Photo: by Christine Schmutzler

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DEMOGRAPHY

DEMOGRAPHY

Demographic data such as population size, distribution and dynamic is essential for a country to assess the needs of the population in relation to education and health facilities, physical infrastructure, employment and overall economic development. The Royal Government Cambodia (RGC), together with Development Partners, has put considerable effort into improving capacity to collect and analyze reliable demographic data to improve the various socio-economic and environmental development plans in the Kingdom.

Beginning in 1998, Cambodia committed to conduct a General Population Census once every 10 years, in accordance with UN recommendations and the country's Statistical Law. The 2008 General Population Census is thus the second in this series, which allows reliable data to be compared and therefore strengthens the foundation for solid demographic analyses (NIS 2009).

This chapter is based on the demographic dataset of both of the 1998 and 2008 censuses. More updated demographic data does exist (such as the commune database), but the methodology to build these datasets diverges from that of the census, making comparison difficult.

A summary on population size and changes in population is followed by age structure in relation to fertility and mortality, given that age and population projections are dependent on these variables.

CHANGES AND SIZE OF POPULATION

According to the 1962 Census, which was the first official census conducted after the country attained independence from the French, the population of Cambodia was 5.7 million. However, Cambodia's demography had changed completely after the census had been conducted, due to war and unrest. There were no further censuses until 1998 and no systematic national surveys until 1993-94. According to the 1998 Census, the population of Cambodia was 11,437,656. The 2004 inter-censal population survey estimated the population in 2004 at 12,824,000. By the time of the 2008 demographic Census the Cambodian population had reached 13,395,682 comprising 48.6% males and 51.4 % females, representing an increase of about 1.96 million in the decade 1998-2008 (NIS 2009).

Between 1998 and 2008, the annual (exponential) growth rate of the population was 1.54%, a higher rate than that of Southeast Asia as a whole. Cambodia's population has increased at a much higher rate than that of Thailand (0.4%/year), marginally higher that the growth rate of Vietnam (1.3%/year) and marginally lower than the growth rate of Lao PDR (1.7%/year) (NIS 2009).
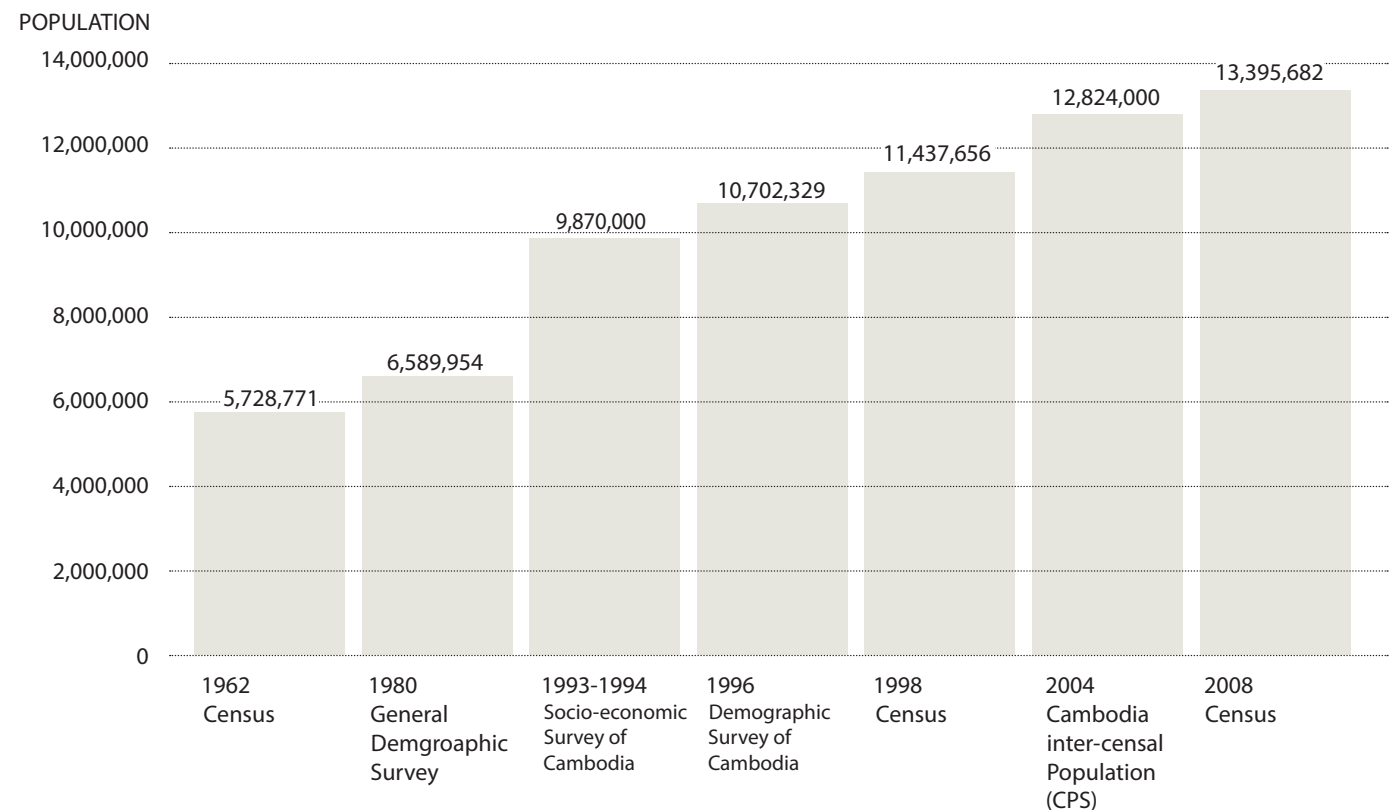
Population Density and Distribution

