Ground water	6.7	27.2							
	Protected ground water					Protected ground water									
	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									
	Other improved sources					Other improved sources									
	Other					Other									
	Other					Other									
	Other non-improved					Other non-improved									
	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	71.6	22.3			Total	80.9	31.2							
Calculations					Calculations										
Estimations					Estimations										
	50% of groundwater considered improved	4.4	10.1			50% of groundwater considered improved	3.4	13.6							
Access to improved drinking water sources :		67%	12%		Access to improved drinking water sources :		78%	18%							
Access to house connections :		63%	2%		Access to house connections :		74%	4%							
Used for the estimates		No	No		Used for the estimates		No	No							
Used for the estimates		No	No		Used for the estimates		No	No							
Ratios	HC / Tap water	100%	100%		Ratios	HC / Tap water	100%	100%							
	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:										
Number of households covered by the survey:					Number of households covered by the survey:										
Total population:					Total population:										
Comments	Not taken into account because of insufficient level of disaggregation				Comments	Not taken into account because of insufficient level of disaggregation									

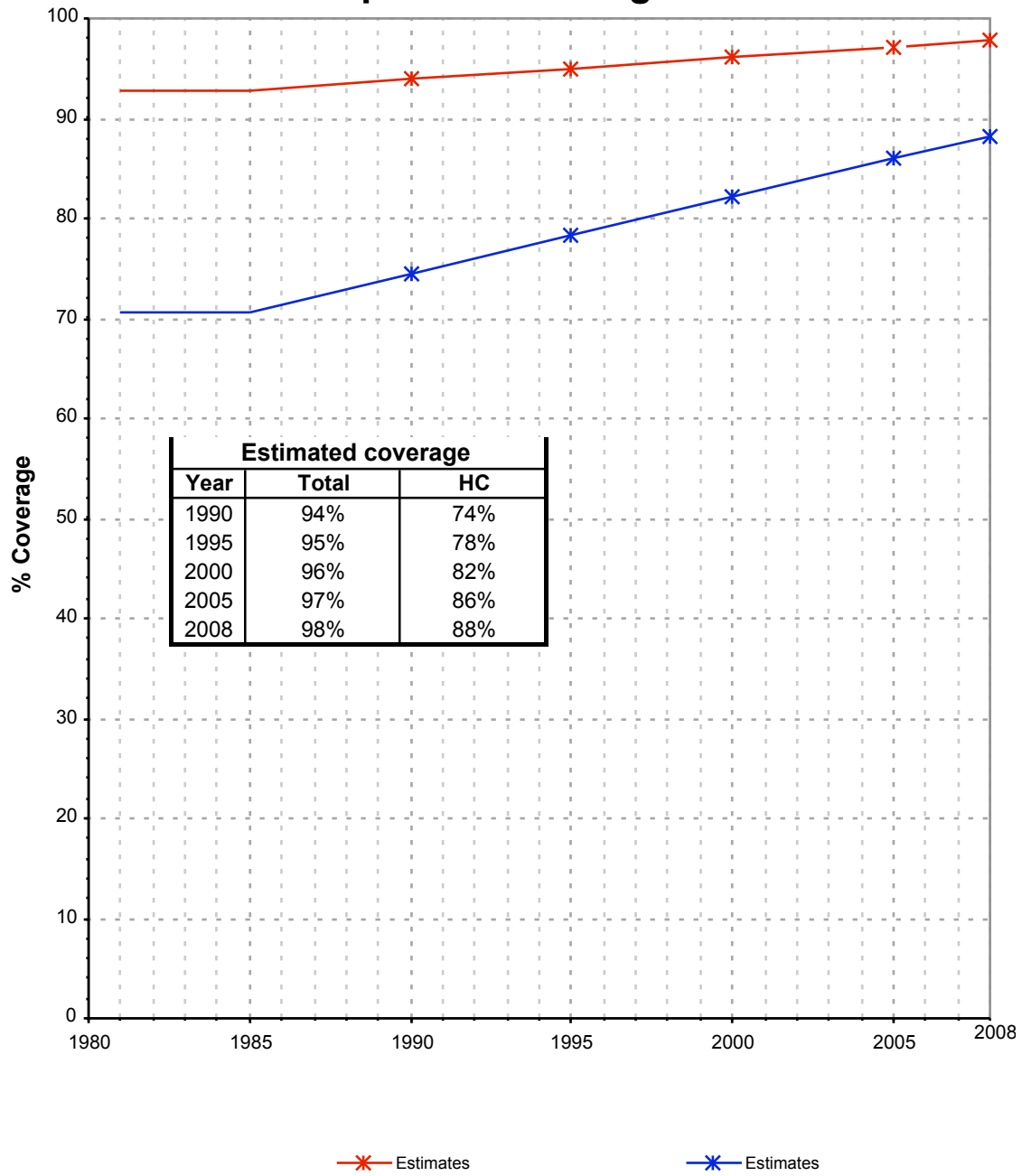
Access to drinking water sources		ENV99			Morocco			Access to drinking water sources		ENE00			Morocco		
Enquête nationale sur les niveaux de vie des ménages					Enquête nationale sur l'emploi					Direction de la Statistique, Haut-Commissariat au Plan					
Direction de la Statistique, Haut-Commissariat au Plan					1999					2000					
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
Ménages branchés au réseau d'eau potable	Tap water	90.9	11.9		Ménages branchés au réseau d'eau potable	Tap water	92.9	16.8							
	House connections	78.4	5.3			House connections	81.7	7.8							
	Piped water into dwelling					Piped water into dwelling									
	Piped water to yard/plot					Piped water to yard/plot									
Bornes fontaines	Public tap, standpipe	12.5	6.6		Bornes fontaines	Public tap, standpipe	11.2	9.0							
	Other					Other									
	Ground water	3.8	55.6			Ground water	3.0	47.7							
	Protected ground water	0.4	5.6			Protected ground water	0.8	3.8							
	Unprotected ground water	0.9	22.8			Unprotected ground water	0.2	26.1							
	Protected wells or springs	0.4	5.6			Protected wells or springs	0.8	3.8							
	Private					Private									
	Public	0.4	5.6			Public	0.8	3.8							
	Other					Other									
	Unprotected wells or springs	0.9	22.8			Unprotected wells or springs	0.2	26.1							
	Private					Private									
	Public	0.9	22.8			Public	0.2	26.1							
	Other					Other									
	All wells	3.8	55.6	0.0		All wells	3.0	47.7							
	Private	2.5	27.2			Private	2.0	17.8							
	Public	1.3	28.4			Public	1.0	29.9							
	Other					Other									
	Tubewell, borehole					Tubewell, borehole									
	Private					Private									
	Public					Public									
	Other					Other									
	Traditional wells	3.8	55.6	0.0		Traditional wells	3.0	47.7							
	Private	2.5	27.2			Private	2.0	17.8							
