



KINGDOM OF CAMBODIA

Nation Religion King

ROYAL GOVERNMENT OF CAMBODIA

The emblem of the Ministry of Planning, featuring a central tiered umbrella with a lotus on top, surrounded by a wreath of rice and cotton stalks, and a lotus flower at the base.

Ageing and Migration in Cambodia

A CRUMP Series Report

Ministry of Planning


December 2013

FOREWORD

It is my pleasure to provide the foreword to this report, entitled, “Ageing and Migration in Cambodia: A Cambodia Rural Urban Migration Project Series Report”. This report paper is another example of one of the most comprehensive research projects undertaken by the Ministry of Planning. The work was conducted through a remarkable collaboration that involved General Directorate of Planning, Ministry of Planning of the Royal Government of Cambodia, the UNFPA, and University of California, San Francisco, USA. An enormous effort took place to assure that the report was of the high quality. The result, presented in this report, is valuable information that data users within institutions of the Royal Government of Cambodia and Non Government Organisations can use for the formulation of development policies, in particular elderly policies aiming at achieving the betterment of Cambodian society.

In order to achieve this goal, a concern action plan is that there is a need to carefully examine the well-beings of the elders resulting from migration out of rural households. Although Cambodia is not frequently thought of as an ageing country, evidence shows that over the next few decades the country will start to age. The research team has accomplished this task in an efficient manner and has produced a report that will be a valuable contribution not just for the country of Cambodia but for reference for other countries that are facing high rates of migration and upcoming ageing society. This investigation will enable us to prioritize programs and an overall strategy to meet the challenge of rapid adult migration.

On behalf of the Ministry of Planning, I would like to thank the significant intellectual and technical contribution made by authors from University of California, San Francisco and General Directorate of Planning, Ministry of Planning who produced this report and worked tirelessly and diligently to assure a quality report. I would also like to acknowledge my appreciation of the financial and technical support provided by UNFPA.

I proudly present this report as an example of what can be accomplished through collaboration, teamwork, and partnership that extends across entities. 

Phnom Penh, December 2013

**SENIOR MINISTER
MINISTER OF PLANNING**



CHHAY THAN

A CRUMP Series Report

Ageing and Migration in Cambodia

Zachary Zimmer (University of California, San Francisco)

Fadane Khim (Ministry of Planning)

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Executive Summary

The current report has two main purposes. The first is to provide a broad look at the demographics of ageing in Cambodia. The second is to utilize the Cambodian Rural Urban Migration Project (CRUMP) data to link migration out of rural households and the situation of older persons in rural areas.

Although Cambodia is not frequently thought of as an ageing country, evidence shows that over the next few decades the country will start to age. When this happens, ageing will occur quickly. A large part of this is due to declining fertility. A large part is also due to the legacy of the Khmer Rouge era. High mortality during the Khmer Rouge, and a baby boom after the Khmer Rouge, set in motion a momentum that assures that the cohort born in the 1980s and early 1990s will constitute a large segment of the population when they are in their old age.

In keeping with the CRUMP study, this report defines a migrant household as a household that had a household member that moved out of district at least three months earlier but not more than five years earlier. Therefore, all migration is recent migration.

There are differences in the living arrangements of older adults based on whether they live in migrant versus non-migrant households in rural areas. Older adults in migrant households are less likely to live with offspring and in three generation situations but are more likely to live in skip generation households, which means they live with a grandchild whose parent is living elsewhere,. Specifically, 15.2 percent of older adults in rural Cambodia that live in a household classified as being migrant live in a skip generation situation, which compares to only 3.6 percent of older adults in non-migrant households. The percent of older adult households that are 'pure' skip generation, which is older person, with or without spouse, and a grandchild, without others present, is over 11% when the household is classified as migrant and under 2% when classified as non-migrant.

Many migrants leave children behind in the rural area, and many of these children live in households containing an older person. Of 4,201 migrants that are 18 and older and are part of the CRUMP study, 29.6% had at least one child at time of interview and 17.2% of these left one or more behind in rural areas. This means that of those migrants with children, 58.0% left a child behind. Daughters are slightly more likely to be left behind than are sons.

Support from migrants back to households of origin varies substantially when there is an older person in the household of origin, or an older person plus a child of a migrant. For instance, about 76% of all migrant households receive remittances from a migrant. When there is a child in the household of origin the percent increases to about 83% and when there is both a child and an older person, it increases to about 90%.

The poorest households in rural Cambodia are those that contain older persons only or older persons and a child 17 and younger. In addition, older person and older person and child households are poorer when they are classified as migrant households. The poorest type of household is the skip generation household. The skip generation non-migrant household is poorer on average than the skip generation migrant household.

Introduction

Rapid migration and population ageing are two phenomena that are co-occurring in Cambodia. The combination of these two demographic events suggests the need to examine empirically the demography of ageing in the country and the impact of migration on the growing population of older adults. Therefore, there are two segments to this report. The first is a discussion of the demographics of ageing in Cambodia. The second is an examination of several aspects of migration in Cambodia that are of relevance to the older population.

A cursory examination of the demography of ageing in Cambodia suggests that while the country is still young in comparison to other countries in the region, it is on the path towards very rapid ageing. The earlier an ageing country begins to think about its older population, the better it will be able to cope with the challenges that are to be anticipated. In addressing population ageing in Cambodia one must consider the rapid migration that the country is experiencing. The two issues are, in many ways, inseparable. Population ageing results in a higher proportion of older persons while migration results in younger persons leaving rural areas for urban life, exacerbating the ageing situation in rural areas. Population ageing is a consequence of declining rates of fertility. Economic circumstances, reduction on the reliance on agriculture for financial wellbeing, globalization and changes in values and norms that lead to lower fertility also lead to higher rates of migration. And, Cambodia has some unique historical conditions that unite both ageing and migration. The Khmer Rouge period in the late 1970's and early 1980's created a distinctive demography for the country, with a high mortality rate during the period and a high fertility rate that followed. Both rapid migration and ageing are in part a consequence of that history.

The inevitability of population ageing in Cambodia makes examination of the ageing trends in the country critical, but also provides Cambodia an opportunity to join a broader dialogue that has started across the region. Indeed, population ageing across the Southeast Asian region has prompted concerns regarding the wellbeing of older persons, their families and the communities in which they live. This has resulted in recent data collection efforts and studies on the situation of older persons in several countries (Knodel & HelpAge International staff, 2013; Knodel, Prachuabmoh, & Chayovan, 2013). A large scale population sample survey of older persons in Cambodia was conducted in 2004 (Knodel, Kim, Zimmer, & Puch, 2005). Analysis of this survey showed older adults to be well integrated into large households with a degree of family support; but it also suggested vulnerabilities, including high degrees of poverty, poor health in comparison to older persons in neighboring countries, an association between economic and physical well-being, and roles to play in the care of adult children with HIV (Knodel, 2008; Knodel & Zimmer, 2007; Knodel, Zimmer, Kim, & Puch, 2007; Zimmer, 2006, 2008; Zimmer, Knodel, Kim, & Puch, 2006).

The earlier data is now almost a decade old. This report brings the discussion of the older population of Cambodia up-to-date and puts the topic of migration and ageing into context. The earlier data allowed for some examination of the impact of migration on older persons in Cambodia (Zimmer, Korinek, Knodel, & Chayovan, 2008). But, migration rates have increased since then to incredibly high rates (CRUMP Research Team, 2012). What impact does this migration have on today's older Cambodians? To what extent are migrant offspring of older rural Cambodians likely to send financial remittances to households in which older persons live? What is the living situation of older adults that have migrant offspring and does rural to urban migration leave older adults alone without support in rural areas? The recent Cambodia Rural Urban Migration Project (CRUMP) provides a unique opportunity to examine these and other questions.

