

**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

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Use of sanitation facilities		ECH97			Bolivia			Use of sanitation facilities		DHS98			Bolivia		
Encuesta Continua de Hogares								Demographic and Health Survey							
Instituto Nacional de Estadística					1997								1998		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
Alcantarillado	<b>Flush and pour flush</b>	80.5	5.1	0.0		<b>Flush and pour flush</b>	45.1	2.4							
	to piped sewer system					to piped sewer system									
Camara séptica	to septic tank	46.4	1.9		to septic tank										
	to pit	14.1	3.2		to pit										
	to unknown place/ not sure/DK				to unknown place/ not sure/DK										
	to elsewhere				to elsewhere										
	<b>Flush/toilets</b>					<b>Flush/toilets</b>	45.1	2.4							
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	<b>Private flush/toilet</b>				Private flush toilet	<b>Private flush/toilet</b>	34.8	1.9							
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	<b>Public/shared flush/toilet</b>				Shared flush toilet	<b>Public/shared flush/toilet</b>	10.3	0.5							
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	<b>Latrines</b>	17.6	25.7			<b>Latrines</b>	37.2	32.9							
	<b>Pour flush latrines</b>					<b>Pour flush latrines</b>									
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	<b>Private pour flush latrine</b>					<b>Private pour flush latrine</b>									
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	<b>Public/shared pour flush latrine</b>					<b>Public/shared pour flush latrine</b>									
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	<b>Dry latrines</b>	17.6	25.7			<b>Dry latrines</b>	37.2	32.9							
	<b>Improved latrines</b>					<b>Improved latrines</b>									
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine									
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine									
	Traditional latrine	17.6	25.7			Traditional latrine	37.2	32.9							
	Pit latrine without slab/open pit					Pit latrine without slab/open pit									
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine									
	Bucket latrine					Bucket latrine									
	Other					Other									
	<b>Private Latrines</b>				Private latrine	<b>Private Latrines</b>	20.6	28.9							
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine									
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine									
	Traditional latrine					Traditional latrine	20.6	28.9							
	Pit latrine without slab/open pit					Pit latrine without slab/open pit									
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine									
	Bucket latrine					Bucket latrine									
	Other					Other									
	<b>Public/shared Latrines</b>				Shared latrine	<b>Public/shared Latrines</b>	16.6	4.0							
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine									
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine									
	Traditional latrine					Traditional latrine	16.6	4.0							
	Pit latrine without slab/open pit					Pit latrine without slab/open pit									
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine									
	Bucket latrine					Bucket latrine									
	Other					Other									
	<b>Composting toilets</b>					<b>Composting toilets</b>									
	Composting toilet (private)					Composting toilet (private)									
	Composting toilet (shared)					Composting toilet (shared)									
	<b>Other improved</b>					<b>Other improved</b>									
	Other					Other									
	Other					Other									
No tiene baño	<b>No facility, bush, field</b>	22.0	69.2		No facility	<b>No facility, bush, field</b>	17.6	64.5							
	<b>Other unimproved</b>					<b>Other unimproved</b>									
	Other					Other									
	Other					Other									
	<b>DK/missing information</b>				Missing information	<b>DK/missing information</b>	0.1	0.2							
	<b>Total</b>	100.0	100.0	0.0		<b>Total</b>	100.0	100.0							
<b>Calculations</b>					<b>Calculations</b>										
	50% of traditional latrines considered improved	8.8	12.8			50% of traditional latrines considered improved	18.6	16.5							
<b>Estimations</b>					<b>Estimations</b>										
						sewerage based on MICS96&DHS03	34.8	0.8							
<b>Access to improved sanitation :</b>		<b>69%</b>	<b>18%</b>	<b>0%</b>	<b>Access to improved sanitation :</b>		<b>64%</b>	<b>19%</b>							
<b>Access to sewerage connections :</b>		<b>46%</b>	<b>2%</b>		<b>Access to sewerage connections :</b>		<b>35%</b>	<b>1%</b>							
Used for the estimates		Yes	Yes		Used for the estimates		Yes	Yes							
Used for the estimates		Yes	Yes		Used for the estimates		Yes	Yes							
<b>Ratios</b>	Shared improved facilities/all improved facilities				<b>Ratios</b>	Shared improved facilities/all improved facilities	29.2%	13.3%							
	Improved latrine / All latrines					Improved latrine / All latrines									
	Covered dry latrines / All dry latrines					Covered dry latrines / All dry latrines									
	VIP / All latrines					VIP / All latrines									
	Traditional latrines / All latrines	100%	100%			Traditional latrines / All latrines	100%	100%							
	Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines									
Sewerage connection among flush/pour flush	76.7	36.5		Sewerage connection among flush/pour flush											
Sewerage connection among flush				Sewerage connection among flush											
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										
<b>Comments</b>					<b>Comments</b>										