	Public	1.3	28.4			Public	1.0	29.9							
	Other					Other									
Puits internes, méfia privée	Protected well	0.4	5.6	0.0	Puits internes, méfia privée	Protected well	0.8	3.8							
	Private					Private									
	Public	0.4	5.6			Public	0.8	3.8							
	Other					Other									
	Unprotected well	0.9	22.8	0.0		Unprotected well	0.2	26.1							
	Private					Private									
	Public	0.9	22.8			Public	0.2	26.1							
	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									
Source, oued, seguia, etc....	Surface water	0.7	26.3		Source, oued, seguia, etc....	Surface water	0.4	28.2							
	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									
	Other non-improved	4.6	6.2			Other non-improved	3.7	7.1							
	Cart with small tank/drum					Cart with small tank/drum									
	Tanker truck provided					Tanker truck provided									
Autres	Other	4.6	6.2		Autres	Other	3.7	7.1							
	Other					Other									
	DK/missing					DK/missing									
	Total	100.0	100.0			Total	100.0	99.8							
Calculations					Calculations										
	Springs of surface water based on EPSF04	0.7	19.8			Springs of surface water based on EPSF04	0.4	21.2							
Estimations					Estimations										
	50% of springs estimated improved	0.4	9.9			50% of springs estimated improved	0.2	10.6							
Access to improved drinking water sources :		94%	55%		Access to improved drinking water sources :		96%	49%							
Access to house connections :		78%	5%		Access to house connections :		82%	8%							
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	86%	45%		Ratios	HC / Tap water	88%	46%							
	Public tap / Tap water	14%	55%			Public tap / Tap water	12%	54%							
	Tubewell + protected well / All wells	11%	10%			Tubewell + protected well / All wells	27%	8%							
	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	31%	20%			Protect. well & spring / well & spring	80%	13%							
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		ECM01			Morocco			Access to drinking water sources		ENE01			Morocco		
Enquête Nationale sur la Consommation et les Dépense des Ménages					Enquête nationale sur l'emploi					Direction de la Statistique, Haut-Commissariat au Plan					
Direction de la Statistique					2001					2001					
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
Ménages branchés au réseau	Tap water	92.2	17.1		Ménages branchés au réseau d'eau potable	Tap water	94.2	19.5							
	House connections	80.7	7.8			House connections	82.7	9.2							
	Piped water into dwelling					Piped water into dwelling									
	Piped water to yard/plot					Piped water to yard/plot									
Bornes fontaines	Public tap, standpipe	11.5	9.3		Bornes fontaines	Public tap, standpipe	11.5	10.3							
	Other					Other									
	Ground water	3.5	66.4			Ground water	2.6	44.2							
	Protected ground water	0.2	3.6			Protected ground water	0.2	4.3							
	Unprotected ground water	0.7	25.8			Unprotected ground water	0.6	22.3							
	Protected wells or springs	0.2	3.6			Protected wells or springs	0.2	4.3							
	Private					Private									
	Public	0.2	3.6			Public	0.2	4.3							
	Other					Other									
	Unprotected wells or springs	0.7	25.8			Unprotected wells or springs	0.6	22.3							
	Private	0.2	5.2			Private	0.6	22.3							