Demography of Ageing in Cambodia

2.1. Importance of Population Ageing

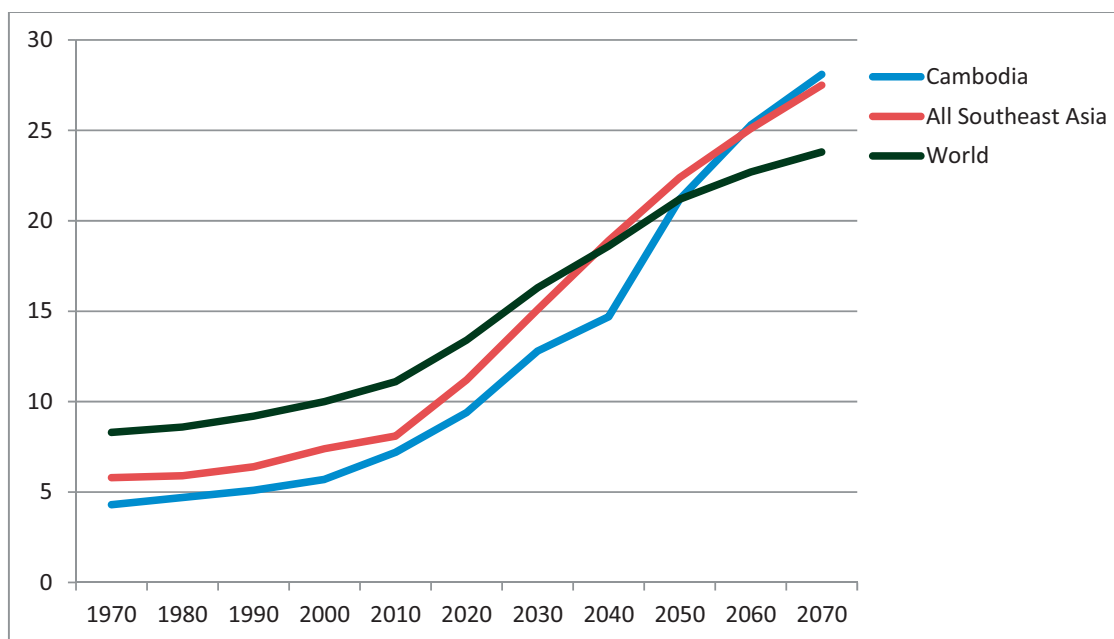
This report comes at a time of burgeoning global interest among policy makers, non-government organizations and academicians regarding the welfare of older persons (Powell, 2010). This report generally defines older persons as those aged 60 and older. Much of this growing concern regarding those 60 and older is due to population ageing - a process whereby an age structure changes from large proportions in young age to large proportions in older ages (Goldstein, 2009). In most countries, population ageing is largely caused by fertility and subsequent birth rate decline. When birth rates fall cohorts from higher fertility regimes move into old ages and smaller cohorts take up younger age segments of a population, making the earlier cohort moving into old age a larger proportion of the total. In more developed countries, when infant mortality is low and most of those born survive to old ages, some population ageing may be due to mortality decline at older ages, keeping older people alive and part of the population longer (Lee, 2011).

Population ageing increases concerns of the older population as a population subgroup and older persons individually for many reasons, not the least of which is simply a greater visibility within a society. But, there are more practical concerns as well. For instance, since old age is a time when health problems are common, larger proportions of older people means there is pressure for larger segments of national budgets to be devoted to health care for the older population. Rapid reductions in fertility also means health care needs of a population change from a concentration on maternal health and infectious diseases common among children to non-communicable and chronic diseases common among older persons. An increase in chronic diseases across a population means that larger proportions of public expenditures may need to be directed towards healthcare. Since older persons are the most likely within a population to have disability, ageing brings with it increasing disability rates at a population level, placing greater onus on the need for policies to assist with physical functioning limitations. Growing numbers of older persons comes hand in hand with reductions in family size, which for societies that count on family for older adult welfare puts greater burden on smaller numbers of family members and adds a greater welfare burden to society. Because older persons often do not or cannot work, population ageing results in decline in labour force. Reduction in ability to work and smaller family sizes available to support older persons materially can increase the risk of poverty. In rural areas, population ageing is often exacerbated by rural to urban migration, which may leave older adults behind with fewer family members to provide material, physical and psychological support. These are only a few of the common concerns that accompany a transformation from a younger to an older population age structure. Indeed, population ageing brings with it a great number of challenges.

2.2. Population Ageing in Cambodia

Cambodia is sometimes viewed as being in a fortunate position given that the percent of older persons within its population, at the time of writing, is nominal in comparison to many developing countries around the world and its neighbors in the region of Southeast Asia. To illustrate, Figure 2.1 shows the percent of the population aged 60 and older in Cambodia, across all Southeast Asian countries and across all countries in the world, estimated for the years 1970 to 2010 and projected out to 2070 based on United Nations Medium Variant population estimates (United Nations, 2013).

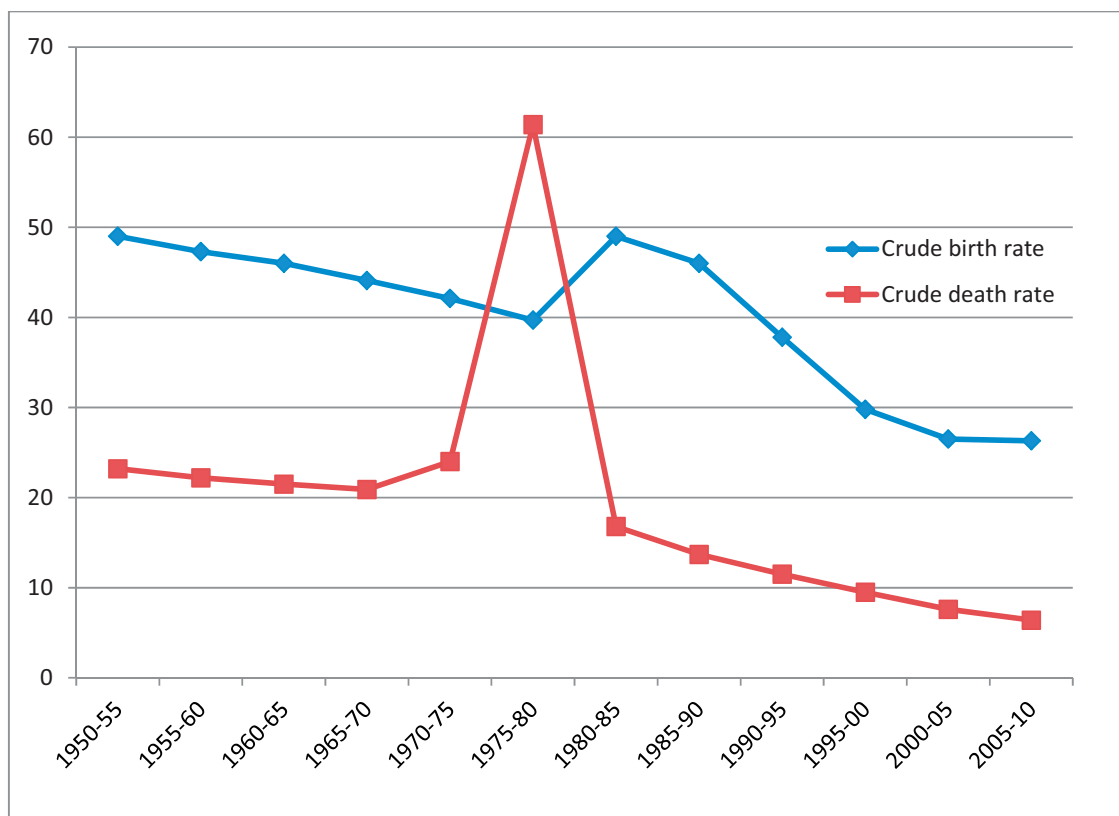
Figure 2.1: Percent of the Population Aged 60+, Cambodia, all of Southeast Asia and the World, 1970 to 2070



The figure illustrates that Cambodia is presently behind the rest of the world and the rest of the Southeast Asian region with respect to the percent that are elderly. But, the percent elderly will become greater in Cambodia in comparison to the world by about 2050 and will equal the rest of Southeast Asia by about 2060. The reason for a smaller current percentage of older persons in Cambodia is twofold: 1) fertility rates have only more recently begun to decline and; 2) the influence of mortality during the Khmer Rouge period in the late 1970's on the population age structure. The Khmer Rouge period, which was highlighted by civil war, unrest, widespread disease and related high rates of mortality, led to a smaller cohort surviving which now are moving into their elder years. The war was followed by a Cambodian baby boom in the post war period in the 1980s and early 1990s, resulting in a large cohort now entering middle adult years.

These points are emphasized in Figure 2.2 which shows crude birth and death rates (CBR and CDR) in Cambodia from 1950 to 2010 (number of births and deaths per 1,000 people living in the country, averaged five years at a time). The figure highlights several important points. CDR was about 20 in 1950 and was on the decline, generally indicating better survival. This was the case until the civil war in 1975 when death rates spiked dramatically. Those dying during this time were overwhelmingly men between the ages of 15 and 35, although there were excess deaths in other age groups as well and among women. This becomes a 'lost generation of older persons' in a sense – *individuals that may have been alive today moving towards old age had it not been for the war*. With respect to CBR, the decline from 1950 to 1970 (which mirrored the rest of the region) ended after the Khmer Rouge period. Those born in the post Khmer Rouge period represent the Cambodian 'baby boom generation'. Also, note that when CBR exceeds CDR there is natural population growth. Thus, excluding international migration, which has only a minor impact on the total population age structure in Cambodia, the population has been substantially increasing. The population of Cambodia grew at all times between 1950 and 2010, with the exception of the period during the Khmer Rouge when CDR exceeded CBR and there was population decline.

