

**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](http://childinfo.org)

Use of sanitation facilities		DHS90			Paraguay			Use of sanitation facilities		CEN92			Paraguay		
Demographic and Health Survey					1990			National Census					1992		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	<b>Flush and pour flush</b>	49.8	5.3			<b>Flush and pour flush</b>	64.8	13.3							
	to piped sewer system					to piped sewer system	20.3	6.3							
	to septic tank					to septic tank									
	to pit					to pit	44.5	7.0							
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
WC con arrastre agua	<b>Flush/toilets</b>	49.8	5.3			<b>Flush/toilets</b>	58.9	7.0							
	to piped sewer system				W.C. red publica	to piped sewer system	14.4	0.0							
	to septic tank				W.C. pozo ciego	to septic tank									
	to pit					to pit	44.5	7.0							
	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>	49.5	91.2			<b>Latrines</b>	38.9	84.3							
	<b>Pour flush latrines</b>					<b>Pour flush latrines</b>	5.9	6.3							
	to piped sewer system					to piped sewer system	5.9	6.3							
	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>				Letrina municipal	<b>Public/shared pour flush latrine</b>	5.9	6.3							
	to piped sewer system					to piped sewer system	5.9	6.3							
	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>	49.5	91.2			<b>Dry latrines</b>	33.0	78.1							
	<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									
Letrina	Traditional latrine	49.5	91.2			Traditional latrine	33.0	78.1							
	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>					<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>				Letrina comun	<b>Public/shared Latrines</b>	33.0	78.1							
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine									
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine									
	Traditional latrine					Traditional latrine	33.0	78.1							
	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 hay servicios	<b>No facility, bush, field</b>	0.4	0.4		No tiene	<b>No facility, bush, field</b>	1.6	7.9							
Otro	<b>Other unimproved</b>	0.2	1.9			<b>Other unimproved</b>									
	Other	0.2	1.9			Other									
	Other					Other									
Sin informacion/ no sabe	<b>DK/missing information</b>	0.0	1.2		No informado	<b>DK/missing information</b>	0.6	0.8							
	<b>Total</b>	99.9	100.0			<b>Total</b>	100.0	100.0							
	Estimated Letrina comun based on CEN92	42.0	84.4			Letrina comun/all letrinas	84.8%	92.6%							
<b>Calculations</b>					<b>Calculations</b>										
	Improved latrine comun from WHS03	2.8	5.2			Improved latrines from WHS03	2.2	4.8							
	Letrina municipal	7.5	6.8												
<b>Estimations</b>					<b>Estimations</b>										
	SC, based on EMSMI98	12.1	0.9												
<b>Access to improved sanitation :</b>		<b>60%</b>	<b>47%</b>		<b>Access to improved sanitation :</b>		<b>67%</b>	<b>18%</b>							
<b>Access to sewerage connections :</b>		<b>12%</b>	<b>1%</b>		<b>Access to sewerage connections :</b>		<b>20%</b>	<b>6%</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									
	Improved latrine / All latrines					Improved latrine / All latrines	15%	7%							
	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	85%	93%							
	Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines	100%	100%							
Sewerage connection among flush/pour flush				Sewerage connection among flush/pour flush	31.3	47.2									
Sewerage connection among flush				Sewerage connection among flush	24.5	0.0									
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		2061.54	2050.46							
<b>Comments</b>					<b>Comments</b>										