	Public	0.5	20.6			Public	0.6	22.3							
	Other					Other									
	All wells	2.9	36.7			All wells	2.6	44.2							
	Private	2.4	17.1			Private	1.8	17.6							
	Public	0.5	19.6			Public	0.8	26.6							
	Other					Other									
	Tubewell, borehole					Tubewell, borehole									
	Private					Private									
	Public					Public									
	Other					Other									
	Traditional wells	2.9	36.7			Traditional wells	2.6	44.2							
	Private	2.4	17.1			Private	1.8	17.6							
	Public	0.5	19.6			Public	0.8	26.6							
	Other					Other									
	Protected well					Protected well	0.2	4.3							
	Private					Private									
	Public					Public	0.2	4.3							
	Other					Other									
	Unprotected well	0.5	19.6			Unprotected well	0.6	22.3							
	Private					Private									
	Public	0.5	19.6			Public	0.6	22.3							
	Other					Other									
	All springs	0.6	29.7			All springs									
	Private	0.2	5.2			Private									
	Public	0.2	4.6			Public									
	Other	0.2	19.9			Other									
	Protected spring	0.2	3.6			Protected spring									
	Private					Private									
	Public	0.2	3.6			Public									
	Other					Other									
	Unprotected spring	0.2	6.2			Unprotected spring									
	Private	0.2	5.2			Private									
	Public	0.0	1.0			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	0.5	5.3		Source, oued, seguia, etc....	Surface water	0.3	26.2							
Oued	River	0.0	2.8			River									
	Lake					Lake									
	Dam					Dam									
	Pond					Pond									
	Stream					Stream									
	Irrigation channel					Irrigation channel									
Seguia	Other	0.5	2.5			Other									
	Other improved sources					Other improved sources									
	Other					Other									
	Other					Other									
	Other non-improved	3.7	11.2			Other non-improved	2.9	10.1							
Vendeur d'eau	Cart with small tank/drum	1.1	2.7			Cart with small tank/drum									
Camion d'eau citeme	Tanker truck provided	0.5	1.6			Tanker truck provided									
Autres	Other	2.1	6.9		Autres	Other	2.9	10.1							
	Other					Other									
	DK/missing					DK/missing									
	Total	99.9	100.0			Total	100.0	100.0							
Calculations					Calculations										
	Springs of surface water based on EPSF04	1.1	35.0			Springs of surface water based on EPSF04	0.3	19.7							
Estimations					Estimations										
	50% of springs estimated improved	0.6	17.5			50% of springs estimated improved	0.2	9.8							
Access to improved drinking water sources :		95%	55%		Access to improved drinking water sources :		96%	51%							
Access to house connections :		81%	8%		Access to house connections :		83%	9%							
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	88%	46%		Ratios	HC / Tap water	88%	47%							
	Public tap / Tap water	12%	54%			Public tap / Tap water	12%	53%							
	Tubewell + protected well / All wells					Tubewell + protected well / All wells									
	Protected wells / Traditional wells					Protected wells / Traditional wells	8%	10%							
	Tubewell / All wells					Tubewell / All wells									
	Protected springs / All springs	33%	12%			Protected springs / All springs									
	Protect. well & spring / well & spring	22%	12%			Protect. well & spring / well & spring	25%	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										