Population density is one of the key indices of population concentration. It refers to the number of people living per square kilometer in a well-defined given area. The population density of Cambodia increased from 64 person per square kilometer in 1998 to 75 persons in 2008.

Historically, the Cambodian population has been concentrated in low-lands areas around the Tonle Sap Great Lake (Battambang, Siem Reap, Banteay Meanchey, Pursat, Kampong Thom and Kampong Chhnang) and the Mekong Plain (Phnom Penh, Kampong Cham, Kandal, Prey Veng, Svay Rieng and Takeo). These two regions are still the most densely populated regions in the country.

In the central provinces of these two regions, the annual growth rate of the population between 1998 -2008 was low – generally lower than the national average 1.54%/year. Notwithstanding, peripheral provinces such as Pailin and Oddar Meanchey have had a higher demographic growth rate for the same period of time.

The plateau and mountainous region (Ratanak Kiri, Mondul Kiri, Stung Treng, Koh Kong) is far more sparsely populated. However, these provinces actually saw high demographic growth rates between 1998 and 2008, as indicated the table. As in the case of Pailin and Oddar Meanchey, these important demographic growth rates can undoubtedly be attributed to in-migration.

POPULATION

Census/Survey	Population
1962 Census	5,728,771
1980 General Demgroaphic Survey	6,589,954
1993-1994 Socio-economic Survey of Cambodia	9,870,000
1996 Demographic Survey of Cambodia	10,702,329
1998 Census	11,437,656
2004 Cambodia inter-censal Population (CPS)	12,824,000
2008 Census	13,395,682

Evolution of Cambodian Population, 1962-2008

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Population Density

THAILAND

ODDAR MEANCHEY
Samraong

BANTEAY MEANCHEY
Poipet
Serey Saophaon

SIEM REAP
Siem Reap

PAILIN
Pailin

BATTAMBANG
Battambang

PURSAT
Pursat

PREAH VIHEAR
Preah Vihear

STUNG TRENG
Stung Treng

KAMPONG THOM
Stueng Saen

RATANAK KIRI
Ban Lung

KRATIE
Kratie

MONDUL KIRI
Sen Monourom

KAMPONG CHHNANG
Kampong Chhnang

KAMPONG CHAM
Kampong Cham

KOH KONG
Khemara Phoumin

KAMPONG SPEU

PHNOM PENH
Phnom Penh
Ta Khmau
Chbar Mon

KANDAL

PREY VENG
Prey Veng

SVAY RIENG
Svay Rieng
Bavet

TAKEO
Doun Key

PREAH SIHANOUK
Preah Sihanouk

KAMPOT
Kampot

KEP
Kep

LAOS

VIETNAM

GULF OF THAILAND

Tonle Sap Lake
Tonle Sap River
Mekong River

LEGEND

- ········· International boundary
- ───── Province boundary
- ─[7]─ National road
- ───── Secondary road
- ───── Other road
- - - - - Railway
- �ю Water body