Use of sanitation facilities		EPH95			Paraguay			Use of sanitation facilities		ENDSR96			Paraguay		
Encuesta Permanente de Hogares					1995			Encuesta Nacional de Demografía y Salud Reproductiva					1996		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	<b>Flush and pour flush</b>					<b>Flush and pour flush</b>	76.3	21.3	49.8						
	to piped sewer system					to piped sewer system	7.5	9.7	8.6						
	to septic tank					to septic tank									
	to pit					to pit	45.7	10.6	28.8						
	to unknown place/ not sure/DK					to unknown place/ not sure/DK	23.1	1.0	12.4						
	to elsewhere					to elsewhere									
	<b>Flush/toilets</b>					<b>Flush/toilets</b>	68.8	11.6	41.2						
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank									
	to pit				Bano moderno con pozo ciego	to pit	45.7	10.6	28.8						
	to unknown place/ not sure/DK				Bano moderno	to unknown place/ not sure/DK	23.1	1.0	12.4						
	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>	30.8	87.2	57.9						
	<b>Pour flush latrines</b>					<b>Pour flush latrines</b>	7.5	9.7	8.6						
	to piped sewer system					to piped sewer system	7.5	9.7	8.6						
	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>	7.5	9.7	8.6						
	to piped sewer system				Letrina municipal	to piped sewer system	7.5	9.7	8.6						
	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>	23.3	77.5	49.3						
	<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					Traditional latrine	23.3	77.5	49.3						
	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>					<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>	23.3	77.5	49.3						
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine									
	Pit latrine with slab/covered latrine				Letrina comun	Pit latrine with slab/covered latrine	23.3	77.5	49.3						
	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>					<b>Other improved</b>									
	Other					Other									
	Other					Other									
	<b>No facility, bush, field</b>					<b>No facility, bush, field</b>									
	<b>Other unimproved</b>					<b>Other unimproved</b>									
	Other					Other									
	Other					Other									
	<b>DK/missing information</b>				Otro/No responde	<b>DK/missing information</b>	0.5	1.3	1.0						
	<b>Total</b>					<b>Total</b>	100.1	100.1	100.1						
<b>Calculations</b>					<b>Calculations</b>										
<b>Estimations</b>					<b>Estimations</b>	Improved latrines from WHS03	1.5	4.8							
						SC, based on EMSM98	18.5	3.6							
<b>Access to improved sanitation :</b>							<b>78%</b>	<b>26%</b>							
<b>Access to sewerage connections :</b>							<b>26%</b>	<b>13%</b>	<b>9%</b>						
Used for the estimates							Yes	Yes							
Used for the estimates							Yes	Yes							
<b>Ratios</b>	Shared improved facilities/all improved facilities					Shared improved facilities/all improved facilities									
	Improved latrine / All latrines					Improved latrine / All latrines	24%	11%	15%						
	Covered dry latrines / All dry latrines					Covered dry latrines / All dry latrines									
	VIP / All latrines					VIP / All latrines									
	Traditional latrines / All latrines					Traditional latrines / All latrines	76%	89%	85%						
	Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines	100%	100%	100%						
	Sewerage connection among flush/pour flush					Sewerage connection among flush/pour flush	9.8	45.5							
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>										





