

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

Use of sanitation facilities		CEN89			Vietnam			Use of sanitation facilities		LSS93			Vietnam		
National Census					1989			Living Standards Survey					1993		
10% micro dataset from IPUMS															
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Flush and pour flush	56.7	5.6			Flush and pour flush	44.9	1.8	10.4						
	to piped sewer system					to piped sewer system									
	to septic tank					to septic tank	44.9	1.8	10.4						
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
Modern Toilet	Flush/toilets	56.7	5.6			Flush/toilets	44.9	1.8	10.4						
	to piped sewer system					to piped sewer system									
	to septic tank				Flush toilet with septic tank	to septic tank	44.9	1.8	10.4						
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	Private flush/toilet					Private flush/toilet									
	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									
	Public/shared flush/toilet					Public/shared flush/toilet									
	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									
	Latrines	10.2	35.4			Latrines	20.3	37.2	33.8						
	Pour flush latrines					Pour flush latrines									
	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									
	Private pour flush latrine					Private pour flush latrine									
	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									
	Public/shared pour flush latrine					Public/shared pour flush latrine									
	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									
	Dry latrines	10.2	35.4			Dry latrines	20.3	37.2	33.8						
	Improved latrines					Improved latrines									
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine									
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine									
Traditional	Traditional latrine	10.2	35.4		Simple toilet*	Traditional latrine	20.3	37.2	33.8						
	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									
	Private Latrines					Private Latrines									
	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									
	Public/shared Latrines					Public/shared Latrines									
	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									
	Composting toilets				Double Vault Compost latrine	Composting toilets	7.7	8.6	8.4						
	Composting toilet (private)					Composting toilet (private)									
	Composting toilet (shared)					Composting toilet (shared)									
	Other improved					Other improved									
	Other					Other									
	Other					Other									
No	No facility, bush, field	33.1	59.1		No toilet	No facility, bush, field	18.2	28.7	26.6						
	Other unimproved				Others	Other unimproved	8.9	23.8	20.8						
	Other					Other	8.9	23.8	20.8						
	Other					Other									
	DK/missing information					DK/missing information									
	Total	100.0	100.0			Total	100.0	100.0	100.0						
Calculations					Calculations										
Estimations	Traditional pit latrines considered improved based on MICS96	7.0	22.3		Estimations	Traditional pit latrines considered improved based on MICS96	13.8	23.4							
	Flush to sewage based on MICS96	3.9	0.0			Flush to sewage based on MICS96	3.1	0.0							
Access to improved sanitation :		64%	28%		Access to improved sanitation :		66%	34%							
Access to sewerage connections :		4%	0%		Access to sewerage connections :		3%	0%							
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	Shared improved facilities/all improved facilities				Ratios	Shared improved facilities/all improved facilities									
	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%	100%						
	Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines									
	Sewerage connection among flush/pour flush					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										
Comments					Comments										