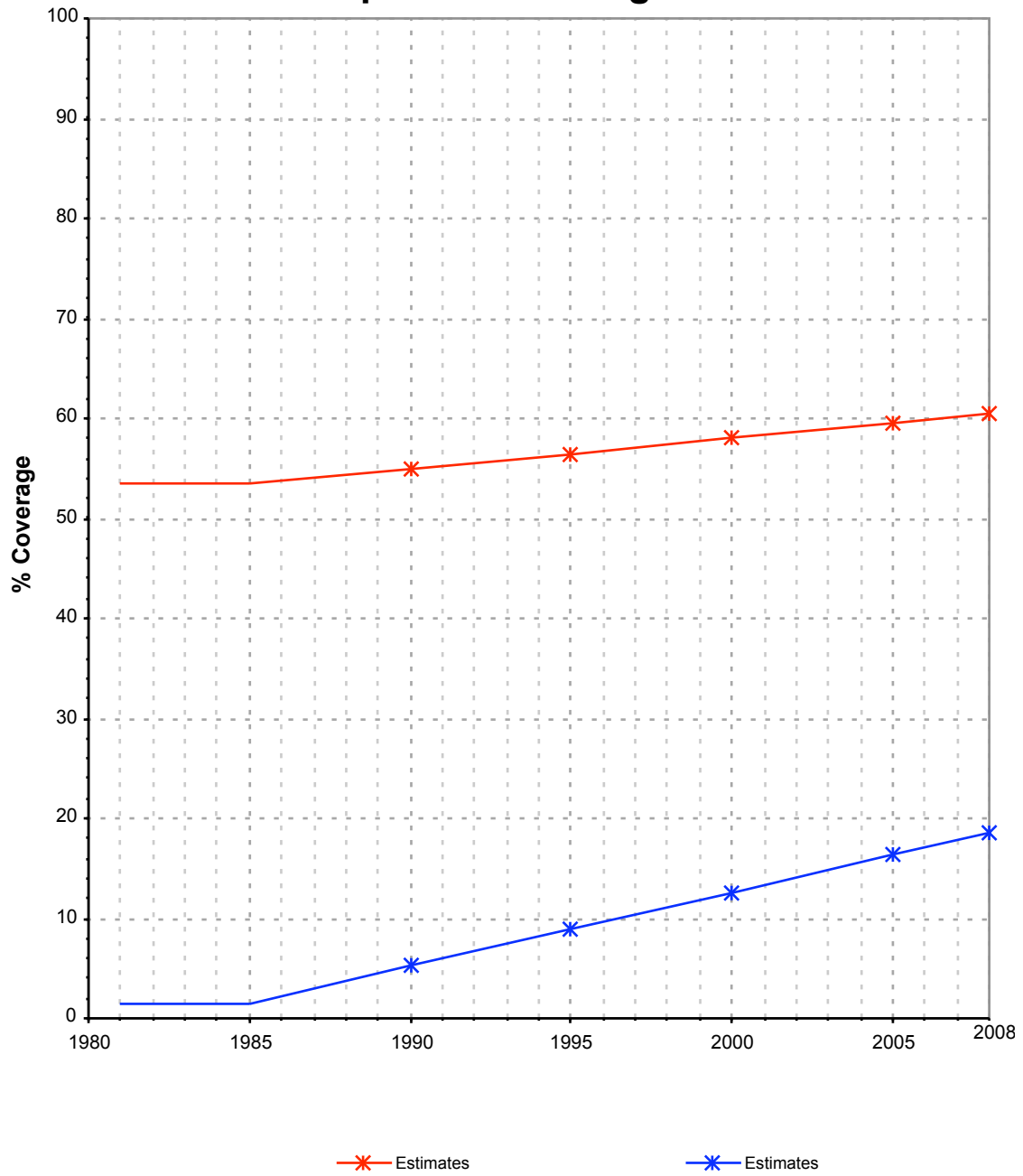
Access to drinking water sources		ENE03			Morocco			Access to drinking water sources		ENE04			Morocco		
Enquête nationale sur l'emploi					Enquête nationale sur l'emploi					Direction de la Statistique, Haut-Commissariat au Plan					
Direction de la Statistique, Haut-Commissariat au Plan					2003			Direction de la Statistique, Haut-Commissariat au Plan					2004		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
Ménages branchés au réseau d'eau potable	Tap water	94.8	23.3		Ménages branchés au réseau d'eau potable	Tap water	94.8	29.3							
	House connections	85.0	11.4			House connections	85.1	17.2							
	Piped water into dwelling					Piped water into dwelling									
	Piped water to yard/plot					Piped water to yard/plot									
Bornes fontaines	Public tap, standpipe	9.8	11.9		Bornes fontaines	Public tap, standpipe	9.7	12.1							
	Other					Other									
	Ground water	2.2	41.1			Ground water	2.2	40.3							
	Protected ground water	0.2	4.2			Protected ground water	0.2	4.6							
	Unprotected ground water	0.5	17.4			Unprotected ground water	0.5	15.7							
	Protected wells or springs	0.2	4.2			Protected wells or springs	0.2	4.6							
	Private					Private									
	Public	0.2	4.2			Public	0.2	4.6							
	Other					Other									
	Unprotected wells or springs	0.5	17.4			Unprotected wells or springs	0.5	15.7							
	Private					Private									
	Public	0.5	17.4			Public	0.5	15.7							
	Other					Other									
	All wells	2.2	41.1			All wells	2.2	40.3							
	Private	1.5	19.5			Private	1.5	20.0							
	Public	0.7	21.6			Public	0.7	20.3							
	Other					Other									
	Tubewell, borehole					Tubewell, borehole									
	Private					Private									
	Public					Public									
	Other					Other									
	Traditional wells	2.2	41.1			Traditional wells	2.2	40.3							
	Private	1.5	19.5			Private	1.5	20.0							
	Public	0.7	21.6			Public	0.7	20.3							
	Other					Other									
	Protected well	0.2	4.2			Protected well	0.2	4.6							
	Private					Private									
	Public	0.2	4.2			Public	0.2	4.6							
	Other					Other									
	Unprotected well	0.5	17.4			Unprotected well	0.5	15.7							
	Private					Private									
	Public	0.5	17.4			Public	0.5	15.7							
	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									
Source, oued, seguia, etc....	Surface water	0.1	26.0		Source, oued, seguia, etc....	Surface water	0.7	22.2							
	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									
	Other non-improved	2.9	9.6			Other non-improved	2.3	8.2							
	Cart with small tank/drum					Cart with small tank/drum									
	Tanker truck provided					Tanker truck provided									
Autres	Other	2.9	9.6		Autres	Other	2.3	8.2							
	Other					Other									
	DK/missing					DK/missing									
	Total	100.0	100.0			Total	100.0	100.0							
Calculations					Calculations										
	Springs of surface water based on EPSF04	0.1	19.5			Springs of surface water based on EPSF04	0.7	16.7							
Estimations					Estimations										
	50% of springs estimated improved	0.1	9.8			50% of springs estimated improved	0.4	8.3							
Access to improved drinking water sources :		97%	57%		Access to improved drinking water sources :		97%	62%							
Access to house connections :		85%	11%		Access to house connections :		85%	17%							
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	90%	49%		Ratios	HC / Tap water	90%	59%							
	Public tap / Tap water	10%	51%			Public tap / Tap water	10%	41%							
	Tubewell + protected well / All wells					Tubewell + protected well / All wells									
	Protected wells / Traditional wells	9%	10%			Protected wells / Traditional wells	9%	11%							
	Tubewell / All wells					Tubewell / All wells									
	Protected springs / All springs					Protected springs / All springs									
	Protect. well & spring / well & spring	29%	19%			Protect. well & spring / well & spring	29%	23%							
	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										

