



The Republic of the Union of Myanmar

The 2014 Myanmar Population and Housing Census

THEMATIC REPORT ON THE OLDER POPULATION

Census Report Volume 4-L



**Department of Population
Ministry of Labour, Immigration and Population**

With technical assistance from UNFPA



SEPTEMBER 2017



The 2014 Myanmar Population and Housing Census

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Ministry of Labour, Immigration and Population**

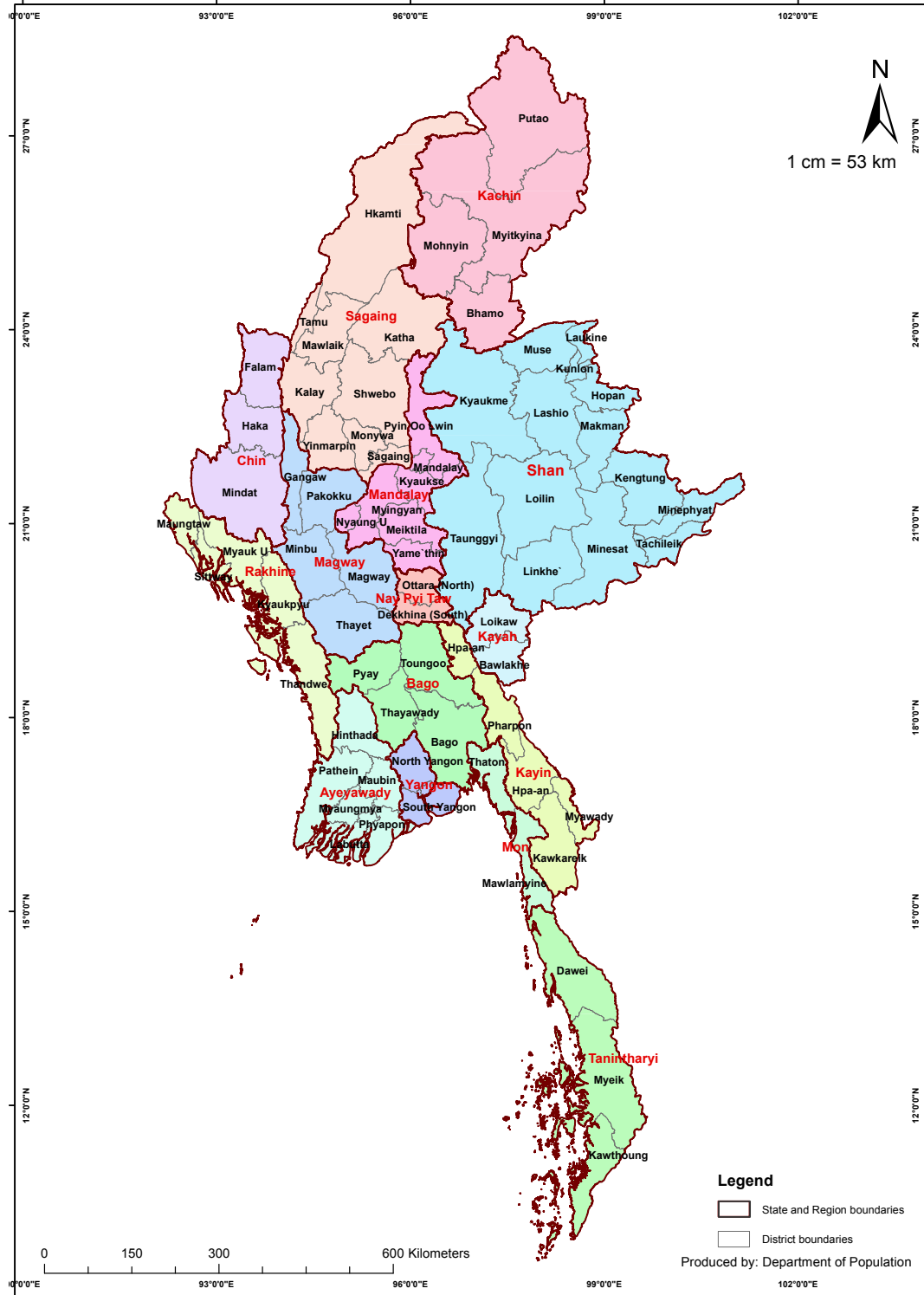
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Figure 1

Map of Myanmar by State/Region and District



Foreword

The 2014 Myanmar Population and Housing Census (2014 Census) was conducted with midnight of 29 March 2014 as the reference point. This is the first Census in 30 years; the last Census was conducted in 1983. Planning and execution of this Census was spearheaded by the former Ministry of Immigration and Population, now the Ministry of Labour, Immigration and Population, on behalf of the Government, in accordance with the Population and Housing Census Law, 2013. The main objectives of the 2014 Census are to provide the Government and other stakeholders with essential information on the population, regarding demographic, social and economic characteristics, and housing conditions and household amenities. By generating information at all administrative levels, it is also intended to provide a sound basis for evidence-based decision-making and to evaluate the impact of social and economic policies and programmes in the country.

