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## Abstract

This report provides a basic but comprehensive demographic, social, economic and health profile of Cambodia's older population based on the 2004 Survey of Elderly in Cambodia (SEC), a representative survey of persons age 60 and over conducted in Phnom Penh and the five largest provinces. As such it represents the first comprehensive examination of the situation of Cambodian elders based on a widely representative sample. The traumatic history of social dislocation, civil strife and political violence that the current generation of elders survived is evident in the fact that over two-fifths lost at least one child and close to one fourth of the women lost a spouse during the short but lethal period of Khmer Rouge rule during 1975-79. Given the lack of alternatives, Cambodian elders rely heavily on filial support as indicated by high levels of coresidence and contributions of modest amounts of money and material goods from children. Both the economic situation and health of Cambodian elders is generally quite unfavorable reflecting the pervasive poverty and underdevelopment of country in general. The results point to a need for greater recognition on the part of the government and aid agencies of the needs and potential contribution of this important but hitherto largely ignored segment of the population.

## Introduction

Today's population of older age Cambodians lived through an exceptionally traumatic period of history during their adult years. Independence from France in the early 1950s was followed by civil strife eventually leading to a coup d'etat establishing the right wing Lon Nol regime in 1970. Five years later, in April 1975, the revolutionary forces of the Khmer Rouge entered Phnom Penh completing their takeover of the country (Ross 1987). During the following four year rule under Pol Pot, political violence, severe food shortages and lack of medical care resulted in an estimated 1.5 to 2 million deaths constituting as much as a fourth of the total population (Heuveline 1998; Kiernan 2003). Many who died were the sons, daughters or spouses of today's older-aged population. Social dislocation, continuing political conflict, and pervasive poverty took their toll during the post Khmer Rouge period resulting in further losses of family members. More recently, Cambodia has been experiencing the worst AIDS epidemic in Asia, and many who became infected and died were adult sons and daughters of the current elderly population. These events may have eroded the base of core family support of older persons in a country which is among the poorest in the world and where formal channels of assistance are virtually absent.

Relatively little systematic data exist on the social and economic situation or the health of Cambodia's elderly. The goal of the present report is to provide a basic but comprehensive demographic, social, economic and health profile of Cambodia's older population based on the 2004 Survey of Elderly in Cambodia (SEC), a representative survey of persons age 60 and over conducted in Phnom Penh and the five largest provinces. A limited amount of prior research has been conducted. One earlier study was conducted in 1997 jointly by the Ministry of Social Affairs, Labor and Veteran Affairs and HelpAge International included a modest sized survey of persons aged 55 and older in Phnom Penh and in the rural areas of four provinces (Kato 2000; 1998; HelpAge International 1998). For convenience we refer to this as the HAI/MSALVA survey. Another study was based on the 1997 nationally representative Socioeconomic Survey but since the survey was not specifically designed for the purpose the amount of information it could provide was limited (Zimmer and Kim 2001).

One likely reason for the lack of attention to the older population is that fertility in Cambodia has remained high and thus the share of the population who are age 60 and over is relatively small, especially compared to a number of other southeast Asian countries where population aging is far more rapid. According to the most recent UN assessment, only 5.6 percent of the Cambodian population is aged 60 and over although it is projected to slowly increase in the coming decades (United Nations 2005). One unusual feature of today's Cambodian older population is the large predominance of women (64 percent in 2005 according to the UN estimates) reflecting in part the disproportionate share of men among those killed during the Khmer Rouge period. The relatively low share that elders make up of the total population masks the fact that almost one in four Cambodian households have at least one member who is at least age 60 (based on original tabulations of the 2000 Cambodia Demographic and health Survey).

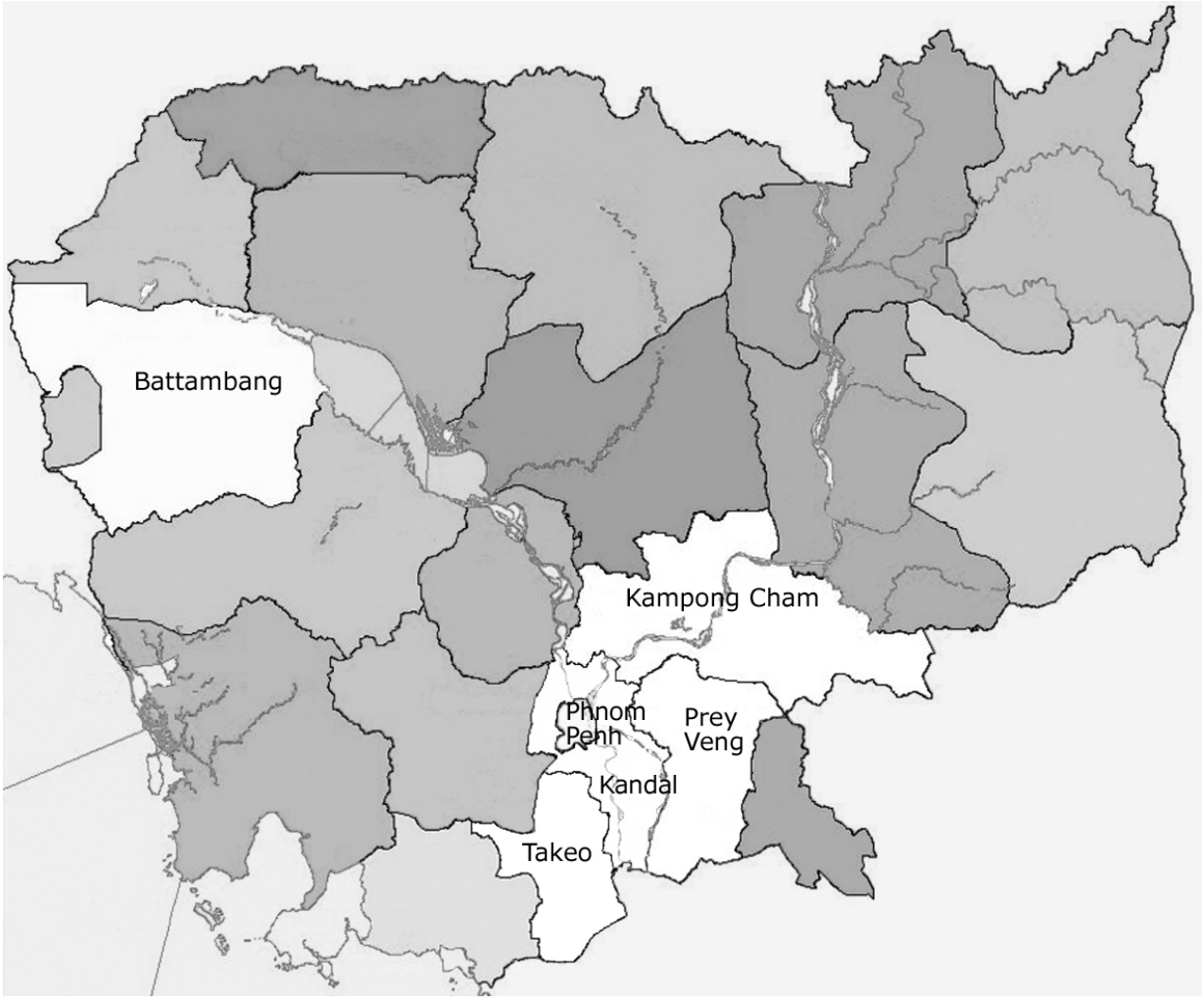
## Methodology

Given the unusual circumstances of Cambodia and their likely impacts on the older population, considerable effort was made to develop a survey questionnaire that not only would cover the standard issues about elderly economic, social and physical well-being that are the focus of recent surveys of older age populations in the region but also issues specific for the situation in Cambodia. The latter included questions to capture the dramatic political history that caused so much social upheaval in the lives of older Cambodians over the past several decades, the impact of illness and death of adult children, and awareness and knowledge of older persons regarding AIDS, especially as related to caregiving to HIV-infected persons. The current report is limited to providing an overview of the more standard issues relevant to older persons. More focused analyses based on the sections of the questionnaire are tailored to examine the impact of the Pol Pot (Khmer Rouge) era and its aftermath, the impact of recent deaths of

adult children including those due to AIDS, and knowledge and awareness related to AIDS are planned for future reports as are more detailed examinations of health and socio and economic well-being of the elderly. The questionnaire in its entirety is appended at the end of this report.

A representative sample survey of 1273 persons aged 60 and older living in private households was conducted in an area covering over half of Cambodia's population which includes Phnom Penh and the five most populated provinces (Kampong Cham, Kandal, Prey Veng, Battambang, and Takeo).[1] The location of the provinces covered are shown in Figure 1. Sampling procedures are described in detail in Appendix A. Samples were drawn separately for Phnom Penh and the other five provinces taken collectively using somewhat different procedures for the two domains. In addition, in sampled households we interviewed only one elderly member regardless of the number of members age 60 and over. For these reasons it is necessary to weight results to make them representative. Determination of the weights is described in detail in Appendix B. All results presented in this report unless otherwise noted are weighted.

Figure 1. Provinces covered by Survey of Elderly in Cambodia




[1] We note that there is considerable overlap in the provinces covered by SEC and the HAI/MSALVA survey which covered Phnom Penh and rural areas of Kampong Cham, Battambang, Takeo and Kapot provinces.

Fieldwork took place in two main stages. The first stage took place in April 2004 in Phnom Penh where 400 interviews were conducted and the second stage in July and August 2004 in the five provinces and involved 800 interviews. In addition, because of problems encountered during the initial fieldwork in Phnom Penh, supplemental interviewing was undertaken in June, August and September. This resulted in an additional 73 interviews, making the total Phnom Penh sample size 473.[2]

A detailed description of response rates is provided in Appendix C. Refusal rates were 8.5% in Phnom compared to only 1.4% elsewhere. Both because of the problem with large numbers of absentee households in Phnom Penh during the April fieldwork as well as higher refusal rates, overall response rates were substantially lower there (84.6%) than in the other provinces (97.9%). Even in Phnom Penh. however, the response rate is quite high compared to surveys in many other countries.

We now turn to presenting results. After examining the demographic characteristics of Cambodian elders, we explore a number of social, economic and health issues in that order. When presenting the results in tabular form, we limit examination of differentials to gender, location (Phnom Penh versus the remainder of the provinces) and age (60-69 versus 70+). Each of these dimensions are typically of interest for both academics and policy-makers. Given that the present report is intended as an overview, we defer more detailed examination of these issues for future more focused reports.

## Demographic characteristics

In order to help judge the adequacy of the 2004 Survey of Elderly in Cambodia (SEC) sample, we compare the basic demographic characteristics of the respondents in the SEC with results from three independent sources from which reasonably recent estimates for the older population of Cambodia can be derived. The three sources used for this purpose are the 1998 census, the 1999 Socioeconomic Survey, and the 2000 Demographic and Health Survey (DHS). Table 1 presents the comparisons.

For each of the three external sources, in addition to national results, results limited to the six province area covered by the SEC are also shown to increase comparability with the SEC. As comparisons between national and SEC area results from the external sources make clear, the older population in the six SEC provinces resembles fairly closely the older population at the national level, at least with respect to the characteristics included in the table. Perhaps the largest difference, as indicated by the 2000 DHS, is that the older population in the six provinces covered by SEC are slightly more likely to have attended school than the national average. This likely reflects a compositional effect attributable to larger share of the total that Phnom Penh elderly (with well above national average levels of education) represent in the SEC area than they do nationally.

[2] More specifically, as noted in Appendix A, the original fieldwork in April encountered substantial non-response due to either to no one being home at the time or the absence of the eligible elderly household member. This situation arose because the timing of the fieldwork coincided with special days or holidays during which persons were likely travel away from their home. To limit potential biases arising from this situation, absentee households in Phnom Penh in those sites where a large number of absentees were recorded were revisited during June to obtain interviews. A second problem with the original Phnom Penh interviews was that an implausibly large number of respondents were recorded as never having heard of AIDS and thus were not asked the further questions regarding knowledge related to AIDS. However, it appears that the initial screening question was asked incorrectly by some interviewers. Thus respondents who originally were recorded as never hearing of AIDS were revisited in late August and September to clarify their answers. As a result most who were re-interviewed indicated that they had heard of AIDS (even if they did not know much about it) and were then asked the full set of knowledge questions that had earlier been mistakenly skipped.

**Table 1. Comparison of basic demographic characteristics of the population age 60 and over in Cambodia according to the 1998 census, the 1999 Socio-economic Survey, the 2000 Demographic and Health Survey (DHS) and the 2004 Survey of Elderly in Cambodia (SEC)**

| | 1998 Census | | 1999 Socio-economic Survey | | 2000 DHS | | 2004 Survey of Elderly in Cambodia |
|---|---|---|---|---|---|---|---|
| | National | SEC sample area | National | SEC sample area | National | SEC sample area | |
| **Sex** (% distribution) | | | | | | | |
| male | 41.8 | 42.3 | 46.9 | 47.5 | 42.5 | 43.7 | 40.2 |
| female | 58.2 | 57.7 | 53.1 | 52.5 | 57.5 | 56.3 | 59.8 |
| **Age** (% distribution) | | | | | | | |
| 60-64 | 34.1 | 33.4 | 34.7 | 33.0 | 35.4 | 35.3 | 32.8 |
| 65-69 | 27.8 | 27.5 | 27.8 | 27.6 | 28.4 | 28.0 | 26.5 |
| 70-74 | 18.7 | 18.8 | 19.1 | 20.6 | 17.5 | 18.2 | 20.8 |
| 75+ | 19.4 | 20.3 | 18.5 | 18.9 | 14.6 | 18.9 | 19.8 |
| **Marital status** (% distribution) | | | | | | | |
| *Men* | | | | | | | |
| currently married | 82.7 | n.a. | 81.6 | 81.0 | n.a. | n.a. | 81.6 |
| widowed | 12.5 | n.a. | 17.8 | 18.5 | n.a. | n.a. | 15.8 |
| other | 4.8 | n.a. | 0.6 | 0.5 | n.a. | n.a. | 2.5 |
| *Women* | | | | | | | |
| currently married | 43.3 | n.a. | 43.0 | 45.1 | n.a. | n.a. | 30.7 |
| widowed | 48.1 | n.a. | 55.9 | 53.7 | n.a. | n.a. | 64.3 |
| other | 8.6 | n.a. | 1.1 | 1.2 | n.a. | n.a. | 4.9 |
| **% literate** (percent) | | | | | | | |
| Total | 33.4 | n.a. | [a] | [a] | n.a. | n.a. | 40.8/31.4 [b] |
| *Men* | 62.5 | n.a. | [a] | [a] | n.a. | n.a. | 72.3/65.0 [b] |
| *Women* | 12.4 | n.a. | [a] | [a] | n.a. | n.a. | 19.6/10.6 [b] |
| **% ever attended school** (including temple school) | | | | | | | |
| *Total* | n.a. | n.a. | [a] | [a] | 32.2/36.8 [c] | 34.2/39.6 [c] | 43.1 |
| *Men* | n.a. | n.a. | [a] | [a] | 60.6/65.3 [c] | 62.7/67.2 [c] | 75.9 |
| *Women* | n.a. | n.a. | [a] | [a] | 11.2/15.6 [c] | 12.2/17.2 [c] | 20.9 |

[a] Although the survey includes these variables, they appear to be incorrectly identified in the public use data set.
[b] the first percent refers to the population 60+ and the second to the population 66+ to correspond to the cohorts age 60+ in the 1998 census.
[c] the first percent refers to the population 60+ and the second to the population 56+ to correspond to the cohorts 60+ in SEC.
n.a.=not available.

The sex distribution in SEC is reasonably close to that in the 1998 census and 2000 DHS. The 1999 Socioeconomic Survey is somewhat out of line with the other sources. Likewise, the age distribution of older persons in the SEC is quite similar to that in the other sources. The marital status distribution in the SES for men is also fairly similar to that found in the other three sources but not for women. The SEC sample has relatively fewer women who are currently married and relatively more who are widowed than indicated by the census and the Socioeconomic Survey (DHS does not have equivalent data). The reason for this is unknown. We note, however, that results from the 1997 Socioeconomic Survey (not shown) with regards to marital status of older women is somewhat closer to that of the SEC than either the 1998 census or 1999 Socioeconomic Survey (Zimmer and Kim 2001).

The percent literate in the SEC is substantially higher than indicated for the population 60 and over in the 1998 census. This largely reflects a process of cohort succession through which persons who were 54-59 in 1998, and thus not part of the 60+ population at that time, aged into the 60 and over population by 2004 while at the same time some persons who were 60 or over in 1998 died, especially among the oldest age groups. Since literacy was generally increasing over time in Cambodia, the average literacy level of younger cohorts who moved into the 60 is higher than the average of their seniors who made up the 60 and over population in 1998 and at the same time the literacy level of those who died was below average given they were skewed towards the oldest ages. This process of cohort succession is thus increasing the average literacy rate of the population 60 and older over time. In addition, Phnom Penh elderly represent a larger share of the SEC sample than of the national population of elderly and, as indicated above, since the literacy level of Phnom Penh elderly is above the national average, this also has the effect of raising the average literacy level compared to nationally representative census results. However when tabulations of SEC are limited to persons 66 and older to correspond to the cohorts who were 60 and older in 1998, the results are relatively close and would be even closer if census results limited to the SEC sample area rather than at the national level were available for comparison. The percentage attending school is also substantially higher in the SEC than in the 2000 DHS. Again, however, an appropriate comparisons needs to take account of the fact that the SEC took place four years later and the process of cohort succession would affect results in the same way as was noted for literacy with respect to comparisons with the census. Thus when DHS results are calculated for persons aged 56 and older (who would be 60 and older in 2004) and limited to the provinces covered by the SEC sample, the percentages who ever attended school are reasonably similar in the two sources.

Overall the comparison of basic demographic characteristics from the 2004 SEC with the other independent sources suggest that the SEC sample is likely to be reasonably representative of the populations of the six provinces covered with respect to age, marital status of men, literacy and education. However the widowed women appear to be overrepresented and currently married women underrepresented needs to be borne in mind when interpreting results. Also examination of the sex ratio of the elderly population, presented below (see table 3) suggests that women are overrepresented, especially in Phnom Penh.

**Table 2. Age distribution (in %) by sex and location, Cambodian elders 2004**

| Age | Total | Sex | | Location | |
|---|---|---|---|---|---|
| | | Men | Women | Phnom Penh | Provinces |
| 60-64 | 32.8 | 33.8 | 32.1 | 41.8 | 30.9 |
| 65-69 | 26.6 | 27.9 | 25.6 | 25.4 | 26.8 |
| 70-74 | 20.8 | 19.7 | 21.6 | 16.0 | 21.8 |
| 75+ | 19.9 | 18.6 | 20.8 | 16.9 | 20.5 |
| Total | 100 | 100 | 100 | 100 | 100 |

Table 2 provides a more detailed examination of the age distribution of Cambodian elders according to the SEC. Among the population 60 and over, the size of age cohorts declines with age as would be expected. Almost a third of persons age 60 and older are in the youngest age group of 60-64 and only a fifth are age 75 and older. In general the age distributions of men and women are quite similar.

More pronounced differences in the age distribution of the elderly are evident between Phnom Penh and the provincial portion of our sample. Older persons in Phnom Penh are substantially more skewed towards younger ages within the elderly range than those in the five other provinces.

**Table 3. Sex ratio of elders (males per 100 females) by age and location, Cambodian elders 2004**

| Age | Total | Location | |
|---|---|---|---|
| | | Phnom Penh | Provinces |
| 60-64 | 71.1 | 55.9 | 75.7 |
| 65-69 | 73.3 | 54.4 | 77.4 |
| 70-74 | 61.9 | 45.2 | 64.7 |
| 75+ | 59.9 | 28.4 | 66.7 |
| Total | 67.4 | 48.4 | 71.7 |

Table 3 examines the sex ratio of the older population by age. The overall sex ratio of the SEC sample indicates that there are about 67 men for every 100 women age 60 and older. This is an extremely low sex ratio for an older population. For example, for less developed regions taken as a whole, the UN estimates that in 2005 the sex ratio of persons 60 and over was approximately 88 men per 100 women (United Nations 2005). The very low sex ratio among elders in Cambodia is undoubtedly related in part to the historical legacy of political violence and turmoil that characterize much of the past half-century and which disproportionately took a toll on the lives of men compared to women. The sex ratio also varies by age and differs between Phnom Penh and the other five provinces. The relative share of men among younger elderly is distinctly higher than among elders age 70 and older. At the same time, the sex ratio is substantially lower in Phnom Penh then in the provinces, particularly for the population age 75 and older for which an extremely low sex ratio of 28 men per 100 women was found in the survey.[3]

**Table 4. Marital status distribution (in %) by sex, age and location, Cambodian elders 2004**

| | Men | | | Women | | |
|---|---|---|---|---|---|---|
| | Married | Widowed | Other | Married | Widowed | Other |
| **Total** | 81.5 | 16.0 | 2.5 | 31.0 | 64.3 | 4.7 |
| **Age** | | | | | | |
| 60-64 | 90.8 | 5.7 | 3.4 | 45.1 | 49.2 | 5.7 |
| 65-69 | 90.1 | 7.0 | 2.8 | 34.4 | 60.0 | 5.6 |
| 70-74 | 78.4 | 21.6 | 0.0 | 23.8 | 73.2 | 3.0 |
| 75+ | 54.7 | 42.1 | 3.2 | 12.7 | 83.5 | 3.8 |
| **Location** | | | | | | |
| Phnom Penh | 88.4 | 11.6 | 0.0 | 22.2 | 71.5 | 6.3 |
| Provinces | 80.8 | 16.5 | 2.7 | 32.9 | 62.6 | 4.5 |

Table 4 examines the marital status distribution for men and women by age and location. The large majority of men in the overall sample are currently married while almost two thirds of women are widowed. Although in virtually all populations around the world, larger shares of older women than men are widowed, still the level of widowhood among Cambodian elders according to the survey is quite extreme (Knodel and Ofstedal 2003). Again this is likely related at least in part to the historical legacy of political violence and turmoil during which men were more likely than women to lose their lives. The high levels of current marriage among men and of widowhood among women is particularly pronounced among elders in Phnom Penh compared to those in the provinces. We note, however, that the levels of widowhood among elderly women indicated by the external sources shown in Table 1 are more moderate and thus the levels found in the SEC should be regarded cautiously.

As noted in the introduction, Cambodian elders of today lived much of their life through a historical period characterized by severe social dislocation and wide scale civil conflict and political violence

[3] Official population projections for Phnom Penh for 2004 indicate substantially higher sex ratios suggesting that the SEC sample for Phnom Penh is skewed towards women.

resulting in the death of family members for an enormous share of the population. Without doubt the most traumatic period was between 1975 and early 1979 when the Khmer Rouge held sway over the entire country and when perhaps a fourth of the entire population perished. Thus it is of interest to examine the extent to which today's elderly lost children and spouses in the past, particularly in relation to the Khmer Rouge years.

Table 5 examines the percent of today's elders who lost a child in the past. Results are shown with respect not only to the loss of children of any age but also the loss of children age 11 and older, given that violent deaths are mainly concentrated from this age upwards.[4] Overall, elders attributed more than a third of all deaths of their children and over half of deaths of their children age 11 and older to violence or 'disappearance'. Over 90 percent of such deaths occurred during the Khmer Rouge period (not shown in table). Overall, fully three fourths of elders reported losing at least one child. Despite the short four year duration of the Khmer Rouge era, over 40% of elders lost at least one child during those years. Moreover, losing a son was more common than losing a daughter, particularly during the Khmer Rouge era and particularly among children aged 11 and older.