Population density 2010 (people per km²)

- > 10000
- 5000 - 10000
- 1000 - 5000
- 500 - 1000
- 250 - 500
- 100 - 250
- < 100

Data Source:
2008 Demographic Census dataset
http://arunatechnology.com
(Aruna Technology Ltd.)
Department of Geography (DoG), 2005

0   25   50   75 km
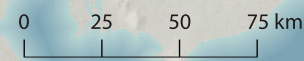
| | | Population (people count) | | | | | | Population Density (people/km²) | | Annual Growth Rate (1998-2008) %/year |
| | | 1998 | | | 2008 | | | | | |
		Total	Rural	Urban	Total	Rural	Urban	1998	2008	
Cambodia		11,437,656	81.7%	18.3%	13,395,682	80.5%	19.5%	64	75	1.54
Plain Region	Kampong Cham	1,608,914	92.7%	7.3%	1,679,992	93.0%	7.0%	164	171	0.43
	Kandal	1,075,125	86.4%	13.6%	1,265,280	84.5%	15.5%	302	355	1.62
	Phnom Penh	999,804	4.9%	95.1%	1,327,615	6.4%	93.6%	3,401	4,516	2.83
	Prey Veng	946,042	96.3%	3.7%	947,372	96.5%	3.5%	194	194	0.01
	Svay Rieng	478,252	96.4%	3.6%	482,788	96.5%	3.5%	161	163	0.09
	Takeo	790,168	98.3%	1.7%	844,906	98.3%	1.7%	222	237	0.66
Tonle Sap Region	Banteay Meanchey	577,772	76.6%	23.4%	677,872	73.2%	26.8%	87	101	1.56
	Battambang	793,129	77.7%	22.3%	1,025,174	82.4%	17.6%	68	88	2.28
	Kampong Chhnang	417,693	90.0%	10.0%	472,341	90.9%	9.1%	76	86	1.22
	Kampong Thom	569,060	94.5%	5.5%	631,409	95.0%	5.0%	41	46	1.03
	Pursat	360,445	92.5%	7.5%	397,161	93.5%	6.5%	28	31	0.69
	Siem Reap	696,164	85.2%	14.8%	896,443	80.6%	19.4%	68	87	2.52
	Oddar Meanchey	68,279	82.3%	17.7%	185,819	89.9%	10.1%	11	30	8.64
	Pailin	22,906	62.8%	37.2%	70,486	77.8%	22.2%	29	88	11.24
Coastal Region	Kampot	528,405	91.4%	8.6%	585,850	91.8%	8.2%	108	120	1.03
	Koh Kong	116,061	64.0%	36.0%	117,481	69.3%	30.7%	12	12	0.12
	Preah Sihanouk	171,735	61.1%	38.9%	221,396	59.6%	40.4%	89	114	2.54
	Kep	28,660	86.0%	14.0%	35,753	86.9%	13.1%	85	106	2.21
Mountain Region	Kampong Speu	598,882	92.0%	8.0%	716,944	92.4%	7.6%	85	102	1.79
	Kratie	263,175	86.2%	13.8%	319,217	88.7%	11.3%	24	29	1.93
	Mondul Kiri	32,407	91.6%	8.4%	61,107	92.0%	8.0%	2	4	6.34
	Preah Vihear	119,261	93.4%	6.6%	171,139	93.8%	6.2%	9	12	3.61
	Ratanak Kiri	94,243	88.1%	11.9%	150,466	87.2%	12.8%	9	14	4.67
	Stung Treng	81,074	81.3%	18.7%	111,671	84.8%	15.2%	7	10	3.2

Main demographic indicators by Province (1998-2008)
Sources: Demographic census report (NIS 2009)

Urban areas are designated according to criteria set by the National Institute of Statistics and have the following characteristics: (i) population density exceeding 200 per km², (ii) percentage of the male employment in agriculture below 50% and (iii) total population of the commune exceeding 2,000 (NIS 2012).