Morocco			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	DHS87	1987	69.7		91.2			7.9		59.3	
Demographic and Health Survey	DHS92	1992	76.4		95.4			9.1		57.6	
Demographic and Health Survey	DHS95	1995	85.6		97.7			10.6		56.9	
Global Water Supply and Sanitation Assessment 2000.	JMP99	1999		84.0		100.0			6.0		38.0
World Health Survey	WHS03	2003	82.0		99.2			8.6		59.3	
EPSF,(PAPFAM)	EPSF04	2004	85.8		97.9			20.1		57.2	
Recensement Général de la Population et de l'Habitat	CEN82	1982		62.9		67.3			2.2		12.3
Recensement Général de la Population et de l'Habitat	CEN94	1994		74.2		77.6			4.0		17.6
Enquête nationale sur les niveaux de vie des ménages	ENV99	1999	78.4		94.2			5.3		54.6	
Enquête nationale sur l'emploi	ENE00	2000	81.7		95.9			7.8		49.0	
Enquête Nationale sur la Consommation et les Dépense des Ménages	ECM01	2001	80.7		95.4			7.8		55.3	
Enquête nationale sur l'emploi	ENE01	2001	82.7		96.4			9.2		51.2	
Enquête nationale sur l'emploi	ENE03	2003	85.0		96.6			11.4		56.8	
Enquête nationale sur l'emploi	ENE04	2004	85.1		96.9			17.2		62.2	
Recensement Général de la Population et de l'Habitat	CEN04	2004				61.8					51.6
Enquête nationale sur l'emploi	ENE05	2005	86.3		97.3			19.4		63.6	
Enquête nationale sur l'emploi	ENE06	2006	87.5		96.3			22.9		65.9	
Enquête nationale sur l'emploi	ENE07	2007	88.4		96.3			25.0		65.7	