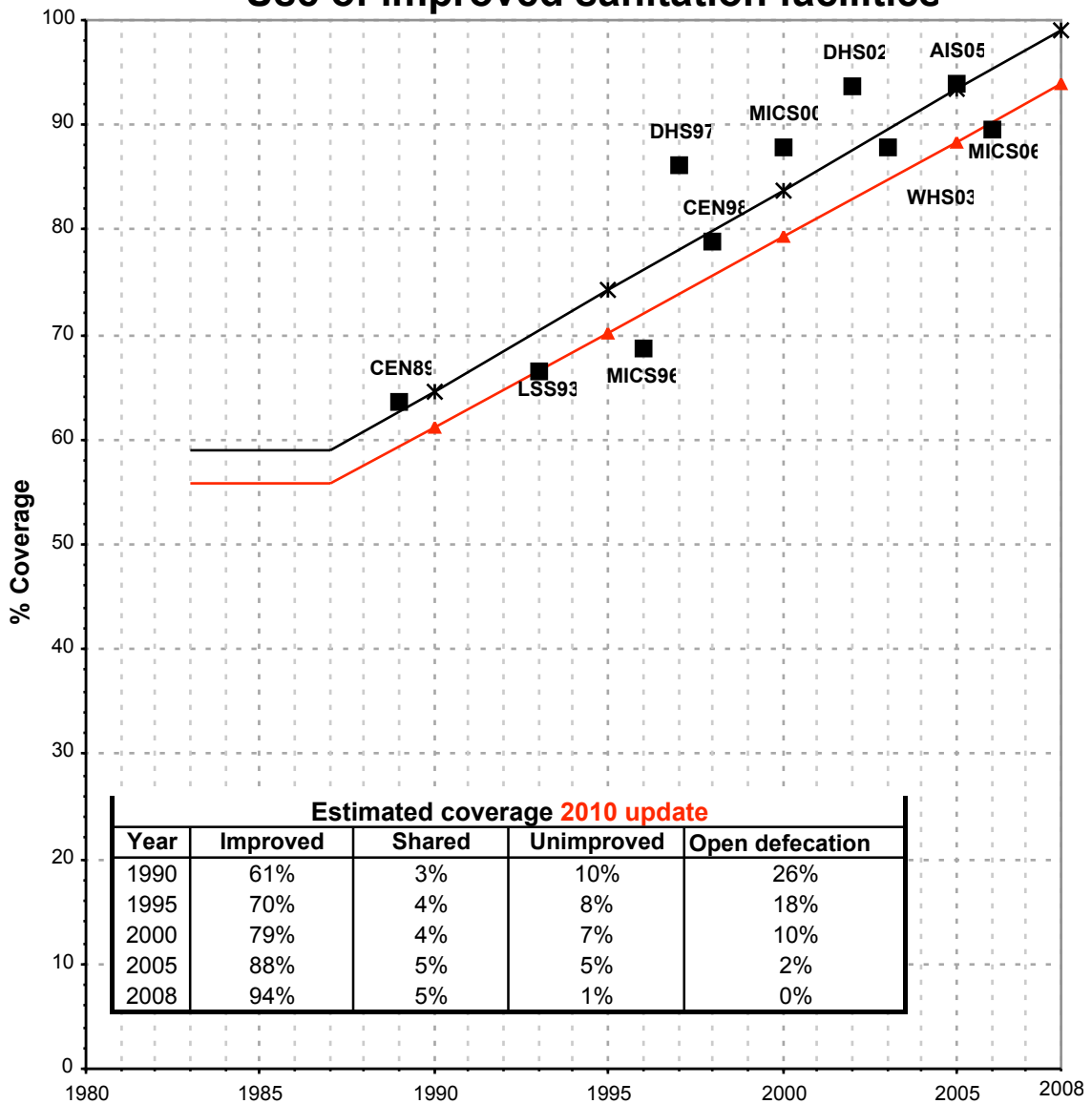
Use of sanitation facilities		MICS96			Vietnam			Use of sanitation facilities		DHS97			Vietnam		
Multiple Indicator Cluster Survey					1996			Demographic and Health Survey					1997		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Flush and pour flush	47.8	4.2	18.8		Flush and pour flush	67.4	6.0	17.7						
	to piped sewer system	3.3	0.0	0.9		to piped sewer system									
	to septic tank	16.8	0.8	5.0		to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	Flush/toilets	20.1	0.8	5.9		Flush/toilets	67.4	6.0	17.7						
Flush latrines to sewage	to piped sewer system	3.3	0.0	0.9		to piped sewer system									
Flush latrines to septic tank	to septic tank	16.8	0.8	5.0		to septic tank									
	to pit					to pit									
	to unknown place/ not sure/DK					to unknown place/ not sure/DK									
	to elsewhere					to elsewhere									
	Private flush/toilet				Own flush toilet	Private flush/toilet	64.5	5.6	16.8						
	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									
	Public/shared flush/toilet				Shared flush toilet	Public/shared flush/toilet	2.9	0.4	0.9						
	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									
	Latrines	58.6	65.1	63.4		Latrines	24.2	67.8	59.5						
Subab latrines (poor flush)	Pour flush latrines	27.7	3.4	9.9		Pour flush latrines									
	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									
	Private pour flush latrine					Private pour flush latrine									
	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									
	Public/shared pour flush latrine					Public/shared pour flush latrine									
	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									
	Dry latrines	30.8	61.7	53.5		Dry latrines	24.2	67.8	59.5						
	Improved latrines	21.0	38.9	34.1		Improved latrines	7.3	9.4	9.0						
	Ventilated Improved Pit latrine				Vent. Imp. Pit toilet	Ventilated Improved Pit latrine	7.3	9.4	9.0						
Roofed latrines*	Pit latrine with slab/covered latrine	21.0	38.9	34.1		Pit latrine with slab/covered latrine									
	Traditional latrine				Traditional pit toilet*	Traditional latrine	16.9	58.4	50.5						
Unroofed latrines*	Pit latrine without slab/open pit	9.8	22.8	19.4		Pit latrine without slab/open pit									