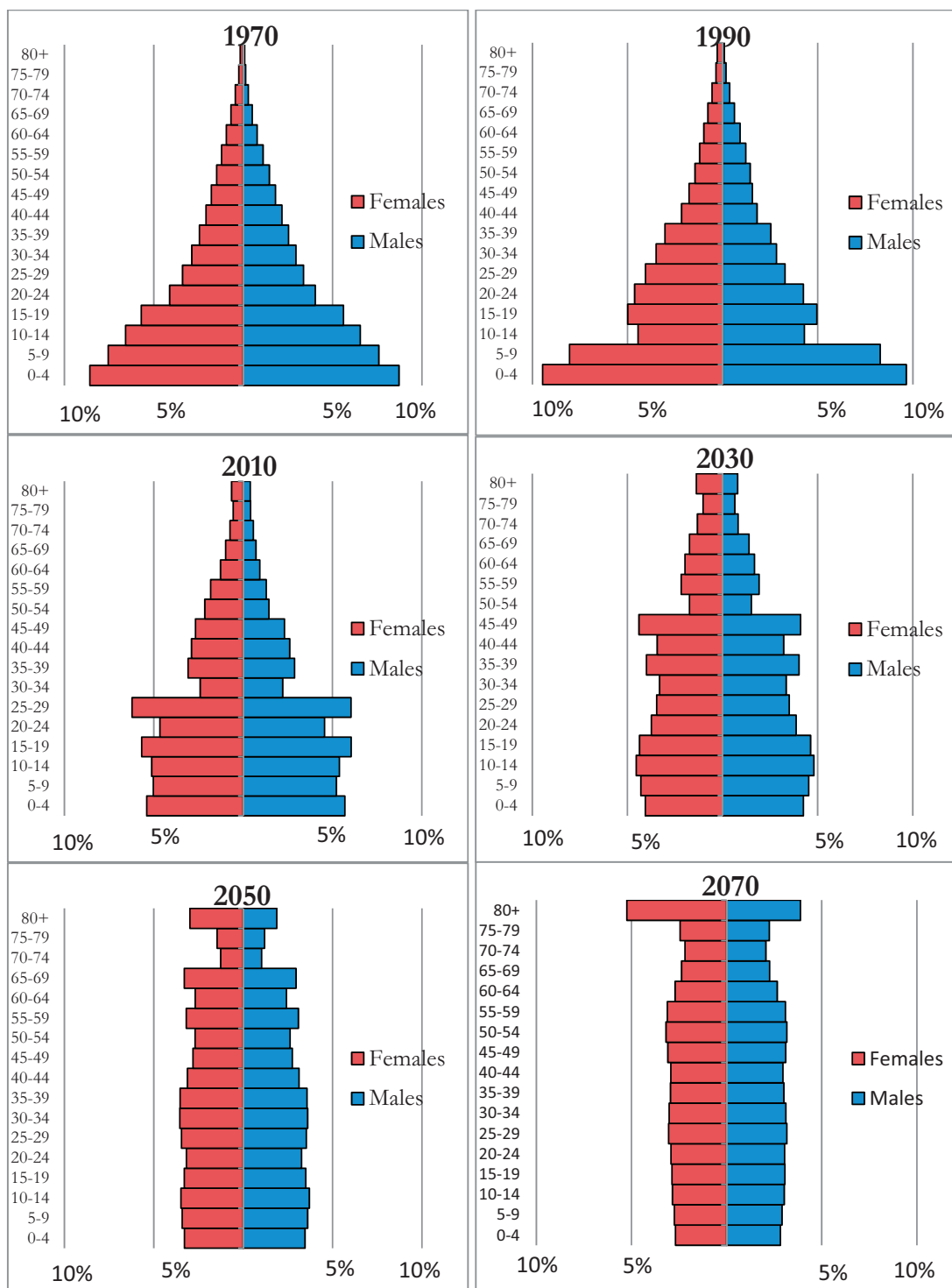
Figure 2.2: Crude Birth and Death Rates for Cambodia, 1950 to 2010



Good discussions of the general demography of the country before and after the Khmer Rouge have been published by Patrick Heuveline (Heuveline, 1998; Heuveline & Poch, 2007). The point to be made here is that high death rates during the Khmer Rouge period and high birth rates in the post Khmer Rouge period led to an unusual set of population age structure circumstances for Cambodia and have had enormous long-term impacts on population ageing which are different from the rest of the region and the world. These impacts come into sharp focus when examining population pyramids for the country, as shown in Figure 2.3. Across pyramids note the following:

- In 1970, prior to the Khmer Rouge period, the age structure of Cambodia had a very pyramidal shape typical of least developed countries. High fertility and high mortality resulted in a substantial percent of the population in young ages and declines in the percent in subsequent age groups. By age 60 and older, most of those born sixty years earlier would have been deceased and as such only a small segment of the population was 60 and older.
- By 1990 the impact of the Khmer Rouge period can be seen. First, high mortality resulted in smaller cohorts moving up to ages 40+. In particular, high male mortality made the percent of males in these age groups very small. Second, there was declining fertility during the war period 1975 to 1979, resulting in a very small cohort aged 10 to 15 in 1990. Third, the post Khmer Rouge Cambodian baby boom produced a huge cohort aged 0 to 10.

Figure 2.3: Comparison of Age and Sex Pyramid for Cambodia, 1970 to 2070



In 2010, a few years before the writing of this report, the effects of the demographic circumstances during the Khmer Rouge period can be seen in small old-age cohorts, who are now survivors of the war, particularly on the male side of the pyramid, and a massive population aged 10 to 30, the result of the post war baby boom.

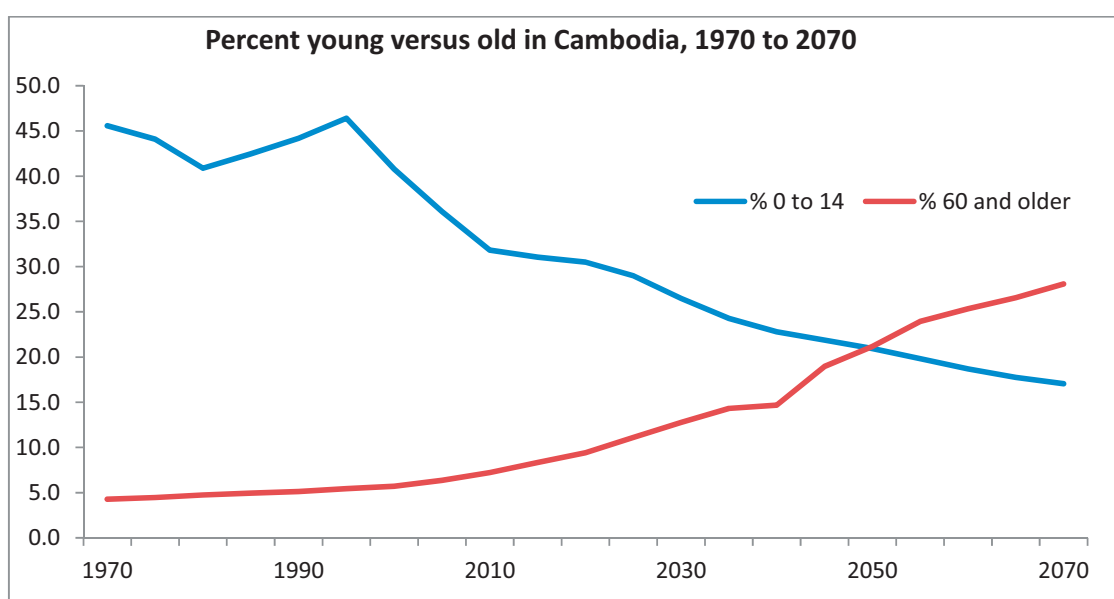
The massive post war period cohort moves into older age ranges by 2030. In addition, sustained high fertility into the 2000s coupled with much lower infant mortality will lead to particularly large cohorts aged 30 to 50 and smaller but still sizeable cohorts under age 30.

The acceleration of population ageing can be seen in 2050. Looking from about age 70 down the pyramid, the population age structure begins to take on a bit of an upside down pyramidal shape. The Cambodian post Khmer Rouge baby boom can be seen in the population bulge between the ages of 35 and 55. After that, projected declines in fertility begin to have an impact by decreasing the proportion of young adults and children.

By 2070, Cambodian baby boomers will be aged 70 and older, making this segment a large proportion of the total population. At that time, Cambodia will be an old-aged society.

Note that projections are based on United Nations Medium Variant estimates. There is the possibility that the Cambodian baby boomers will not live as long as predicted, given poor health care services, limited appropriate food-intake (nutrient food) and other factors. Higher mortality may impact the exact number living to old age but even some degree of higher mortality cannot reverse the overall trend towards an ageing population given the magnitude of the cohort now moving up the population pyramid. More concerning is that the older population of the future, due to health care and other current circumstances, may survive but do so in worse health than the current cohort of older adults. This will result in even greater challenges.