Use of sanitation facilities		JMP99			Bolivia			Use of sanitation facilities		MICS00			Bolivia						
Global Water Supply and Sanitation Assessment 2000.										Multiple Indicator Cluster Survey									
Water Supply and Sanitation Sector Questionnaire - 1999. Form 6 sent to WHO.					1998					Encuesta de multiples indicadores por conglomerados Informe preliminar, febrero 2001					2000				
Original denomination	Classification				Urban	Rural	Total	Original denomination	Classification				Urban	Rural	Total				
Population served with household connections to conventional	<b>Flush and pour flush</b>				45.1	2.4		Sanitario con sistema de alcantarillado o pozo septic	<b>Flush and pour flush</b>				75.5	9.9					
	to piped sewer system				45.1	2.4			to piped sewer system										
	to septic tank								to septic tank										
	to pit								to pit										
	to unknown place/ not sure/DK								to unknown place/ not sure/DK										
	to elsewhere								to elsewhere										
	<b>Flush/toilets</b>								<b>Flush/toilets</b>				68.8	8.9					
	to piped sewer system								to piped sewer system										
	to septic tank								to septic tank										
	to pit								to pit										
to unknown place/ not sure/DK							to unknown place/ not sure/DK												
to elsewhere							to elsewhere												
<b>Private flush/toilet</b>							<b>Private flush/toilet</b>												
to piped sewer system							to piped sewer system												
to septic tank							to septic tank												
to pit							to pit												
to unknown place/ not sure/DK							to unknown place/ not sure/DK												
to elsewhere							to elsewhere												
<b>Public/shared flush/toilet</b>							<b>Public/shared flush/toilet</b>												
to piped sewer system							to piped sewer system												
to septic tank							to septic tank												
to pit							to pit												
to unknown place/ not sure/DK							to unknown place/ not sure/DK												
to elsewhere							to elsewhere												
<b>Latrines</b>							<b>Latrines</b>				21.7	34.1							
<b>Pour flush latrines</b>							<b>Pour flush latrines</b>				6.7	1.0							
to piped sewer system							to piped sewer system												
to septic tank							to septic tank												
to pit							to pit												
to unknown place/ not sure/DK							to unknown place/ not sure/DK												
to elsewhere							to elsewhere												
<b>Private pour flush latrine</b>							<b>Private pour flush latrine</b>												
to piped sewer system							to piped sewer system												
to septic tank							to septic tank												
to pit							to pit												
to unknown place/ not sure/DK							to unknown place/ not sure/DK												
to elsewhere							to elsewhere												
<b>Public/shared pour flush latrine</b>							<b>Public/shared pour flush latrine</b>												
to piped sewer system							to piped sewer system												
to septic tank							to septic tank												
to pit							to pit												
to unknown place/ not sure/DK							to unknown place/ not sure/DK												
to elsewhere							to elsewhere												
<b>Dry latrines</b>							<b>Dry latrines</b>				15.0	33.1							
<b>Improved latrines</b>							<b>Improved latrines</b>				2.9	1.9							
Ventilated Improved Pit latrine							Ventilated Improved Pit latrine				2.9	1.9							
Pit latrine with slab/covered latrine							Pit latrine with slab/covered latrine												
Traditional latrine							Traditional latrine				11.7	31.2							
Pit latrine without slab/open pit							Pit latrine without slab/open pit												