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine									
	Bucket latrine					Bucket latrine									
	Other					Other									
	Private Latrines					Private Latrines									
	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									
	Public/shared Latrines					Public/shared Latrines									
	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									
	Composting toilets					Composting toilets									
	Composting toilet (private)					Composting toilet (private)									
	Composting toilet (shared)					Composting toilet (shared)									
	Other improved					Other improved									
	Other					Other									
	Other					Other									
Public latrines/without latrines	No facility, bush, field	21.4	34.1	30.8	No facility, bush	No facility, bush, field	8.3	26.2	22.8						
	Other unimproved					Other unimproved									
	Other					Other									
	Other					Other									
	DK/missing information					DK/missing information									
	Total	100.0	100.0	100.1		Total	99.9	100.0	100.0						
Calculations					Calculations										
Estimations					Estimations										
						Traditional pit latrines considered improved based on MICS96	11.5	39.8							
						Flush to sewage based on MICS96	4.7	0.0							
Access to improved sanitation :		69%	43%	50%	Access to improved sanitation :		86%	55%							
Access to sewerage connections :		3%	0%	1%	Access to sewerage connections :		5%	0%							
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	Shared improved facilities/all improved facilities				Ratios	Shared improved facilities/all improved facilities									
	Improved latrine / All latrines	83%	65%	69%		Improved latrine / All latrines	30%	14%	15%						
	Covered dry latrines / All dry latrines	68%	63%			Covered dry latrines / All dry latrines									
	VIP / All latrines					VIP / All latrines	30%	14%							
	Traditional latrines / All latrines					Traditional latrines / All latrines	70%	86%	85%						
	Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines	100%	100%	100%						
	Sewerage connection among flush/pour flush	6.9	0.0			Sewerage connection among flush/pour flush									
Sewerage connection among flush	16.4	0.0		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										
Comments					Comments										