According to this definition, the urban population of Cambodia, which stood at about 2.1 million in 1998, had increased to about 2.6 million in 2008. Correspondingly, the rural population of the country rose from about 9.34 million counted in 1998 to about 10.78 million in 2008 (NIS 2009). The urbanization, measured as percentage of urban population to total population, has increased from 18.3% in 1998 to 19.5% in 2008, representing a rather small increase of 1.3%.

Households

According to the CIPS 2004, 'household' refers to a group of people who commonly live together and take meals from a common kitchen. They might be related by blood or are not blood related or mixed. Household sizes vary and start from about 5 members and upwards. The nuclear and immediate family members are wife, husband and unmarried children, who are usually living together. They comprise the major unit of productivity and consumption, organize economic cooperation and labor, contribute to the overall income and also share resources and aid in case of emergency (SCW 2006).

Other Populations

'Other populations' refers to boat, homeless or transient populations in the Kingdom of Cambodia. For census updates it is difficult to enumerate them as they not always have a fixed position. Only those who are living at a fixed point are registered with a local authority and are included in the regular household population. The boat population refers to persons living in boats or conducting business from a boat that is not registered with any authority. The homeless population refers to those who do not live in a dwelling but reside on pavements, in parks, open spaces outside pagodas or markets. Most of homeless people live in areas with high urbanization rates because of industrial growth and search for employment to earn income. The transient population includes people who stay at airports, railway stations, bus stands, harbors, ferries and in carts (as travelers) or stay on boats within Cambodia's waterways. (SCW, 2006)

AGE STRUCTURE (1998-2008)

The age structure by gender of the population affects the demographic, social, economic and political structures. In consequence, shifts in the population age structure are likely to have far reaching consequences on the overall development of the country.

The age structure of a population is determined by three factors that affect the growth rate of the population – fertility, mortality and migration. The total fertility rate gives the total number of children that a woman would bear during her lifetime. In Cambodia this rate is in decline due to improved education, and in 2008 was estimated at 3.1 (NIS, 2010a). Both the infant and maternal mortality are also on the decline. In 2008, they were estimated at 60 per 1,000 live births and 461 per 100,000 live births respectively. Life expectancy at birth at the national level is increasing and is estimated at 60.5 years for males, 64.3 years for females, with an overall average of 62.4 (NIS 2010a; Derveeuw, 2013).

Changes in socio-economic and cultural patterns, as well as in the political situations, can influence the sex structure of a population. An important indicator to measure this change is the sex ratio, which gives the number of males per 100 females. At the time of the 1962 census, the sex ratio of Cambodia was 99.9 (NIS, 2010b). It dipped to 86 in the early 1980s, owing to heavy male mortality during the seventies. Since the nineties, it has been gradually improving and reached 93.0 in 1998 and 94.7 in 2008. This low sex ratio is still mainly attributed to war and political unrest in the past, as the period of war spanning three decades saw unprecedented male mortality in the country (NIS, 2010b).

A following comparison of the population pyramid for 1998 and 2008 shows a fairly consistent pattern in the age distribution. The number of children in the age group 0-4 and 5-9 have decreased. The age group 15-19 onwards has shown increases except the age group 30-34. The highest increase is recorded for the age group 20-24.

The differences observed in the proportions of children and aged persons to the people of working age are accounted for by the index called "age dependency". It is defined as the ratio of the combined child population (0-14) and aged population (65+) to the number of person in the intermediate age. During the decade from 1998 to 2008, Cambodia has shown a declining trend in the age dependency ratio from 86.15 to 61.19, indicating a reduction in the dependency burden. Given that percentage of working age population has increased from 53.7% in 1998 to 62% in 2008, the challenges of job creation is becoming more acute in the country (NIS, 2010b).