**Table 5. Loss of children by cause, sex, and age of child and period of death, Cambodian elders, 2004**

| | All children | | Sons | | Daughters | |
|---|---|---|---|---|---|---|
| | Any age | Age 11+ | Any age | Age 11+ | Any age | Age 11+ |
| **% losing a child - all causes** (a) | | | | | | |
| All periods | 75.5 | 48.5 | 59.0 | 36.2 | 46.8 | 24.3 |
| Before Khmer Rouge era | 29.2 | 5.6 | 19.9 | 3.9 | 17.2 | 2.5 |
| During Khmer Rouge era | 42.8 | 27.2 | 32.8 | 21.2 | 22.2 | 11.8 |
| After Khmer Rouge era | 30.1 | 24.3 | 19.2 | 15.0 | 14.4 | 11.4 |
| **% losing a child due to violence** (b) | | | | | | |
| All periods | 31.8 | 26.6 | 25.5 | 21.5 | 13.5 | 10.2 |
| Before Khmer Rouge era | 2.2 | 1.9 | 2.1 | 1.9 | 0.4 | 0.3 |
| During Khmer Rouge era | 28.6 | 23.2 | 22.7 | 18.5 | 12.9 | 9.4 |
| After Khmer Rouge era | 2.2 | 2.1 | 1.6 | 1.6 | 0.6 | 0.5 |
| **% losing a child due to illness** | | | | | | |
| All periods | 53.4 | 23.0 | 35.9 | 13.9 | 33.7 | 12.3 |
| Before Khmer Rouge era | 26.7 | 3.3 | 17.1 | 1.8 | 16.2 | 1.8 |
| During Khmer Rouge era | 16.8 | 4.2 | 11.0 | 2.6 | 9.6 | 2.2 |
| After Khmer Rouge era | 22.7 | 17.4 | 13.4 | 10.1 | 11.5 | 8.5 |

(a) includes violence/disappearance and illness as well as other causes
(b) includes violence and disappearance

Almost a third of elders reported losing a child due to violence or disappearance and over a fourth lost a child age 11 and older in this way. It was far more common to lose a son than a daughter to violence. The loss of children to violence is overwhelmingly concentrated during the Khmer Rouge era. Over half of elderly reported losing a child due to illness. However unlike violence, this is not overwhelmingly concentrated during the Khmer Rouge years although indeed such losses were common during that period as well. Also, unlike in the case of violent deaths, there is not a large difference in the proportion who lost sons to illness compared to daughters.

[4] For example, although less than half of the deaths reported by the elders were to children age 11 and older, over three-fourths of violent deaths were to children in this age range (weighted results).

Table 6 indicates the percent of elders who reported losing a spouse at some time during their life. Overall slightly more than half of today's elders lost a spouse during their lifetime. However, the share who did so than twice as high among women than among men. Moreover, 10% lost a spouse to violence or disappearance with almost all of such experiences occurring during the Khmer Rouge years and being confined mainly to deaths of husbands rather than of wives. The loss of spouses to illness is considerably more common in general than the loss to violence but during the Khmer Rouge years losses due to violence were actually more common than losses attributed to illness.

**Table 6: Percent of older adults experiencing the death of a spouse by sex, cause of death, and period of death, Cambodian elders 2004**

| Cause | Period | Both sexes (N=1258) | Men (N=463) | Women (N=795) |
|---|---|---|---|---|
| **All causes** (a) | All periods | 52.8 | 30.9 | 67.8 |
| | Pre KR | 10.9 | 8.0 | 12.9 |
| | During KR | 16.1 | 5.9 | 23.1 |
| | Post KR | 28.0 | 19.5 | 33.8 |
| **Violence** (b) | All periods | 10.8 | 2.1 | 16.6 |
| | Pre KR | 0.5 | 0.2 | 0.8 |
| | During KR | 10.0 | 1.9 | 15.5 |
| | Post KR | 0.2 | 0.0 | 0.3 |
| **Illness** | All periods | 38.1 | 27.3 | 45.4 |
| | Pre KR | 8.3 | 7.4 | 8.9 |
| | During KR | 4.7 | 2.9 | 5.9 |
| | Post KR | 26.1 | 18.6 | 31.1 |

(a) includes violence, disappearance, illness, accident and other causes
(b) includes violence and disappearance

Given the virtual absence of formal channels for care and support of the older population, older Cambodians are dependent largely on their families, and particularly their adult children, for any assistance needed. Table 7 indicates the number of living children of the current generation of elderly Cambodians. Although many elderly Cambodians lost children during the tumultuous history of the last several decades, sustained high fertility has resulted in substantial numbers of children who still survive. Among the 5% who have neither a biological child of their own nor a step child through their spouse, almost a third have adopted a child (result not shown).[5] Thus less than 4% are childless. In addition, less than 10% have only one living child. At the same time, almost two fifths have six or more living children. As a result, Cambodian elders average 4.7 living children counting own, step and adopted children.

[5] Among all elders, 3.7% indicated that they had at least one adopted child. This is substantially below the 13% in rural areas and 10.5% in Phnom Penh reported by the HAI/MSALVA survey (Kato 2000) suggesting that some adopted children in SEC may have been reported as own children (since very few respondents reported step children).

**Table 7. Number of living children (own, step and Adopted) by sex, location, and age of respondent, Cambodian elders 2004**

| | Total | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Number of children** (% distribution) | | | | | | | |
| none | 3.5 | 1.0 | 5.3 | 6.1 | 3.0 | 3.8 | 3.1 |
| 1 | 8.2 | 5.7 | 9.9 | 10.8 | 7.7 | 7.0 | 10.0 |
| 2-3 | 19.9 | 11.1 | 25.9 | 28.2 | 18.2 | 17.7 | 23.2 |
| 4-5 | 29.7 | 29.6 | 29.7 | 28.2 | 30.0 | 28.7 | 31.1 |
| 6+ | 38.7 | 52.6 | 29.3 | 26.8 | 41.1 | 42.7 | 32.6 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| *Mean number* | 4.7 | 5.6 | 4.2 | 4.0 | 4.9 | 4.9 | 4.4 |
| **Number of sons** (% distribution) | | | | | | | |
| none | 17.1 | 10.9 | 21.3 | 22.1 | 16.1 | 15.9 | 19.0 |
| 1 | 20.7 | 17.8 | 22.6 | 24.9 | 19.8 | 17.6 | 25.1 |
| 2 | 21.1 | 19.5 | 22.1 | 22.1 | 20.8 | 19.8 | 22.8 |
| 3+ | 41.2 | 51.8 | 34.0 | 31.0 | 43.2 | 46.7 | 33.1 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| *Mean number* | 2.2 | 2.6 | 1.9 | 1.8 | 2.3 | 2.4 | 1.9 |
| **Number of daughters** (% distribution) | | | | | | | |
| none | 12.3 | 6.1 | 16.4 | 16.5 | 11.4 | 13.0 | 11.2 |
| 1 | 19.5 | 16.6 | 21.4 | 22.6 | 18.9 | 18.4 | 21.0 |
| 2 | 22.1 | 21.9 | 22.2 | 24.1 | 21.7 | 21.5 | 23.0 |
| 3+ | 46.1 | 55.5 | 39.9 | 36.8 | 48.0 | 47.1 | 44.8 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| *Mean number* | 2.5 | 2.9 | 2.2 | 2.1 | 2.6 | 2.5 | 2.4 |

Most Cambodian elders have both living sons and daughters. Reflecting the higher mortality of males, including losses due to political violence associated with the Khmer Rouge period and its aftermath, the average number of surviving daughters modestly exceeds that of surviving sons. Some differences in the number of living children are evident according to sex, location and age of elders. Elderly men average larger numbers of surviving children than elderly women, reflecting the fact that men are far more likely to remarry than women in cases of marital dissolution. Thus men spend more time in reproductive unions and continue having children than do women whose initial marriages ended prematurely. Still only 5% of elderly women are childless and just one in ten has only one living child. The average number of living children is lower in Phnom Penh than in the five provinces. This apparently is the result of lower past fertility levels of current Phnom Penh elderly rather than higher losses of children through mortality. In fact, respondents in Phnom Penh report fewer deaths of their children than do those in the provinces (results not shown). Older elders average somewhat smaller numbers of surviving children than younger elders. This reflects higher mortality among the children of older elders due at least in part to the longer exposure to mortality to which their children would be subject (given that children of older elders would have been born earlier on average than those of younger elders). In fact the number of children inclusive of those who died is very similar between the two age groups of elders (results not shown).

## Social Characteristics

As Table 8 shows, the majority of the current generation of elders in Cambodia are illiterate and have never attended school. Almost 60% cannot read and an additional 22% report they can only read with difficulty. Less than one fifth of Cambodian elders can read comfortably. At the same time, there are sharp differences in the ability to read according to sex, location of residence, and age. Reflecting substantial gender differences in schooling in earlier times (see below), literacy levels are far lower for elderly women than for men. Fully 80% of elderly women indicated they could not read at all compared to only a little more than one fourth of elderly men. Moreover, among elderly women who can read, very few can do so comfortably. In contrast, more than half of the literate elderly men can read comfortably. Literacy is also substantially higher in Phnom Penh than in the five provinces. Just under half of Phnom Penh elders are illiterate compared to over 60% of those in the provinces. Older elders are also far less likely to be able to read than younger elders, reflecting the trend towards increasing access to schooling over time during the past.

**Table 8. Percent distribution according to literacy and education, by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Ability to read** | | | | | | | |
| Not able at all | 59.2 | 27.7 | 80.4 | 49.3 | 61.1 | 49.5 | 73.2 |
| With difficulty | 22.1 | 33.0 | 14.7 | 24.9 | 21.5 | 25.8 | 16.6 |
| Read comfortably | 18.7 | 39.3 | 4.9 | 25.8 | 17.4 | 24.6 | 10.2 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Educational attainment** | | | | | | | |
| No schooling | 56.9 | 24.0 | 79.0 | 49.5 | 58.4 | 47.6 | 70.5 |
| Temple | 16.2 | 35.9 | 2.9 | 8.0 | 17.7 | 14.0 | 19.3 |
| Some primary | 13.3 | 13.9 | 12.9 | 16.5 | 12.6 | 18.0 | 6.4 |
| Completed primary | 5.0 | 10.0 | 1.7 | 6.6 | 4.7 | 7.3 | 1.7 |
| Lower secondary | 4.6 | 9.0 | 1.7 | 8.5 | 3.9 | 7.0 | 1.2 |
| Beyond lower secondary | 4.0 | 7.2 | 1.8 | 10.8 | 2.6 | 6.1 | 1.0 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

More than half of older Cambodians have never attended any school. In earlier years, attending school at a Buddhist temple was the most common form of education but was limited largely to males (Ross 1987). This results in a very substantial gender difference in educational attainment among Cambodian elders. While less than a fourth of elderly men indicated they had never attended school, almost four fifths of elderly women said they had no schooling. A substantial share of the men however had received only temple schooling. For women who did receive education, only a small share did so through the temple. The levels of education of those who attended school is generally quite low particularly for women. Overall less than 10% of Cambodian elders received any type of secondary education and those who did were mainly the men. Less than 4% of elderly women indicated that they had received any secondary education compared to 16% of the men. Educational levels are substantially higher among elders in Phnom Penh than in the provinces. Likewise younger elders are far more likely than older elders to have attended school and to have received higher levels of education if they had attended school. Only 2% of elders age 70 or older received any secondary education compared to 13% of those in their 60s reflecting

increased educational access over time. This sharp difference corresponds with the attempt of the Cambodian government to rapidly expand education including secondary schooling which had been seriously neglected under French rule (Ross 1987).

As Table 9 shows, the vast majority of elders in Cambodia are ethnic Khmers and profess Buddhism as their religion. Approximately 90% of respondents identified themselves as Khmer. The only other two ethnic groups that constitute more than 1% of the population age 60 and over are those of Chinese or mixed Khmer and Chinese descent and those of Cham ethnicity. Chinese and mixed Khmer-Chinese are found more commonly in Phnom Penh, where they constitute 9% of the population, than in the provinces. They are also more common among older than younger elders. However, the percent of the population who are Cham differs only modestly between Phnom Penh and the remaining provinces or between age groups among the elderly. Fully 95% of elders in the survey identify themselves as Buddhists. The only other religion that constitutes more than 1% of the population is Islam which largely coincides with Cham ethnicity.

**Table 9. Percent distribution according to ethnicity and religion by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Ethnicity** | | | | | | | |
| Khmer | 89.5 | 90.0 | 89.2 | 86.4 | 90.2 | 91.3 | 87.1 |
| Chinese/Khmer-Chinese | 5.8 | 4.3 | 6.8 | 8.9 | 5.2 | 4.0 | 8.5 |
| Cham | 3.8 | 5.3 | 2.8 | 3.9 | 3.8 | 4.1 | 3.3 |
| Other | 0.9 | 0.4 | 1.2 | 0.9 | 0.8 | 0.7 | 1.2 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Religion** | | | | | | | |
| Buddhism | 95.4 | 94.3 | 96.1 | 94.4 | 95.7 | 95.2 | 95.7 |
| Islam | 3.9 | 5.3 | 3.0 | 3.8 | 3.9 | 4.1 | 3.5 |
| Other | 0.7 | 0.4 | 0.9 | 1.9 | 0.5 | 0.7 | 0.8 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Respondents were also asked about the importance of religion for them and about their religious practices. Results are shown in Table 10 for Buddhists and Moslems. Given the small number of Moslems in the sample, caution is appropriate when interpreting the results. Clearly religion is very important for a substantial majority of Cambodian elders. Three fourths of Buddhists and over 90% of Moslems in our sample indicated that religion was very important for them. This varied very little across gender and residence. There is a modest increase with age in the proportion of Buddhists who indicated religion is very important.

| **Table 10. Importance of religion and religious behavior and by religious affiliation and by sex, location, and age, Cambodian elders 2004** | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Sex | | Location | | Age | |
| | All | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| *Buddhists* | | | | | | | |
| **% for whom religion is very important** | 74.8 | 74.3 | 75.2 | 78.4 | 74.1 | 72.2 | 78.6 |
| **Frequency of visiting temple during previous month** (% distribution) | | | | | | | |
| None | 17.2 | 18.6 | 16.3 | 20.5 | 16.6 | 12.5 | 24.1 |
| Once or twice | 25.8 | 26.7 | 25.2 | 35.0 | 24.1 | 31.4 | 17.8 |
| Weekly | 52.9 | 49.5 | 55.1 | 40.5 | 55.3 | 53.8 | 51.6 |
| More frequent | 4.1 | 5.2 | 3.4 | 4.0 | 4.0 | 2.4 | 6.5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Frequency of meditating during previous month** (% distribution) | | | | | | | |
| None | 10.4 | 13.8 | 8.1 | 17.0 | 9.1 | 11.8 | 8.1 |
| Once or twice | 11.2 | 12.4 | 10.4 | 14.5 | 10.5 | 13.1 | 8.5 |
| Weekly | 27.4 | 26.2 | 28.1 | 21.5 | 28.5 | 30.6 | 22.8 |
| More frequent | 51.1 | 47.5 | 53.4 | 47.0 | 52.0 | 44.5 | 60.6 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| *Moslems* | | | | | | | |
| **% for whom religion is very important** | 91.5 | 90.9 | 92.2 | 86.4 | 92.5 | 90.9 | 92.3 |
| **Frequency of visiting mosque during previous month** (% distribution) | | | | | | | |
| None | 30.6 | 0.0 | 65.2 | 33.3 | 29.3 | 23.3 | 42.1 |
| Once or twice | 10.2 | 7.7 | 13.0 | 22.2 | 9.8 | 10.0 | 15.8 |
| Weekly | 8.2 | 7.7 | 8.7 | 0.0 | 9.8 | 10.0 | 5.3 |
| More frequent | 51.0 | 84.6 | 13.0 | 44.4 | 51.2 | 56.7 | 36.8 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Frequency of praying during previous month** (% distribution) | | | | | | | |
| None | 2.0 | 0.0 | 4.3 | 11.1 | 0.0 | 3.1 | 0.0 |
| Once or twice | 4.0 | 7.4 | 0.0 | 11.1 | 2.4 | 6.3 | 0.0 |
| Weekly | 2.0 | 0.0 | 4.3 | 0.0 | 2.4 | 3.1 | 0.0 |
| More frequent | 92.0 | 92.6 | 91.3 | 77.8 | 95.1 | 87.5 | 100.0 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Most Buddhists visit the temple at least once or twice a month and more than half do so at least weekly. The frequency of visiting the temple does not differ very much between elderly Buddhist men and women but is somewhat more frequent in the provinces than in Phnom Penh. Older Buddhist elderly are somewhat less likely than their younger counterparts to go to the temple during the previous month. While this may seem contradictory to the higher proportion of older than younger elderly Buddhists who indicated that religion was very important for them, it is likely a reflection of physical problems that limit mobility thus making visits to the temple impractical. For example, those who did not go to the temple were much more likely to say they were in very bad health than those who did (results not shown). The vast majority of Buddhists also indicated that they meditated during the past month and just over half indicated they meditated at least several times a week. Elderly women meditate somewhat more frequently than men. Provincial elders also reported more frequent meditation than those in Phnom Penh. However older elderly meditate more frequently than younger elderly, a finding that is consistent with the higher percentage of older elderly who indicate religion is very important for them.

Among Muslims there is a very sharp difference between men and women with respect to visiting a mosque during a previous month. All of the elderly Muslim men indicated they had visited the mosque at least once and the vast majority said they visited at least several times a week. In contrast two thirds of the elderly Muslim women indicated they did not visit the mosque during the past month. This is presumably a function of religious rules limiting access to the mosque for women. Although visiting the mosque does not differ greatly among Moslems in Phnom Penh and the provinces, older Moslems are less likely to do so. Praying is very common among Moslems. Over 90% indicated they prayed at least several times a week. This differs little between men and women but is more frequent among Moslems in the provinces than in Phnom Penh and among older than younger elderly Muslims.

Table 11 addresses mass media exposure of elderly Cambodians. Given the high level of illiteracy, not surprisingly the large majority of Cambodian elders do not read the newspaper at all. Differences according to gender, location, and age are all consistent with differences in literacy rates. Thus newspaper reading is more common among men than women, elders in Phnom Penh than in the provinces, and among the younger compared to the older elderly.

**Table 11. Mass media exposure by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Frequency of reading the newspaper** (% distribution) | | | | | | | |
| Not at all | 92.5 | 85.4 | 97.2 | 82.6 | 94.2 | 88.7 | 97.7 |
| Rarely | 3.8 | 7.4 | 1.3 | 5.6 | 3.5 | 5.3 | 1.7 |
| At least weekly | 3.8 | 7.2 | 1.4 | 11.7 | 2.2 | 6.0 | 0.6 |
| **Frequency of listening to radio** (% distribution) | | | | | | | |
| Not at all | 26.0 | 15.6 | 33.1 | 17.5 | 27.7 | 21.0 | 33.3 |
| Rarely | 13.2 | 9.6 | 15.6 | 15.6 | 12.6 | 14.0 | 11.9 |
| Weekly/several times a week | 11.4 | 12.9 | 10.4 | 11.8 | 11.3 | 11.6 | 11.0 |
| Daily or almost daily | 49.4 | 62.0 | 40.9 | 55.2 | 48.3 | 53.3 | 43.7 |
| **Frequency of watching TV** (% distribution) | | | | | | | |
| Not at all | 40.3 | 36.9 | 42.5 | 19.2 | 44.5 | 34.8 | 48.3 |
| Rarely | 18.6 | 14.3 | 21.6 | 20.7 | 18.2 | 18.9 | 18.0 |
| Weekly/several times a week | 12.7 | 13.5 | 12.1 | 12.2 | 12.7 | 12.3 | 13.3 |
| Daily or almost daily | 28.5 | 35.4 | 23.8 | 47.9 | 24.5 | 33.9 | 20.5 |

Listening to the radio is fairly common among elders although only half do so daily or almost daily and just over one fourth do not listen to the radio at all. Elders who are men, live in Phnom Penh, or are younger are more likely to listen to the radio and to listen to frequently than elders who are women, live in the provinces, or are older. TV watching is somewhat less common than listening to the radio. Two fifths of Cambodian elders indicate they did not watch TV during the last month while only modestly more than one fourth did so on a daily or almost daily basis. The less frequent exposure to television compared to radio can only be partially attributable to a lesser availability of TV than radio since the percent of elderly who live in households with a TV is only modestly lower than the percent who live in households with a radio (see Table 18 below). As with radio listening, watching TV is more common among men than women, among elderly in Phnom Penh than in the provinces, and among those who are younger than older.

Many aspects of well-being of older persons are influenced by their living arrangements. In the Asian context, and specifically in Cambodia, living with an adult child, especially a daughter, has been a traditional pattern (Kato 2000). While household composition is the most common and readily available indicator of living arrangements, it is important to recognize that the meaning and implications of particular configurations defined by such information can be ambiguous. One limitation is that such measures do not encompass information about others who live nearby but may still play an important role in the lives of elderly members (Knodel and Saengtienchai 1999). Another difficulty arises because the function of living arrangements can not be inferred with any certainty simply from their form (Hermalin, Roan, and Chang 1997). Thus although measures of the living arrangements based on household composition can be suggestive, they need to be interpreted cautiously.

With that said, coresidence with one or more adult children (or a functionally equivalent arrangement) often meet the needs of both generations. In contrast, living alone is not only likely to be associated with less frequent interpersonal interactions, and hence feelings of loneliness, but there is also a greater chance that urgent needs for assistance created by an acute health crisis or accident will go unnoticed longer than if others are present in the same household. Although living only with a spouse also indicates that adult children or other younger generation kin are not present in the household, it is generally viewed as less serious than living alone since spouses can be a principal source of emotional and material support and personal care during illness or frailty.

In examining living arrangements based on the Survey of Elderly in Cambodia, we note that the sample was limited to elders who are members of private households and does not consider any who may be living in institutional settings. While old-age homes in Cambodia are almost nonexistent, some elderly lived in the temples and are excluded from our sample. Little systematic information is available on the extent to which elderly live in temples. However, according to the 1997 HAI/MSALVA survey of persons age 55 and older, only four cases out of 600 covered by the survey lived in a temple at the time of interview (HelpAge International 1998). To the extent this finding is representative, it suggests that the omission of institutional populations of older Cambodians does not affect seriously the results presented here. Nevertheless, more systematic research on this issue is needed.

As Table 12 shows, a large majority (80%) of Cambodian elders in private households live with at least one child. Very few live alone and only small percentages live only with a spouse. These figures are in close agreement with those found in the 1997 HAI/MSALVA survey of persons age 55 and older and the analysis of the population age 60 and older from 1997 Socioeconomic Survey (Kato 2000; Zimmer and Kim 2001). At the same time, elderly women are more likely than men to live alone while elderly men are more likely than women to live only with a spouse. Older elders are also more likely than younger elders to live alone but less likely to live with a spouse only. Women are more likely than men to live only with others than with children or spouse. Nevertheless for no group shown in the table is the share who live alone more than 5% nor do less than three fourths live with at least one child.

