

CHAPTER 3

SEX STRUCTURE

3.1 Measurement of Sex Composition

The basic information made available by a Census is the number of males and females in the population. In both the 1998 and 2008 Censuses of Cambodia, disaggregated information by males and females has been produced for almost all topics. This is a basic requirement in development planning. It also enables determination of gender impacts of development activities and helps respond effectively to gender issues.

The changes in socio-economic and cultural patterns as well as in the political situations of a society mostly result in changes in its sex composition. The main measure of sex composition in population studies is the sex ratio. It is defined as the number of males per 100 females in a given population. A sex ratio above 100 denotes an excess of males, a sex ratio below 100 denotes an excess females. In other words, the greater the number of males, the higher the sex ratio and the greater the number of females, the lower the sex ratio.

3.2 Trends in Sex Ratio

With the overall sex ratio of the total population of Cambodia at 94.7 according to the 2008 Census, there is an excess of females in the Cambodian population. In most of the countries of the world sex ratio ranges from 95 to 105. The sex ratios of the neighbouring countries of Lao PDR, Thailand and Vietnam are in the order of 98. The low sex ratio of Cambodia may be mainly attributed to war and political instability in the country during the second half of the 1970s.

At the time of the 1962 Census the sex ratio of Cambodia was 99.9. It dipped to 86 in the early 1980s owing to heavy male mortality during the Khmer Rouge period. Since then it has been improving gradually reaching 93.0 in 1998 and 94.7 in 2008.

3.3 Factors affecting Sex Ratio

The sex ratio is the result of the cumulative effect of the following factors:

- (i) Sex ratio at birth or sex ratio of new born babies
- (ii) Differential mortality of males and females
- (iii) Sex ratio of the net-migrants
- (iv) Sex differential in population enumeration

In the male and female births there is no equality all over the world. The number of male births always has an edge over the number of female births. Studies of births have revealed that the natural sex ratio of births is close to 110 or 110 male babies are born per 100 female babies. It varies within a range of 102 to 110 in most of the countries. The estimated Cambodian sex ratio at birth (105) falls within this range.

The period of war spanning three decades witnessed unprecedented male mortality in the country that resulted in differential mortality between males and females. Mortality among men is higher. For instance, the overall sex ratio among the deceased in households during the year preceding the census reference date of March 3, 2008 is 137 according to the 2008 Census Priority Table G1 (not published in this report). This indicates excess of male deaths in the households during that year.

In Cambodia, census enumerators recorded the sex of each individual correctly as was evident in field supervisions and evaluations. Hence the reason mentioned at (iv) above does not apply. As the international migration in Cambodia is not significant it could not have affected the overall sex structure at the national level either.

3.4 Differential Sex Ratio

The overall sex ratio of Cambodia represents the numbers of males per 100 females at the national level. However the sex ratio varies within the country according to certain characteristics the most important of which are discussed below:

3.4.1 Religious Communities

In 2008, Buddhists who predominate in Cambodia have almost the same sex ratio as the overall sex ratio (96.7). Among Muslims the sex ratio is not very different (94.9). Among Christians who form comparatively a very small number, it is much higher (104.4). The higher sex ratio of Christians may be due to higher inflow of male migrants or visitors.

3.4.2 Linguistic Groups

The sex ratio of the population whose mother tongue is Khmer language, works out to 94.6 in 2008. This is almost the same as the national sex ratio (94.7) in 2008. Among the minority language speakers, it is marginally higher (94.9). These two language groups account for 99.2 percent of the country's population. Among the remaining population, the sex ratio of speakers of Vietnamese, Laos and Thai are 103, 99 and 178 respectively. Among each of the other language groups like English, French and other Asian languages the sex ratio is very much higher than 100 indicating the predominance of males among persons from abroad.

3.4.3 Different Age Groups

Table 3.1 shows the sex ratio by five year age groups according to the 1998 and 2008 Censuses. Figure 3.1 depicts the trends in sex ratio by single year of age in 1998 and 2008. Figures 3.2 and 3.3 graphically represent the sex ratio by five-year age groups for Cambodia as per the 1998 and 2008 Censuses respectively.