Figure 2.4: Percent Aged 0 to 14 and 60+ in Cambodia from 1970 to 2070



Source: UN, Population prospects

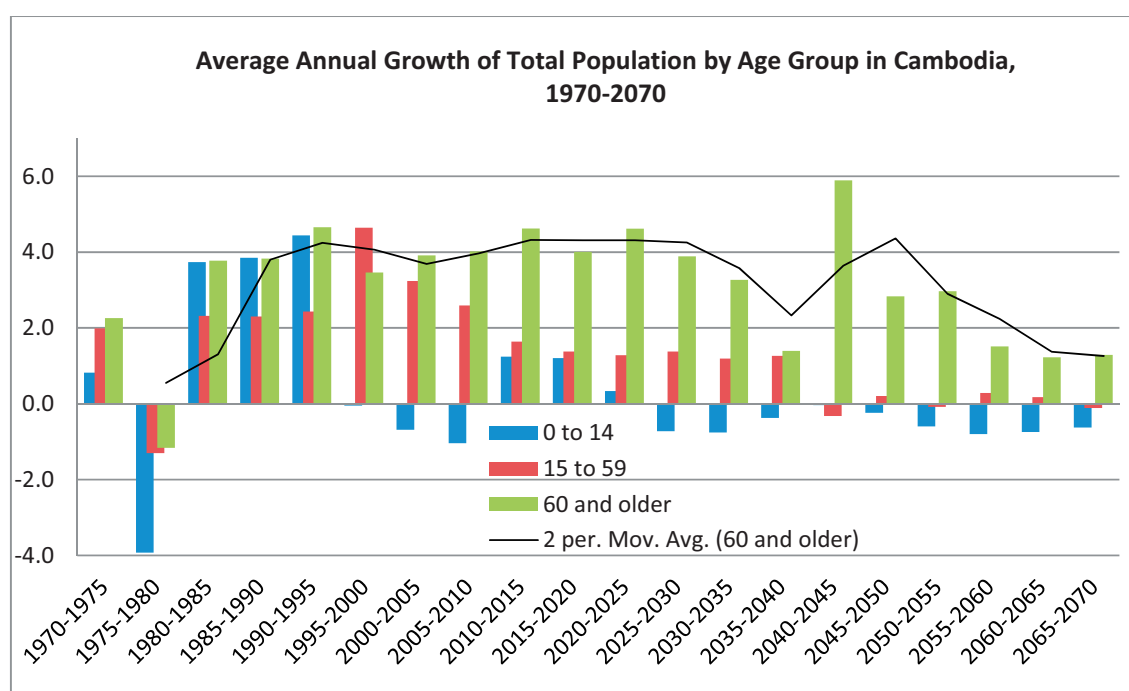
Several additional figures are presented which indicate more precisely how these population pyramids translate into unusual population ageing dynamics. Figure 2.4 shows the percent young and old from 1970 to 2070. The impact of the war on fertility can be seen in the decline then increase in the percent 0 to 14 beginning around 1975 to around 2000. By about 2040, the older population will overtake the younger as a larger segment for the first time in Cambodia's history.

In terms of actual numbers, the population of Cambodia in 1970 was a little over 7 million persons. Of these, there were about 3.2 million aged under 15 and only about 300,000, less than one-tenth, aged 60 and older. In 2015, Cambodia's population is expected to reach

about 15.6 million, of which 4.9 million will be under 15 and 1.3 million will be 60 and older. By 2050, when the population of Cambodia is expected to hit about 22.5 million, 4.7 million will be under 15 and about the same number will be 60 and older. So, between 1970 and 2050, the younger population will have grown by a factor of about 1.5 while the older population will have grown by a factor of over 15.

If population ageing is defined as a dynamic process, then Figure 2.5 is particularly important. It shows the average annual percent growth of different population age groups in five year periods. From 2000 onward, the elderly is the fastest growing segment of Cambodia's population. In contrast, from that period onward, the growth rate in working aged adults declines until it becomes negative in the near future, while the growth rate of young aged 0 to 14 is already negative by about the year 2000 – a function of declining fertility. The net result is increasing numbers and proportions of elderly and declining proportions in other age groups, the quintessential circumstance defining population ageing.

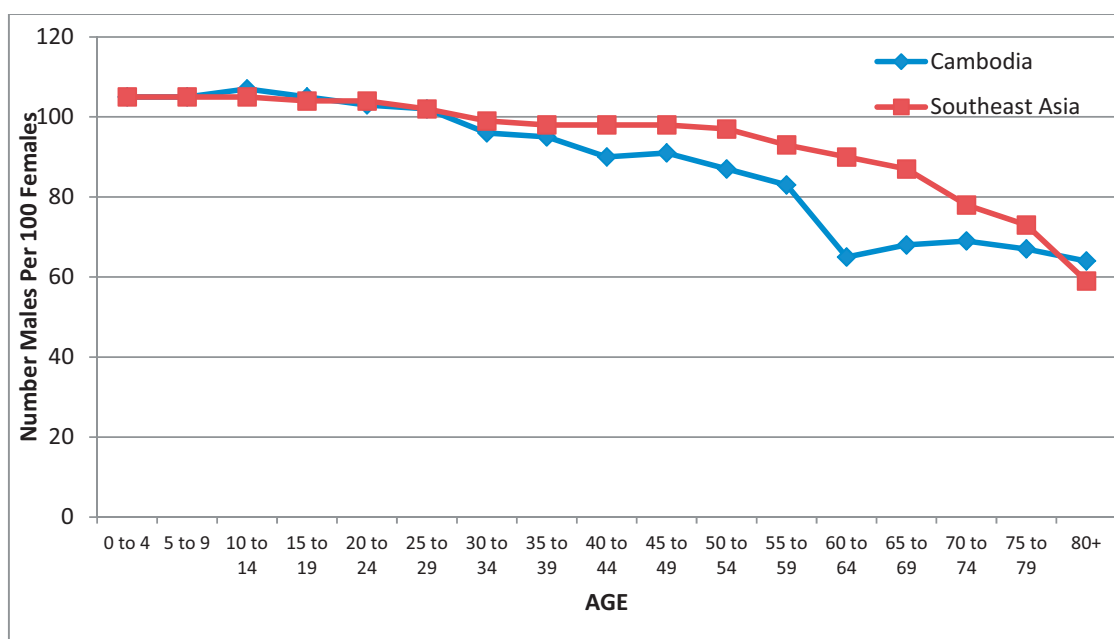
Figure 2.5: Average Annual Growth by Age Group in Cambodia, 1970-2070



Source: UN, Population prospects

Finally, the Khmer Rouge period, with its high mortality, created a situation where there is an unusual sex ratio. This can be seen to some degree in the population pyramids above. Figure 2.6 shows it more clearly by illustrating the projected sex ratio of Cambodia compared to the rest of the Southeast Asian region in 2020. While the sex ratios show slightly greater numbers of males per 100 females in young ages for both populations, as is the norm around the world, due mostly to biological circumstances, excess male mortality during the war can be seen in the enormous gap in sex ratios across the two regions in older ages, starting at about age 50 until age 80+. The 'feminization' of ageing, a concept that suggests as populations get older they become more female dominated due to higher male mortality, is often referenced in academic and policy circles. For Cambodia, this reality takes on great significance due to excess male mortality as a result of violence.

Figure 2.6: Projected Sex Ratios (Number of Males Per 100 Females), by Age, for Cambodia and Southeast Asia, 2020



In sum, taking the period 2030 to 2070, the proportion of the population 60 and older will increase from about 13% to about 30% and at that time Cambodia will resemble countries today that can be considered old like Italy and Japan. Cambodia will be older than the world in total and equally as old as the region of Southeast Asia. Since population ageing refers to the dynamic process of growing proportions that are old, it can be projected that the period 2030 to 2070 will be defined as Cambodia's rapid population ageing period.

Indeed, it can be said that the ageing of Cambodia is being delayed due to demographic circumstances of the Khmer Rouge period, but it is not being stopped. While some countries in the region and in fact around the world are currently undergoing a type of panic because of the rapidity of the growth of their older population at present and the potential economic and social collapse that can occur when population age structure changes so quickly, Cambodia has the luxury of time to consider the consequences of aging and move early to establish effective strategies for its older population.

2.3. Other Selected Issues: Rural versus Urban Residence and Life Expectancy

Table 2.1 shows the population of Cambodia in rural and urban areas for all ages and divided into elderly and non-elderly, for the years 2013 and 2030. The population of Cambodia in 2013 was just shy of 15 million. Cambodia is predominantly a rural population, with approximately 78% living in rural areas in 2013. As for the population aged 60 and older, they are somewhat more likely to be living in rural areas. About 80% of elders live in rural Cambodia compared to about 78% of non-elders. Both elderly and non-elderly are projected to become more urban in the future, but the growth of urban areas will be somewhat more a function of growth in non-elderly populations. By 2030, when the population of Cambodia is expected to be over 18 million, about 70% of non-elderly will be living in rural areas compared to 74% of elderly. The change is, however, not dramatic for either age group, placing some doubt on the idea that rural areas are becoming predominantly elderly due to an evacuation of younger aged to the cities.

Table 2.1: Population of Cambodia by Age and Rural/Urban Residence, 2013 and 2030

	2013		2030	
	Population	Percent	Population	Percent
All Ages				
Urban	3,287,428	22.1	5,418,399	29.9
Rural	11,615,457	77.9	12,720,649	70.1
Total	14,902,885*	100.0	18,139,048	100.0
60 and older				
Urban	204,180	19.7	511,537	25.7
Rural	827,756	80.3	1,482,544	74.3
Total	1,033,936	100.0	1,994,081	100.0
Under 60				
Urban	3,083,248	22.2	4,906,862	30.4
Rural	10,785,701	77.8	11,238,105	69.6
Total	13,868,949	100.0	16,144,967	100.0

Source: Census of Cambodia Projection. Base year 2008

* The current computed population based on Cambodia Inter-Censal Population Survey 2013.

Life expectancy in Cambodia is rising as its population size increases. Table 2.2 shows however, that life expectancy rose faster between 1990 and 2009 at birth than at older ages, a function of improvements in infant mortality that are more pronounced than improvements in mortality at older ages. Still, even the elderly saw some increase in life expectancy over the nineteen year period. Life expectancy at age 60 increased from 14 to 14.3 for males and from 16.9 to 17.4 females, proportional increases of 2.1 and 3.0 percent. Total life expectancy during the time period rose by 5.5 percent for males and 4.0 percent for females.