**Table 12. Living arrangements, by sex, location, and age, Cambodian elders 2004**

| | Total | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Living with whom** (% distribution) | | | | | | | |
| Alone | 3.3 | 0.8 | 5.0 | 1.4 | 3.7 | 2.1 | 5.0 |
| Spouse only | 5.3 | 7.2 | 4.1 | 0.9 | 6.2 | 6.5 | 3.5 |
| Child only | 5.3 | 2.5 | 7.2 | 5.2 | 5.4 | 5.4 | 5.2 |
| Others only | 7.1 | 1.2 | 11.1 | 7.5 | 7.0 | 6.5 | 7.9 |
| Spouse and child | 12.6 | 24.0 | 4.9 | 9.9 | 13.0 | 18.0 | 4.6 |
| Spouse and other | 4.7 | 6.0 | 3.7 | 3.3 | 5.0 | 4.6 | 4.6 |
| Child and other | 33.8 | 14.4 | 47.0 | 43.7 | 31.9 | 25.6 | 45.8 |
| Spouse, Child and other | 27.9 | 43.9 | 17.1 | 28.2 | 27.8 | 31.0 | 23.4 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Overall coresidence with children: % living with** | | | | | | | |
| any child | 79.6 | 84.7 | 76.1 | 86.9 | 78.1 | 80.0 | 78.9 |
| any single child | 38.6 | 53.6 | 28.5 | 44.1 | 37.5 | 50.3 | 21.5 |
| any ever-married child | 58.0 | 52.1 | 61.9 | 69.0 | 55.8 | 51.3 | 67.8 |
| **Sex and marital status specific coresidence with children: % living with** | | | | | | | |
| Any daughter | 65.3 | 69.4 | 62.6 | 70.2 | 65.4 | 65.4 | 65.2 |
| Any son | 32.9 | 45.6 | 24.3 | 47.9 | 29.9 | 39.4 | 23.5 |
| Any single daughter | 27.6 | 37.0 | 21.3 | 29.4 | 27.3 | 35.7 | 15.9 |
| Any single son | 22.3 | 37.0 | 12.4 | 30.3 | 20.7 | 31.5 | 9.0 |
| Any ever-married daughter | 47.8 | 44.1 | 50.3 | 53.5 | 46.6 | 42.8 | 55.0 |
| Any ever-married son | 13.3 | 12.6 | 13.8 | 23.9 | 11.2 | 12.0 | 15.3 |
| **Ratios of coresidence with daughters to sons** | | | | | | | |
| Daughters to sons (a) | 1.98 | 1.52 | 2.58 | 1.47 | 2.19 | 1.66 | 2.77 |
| Single daughters to single sons (b) | 1.24 | 1.00 | 1.72 | 0.97 | 1.32 | 1.13 | 1.77 |
| Ever-married daughters to ever-married sons (c) | 3.59 | 3.50 | 3.64 | 2.24 | 4.16 | 3.57 | 3.59 |

(a) ratio of the percent coresident with a daughter to the percent coresident with a son
(b) ratio of the percent coresident with a single daughter to the percent coresident with a single son
(c) ratio of the percent coresident with an ever-married daughter to the percent coresident with an ever-married son

It is more common to live with an ever married child than with a single child. This is particularly true for elders who are women or who are in 70 or older. This reflects the fact that most children of elderly Cambodians are adults past the ages were marriage normally occurs. Consistent with previous studies, elderly who live with a child are more likely to live with a daughter than with a son (Kato 2000; Zimmer and Kim 2001). This tendency, however, is much more pronounced when coresidence with ever-married children rather than single children is considered. The last rows of Table 12 show the ratio of the percent of elderly who co-reside with a daughter to the percent who co-reside with the son according to the marital status of the co-resident child. In most cases even when single children are considered, elderly are

more likely to be living with a single daughter than a living son although the tendency is modest and elderly men and elderly who live in Phnom Penh are essentially as likely to coreside with single sons as daughters. However, when ever married children are considered a very sharp tendency for coresidence to be with a daughter rather than with a son is evident. This is true regardless of gender, residence or age of the elderly, although the tendency is somewhat weaker in Phnom Penh than in the provinces.[6]

## Economic characteristics and material support

Elderly Cambodians live in one of the very poorest countries in Asia where poverty is widespread. Thus issues of economic well-being are particularly critical to consider. Since formal social protection measures are largely lacking (Chan and Ear 2004), most have little choice but to depend on themselves or their families for material support.

As Table 13 indicates, only a small minority of Cambodian elders indicate they did not work during their lifetime. Those who were not economically active are almost entirely women and are disproportionately concentrated in a Phnom Penh relative to the provinces. It is likely that many of the women who reported themselves as not having a lifetime occupation were housewives.[7] Among the vast majority who did work, most were engaged in farming and/or fishing. Not surprisingly, the main exception is among elders in Phnom Penh where only a little more than a fourth were in farming/fishing compared to over four fifths in the provinces. Most of the remainder of Phnom Penh elders were either in white collar/professional occupations or were own account, sales or service workers. Women are almost as likely as men to have worked in farming/fishing. The most pronounced sex difference in lifetime occupations is with regards to the higher proportion of men compared to women who had white collar/professional jobs and the higher proportion of women compared to men who were own account or sales/service workers.

Over a third of the population age 60 and older reported that they were still economically active. This differs sharply by sex, location, and age. Almost half of men compared to 28% of women are still working. Remaining economically active was also much higher within the provinces than in Phnom Penh. About half of elders in their 60s are still working compared to less than a fifth of those age 70 and older. The lower economic activity rates among elders in Phnom Penh likely reflects in part their rather different lifetime occupations than those in the provinces. Unlike most rural occupations, some urban occupations are likely to be subject to mandatory retirement rules. The occupational distribution among Cambodian elders who are still economically active is relatively similar to that for lifetime occupations.

As results in Table 14 indicate, over two fifths of Cambodian elders reported that they received some income from their own or their spouse's work. This is substantially higher for men than for women, reflecting both the higher percentage of men who were economically active and the higher percentage of women who have no living spouse. Elders in the provinces and those in their 60s are also far more likely to receive income based on their own or spouse's work than those living in Phnom Penh or who are age 70 or older. Only about 5% of elders report receiving pensions. This is far higher for men than for women, for those in Phnom Penh than in the provinces, and for younger than older elders. Income from

[6] This finding is somewhat contradictory to the results of an analysis of the 1997 socioeconomic survey which found a much less pronounced tendency to live with a married daughter over a married son once widowed children were excluded from consideration (Zimmer and Kim 2001). Similar to their findings, SEC findings confirm that Cambodian elders are much more likely to live with a widowed daughter than a widowed son. However, if co-resident widowed children are excluded from co-resident ever-married children, the ratio of coresidence with married daughters to coresidence with married sons is only modestly reduced in the case of the SEC data (from 3.59 to 3.20). This is in sharp contrast to the ratio of only 1.08 indicated by the analysis of the 1997 Socioeconomic Survey.

[7] For this reason the few who reported their occupation as 'housewife' are grouped with those counted as not economically active although such activity would obviously have contributed to household welfare.

**Table 13. Percent distribution according to current and lifetime occupation, by sex, location, and age, Cambodian elders 2004**

| | Total | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Main lifetime occupation, all elderly** (% distribution) | | | | | | | |
| Never worked | 4.7 | 0.4 | 7.6 | 11.7 | 3.3 | 4.6 | 5.0 |
| Farming/fishing | 72.5 | 73.4 | 72.1 | 25.8 | 81.9 | 70.6 | 75.1 |
| Non-agric. labor | 2.7 | 3.7 | 2.0 | 10.8 | 1.0 | 2.6 | 2.9 |
| White collar-professional | 7.2 | 13.7 | 2.8 | 23.0 | 4.0 | 9.3 | 4.1 |
| Own account sales/service | 8.2 | 3.1 | 11.6 | 23.0 | 5.3 | 8.1 | 8.5 |
| Other | 1.8 | 1.8 | 1.8 | 4.7 | 1.2 | 1.6 | 2.1 |
| Skilled labor | 2.9 | 3.9 | 2.1 | 0.9 | 3.3 | 3.3 | 2.3 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **% currently economically active** | 36.4 | 48.2 | 28.4 | 24.4 | 38.9 | 49.5 | 17.4 |
| **Current occupation (if active)** (% distribution) | | | | | | | |
| Farming/fishing | 72.0 | 78.9 | 64.1 | 29.4 | 77.8 | 74.4 | 61.1 |
| Non-agric. labor | 4.2 | 2.8 | 6.0 | 11.8 | 3.2 | 4.3 | 4.4 |
| White collar-professional | 4.9 | 7.3 | 2.3 | 17.6 | 3.2 | 4.8 | 5.6 |
| Own account sales/service | 12.8 | 4.9 | 21.7 | 31.4 | 10.5 | 12.8 | 13.3 |
| Other | 3.3 | 3.2 | 3.2 | 9.8 | 2.4 | 1.6 | 10.0 |
| Skilled labor | 2.8 | 2.8 | 2.8 | 0.0 | 2.9 | 2.1 | 5.6 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Note: A small number of persons who stated their occupation as housewife are counted as not working; a small number of persons who stated their occupation as agricultural laborers are grouped with farmers.

rental properties was also reported by about 5% of elders with little difference between men and women but somewhat higher percentages of Phnom Penh and younger elders than provincial and older elders indicated this as a source of income. Investments or savings are even rarer sources of income with only 2% mentioning them. Although still low, they are a more common income source for men, Phnom Penh residents, and younger elders than for women. provincial residents and older elders. Financial support from government welfare or organized charity is extremely rare and reported by less than 1% of elders reflecting the lack of any thing close to an adequate social protection program in the country.[8]

Although a substantial proportion of elders receive income from their own or their spouse's work, this is not necessarily their main source of material support. Work is more likely to be reported as a main source of support among men than women, those in the provinces than those in Phnom Penh, and younger than older elders. In no group, however, is work the most important source of support for the majority of elders.

[8] We note that somewhat higher percentages of elderly in the HAI/MSALVA survey reported receiving income from such sources (HelpAge International 1998).

**Table 14. Sources of household support and income, by sex, location, and age, Cambodian elders 2004**

| | Total | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **% who (or whose spouse) receive income from:** | | | | | | | |
| Work | 42.2 | 56.2 | 32.4 | 26.2 | 45.4 | 55.7 | 22.4 |
| Pension | 4.9 | 8.1 | 2.8 | 14.4 | 3.0 | 6.7 | 2.2 |
| Rental properties | 4.7 | 5.0 | 4.6 | 7.4 | 4.2 | 6.3 | 2.5 |
| Investment or savings | 1.9 | 2.4 | 1.5 | 6.4 | 1.0 | 2.4 | 1.1 |
| Welfare, agencies (NGO) | 0.8 | 0.4 | 1.0 | 0.7 | 0.8 | 0.8 | 0.7 |
| **Main sources of support for self/spouse** (% distribution) | | | | | | | |
| Work (own/spouse) | 28.5 | 41.9 | 19.5 | 20.2 | 30.2 | 39.5 | 12.4 |
| Children/children-in-law | 63.6 | 53.0 | 70.8 | 64.3 | 63.5 | 52.6 | 79.7 |
| Other | 7.9 | 5.1 | 9.7 | 15.5 | 6.3 | 7.9 | 7.9 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Main contributor to support of household** (% distribution) | | | | | | | |
| Self, spouse or both | 29.9 | 41.8 | 21.8 | 31.5 | 29.5 | 40.8 | 13.9 |
| Children | 65.0 | 55.1 | 71.7 | 62.0 | 65.6 | 55.0 | 79.7 |
| Others | 5.1 | 3.1 | 6.4 | 6.6 | 4.9 | 4.2 | 6.4 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **% who (or whose spouse) help support household** | 49.4 | 64.4 | 39.3 | 44.1 | 50.4 | 64.2 | 27.8 |

Instead, regardless of category, the majority of elders report their children or children-in-law as their main source of support. Overall almost two thirds reported this to be the case underscoring the importance of the family for the material well-being of older Cambodians. As noted above, the large majority of Cambodian elders lived in households with at least one of their children and undoubtedly share support that comes to the household. Only a relatively small minority of elders in Cambodia indicate their main source of support is neither work nor children. However this situation is more common for elderly women than men and for elders in Phnom Penh than in the provinces. Elderly women and elders in the provinces who do not rely on children or work are far more likely to rely on other family members than are counterparts among men or Phnom Penh residents, both of whom are more likely to report investments or savings as their main source than the women or provincial elders (results not shown).

**Table 15. Availability of children and percentages receiving material support from to children during prior year, by sex, location, and age of respondent, Cambodian elders, 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Availability** | | | | | | | |
| Percent having at least | | | | | | | |
| one living child | 96.5 | 99.1 | 94.7 | 94.0 | 97.0 | 96.2 | 96.9 |
| one coresident child | 79.6 | 84.7 | 76.1 | 86.9 | 78.1 | 80.0 | 78.9 |
| one non-coresident child | 87.3 | 90.3 | 85.3 | 74.5 | 89.9 | 86.9 | 87.9 |
| one coresident and one non-coresident child | | | | | | | |
| **Support received from children** | | | | | | | |
| *From any child (among elders with living children)* | | | | | | | |
| Support of household | 90.5 | 89.6 | 91.2 | 89.2 | 90.8 | 87.7 | 94.6 |
| Money | 94.0 | 94.5 | 93.6 | 88.3 | 95.1 | 92.8 | 95.7 |
| Food/clothes etc. | 85.4 | 82.8 | 87.3 | 78.7 | 86.7 | 81.8 | 90.7 |
| Money and/or food/clothes worth $25+ | 26.2 | 24.1 | 27.8 | 44.0 | 22.8 | 24.4 | 28.9 |
| *From any coresident child (among elders with coresident children)* | | | | | | | |
| Support of household | 86.2 | 79.0 | 91.6 | 85.5 | 86.4 | 82.0 | 92.4 |
| Money | 80.0 | 78.2 | 80.4 | 78.2 | 80.4 | 75.0 | 87.4 |
| Food/clothes etc. | 72.0 | 62.3 | 79.2 | 68.2 | 72.8 | 65.6 | 81.4 |
| Money and/or food/clothes worth $25+ | 17.6 | 15.6 | 19.1 | 32.2 | 14.3 | 16.4 | 19.4 |
| *From any non-coresident child (among elders with non-coresident children)* | | | | | | | |
| Support of household | 62.6 | 61.7 | 63.2 | 58.3 | 63.3 | 59.8 | 66.6 |
| Money | 89.8 | 89.2 | 90.2 | 76.7 | 92.0 | 88.9 | 91.1 |
| Food/clothes etc. | 74.8 | 72.7 | 76.3 | 58.8 | 77.5 | 71.8 | 79.1 |
| Money and/or food/clothes worth $25+ | 17.4 | 14.8 | 19.2 | 32.6 | 14.8 | 16.5 | 18.7 |

Note: Children include own, adopted and step children.

As noted above, childlessness is rare among Cambodian elders today. Thus children are a potential source of support for the vast majority. Table 15 provides information on both the availability of children and the extent to which their elderly parents receive material support from them. The type of support provided by a child may differ according to whether or not the child lives with the parent. In addition, it is more difficult to interpret the meaning of support provided by co-resident children since material resources may be shared within the household. Thus results are shown in based not only on all children but also separately for support provided by co-resident and non-coresident children. In each case, the tabulations refer to elders who have at least one child of the stated type.

Not only do the vast majority of elders have at least one child, but four fifths have at least one co-resident child and an even higher percentage have at least one non-coresident child. Moreover, fully 70% have both a co-resident and a non-coresident child. The availability of children of each type is somewhat less for elderly women than elderly men. Elders who live in Phnom Penh are noticeably more likely to have at least one co-resident child but substantially less likely to have one non-coresident child in comparison

to elders in the provinces. Thus on balance there is only a modest difference in the percent who have at children of both types between Phnom Penh and provincial elders. The age of elderly parents has little effect on the availability of either type of child.

Among elderly parents, the vast majority report that a child contributes to the support for the household, provides some money, and provides some food or clothing. However the amount of support received is typically quite modest. Only slightly more than a fourth of elderly parents report receiving contributions of money and/or food and clothing equal to a value of at least $25 during the previous year.[9] Support of this amount is about as common from non-coresident children as it is from co-resident children (provided the elder has at least one child of the stated type). In general elderly women are more likely than men to report receiving the types of support being considered, especially from co-resident children. This may reflect in part a greater tendency for women than men to assist in managing the household economy.

Although in general, provincial elders are modestly more likely to receive at least some money or some food or clothes from a child, Phnom Penh elders are almost twice as likely as those in the provinces to receive material support worth at least $25. This pattern holds for both support from co-resident and non-coresident children. Parents age 70 or older are modestly more likely to receive each type of support than parents in their 60s. This is true both with respect to support from co-resident and non-coresident children and perhaps reflects children responding to a increased need on the part of elderly parents as they age to depend on others for their support.

**Table 16. Percentages providing material support to children during prior year, by sex, location, and age of respondent, Cambodian elders 2004, 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Support given to at least one child (among elders with living children)** | | | | | | | |
| Money | 30.7 | 39.5 | 24.5 | 34.7 | 29.9 | 39.6 | 17.8 |
| Food/clothes etc. | 24.4 | 33.7 | 17.9 | 22.6 | 24.8 | 32.2 | 13.2 |
| Money and/or food/clothes worth $25+ | 5.3 | 7.7 | 3.6 | 14.5 | 3.5 | 6.9 | 3.0 |
| **Support given to at least one coresident child (among elders with coresident children)** | | | | | | | |
| Money | 32.0 | 42.1 | 24.5 | 32.4 | 31.9 | 42.0 | 17.2 |
| Food/clothes etc. | 24.7 | 34.7 | 17.2 | 22.4 | 25.2 | 33.7 | 11.4 |
| Money and/or food/clothes worth $25+ | 5.6 | 8.0 | 3.8 | 14.1 | 3.7 | 7.5 | 2.9 |
| **Support given to at least one non-coresident child (among elders with non-coresident children)** | | | | | | | |
| Money | 10.7 | 13.1 | 9.0 | 12.6 | 10.4 | 12.1 | 8.7 |
| Food/clothes etc. | 8.3 | 10.0 | 7.1 | 5.0 | 8.9 | 9.8 | 6.1 |
| Money and/or food/clothes worth $25+ | 1.3 | 1.8 | 1.0 | 4.0 | 0.9 | 1.6 | 0.8 |

Note: Children include own, adopted and step children.

[9] The questionnaire asked the respondent separate questions about the value of money received and the value of food/clothes received during the past year. The measure shown in the table indicates whether they received either money or food/clothes valued at $25 or more or both. However, if a respondent received amounts of money and food/clothes each valued at less than $25 but combined were worth $25 or more, this would not be detected by the questions.

Cambodian elders also sometimes provide material support to their children. Table 16 indicates the percent who provided at least one child with any money, any food or clothes, and amounts valued at $25 or more during the previous year. The results clearly indicate that material support from elderly parents to their children is far less common than support from children to their elderly parents.

Overall somewhat less than a third of Cambodian elders report providing any money to at least one child during the previous year and about one fourth report providing food or clothes. Very few however report providing amounts of support equal to $25 or more. Support of each type shown is far more common to co-resident children than to non-coresident children. Only 1% of elders reported that they provided substantial amounts of material aid to a non-coresident child. Elderly men and younger elderly parents are clearly more likely than women and older elderly parents to provide each type of support to children. However differences between Phnom Penh and provincial elders are only pronounced with respect to provision of substantial amounts of material support which is more common for elders in Phnom Penh to do.

One important aspect of material well-being is the quality of housing. Table 17 provides a number of indicators that are likely to reflect the quality of dwellings in which Cambodian elderly live. These indicators refer to the material used for flooring and roofs, the type of toilet, and whether or not the house has electricity. For indicators with multiple categories, the categories are listed in presumed ascending order of quality.

**Table 17. Housing quality indicators, by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Floor material** (% distribution) | | | | | | | |
| Earth, bamboo, thatch | 46.8 | 45.9 | 47.5 | 5.7 | 55.0 | 45.9 | 48.0 |
| Wood planks | 35.2 | 38.1 | 33.3 | 32.1 | 35.8 | 34.9 | 35.6 |
| Cement/asphalt | 4.5 | 3.7 | 5.0 | 12.7 | 2.9 | 4.8 | 4.2 |
| Polished wood | 4.8 | 4.9 | 4.7 | 6.6 | 4.4 | 5.0 | 4.6 |
| Tiles, marble | 8.6 | 7.4 | 9.5 | 42.9 | 1.8 | 9.4 | 7.5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Roof material** (% distribution) | | | | | | | |
| Thatch/palm/bamboo/bark | 18.3 | 18.1 | 18.3 | 2.4 | 21.4 | 19.2 | 16.8 |
| Galvanized iron/aluminum | 34.3 | 32.2 | 35.7 | 48.6 | 31.5 | 35.1 | 33.1 |
| Tiles/cement/concrete | 47.5 | 49.7 | 46.1 | 49.1 | 47.1 | 45.7 | 50.1 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Type of Toilet** (% distribution) | | | | | | | |
| Flush with septic tank | 8.9 | 7.2 | 10.1 | 43.9 | 1.9 | 9.5 | 8.0 |
| Flush without septic tank | 24.4 | 26.2 | 23.2 | 30.2 | 23.2 | 24.1 | 24.8 |
| Pit toilet with septic tank | 2.3 | 2.0 | 2.5 | 9.0 | 1.0 | 2.0 | 2.7 |
| Pit toilet without septic tank | 8.9 | 9.6 | 8.3 | 7.5 | 9.1 | 8.7 | 9.2 |
| No facility/field | 55.5 | 55.0 | 55.9 | 9.4 | 64.8 | 55.7 | 55.3 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **% living in a house with electricity** | 31.2 | 26.7 | 34.2 | 89.4 | 19.6 | 32.3 | 29.6 |

The largest share of elderly live in dwellings with very basic floors consisting of the earth, bamboo or thatch. There is little difference in this respect according to the sex or age of the elders. However, dwellings with such floor material are mainly limited to the provinces, where over half of elders live in such dwellings, and are only rarely encountered in Phnom Penh. The next most common type of floor is one consisting of wooden planks. There is little difference in the percentages of elders living in such houses according to sex, location, or age. Less than a fifth of Cambodian elders live in houses with floors of higher quality material than described above. However a substantial share of Phnom Penh elders live in dwellings with better quality floors, particularly ones made of tile or marble.

The most common type of roofing material consists of tiles, cement or concrete. Almost half of dwelling units in which elders live have such roofs. The next most common roof is galvanized tin or aluminum and about a third of elders live in such houses. Less than a fifth live in houses in which the roof is made of thatch or other related natural material. Differences in types of material used for roofs of the houses do not differ much according to the sex, location, or age of the respondents.

More than half of Cambodian elders live in houses with no toilet. Neither men and women nor older and younger elders differ much in this respect. However a sharp difference exists between Phnom Penh and provincial elders. Over 90% of the dwellings in which a Phnom Penh elders live do have at least some form of toilet in contrast to just over a third of the dwellings of elders in the provinces. In Phnom Penh, flush toilets with septic tanks are the most common type although flush toilets without a septic tank are also common. In the provinces, elderly who live in dwellings with flush toilets rarely have one with a septic tank associated with it.

Only a minority of Cambodian elders live in houses with access to electricity. Women are somewhat more likely than men to do so as are younger compared to older elders. Far more striking, however, is the difference between Phnom Penh and provincial elders. Almost 90% of elders in Phnom Penh compared to only one fifth in the provinces live in houses with electricity.

Another relatively clear set of indicators of economic well-being available from the survey are household possessions and assets. Both are listed in order of frequency of occurrence in Table 18. Although the elderly household member is not necessarily the owner of each of the possessions indicated, it seems reasonable to assume that elders at least benefit from them. The most common household possession reported among those asked is a radio. Only modestly less frequent, however, are televisions. Overall, more than 80% of elders live in a household with either a radio or television and just over half live in one with both (results not shown). Thus most elderly have relatively easy access to mass media if they are so interested. The next most frequent possession, although far less common than radios or TV is a motorcycle. Even if the elderly member is not the owner of the motorcycle and may not drive it, the fact that there is a motorcycle available within the household clearly could be a considerable advantage to the elderly member. Electric fans and telephones are the two next most common items but less than one fifth of households have these. Other items shown are quite uncommon overall with less than 5% of elders reporting their household has a four-wheel motorized vehicle, refrigerator, boat with motor, or air conditioner.

Only modest differences are apparent between elderly men and women with respect to living in households with these particular possessions and the direction of the difference varies with the particular item. Even more modest differences are associated with the age of the elderly person. However, very sharp differences are apparent between elders in Phnom Penh and those in the provinces. For every possession indicated, a Phnom Penh elders are more likely to be in a household possessing it. In some cases the differences are very dramatic, especially with respect to telephones, refrigerators, electric fans, motorcycles, and cars. Only radios and TVs are found in the majority of households of provincial elders. In contrast, most Phnom Penh elders not only live in houses with radios and TVs but also in households that have telephones, electric fans and motorcycles.