The higher number of males at birth decreases with age mainly due to higher number of male deaths. It may be noted that sex ratios among children in the age groups 0-4, 5-9 and 10-14 are not very different in 1998 and 2008. They are also much higher in general.

In the age group 15-19 in 1998 and in the corresponding cohort of 25-29 in 2008 the sex ratio is close to 100. If only the broad age group 15-29 of the 2008 Census is considered the number of males and females are almost equal (nearly 2.11 million) with the sex ratio of 99.9.

In the middle and the older ages the number of females very much exceeds the number of males due to higher male mortality. Lower sex ratios from the age group 40-44 onwards in 1998 (50-54 onwards in 2008) are the results of higher mortality among males and large scale exodus of adult males from Cambodia during the Khmer Rouge years.

Table 3.1. Sex Ratio by Five-Year Age Group: Cambodia 1998 and 2008

Age Group	Sex Ratio according to	
	1998 Census	2008 Census
(1)	(2)	(3)
Total	93.00	94.72
0 – 4	103.86	105.00
5 – 9	104.04	104.73
10 – 14	105.46	105.96
15 – 19	97.66	106.31
20 – 24	90.43	95.64
25 – 29	92.50	96.50
30 – 34	89.70	93.54
35 – 39	87.80	93.51
40 – 44	67.17	87.56
45 – 49	72.67	84.31
50 – 54	73.54	66.45
55 – 59	75.09	70.95
60 – 64	73.15	72.56
65 – 69	73.40	71.66
70 – 74	71.46	67.30
75 +	67.64	63.23