Table 2.2: Life Expectancy in Cambodia, 1990 and 2009, at Different Ages

	1990	2009	Percent change
Males			
At birth	54.2	57.2	+5.5
At age 60s	14.0	14.3	+2.1
At age 70s	8.8	9.0	+2.3
At age 80s	5.1	5.2	+2.0
Females			
At birth	62.6	65.1	+4.0
At age 60s	16.9	17.4	+3.0
At age 70s	10.3	10.7	+3.9
At age 80s	5.8	5.9	+1.7

Source: WHO. World Health Statistics 2011. Geneva, WHO, 2011

Data for the Study of Ageing and Migration

The remainder of this report concerns how older adults in rural areas are impacted upon by migration of household members. Often, these household members are their own offspring, while at times, these household members are their grandchildren.

Data: Unless otherwise noted, the remainder of this report uses data from the Cambodian Rural Urban Migration Project (CRUMP). In 2011, funded by UNFPA, the Ministry of Planning of the government of Cambodia undertook CRUMP - an ambitious data collection effort to garner information on the migration situation within the country. The effort was prompted by high rates of migration around the country, out of the country, and rapid rural to urban migration. Main aims of the project were to provide data that could be used to examine causes and consequences of migration in Cambodia on various levels and to suggest policy that would assist the country cope with the increasing challenges brought about by migration. A major report used CRUMP data, and this report includes details on aims of CRUMP, study methodology, results and policy recommendations (CRUMP Research Team, 2012). It is recommended that this report is referred to for specific information on data collection methodology.

Migrant versus non-migrant rural households: CRUMP was a multidimensional study and took place by way of surveys. One dimension was a survey of rural households defined as migrant and non-migrant. Other dimensions of CRUMP included surveys of migrants living in Phnom Penh and surveys of rural village chiefs. For the rural household survey, migrant households were those from where a member departed within the last five years and was living elsewhere at time of survey. The rural household component took place in 375 villages across the entire country, with every province represented. There were 1,625 surveys of households designated as non-migrant and 2,875 surveys of households designated as migrants. The choice of households to survey was made by way of a probability random multistage sampling technique. The remainder of this report concerns these data.

This division of migrant versus non-migrant households represents a large oversampling of migrant households. Weights are included in CRUMP data when it is necessary to make the data representative of rural households. The results shown below are all weighted, except for N's, which are unweighted unless otherwise noted.

Data for Sections 4 and 5: Sections 4 and 5 below consider all older persons living in rural households and all rural households with an older person. Within the 4,500 households surveyed in CRUMP, there were 1,619 older persons, aged 60+ (720 male and 899 female persons), living in 1,217 households. When weighted, the average age of the older sample is 67.7 years, with about two-thirds being between ages 60 and 69.

Data for Section 6: Section 6 below focuses on migrants and the support they provide to households of origin. Across the 2,875 migrant households there are 4,201 migrants aged 18 and older (2,102 male and 2,099 female migrants). In 546 of these households there is a child aged younger than 18. In 849 of these households there is an older person 60 and older. Both a child and an older person are found in 142 households.

Data for Section 7: Section 7 examines a wealth indicator and divides wealth scores by household type. Therefore, the section focuses on households. This includes all 4,500 households in the rural component of CRUMP and the 1,217 households containing one or more older person.

Other data issues: There are a couple of important issues to note with regard to these data and the older persons within it. First, all information collected in the rural household survey was collected from a single person who reported on all household members as well as household level information. This is not, therefore, a survey 'of' elderly persons. While much of the information indicated in this report, such as household composition, would not change much regardless of the person interviewed, there are some measures pertinent to older persons that would likely receive more valid responses if older household members themselves had been interviewed. For instance, an older person themselves may report their health differently than would another household member.

Second, some important measures examined in the analysis below concern offspring and grandchildren of older household members. The report often uses an age of 18 to designate whether offspring and grandchildren are 'children' or 'adults'. Thus, when living with grandchildren, the report, unless otherwise noted, considers grandchildren to be those aged 17 and under. When living with offspring, the report, unless otherwise noted, considers adult offspring to be those aged 18 and older.

Third, the statistics shown in the remainder of the report reflect the situation of older adults living in migrant and non-migrant households in **rural** Cambodia. The results are generalizable to all older adults living in rural areas and not reflective of those living in urban areas.

Characteristics of Older Cambodians by Household Migrant Status

Table 4.1 shows the distribution of selected demographic social and economic characteristics of older adults in rural areas by whether they live in migrant or non-migrant household. In migrant households, 53% of older adults are female. In non-migrant households, about 60% are female. Therefore, older females are more prevalent in non-migrant households. Besides differences in sex distribution, migrant and non-migrant households differ with respect to age, whether the older adult is head of household, number of living children, marital status, and schooling. Of note, older adults in migrant households tend to have a greater number of living children. More children likely means there is more opportunity for one child to be a migrant. Also of note, rural older adults in migrant households are more likely to be married and less likely to be widowed. Those in migrant households also are more likely to have education. Fifty-nine percent of older adults in migrant households have any schooling compared to 53% of those in non-migrant households.

Table 4.1: Demographic and Socio-Economic Characteristics of Older Adults Living in Rural Cambodia by Migrant Status of Household

	Total (N=1619)	Migrant status of household	
		Migrant (N=1156)	Non-migrant (N=463)
Sex			
% Male	42.1	47.0	40.1
% Female	58.0	53.0	59.9
Age distribution			
% 60 to 64	35.4	41.5	32.9
% 65 to 69	25.9	28.1	25.1
% 70 to 74	18.3	15.5	19.4
% 75 to 79	13.2	8.4	15.1
% 80 +	7.2	6.5	7.5
Mean age	68.4	67.3	68.8
% older adult is head of household	55.5	61.2	53.2
Number living children			
% 0	4.2	2.4	4.8
% 1	8.9	6.9	9.7
% 2	12.1	10.2	12.9
% 3	15.1	13.7	15.7
% 4	14.9	13.1	15.7
% 5+	44.8	53.6	41.3
Mean number of living children	3.6	3.8	3.5
Marital status			
% Married	63.1	66.4	61.9
% Widowed	35.3	31.3	36.8
% Other	1.6	2.3	1.3
% ever attended formal schooling*	54.7	59.2	52.9

Table 4.2 shows two health measures for rural older adults by age, sex and migrant status of the household. The first is a measure of self-assessed health. This is a global measure indicating whether the health of the older adults is, overall, good or very good, fair, or poor or very poor. The second is a measure of functionality and comes from a question regarding whether the older adult has any difficulty walking 200 meters. The responses are: can do without difficulty, can do but with difficulty and cannot do at all. Earlier research has indicated that Cambodian elders have a higher degree of physical functioning and disability problems in comparison to their counterparts in neighboring Southeast Asian countries (Zimmer, 2006). Overall, older adults from migrant households are slightly more likely to report good health. For instance, the percent with a very good or good health rating is 31% versus 27% in favor of those in migrant households. The percent that can walk 200 meters without difficulty is about 80% versus about 74%, also in favor of those in migrant households. This association generally holds across age and sex.

Table 4.2: Distribution of Health of Older Persons in Rural Cambodia by Migrant Household Status

	Males			Females	
	Total	60-69	70+	60-69	70+
Migrant households					
Self-assessed health					
% Good or very good	31.4	43.5	19.9	32.6	12.4
% Fair	40.6	39.6	41.7	44.6	32.2
% Poor or very poor	28.0	16.9	38.4	22.8	55.4
Ability to walk 200 m					
% No difficulty	80.3	93.4	66.2	88.7	44.1
% With difficulty	13.1	3.7	25.2	9.4	31.6
% Cannot do	6.6	2.9	8.6	1.9	24.3
Non-migrant households					
Self-assessed health					
% Good or very good	27.0	34.5	22.1	30.9	18.3
% Fair	38.7	47.8	23.4	46.1	30.5
% Poor or very poor	34.4	17.7	54.5	23.0	51.1
Ability to walk 200 m					
% No difficulty	74.5	89.4	63.6	89.7	48.9
% With difficulty	15.6	8.0	22.1	7.3	29.0
% Cannot do	9.9	2.7	14.3	3.0	22.1

Migration and the Living Arrangements of the Older Rural Cambodians

Living arrangements of older adults in rural Cambodia, as older adults elsewhere in the developing world, is considered to be an important indicator of their well-being (Asis, Domingo, Knodel, & Mehta, 1995; Bongaarts & Zimmer, 2002; Chen & Short, 2008; Silverstein, Cong, & Li, 2006; United Nations, 2005; Wu & Schimmele, 2008). Whereas in developed countries, independent living is often considered to signal good health and material standing, in rural Cambodia and elsewhere in the developing world it is co-residence with others that is thought to be an indicator of well-being. This is because public social security systems in Cambodia and in many developing countries are weak. Moreover, older persons have not had the opportunity to save money throughout their working lives and hence move into old age in a state of material vulnerability. Coupled with the possibility of physical frailty, older adults require support from their family in order to survive materially and physically. Traditionally, then, older persons in Cambodia, and elsewhere across the developing world, tend to live with one or more than one adult child and their material and physical well-being is often highly dependent upon this living arrangement (Knodel et al., 2005; Zimmer & Kim, 2001).