**Table 18. Household Possessions and Assets by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Household possessions** | | | | | | | |
| *% who live in a household with:* | | | | | | | |
| Radio | 69.8 | 76.9 | 65.0 | 89.7 | 65.8 | 74.5 | 63.0 |
| TV | 63.7 | 65.1 | 62.8 | 90.6 | 58.3 | 62.3 | 65.8 |
| Motorcycle | 29.8 | 32.1 | 28.3 | 67.0 | 22.4 | 29.9 | 29.7 |
| Electric fan | 18.1 | 13.5 | 21.2 | 73.8 | 6.9 | 18.9 | 16.9 |
| Telephone, Cellular phone | 16.4 | 13.6 | 18.2 | 56.4 | 8.4 | 17.6 | 14.6 |
| Car, truck, van | 4.4 | 4.5 | 4.3 | 17.0 | 1.9 | 5.2 | 3.1 |
| Refrigerator | 4.3 | 4.5 | 4.1 | 21.6 | 0.8 | 4.5 | 3.9 |
| Boat with motor | 3.2 | 4.2 | 2.6 | 3.4 | 3.2 | 3.4 | 3.0 |
| Air conditioner | 1.7 | 1.0 | 2.2 | 10.1 | 0.0 | 1.9 | 1.4 |
| **Assets** | | | | | | | |
| *% who (or whose spouse) own:* | | | | | | | |
| Land | 75.2 | 85.7 | 68.1 | 65.2 | 77.3 | 83.6 | 62.8 |
| House | 68.3 | 79.5 | 60.8 | 58.3 | 70.4 | 77.0 | 55.4 |
| Livestock | 32.9 | 47.1 | 23.3 | 4.1 | 38.7 | 37.5 | 26.1 |
| Jewelry | 28.3 | 28.8 | 28.0 | 46.1 | 24.7 | 34.7 | 18.7 |
| Bank account | 0.4 | 0.3 | 0.5 | 0.5 | 0.4 | 0.6 | 0.1 |

With regards to assets, most elderly or their spouse own some land and a house. Substantially less common is ownership of livestock and jewelry and almost nonexistent are bank accounts. Some gender differences are apparent. Men or their spouses more likely to own land, houses and livestock. However jewelry is owned by approximately equal shares of elderly men and women. With respect to the assets shown, Phnom Penh elders are more likely to own jewelry than provincial elders but less likely to own land, a house, or livestock. The difference in livestock ownership is undoubtedly associated with differences between rural and urban types of economic activity. Lower ownership of land and houses by elders in Phnom Penh likely reflects the far higher costs of each in the city than in rural areas. Still the majority of Phnom Penh elders own each.

Table 19 provides information on financial indebtedness as well as self-assessed measures of respondents' economic situation. Less than a quarter of Cambodian elders indicated they were in debt and just under 5% indicated that they had a debt that was a serious burden. Men, Phnom Penh residents and younger elders are more likely than women, provincial residents or older elders to have either any debt or a serious debt. For no group, however, is serious debt very common.

Respondents were asked four different questions related to assessing their economic situation. The first question asked them to assess their economic status relative to others in their community, the second whether their income was sufficient to meet their expenses, the third how satisfied they were with their economic situation and the fourth how their current economic situation compared to with their situation three years earlier.

| Table 19. Debt and Self assessed economic situation, by sex, location, and age, Cambodian elders 2004 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Sex | | Location | | Age | |
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **% who are in debt** | 22.5 | 26.4 | 19.9 | 18.7 | 23.3 | 26.9 | 15.8 |
| **% for whom debt is serious burden** | 4.5 | 5.2 | 3.9 | 6.4 | 4.1 | 5.4 | 3.1 |
| **Economic status relative to others** (% distribution) | | | | | | | |
| Somewhat better | 2.7 | 3.0 | 2.4 | 5.5 | 2.2 | 2.9 | 2.3 |
| Average | 48.3 | 52.2 | 45.7 | 61.2 | 45.8 | 48.2 | 48.6 |
| Somewhat worse | 39.6 | 37.6 | 41.1 | 27.9 | 41.9 | 39.6 | 39.8 |
| Much worse | 9.4 | 7.2 | 10.7 | 5.5 | 10.0 | 9.2 | 9.4 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Income compared expenses** (% distribution) | | | | | | | |
| Enough | 22.5 | 20.6 | 23.8 | 35.6 | 20.0 | 22.5 | 22.5 |
| Sometime enough | 38.6 | 41.4 | 36.6 | 37.6 | 38.7 | 38.6 | 38.7 |
| Usually not enough | 38.9 | 38.0 | 39.6 | 26.7 | 41.3 | 39.0 | 38.9 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Satisfaction with economic situation** (% distribution) | | | | | | | |
| Satisfied | 22.8 | 21.8 | 23.5 | 31.3 | 21.2 | 23.4 | 21.9 |
| Somewhat satisfied | 53.7 | 53.9 | 53.6 | 43.8 | 55.6 | 52.4 | 55.6 |
| Unsatisfied | 23.5 | 24.4 | 22.9 | 24.9 | 23.3 | 24.2 | 22.5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| **Economic situation compared to 3 years ago** (% distribution) | | | | | | | |
| Better | 17.5 | 15.6 | 18.8 | 19.9 | 17.1 | 17.8 | 17.0 |
| Same | 37.2 | 32.1 | 40.6 | 46.8 | 35.3 | 39.2 | 34.2 |
| Somewhat worse | 39.6 | 46.1 | 35.1 | 28.9 | 41.6 | 37.6 | 42.5 |
| Much worse | 5.7 | 6.2 | 5.4 | 4.5 | 6.0 | 5.4 | 6.3 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

In assessing economic status relative to others in the community, respondents were given five choices: much better, somewhat better, about average, somewhat worse, and much worse. Since the respondent's status is supposed to be relative to others in their community, in theory there should be as many who claim to be better off than worse off. The pattern of results clearly suggests that the responses cannot be taken at face value. No one answered that they were much better so this category is not shown in Table 19. The fact that very few indicated that they were even somewhat better off suggests that respondents were unlikely to be taking the general community average as their reference. Rather the pattern suggests that most respondents were indicating that they considered themselves to be quite poor on any reasonable absolute standard. Women tend to report their situation as being worse than do men while virtually no differences are apparent between younger and older elders. The most striking contrast is between Phnom Penh and provincial elders with the former providing more favorable assessments of their economic status than the latter.

The question on income relative to expenses allowed for four possible responses: more than enough, just enough, only sometimes enough, and usually not enough. Since only one respondent indicated an income that was 'more than enough', this category is combined with 'just enough'. Those who felt that their income was sufficient are a clear minority representing between a fifth and a fourth of elders in all categories shown except Phnom Penh where just over a third indicated there income was enough to meet their expenses. Gender and age differences in response to this question are minimal.

Respondents were offered four possible responses regarding their satisfaction with their economic situation: very satisfied, somewhat satisfied, neither satisfied nor unsatisfied, somewhat unsatisfied, and very unsatisfied. Very few indicated response on either extreme. Thus the five categories have been collapsed into three with the extreme responses at either end combined with the next nearest category. Slightly over half of respondents indicated they were somewhat satisfied with the remainder divided almost equally between those who indicated being satisfied and not being satisfied. Men and women as well as older and younger elders show fairly similar distributions. However, Phnom Penh elders are more likely to express satisfaction than provincial elders although the proportions who indicated they were not satisfied are relatively similar for elders in either location.

When assessing how their economic situation changed over the last three years, respondents were offered five possible choices: much better, somewhat better, about the same, somewhat worse, and much worse. Since very few people indicated the situation was much better, they have been combined with those who said their situation was somewhat better. Somewhat over a third of the elders indicated their situation had not changed. Among the remainder, substantially more indicated that their economic situation had become worse than had become better. Overall 45% indicated that their economic situation is either somewhat or much worse. Men were more likely to report unfavorable change than women while older and younger elderly show little difference in this respect. Phnom Penh elders were only slightly more likely to indicate that their economic situation had improved but were substantially less likely than provincial elders to indicate that it had worsened.

## Health

Health is an abstract concept that can be measured along a number of dimensions, and as such, has been conceptualized and operationalized in a variety of ways. One measurement scheme outlined by Blaxter (1989) identifies three components of health: *medical, social* and *subjective*. The SEC generally follows this conceptualization. The medical component relates health to deviations from physiological norms, and hence links to medically diagnosed diseases, like having a heart condition or arthritis. Unfortunately, reports of diseases from older adults in poor societies like Cambodia are particularly vulnerable to validity and reliability problems. Many are asymptomatic, and there will be no indication that they exist until the disease has progressed to the point of resulting in a major health event (e.g., heart attack) or a recognizable impairment (e.g., unusual fatigue). Therefore, accuracy in reporting cannot be assured. A better assessment of the medical component can be achieved from a battery of symptoms that generally relate to disease, like joint pain, fever and breathing problems. These symptoms can at times be linked to specific diseases, but they always indicate some physical impairment.

The social and subjective components are easier to measure in a country like Cambodia. The social considers the ability to negotiate successfully within an environment, and as such relates well to physical functioning measures, like the ability to do a physical movement or conduct a usual daily task. One set of functioning measures, called Activities of Daily Living (Katz et al. 1963), examine the extent to which individuals can maintain themselves within their living environment, for instance, their ability to bathe or dress. These types of items have become quite standard indicators of functional health.

The subjective component considers an individual's own perception of their health, and is usually measured using a global self-assessed health question that asks an individual to simply rate their health along some scale. There is now much research that shows self-assessments of health to be valid indicators of overall health, relating well to other more objective measures, and even providing subtle

information about health that is not obtainable using other types of survey measures (Idler and Benyami 1997).

In addition to indicators that are direct measures of health, determining good health involves other things. The SEC asked questions about health behaviors and access to health care when sick or injured.

Table 20 shows distributions for self-assessed health and self-reported health symptoms. Self-assessed health is derived from a single question asking respondents, 'How would you rate your health currently? Would you say it is very good, good, fair, poor, or very poor?' Very few rated their health as 'very good', so this category is combined with those that said 'good'. The majority of older Cambodians (almost two thirds) rate their health as 'poor,' and most of the others rate their health as 'fair'. This result is somewhat unusual in that poor ratings of health are dominant, a pattern that is quite different from the types of responses typical in surveys of older adults elsewhere (see, for example, Ofstedal et al. Forthcoming). Although men and younger elders are more likely to provide favorable ratings, comparisons between Phnom Penh and provinces yield even larger differences. For instance, almost 9% of those in Phnom Penh rate their health as good compared to only about 2% of those in the provinces. Among elders in Phnom Penh 44%rate their health as poor compared to 68% of those in the provinces.

**Table 20. Self-assessed Health status and Symptoms, by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **Self-assessed health** (% distribution) | | | | | | | |
| Good | 3.4 | 3.8 | 3.2 | 8.8 | 2.4 | 4.0 | 2.5 |
| Fair | 26.5 | 32.4 | 22.5 | 42.7 | 23.4 | 31.5 | 18.8 |
| Poor | 63.6 | 58.0 | 67.4 | 43.5 | 67.5 | 60.6 | 68.0 |
| Very poor | 6.5 | 5.8 | 7.0 | 5.1 | 6.8 | 3.8 | 10.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **% reporting the following health symptoms in the last month** | | | | | | | |
| Joint pain | 88.4 | 86.6 | 89.7 | 80.1 | 90.1 | 86.3 | 91.4 |
| Weakness | 85.9 | 81.7 | 88.9 | 63.8 | 86.6 | 82.4 | 90.9 |
| Back pain | 79.1 | 76.2 | 81.2 | 71.6 | 80.6 | 77.0 | 82.2 |
| Dizziness | 73.6 | 66.4 | 78.5 | 66.0 | 75.2 | 71.6 | 76.7 |
| Headaches | 71.8 | 65.7 | 75.8 | 67.4 | 72.6 | 72.6 | 70.5 |
| Fever | 57.8 | 55.2 | 59.6 | 51.4 | 59.1 | 56.7 | 59.5 |
| Chest pain | 57.1 | 53.0 | 59.8 | 46.1 | 59.3 | 55.2 | 59.9 |
| Coughing | 48.9 | 49.0 | 48.9 | 34.0 | 51.9 | 42.3 | 58.5 |
| Trembling hands | 39.8 | 34.6 | 43.3 | 39.0 | 39.9 | 34.0 | 48.2 |
| Stomach ache | 37.6 | 38.1 | 37.3 | 33.3 | 38.5 | 37.1 | 38.3 |
| Breathing problems | 37.6 | 33.7 | 40.3 | 27.7 | 39.6 | 34.4 | 42.4 |
| Diarrhea | 26.9 | 28.7 | 25.7 | 20.9 | 28.1 | 24.9 | 29.9 |
| Loss of bladder control | 22.4 | 19.6 | 24.3 | 15.2 | 23.9 | 18.9 | 27.6 |
| Skin problems | 19.6 | 23.5 | 16.9 | 5.9 | 22.3 | 15.0 | 26.0 |
| Vomiting | 14.3 | 10.4 | 17.2 | 8.0 | 15.8 | 13.7 | 15.6 |

The symptoms are listed from most frequently to least frequently reported. The most common health symptoms are joint pain, weakness and back pain. Although it is difficult to link symptoms directly to diseases, these three symptoms are all typical of those with arthritis, one of the most common ailments in old age. The least commonly reported symptoms are loss of bladder control, skin problems, and vomiting. Coughing, stomach ache, and diarrhea are more commonly reported by men, while women are more likely to report the other twelve symptoms. Younger elders are more likely to report headaches, but older individuals are more likely to report all other symptoms. Those living in Phnom Penh differ considerably from those in the provinces when reporting symptoms. For instance, 64% of those in Phnom Penh report weakness compared to almost 87% of those in the provinces. The greatest difference is found with skin problems, with those in the provinces are almost four times more likely to report this problem.

Table 21 examines measures of functioning by looking at a variety of disabilities. The first set looks at the percent reporting difficulties conducting basic physical movements: lifting, walking, climbing, crouching and grasping. The last row reports the percent with at least one of these problems. Overall, Cambodians appear quite likely to report a physical functioning disability. Over four fifths of Cambodian elders report at least one physical functioning problem, the most common being lifting. Over 90% of those age 70 and older compared to about three fourths of elders age 60-69 report at least one of the problems. Females, those in the provinces, and those over 70, are more likely to report each individual problem. Although the results for the level of physical functioning problems is quite high, we note that on the one equivalent item included in he HAI/MSALVA survey, namely problems with walking, the percentages of elders with problems in Phnom Penh and the provinces are almost identical (calculated for those 60 and older from (HelpAge International 1998).

**Table 21. Physical Functioning and Seeing and Hearing Problems, by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **% reporting the following physical functioning problems** | | | | | | | |
| Lifting | 66.1 | 51.9 | 75.6 | 54.6 | 68.4 | 54.8 | 82.4 |
| Walking | 62.4 | 47.5 | 72.5 | 56.0 | 63.7 | 50.7 | 79.5 |
| Climbing stairs | 60.3 | 47.6 | 68.9 | 50.0 | 62.4 | 49.9 | 75.6 |
| Crouching | 57.8 | 47.8 | 64.5 | 43.3 | 60.7 | 47.8 | 72.3 |
| Grasping | 39.4 | 32.2 | 44.3 | 30.7 | 41.2 | 31.0 | 51.8 |
| At least one of the above | 81.3 | 71.1 | 88 | 69.7 | 83.6 | 74.0 | 92.0 |
| **% reporting the following Activity of Daily Living problems** | | | | | | | |
| Getting up from lying down | 18.8 | 15.2 | 21.3 | 14.2 | 19.8 | 13.0 | 27.4 |
| Eating | 8.7 | 7.3 | 9.7 | 7.6 | 9.0 | 5.5 | 13.5 |
| Bathing | 8.4 | 7.3 | 9.1 | 5.0 | 9.1 | 3.5 | 15.5 |
| Dressing | 6.2 | 5.9 | 6.4 | 3.2 | 6.8 | 2.2 | 12.1 |
| At least one of the above | 23.1 | 19.1 | 25.7 | 17.2 | 24.2 | 16.2 | 33.1 |
| **% who do not see and hear well without aids** | | | | | | | |
| Do not see well | 64.9 | 64.2 | 65.4 | 62.6 | 65.3 | 57.9 | 75.0 |
| Do not hear well | 30.9 | 31.5 | 30.6 | 27.0 | 31.7 | 23.9 | 41.2 |

The second panel looks at Activities of Daily Living (ADLs), a set of functional items first introduced by (Katz et al. 1963). Rather than focusing on a specific types of physical activity as the previous measures, these measures attempt to assess the combined impact of any physical disabilities on the need for assistance in conducting usual and necessary daily tasks. Bathing is a typical example. Those who have difficulties bathing may have a variety of physical disabilities, such as the ability to raise an arm, crouch, or do other movements that assist in the task. But, what is certain is that they will require assistance from someone on a nearly daily basis. The most common ADL problem is getting up from lying down, reported by almost 19% of respondents. Far fewer older Cambodians have difficulties getting dressed, with only about 6% reporting this problem. The ability to successfully conduct ADLs greatly diminishes with age. For instance, those 70 are more than four times as likely to report bathing and dressing problems in comparison to their younger counterparts.

The last two rows of the table report the percent that do not see or hear well without the use of aids. Seeing is a much more frequently reported problem, although a fair proportion of Cambodians have hearing problems as well. There is little difference between men and women and between those in Phnom Penh versus the provinces, but it is clear that those over 70 are much more likely to have these problems than are those between 60 and 69. Fully three quarters of elders 70 and older report problems seeing and more than 40% report problems hearing.

Table 22 moves on to indicators not directly related to health status, but ones that link with a broader definition of health. First, there are health behavior items. While about one third of older Cambodians smoke, there are pronounced differences by sex and place of residence. Men are very likely to smoke, with more than two thirds reporting that they did so, while less than 15% of women report they smoke. While 40% of those in the provinces smoke, the same is true for only 18% of those in Phnom Penh. But, where men smoke, women partake in betel nut chewing. Nearly two thirds of women chew betel compared to less than 6% of men. Drinking alcohol is very uncommon among the older population in Cambodia. However, all three behaviors, smoking, drinking and betel nut chewing, are more common in the provinces than in Phnom Penh.

**Table 22. Health Behaviors, sickness and injury, and health insurance, by sex, location, and age, Cambodian elders 2004**

| | | Sex | | Location | | Age | |
|---|---|---|---|---|---|---|---|
| | Total | Male | Female | Phnom Penh | Provinces | 60-69 | 70+ |
| **% who do the following** | | | | | | | |
| Smoke | 36.3 | 68.4 | 14.7 | 17.9 | 40.0 | 37.7 | 34.3 |
| Drink | 5.0 | 10.7 | 2.7 | 5.3 | 6.0 | 8.7 | 1.9 |
| Chew betel | 40.5 | 5.8 | 63.9 | 27.8 | 43.0 | 35.8 | 47.3 |
| **Sickness and injury during past year** (% distribution) | | | | | | | |
| Was not sick or injured | 42.3 | 47.0 | 39.2 | 60.3 | 38.8 | 48.4 | 33.6 |
| Was sick or injured and received treatment | 54.9 | 50.9 | 57.6 | 37.6 | 58.3 | 48.2 | 63.1 |
| Was sick or injured and did not receive treatment | 2.8 | 2.2 | 3.2 | 2.1 | 2.9 | 2.4 | 3.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **% who have health insurance** | 0.4 | 0.6 | 0.3 | 0.2 | 0.5 | 0.7 | 0.1 |

The SEC asked individuals if they were sick or injured over the past year, and if so, whether they received treatment for their illness or injury. More than half of respondents stated they were sick or injured, and sickness or injury was more likely reported by women, those in the provinces, and by those 70 and older. Although the level of reported sickness and injury may seem high, it is quite consistent with findings from the HAI/MSALVA survey (HelpAge International 1998). As for access to treatment, our results show two sides of the situation. On the one hand, a vast majority of those that reported being sick or injured reported receiving treatment. Less than 3% of all Cambodians were sick or injured and did not receive treatment. If only those who were sick or injured are considered, about 5% did not receive treatment. On the other hand, almost no older Cambodian has health insurance with less that 1% reporting they had any.

## Discussion and Conclusions

The 2004 Survey of Elderly in Cambodia (SEC) was conducted to fill an important gap in knowledge and understanding about a critical but largely ignored segment of the Cambodian population. Although the elderly (defined as persons age 60 over) make up a relatively modest share of the total population, they constitute important members of a large share of Cambodian households and families. Moreover, Cambodian elders are unique in having lived much of their adult lives during a period of unprecedented social upheaval, civil conflict, and massive violence against civilians during the traumatic four year period when the Khmer Rouge controlled the country. As in other societies, older Cambodians have their own particular needs related to their advanced age and make important contributions to family and community life. Yet very little prior information about their situation, including their needs and contributions, is available. Only one prior survey focusing on older Cambodians has previously been conducted. While this pioneering effort has yielded important information and insights, the sample was considerably more restricted and its questionnaire far more limited than that of the present survey. Thus the survey provides the first detailed data on the situation of Cambodian elders based on a widely representative sample. The present report provides a broad overview of the results. Forthcoming reports will present more focused analyses on specific topics.

The profile of older Cambodians presented in the current report confirms their unusual demographic characteristics, many of which stem from the unique and tragic history that they have survived. Thus elderly women outnumber elderly men in proportions far greater than found in most other societies reflecting the disproportionate toll of death on males that civil strife and political violence brought with it. Related to this is the very high level of widowhood found among older Cambodian women. Very high proportions of elderly of both sexes have lost children, not only to disease such as was common in many impoverished countries at the time, but also to violence, particularly associated with the Khmer Rouge era. In addition, high proportions of elderly, particularly of women, have lost spouses including substantial numbers who spouses perished from violent causes during the Khmer Rouge years.

Cambodian elders are also characterized by high levels of illiteracy and low levels of education. This is particularly true for elderly women. One result is that few elderly Cambodians read newspapers. TV watching is more common although most either see TV only rarely or not at all. In contrast a majority listen regularly to the radio. Information campaigns aimed at the older population and utilizing mass media would do well to take these patterns into account. At the same time, religion plays an important part in the lives of elderly Cambodians with a large majority of both sexes regularly visiting temples. Thus one effective venue for reaching elders could be through religious institutions.

Despite the common loss of children during the tumultuous history of the last several decades, sustained high fertility has nevertheless resulted in substantial numbers of children who still survive. Indeed in comparison to neighboring Thailand, which was spared severe political violence during the same period but which experienced rapid fertility decline, the average number of surviving children among the current generation of elders is actually higher in Cambodia and the extent of childlessness lower (Knodel et al. 2005). Thus almost all Cambodian elders have living children who potentially can serve as sources of old

age support. Levels of coresidence are extremely high, even on Asian standards, with approximately four out of five elderly Cambodians living with at least one child. Particularly common is coresidence with married daughters, a similar feature to neighboring Thailand, especially in the northeastern region of Thailand that borders much of Cambodia (Knodel, Chayovan and Siriboon 1992). Indeed given the lack of welfare measures, elderly Cambodians have little choice but to depend on material and physical support from their families and particularly from their children. While the vast majority of older Cambodians receive some money and other material support from their children, far fewer receive such support in substantial amounts, undoubtedly reflecting the pervasive and severe level of poverty characterizing both elderly parents and their children.

Many elderly also contribute to their own support although remaining economically active decreases rapidly with age. Thus while a majority of elders in their sixties contribute to supporting their own household this is far less common among those who have reached aged 70. Thus children are reported to be the main source of support for almost two thirds of the households in which elderly live although in a substantial minority elders themselves make the most important contribution to household support.

Evidence from the survey makes clear that poverty among Cambodian elders and their families is pervasive. The majority of elders own some land as well as their own house although the dwelling is often very modest. Large majorities live in very basic housing and more than half lack a toilet. The majority of households do have radios or televisions. Other household possessions are typically meager with only a small proportion living in a household with an electric fan or a telephone and very few in a household with a refrigerator. Elders in Phnom Penh, however, are considerably more likely to have such household possessions than those who live in the provinces.

Serious debt is not a common problem for the vast majority of elders although over one fifth have some debt. Self reports about their economic situation presents a fairly grim picture. Only slightly more than a fifth indicate that their income is sufficient to cover to their expenses or say that they are satisfied with their economic situation. Moreover elders were more than twice as likely to say that their economic situation became worse during the previous three years than to say it had improved.