Figure 3.1. Sex Ratio for Age in Single Years, Cambodia 1998 and 2008

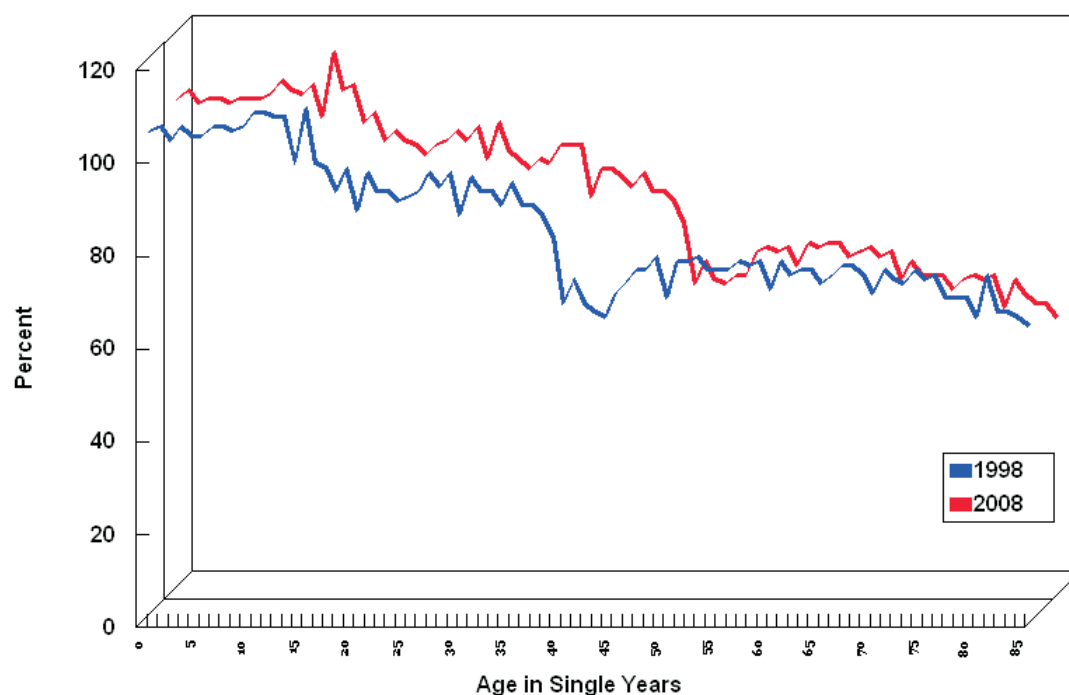


Figure 3.2. Sex Ratio by Five-year Age Group: Cambodia (Total), 1998 and 2008

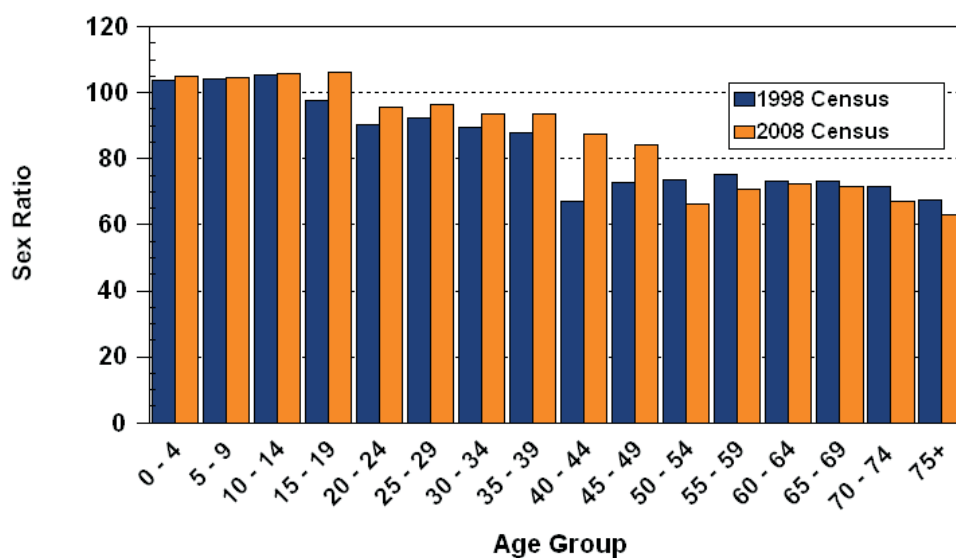


Figure 3.3. Sex Ratio by Five-Year Age Group: Cambodia (Urban) 1998 and 2008

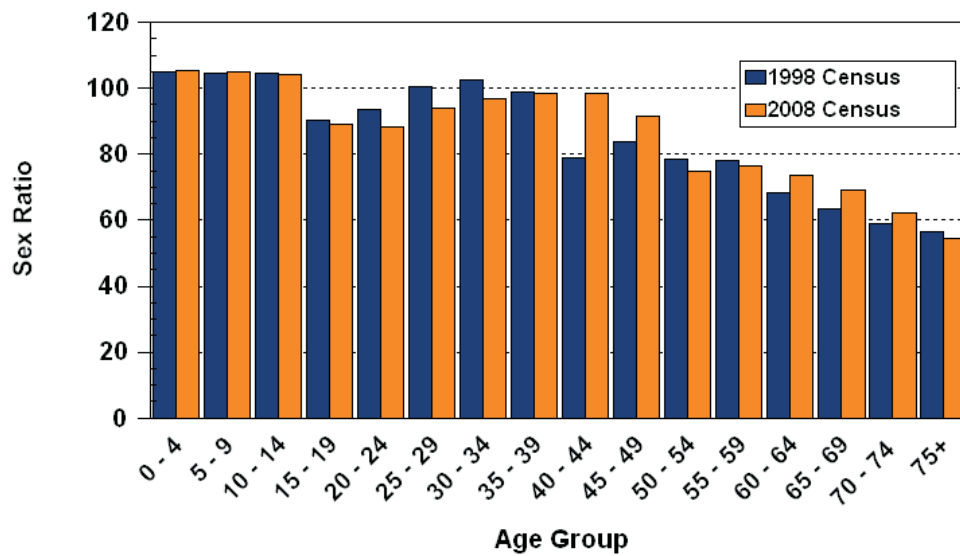


Figure 3.4. Sex Ratio by Five-Year Age Group, Cambodia (Rural), 1998 and 2008

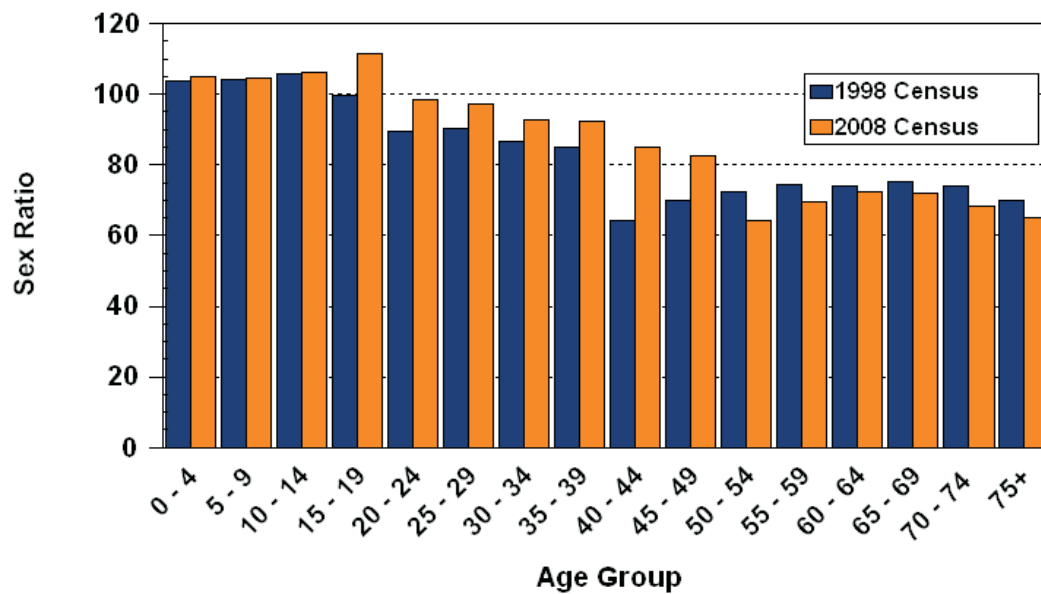


Table3.2. Sex Ratio by Broad Age Group: Cambodia and Provinces, 1998 and 2008

Cambodia/Province	Sex Ratio by Age group					
	0 – 14		15 -64		65+	
	1998	2008	1998	2008	1998	2008
	Total					
Cambodia	104.5	105.3	86.2	91.5	71.1	67.5
Banteay Meanchey	104.9	104.2	91.1	93.4	67.9	66.9
Battambang	104.9	105.5	91.1	95.3	66.9	71.0
Kampong Cham	105.1	105.5	85.8	91.7	77.8	72.6
Kampong Chhnang	103.2	103.7	81.7	89.1	63.8	60.6
Kampong Speu	103.6	104.5	85.0	91.4	67.0	64.4
Kampong Thom	103.9	105.2	84.2	91.3	76.0	69.5
Kampot	104.8	105.4	84.0	90.8	63.4	63.0
Kandal	105.0	106.4	84.9	90.6	73.6	67.8
Koh Kong	102.3	104.7	108.9	102.4	67.5	66.8
Kratie	104.8	103.8	94.6	98.8	79.4	74.0
Mondul Kiri	103.7	104.1	100.8	107.0	107.7	92.6
Phnom Penh	104.4	103.4	89.4	86.7	58.2	62.0
Preah Vihear	103.9	104.0	96.5	98.0	75.3	72.9
Prey Veng	104.1	106.1	78.8	86.0	80.3	70.0
Pursat	102.9	104.7	84.9	91.3	61.1	61.2