AGE GROUP   **POPULATION PYRAMID 1998**

AGE GROUP   **POPULATION PYRAMID 2008**   ■ Female   ■ Male
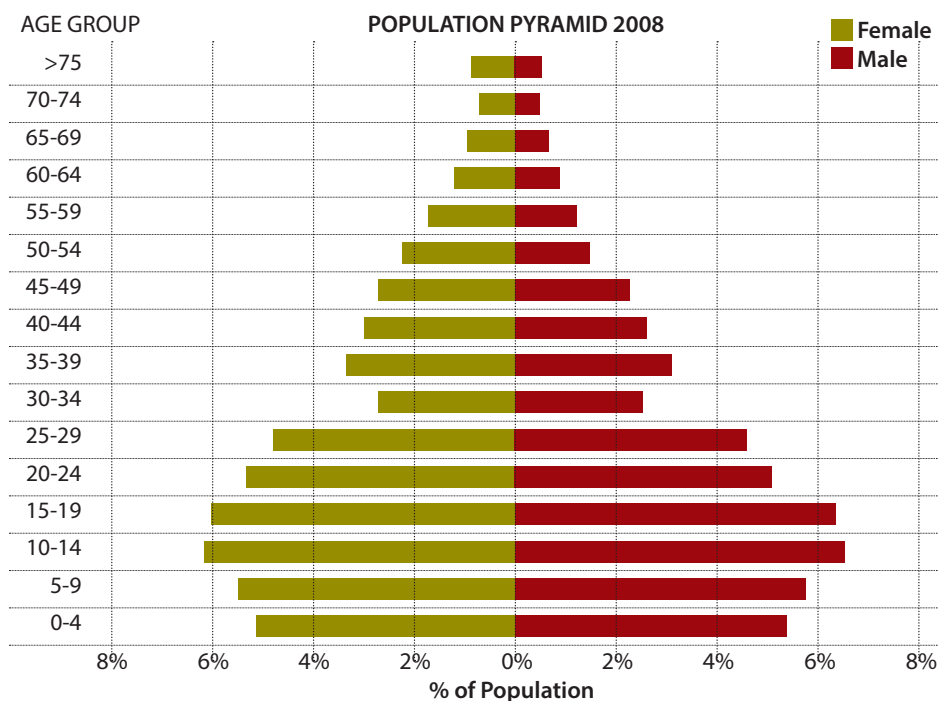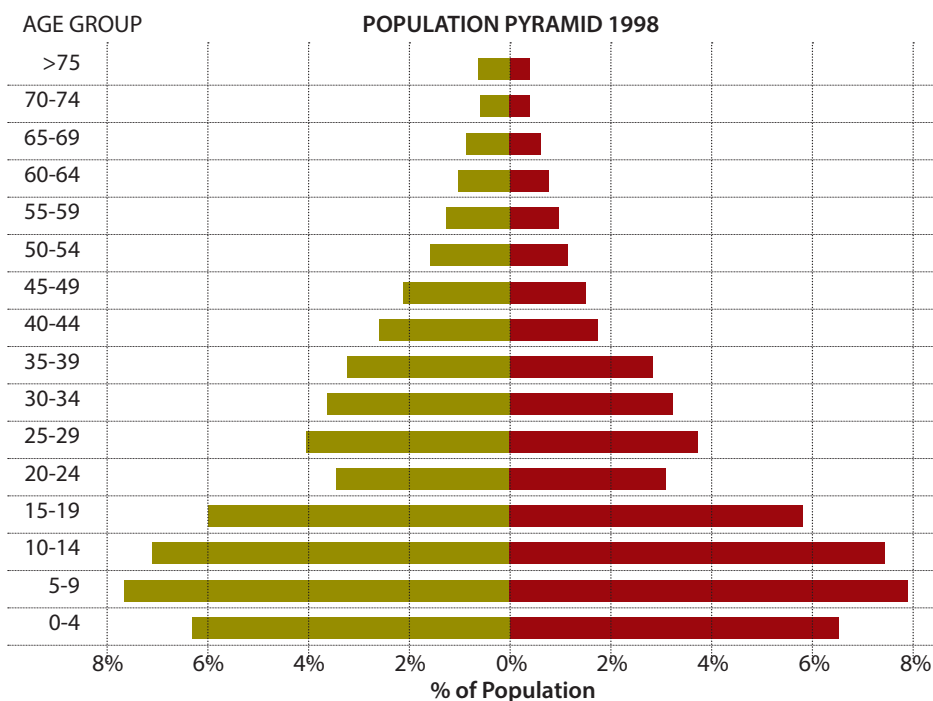
% of Population

Source : Demographic census dataset, 2008 (NIS, 2010b)

POPULATION PROJECTION

The projection of the population into the future is a prospective exercise, which does not help predict the future but construct it (NIS, 2010c). Population projection helps determine whether the number of schools, classrooms and teachers will have to increase by a given percentage to reach full education coverage in the future, whether the economy will have to generate jobs at a certain rate to reach low levels of unemployment, and whether a given quantity of new residential dwelling will have to be constructed to avoid housing shortages.