Health is a vital indicator of well-being among any old age population, and as such, the SEC included a wide range of measures that tap into various health issues that confront the elderly. The results in this respect are sobering. Older Cambodians are more likely to state that they believe their health is poor than to state it is good. Most report joint pain, weakness and back pain. Thus not surprisingly, a large majority report having difficulties performing physical functions such as lifting things and walking. The combination of these problems hamper the ability to comfortably conduct activities necessary for daily maintenance and subsequently result in the need for physical assistance.

Women and those living in rural areas generally report much less favorable health than do men and elders in Phnom Penh. Given that access to health services in remote parts of the country is likely to be far worse than in Phnom Penh, this finding is particularly important, suggesting that health service needs may be highest where services are least likely to available. Although it is difficult to compare measures of health derived from survey questions across borders, it is fairly clear that Cambodian elders report themselves to be physically worse off than do their counterparts in other countries in Southeast Asia. For example, in a separate analysis of the SEC data not included in this report, results indicate that the percent of older Cambodians reporting limitations conducting activities of daily living (ADLs) is substantially higher than similarly aged elders in Indonesia, Myanmar, the Philippines, or Thailand (Zimmer 2005).

As for health behaviors, smoking and betel nut chewing are clearly public health issues among elders, with smoking common for men and betel nut chewing common for women. In contrast, alcohol consumption is low among older Cambodians. With regards to health services, results are somewhat more favorable. A vast majority of older Cambodians that reported being sick or injured in the past year said that they received treatment, although we cannot comment on the nature or quality of the treatment received. Finally, the SEC confirms that health insurance for older Cambodians is nearly non-existent, with only a handful of respondents reporting that they had any.

Clearly the situation of the elderly population in Cambodia and the many needs that arise from it merit greater recognition by government agencies concerned with health and social welfare than has so far been the case. Other countries in the region including neighboring Vietnam and Thailand have been actively pursuing the study of their aging populations and the resulting research has helped to stimulate as well as inform their efforts to develop specific programs and comprehensive plans dealing with elderly members of their populations. We anticipate that SEC results will contribute to basic knowledge about the family and social life in Cambodia and foster a better understanding of how they fit within the broader regional setting. We also hope that results from SEC will be useful to government and nongovernmental organizations in Cambodia in efforts to develop evidence-based policies and programs that address the needs of the older population and that harness their potential to contribute to the development of the society of which they and their families are part.

## References


Blaxter, Mildred. 1989. A comparison of measures of inequality in morbidity. In *Health Inequalities in European Countries.* Edited by John Fox. Aldershot: Gower.

Chan, Sophal and Sophal Ear. 2004. "Towards Understanding Social Protection in Cambodia," *Cambodia Development Review* 8 (4)

HelpAge International. 1998. Study on the Situation of Older People in Cambodia. Phnom Penh, Cambodia, HelpAge International.

Hermalin, Albert I., Carol L. Roan, and Ming-Cheng Chang. 1997. Plans for Moving among the Elderly in Taiwan and Their Outcomes: A Panel Study. In *Annual Meeting of the Population Association of America.* Washington, DC.

Heuveline, P. 1998. "'Between One and Three Million': Towards the Demographic Reconstruction of a Decade of Cambodian History (1970-79)," *Population Studies-a Journal of Demography* 52 (1): 49-65 (1998).

Idler, Ellen L. and Yael Benyami. 1997. "Self-rated health and mortality: A review of twenty-seven community studies," *Journal of Health and Social Behavior* 36: 21-37.

Kato, E. U. 2000. Ageing in Cambodia: Tradition, change and challenges. In *Ageing in the Asia-Pacific Region.* Edited by D. R. Phillips. New York, NY : Routledge.

Katz, S., A. B. Ford, R. W. Moskowitz, B. A. Jackson, and M. W. Jaffee (1963). "Studies of Illness in the Aged: The Index of ADL, a Standardized Measure of Biological and Psychosocial Function." *Journal of the American Medical Association* 185: 914-19.

Kiernan, B. 2003. "The Demography of Genocide in Southeast Asia - the Death Tolls in Cambodia, 1975-79, and East Timor, 1975-80," *Critical Asian Studies* 35 (4): 585-597.

Knodel, J. and M. B. Ofstedal. 2003. "Gender and Aging in the Developing World: Where Are the Men?," *Population and Development Review* 29 (4): 677-698.

Knodel, John, Chayovan, Napaporn, Mithranon, Preeya, Amornsirisomboon, Pattama, and Arunraksombat, Supraporn. 2005. Thailand's Older Population: Social and Economic Support as Assessed in 2002. Bangkok, Thailand, National Statistical Office.

Knodel, John and Chanpen Saengtienchai. 1999. "Studying Living Arrangements of the Elderly: Lessons from a Quasi Qualitative Case Study Approach in Thailand," *Journal of Cross-Cultural Gerontology* 14 (3): 197-220.

Knodel, John, Napaporn Chayovan and Siriwan Siriboon, "The Familial Support System of Thai Elderly: An Overview," *Asia-Pacific Population Journal* 7(3), Sept. 1992.

Ministry of Social Affairs, Labor and Veteran Affairs and HelpAge International . 1998. *Summary Report on the Situation of Older People in Cambodia.* Phnom Penh: Ministry of Social Affairs, Labor and Veteran Affairs//HelpAge International .

Ofstedal, Mary Beth et al. (Forthcoming) "Self-assessed health expectancy among older adults: A comparison of six Asian settings," *Hallym International Journal of Aging.*

Ross, Russell R. Cambodia: A Country Study. 1987. Washington, DC, Library of Congress, Federal Research Division.

United Nations. 2005. *World Population Prospects: The 2004 Revision. Volume I: Comprehensive Tables.* Vol. New York: United Nations.

Zimmer, Zachary (2005) "Activities of Daily Living and Active Life Expectancy among older Cambodians: Preliminary findings from the 2004 Survey of the Elderly in Cambodia." Paper presented at the annual meetings of REVES (International Network on Active Life Expectancy and Disability) in Beijing, China.

Zimmer, Zachary and Sovan Kiry Kim. 2001. "Living Arrangements and Socio-Demographic Conditions of Older Adults in Cambodia," *Journal of Cross-Cultural Gerontology* 14 (4): 353-381.

## *Appendix A. Sampling Strategy for the 2004 Survey of Elderly In Cambodia*

### I. General

1. Administrative structure of Cambodia:

The sampling strategy took advantage of the administrative structure of the country. There are 24 Provinces. Each Province is divided into Districts. The number of Districts varies across Provinces. In the six Provinces selected for study, there are between 7 and 16 Districts. Each District is designated as an urban or a rural area. Districts are further divided into Communes. The number of Communes can range from as few as 5 or 6 to as many as 15 or 16. Communes are divided into Villages. Again, there is a wide range of number of Villages within a Commune, but a typical number may be 10. The National Institute of Statistics (NIS) further divides Villages into Enumeration Areas (EAs), with each EA containing approximately 110 households. Some Villages, however, have fewer than 110 households and are represented by a single EA. The number of EA in a Village can range from as few as 1 to over 20, depending on the number of households contained in the Village.

2. Overall sampling strategy:

The first decision was to limit the number of Provinces from which to sample. In order to select few enough Provinces to make the study economical, yet be generally representative of a good part of Cambodia, sampling was limited to Provinces that together make up a majority of the Cambodian population. That is, although there are 24 Provinces in Cambodia, the population is unevenly concentrated and a few Provinces contain much of the population. The first sampling decision was to choose the fewest Provinces necessary that combined include at least 50% of the Cambodian population. This includes six Provinces, which in order of population size are: Kampong Cham, Kandal, Phnom Penh, Prey Veng, Battambang, and Takeo.

Sampling within provinces was carried out using two separate multi-stage cluster designs: one for the province of Phnom Penh and another for the other five provinces (hereafter referred to collectively as 'the provinces'). In Phnom Penh, the strategy involved 1) the selection of Villages; 2) the selection of enumeration areas (EA) within Villages; 3) the selection of households within EAs; 4) the selection of a respondent within household. The selection of Villages was conducted on a probability to size basis. A parallel design was used for the provinces, but because the larger geographical area, Villages were selected in a stratified manner by: 1) selecting Districts; 2) Communes within Districts; and 3) Villages within Communes. Districts, Communes and Villages were selected on a probability to size basis. After the selection of Villages, the sampling mirrored the Phnom Penh strategy.

The initial strategy called for 25 individuals living in 2 EAs within selected Villages to be interviewed. Thirty-two Villages were chosen for the provinces and 16 for Phnom Penh. This represented an over-sampling of Phnom Penh. The intended sample size was 800 for the provinces and 400 for Phnom Penh. The final sample is somewhat larger, as is explained below. The selection of Villages was conducted using a clustered systematic sampling strategy that was proportionate to size. The 25 respondents were identified after enumeration of households within two EAs in each selected Village. Assistance in enumeration and maps of EAs were provided by the NIS. Staff from the NIS was involved in training for the enumeration. Staff from the NIS also randomly selected 2 contiguous EAs for Villages containing more than 2.

### II. Sampling strategy

1. Selection of Villages for Phnom Penh:

16 Villages were selected in the following manner: The *General Population Census of Cambodia 1998 Village Gazetteer*, published by the NIS in 2000, was used to estimate the total number of households

within Phnom Penh Province (pp. 191-206). The Gazetteer lists number of households within District/Commune/Village. Accumulating households within all Villages listed for Phnom Penh Province provides 173,678 households. A household sampling interval was determined by dividing the total number by 16 (since 16 Villages were sampled).

*HH interval = 173,678 / 16 = 10,855*

Using EXCEL a random starting household number was generated between 1 and 10,855, which was 4,076. The first Village selected was the one that contained the 4,076$^{th}$ household when households were counted down cumulatively beginning with Commune 1, District 1, Village 1 as listed in the *Population Census of Cambodia 1998 Village Gazetteer.* Subsequent Villages were chosen by continuing to count down the households cumulatively.

The list of Villages and the number of households listed for each Village from the *Gazetteer* is as follows:

| District | Commune | Village | # HHs |
|---|---|---|---|
| 1. Chamkaar Mon | 1. Tonle Basak | 12. Center 12 | 340 |
| 1. Chamkaar Mon | 4. Boeng Keng Kang Bei | 4. Center 4 | 415 |
| 1. Chamkaar Mon | 9. Tuol Tumpung Pir | 3. Center 3 | 246 |
| 2. Doun Penh | 3. Phsar Thmei Bei | 11. Center 11 | 443 |
| 2. Doun Penh | 10. Srah Chak | 2. Center 2 | 343 |
| 3. Prampir Meakkakra | 3. Ou Ruessei Bei | 1. Center 1 | 597 |
| 3. Prampir Meakkakra | 8. Boeng Prolit | 1. Center 1 | 615 |
| 4. Tuol Kouk | 4. Tuek Lák Muoy | 16. Center 16 | 308 |
| 4. Tuol Kouk | 8. Boeng Kak Pir | 6. Center 6 | 151 |
| 5. Daangkao | 5. Chaom Chau | 3. Phum Kob Korng | 67 |
| 5. Daangkao | 13. Prateah Lang | 1. Phum Prateah Lang | 280 |
| 6. Mean Chey | 2. Boeng Tumpun | 4. Phum Kbal Tum Nub | 1179 |
| 6. Mean Chey | 6. Chak Angrae Leu | 1. Phum Prek Takuong | 1430 |
| 7. Ruessei Kaev | 2. Tuol Sangkae | 2. Phum Tuol Sangke | 2026 |
| 7. Ruessei Kaev | 6. Ruessei Kaev | 1. Phum Meattapheap | 1040 |
| 7. Ruessei Kaev | 9. Preeaek Taa Sek | 3. Phum Prek Rang | 156 |

2. Selection of Villages for Provinces:

As noted above additional levels of clustering were involved for Provinces. Thirty-two Villages were selected by: a) selecting eight Districts within the Provinces; b) selecting two Communes within Districts for a total of 16 Communes; and c) selecting two Villages within Communes for a total of 32 Villages. The *General Population Census of Cambodia 1998 Village Gazetteer* was used to estimate the total number of households within each District, Commune and Village, and systematically select these according to size as follows:

a. Districts: All Districts were listed and household accumulated. Districts were listed by Province starting with District 1 to 16 in Kampong Cham, District 1 to 11 in Kandal, District 1 to 12 in Prey Veng, District 1 to 12 in Battambang, and District 1 to 10 in Takeo. The total number of households was 1,016,601. A household sampling interval was determined by dividing the total number of households by 8.

*HH interval for Districts = 1,016,601 / 8 = 127,075*

Using EXCEL a random starting household number was generated between 1 and 127,075, which turned out to be 102,898. The first District was the one that contained the 102,898$^{th}$ household when households were counted down cumulatively beginning with the first District listed. This turned out to be Kang Meas

in Kampong Cham. Subsequent Districts were chosen by continuing to count down the households cumulatively.

b. Communes: A similar strategy was used to select two Communes. For instance, the first District chosen was Kampong Meas in the Province of Kampong Cham. The *Gazetteer* lists 11 Communes in this District, with a total number of households of 17,661. A household sampling interval for the Commune was determined by dividing the total number of households by 2.

*HH interval for Communes in Kampong Meas District = 17,661 / 2 = 8,831*

Using EXCEL a random starting household number was generated, which turned out to be 6,057. The first Commune was the one containing the 6,057$^{th}$ household, and the second was the one containing the 6,057 + 8,831 = 14,888$^{th}$ household. The same procedure was followed for the other 8 Districts, resulting in 16 randomly chosen Communes.

c. Villages: Villages were listed within each of the selected Communes and two were selected in the same fashion as above. For instance, the first Commune chosen, which was Peam Chi Kang in Kampong Meas District in Kampong Cham Province contains 7 Villages with 1,496 households. A household sampling interval for the Village is:

*HH interval for Villages in Peam Chi Kang Commune* = 1,496 / 2 = 748

A random number of 670 was generated, and the first Village chosen was the one with the 670$^{th}$ household.

d. Final selection of Villages: In order to finalize the selection, it was necessary to assure all areas chosen were accessible. One District in Prey Veng Province was deemed to be inaccessible because of its remoteness and the possibility of flooding during the interviewing period. Therefore, the next District on the list was chosen as a substitute. One village in Peam Chi Kang Commune was also inaccessible and the next village on the list was selected as a substitute.

The final list of Villages sampled is as follows:

| Province | District | Commune | Village | # HHs |
|---|---|---|---|---|
| Kampong Cham | Kang Meas | Peam Chi Kang | Sach Sou | 139 |
| | | | Sambour Meas Kha | 272 |
| | | Sdau | Sdau | 182 |
| | | | Anglong Kokir | 199 |
| | Prey Chhor | Baray | Tuol Chambak | 243 |
| | | | Roung Kou | 108 |
| | | Mien | Tuol Poun | 183 |
| | | | Khlouy Ti Pir | 211 |
| Kandal | Kien Svay | Dei Edth | Popeal Khae | 554 |
| | | | Sdau Kanlaeng | 1497 |
| | | Preaek Aeng | Kbal Chrouy | 225 |
| | | | Chong Preaek | 487 |
| | S'ang | Preaek Ambel | Preaek Ta Lai | 341 |
| | | | Anlong Ta Sek Krao | 478 |
| | | Traevy Slaa | Pou Kraom | 285 |
| | | | Preae Balat Chhoeng | 462 |
| Prey Veaeng | Peam Ro[1] | Peam Ro | Bati | 457 |
| | | | Chak Khlanh | 325 |
| | | Prey Kandieng | Prey Kandieng | 380 |
| | | | Prey Kampeaeng | 251 |
| Battambang | Battambang | Ta Pung | Paoy Samraong | 509 |

| | | | | |
|---|---|---|---|---|
| | | | Tumpung Tboung | 239 |
| | | Chrey | Chrey | 483 |
| | | | Prey Totueng | 329 |
| Takeo | Angkor Borei | Ba Srae | Prey Ba Soeng | 230 |
| | | | Puon Kak | 149 |
| | | Prey Phkoam | Prey Phkoam Kha | 290 |
| | | | Trong Phum | 320 |
| | Tram Kak | Ou Saray | Trapeang Kang Tuek | 124 |
| | | | Trapeang Phlu | 152 |
| | | Trapeang Thum Khang Cheung | Ta Suon | 163 |
| | | | Pou Doh | 235 |

3. Selection of Enumeration Areas (EA):

From this point forward, the strategy for the provinces and Phnom Penh was nearly identical. From selected Villages, 2 EAs were chosen. Since each EA contains about 110 households, the Villages contained a wide range of number of EAs, and except for a few exceptions, there were at least 2. The 2 for study were randomly selected by NIS, and they were contiguous. Where only 1 existed, that EA was chosen and a second was chosen in a contiguous Village.

4. Selection of Households:

Each individual chosen was a person living in a household that contained at least one person aged 60 and older. The selection of potential households containing someone aged 60 and older took place as follows:

a. Enumeration List - Enumerators visited the EAs and made a complete mapping of dwellings, updating maps from the 1998 census provided by NIS. Each dwelling was assigned a number for identification. Enumerators then recorded each household and information about each household. This information included an address or other information to identify the household, the name of the household head, and whether there were individuals over a certain age in the household. For Phnom Penh, enumerators recorded whether there was someone 55 and older. The age 55 instead of 60 was done to reduce error in case of age under-reporting. However, underage reporting turned out not to be a problem, and for the provinces, the age 60 and older was used. Sheets on which the information was recorded contained information on up to ten households. Since each line was numbered, and each sheet was numbered, each household had a unique identifier, which was the combination of the sheet and line numbers. NIS staff, during training, provided instructions on exactly how to do this.

b. Master List – A master list was created for each sampled Village. The enumeration lists from the two EAs obtained from the enumeration procedure were ordered and stacked. A master list of households containing someone 60 and older (or 55 and older for Phnom Penh) was created by recording information from the first household listed from sheet 1, followed by the first household from sheet 2, followed by the first household from sheet 3, etc., until the first household listed on each sheet was transcribed to the master list. If there was no household with someone aged 60 and older listed (or 55 and older for Phnom Penh), that sheet was put aside. The master list continued by recording information from the second household from sheet 1, sheet 2 etc., as long as there were at least two households with older individuals listed on the sheet. This procedure continued until all the households within the two EAs with older adults were recorded onto the master list.

c. Household Selection - The master list for each of the Villages contained different numbers of households for possible selection depending upon the size of the EAs and the number of households that contained an older adult. These master lists, at this point, had a list of possible households with an older person present listed in a random order. Interviewers visited households beginning from the first listed on

the master list. When interviewers visited, they determined the age of each household member who might be eligible for the study as is further described below. Someone was defined as living in the household if they were a usual resident.

5. Selection of respondent:

Once a household was selected, interviewers visited and determined a) whether an eligible respondent lived in the household; and b) which eligible individual became the respondent in cases where there was more than one. To clarify, the enumeration procedure lists households reported to have someone 60 and older in the provinces and 55 and older in Phnom Penh. But, it was necessary to first verify the information and second select one of possibly several individuals for interview. If no one in the household was confirmed to be 60 and older, that household was not eligible for study. If more than one person was listed, a random choice was made to select one respondent.

a. Determining Whether An Eligible Respondent Was Present – Teams of interviewers worked with supervisors within Villages. Interviewers were sent to a household listed on the master list by the supervisor. The supervisor sent interviewers beginning from the top of the master list, working down the list. When interviewers arrived at the household, they began by determining whether there were any eligible respondents. This was done by asking for the names and ages of household members reported to be 60 and older in the provinces and 55 and older in Phnom Penh and recording these on a list from youngest to oldest according to the stated age. The list is shown below:

| Name | Age as stated | Khmer (Animal) year or Western year of birth (use corresponding chart to determine corrected age based on Khmer or Western year of birth) | Corrected Age |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

After filling in the name and stated age, the interviewer corrected the age by asking about the animal year of birth, or the western year of birth, and using a corresponding chart that linked animal year or western year to actual age. Those aged under 60 were eliminated and crossed-off the list. Those 60 and older remained. There were very few cases where more than 2 individuals 60 and older were living in a household, and almost no cases with more than 3, but in the unlikely case of 3 or more aged 60 and older, the first 3 were listed and others ignored.

b. Selecting A Respondent - A selection of a respondent was made from those aged 60 and older left on the list after the age correction. If there was no one aged 60 and older on the list, the household was not selected, and the interviewer left without obtaining an interview. If there was one individual, she or he was the respondent. If there was more than one, a random selection was made from a random selection table shown below:

| Number of persons in household whose corrected age is 60 or more | Person to interview |
|---|---|
| 0 | No one |
| 1 | This person |
| 2 | Person to Interview: 1st 2nd |
| 3 | Person to Interview: 1st 2nd 3rd |

Before sending the interviewer to the household, a random number (1st, 2nd, 3rd) was circled in rows pertaining to possible situations of multiple persons in the household whose corrected age was 60 and or older. The person to be interviewed was the one circled in the appropriate row. For instance, if in the row pertaining to 2 persons in the household whose corrected age is 60 or more, the 2nd was circled in advance, the interviewer chose the 2nd person on the list. This would likely be the older of the two persons, since individuals were listed according to their stated age.

These circles were done beforehand by going through all the random selection sheets and circling 1st or 2nd on each sheet for the row corresponding to 2 eligible persons, then circling 1st, 2nd, or 3rd on the sheet for the row corresponding to 3 eligible persons, in order, so that combinations of numbers circled varied systematically with the effect that the selection of a respondent in households with multiple eligible respondents was random.

## III. Special issues

1. Refusals and non-response:

Interviewers noted refusals and sources of non-response. The reason for a non-response could be that nobody in the household met the age requirement, nobody was home, or somebody was home but older members of the household were temporarily absent. Supervisors in the field kept watch on these numbers. Interviews continued interviewing in each Village until 25 interviews were completed.

2. Continued interviewing

Although many refusals and non-responses could bias the sample, in the provinces, the method noted above, that is, continuing interviewing until 25 interviews were completed, resulted in a very small number of refusals and non-respondents. However, this was not the case in Phnom Penh. What was not anticipated in Phnom Penh was that in a large number of households there was nobody home or the older adults were temporarily away. The total number during the initial fieldwork was more than 200, providing a very high non-response rate. The reason for the large number of absentees appears to be that one of the survey days early in the field work was a special day during which many Cambodians make a day trip for ritual purposes, and the last few days of the interviewing were close to the 3-day Cambodian new-year holiday when may individuals visit their family living elsewhere. It was determined that in order to limit the bias it was necessary to return to Villages where a large number of absentees were recorded, return to the absentee household, and repeat the process, attempting to interview as many older adults as possible from the list of households visited earlier. This resulted in an additional 73 interviews in Phnom Penh, making the total sample size 473.

3. Not enough households:

In cases where Villages did not have enough households containing an older person to complete 25 interviews, it was necessary to choose a contiguous Village and continue the procedure.

4. Respondent unable to answer the survey:

Where an individual within a household was identified as the respondent but was unable to answer the questionnaire due to health or cognitive difficulties, someone in the household was chosen as a proxy. This was a person who knows the respondent well, for instance, a spouse or a child.

## Appendix B. Determination of Sample Weights

The sampling strategy employed for the survey necessitates a weighting scheme to ensure that results are representative of the population of older adults within the six provinces that were included in the study. Individual cases were weighted by the inverse of the probability of being selected as part of the sample. The probability of being selected is dependent upon two factors. First, there is the probability that a specific individual will be chosen to be interviewed out of the total number of individuals eligible within the household. This probability of being selected in a household is inverse to the number of older adults (i.e. age 60 and over) in the household. Thus the weighting factor to account for this is the number of older persons in the household. Second, there is the probability that the specific household is sampled. For Phnom Penh, and for the other five provinces, this probability is self-weighted since selection of households within the two areas is based on a probability sampling scheme. However, in our sampling design, households in Phnom Penh were over-sampled compared households in the five other provinces. Therefore the weighting scheme includes an adjustment factor to produce results in which the Phnom Penh sample and the provincial sample (taken as a whole) are weighted proportional to the projected population of persons aged 60 in each of the two domains as of mid-2004 as indicated by the latest official projections {National Institute of Statistics & Center for Population Studies 2004 #8740}. Since the annual projection results provided refer to January 1 of each year we use the mean of the results for 2004 and 2005 to obtain the mid-year 2004 population of persons 60 and older. According to these calculations, we would expect that 16.7 percent of households with a person aged 60 or over within the two domains combined would be in Phnom Penh and 83.3 percent would be in the five other provinces. Therefore weighting factors were determined so that each respondent would be weighted proportional to the number of persons 60 or older in their household and so that the final weighted number of respondents in each of the two domains would be normalized (i.e. the weighted total number of cases would equal the unweighted total of 1273 cases) and would be in the same proportion to each other as the projected populations aged 60 and over in the two domains in mid-2004.