Use of sanitation facilities		CEN98			Vietnam			Use of sanitation facilities		JMP99			Vietnam		
National Census					1998			Global Water Supply and Sanitation Assessment 2000.					1999		
Water Supply and Sanitation Sector Questionnaire - 1999. Form 6 sent to WHO.															
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total	
	Flush and pour flush	62.4	4.6			Flush and pour flush	87.5	33.0			Flush and pour flush	87.5	33.0		
	to piped sewer system				Population served with household connections to conventional	to piped sewer system					to piped sewer system				
	to septic tank	62.4	4.6			to septic tank					to septic tank				
	to pit					to pit					to pit				
	to unknown place/ not sure/DK					to unknown place/ not sure/DK					to unknown place/ not sure/DK				
	to elsewhere					to elsewhere					to elsewhere				
	Flush/toilets	62.4	4.6			Flush/toilets					Flush/toilets				
	to piped sewer system					to piped sewer system					to piped sewer system				
	to septic tank	62.4	4.6			to septic tank					to septic tank				
	to pit					to pit					to pit				
	to unknown place/ not sure/DK					to unknown place/ not sure/DK					to unknown place/ not sure/DK				
	to elsewhere					to elsewhere					to elsewhere				
	Private flush/toilet	62.4	4.6			Private flush/toilet					Private flush/toilet				
	to piped sewer system					to piped sewer system					to piped sewer system				
Private septic tank and semi-septic	to septic tank	62.4	4.6			to septic tank					to septic tank				
	to pit					to pit					to pit				
	to unknown place/ not sure/DK					to unknown place/ not sure/DK					to unknown place/ not sure/DK				
	to elsewhere					to elsewhere					to elsewhere				
	Public/shared flush/toilet					Public/shared flush/toilet					Public/shared flush/toilet				
	to piped sewer system					to piped sewer system					to piped sewer system				
	to septic tank					to septic tank					to septic tank				
	to pit					to pit					to pit				
	to unknown place/ not sure/DK					to unknown place/ not sure/DK					to unknown place/ not sure/DK				
	to elsewhere					to elsewhere					to elsewhere				
	Latrines	12.9	46.3			Latrines					Latrines				
	Pour flush latrines					Pour flush latrines					Pour flush latrines				
	to piped sewer system					to piped sewer system					to piped sewer system				
	to septic tank					to septic tank					to septic tank				
	to pit					to pit					to pit				
	to unknown place/ not sure/DK					to unknown place/ not sure/DK					to unknown place/ not sure/DK				
	to elsewhere					to elsewhere					to elsewhere				
	Private pour flush latrine					Private pour flush latrine					Private pour flush latrine				
	to piped sewer system					to piped sewer system					to piped sewer system				
	to septic tank					to septic tank					to septic tank				
	to pit					to pit					to pit				
	to unknown place/ not sure/DK					to unknown place/ not sure/DK					to unknown place/ not sure/DK				
	to elsewhere					to elsewhere					to elsewhere				
	Public/shared pour flush latrine					Public/shared pour flush latrine					Public/shared pour flush latrine				
	to piped sewer system					to piped sewer system					to piped sewer system				
	to septic tank					to septic tank					to septic tank				
	to pit					to pit					to pit				
	to unknown place/ not sure/DK					to unknown place/ not sure/DK					to unknown place/ not sure/DK				
	to elsewhere					to elsewhere					to elsewhere				
	Dry latrines	12.9	46.3			Dry latrines					Dry latrines				
	Improved latrines					Improved latrines					Improved latrines				
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine					Ventilated Improved Pit latrine				
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine				
Latrine simple*	Traditional latrine	12.9	46.3			Traditional latrine					Traditional latrine				
	Pit latrine without slab/open pit					Pit latrine without slab/open pit					Pit latrine without slab/open pit				
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine					Hanging toilet/hanging latrine				
	Bucket latrine					Bucket latrine					Bucket latrine				
	Other					Other					Other				
	Private Latrines					Private Latrines					Private Latrines				
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine					Ventilated Improved Pit latrine				
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine				
	Traditional latrine					Traditional latrine					Traditional latrine				
	Pit latrine without slab/open pit					Pit latrine without slab/open pit					Pit latrine without slab/open pit				
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine					Hanging toilet/hanging latrine				
	Bucket latrine					Bucket latrine					Bucket latrine				
	Other					Other					Other				
	Public/shared Latrines					Public/shared Latrines					Public/shared Latrines				
	Ventilated Improved Pit latrine					Ventilated Improved Pit latrine					Ventilated Improved Pit latrine				
	Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine					Pit latrine with slab/covered latrine				
	Traditional latrine					Traditional latrine					Traditional latrine				
	Pit latrine without slab/open pit					Pit latrine without slab/open pit					Pit latrine without slab/open pit				
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine					Hanging toilet/hanging latrine				
	Bucket latrine					Bucket latrine					Bucket latrine				
	Other					Other					Other				
Double vaulting composting latrine	Composting toilets	7.7	9.9			Composting toilets					Composting toilets				
	Composting toilet (private)					Composting toilet (private)					Composting toilet (private)				
	Composting toilet (shared)					Composting toilet (shared)					Composting toilet (shared)				
	Other improved				Population without household connections but served	Other improved	6.3	15.0			Other improved	6.3	15.0		
	Other					Other					Other				
	Other					Other					Other				
	No facility, bush, field					No facility, bush, field					No facility, bush, field				
	Other unimproved	16.9	39.3		Total population unserved	Other unimproved	6.3	52.0			Other unimproved	6.3	52.0		
Toilet directly over water	Other	2.6	12.2			Other					Other				
Other	Other	14.3	27.1			Other					Other				
	DK/missing information					DK/missing information					DK/missing information				
	Total	99.9	100.1			Total	100.0	100.0			Total	100.0	100.0		
Calculations						Calculations					Calculations				
	Traditional pit latrines considered improved based on MICS96	8.8	29.2												
Estimations						Estimations					Estimations				
	Flush to sewerage based on MICS96	4.3	0.0												
Access to improved sanitation :		79%	44%		Access to improved plus shared sanitation:		94%	48%		Access to improved plus shared sanitation:		94%	48%		
Access to sewerage connections :		4%	0%		Access to sewerage connections :		88%	33%		Access to sewerage connections :		88%	33%		
Used for the estimates		Yes	Yes		Used for the estimates		No	No		Used for the estimates		No	No		
Shared improved facilities/all improved facilities		Yes	Yes		Shared improved facilities/all improved facilities		No	No		Shared improved facilities/all improved facilities		No	No		
Ratios	Improved latrine / All latrines				Ratios	Improved latrine / All latrines				Ratios	Improved latrine / All latrines				
	Covered dry latrines / All dry latrines					Covered dry latrines / All dry latrines					Covered dry latrines / All dry latrines				
	VIP / All latrines					VIP / All latrines					VIP / All latrines				
	Traditional latrines / All latrines	100%	100%			Traditional latrines / All latrines					Traditional latrines / All latrines				
	Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines				
	Sewerage connection among flush/pour flush					Sewerage connection among flush/pour flush					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 people covered by the survey				
	Number of households covered by the survey					Number of households covered by the survey					Number of households covered by the survey				
	Total population					Total population	16000	64000			Total population	16000	64000		
Comments					Comments					Comments					