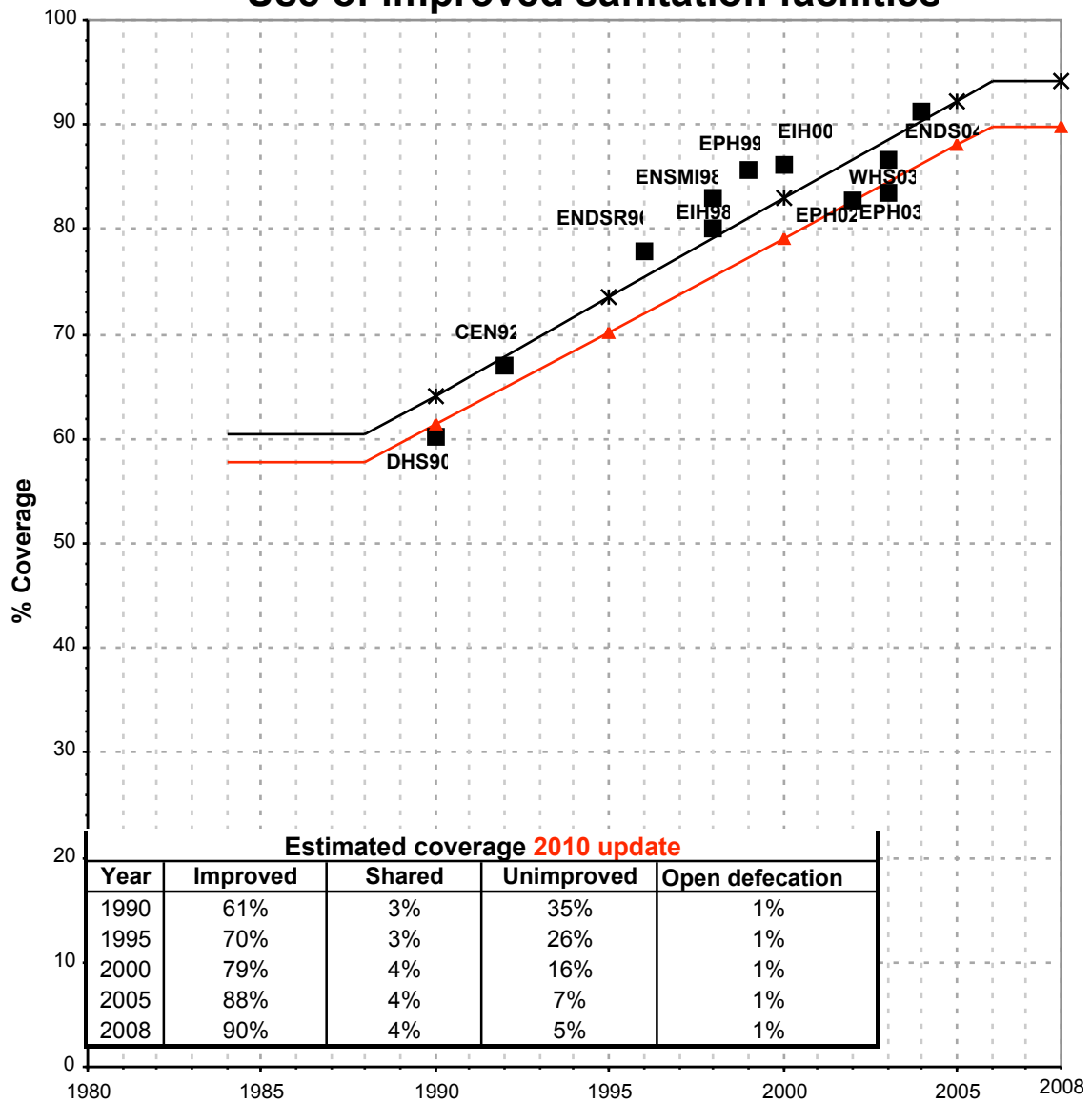






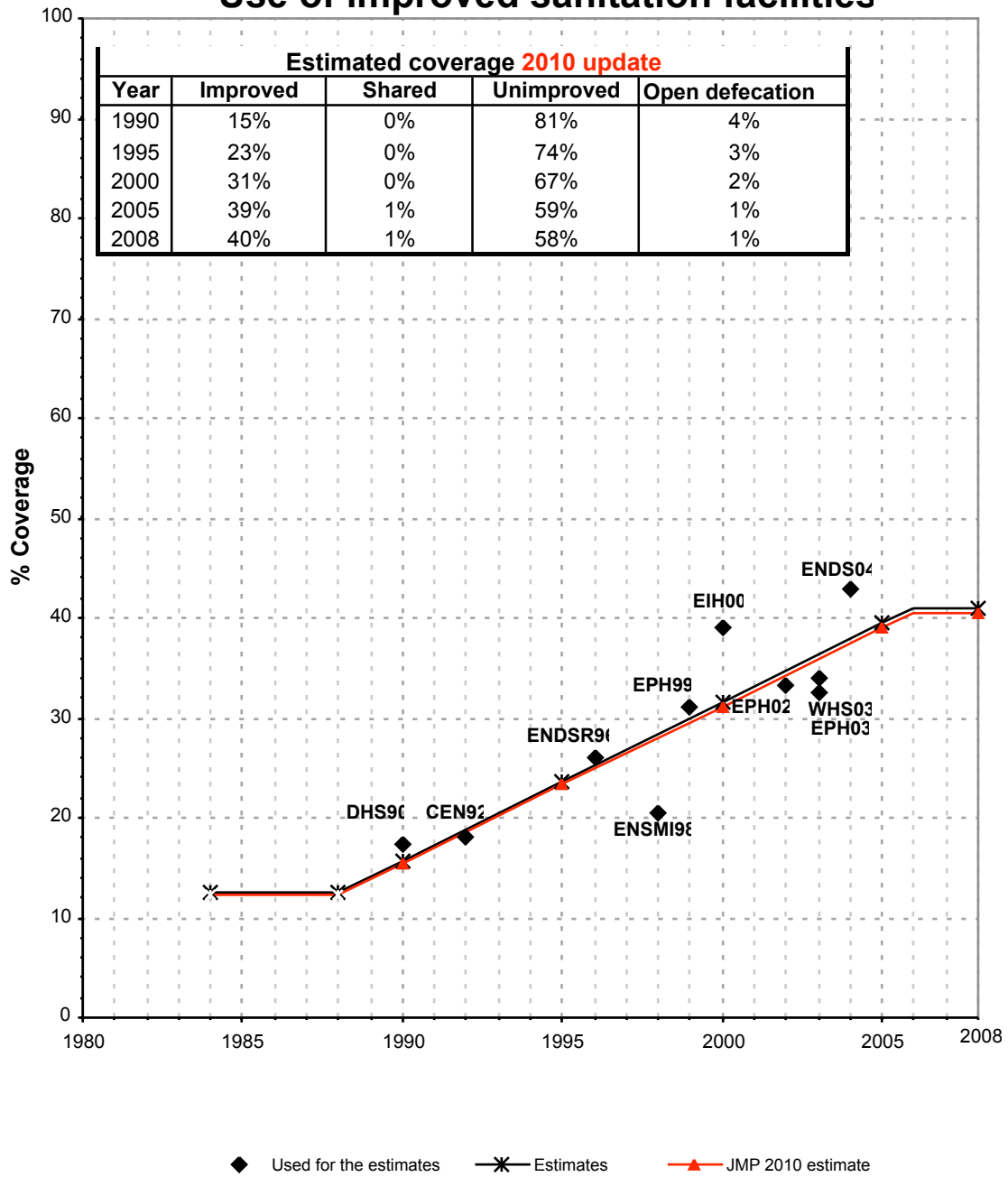
Paraguay			SANITATION															
			URBAN								RURAL							
			Sewer connection		Total		Open defecation		Shared		Sewer connection		Total		Open defecation		Shared	
Source	Code	Year	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used
Demographic and Health Survey	DHS90	1990	12.1		60.1		0.4				0.9		17.3		0.4			
National Census	CEN92	1992	20.3		67.0		1.6				6.3		18.1		7.9			
Encuesta Permanente de Hogares	EPH95	1995																
Encuesta Nacional de Demografia y Salud Reproductiva	ENDSR96	1996	26.0		77.8						13.3		26.1					
Encuesta Nacional de Salud Materno Infantil	ENSMI98	1998	19.8		82.9						2.6		20.5					
Desigualdades en el acceso, uso y gasto con el agua potable en America Latina y el Caribe	EIH98	1998	16.4		80.1		1.0											
Encuesta Permanente de Hogares	EPH99	1999	19.8		85.6		1.6				9.0		31.1		1.6			
Global Water Supply and Sanitation Assessment 2000.	JMP99	1998		13.2		99.1						0.0		100.0				