The weights can be described by the following equations:

$$W_i = n_{60+} \; x \; A_{pp/pr}$$
$$A_{pp} = (0.167 \; x \; U)/T_{pp}$$
$$A_{pr} = (0.832 \; x \; U)/T_{pr}$$

where $W_i$ is the weight given for individuals, $n_{60+}$ is the number of persons age 60 or over in a household, A is the adjustment factor for Phnom Penh (pp) or the other provinces (pr); U is the unweighted total number of respondents (1273) and T is the total number of persons 60 or over in Phnom Penh (pp) or the other provinces (pr). The adjustment factors so calculated were 0.37697 for pp and 1.03251 for pr.

Table C1 compares the unweighted and weighted numbers of respondents. Since the weights were normalized, the total unweighted and weighted numbers are the same. Because Phnom Penh was over-sampled relative to the provinces, the weighted number of respondents in Phnom Penh is substantially lower than the unweighted while in each province the weighted number is larger than the unweighted number. Some differences are also apparent with respect to sex, age and marital status. Because men are far more likely to be married than women, they were more likely to be in households with more than one eligible respondent (since their wives often were also eligible with respect to the target minimum age of 60). Thus men general received higher weights than women according to the formula above and hence represent a greater share of the weighted sample than of the unweighted sample. The distribution by age among the weighted sample is only modestly different than that in the unweighted. The main difference is with respect to the youngest age group of older persons who are somewhat less represented in the weighted than the unweighted numbers. Finally, because currently married elders are more likely to live in households with more than one eligible elderly member and widowed elderly are more likely than

others to live in households with only one elderly member, the share of currently married is substantially higher in the weighted results in the share of widowed is substantially lower in comparison to the unweighted numbers.

**Table B1. Unweighted and weighted numbers of respondents, by sex and by province, age, and marital status, Survey of Elderly in Cambodia, 2004**

| | Unweighted | | | Weighted (normalized) | | |
|---|---|---|---|---|---|---|
| | Total | Men | Women | Total | Men | Women |
| **Total** | 1273 | 463 | 810 | 1273 | 512 | 760 |
| | | | | | | |
| **Province** | | | | | | |
| Phnom Penh | 473 | 149 | 324 | 212 | 69 | 143 |
| Center | 262 | 81 | 181 | 120 | 38 | 82 |
| Periphery | 211 | 68 | 143 | 92 | 31 | 61 |
| Battambang | 100 | 41 | 59 | 120 | 50 | 70 |
| Kampong Cham | 200 | 82 | 118 | 284 | 118 | 166 |
| Kandal | 200 | 67 | 133 | 267 | 100 | 167 |
| Prey Veng | 100 | 29 | 71 | 124 | 36 | 88 |
| Takeo | 200 | 95 | 105 | 265 | 139 | 126 |
| | | | | | | |
| **Age** | | | | | | |
| 60-64 | 457 | 191 | 266 | 417 | 173 | 244 |
| 65-69 | 325 | 121 | 204 | 338 | 143 | 195 |
| 70-74 | 245 | 76 | 169 | 265 | 101 | 164 |
| 75+ | 246 | 75 | 171 | 253 | 95 | 158 |
| | | | | | | |
| **Marital status** | | | | | | |
| never married | 15 | 0 | 15 | 13 | 0 | 13 |
| currently married | 505 | 361 | 144 | 653 | 418 | 235 |
| separated/divorced | 45 | 13 | 32 | 37 | 13 | 24 |
| widowed | 708 | 89 | 619 | 570 | 81 | 489 |

Note: Weighted sums may differ slightly from totals due to rounding.

## Appendix C. Response Rates in Survey of Elderly in Cambodia

As noted in the description of the sampling procedures for the Phnom Penh and provincial phases of the survey, a listing of households with an older person resident was made based on field enumeration in each selected sample site. Information about the age of potential respondents during the enumeration phase was often provided by someone other than the potential respondents themselves. For the Phnom Penh phase, during the enumeration we listed all households in which we were told that someone at least age 55 or older was resident. The purpose of choosing 55 rather than 60 was to minimize the chance that we would miss someone whose actual age was 60 or over but who would be misreported as below 60 during the enumeration. As a result of this procedure as well as because some persons thought to be age 60 or older were not yet 60, some houses during the actual survey interviewing, were found not to have member who actually was age 60 or above. Thus these households were ineligible for the sample. Preliminary results from the Phnom Penh sample, which became available prior to the fieldwork in the provinces, revealed that only very rarely was anyone who was said to be under age 60 in the enumeration actually age 60 or over. However it was not unusual that persons who were said to be age 60 or over in the enumeration had not yet actually reached age 60. For this reason, in order to minimize time lost during the survey as a result of contacting houses with no eligible respondent age 60 or over, in the provincial enumeration phase we only listed households that were said have someone 60 or over.

During the survey, 26% of the households contacted in Phnom Penh and 12% contacted in the provinces turned out not to have anyone aged 60 or over in them. The lower provincial percentage is due in part to the fact that, unlike in Phnom Penh, during the enumeration stage the listing did not include households in which someone was said to be over 55 but no one was said to be 60 or over.

When calculating response rates, we need to take into account that when, during the survey, no one was found to be home in a household originally selected for interview or when the selected household could not be located, a certain proportion of those households did not actually include an eligible respondent and thus should not be counted as non-response. We thus adjusted the numbers of households in which no one was home or which could not be located to reflect an estimated share that would not have an eligible respondent age 60 and over. The adjustment was based on the proportion of households among those selected and contacted in which we could determine the ages of potential respondents. For the purpose of calculating non-response rates, we thus discounted the number of households where no one was home or which could not be located by 26% for Phnom Penh and 12% for the provinces. The resulting non-response rates are summarized in the following table.

**Table C1. Reasons for Non-response, 2004 Survey of Elderly in Cambodia**

| | Phnom Penh | Provinces | Total |
|---|---|---|---|
| a) Not at home or could not find house (adjusted for likely share of under-aged respondents)* | 58 | 6 | 64 |
| b) Refusal to be interviewed | 44 | 11 | 55 |
| c) Successful interview | 473 | 800 | 1273 |
| | | | |
| Overall non-response [(a+b)/(a+b+c)] | 15.4% | 2.1% | 8.5% |
| Refusal rate among eligible persons contacted [b/(b+c)] | 8.5% | 1.4% | 4.1% |

*assuming the share of under-aged potential respondents is the same as that found for cases who could be contacted (and whose age could be determined) i.e. 73.9% of Phnom Penh sample and 88.2% of provincial rural sample.

_____ ID NUMBER

The following information is to be filled in by the interviewer:

1. Province _____

2. District _____

3. Commune _____

4. Village _____

5. Rural or urban: 1. Rural 2. Urban

6. Household line number from enumeration _____

7. Page number of enumeration sheet _____

8. Name of household head _____

9. Building number _____

10. Household number _____

111. Type of house
1. Detached
2. Multiple family unit
3. Apartment

**Contact information**

| Contact number | Date of contact | Result of contact<br>0. no person aged 60+ in household<br>1. Interview<br>2. Nobody home<br>3. Respondent refusal<br>4. Respondent away<br>7. Appointment made to visit at another time<br>8. Other (_____) | Time and date of appointment |
|---|---|---|---|
| 1 | | 1 2 3 4 5 6 7 | |
| 2 | | 1 2 3 4 5 6 7 | |
| 3 | | 1 2 3 4 5 6 7 | |
| 4 | | 1 2 3 4 5 6 7 | |

Name of interviewer_____

# CAMBODIA ELDERLY SURVEY: RESPONDENT IDENTIFICATION PAGE

Step 1. List household members age 59 and over:

List all household members whose age is said to be 59 and older in the chart below. Start the listing with the oldest person. Write the name, the stated age, and the year of birth for each person. If more than four people in the household are said to be 59 and older, just write down the names of the four oldest. Note that the year of birth may be stated either as a Khmer (animal) year or as a Western year (19xx).

Determine a corrected age by using either the 'Khmer Animal Year Conversion Chart if birth year is stated in terms of the Khmer system or the Western Year Conversion Chart if birth year is stated in terms of the Western system. (Note: the conversion charts are on a separate page.)

Cross out anybody in the chart whose corrected age is less than 60.

| Name | Age as stated | Khmer (Animal) year or Western year of birth (use corresponding chart to determine corrected age based on Khmer or Western year of birth) | Corrected Age |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

Step 2. Selecting the respondent:

Refer to the chart below to determine to interview. Look at the line corresponding to the number of persons on the list of older persons above. The person to interview is circled. Count down from the top of the list of older persons to find the '1st', '2nd', '3rd or '4th' person and interview that person.

| Number of persons in household whose corrected age is 60 or more | Person to interview |
|---|---|
| 0 | No one |
| 1 | This person |
| 2 | Person to Interview: 1st 2nd |
| 3 | Person to Interview: 1st 2nd 3rd |

KHMER ANIMAL YEAR CONVERSION CHART
(Completed age of persons as of April 2004 assuming animal year changes in April)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Rat | 103 | 91 | 79 | 67 | 55 | 43 | 31 | 19 |
| Ox | 102 | 90 | 78 | 66 | 54 | 42 | 30 | 18 |
| Tiger | 101 | 89 | 77 | 65 | 53 | 41 | 29 | 17 |
| Rabbit | 100 | 88 | 76 | 64 | 52 | 40 | 28 | 16 |
| Dragon | 99 | 87 | 75 | 63 | 51 | 39 | 27 | 15 |
| Snake | 98 | 86 | 74 | 62 | 50 | 38 | 26 | 14 |
| Horse | 97 | 85 | 73 | 61 | 49 | 37 | 25 | 13 |
| Goat | 96 | 84 | 72 | 60 | 48 | 36 | 24 | 12 |
| Monkey | 95 | 83 | 71 | 59 | 47 | 35 | 23 | 11 |
| Rooster | 94 | 82 | 70 | 58 | 46 | 34 | 22 | 10 |
| Dog | 93 | 81 | 69 | 57 | 45 | 33 | 21 | 9 |
| Pig | 92 | 80 | 68 | 56 | 44 | 32 | 20 | 8 |

Western YEAR CONVERSION CHART
(Completed age of persons as of April 2004)

| year | Age (if born April – Dec. or month unknown) | Age (if born Jan- – March) | year | Age (if born April – Dec. or month unknown) | Age (if born Jan- – March) | year | Age (if born April – Dec. or month unknown) | Age (if born Jan- – March) |
|---|---|---|---|---|---|---|---|---|
| 1903 | 100 | 101 | 1932 | 71 | 72 | 1961 | 42 | 43 |
| 1904 | 99 | 100 | 1933 | 70 | 71 | 1962 | 41 | 42 |
| 1905 | 98 | 99 | 1934 | 69 | 70 | 1963 | 40 | 41 |
| 1906 | 97 | 98 | 1935 | 68 | 69 | 1964 | 39 | 40 |
| 1907 | 96 | 97 | 1936 | 67 | 68 | 1965 | 38 | 39 |
| 1908 | 95 | 96 | 1937 | 66 | 67 | 1966 | 37 | 38 |
| 1909 | 94 | 95 | 1938 | 65 | 66 | 1967 | 36 | 37 |
| 1910 | 93 | 94 | 1939 | 64 | 65 | 1968 | 35 | 36 |
| 1911 | 92 | 93 | 1940 | 63 | 64 | 1969 | 34 | 35 |
| 1912 | 91 | 92 | 1941 | 62 | 63 | 1970 | 33 | 34 |
| 1913 | 90 | 91 | 1942 | 61 | 62 | 1971 | 32 | 33 |
| 1914 | 89 | 90 | 1943 | 60 | 61 | 1972 | 31 | 32 |
| 1915 | 88 | 89 | 1944 | 59 | 60 | 1973 | 30 | 31 |
| 1916 | 87 | 88 | 1945 | 58 | 59 | 1974 | 29 | 30 |
| 1917 | 86 | 87 | 1946 | 57 | 58 | 1975 | 28 | 29 |
| 1918 | 85 | 86 | 1947 | 56 | 57 | 1976 | 27 | 28 |
| 1919 | 84 | 85 | 1948 | 55 | 56 | 1977 | 26 | 27 |
| 1920 | 83 | 84 | 1949 | 54 | 55 | 1978 | 25 | 26 |
| 1921 | 82 | 83 | 1950 | 53 | 54 | 1979 | 24 | 25 |
| 1922 | 81 | 82 | 1951 | 52 | 53 | 1980 | 23 | 24 |
| 1923 | 80 | 81 | 1952 | 51 | 52 | 1981 | 22 | 23 |
| 1924 | 79 | 80 | 1953 | 50 | 51 | 1982 | 21 | 22 |
| 1925 | 78 | 79 | 1954 | 49 | 50 | 1983 | 20 | 21 |
| 1926 | 77 | 78 | 1955 | 48 | 49 | 1984 | 19 | 20 |
| 1927 | 76 | 77 | 1956 | 47 | 48 | 1985 | 18 | 19 |
| 1928 | 75 | 76 | 1957 | 46 | 47 | 1986 | 17 | 18 |
| 1929 | 74 | 75 | 1958 | 45 | 46 | 1987 | 16 | 17 |
| 1930 | 73 | 74 | 1959 | 44 | 45 | 1988 | 15 | 16 |
| 1931 | 72 | 73 | 1960 | 43 | 44 | 1989 | 14 | 15 |

CAMBODIA ELDERLY SURVEY QUESTIONNARE
(Version 3 June 2004)

ID number _____
Province _____ District _____ Commune _____
Village _____ EA # _____ Building #_____ Household # _____
Name of interviewer_____
Start time: ____hour _____ minute (circle as appropriate: AM PM) Date : ___ day ___month 2004

## SECTION A. BACKGROUND INFORMATION

A1. Sex of respondent
1. male
2. female

A2. What is your current age? _____years old

A3a. In which animal year were you born?

| | | |
|---|---|---|
| 1. Rat-mouse | 7. Horse | 99. do not know |
| 2. Ox | 8. Goat | |
| 3. Tiger | 9. Monkey | |
| 4. Rabbit | 10. Rooster | |
| 5. Dragon | 11. Dog | |
| 6. Snake | 12. Pig | |

A3b . In what Cambodian lunar month were you born?

| | | |
|---|---|---|
| 1. 1st | 7. 7th | 98. Other (specify _____) |
| 2. 2nd | 8. 8th | 99. Do not know |
| 3. 3rd | 9. 9th | |
| 4. 4th | 10. 10th | |
| 5. 5th | 11. 11th | |
| 6. 6th | 12. 12th | |

A3new. In which Western calendar year were you born? _____
99. does not know

A4. Are you able to read letters or newspapers comfortably, with difficulty, or not able to read at all
1. not able at all → A6
2. with difficulty → A6
3. read comfortably → continue to A5

A5. How often have you read the newspaper during the last month? Would you say**… [read categories]**
1. not at all
2. only a few times
3. once a week
4. several times a week
5. every day (or most days)

A6. How often have you listened to the radio during the last month? Would you say**…. [read categories]**
1. not at all
2. only a few times
3. once a week
4. several times a week
5. every day (or most days)

A7. How often have you watched TV during the last month? Would you say**… [read categories]**
1. not at all
2. only a few times
3. once a week
4. several times a week
5. every day (or most days)

A8. Have you ever attended school?
1. yes → continue to A9
2. no→ A10

A9. What was the highest level of schooling that you attained?
2. some primary but not complete
3. completed primary
4. lower secondary
5. diploma/upper secondary
6. beyond secondary
7. pagoda school only

A10. What is your ethnicity
1. Khmer
2. Chinese
3. Cham
4. Vietnamese
5. Khmer & Chinese
6. Khmer & Vietnamese
7. other _____

A11. What is your religion
1. Buddhism
2. Islam
3. Christian
4. none
5. other _____

A12. In the last month, how often have you gone to the temple **[ask about mosque if Islam and church if Christian]**. Would you say… **[read categories]**
1. not at all
2. once or twice
3. once a week
4. several times a week
5. every day (or most days)

A13. How often did you meditate or pray at home during the last month? Would you say**… [read categories]**
1. not at all
2. only a few times
3. once a week
4. several times a week
5. every day (or most days)

A14. Overall, how important would you say religion is in your life? Is it… **[read categories]**
1. not at all important
2. slightly important
3. moderately important
4. very important

## SECTION B. MARITAL HISTORY

B1. What is your current marital status?
1. single (never married) → skip to section C
2. currently married → continue to B2
3. separated → B6
4. divorced → B6
5. widowed → B7
6. disappeared → B7

B2. What is the age of your spouse? _____

B2a. In which animal year was your spouse born?

| | | |
|---|---|---|
| 1. Rat-mouse | 7. Horse | 99. do not know |
| 2. Ox | 8. Goat | |
| 3. Tiger | 9. Monkey | |
| 4. Rabbit | 10. Rooster | |
| 5. Dragon | 11. Dog | |
| 6. Snake | 12. Pig | |

B3. How old were you when you got married to your spouse? _____

B4. Is your spouse able to read letters or newspapers comfortably, with difficulty, or not able to read at all
1. not able at all
2. with difficulty
3. read comfortably

B4a. Did your spouse ever attend school?
1. yes → continue to B4b
2. no→ B5

B4b. What was the highest level of schooling that your spouse attained?
2. some primary but not complete
3. completed primary
4. lower secondary
5. diploma/upper secondary
6. beyond secondary
7. pagoda school only
9. Don't know

B5. Does your spouse live in the same house with you?
1. yes → B13
2. no → continue to B5a

B5a. How long now have you been living separately from your spouse**? [circle appropriate response and record number of months if less than a year or number of years if one or more years]**
1. less than a year (_____ months) → B13
2. one or more years (_____ years) → B13

B6. How long ago did you separate from or divorce your spouse? **[circle appropriate response and record number of months if less than a year or number of years if one or more years]**
1. less than a year (_____ months) → B10
2. one or more years (_____ years) → B10

B7. Did your spouse die (or disappear) before during or after the Pol Pot period?
1. before
2. during
3. after

B8. What was the cause of your last spouse's death?
1. illness
2. accident
3. violence
4. disappeared
5. other (specify _____)

B9. For how many years did you live together with your spouse? **[if less 6 months record 0; if 6-11 months record 1]**
_____ years

B10. How old were you when you got married to your spouse? _____

B11. What was the main lifetime occupation of former spouse? [**write down occupation**_____]
0. housewife
1. farming, fishing
2. non-agric. labor
3. professional/ clerical/ administrative/ white collar
4. own account sales/service (incl. street vendor or house front sales)
5. Sales/service employee
6. shop or business owner
7. other
8. skilled labor
9. Never worked
10. agricultural labor

B12a. Did your former spouse ever attend school?
1. yes → continue to B12b
2. no→ B13

B12b. What was the highest level of schooling that your former spouse attained?
2. some primary but not complete
3. completed primary
4. lower secondary
5. diploma/upper secondary
6. beyond secondary
7. pagoda school only
9. Don't know

B13. During your life, have you been married only once or were you married more than once?
1. only once → skip to section C
2 more than once → continue to B14

B14. Altogether how many times have you been married? _____ times

B15a. Now I would like to ask you about your 1st marriage. How old were you when you married your 1st spouse?
_____

B15b. Did your 1st marriage end before, during or after the Pol Pot era?
1. before
2. during
3. after

B15c. For how long did you live together with your 1st spouse? _____ years

B15d. How did your 1st marriage end?
1. separation or divorce → B15x
2. disappeared during civil unrest → B15x
3. died → continue to B15e

B15e. What was the cause of death of your 1st spouse?

1. illness
2. accident
3. violence
4. disappeared
5. other _____

| | | |
|---|---|---|
| B15x. *Interviewer: Based on B14 check if respondent is married only 2 times or more than 2 times and follow instruction* | | Only 2 times (skip to section C) |
| | | More that 2 times → continue to B16a |

B16a. Now I would like to ask you about your 2nd marriage. How old were you when you married your 2nd spouse? _____

B16b. Did your 2nd marriage end before, during or after the Pol Pot era?

1. before
2. during
3. after

B16c. For how long were you married to your 2nd spouse? _____ years

B16d. How did your 2nd marriage end?

1. separation or divorce → section C
2. disappeared during civil unrest → section C
3. died → continue to B16e

B16e. What was the cause of death?

1. illness
2. accident
3. violence
4. disappeared
5. other _____

## SECTION C. RESIDENTIAL HISTORY **[Skip to section D if this is all or mostly an interview by proxy]**

C1. Were you born in Cambodia?
1. yes (In what province? _____)
2. no (In what country? _____)

C2. What type of place were you living in most of the time when you were growing up? Was it urban or rural?
1. urban
2. rural

C3-6. I now want to ask you about where you lived during different periods of Cambodia's history and if you moved from one community to another during these periods. For each period I want to know:
A. Where did you live at the beginning of the period
B. Whether you moved from one community to another during the period
C. If you did move, how many times you moved
D. Whether any of these moves separated you from your family
E. The reasons that you moved.