Use of sanitation facilities		MICS00			Vietnam			Use of sanitation facilities		DHS02			Vietnam		
Multiple Indicator Cluster Survey					2000			Demographic and Health Survey					2002		
Original denomination	Classification	Urban	Rural	Total	Original denomination	Classification	Urban	Rural	Total						
	Flush and pour flush	68.9	5.9	20.8		Flush and pour flush	82.1	11.9							
	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									
Flush to sewage/septic tank	Flush/toilets	45.8	2.6	12.8		Flush/toilets	82.1	11.9							
	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									
	Private flush/toilet				Own flush toilet	Private flush/toilet	78.8	11.6							
	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									
	Public/shared flush/toilet				Shared flush toilet	Public/shared flush/toilet	3.3	0.3							
	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									
	Latrines	49.7	74.1	68.4		Latrines	13.9	66.4							
Poor flush latrine (water seal type)	Pour flush latrines	23.1	3.3	8.0		Pour flush latrines									
	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									
	Private pour flush latrine					Private pour flush latrine									
	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									
	Public/shared pour flush latrine					Public/shared pour flush latrine									
	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									
	Dry latrines	26.6	70.8	60.4		Dry latrines	13.9	66.4							
	Improved latrines	2.2	1.6	1.7		Improved latrines	4.0	12.8							
	Ventilated Improved Pit latrine				Vent. imp. pit toilet	Ventilated Improved Pit latrine									
Improved pit latrine	Pit latrine with slab/covered latrine	2.2	1.6	1.7		Pit latrine with slab/covered latrine									
Traditional pit latrine	Traditional latrine	10.7	24.9	21.6	Traditional pit toilet	Traditional latrine	9.9	53.6							
Open Pit	Pit latrine without slab/open pit	11.3	38.9	32.4		Pit latrine without slab/open pit									
	Hanging toilet/hanging latrine					Hanging toilet/hanging latrine									
Bucket	Bucket latrine	1.4	2.3	2.1		Bucket latrine									
Other	Other	1.0	3.1	2.6		Other									
	Private Latrines					Private Latrines									
	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									
	Public/shared Latrines					Public/shared Latrines									
	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									
	Composting toilets					Composting toilets									
	Composting toilet (private)					Composting toilet (private)									
	Composting toilet (shared)					Composting toilet (shared)									
	Other improved					Other improved									
	Other					Other									
	Other					Other									
No facilities	No facility, bush, field	4.5	23.2	16.8	No facility, bush	No facility, bush, field	3.9	20.6							
	Other unimproved					Other unimproved									
	Other					Other									
	Other					Other									
	DK/missing information				Other/missing	DK/missing information	0.0	1.1							
	Total	100.0	99.9	100.0		Total	99.9	100.0							
Calculations					Calculations										
	Traditional and open pit latrines considered improved based on WHS03	16.8	45.1			Traditional pit latrines considered improved based on WHS03	7.6	40.9							
Estimations					Estimations										
	SC, based on WHS03	2.9	0.2			SC, based on WHS03	3.4	0.5							
Access to improved sanitation : 88% 53%					Access to improved sanitation : 94% 66%										
Access to sewerage connections : 3% 0%					Access to sewerage connections : 3% 0%										
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	Shared improved facilities/all improved facilities	51%	7%	14%		Shared improved facilities/all improved facilities	29%	19%							
	Improved latrine / All latrines	8%	2%			Improved latrine / All latrines	29%	19%							
	Covered dry latrines / All dry latrines					Covered dry latrines / All dry latrines									
	VIP / All latrines	22%	34%	32%		VIP / All latrines	71%	81%							
	Traditional latrines / All latrines	72%	40%	46%		Traditional latrines / All latrines	100%	100%							
	Improved + traditional latrines / All latrines					Improved + traditional latrines / All latrines									
	Sewerage connection among flush/pour flush					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									
Comments					Comments										