Encuesta Integrada de Hogares	EIH00	2000	17.6		86.2		0.4				0.2		39.1		1.6			
Encuesta Integrada de Hogares	EIH01	2001																
Encuesta Permanente de Hogares	EPH02	2002	18.4		82.7		0.7				4.2		33.2		1.2			
World Health Survey	WHS03	2003	19.5		86.7		0.3		4.5		0.2		34.0		0.9		1.4	
Encuesta Permanente de Hogares	EPH03	2003	21.1		83.6		0.7				2.6		32.6		2.4			
ENCUESTA NACIONAL DE DEMOGRAFIA Y SALUD REPRODUCTIVA	ENDS04	2004	15.1		91.3						0.0		42.8					

## Paraguay - urban - Use of improved sanitation facilities



Used for the estimates  
  \* Estimates  
  JMP 2010 estimate

# Paraguay - rural - Use of improved sanitation facilities



## Sanitation

Paraguay	Sanitation coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Improved facilities	61	90	15	40	37	70
Shared facilities	3	4	0	1	1	3
Unimproved facilities	35	5	81	58	59	26
Open defecation	1	1	4	1	3	1

Source: WHO/UNICEF JMP, 2010

Paraguay	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	2,069	3,762	2,180	2,476	4,250	6,238

Source: UN / Population Division, 2008