**[In the following table, ask all questions about the same period (i.e. across a row) before starting to ask about the next period]**

| | a. Where were you living at the very beginning of this period? **[in the case of the Pol Pot period (C4), stress that we mean the day he took over Phnom Penh in April 1975]** | b. Did you move during this period from one community to another? 1. yes 2. no | c. (IF YES…) How many times did you move? **[Ask respondent to estimate if s/he does not remember exactly]** | d. Did any of the moves separate you from your family? | e. Name the reasons for these moves: **[circle all that apply for any move and write in all other reasons stated]** |
|---|---|---|---|---|---|
| C3. During the Lon Nol period from 1970-75 | 1. Phnom Penh<br>2. Other city or town<br>3. Countryside<br>4. Other country | 1. yes →col c<br>2. no → C4 | _____ | 1. yes<br>2. no | 1. repatriation/return after displaced<br>2. flee political situation or violence<br>3. economic reasons (to work)<br>4. to be close to or live with children<br>5. to be close to or live with other family members<br>6. to join army<br>7. to marry<br>8. to go to school<br>9.natural calamities<br>10. forced to move<br>11. others specify |
| C4. During the period that Pol Pot was in power from 1975-79 | 1. Phnom Penh<br>2. Other city or town<br>3. Countryside<br>4. Other country | 1. yes →col c<br>2. no → C5 | _____ | 1. yes<br>2. no | 1. repatriation/return after displaced<br>2. flee political situation or violence<br>3. economic reasons (to work)<br>4. to be close to or live with children<br>5. to be close to or live with other family members<br>6. to join army<br>7. to marry<br>8. to go to school<br>9.natural calamities<br>10. forced to move<br>11. others specify |
| C5. During the period that the Vietnamese were in power | 1. Phnom Penh<br>2. Other city or town<br>3. Countryside | 1. yes →col c<br>2. no → C6 | _____ | 1. yes<br>2. no | 1. repatriation/return after displaced<br>2. flee political situation or violence<br>3. economic reasons (to work)<br>4. to be close to or live with children |

| | | | | | |
|---|---|---|---|---|---|
| m 1979-89fr | 4. Other country | | | | 5. to be close to or live with other family members<br>6. to join army<br>7. to marry<br>8. to go to school<br>9.natural calamities<br>10. forced to move<br>11. others specify |
| C6. Since the Vietnamese left 1989 to present | 1. Phnom Penh<br>2. Other city or town<br>3. Countryside<br>4. Other country | 1. yes →col c<br>2. no → skip to next section | _____ | 1. yes<br>2. no | 1. repatriation/return after displaced<br>2. flee political situation or violence<br>3. economic reasons (to work)<br>4. to be close to or live with children<br>5. to be close to or live with other family members<br>6. to join army<br>7. to marry<br>8. to go to school<br>9.natural calamities<br>10. forced to move<br>11. others specify |

## SECTION D. OCCUPATION HISTORY OF SELF AND SPOUSE

| | | |
|---|---|---|
| D0. ***Interviewer:*** *Based on B1 check appropriate box indicating if respondent is currently married or not and follow instruction* | | currently married (code 2 in B1) --**first ask D1 to D12 about respondent and then repeat questions for spouse** |
| | | not currently married (not coded 2 in B1) -- **ask questions D1 to D12 only about respondent** |

| | a. Respondent | b. Spouse |
|---|---|---|
| D1. Aside from housework, during the last year, did you (your spouse) work to support yourself or family? | 1. yes → continue to D2<br>2. no → D7 | 1. yes → continue to D2<br>2. no → D7 |
| D2. What type of work did you (your spouse) mainly do? ? **[write down the occupation before coding]** | specify_____<br>0. housewife<br>1. farming, fishing<br>2. non-agric. labor<br>3. professional/ clerical/ administrative/ white collar<br>4. own account sales/service (incl. street vendor or house front sales)<br>5. sales/service employee<br>6. shop or business owner<br>7. other<br>8. skilled labor<br>9. Never worked<br>10. agricultural labor | specify_____<br>0. housewife<br>1. farming, fishing<br>2. non-agric. labor<br>3. professional/ clerical/ administrative/ white collar<br>4. own account sales/service (incl. street vendor or house front sales)<br>5. sales/service employee<br>6. shop or business owner<br>7. other<br>8. skilled labor<br>9. Never worked<br>10. agricultural labor |
| D3. Did you work throughout the year, seasonally, or once in a while? | 1. throughout the year<br>2. seasonally<br>3. once in a while | 1. throughout the year<br>2. seasonally<br>3. once in a while |
| D4. Do you (your spouse) plan to stop working within the next two years or will you (your spouse) continue working for more than two years? | 1. stop working<br>2. continue working<br>3. other specify _____<br>9. do not know | 1. stop working<br>2. continue working<br>3. other specify _____<br>9. do not know |
| D5. Are you (your spouse) currently spending as much time working now as in the past or are you (your spouse) working more or less than before? | 1. less than before<br>2. about the same as before<br>3. more than before<br>4. other specify<br>_____ | 1. less than before<br>2. about the same as before<br>3. more than before<br>4. other specify<br>_____ |
| D6. Is your (your spouse's) current work what you have been doing for most of life? | 1. yes (if married → D1 for spouse; if unmarried skip to next section)<br>2. no → continue to D7 | 1. yes → skip to next section<br>2. no → continue to D7 |
| D7. For most of your life have you (your spouse) worked to support yourself or family | 1. yes → continue to D 8<br>2. no → (if married → D1 for spouse; if unmarried skip to next section) | 1. yes → continue to D8<br>2. no → skip to next section |
| D8. What type of work did you (your spouse) mainly do most of your life? **[write down the occupation]** | specify_____<br>0. housewife<br>1. farming, fishing<br>2. non-agric. labor<br>3. professional/ clerical/ administrative/ white collar<br>4. own account sales/service (incl. street vendor or house front sales)<br>5. sales/service employee<br>6. shop or business owner<br>7. other<br>8. skilled labor<br>10. agricultural labor | specify_____<br>0. housewife<br>1. farming, fishing<br>2. non-agric. labor<br>3. professional/ clerical/ administrative/ white collar<br>4. own account sales/service (incl. street vendor or house front sales)<br>5. sales/service employee<br>6. shop or business owner<br>7. other<br>8. skilled labor<br>10. agricultural labor |

| | | | | |
|---|---|---|---|---|
| D8x. ***Interviewer:*** *Based on D1 check appropriate box indicating if respondent (spouse) no longer works and follow appropriate skip pattern.* | | still works (if married → D1 for spouse; if unmarried skip to next section) | | still works → skip to next section |
| | | no longer working → contunue to D9 | | no longer working → contunue to D9 |
| D9. Why did you (your spouse) stop working? | 1. retirement plan<br>2. health reasons<br>3. had other things to do<br>4. became a monk, or participated in religious ceremonies<br>5. no job available<br>6. other specify<br>_____ | | 1. retirement plan<br>2. health reasons<br>3. had other things to do<br>4. became a monk, or participated in religious ceremonies<br>5. no job available<br>6. other specify<br>_____ | |
| D10. How long ago did you (your spouse) stop working? | -------- years ----------months | | -------- years ----------months | |
| D11. Do you (does your spouse)plan to return to work in the future? | 1. yes → continue to D12<br>2. no → (if married → D1 for spouse; if unmarried skip to next section) | | 1. yes → continue to D12<br>2. No → skip to next section | |
| D12. Why do you (does your spouse) want to return to work | 1. need the money<br>2. for something to do<br>3. was just taking a vacation<br>4. other reasons specify<br>_____ | | 1. need the money<br>2. for something to do<br>3. was just taking a vacation<br>4. other reasons specify<br>_____ | |

## SECTION E. CHILDREN AND HOUSEHOLD MEMBERS

E1a. How many living sons and daughters of your own do you have? **[write 0 if none]**
_____ sons _____ daughters

E1b. **[if currently married ask]** How many living sons and daughters does your spouse have from other marriages? **[write 0 if none]**
_____ sons _____ daughters

E1c. How many living adopted sons and daughters do you have? **[write 0 if none]**
_____ sons _____ daughters

E1d. **[add sum of E1a, E1b and E1c to get total number of own, step or adopted children]** Just to make sure I have this right, I see you have a total of _____ own, step or adopted children. is this right? **[if not correct go back and correct E1a-c]**

| | | |
|---|---|---|
| E1x. *Interviewer: check the appropriate box and follow instruction* | | has no own, step or adopted children → E4 |
| | | has 1 or more own, step or adopted children → continue to E2 |

E2. How many of these children live with you in the same house, including those who eat with you as well as those who have their own kitchen, and how many live elsewhere?

Number living with respondent: _____

Number not living with respondent:_____

| | | |
|---|---|---|
| E2x. *Interviewer: check the appropriate box and follow instruction* | | no children live with respondent → E4 |
| | | 1 or more children live with respondent → continue to E3 |

E3. I would like to ask you a few questions about the children that live with you in this household.
**Interviewer: First write down the nicknames of all the respondent's children who live in the household. Then ask questions c to r about the first child, then ask the questions about the second child, and so on, until you have covered all the children.**

| **Ask about all own, step or adopted children living in household** | | | | | | **Ask only about children aged 16 and older** | |
|---|---|---|---|---|---|---|---|
| (a) no. | (b) What is their nick-name | (c) Sex<br>1=M<br>2=F | (d) How old is he/she? | (e) Is this child your own, adopted or step<br>1=own<br>2=adopt<br>3=step | (f) highest level of schooling<br>1=none<br>2=some primary but not complete<br>3=complete primary<br>4=lower secondary<br>5=diploma/upper secondary<br>6=beyond secondary<br>7=pagoda school only<br>9=don't know | (g) Marital status<br>1=single → j<br>2= married → i<br>3=div/sep → i<br>4=widowed→ h | (h) Did the spouse die before, during, or after the Pol Pot period<br>1=before<br>2=during<br>3=after |
| 1 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 2 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 3 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 4 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 5 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 6 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 7 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 8 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 9 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |
| 10 | | 1 2 | | 1 2 3 | 1 2 3 4 5 6 7 9 | 1 2 3 4 | 1 2 3 |

| **Ask only about children aged 16 and older** | | | | | | |
|---|---|---|---|---|---|---|
| no. | (i) How many children does he/she have? | (j) Does he/she currently help in supporting your household?<br><br>1=yes<br>2=no | (k) Has he/she given you any money in last year ?<br><br>1=yes → l<br>2=no → m | (l) Was the amount…<br><br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? | (m) Has he/she given you any clothing or other such things over the last year?<br><br>1=yes → n<br>2=no → o | (n) In total, how much were these worth…<br><br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? |
| 1 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 2 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 3 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 4 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 5 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 6 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 7 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 8 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 9 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 10 | | 1 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |

| **Ask only about children aged 16 and older** | | | | |
|---|---|---|---|---|
| no. | (o) Did you give him/her any money in last year ?<br><br>1=Yes → p<br>2=No → q | (p) Was the amount…<br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? | (q) Have you given him/her clothes or other things over the last year?<br><br>1=Yes → r<br>2=No → Go to next child or E4 | (r) In total, how much were these worth…<br><br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? |
| 1 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 2 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 4 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 5 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 6 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 7 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 8 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 9 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 10 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |

E4. Not counting your children or your spouse doe anyone else live with you such as children-in-law, grandchildren or anyone else?

1. yes → continue to ask about these household members
2. no → E5

Please tell me who else it is who lives with you..

| | | | | | Ask only about persons aged 16 and older | |
|---|---|---|---|---|---|---|
| (a) no. | (b) nickname | (c) relationship to you? (Use relationship codes) | (d) Sex<br><br>1= M<br>2= F | (e) Age | (f) Marital status<br>1=single<br>2=married<br>3=sep/div<br>4=widowed | (g) Does he/she help in supporting your household?<br><br>1=yes<br>2=no |
| 1 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 2 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 3 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 4 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 5 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 6 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 7 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 8 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 9 | | | 1 2 | | 1 2 3 4 | 1 2 |
| 10 | | | 1 2 | | 1 2 3 4 | 1 2 |

Relationship codes:

| | |
|---|---|
| | 8. Cousin |
| 1. Parent | 9. Nephew/niece |
| 2. Child in law | 10. Great grandchild |
| 3. Grandkid | 11. Other relative |
| 4. Sibling | 12. Friend |
| 5. Uncle/aunt | 13. Boarder (someone paying rent) |
| 6. Brother/sister in law | 14. Worker |
| 7. Mother/father in law | 15. Other(specify) |

| | | |
|---|---|---|
| E5x. *Interviewer: look back at E2 to see if the respondent has children living outside household, check the appropriate box, and follow instructions* | | no children living elsewhere → skip to section F |
| | | 1 or more children living elsewhere → continue to E5 |

E5. You told me earlier that you have _____own step and adopted children not living with you. Now I would like to ask you about these children.

| (a) no. | (b) What is their nick-name | (c) Sex<br><br>1=M<br>2=F | (d) Age | (e) Where do they live?<br><br>1=next door or same apartment building<br>2=same village<br>3=same commune<br>4=same district<br>5=same province<br>6=elsewhere in Cambodia<br>7=other country | (f) Is this child your own, adopted or step<br><br>1=own<br>2=adopt<br>3=step | (g) highest level of schooling<br>1=none<br>2 =some primary but not complete<br>3=complete primary<br>4=lower secondary<br>5=diploma/upper secondary<br>6=beyond secondary<br>7=pagoda school only<br>9 =don't know |
|---|---|---|---|---|---|---|
| 1 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 2 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 3 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 4 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 5 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 6 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 7 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 8 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 9 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |
| 10 | | 1 2 | | 1 2 3 4 5 6 7 | 1 2 3 | 1 2 3 4 5 6 7 9 |

| **Ask only about children 16 and older** | | | | | | | |
|---|---|---|---|---|---|---|---|
| no. | (h) How often does (name) visit you? 1=every day 2=weekly 3=monthly 4=yearly 5=less often | (i) How often do you visit (name)? 1=every day 2=weekly 3=monthly 4=yearly 5=less often | (j) Marital status 1=single → m 2=married →l 3=div/sep → l 4=widowed→ k | (k) Did the spouse die before, during, or after the Pol Pot period<br><br>1 = before 2 = during 3 = after | (l) How many children does he/she have? (write 0 if none) | (m) Does he/she help in supporting your household?<br><br>1=yes 2=no | (n) Has he/she given you any money in last year ?<br><br>1. yes → o 2. no→ p |
| 1 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 2 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 3 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 4 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 6 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 7 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 8 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 9 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |
| 10 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 | | 1 2 | 1 2 |

| **Ask only about children 16 and older** | | | | | | | |
|---|---|---|---|---|---|---|---|
| no. | (o) Was the amount…<br><br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? | (p) Has he/she given you any food, clothing, or other such things over the last year?<br><br>1=Yes→ q<br>2=No→ r | (q) In total, how much were these worth…<br><br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? | (r) Have you given him/her any money in last year ?<br><br>1=Yes → s<br>2=No → t | (s) Would you say the amount you gave was:<br><br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? | (t) Have you given him/her food, clothing, or other such things over the last year?<br><br>1=Yes → u<br>2=No →go to next child or E5 | (u) In total, how much were these worth…<br><br>1=less than 100,000<br>2=between 100,000 up to 200,000<br>3=more than 200,000 up to 500,000<br>4=more than 500,000? |
| 1 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 2 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 3 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 4 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 5 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 6 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 7 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 8 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 9 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |
| 10 | 1 2 3 4 | 1 2 | 1 2 3 | 1 2 | 1 2 3 4 | 1 2 | 1 2 3 4 |

| | |
|---|---|
| E6x. *Interviewer: look back at E1d to see if the total number of own, step and adopted children equals the sum of children reported in E3 and E5 and follow instructions* | Sum of children reported in E3 and E5 adds to total number indicated in E1d → continue to section F |
| | Sum of children reported in E3 and E5 does not equal total number indicated in E1d → go back and clear up inconsistency |

## SECTION F. SOCIO-ECONOMIC INFORMATION

F1. Do members of your household normally drink purified bottled water?

1. yes → F3
2. no → continue to F2
8. Other_____

F2. Do members of your household normally boil water before drinking it?

1. yes
2. no
8. Other_____

F3. What kind of toilet facility do most members of your household use?

11. Flush connected to sewer with septic tank
12. Flush unconnected to sewer/without septic tank
21. Pit toilet/latrine connected to sewer/ with septic tank
22. Pit toilet/latrine unconnected to sewer/without septic tank
31. No facility/field
96. Other _____

F4. Does your household have any of these items?

| | Yes | No |
|---|---|---|
| a) electricity | 1 | 2 |
| b) radio | 1 | 2 |
| c) TV | 1 | 2 |
| d) telephone/cellular phone | 1 | 2 |
| e) refrigerator | 1 | 2 |
| f) electric fan | 1 | 2 |
| g) air conditioner | 1 | 2 |
| h) motorcycle, moped, scooter | 1 | 2 |
| i) car, truck, van | 1 | 2 |
| j) boat with motor | 1 | 2 |

F5. What is the floor of the house mostly made of?

11. Natural floor: earth/sand/clay
21. Rudimentary floor: wood planks
22. Rudimentary floor: bamboo strips/thatch/palm
31. Finished: parquet or polished wood
32. Finished: vinyl or asphalt strips
33. Finished: ceramic tiles/marble
34. Finished: cement
41. House boat
96. Other_____

F6. What is the roof mostly made of?

1. Plastic sheet/tent
2. Thatch/palm/bamboo/bark
3. Galvanized iron/aluminum
4. Tiles/cement/concrete/fibrous cement
6. Other _____

F7. Does your household have any bed nets that can be used while sleeping ?

1. yes
2. no

F8. Who contributes most to supporting this household?
1. self → F11
2. spouse → F11
3. both self and spouse → F11
4. child(ren) living in the household → continue to F9
5. child(ren) living outside the household → continue to F9
6. other household member → continue to F9
7. other relative→ continue to F9
8. other person→ continue to F9

F9. Do you (and/or your spouse if married) contribute to the support this household?
1. yes → continue to F10
2. no → F11

F10. About how much do you (and/or your spouse if married) contribute? Would you say it is
1. only a little
2. more than a little but less than ¼
3. about ¼
4. more than ¼ but less than ½
5. at least 1/2

F11new. Do you rent your home?
1. yes
2. no

F11. Who is the owner of the house that you are living in right now?
1. self
2. spouse
3. self and spouse
4. child
5. child-in law
6. parent
7. parent in law
8. other relative
9. non-relative (including landlord)
10. government or company
11. other _____

F12new. Do you rent the land that your house is on?
1. yes
2. no

F12. Who owns the land that this house is on?
1. self → F14
2. spouse → F14
3. both self and spouse → F14
4. child → continue to F13
5. child in law → continue to F13
6. parent → continue to F13
7. parent in law → continue to F13
8. other relative (including landlord)→ continue to F13
9. non-relative → continue to F13
10. government or company → continue to F13
11. other _____

F13. Do you (and/or your spouse if married) own any land
1. no
2. yes self only
3. yes, spouse only
4. yes, both self and spouse

F14. Do you or your spouse receive cash income from any of the following sources:

| | | | | |
|---|---|---|---|---|
| a. work | 1. no | 2. self only | 3. spouse only | 4. both |
| b. pension | 1. no | 2. self only | 3. spouse only | 4. both |
| c. welfare, social agency or NGO | 1. no | 2. self only | 3. spouse only | 4. both |
| d. rental property | 1. no | 2. self only | 3. spouse only | 4. both |
| e. investments or savings | 1. no | 2. self only | 3. spouse only | 4. both |

F15. Do you or your spouse have any of the following:

| | | | | |
|---|---|---|---|---|
| a. Bank savings | 1. no | 2. self only | 3. spouse only | 4. both |
| b. Livestock | 1. no | 2. self only | 3. spouse only | 4. both |
| c. Jewelry | 1. no | 2. self only | 3. spouse only | 4. both |

F16. What is the main source of support for you (and your spouse if married)

1. work (own and/or spouse's)
2. investments, savings or rental income (own and/or spouse's)
3. pension (own and/or spouse's)
4. welfare, social agency or NGO
5. children and/or children-in-law
6. other relatives
7. non-relatives
8. other _____

F17. **[Interviewer instruction: If someone other than the chosen respondent is providing most of the answers to this questionnaire because the respondent is unable to do so, skip to question G3 in section G]**
Do you currently have any debt?

1.yes → continue to F18
2. no → F19

F18. How much of a burden is this debt to you? Would you say it is

1. A great burden
2. Somewhat of a burden
3. Not a burden

F19. How would you rate your economic status relative to others in your community? Would you say it was much better, somewhat better, about the same, somewhat worse or much worse?

1. much better
2. somewhat better
3. about average
4. somewhat worse
5. much worse

F20. Do you feel that your income is more than enough, just enough or less than enough to meet your expenses?

1. more than enough
2. just enough
3. only enough sometimes
4. usually not enough

F21. How satisfied are you with your present economic situation?

1. very satisfied
2. somewhat satisfied
3. So so
4. somewhat unsatisfied
5. very unsatisfied

F22. Over the last 3 years or so would you say your economic situation has become better or worse?

1. much better
2. somewhat better
3. about the same
4. somewhat worse
5. much worse

## SECTION G. PHYSICAL, MENTAL AND EMOTIONAL WELL-BEING

G1. How would you rate your physical health at the present time? Would you say it is very good, good, fair, poor or very poor?

1. very good
2. good
3. fair
4. poor
5. very poor

G2. [**If respondent is a man ask …]** Compared to other men your age, would you say your health is much better, somewhat better, about the same, somewhat worse, or much worse?
**[If respondent is a women ask…]** Compared to other women your age, would you say your health is much better, somewhat better, about the same, somewhat worse, or much worse?

1. much better
2. somewhat better
3. about the same
4. somewhat worse
5. much worse

G3. In the **last month**, have you had any of the following health complaints?

| | | |
|---|---|---|
| a) Headache | 1. yes | 2. no |
| b) Vomiting | 1. yes | 2. no |
| c) Fever | 1. yes | 2. no |
| d) Diarrhea | 1. yes | 2. no |
| e) Skin problems | 1. yes | 2. no |
| f) Chest pain | 1. yes | 2. no |
| g) Pain in your joints | 1. yes | 2. no |
| h) Dizziness | 1. yes | 2. no |
| i) Back pain | 1. yes | 2. no |
| j) Trembling hands | 1. yes | 2. no |
| k) Stomach ache | 1. yes | 2. no |
| l) Problems breathing | 1. yes | 2. no |
| m) Coughing | 1. yes | 2. no |
| n) Loss of bladder control | 1. yes | 2. no |
| o) Feel weak | 1. yes | 2. no |

G4. How well can you see without wearing glasses?

1. very well → G6
2. somewhat well → G6
3. not too well → continue to G5
4. cannot see at all → continue to G5

G5. Do you wear glasses?

1. yes
2. no

G6. How well can you hear without a hearing aid?

1. very well → G8
2. somewhat well → G8
3. not too well → continue to G7
4. cannot see at all → continue to G7

G7. Do you use a hearing aid?

1. yes
2. no

G8. I am now going to ask you whether you can do a number of physical tasks on your own without assistance. I first want to know if you have any difficulty with these tasks, and if you have difficulty, I want to know whether you have some difficulty, a lot of difficulty, or whether you cannot do the task at all by yourself, without help. Do you have any difficulty…

| | i. Do you have any difficulty | ii. How much difficulty |
|---|---|---|
| a. Walking 200-300 meters? | 1. yes → **ask how much difficulty**<br>2. no → **continue to b** | 1. some<br>2. a lot<br>3. cannot do |
| b. Lifting or carrying something as heavy as 5 kg.? | 1. yes → **ask how much difficulty**<br>2. no → **continue to c** | 1. some<br>2. a lot<br>3. cannot do |
| c. Crouching or squatting? | 1. yes → **ask how much difficulty**<br>2. no → **continue to d** | 1. some<br>2. a lot<br>3. cannot do |
| d. Using fingers to grasp or handle? | 1. yes → **ask how much difficulty**<br>2. no → **continue to e** | 1. some<br>2. a lot<br>3. cannot do |
| e. Walking up and down a set of stairs | 1. yes → **ask how much difficulty**<br>2. no → **continue to G9** | 1. some<br>2. a lot<br>3. cannot do |

G9. Now I would like to ask you about things people need to do to take care of themselves. Can you tell me if you have any difficulty doing these things on your own without help, and if you have difficulty, whether you have some difficulty, a lot of difficulty, or whether you cannot do the task at all without help. Do you have any difficulty…

| | i. Do you have any difficulty | ii. How much difficulty |
|---|---|---|
| a. Eating? | 1. yes → **ask how much difficulty**<br>2. no → **continue to b** | 1. some<br>2. a lot<br>3. cannot do |
| b. Getting dressed and undressed? | 1. yes → **ask how much difficulty**<br>2. no → **continue to c** | 1. some<br>2. a lot<br>3. cannot do |
| c. Bathing yourself? | 1. yes → **ask how much difficulty**<br>2. no → **continue to d** | 1. some<br>2. a lot<br>3. cannot do |
| d. Getting up when you are lying down? | 1. yes → **ask how much difficulty**<br>2. no → **continue to G9x** | 1. some<br>2. a lot<br>3. cannot do |

| | | |
|---|---|---|
| G9x. ***Interviewer:*** *examine if respondent indicated having any problems in G9a-d, check the appropriate box and follow instruction* | | no problems →G14x |
| | | has 1 or more problem → continue to G10 |

G10. When it comes to doing things people need to do to take care of themselves, like bathing and getting dressed, do you receive any help from anyone?

1. yes → G12
2. no → continue to G11

G11. Do you think that you need such help?

1. yes → G14x
2. no → G14x

G12. Can you tell me who helps you? **[Circle all that apply. After respondent names someone, ask if anyone else helps.]**

1. spouse
2. son
3. daughter
4. son in law
5. daughter in law
6. grandchild
7. great grandchild or earlier grandchild
8. other relative
9. community member
10. hired worker
11. health worker
12. other person (specify _____)

G13. **[If more than one person mentioned in G12 ask]** Who would you say is the person that helps you most?
**_____[record code number from G12].**

G14. Would you say that the help that you get is as much as you need or not enough?

1. as much as needed
2. not enough

| | | |
|---|---|---|
| G14x. *Interviewer: Based on B1 check box indicating if respondent is currently married or not and follow instruction* | | not married → G19 |
| | | currently married → continue to G15 |

G15. How would you rate the health of your spouse at the present time? Would you say it is very good, good, fair, poor or very poor?