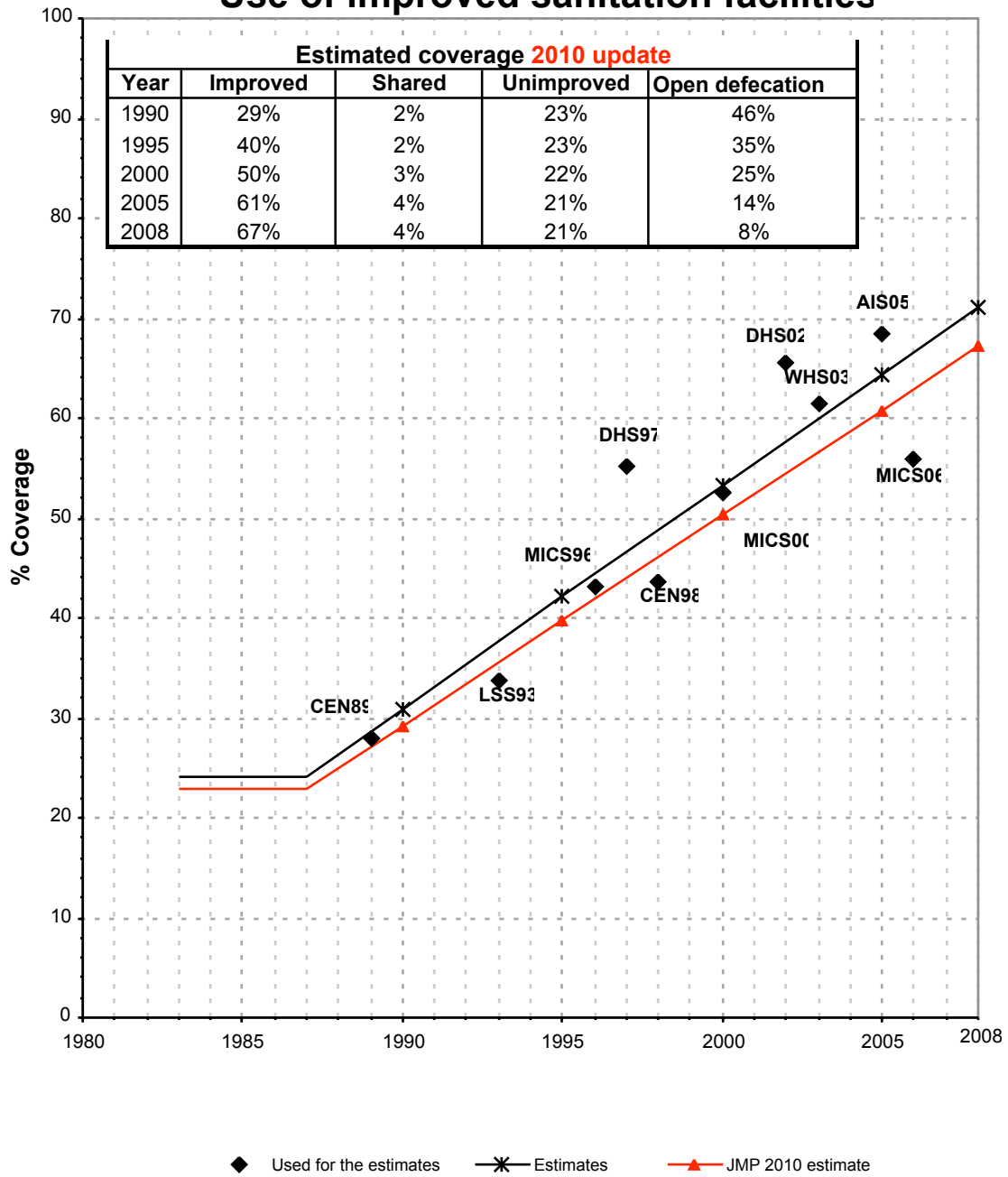
Vietnam			SANITATION															
			URBAN								RURAL							
			Sewer connection		Total		Open defecation		Shared		Sewer connection		Total		Open defecation		Shared	
Source	Code	Year	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used	Used	Not used
National Census	CEN89	1989	3.9		63.6		33.1				0.0		27.9		59.1			
Living Standards Survey	LSS93	1993	3.1		66.5		18.2				0.0		33.8		28.7			
Multiple Indicator Cluster Survey	MICS96	1996	3.3		68.8		21.4				0.0		43.1		34.1			
Demographic and Health Survey	DHS97	1997	4.7		86.2		8.3				0.0		55.2		26.2			
National Census	CEN98	1998	4.3		78.9						0.0		43.7					
Global Water Supply and Sanitation Assessment 2000.	JMP99	1999		87.5		93.8						33.0		48.0				
Multiple Indicator Cluster Survey	MICS00	2000	2.9		87.9		4.5				0.2		52.6		23.2			
Demographic and Health Survey	DHS02	2002	3.4		93.7		3.9				0.5		65.6		20.6			
World Health Survey	WHS03	2003	3.2		87.9		4.2				1.0		61.5		14.5			
Aids Indicator Survey	AIS05	2005	3.3		94.0		3.7				0.8		68.4		19.3			
Multiple Indicator Cluster Survey	MICS06	2006	2.7		89.5		3.4		5.4		0.9		55.8		15.3		5.6	
Living Standards Survey	LSS04	2004				83.3	6.3							41.6		16.5		