Ratanak Kiri	103.7	105.1	91.2	101.0	102.6	93.2
Siem Reap	104.3	106.1	86.6	92.8	67.8	64.5
Preah Sihanouk	104.7	106.1	95.4	99.2	60.0	64.4
Stung Treng	105.0	101.4	93.9	99.3	75.6	78.3
Svay Rieng	104.1	104.9	78.6	88.4	71.0	63.2
Takeo	105.2	106.8	82.3	91.0	70.8	65.3
Otdar Meanchey	104.2	106.5	102.1	100.0	61.1	67.3
Kep	107.4	107.5	89.5	95.3	54.9	57.9
Pailin	101.6	107.0	131.8	106.9	79.3	82.4
	Urban					
Cambodia	104.6	104.7	91.4	90.1	60.0	62.1
Banteay Meanchey	105.0	105.2	92.9	96.2	65.1	65.2
Battambang	104.8	105.4	88.7	91.1	60.8	64.3
Kampong Cham	104.7	105.4	92.4	93.3	71.8	67.0
Kampong Chhnang	104.3	105.7	88.4	91.2	60.9	54.0
Kampong Speu	105.2	102.2	91.7	93.7	55.0	56.0
Kampong Thom	106.1	104.1	90.6	90.2	64.8	65.4
Kampot	105.5	109.1	87.9	93.6	52.9	56.9
Kandal	105.3	107.7	90.6	85.4	62.8	62.3
Koh Kong	103.3	103.6	105.1	99.8	46.1	58.2
Kratie	105.2	104.0	99.0	99.3	69.2	66.0
Mondul Kiri	102.0	108.7	107.2	117.9	47.1	94.7
Phnom Penh	104.4	103.0	89.6	86.5	58.0	62.0
Preah Vihear	99.7	110.2	105.2	107.1	93.5	65.7
Prey Veng	106.4	106.8	91.7	93.7	68.6	60.9
Pursat	101.5	104.9	84.4	85.1	45.0	51.0
Ratanak Kiri	104.4	105.1	102.0	114.1	72.5	79.8

Siem Reap	103.8	109.1	92.6	98.1	55.4	57.1
Preah Sihanouk	105.4	104.8	97.1	96.8	50.8	64.7
Stung Treng	108.9	98.5	101.9	106.1	72.5	74.4

Table 3.2 Sex Ratio by Broad Age Group: Cambodia and Provinces, 1998 and 2008
(Continued)

Cambodia/Province	Sex Ratio by Age group					