But, as this report has noted, demographic change is occurring rapidly in Cambodia. High rates of rural to urban migration are moving many children of older adults out of the rural areas into cities. This is occurring not only in Cambodia but all around the developing world. There is an underlying and at times anecdotal notion among some academics, policy makers and other interested observers that in rural areas around the developing world increased migration can leave older adults 'left behind' to fend for themselves, and this loss of support can have harmful effects on the older population (Coles, 2001; Hendricks & Yoon, 2006; Nguyen, Yeoh, & Toyota, 2006; United Nations, 2002; Van Der Geest, Mul, & Vermeulen, 2004). With this as a background, the current section examines the living situation of older adults and older adult households in rural Cambodia, comparing those in migrant and non-migrant households.

5.1. Living Arrangements of Older Adults

Figure 5.1 shows the percent of older adults living in households of different sizes by migrant status. The figure shows that older adults living in non-migrant households are likely to be in households of larger size. For instance, a greater proportion of older adults in non-migrant households live in five, six or seven+ person households. A greater proportion of older adults in migrant households live in households of one, two, three and four person households. Still, it is rare that older persons live in single person households regardless of migrant status of the household.

Figure 5.1: Distribution of Size of Household in which Older Persons Live by Migrant Status (N=1,619)

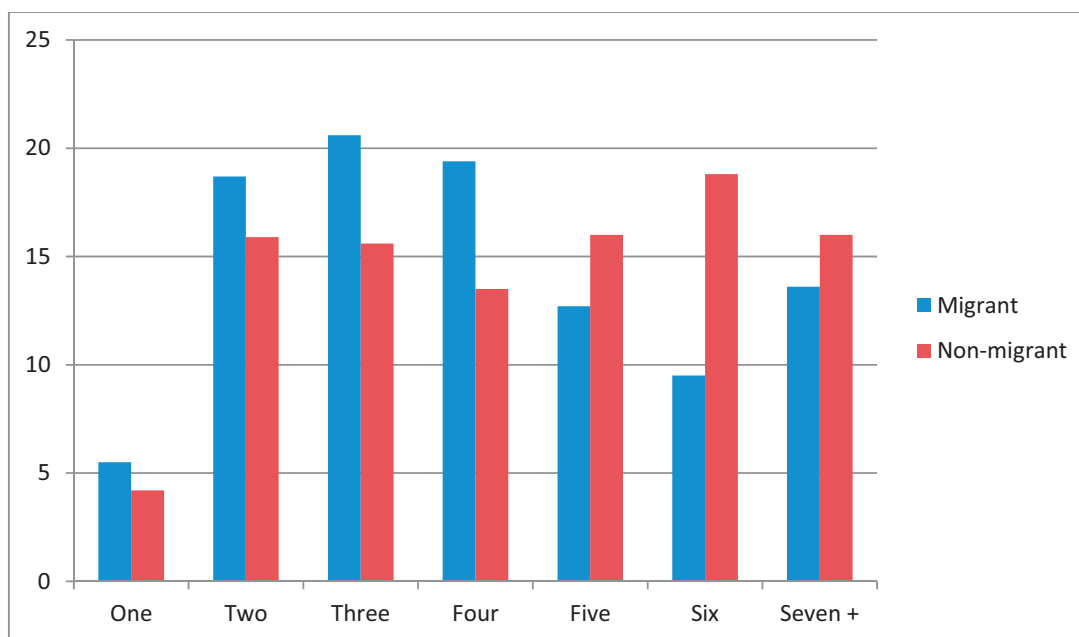


Table 5.1 provides the percent of older persons living in specific situations, such as living alone, living with a spouse, etc. Although a higher percent of older adults from migrant households live alone (5.5% versus 4.2%) the difference is not substantial, and in fact not 'statistically significant', meaning that the difference is not large enough that we can be overly confident that a difference is generalizable to the total population. However, it is certain that older adults in migrant households are less likely to live with offspring of any age, with offspring age 18 and older (some offspring are under age 18), with sons and with daughters. Older adults are more likely overall to live with daughters than with sons, regardless of migration status, a result that has been seen in other studies (Knodel et al., 2005; Zimmer & Kim, 2001).

What is particularly striking is the percent living in three generation as opposed to skip generation households. Three generation households include at least one offspring 18 and older and at least one grandchild younger than 18 while skip generation include at least one grandchild under 18 but no offspring 18 and older. A substantial lower proportion of older adults live in three generation households if they are in migrant households versus non-migrant (28.1 versus 40.3). In contrast, the percent living in skip generation households is several-fold greater for older adults in migrant households (15.2 versus 3.6).

Table 5.1: Percent of Older Adults in Rural Cambodia Living in Specific Situations (N=1,619)

% of older adults living...	Migrant (N=1,133)	Non-migrant (N=486)	Total (N=1,619)
alone	5.5	4.2	4.6
with a spouse	73.6	74.1	74.0
with offspring any age	63.4	76.5	72.8
with offspring 18 and older	60.7	75.7	71.4
with a son	30.6	43.5	39.8
with a daughter	50.6	59.3	56.8
with a grandchild	47.0	47.9	48.3
with a grandchild 17 and under	43.3	43.9	43.7
in three generation household ¹	28.1	40.3	36.8
in skip generation household ²	15.2	3.6	6.9

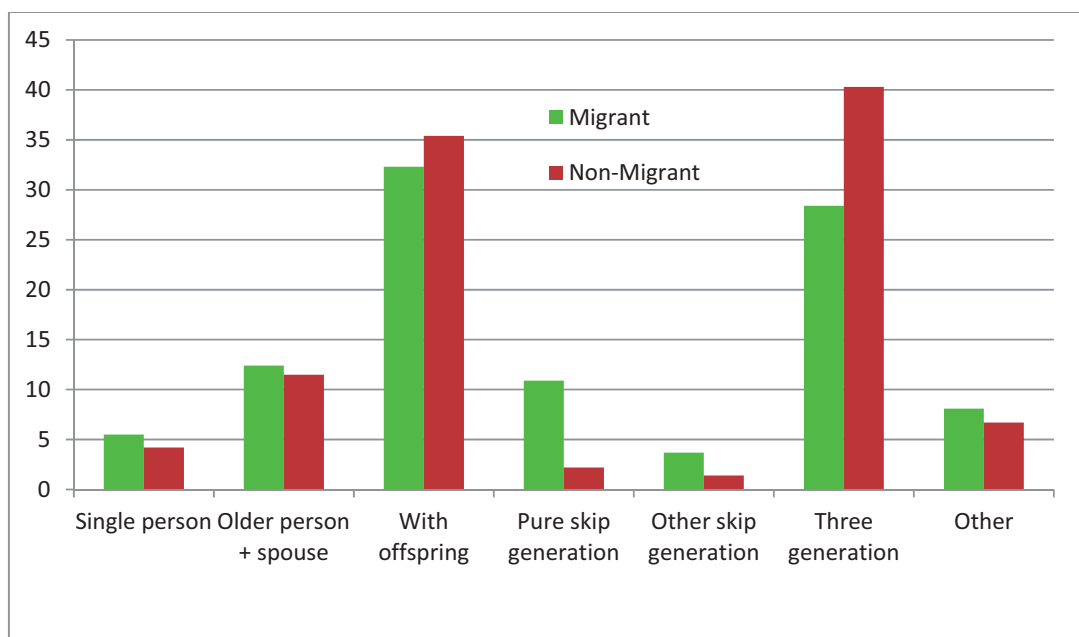
Note: 1 Lives with at least one offspring 18 and older and at least one grandchild younger than 18.
2 Lives with at least one grandchild under 18 but no offspring 18 and older.

5.2. Distribution of older Adult Households

The above analysis deals with older adults. Some households will contain more than one older adult. Indeed, the CRUMP rural survey included 1,619 older household members living in 1,217 households, meaning there is an average of 1.3 persons 60 and older in each older person household. There are times when it is more advantageous for analytical purposes to examine households as opposed to older persons per se. For Figure 5.2, a seven category classification of older person households was created. Each household containing an older adult was considered, but those that had more than one older person were considered as just one observation rather than multiple observations. The classification is as follows:

- *Single person household:* One household member and that person is aged 60 and older. This is equivalent to older persons living alone.
- *Older person with spouse:* This is a two person household with at least one being 60 and older. Both may be 60 and older.
- *With offspring:* There is at least one person 60 and older present with at least one offspring 18 or older in the household. There may or may also be a spouse or others but there are no grandchildren aged 0 to 17.
- *Pure skip generation:* There is at least one person 60 and older present and at least one grandchild aged 0 to 17 in household. There are no children 18 and older. There may or may not be a spouse, but there are no others in the household.
- *Other skip generation:* There is at least one person 60 and older present and at least one grandchild aged 0 to 17 in the household. The household may contain a spouse, and it may contain others, such as younger children, older grandchildren or other relatives or non-relatives. But, there are no children 18 and older.
- *Three generation:* There is at least one person aged 60 and older, at least one offspring 18 or older and at least one grandchild 0 to 17 in household. There may or may not be a spouse and others.
- *Other:* This category is included for all other types of households, which mean those without children 18 and older or grandchildren 0 to 17 but with other children, grandchildren, relatives or non-relative. There may or may not be a spouse.