1. very good
2. good
3. fair
4. poor
5. very poor

G16. Does your spouse need any help doing things people need to do to take care of themselves, like bathing and getting dressed.

1. yes → G18
2. no → continue to G17

G17. Can you tell me who helps your spouse? **[If more than one person helps, circle all that apply.]**

1. I do
2. son
3. daughter
4. son in law
5. daughter in law
6. grandchild
7. great grandchild or earlier grandchild
8. other relative
9. community member
10. hired worker
11. health worker
12. other person (specify _____)
13. no one

G18. **[If more than one person mentioned in G17 ask]** Who would you say is the person who helps your spouse the most?

**_____[record code number from G17].**

G19. Do you have any type of health insurance?

1. yes (**specify type of insurance _____)**
2. no

G20. During the past year, were there any times that you were sick or injured?
1. yes → continue to G21
2. no → G35

G21. For how many days, if any, during the last year would you say you were unable to perform your usual activities because of these illnesses or injuries? **[Write 0 if none]**
_____ days

G22. Did you receive any professional treatment or take any medicines for these illnesses or injuries over the past year?
1. yes → G26
2. no → continue to G23

G23. Do you think that you needed such treatment or medicines?
1. yes → continue to G24
2. no → G31

G24. What were the reasons that you did not receive this treatment? **[circle all that are mentioned. After one reason is mentioned, ask if there are any other reasons.**
1. I did not have enough money to pay for treatment
2. I did not have anyone to help me pay for treatment
3. no one to take me
4. did not know where to go
5. too far to go
6. too shy to ask for help
7. did not want to go for help
8. other reason (specify_____)

| | | |
|---|---|---|
| G24x. *Interviewer: Based on G24 check box indicating if respondent stated more than one reason and follow instruction* | | one reason only → G31 |
| | | more than one reason → continue to G25 |

G25. What is the main reason?
_____**[record code number from G24].** → G31

G26. The last time you received treatment for an illness or injury, where did you go?
11. public sector: central hospital
12. public sector: provincial hospital
13. public sector: district hospital
14. public sector: health center
15. public sector: khum clinic
16. public sector: health worker
17. public sector: other public
21. private medical: private hospital
22. private medical: private clinic
23. private medical: home/office of trained health worker/nurse
26. private medical: other private medical (including in home service)
31. not medical sector: dedicated drug store
32. not medical sector: shop selling drugs/market
33. not medical sector: kru khmer/magician
34. not medical sector: monk/religious. leader
96. other _____

G27. Were there any costs for health care or medicines that had to be paid?
1. yes → continue to G28
2. no → G31

G28. Can you tell me who paid for these costs? [Probe to determine if more than one person paid. Circle all that apply.]

1. I did
2. spouse
3. son
4. daughter
5. son in law
6. daughter in law
7. grand or great grandson
8. grand or great granddaughter
9. other relative (specify_____)
10. community group
11. other person (specify _____)
12. insurance

G29. **[If more than one person mentioned in G28 ask]** Who paid the most over the past year?
_____ **[record code number from G28]**

G30. Would you say that there was enough money available to you to pay for the all the professional treatment and medicines you needed in the past year?

1. there was enough
2. not enough

G31. Did anyone help take care of you during your illnesses or injuries, like taking you to a doctor, helping you take medicine, going shopping for you to get food or medicine, or helping you to do other things around the house because you were too sick?

1. yes → G33
2. no → continue to G32

G32. Do you think that you needed such help?

1. Yes → G35
2. No → G35

G33. Can you tell me who helped you when you were ill or injured? **[Probe if more than one person helps. Circle all that apply.]**

1. spouse
2. son
3. daughter
4. son in law
5. daughter in law
6. grandchild
7. great grandchild or earlier grandchild
8. other relative
9. community member
10. hired worker
11. health worker
12. other person (specify _____)

G34. **[If more than one in G33 ask]** Who helped the most? _____**[record code from G33]**

G35. Do you currently smoke?

1. yes → continue to G36
2. no → G37

G36. Do you smoke every day?

1. yes → G38
2. no → G38

G37. Did you used to smoke but quit?

1. yes
2. no

G38. Do you currently drink alcohol?
1. yes → continue to G39
2. no → G41

G39. Do you drink every day?
1. yes
2. no

G40. Do you think that you frequently drink too much?
1. yes → G42
2. no → G42

G41. Did you used to drink but quit?
1. yes
2. no

G42. Do you currently chew betel?
1. yes → continue to G43
2. no → G44

G43. Do you chew betel every day?
1. yes → G45
2. no → G45

G44. Did you used to chew betel but quit?
1. yes
2. no

G45. **[Interviewer instruction: If someone other than the chosen respondent is providing most of the answers to this questionnaire because the respondent is unable to do so, skip to section J]**
Here are some statements about how people might feel. After I read the statement I would like you to tell me whether, in the **past week**, you have not felt this way, felt this way some of the time, or felt this way most of the time.

| | Not at all | Some of the time | Most of the time | Do not know |
|---|---|---|---|---|
| a. I did not feel like eating and my appetite was poor | 1 | 2 | 3 | 9 |
| b. I felt sad or depressed | 1 | 2 | 3 | 9 |
| c. I felt that my life has been unsuccessful | 1 | 2 | 3 | 9 |
| d. I had difficulty sleeping | 1 | 2 | 3 | 9 |
| e. I felt happy | 1 | 2 | 3 | 9 |
| f. I felt lonely | 1 | 2 | 3 | 9 |

G46. I am going to name some things that people are sometimes satisfied or unsatisfied with. For each, I would like you to tell me whether you are very unsatisfied, somewhat unsatisfied, somewhat satisfied, very satisfied, or have mixed feelings.

| | Very unsatisfied | Somewhat unsatisfied | Mixed | Somewhat satisfied | Very satisfied | Do not know |
|---|---|---|---|---|---|---|
| a. The relationships you have with your family | 1 | 2 | 3 | 4 | 5 | 9 |
| b. Your housing | 1 | 2 | 3 | 4 | 5 | 9 |
| c. The amount of respect younger persons in your community have for older persons | 1 | 2 | 3 | 4 | 5 | 9 |
| d. Overall how satisfied would you say you are with your life? | 1 | 2 | 3 | 4 | 5 | 9 |

G47. I am going to ask you some questions about things that are done around your house. For each I want to know whether you (and, if married, your spouse) perform the task never, sometimes, or often. **[If married, ask how often you do the task, then how often the spouse does the task, before asking about the next task.]**

| | i. How often do you do the task? | | | ii. (If married) How often does your spouse do the task? | | |
|---|---|---|---|---|---|---|
| | Never | Sometimes | Often | Never | Sometimes | Often |
| a. Cleaning house | 1 | 2 | 3 | 1 | 2 | 3 |
| b. Going to market | 1 | 2 | 3 | 1 | 2 | 3 |
| c. Preparing food | 1 | 2 | 3 | 1 | 2 | 3 |
| d. Washing clothes | 1 | 2 | 3 | 1 | 2 | 3 |
| e. Fixing house | 1 | 2 | 3 | 1 | 2 | 3 |
| f. Looking after children | 1 | 2 | 3 | 1 | 2 | 3 |

G48. **During last year** how often did you engage in the following activities? Was it never, once or a few times, about every month, about every week, several times a week, or every day?

| | Never | Once or a few times a year | Monthly or almost monthly | Weekly or almost weekly | Daily or almost daily |
|---|---|---|---|---|---|
| a. Attend community meetings | 1 | 2 | 3 | 4 | 5 |
| b. Offer food to monks | 1 | 2 | 3 | 4 | 5 |
| c. Participate in political meetings or events | 1 | 2 | 3 | 4 | 5 |
| d. Socialize with friends and neighbors, like chatting, eating together, or playing games | 1 | 2 | 3 | 4 | 5 |
| e. Do physical exercise | 1 | 2 | 3 | 4 | 5 |
| f. Attend community or religious ceremonies | 1 | 2 | 3 | 4 | 5 |

## SECTION H. KNOWLEDGE, ATTITUDES AND PERCEPTIONS ABOUT AIDS

H1. I would now like to talk with you about an illness called AIDS? Have you heard of AIDS?
1 yes → continue to H2
2 no → skip to section I

H2. Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?
1 yes → continue to H3
2 no → H4
9 don't know →H4

H3. What can a person do? **[Do not read answers; circle all that are mentioned.] [Probe:]** Is there anything else?
1. abstain from sex
2. use condoms
3. limit sex to one partner
4. limit number of sexual partners
5. avoid sex with prostitutes (do not go out to prostitutes)
6. avoid sex with persons who have many partners
7. avoid sex with homosexuals
8. avoid sex with persons who inject drugs intravenously
9. avoid blood transfusions
10. avoid injections
11. avoid kissing
12. avoid mosquito bites
13. seek protection from traditional practitioner
14. avoid sharing razors, blades
15. avoid manicure or pedicure
16. other (specify)_____

H4. Now I would like to ask you for your opinion about AIDS. Please tell me what you think.

| | | | | |
|---|---|---|---|---|
| a. Can people protect themselves from getting the AIDS virus by having just one sex partner who has no other partners? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| b. Can people get the AIDS virus from mosquito bites? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| c. Can people protect themselves from getting AIDS by using a condom every time they have sex? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| d. Can people get AIDS by sharing food with a person who has AIDS? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| e. Can AIDS be transmitted through a blood transfusion that includes blood from someone infected by the AIDS virus? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| f. Can AIDS be transmitted by attending the funeral of someone who has died from the AIDS virus? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| g. Can AIDS be transmitted by eating a meal prepared by someone who has the AIDS virus? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| h. Can AIDS be transmitted by having sexual relations with a person who has AIDS without using a condom? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| i. Are there modern drugs/medicine(s) that can lengthen the life of a person infected with the AIDS virus? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| j. Are there traditional drugs/herbs/concoctions that can lengthen the life of a person infected with the AIDS virus | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| k. Is someone who gives care to a person with AIDS likely to get infected as a result | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| l. Can AIDS be transmitted from a mother who is infected to her child during pregnancy? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| m. Can AIDS be transmitted from a mother who is infected to her child during breastfeeding? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| n. Is it possible to get a medical test to tell if a person has AIDS? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |
| o. Is it possible for a healthy looking person to be infected with AIDS? | 1 yes | 2 no | 3 depends /maybe | 9 don't know /not sure |

H5. If a relative of yours became sick with AIDS, would you be willing to care for her or him in your own household?

1 yes
2 no
9 don't know, not sure/depends

H6. What if an unmarried man or woman becomes sick with AIDS, from whom do you think they should receive care?

1 from friends
2 from parents
3 from siblings
4 from other family members (not parents of siblings)
5 from health care facility (hospital or health center)
8 other (specify _____)
9 don't know, not sure/depends

H7. How about if the man or woman who becomes sick with AIDS is married, from whom do you think he or she should receive personal care?

1 from friends
2 from parents
3 from siblings
4 from other family members (not parents of siblings)
5 from health care facility (hospital or health center)
6 from his or her spouse
8 other (specify _____)
9 don't know, not sure/depends

H8. Do you think it is safe for members in the same house with a person with AIDS to share the following things with them?

| | | | | |
|---|---|---|---|---|
| a. Clothes that have been laundered | 1 yes | 2 no | 3 depends /maybe | 9 don't know /unsure |
| b. Dishes that have been washed | 1 yes | 2 no | 3 depends /maybe | 9 don't know /unsure |
| c. A glass that has been washed | 1 yes | 2 no | 3 depends /maybe | 9 don't know /unsure |
| d. A book | 1 yes | 2 no | 3 depends /maybe | 9 don't know /unsure |
| e. A pen | 1 yes | 2 no | 3 depends | 9 don't know |

## SECTION I. IMPACT OF DEATH OF ADULT CHILD

I1. Have you ever had any children that have died?
1 yes
2 no → thank respondent and terminate interview

I2. How many of your children have ever died? _____ number

I3. Please tell me something about your deceased children. **[Start with the most recent one to die and ask questions across before going to the next child]**:

| a) No. | b) Was it a son or a daughter? | c) Was it before, during or after the Pol Pot period (1975-79) | d) How long ago did the child die | e) How old was s/he when s/he died? **[enter years old; under 6 months= 0; 6-11 months =1]** | f) What was the cause of death? | g) **[if illness:]** Do you know what illness it was? |
|---|---|---|---|---|---|---|
| 1 | 1 son<br>2 daughter | 1 before → e<br>2 during → e<br>3 after → d | ____years<br>____months | age _____ | 1 illness ---------→<br>2 accident<br>3 violence<br>4 disappeared<br>5 other (specify)<br>..... | 1 TB/lung infection<br>2 brain infection<br>3 AIDS<br>4 cancer<br>5 heart attack<br>6 other (specify) ..... |
| 2 | 1 son<br>2 daughter | 1 before → e<br>2 during → e<br>3 after → d | ____years<br>____months | age _____ | 1 illness ---------→<br>2=accident<br>3= violence<br>4= disappeared<br>5=other (specify)<br>..... | 1 TB/lung infection<br>2 brain infection<br>3 AIDS<br>4 Cancer<br>5 heart attack<br>6 other (specify) ..... |
| 3 | 1 son<br>2 daughter | 1 before → e<br>2 during → e<br>3 after → d | ____years<br>____months | age _____ | 1=illness<br>2=accident<br>3= violence<br>4= disappeared<br>5=other (specify)<br>..... | 1 TB/lung infection<br>2 brain infection<br>3 AIDS<br>4 Cancer<br>5 heart attack<br>6 other (specify) ..... |
| 4 | 1 son<br>2 daughter | 1 before → e<br>2 during → e<br>3 after → d | ____years<br>____months | age _____ | 1 illness ---------→<br>2=accident<br>3= violence<br>4= disappeared<br>5=other (specify)<br>..... | 1 TB/lung infection<br>2 brain infection<br>3 AIDS<br>4 Cancer<br>5 heart attack<br>6 other (specify) …….. |
| 5 | 1 son<br>2 daughter | 1 before → e<br>2 during → e<br>3 after → d | ____years<br>____months | age _____ | 1 illness ---------→<br>2=accident<br>3= violence<br>4= disappeared<br>5=other (specify)<br>..... | 1 TB/lung infection<br>2 brain infection<br>3 AIDS<br>4 Cancer<br>5 heart attack<br>6 other (specify) ..... |
| 6 | 1 son<br>2 daughter | 1 before → e<br>2 during → e<br>3 after → d | ____years<br>____months | age _____ | 1 illness ---------→<br>2=accident<br>3= violence<br>4= disappeared<br>5=other (specify)<br>..... | 1 TB/lung infection<br>2 brain infection<br>3 AIDS<br>4 Cancer<br>5 heart attack<br>6 other (specify) ..... |

| | | |
|---|---|---|
| I3x. *examine column d and indicate if the respondent had any child age 16 or older who died in the last 5 years. Then follow instruction* | | no child age 16 or over who died in last 5 years → skip to section J |
| | | one or more children age 16 and over who died in last 5 years → continue to I4 **[if more than one child age 16 or over who died within the last 5 years, ask the remaining questions about the most recent one to die.]** |

I4. Now I want to now ask you some questions about your child that died (or child that died most recently).
**[Ask the name of the deceased child and refer to the child by name in the following questions.]**
When (name) was in good health was (name) helping with the economic activities of your household or otherwise contributing to its support?

1. yes → continue to I5
2. no → I8

I5. Was (name) the main provider for your household?

1. yes
2. no

I6. Because (name) died and no longer contributes to your household, is your financial situation more difficult?

1. yes → continue to I7
2. no → I8

I7. Would you say it is much more difficult, somewhat more difficult, or just a little more difficult?

1. much
2. somewhat
3. just a little

I8. What was (name's) marital status at time of death?

1. single (never married) → I12
2. married, living with spouse → continue to I9
3. married but not living with spouse → continue to I9
4. separated or divorced → continue to I9
5. widowed → continue to I9

I9. Did (name) have any children who were alive at the time of his/her death?

1. yes → continue to I10
2. no → I12

I10. Were any of (name's) children under age 15 at the time name died?

1. yes → continue to I10a
2. no → I12

I10a. Do any of name's children live with you now?

1. yes → I10c
2. no → continue to I10b
3. all are dead now → continue to I10b.

I10b. Did any of name's children ever live with you since (name) died?

1. yes
2. no

I10c. Do you or did you ever support or provide money to pay for expenses for (name's) children since (name) died?

1. yes → continue to I11
2. no → I12

I11. How much of a burden were the expenses you provided to help support this (these) grandchildren? Would you say…

1. a serious burden
2. somewhat of a burden
3. not much or no burden

I12. Now I would like to ask some questions about (name's) illness/injury. How long did (name) need someone to give personal care before dying? **[if (name) died instantly of an injury, accident or violence, enter 0 in both months and weeks].**

___ total number of months (if more than one year state in terms of months)
___ total weeks if less than a month

I13. At the time of illness/injury, did (name) receive any kind of assistance from any of following sources:

| | |
|---|---|
| b government | 1. yes 2. no |
| c. community | 1. yes 2. no |
| d. NGO | 1. yes 2. no |
| e. insurance | 1. yes 2. no |

I14. Did you and/or your spouse help to pay for any of their medical costs?

1. yes → continue to I15
2. no → I18

I15. Would you say you were the primary source paying for their medical costs?

1. yes
2. no

I16. Would you say you paid for:

1. only a little bit of their health costs
2. more than a little bit but less than ¼
3. about ¼
4. more than ¼ but less than ½
5. at least ½

I17. How much of a burden were these expenses? Were they

1. a serious burden
2. somewhat serious burden
3. not much or no burden

I18. Did you spend any money on the funeral?

1. yes → continue to I19
2. no → I20

I19. How much of a burden were these expenses? Were they

1. a serious burden
2. somewhat of a burden
3. not much or no burden

I20. As a result of your child's illness/injury, did you have to borrow money to cover any expenses?

1. yes → continue to I21
2. no → I22

I21. Have you paid off all, most, some, or none of this debt?

1. yes, all of it
2. most of it
3. only some of it
4. none of it

I22. As a result of expenses you had in connection with your child's illness/injury, did you have to sell any of the following to help pay? [Ask each separately]

| | | |
|---|---|---|
| a. Land | 1 yes | 2 no |
| b. Livestock | 1 yes | 2 no |
| c. Gold/jewelry | 1 yes | 2 no |
| d. Other possessions specify _____ | 1 yes | 2 no |

I23. Besides getting help with expenses, people who are seriously ill or injured sometimes need to be given care. Did you and/or your spouse provide any personal care when (name) was ill/injured, like help with eating, dressing, bathing, moving around in the house.

1. yes we both helped → continue to I24
2. yes I helped but not my spouse (including cases where spouse is dead) → continue to I24
3. yes, my spouse helped but I did not → continue to I24
4. no, neither helped → I25

I24. Were either you or your spouse the main provider?

1. self was
2. spouse was
3. both were
4. neither were

I25. What about helping with their affairs outside the house, like going to see doctors, buying medicine or managing their personal affairs. Did you and/or your spouse provide any of this assistance?

1. yes we both helped → continue to I26
2. yes I helped but not my spouse (including cases where spouse is dead) → continue to I26
3. yes, my spouse helped but I did not → continue to I26
4. no, neither helped → I26x

I26. Were either you or your spouse the main provider?

1. self was
2. spouse was
3. both were
4. neither were

| | | |
|---|---|---|
| I26x. *examine I23 and I25. Check the appropriate box to indicate if either the respondent or spouse helped provided personal or other care to the deceased child. Then follow instruction* | | Either I23 or I25 is coded 1,2 or 3 (that is one or both parents provided some kind of care) → continue to I27 |
| | | Both I23 and I25 are coded 4 (that is neither parent provided any kind of care) → I30 |

I27. For how long were you and/or your spouse providing help during the illness/injury? **[record in units as stated by respondent. For example, if respondent says 3 weeks record and 2 days, put 3 under weeks, 2 under days and leave other units blank]**

_____ years _____ months _____ weeks _____ days

I28. Did you and/or your spouse have to stop or reduce working because of caretaking responsibilities during the time that (name) was ill/injured?

1. yes
2. no

I29. Did you and/or your spouse have to stop participating in social activities because you were burdened with the care responsibilities?

1. yes
2. no

I30. Was (name) staying with you just before (name) died? **[if staying in several places during illness/injury, ask about where the deceased child last lived just before dying.]**

1. yes, with respondent → to I31
2. no, not with respondent → continue to I30a

I30a. Where was (name) staying, was name in a nearby house, in the village or elsewhere?

1. adjacent or very nearby respondent → continue to I31
2. in same village or community → continue to I31
3. elsewhere → I33

I31. Did (name) move nearer to you after becoming ill/injured or did (name) live with or near you even before becoming ill/injured?

1. moved → continue to I32
2. already lived nearby before being ill/injured → I33

I32. How long before (name) died did (name) move near you? **[record in units as stated by respondent. For example, if respondent says 3 weeks record and 2 days, put 3 under weeks, 2 under days and leave other units blank]**

_____ years _____ months _____weeks _____days

I33. Before becoming ill/injured had (name) been helping you and your household by doing household chores?

1. yes → continue to I34
2. no → I35

I34. How much of a burden is it that (name) is no longer HoHaround to help with household chores? Would you say…

1. a serious burden
2. somewhat serious burden
3. not much or no burden

I35. As a result of (name's) illness/injury, did any neighbors show sympathy or offer help for you and your child in the following ways?

| | | |
|---|---|---|
| a) Visited | 1 yes | 2 no |
| b) Looked after your sick child | 1 yes | 2 no |
| c) Brought some food or medicine | 1 yes | 2 no |
| d) Provided transportation or went with you to the hospital | 1 yes | 2 no |

I36. Did some neighbors have any of the following negative reactions to you and your child as a result of (name's) illness/injury?

| | | |
|---|---|---|
| a) Avoided talking to you or others in household | 1 yes | 2 no |
| b) Gossiped | 1 yes | 2 no |
| c) Would not visit your home | 1 yes | 2 no |

| | | |
|---|---|---|
| I36x. *Check the appropriate box to indicate if the deceased child died of an illness. Then follow instruction* | | the child died of an illness → continue to I37 |
| | | the child died from a cause other than an illness → **thank respondent and terminate interview** |

I37. I would like to ask you a few questions about some of the health problems that (name) was having in the weeks leading up to his/her death. Can you tell me first whether s/he experienced these problems at the time of his/her death, and if so, for how many days, weeks or months had s/he been experiencing these problems

| | | |
|---|---|---|
| a. fever | 0. no | 1. yes for _____days, _____weeks _____months |
| b. diarrhea | 0. no | 1. yes for _____days, _____weeks _____months |
| c. vomiting | 0. no | 1. yes for _____days, _____weeks _____months |
| d. coughing blood | 0. no | 1. yes for _____days, _____weeks _____months |
| e. coughing without blood | 0. no | 1. yes for _____days, _____weeks _____months |
| f. severe headaches | 0. no | 1. yes for _____days, _____weeks _____months |

I38. Finally, can you tell me whether s/he was losing weight prior to their death?

1. yes → continue to I39
2. no → **thank respondent and terminate interview**

I39. Would you say their weight loss was:

1. severe, they lost an awful lot of weight before their death
2. moderate, they lost quite a bit of weight
3. slight, they lost a little weight only

## SECTION J. INTERVIEWER ASSESSMENT OF INTERVIEW AND RESPONDENT

J1. Who answered most of the questions?

1. the respondent answered all or almost all questions by self
2. the respondent answered many questions by self but others assisted on some
3. Some one other than the respondent provided the answers to most questions
4. Other (specify _____)

J2. How well did the respondent (or proxy providing answers) seem to understand the questionnaire?

1. had no difficulty
2. had difficulty with a few questions
3. hand difficulty with many questions
4. Other (specify _____)

J3. Interviewer assessment of economic status **[Do not ask respondent but make your own judgment the economic status of the household based on the appearance of the respondents house]**

1. well off
2. somewhat above average
3. about average
4. somewhat below average
5. very poor

**Thank respondent and terminate interview**

End time: ____hour _____ minute (circle as appropriate: AM PM)

# Population Studies Center Research Reports

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