Based on elaborated calculations, demographers have projected the Cambodian population until 2030. By that time, the population is expected to be 18,390,683 people (NIS, 2010c). While the annual demographic growth rate between 1998 and 2008 was 1.54%, the projected annual growth rates for the period 2008-2030 is 1.29%/year. Viewed by province, the rate presents significant differences. Significantly, the population of Kampong Cham is expected to decrease by 2030 (-0.24%/year). The population of the others 23 provinces will continue to grow. However, in most provinces, the average rate of demographic growth will be lower than that experienced between 1998 and 2008. The provinces where the population will grow faster are Banteay Meanchey, Kep, Koh Kong, Svay Rieng and Pursat.

The projections also show that the population living in rural areas will remain predominant in the national population. Population projections that differentiate between urban and rural growth show that change in the proportion of the urban population is rather limited – at 20.08% in 2013, it is projected to reach only 21.97% in 2030, and 27.49% in 2060 (Pardee Center 2013). This strongly suggests that a very large part of the population will continue to live in rural areas. This is of crucial importance as it means that rural economy will continue to be of major importance in supporting national development.
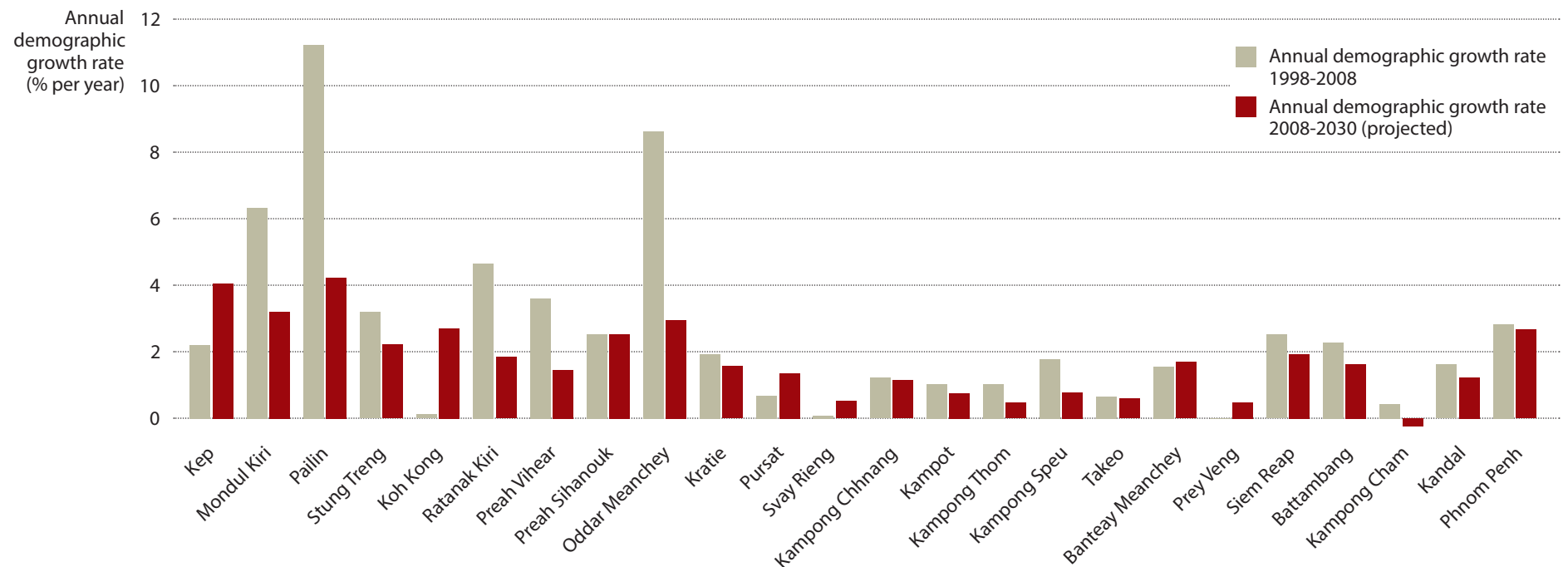
Extract of NIS Observations about Population Projections Exercise