Figure 5.2: Distribution of Household Type for Older Person Households by Household Migrant Status (N=1,217)



It is absolutely clear, looking at Figure 5.2, that *older person households that are migrant households are much more likely to be the pure skip generation type*. This means that older migrant households are much more likely than older non-migrant households to contain a grandchild under age 18, no children 18 and older, and no other person with the possible exception of a spouse. In total, 10.9% of migrant households are classified as pure skip generation households in comparison to only 2.2% of non-migrant households. Combining pure and other skip generation households (other skip generation households contain others besides spouse, offspring and grandchildren), 14.6% of migrant older person households are skip generation compared to 3.6% of non-migrant older person households.

In contrast, *migrant households are much less likely to be classified as three generation*. The percentage of three generation households is 28.4% for migrant and 40.3% for non-migrant older adult households. On balance, older adult non-migrant households are much more likely to contain offspring 18 and older in comparison to older adult migrant households. Adding up across the categories, 60.7% of migrant older adult households contain an offspring 18 and older compared to 75.7% of non-migrant older adult households.

Migrant Remittance and Support to Households Containing Older Persons

The current section examines whether migrants tend to provide more or less support for older adult versus non-older adult households and whether this depends upon whether there are children left behind. First, for the purpose of clarifying the degree to which children of migrants are left behind, Table 6.1 considers all migrants 18 and older from the CRUMP survey and shows the percent of children left behind by sex of migrant. Of 4,201 migrants, 29.6% had at least one child at time of interview and 17.2% left one or more behind in rural areas. This means that of those with children, fully 58.0% left a child behind in the household of origin. Males are more likely to leave children behind, but this is because male migrants are more likely to have children than are female migrants. In fact, earlier analyses have shown that females are less likely to migrate if they have children than are males (CRUMP Research Team, 2012). About half of those leaving children behind leave behind more than one. Daughters are slightly more likely to be left behind than are sons. In total, 9.4% left a child aged 0 to 5 behind, compared to 8.6% aged 6 to 11 and 5.8% aged 12 to 17.

Table 6.1: Indicators of Migrants Leaving a Child behind in Household of Origin¹

	All migrants 4201	Males 2101	Females 2099
N			
Children left behind			
% of migrants with at least one child	29.6	33.0	26.2
% with a child left behind	17.2	19.8	14.5
% with multiple children left behind	9.0	11.1	7.1
% with son left behind	10.3	12.4	8.1
% with daughter left behind	12.0	14.1	9.8
% with child age 0 to 5 left behind	9.4	11.2	7.6
% with child age 6 to 11 left behind	8.6	9.7	7.5
% with child age 12 to 17 left behind	5.8	7.2	4.4
Of those with at least one child, % with child left behind	58.0	60.1	55.3

Note: (1) To be considered, child left behind must be aged 17 and younger. Migrant must be 18 or older.

Table 6.2 looks at migrant support going to household of origin and analyzes this support depending upon whether there is a child left behind in the household of origin and whether there is an older person in the household. Due to the structure of the data, it is not possible to determine 100% of the time whether the older person in the household is the parent of the migrant. In fact, there are instances where the older person is the grandparent or another relative. Also note that Table 6.2 looks at households, not individual migrants. There are quite a few instances, as noted in the data section, where there is more than one migrant associated with a household. Where there is more than one migrant, a child left behind could be the offspring of any individual migrant or more than one migrant may have left children behind.

Looking at numbers of cases, of 2,875 migrant households surveyed, 1,564 or about 55% do not have either a child or an older person left behind. Four-hundred and thirty one or about 15% have a child that is the offspring of a migrant left behind. Seven-hundred and thirteen, or about 25% have an older person left behind. Finally, 167, or about 6%, have both a child and older person left behind. Therefore, about 21% of rural migrant households in Cambodia contain one or more child of a migrant that was left behind and about 31% contain an older person that was left behind.¹

The level of support indicators differ substantially depending on who is left behind. Support is more likely to be received when there is a child of a migrant in the household of origin, or a child and an older person. For instance, about 76% of all migrant households receive remittances. When there is a child in the household of origin the percent increases to about 83% and when there is both child and older person it increases to about 90%. The average monthly remittance is higher for households that contain a child left behind and households that contain a child and an older person. The average monthly remittance is about 96,000 Riel for all households (about \$24 USD), but closer to 120,000 for households with a child or child and older person left behind (about \$30 USD).

Table 6.2: Indicators of Migrant Support to Migrant Households by Child and Older Person Left behind in Household of Origin¹

	Who is left behind				
	All households	Neither youth nor older person	Youth	Older person	Both youth and older person
N ²	2875	1564	431	713	167
% of households getting remittances from a migrant	75.7	72.9	83.3	73.7	89.8
Average monthly migrant remittance	95,880	87,681	121,446	93,480	116,519
% of households receiving material support	29.5	29.0	22.7	32.3	39.7
% of households receiving instrumental help	25.6	25.2	26.0	25.9	27.1

Note: (1) a child left behind must be 17 and under. An older person is 60 and older.
(2) This table reports weighted N's.

The percent of households receiving material support, which may be any goods or material items not including actual money, is substantially greater when there is a child of a migrant and older person present. About 30% of all households receive material support from a migrant. The percent is almost 40% when a child and older person are left behind. At the same time, there is little difference in instrumental support, which may be household help or help on a farm or with a business.

The same indicators of migrant support are analyzed in Table 6.3, but here the focus is only on the households where there is an older person left behind, and support is shown across the seven household types that were defined in section 5 above. Skip generation households are the most likely to be receiving remittances. That is, about 85% of pure skip and about 83% of other skip generation households receive any remittances compared to about 76% of all households. But, the amount of remittance is not necessarily greater for skip generation households. In fact, it is households with an older adult and their offspring 18 and older that receives the highest remittance amount with an average of about 140,000 Riel per month (about \$35 USD). Since it is uncertain whether the older person left behind is a parent or grandparent of the migrant, it is possible the offspring referred to here could be a sibling or a parent of the migrant. Households with an older person and their adult offspring are also more likely to be receiving material support than any other household type. The percent receiving instrumental support does not differ much across household type.

In sum, this section has shown that a) migrants often leave biological children behind; b) households with children left behind, and those with children and older persons, are on balance more likely to get remittances; c) among older person households, those classified as skip generation, that is those with an older person and grandchild present but no middle generation, are more likely to get remittances than other older adult household types, and; d) the average

amount of remittances are highest when there is an older adult and their offspring 18 and older present.

Table 6.3: Indicators of Migrant Support to Older Adult Migrant Households by Household Type¹

	Older person household type							
	All	Single person	Older person + spouse	Older person + offspring	Pure skip	Other skip	Three generation	Other
N	848	64	87	286	76	28	243	65
% of households getting remittances from a migrant	76.2	81.8	65.6	74.2	85.3	83.3	78.8	68.0
Average monthly migrant remittance	108,858	76,336	99,657	140,210	94,737	97,082	55,466	97,879
% of households receiving material support	27.3	28.1	30.9	47.1	30.8	35.3	36.0	33.8
% of households receiving instrumental help	27.3	32.3	25.8	23.5	16.7	29.4	20.0	26.5

Note: (1) For definitions of household type, see Section 5 above.

Wealth of Older Person Households by Household Migrant Status

The sections above have shown that older persons that live in migrant households often live with their grandchildren and in skip generation situations. In turn, migrant households are more likely to receive remittances if a child of the migrant and older adult is left behind and if the older adult household is classified as skip generation. It is reasonable to now ask about the material well-being of households with older persons or with older persons and youth and whether these are more or less favorable than other household types.

Household wealth scores were calculated for each household that was part of the CRUMP rural survey. This score is based on a similar one that is normally calculated for households using the Demographic and Health Survey. This is based on owned resources and consumption expenditures (Filmer & Pritchett, 2001; Montgomery & Hewett, 2005; Rutstein & Johnson, 2004). Specifically, the score is a sum of weighted values assigned to the ownership of specific assets such as radios, televisions, refrigerators, bicycles, motor vehicles, and so on. The weight of each asset is assigned by Principal Component factor scores. The sum of the scores is standardized to have a maximum value of 100 and a minimum value of 0. The higher the score, the more assets are owned by the household and therefore the wealthier the household. The lower the score, the fewer assets are owned by the household and the poorer the household.

Household wealth scores are examined in two figures, each of which divides households in different ways, and each of which examines migrant versus non-migrant households. Figure, 7.1, divides households by their age distribution and migrant status. For this figure, children refer to those 17 and under. Adults refer to those 18 to 59. Elderly refer to those 60 and older.

The wealthiest household types on average are those with adults, children and elderly, with adults and elderly, with adults and children and with adults only. In other words, any household that contains an adult aged 18 to 59 is wealthier than any household that does not contain an adult. In addition, there is not much difference depending upon whether these households are categorized as migrant or non-migrant. In contrast, the poorest household types on average are those with elderly only, with children and elderly or with children only (although there are only 14 households that contain only children), and for those household types, migrant households are much poorer than their non-migrant counterparts (there are no non-migrant households with children only). In sum, despite remittances from migrants, the poorest households in Cambodia are migrant households with elderly only, with children only, or with a combination of elderly and children, but no adults.