The results of the 2014 Census have been published to date in a number of volumes. The first was the Provisional Results (Census Report Volume 1), which was released in August 2014. The Census Main Results were launched in May 2015. These included *The Union Report* (Census Report Volume 2), *Highlights of the Main Results* (Census Report Volume 2-A), and the reports for each of the 15 States and Regions (Census Report Volume 3[A -O]). The reports on *Occupation and Industry* (Census Report Volume 2-B) and *Religion* (Census Report Volume 2-C) were launched in March 2016 and July 2016, respectively.

The current set of 2014 Census publications comprises thirteen thematic reports and a Census Atlas. They address issues on Fertility and Nuptiality; Mortality; Maternal Mortality; Migration and Urbanization; Population Projections; Population Dynamics; the Older Population; Children and Youth; Education; Labour Force; Disability; Gender Dimensions; and Housing Conditions and Household Amenities. Their preparation involved collaborative efforts with both local and international experts as well as various Government Ministries, Departments and research institutions. The thematic reports published to date include: Fertility and Nuptiality; Mortality; Maternal Mortality; Migration and Urbanization; Population Dynamics; Population Projections; the Labour Force; Education; Housing Conditions and Household Amenities; Gender Dimensions; and Disability.

Data capture of the Census was undertaken using scanning technology. The processes were highly integrated, with tight controls to guarantee accuracy of results. To achieve internal consistency and minimize errors, rigorous data editing and validation were carried out to facilitate further analysis of the results. The information presented in these reports is therefore based on more cleaned data sets, and the reader should be aware that there may be some small differences from the results published in the first set of volumes. In such instances, the data in the thematic reports should be preferred.

The 2030 Sustainable Development Agenda calls for all governments to 'leave no one behind'. Most of the Sustainable Development Goals (SDGs) specifically mention the importance of eliminating discrimination and increasing opportunities 'for all' or for 'all ages'. These include ending poverty for all; the right to health 'for all at all ages'; promoting lifelong learning; encouraging the development of sustainable, inclusive, and accessible urban environments, including for 'older persons'; and the production and use of age-disaggregated data to monitor the SDGs.

Foreword

Myanmar is committed to providing for the economic, health and social needs of older people. This has been stipulated in the 2008 Constitution, which states ‘the Union shall care for mothers and children, orphans, fallen Defence Services personnel’s children, the aged and the disabled.’ This has been reiterated in the National Social Protection Strategic Plan and the National Action Plan on Ageing which were both approved in 2014.

With the older population growing at 2.4 per cent, a rate faster than the rate of growth of the total population (1.4 per cent), and where this growth of the older population will result in more older people than children by 2050 (12.9 million children aged 0 to 14 against 13.1 million people aged 60 years old and over), the Government of Myanmar must prepare and provide the means for a supportive environment for older persons such as social protection; affordable access to basic primary health care services; sufficient universal social pension schemes; work opportunities for those who wish to continue working; and other infrastructure that will ensure their well-being and facilitate their physical and social activities.

The 2014 Census also shows that the urban population was slightly older than the rural population. The proportion of the older population in urban areas is 9.2 per cent while it is 8.8 per cent in rural areas. This is the result of a more rapid decline in urban fertility, offset by net migration to urban areas by youth and young adults. Furthermore, the Census has indicated that there are more older females than older males - 2.6 million against 1.9 million, or a sex ratio of 75 older males for every 100 females aged 60 years and over. On the other hand, the younger age group (0-59 years old) recorded only 95 males per 100 females. Among States/Regions, differentials exist on the extent of ageing. Mayway Region recorded the highest proportion of the older population at 10.8 per cent of its population while Kayah State recorded the lowest at 6 per cent.

The information from the Census, which includes differentials across groups of population, as well as their geographical distribution allows for the development of policies and programmes that will directly target older people, especially those who are poor and vulnerable, to improve the quality of health and social services for this segment of the population.