Hanging toilet/hanging latrine							Hanging toilet/hanging latrine												
Bucket latrine							Bucket latrine												
Other							Other				0.4	0.0							
<b>Private Latrines</b>							<b>Private Latrines</b>												
Ventilated Improved Pit latrine							Ventilated Improved Pit latrine												
Pit latrine with slab/covered latrine							Pit latrine with slab/covered latrine												
Traditional latrine							Traditional latrine												
Pit latrine without slab/open pit							Pit latrine without slab/open pit												
Hanging toilet/hanging latrine							Hanging toilet/hanging latrine												
Bucket latrine							Bucket latrine												
Other							Other												
<b>Public/shared Latrines</b>							<b>Public/shared Latrines</b>												
Ventilated Improved Pit latrine							Ventilated Improved Pit latrine												
Pit latrine with slab/covered latrine							Pit latrine with slab/covered latrine												
Traditional latrine							Traditional latrine												
Pit latrine without slab/open pit							Pit latrine without slab/open pit												
Hanging toilet/hanging latrine							Hanging toilet/hanging latrine												
Bucket latrine							Bucket latrine												
Other							Other												
<b>Composting toilets</b>							<b>Composting toilets</b>												
Composting toilet (private)							Composting toilet (private)												
Composting toilet (shared)							Composting toilet (shared)												
<b>Other improved</b>				37.2	32.9		<b>Other improved</b>												
Other							Other												
Other							Other												
<b>No facility, bush, field</b>							<b>No facility, bush, field</b>				6.7	52.6							
<b>Other unimproved</b>				17.7	64.7		<b>Other unimproved</b>				2.8	4.3							
Other							Other				2.8	4.3							
Other							Other												
DK/missing information							DK/missing information												
<b>Total</b>				100.0	100.0		<b>Total</b>				100.0	99.9							
<b>Calculations</b>							<b>Calculations</b>												
<b>Estimations</b>							<b>Estimations</b>												
							50% of traditional latrines considered improved				5.9	15.6							
							sewerage based on MICS96&DHS03				53.1	3.0							
<b>Access to improved plus shared sanitation:</b>				<b>82%</b>	<b>35%</b>		<b>Access to improved sanitation:</b>				<b>84%</b>	<b>27%</b>							
<b>Access to sewerage connections:</b>				<b>45%</b>	<b>2%</b>		<b>Access to sewerage connections:</b>				<b>53%</b>	<b>3%</b>							
Used for the estimates				No	No		Used for the estimates				Yes	Yes							
Used for the estimates				No	No		Used for the estimates				Yes	Yes							
<b>Ratios</b>							<b>Ratios</b>												
Shared improved facilities/all improved facilities							Shared improved facilities/all improved facilities												
Improved latrine / All latrines							Improved latrine / All latrines				44%	9%							
Covered dry latrines / All dry latrines							Covered dry latrines / All dry latrines												
VIP / All latrines							VIP / All latrines				19%	6%							
Traditional latrines / All latrines							Traditional latrines / All latrines				54%	91%							
Improved + traditional latrines / All latrines							Improved + traditional latrines / All latrines				98%	100%							
							Sewerage connection among flush/pour flush												
							Sewerage connection among flush												
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:				4770	3180		Total population:												
<b>Comments</b>							<b>Comments</b>												