Viet Nam - urban - Use of improved sanitation facilities



Used for the estimates
 * Estimates
 JMP 2010 estimate

Viet Nam - rural - Use of improved sanitation facilities



Sanitation

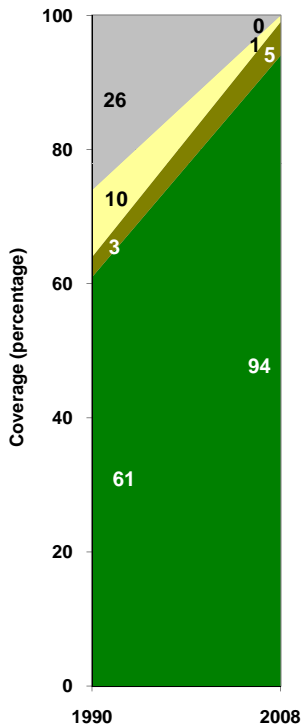
Vietnam	Sanitation coverage estimates					
	Urban (%)		Rural (%)		Total (%)	
	1990	2008	1990	2008	1990	2008
Improved facilities	61	94	29	67	35	75
Shared facilities	3	5	2	4	2	4
Unimproved facilities	10	1	23	21	21	15
Open defecation	26	0	46	8	42	6

Source: WHO/UNICEF JMP, 2010

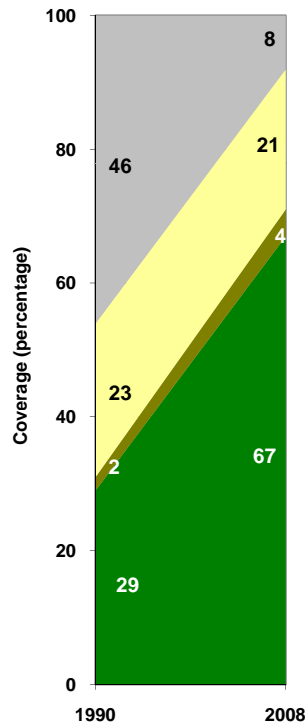
Vietnam	Urban		Rural		Total	
	1990	2008	1990	2008	1990	2008
Population (x1000)	13,418	24,234	52,829	62,862	66,247	87,096

Source: UN / Population Division, 2008

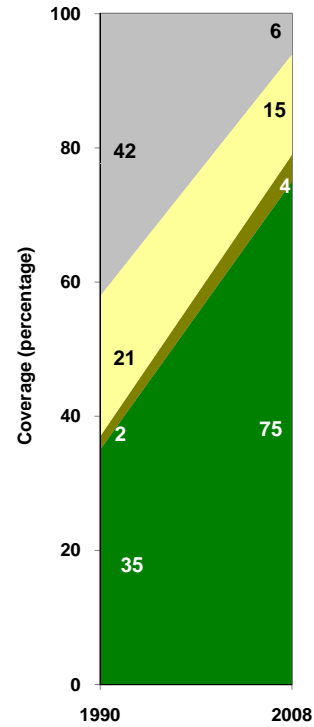
Urban sanitation trends



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