

Table 2.13 Distribution of Households by Availability and Type of Toilet Facility: Province, 1998 and 2008

	Percentage									
	1998			2008						
	Total Number of Households	Toilet Facility Availability		Total Number of Households	Toilet Facility Availability		Type of Toilet Facility			
		Households without Toilet	Households with Toilet		Households without Toilet	Households with Toilet (Total Toilet)	Connected to	Septic Tank	Pit Latrine	Other
Total	2,162,086	85.5	14.5	2,817,637	66.3	33.7	13.5	14.4	4.9	0.9
Urban	364,581	43.9	56.1	506,579	18.5	81.5	45.7	32.6	2.5	0.7
Rural	1,797,505	94.0	6.0	2,311,058	76.8	23.2	6.4	10.4	5.4	0.9
Province										
Banteay MeanChey	110,994	89.6	10.4	144,658	65.0	35.0	14.5	17.1	3.1	0.4
Battambang	146,661	80.1	19.9	209,702	56.0	44.0	14.3	21.4	7.1	1.2
Kampong Cham	311,151	90.4	9.6	368,114	74.4	25.6	4.9	14.2	5.8	0.7
Kampong Chhnang	81,201	94.0	6.0	100,801	81.2	18.8	5.9	9.2	2.7	1.0
Kampong Spueu	114,959	96.1	3.9	149,270	82.5	17.5	6.4	8.4	2.4	0.3
Kampong Thom	105,583	86.9	13.1	133,878	72.2	27.8	4.3	9.0	13.3	1.3
Kampot	104,498	92.0	8.0	129,646	73.8	26.2	6.5	9.9	9.3	0.6
Kandal	203,357	87.7	12.3	255,029	54.2	45.8	13.5	25.7	6.0	0.6
Koh Kong	21,401	83.8	16.2	24,166	61.4	38.6	13.1	18.5	3.0	4.1
Kratie	48,761	86.6	13.4	65,323	73.9	26.1	3.2	14.2	6.5	2.1
Mondul Kiri	5,615	88.6	11.4	12,270	83.4	16.6	3.5	7.9	4.8	0.4
Phnom Penh	167,758	25.1	74.9	250,597	9.3	90.7	66.4	23.0	0.9	0.4
Preah Vihear	21,007	95.1	4.9	33,115	89.2	10.8	2.6	4.7	2.7	0.8
Prey Veng	192,735	95.7	4.3	226,312	83.2	16.8	5.0	5.7	5.0	1.2
Pursat	67,022	91.5	8.5	83,412	81.6	18.4	5.0	8.6	3.0	1.7
Ratanak Kikri	16,646	90.8	9.2	27,485	78.9	21.1	4.5	8.1	5.4	3.1
Siem Reap	125,387	93.4	6.6	179,754	72.9	27.1	12.1	11.8	2.6	0.6
Preah Sihanouk	30,075	76.8	23.2	44,656	50.4	49.6	17.2	28.3	3.1	1.0
Stung Treng	14,126	86.2	13.8	20,922	67.0	33.0	11.1	16.7	3.8	1.5
Svay Rieng	97,796	91.8	8.2	114,758	78.7	21.3	6.1	8.3	6.0	0.9
Takeo	153,863	95.7	4.3	183,742	76.3	23.7	7.8	12.1	3.0	0.8
Otdar Meanchey	12,208	98.0	2.0	38,398	78.6	21.4	6.6	9.4	4.5	0.9
Kep	5,282	96.7	3.3	7,193	73.9	26.1	9.9	11.9	2.2	2.1
Pailin	4,000	80.3	19.8	14,436	60.7	39.3	10.4	17.8	9.6	1.5

Note: Excludes Institutional Homeless Boat and Transient Households.

2.7 HOUSEHOLDS ENJOYING BETTER AMENITIES

The distribution of households enjoying better amenities is an important poverty indicator. The availability of improved source of drinking water, access to adequate and improved sanitation and equipped with electric power has an impact on the general health of the population.

Improved source of drinking water consists of Piped Water, Tube/Pipe Well, Protected Dug Well and Rain water¹. Improved sanitation is substituted with a facility of toilet 'Within the Premises'. Electric Power includes (i) City power, (ii) City power and Generator, and (iii) Generator, according to the classification

¹ The word 'Safe' used in the report on GPCC 1998 is replaced by the word 'Improved' on GPCC 2008. The Census 2008 did not collect the information about whether 'Rain water' is protected or not. There must be a great difference between the quality of protected rain water and unprotected one. Strictly speaking, 'Improved water source' in this report is not equal to the original meaning of 'Improved water source'. In the next Census, it is desirable to collect the information that the 'Rain Water' is protected or unprotected.

applied in the analysis of GPCC 1998. The households using a battery have increased greatly after 2004 Inter-censal Population Survey as already mentioned above. Batteries supply electricity, though, most of batteries for domestic use will have much smaller capacity than city power or a generator. So in this report, 'electricity' does not include 'battery'. The households which can access to all of three amenities - 'improved water source', 'electricity' and 'toilet facility within premises' - are categorized into 'having Combined Amenities'. In Cambodia, the proportion of the households enjoying better amenities has increased greatly in a decade (Table 2.14). Water source is the most improved amenity in the component of 'Combined amenities' (improved 26 percentage points from 1998 to 2008).