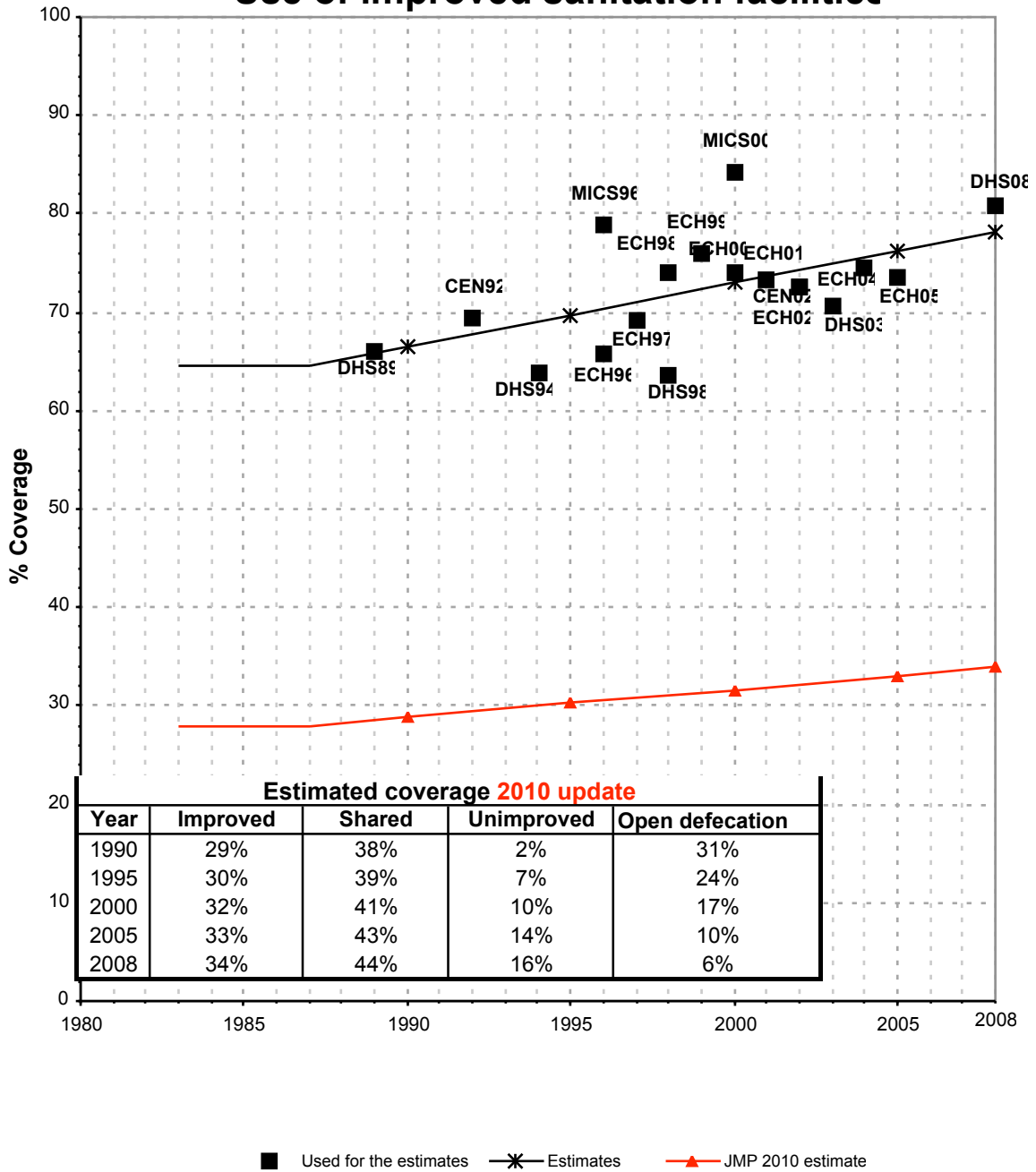




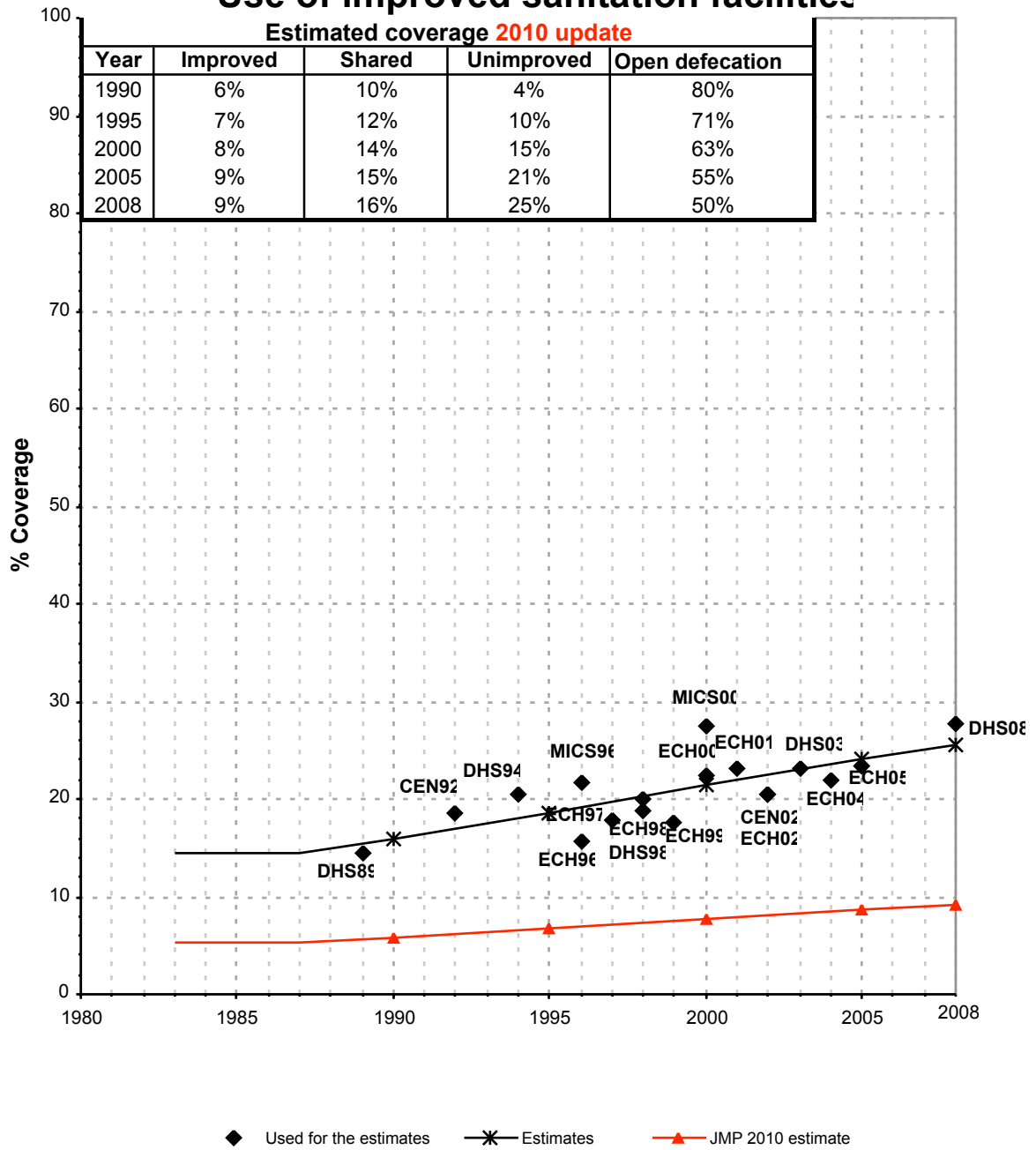


Bolivia			SANITATION															
			URBAN								RURAL							
			Sewer connection		Total		Open defecation		Shared		Sewer connection		Total		Open defecation		Shared	
Source	Code	Year	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used
Demographic and Health Survey	DHS89	1989	42.1		66.0						3.8		14.5					
National Census	CEN92	1992	42.1		69.3		43.2				1.1		18.6		96.3			
National Census	CEN92	1992		30.5		70.1		38.8				0.3		29.2		82.1		
Demographic and Health Survey	DHS94	1994	40.6		63.9		26.0				1.6		20.6		62.4			
Multiple Indicator Cluster Survey	MICS96	1996	52.5		78.8		10.7				1.4		21.8		58.1			
Encuesta Continua de Hogares	ECH96	1996	42.3		65.8		22.2				1.2		15.7		71.5			
Encuesta Continua de Hogares	ECH97	1997	46.4		69.3		22.0				1.9		17.9		69.2			
Demographic and Health Survey	DHS98	1998	34.8		63.7		17.6		29.2		0.8		18.9		64.5		13.3	
Encuesta Continua de Hogares	ECH98	1998	54.5		74.1		17.6				0.8		19.9		64.5			