	0 – 14		15 -64		65+	
	1998	2008	1998	2008	1998	2008
Svay Rieng	103.6	101.8	90.9	94.2	60.0	56.3
Takeo	105.6	104.5	100.3	96.8	54.5	54.7
Otdar Meanchey	103.5	101.9	137.2	105.6	50.7	57.3
Kep	112.2	107.6	100.8	101.9	57.1	82.0
Pailin	100.9	103.8	164.6	106.3	102.3	71.5
	Rural					
Cambodia	104.4	105.4	84.9	91.9	73.3	68.6
Banteay Meanchey	104.9	103.9	90.4	92.3	68.6	67.3
Battambang	105.0	105.5	91.8	96.3	69.0	72.9
Kampong Cham	105.2	105.5	85.3	91.5	78.2	73.0
Kampong Chhnang	103.1	103.5	80.9	88.9	64.2	61.3
Kampong Speu	103.4	104.7	84.3	91.2	68.1	65.1
Kampong Thom	103.8	105.2	83.8	91.4	76.7	69.7
Kampot	104.8	105.2	83.7	90.5	64.4	63.5
Kandal	104.9	106.2	84.0	91.7	75.0	68.6
Koh Kong	101.8	105.2	111.1	103.6	79.5	70.4
Kratie	104.7	103.7	93.8	98.8	81.0	75.1
Mondul Kiri	103.8	103.8	100.2	106.0	110.8	92.5
Phnom Penh	104.9	108.2	86.3	89.4	60.9	62.5
Preah Vihear	104.2	103.7	95.9	97.3	74.4	73.4
Prey Veng	104.0	106.0	78.3	85.7	80.7	70.3
Pursat	103.0	104.7	85.0	91.8	62.8	62.1
Ratanak Kiri	103.6	105.1	89.8	98.8	104.7	94.6
Siem Reap	104.4	105.6	85.5	91.4	70.5	66.2
Preah Sihanouk	104.3	106.9	94.2	101.2	64.1	64.3
Stung Treng	104.2	101.8	92.0	97.9	76.0	78.8
Svay Rieng	104.1	104.9	78.2	88.2	71.4	63.4
Takeo	105.2	106.8	82.0	90.9	71.0	65.4
Otdar Meanchey	104.3	107.0	94.9	99.4	63.0	68.6
Kep	106.7	107.5	87.6	94.3	54.6	54.9
Pailin	101.9	107.9	112.9	107.0	70.1	85.7