2.7.1 Provincial Differences

In the provincial level, the greatest proportion of 'Improved Water Source' has come to 93.1 percent (Svay Rieng province) in 2008, it was 53.8 percent (Prey Veng province) in 1998, and the least value has come to 20.9 percent (Kep province) in 2008, from 1.5 percent (Mondul Kiri province) of 1998. The provincial discrepancy has widened from 50 percentage points to 70 percentage points. The difference between urban and rural has also expanded from 22 percentage points in 1998 to 35 percentage points in 2008.

The following improved amenity is 'Toilet facility'. Approximately 32.8 percent in 2008 and 14.5 percent in 1998 of households are enjoying improved sanitation. So, the improvement of 'Toilet Facility' is around 18 percentage points. In 1998, the least proportion of household having toilet facility was 2.0 percent and over a half of all provinces showed less than 10 percent. But in 2008, there are no provinces presenting less than 10 percent. Although the expansion of the provincial discrepancy is much less than observed in water source, it has widened from 73 percentage points in 1998 to 80 percentage points in 2008 and the discrepancy is greater than observed in water source.

The improvement of 'Electricity' is the least (9.6 percentage points) as a whole, and the provincial discrepancy is the greatest (85.9 percentage points) in 2008. In the whole country, about 24.7 percent of households in 2008 and 15.1 percent of 1998 were equipped with electric power. In urban areas, 85.2 percent of households are enjoying 'Electricity', while only 11.4 percent of rural households enjoy this amenity. In all provinces, the greatest value is 92.9 percent of Phnom Penh and the least value is only 7.0 percent of Prey Veng.

The increase of 'Combined Amenities' has been around 10 percentage points (from 8.0 percent in 1998 to 17.4 percent in 2008) and the proportion of 'Combined Amenities' does not reach 20 percent in 2008. Every component of 'Combined Amenities' has the great discrepancy in the provincial data, as a result, 'Combined Amenity' has a big discrepancy too. The provincial difference between the least value and median is only 4.5 percentage points, while the difference between the greatest value and median is 77.7 percentage points in

2008. The provinces they have big proportion in ‘Combined Amenities’ are concentrating on several specific provinces; those are Phnom Penh, Preah Sihanouk, Koh Kong and so on.

2.7.2 Difference by District

We have seen there are large regional differences in provincial data. Table 2.15 shows the differences of the districts in the provinces.

The greatest values of districts of each province show less discrepancy than provincial data in every amenity in Table 2.15, for example, the provincial gap in ‘Toilet Facility’ is 80.2 percentage points and the gap in the greatest value of districts is 70.0 percentage points and the gaps in ‘Electricity’ are 85.9 percentage points and 64.7 percentage points respectively. Even if the greatest values of districts are at the similar level, sometimes the provincial data shows big difference. For example, the greatest value of districts of ‘Improved Water Source’ in Siemreap and Svay Rieng is 92.4 and 97.0 percent and the corresponding provincial data is 52.5 and 93.1 percent respectively. There are big differences between the least values of districts (17.0 percent in Siemreap and 66.8 percent in Svay Rieng). It indicates that at least one of the districts, it may be central district in the province, shows much higher proportion than the other districts in the same province and the provincial differences have mainly been brought from those un-central districts.

2.7.3 Correlation between ‘Combined Amenities’ and its Components

Figure 2.13 shows the correlations between the proportions of ‘Combined Amenities’ and three components of it in 1998 and 2008 by the provincial level data. Each amenity has increased its proportion in a decade. The proportion of ‘Combined Amenities’ is greatly restricted by the proportion of ‘Electricity’. For example, the proportion of ‘Improved Water Source’ in Prey Veng is 85.8 percent and ‘Toilet facility’ is 15.6 percent but the proportion of ‘Combined Amenities’ is only 4.0 percent because the access to electricity of this province stays only 7.0 percent. On the other hand, the proportion of ‘Improved Water Source’ in Preah Vihear is 46.0 percent and ‘Toilet facility’ is 10.1 percent — both are lower than Prey Veng — but the access to electricity is 9.5 percent and the proportion of ‘Combined Amenities’ is 5.3 percent - greater than Prey Veng.

The condition of ‘Improved Water Source’ and ‘Toilet Facility’ are remarkably progressing in Cambodia. To enjoy better amenities in more Cambodian household, the progress of ‘Electricity’— especially ‘City Power’ —is vital.