Figure 7.1: Household Wealth Scores by Age Distribution of Households and Migrant Status¹

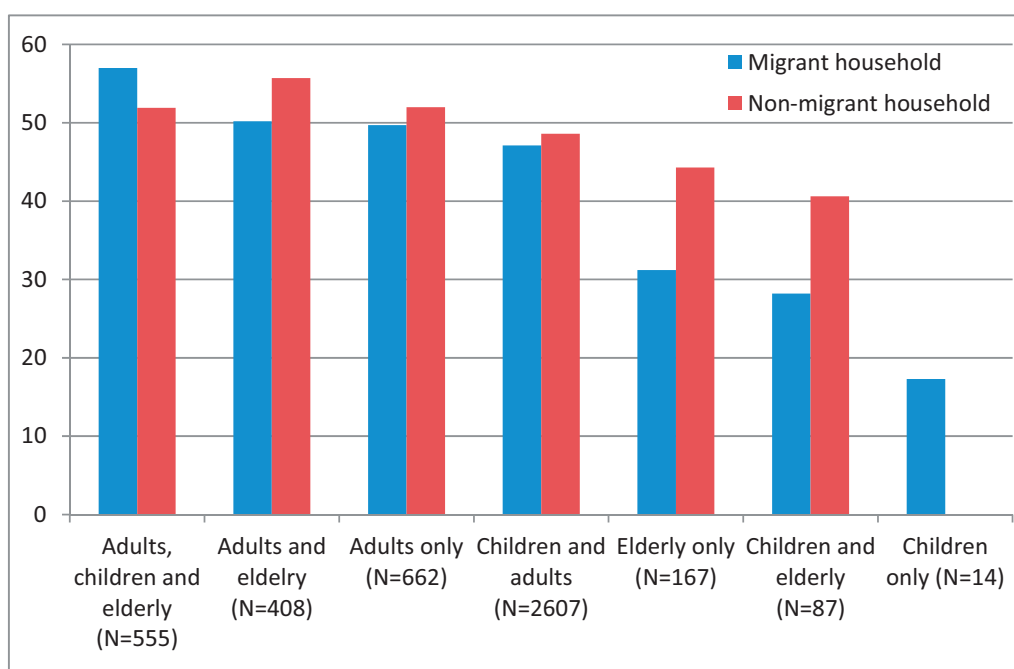
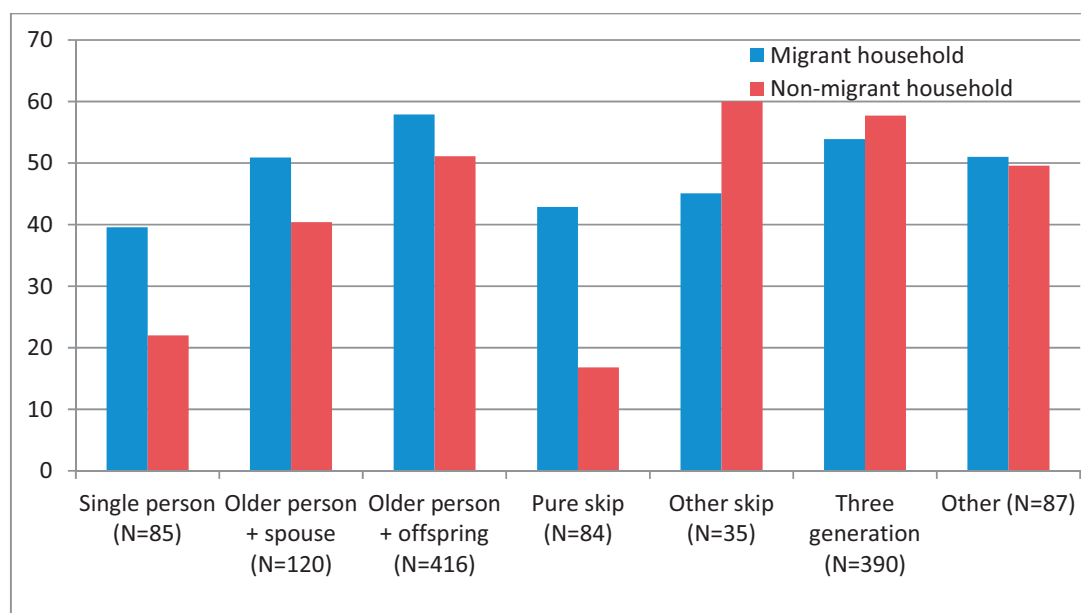


Figure 7.2 looks only at older person households and shows the average wealth scores by household type. There are incredible differences across household types. The poorest type is a pure skip generation household. Skip generation households classified as non-migrant are particularly poor. The average wealth score of this household type is only about 17 out of 100. Skip generation households that are categorized as migrant households have much higher wealth scores than skip generation households categorized as non-migrant. It may be that the remittances that are sent by migrants back to skip generation households may make a difference with respect to wealth. Moreover, it is notable that older person only and older person plus spouse only households do better if they are migrant rather than non-migrant, which again is consistent with a positive impact of migrant remittance. The wealthiest older person household types are three generation, older person plus offspring, and other skip generation households, and for these types there is not much difference depending upon whether they are migrant or non-migrant.

Figure 7.2: Household Wealth Scores of Older Person Households by Older Person Household Type¹



Note: (1) Household type as per Table 6.3.

Conclusion and Policy Implications

This report examined the demographic ageing situation in Cambodia and looked at some of the circumstances related to ageing and migration in rural areas. In doing so, the report dealt with older persons 'left behind' in rural areas and not with older persons 'as' migrants. As migration increases together with ageing of the population, there will be more elderly migrants and research on elderly migrants will be needed. This report, in contrast, focused on elderly persons as impacted by migration of their family members, such as children and grandchildren.

Several clear findings come out of this report. From a demographic point of view, *older persons are a fast growing segment of the Cambodian population*. The percent of the Cambodian population that is elderly is currently less than other countries in the region and less than the global average. But, because of past fertility and mortality, including unusual fertility and mortality trends associated with the Khmer Rouge period, the percent elderly in Cambodia will soon match or exceed the percent elsewhere. The transformation of Cambodia from a younger to an older population is inevitable due to population momentum. That is, the fertility and mortality patterns of the past already predetermine ageing in the future as long as unforeseen changes in these patterns do not occur going forward.

With respect to older adults in rural Cambodia and the migration of household members, CRUMP data determined that older persons from migrant households are more likely to be living in smaller sized households and skip generation households in comparison to their non-migrant household counterparts, and are less likely to be living in three generation households. This is consequential given that the skip generation household is potentially a vulnerable household type. For instance, skip generation households containing an older adult and child are among the poorest in rural Cambodia. Still, information on remittances indicated that remittances are more likely when there is a child and older person left behind in the rural household. These remittances are not necessarily large. The greater total average amount of remittance tends to go to older households where the older adult is living with an offspring aged 18 and older.

A limitation of CRUMP data is that it is a cross-sectional survey. Therefore, causal connections are difficult to determine. One might hypothesize that it is migration of a household member that causes skip generation households to be poorer. This hypothesis can only be tested, and the finding can only be verified, when longitudinal panel data come on board. Yet, given the findings in this report, there are several policy recommendations that can be suggested. The earlier main CRUMP report (CRUMP Research Team, 2012) determined that:

A program should be established to support older adults in rural areas, particularly ones that are taking care of grandchildren. Social security systems, welfare services for elderly, and health care for elderly should be strengthened and expanded. Centers for older adults that might provide information, health care and other services could be established. Old Person Associations, which do exist, should be supported and strengthened.

Further policy implications come out of this report:

- Any policy agenda needs to give adequate consideration to the implications of a growing elderly population. There should be recognition of the fact that elderly household members are important providers and contribute to households. Involvement of elderly in

all spheres of life is important for development. Older people increasingly want to remain economically active and make a contribution to development. Societies need to recognize the strengths of older persons and empower them. While Cambodia needs to recognize that elderly persons are key for the development of nation, there also needs to be recognition that non-elderly household members are major supporters for the care of elders.

- Because the population of Cambodia is ageing, there is a growing need for information on elderly persons, their households, the communities in which they live, and various aspects related to their well-being. A national survey of older persons is in order. These data could be used to better understand the elderly situation and to determine informed policy moving forward.
- Older persons are impacted upon by the migration of family members. A follow-up CRUMP project should provide some specific focus on elderly left behind.
- Health care of older persons needs to be examined, particularly in rural areas. Cambodia has for many years been a young country, but increased population ageing will give rise to new health concerns. Some training of medical practitioners should focus on elderly health problems. Formal and informal mechanisms for the support of older people need to be examined. Health insurance for older persons should be introduced.
- Elderly persons from poor migrant households should be a focus for social welfare services and economic support. Poor older persons with one child or two children who are migrants could be in the most disadvantage situation. Social welfare at the community level could provide both direct and indirect services to these elderly persons. There should be formulation or expansion of an elderly health insurance card program for rural poor households through government funds.
- Social affairs should continue to implement an elderly policy. A national committee of elderly persons existing in Cambodia suggests there is a political will for such implementation to continue.

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Ministry of Planning

Nº. 386, Preah Monivong, Phnom Penh

Tel: 023 720 901

Fax: 023 210 944

023 210 698

Website: www.mop.gov.kh



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