Encuesta Continua de Hogares	ECH99	1999	51.3		76.1		13.0				0.8		17.7		67.5			
Global Water Supply and Sanitation Assessment 2000.	JMP99	1998		45.1		82.3						2.4		35.3				
Multiple Indicator Cluster Survey	MICS00	2000	53.1		84.3		6.7				3.0		27.4		52.6			
Encuesta Continua de Hogares	ECH00	2000	53.3		74.0		13.6				2.1		22.4		61.3			
Encuesta Continua de Hogares	ECH01	2001	48.4		73.4		14.9				2.6		23.2		59.6			
National Census	CEN02	2002	48.2		72.6		15.4				1.9		20.6		63.7			
National Census	CEN02	2002		44.3		68.3		16.4				1.3		19.5		62.6		
Encuesta Continua de Hogares	ECH02	2002	48.2		72.6		15.4				1.9		20.6		63.8			
Demographic and Health Survey	DHS03	2003	49.0		70.7		17.7		70.5		2.6		23.1		60.1		90.0	
Encuesta Continua de Hogares	ECH04	2004	50.3		74.5		12.9				2.0		22.0		60.4			
Encuesta Continua de Hogares	ECH05	2005	55.3		73.6		11.6				2.1		23.3		57.7			
Demographic and Health Survey	DHS08	2008	61.0		80.9		10.2		70.2		3.2		27.6		51.6		88.5	