Table 3.2 shows the sex ratios by broad age group for Cambodia and provinces (Total, Urban and Rural). One general feature noticed in most of the provinces is that the sex ratio among children (0-14) is high and they are not very different in 2008 compared to 1998. Unlike the sex ratio of the total population, sex ratio among children is not influenced much by sex selective spatial mobility of population. Migration in these age groups normally occurs with family. The main determinants of sex composition in these age groups are sex ratio at birth and sex differentials of mortality rates among children. Sex ratio among children may therefore be considered as a better indicator of gender relations in the population.

In the provinces of Koh Kong, Mondulkiri, Ratanak Kiri, Otdar Meanchey and Pailin, males predominate in the working ages. This may be due to influx of male migrant workers. Phnom Penh, Prey Veng and Svay Rieng have recorded relatively low sex ratios in the age group 15-64 either due to inflow of women migrant workers from other provinces or out migration of male workers. Among the elderly population, the sex ratio is the lowest of the three age groups.

3.4.4 Internal Migrants

Among the internal migrants as a whole in Cambodia (including inter-province and intra-province migrants), the sex ratio is different from that among inter-province migrants. According to Priority Table D1 of the migration series (not published in this report), among the internal migrants of Cambodia the sex ratio is 101.80 indicating overall male-selective migration. However the sex ratio is 97.7 among the inter-province migrants showing that more females move from one province to another.

3.4.5 Urban and Rural Residence

The urban-rural pattern of sex ratio in Cambodia has changed during 1998-2008 (Table 3.5). In 1998 the urban sex ratio (94.9) was higher than that of rural areas (92.6) as is generally the case. But in 2008 this trend has reversed with the rural Cambodia registering a sex ratio (95.3) higher than the urban sex ratio (92.4). An analysis of the cause for this change has revealed that this has happened as urban Phnom Penh and urban Kandal have registered much lower sex ratios in 2008 than in 1998. This decline is mainly attributable to the fact that during 2003-2008 a large number of young women workers moved into urban Phnom Penh and neighbouring urban parts of Kandal province to work in garment factories. The decline in the sex ratios of urban Phnom Penh and urban Kandal has lowered the sex ratio of urban Cambodia as a whole. This will be clear from Table 3.3.

Table 3.3. Sex Ratio: Urban Areas of Cambodia, Phnom Penh Municipality and Kandal Province, 2008

Area	Males	Females	Sex Ratio
(1)	(2)	(3)	(4)
Cambodia urban	1,255,570	1,358,457	92.43
Phnom Penh urban	584,663	658,329	88.81
Kandal Province urban	92,569	103,329	89.59
Cambodia urban minus (Urban Phnom Penh plus urban Kandal)	578,338	596,799	96.90

Hence the sex ratio of urban Cambodia excluding urban Phnom Penh and urban Kandal exceeds the sex ratio of rural Cambodia. The sex ratios of the urban and rural areas of the provinces are presented in Figures 3.6 and 3.7 respectively.