"In spite of a substantial fertility decline that is expected for the next decades, population will continue to experience a substantial growth. This growth will take place even after fertility rates continue to decline. The reason of this continuous growth is the population momentum that Cambodia is experiencing. Past high fertility rates resulted in large cohorts of women in reproductive age that, in spite of having reduced their fertility, as a cohort, are producing large number of children. In other words, the number of children per woman has, and will continue, to decrease but, because the number of woman in reproductive age is increasing, the number of births will not decline or will experience only a limited decline. [...] By the middle of the 2020 it will be near 1% and by the end of that decade it will be less that 1%. At the end of the projection period it will be only 0.55%. Although these numbers appear to indicate a substantial relieve of the population pressure that the country will experience in the future, absolute numbers are not very small. For example, between 2010 and 2015 the population with expand by more than 1 million people and between 2010 and 2020 by more than 2 million."(NIS, 2010c)

"Substantial changes are also expected in the population's age composition. The population of Cambodia will experience an importa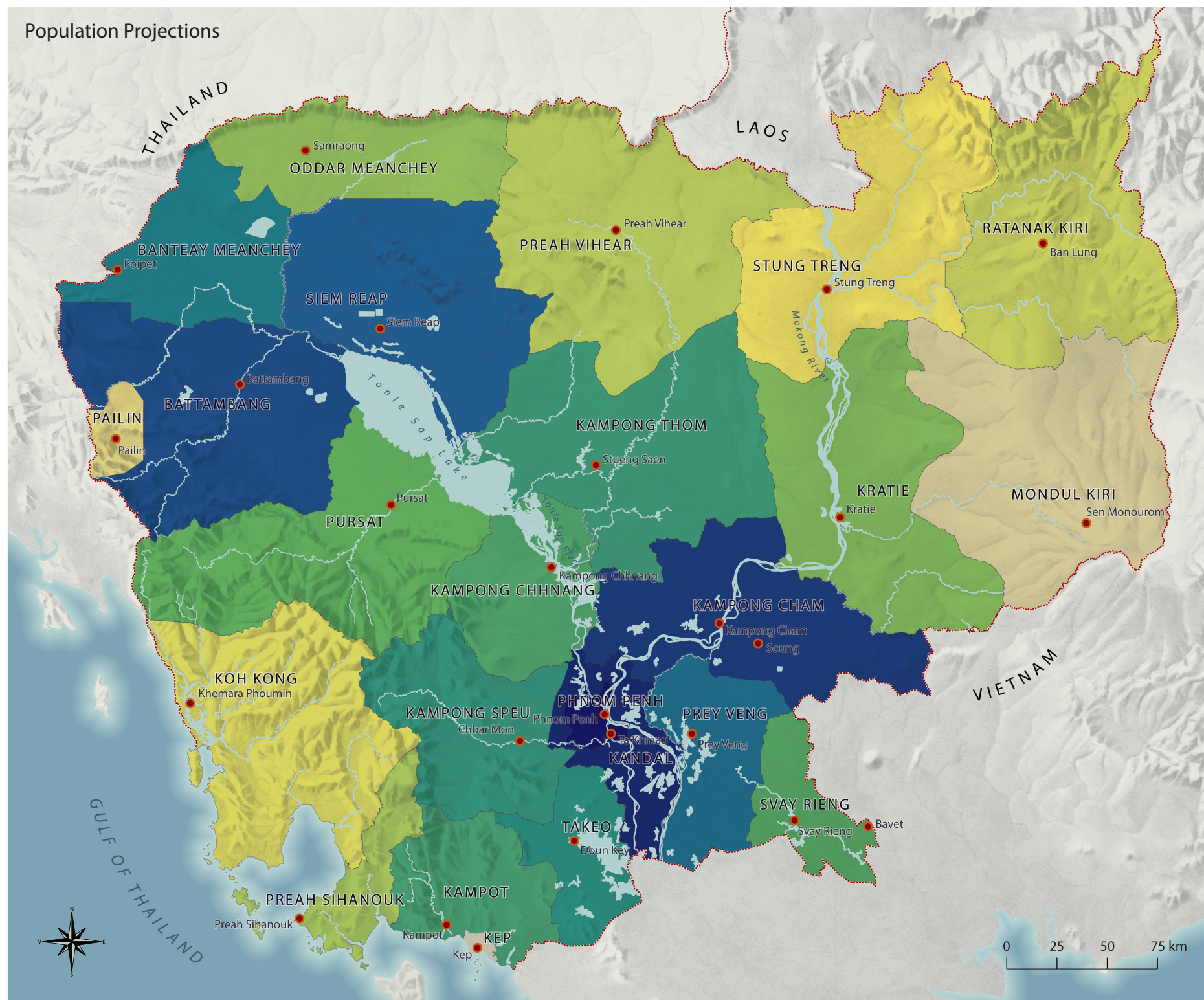nt process of ageing. This does not mean that old-age people will predominate in the population or will reach a very high percentage; this means that the proportion of children will decline and the proportion of middle age people will increase substantially and also the elderly will experience an increase. This is clearly indicated by the median population. While in 2008 it was 22.0 years, in 2020 it will be 26.7 years and 30.8 years in 2030. By the end of the projection period it will be 36.1 years." (NIS, 2010c)