# Bolivia - urban - Use of improved sanitation facilities



# Bolivia - rural - Use of improved sanitation facilities



# Sanitation

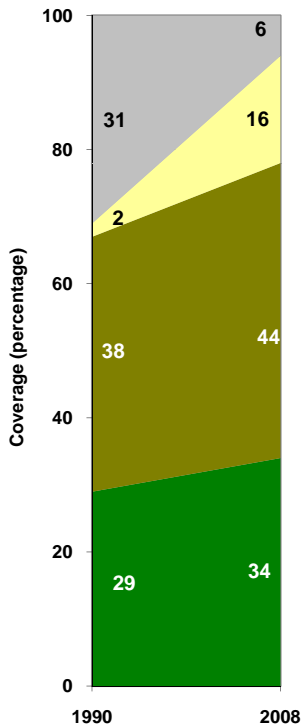
Bolivia	Sanitation coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Improved facilities	29	34	6	9	19	25
Shared facilities	38	44	10	16	26	34
Unimproved facilities	2	16	4	25	2	20
Open defecation	31	6	80	50	53	21

Source: WHO/UNICEF JMP, 2010

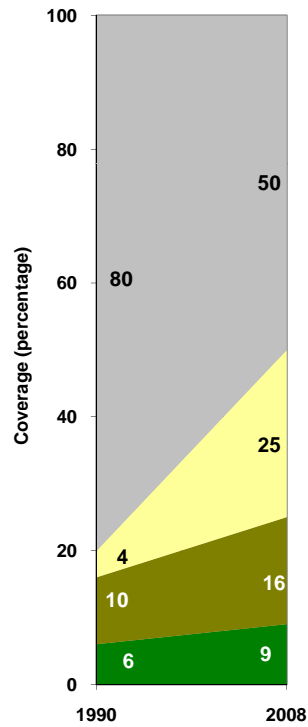
Bolivia	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	3,707	6,361	2,963	3,333	6,671	9,694

Source: UN / Population Division, 2008

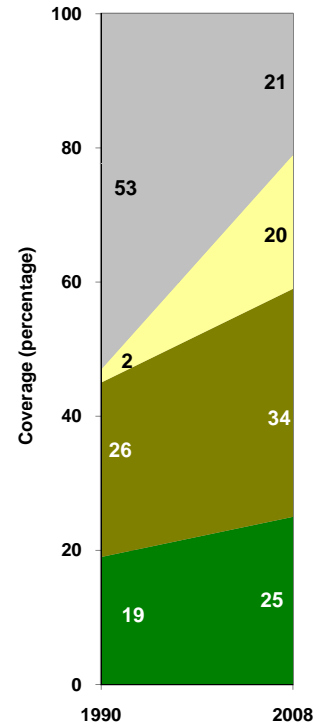
Urban sanitation trends



Rural sanitation trends



Total sanitation trends



■ Open defecation  
 ■ Unimproved facilities  
 ■ Shared facilities  
 ■ Improved facilities

■ Open defecation  
 ■ Unimproved facilities  
 ■ Shared facilities  
 ■ Improved facilities

■ Open defecation  
 ■ Unimproved facilities  
 ■ Shared facilities  
 ■ Improved facilities