Figure3.5. Sex Ratio by Province, Cambodia (Total), 1998 and 2008

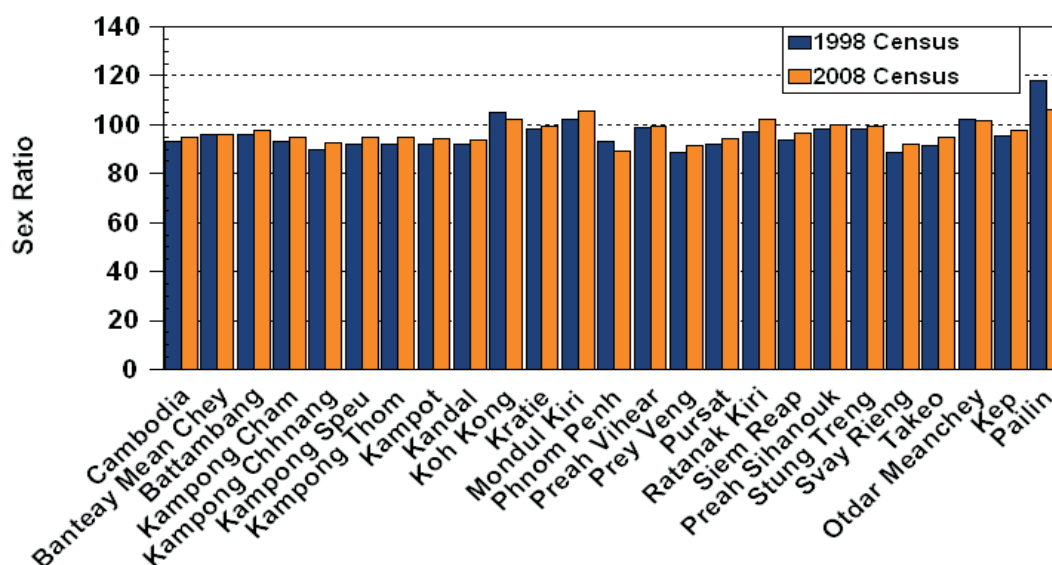


Figure 3.6.Sex Ratio by Province, Cambodia (Urban), 1998 and 2008

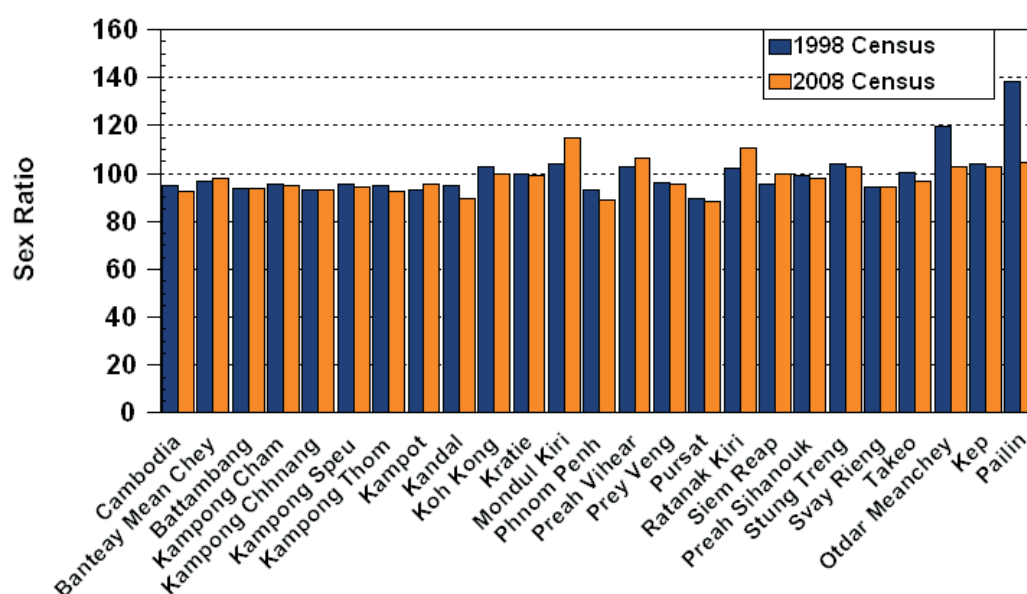
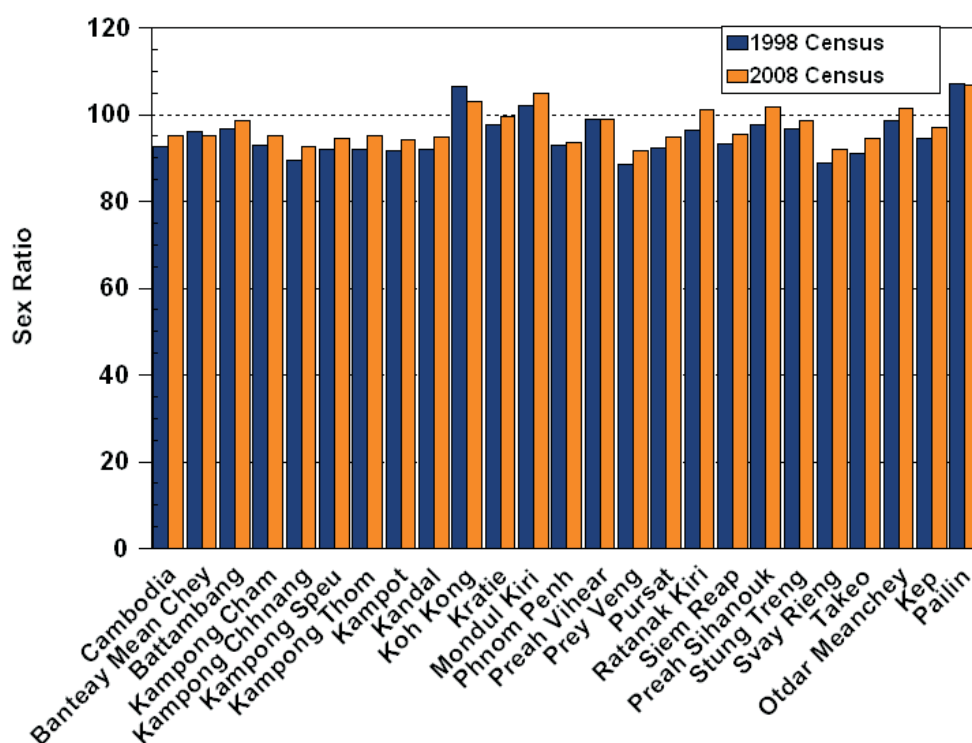


Figure3.7. Sex Ratio by Province, Cambodia (Rural), 1998 and 2008



3.4.6 Natural Regions

Table 3.4. Sex Ratio: Natural Regions, Cambodia 1998 and 2008

Name of Natural Region	Sex Ratio in		Change
	1998	2008	
(1)	(2)	(3)	(4)
Plain Region (Kampong Cham, Kandal, Phnom Penh, Prey Veng, Svay Rieng, Takeo)	91.7	92.8	1.17
Tonle Sap Region (Banteay Meanchey, Battambang, Kampong Chhnang, Kampong Thom, Pursat, Siem Reap, Otdar Meanchey, Pailin)	94.0	96.2	2.12
Coastal Region (Kampot, Koh Kong, Preah Sihanouk, Kep)	95.1	96.6	1.52
Plateau and Mountain region (Kampong Speu, Kratie, Mondul Kiri, Preah Vihear, Ratanak Kiri, Stung Treng)	95.2	97.6	2.44

Table 3.4 presents the sex ratio of each Natural Region of the country and the change in it during 1998-2008. It is observed that both in 1998 and 2008 the Plateau and Mountain, the Coastal, the Tonle Sap and the Plain regions have maintained the ranks of 1 to 4 respectively in this regard. The Plateau and Mountain Region has recorded the highest increase and the Plain Region the lowest increase during the decade.