Annual demographic growth rate (% per year)

Legend:
- Annual demographic growth rate 1998-2008
- Annual demographic growth rate 2008-2030 (projected)

Provinces: Kep, Mondul Kiri, Pailin, Stung Treng, Koh Kong, Ratanak Kiri, Preah Vihear, Preah Sihanouk, Oddar Meanchey, Kratie, Pursat, Svay Rieng, Kampong Chhnang, Kampot, Kampong Thom, Kampong Speu, Takeo, Banteay Meanchey, Prey Veng, Siem Reap, Battambang, Kampong Cham, Kandal, Phnom Penh

Population projections for Cambodia
Each province is assigned two values: the first (left) gives the average annual demgraphic growth rate 1998-2008
and the second (right) give the projected demographic growth rate 2008-2030
Data source: NIS, 2010c

Population Projections

THAILAND

LAOS

VIETNAM

GULF OF THAILAND

Place names

Samraong

ODDAR MEANCHEY

BANTEAY MEANCHEY

Poipet

PREAH VIHEAR

Preah Vihear

RATANAK KIRI

Ban Lung

STUNG TRENG

Stung Treng

SIEM REAP

Siem Reap

Battambang

PAILIN

Pailin

BATTAMBANG

Tonle Sap Lake

KAMPONG THOM

Stueng Saen

Mekong River

KRATIE

Kratie

MONDUL KIRI

Sen Monourom

Pursat

PURSAT

KAMPONG CHHNANG

Kampong Chhnang

KAMPONG CHAM

Kampong Cham

Soung

KOH KONG

Khemara Phoumin

KAMPONG SPEU

Chbar Mon

PHNOM PENH

Phnom Penh

PREY VENG

Prey Veng

KANDAL

Ta Khmau

SVAY RIENG

Svay Rieng

Bavet

TAKEO

Doun Kaev

KAMPOT

Kampot

KEP

Kep

PREAH SIHANOUK

Preah Sihanouk

LEGEND

● Krong (City)

⋯⋯ International boundary

── Province boundary

▢ Water body

Projected Population in 2030 people count

- Kep: 88797
- Mondul Kiri: 126725
- Pailin: 181801
- Stung Treng: 187442
- Koh Kong: 218811
- Ratanak Kiri: 233141
- Preah Vihear: 243681
- Preah Sihanouk: 360684
- Otdar Meanchey: 365010
- Kratie: 465960
- Pursat: 553067
- Svay Rieng: 559726
- Kampong Chhnang: 628577
- Kampot: 716987
- Kampong Thom: 724456
- Kampong Speu: 882184
- Takeo: 997025
- Banteay Meanchey: 1017936
- Prey Veng: 1089316
- Siem Reap: 1414727
- Battambang: 1519185
- Kampong Cham: 1648438
- Kandal: 1716290
- Phnom Penh: 2450717

0 25 50 75 km

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