Morocco - urban - Use of improved drinking water sources



Morocco - rural - Use of improved drinking water sources



Drinking Water

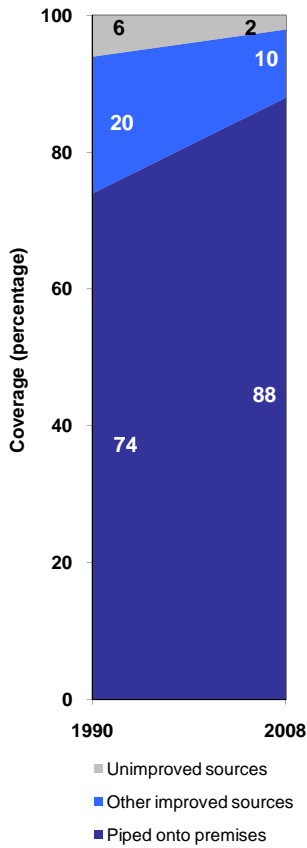
Morocco	Drinking water coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Piped into premises	74	88	5	19	38	58
Other improved source	20	10	50	41	36	23
Unimproved source	6	2	45	40	26	19

Source: WHO/UNICEF JMP, 2010

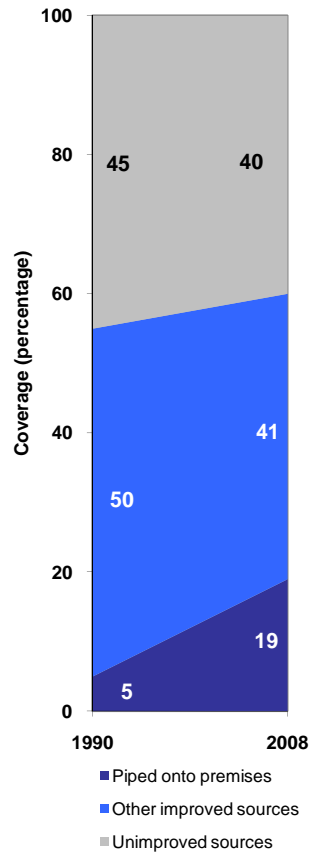
Morocco	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	12005	17701	12803	13905	24808	31606

Source: UN / Population Division, 2008

Urban drinking water trends



Rural drinking water trends



Total drinking water trends