On behalf of the Government of Myanmar, I wish to thank the teams at the Department of Population, the United Nations Population Fund (UNFPA) and the authors for their contribution towards the preparation of this thematic report. I would also like to thank our development partners, namely; Australia, Finland, Germany, Italy, Norway, Sweden, Switzerland, and the United Kingdom for their support to undertake the Census, as well as the technical support provided by the United States of America.



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List of Acronyms

ASEAN	Association of Southeast Asian Nations
GDP	Gross domestic product
Lao PDR	Lao People's Democratic Republic
LPG	Liquefied petroleum gas
MSWRR	Ministry of Social Welfare, Relief and Resettlement
NCDs	Non-communicable diseases
NGOs	Non-governmental organizations
SDGs	Sustainable Development Goals
TFR	Total fertility rate
UN	United Nations
UN DESA	United Nations Department of Economic and Social Affairs
UNFPA	United Nations Population Fund
WHO	World Health Organization

Executive summary

The world's population is rapidly ageing as a consequence of declining fertility and mortality. The number of older people, defined as those aged 60 and over, has increased much more rapidly than the total population. In 1990 there were 482 million older people; in 2015 there were an estimated 901 million; and by 2050 there will be nearly 2.1 billion.

Myanmar's 2014 Census enumerated 4.5 million people aged 60 and over and by 2050 Myanmar is projected to have 13 million people in this age group. In 2050, the country's age structure will be similar to Singapore's today with about 20 per cent of the population aged 60 and over and approximately the same number of older people and children under 15 years of age.

Understanding population ageing is important because of the potential effects on the economic development of the country. The 2014 Census, the first in the country for 30 years, is a unique source for describing national and regional population dynamics underlying population ageing. Furthermore, the Census is invaluable in describing the situation of the older population to facilitate the design of programmes targeting the most vulnerable and to monitor the outcomes of these programmes.

Myanmar's population has aged between 1973 and 2014; while the total population increased at an annual rate of 1.4 per cent, the population aged 60 and over increased annually by 2.4 per cent. Within the older population, the oldest age group, those over 80 years old, has been growing much faster than those aged 60-79. In 2014, the urban population was slightly older than the rural population. This is the result of a more rapid decline in urban fertility, offset by net migration to urban areas by youth and young adults.

Myanmar's population is much younger than richer ASEAN countries such as Singapore, Malaysia and Thailand, which had an earlier and more rapid fertility decline. Its population is slightly older than the other low and middle-income ASEAN countries which still have high fertility.

The conditions of the older population are an accumulation of their life experiences and are also directly affected by current social and economic realities. Most of the people aged 60 and over enumerated in the Census were born between 1925 and 1950. Their access to education and choices about marriage and childbearing were influenced by the times through which they lived.

Three quarters of people aged 60 and over are still living in the Township where they were born. However, nearly half of them in urban areas were born elsewhere, mostly in other urban areas.

Most men aged 60 and over are currently married (73.9 per cent) whereas only 44.1 per cent of women in the same age group are married. The proportion of women aged 60 and over who are widowed rises rapidly with age, from 30.7 per cent at ages 60-64; to 60.5 per cent at ages 75-79; to 74.0 per cent among those aged 85-89. This is due to women marrying men some years older than themselves, poorer life expectancy of males and much higher life expectancy for females. Among urban women aged 60-64, 12.1 per cent were reported

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to have never married. In the future, this proportion will rise among urban women 20 years younger, aged 40-44; 18.7 per cent will have never married. Nearly one-fifth of women aged 60 years and over (18.4 per cent) reported that they have no surviving children of their own.

People who are reported as not being able to read or write comprise 20.9 per cent of the population aged 60 years and over: 11.2 per cent of men and 28.0 per cent of women. The older population and especially women, have lower levels of education and literacy than prime working-age adults, aged 15-59. Similarly, 24.6 per cent of older men and 37.7 per cent of older women have never attended school. Among today's youth, literacy and completing at least one grade of primary school is nearly universal.

The practice of older people living with their adult children is firmly entrenched in Myanmar. About three-quarters of older people living in conventional households co-reside with one or more son or daughter or son- or daughter-in-law. Fifteen per cent of older men and women live alone or with only a spouse. Approximately 6 per cent of older people live with a grandchild but no adult child and another 2 per cent live with a sibling and no adult child.

The preference for living with younger family members is so strong that marital status has very little effect on household composition. Older people who are married and those who are widowed are equally likely to live with their children. Even those reported in the Census as without a living child describe themselves as a parent to other household members.

Myanmar society places a high value on the reciprocal duties between parents and children and there is a very strong belief in the importance of looking after older members of the family. Among adults aged 40-59, at least 15.7 per cent live with a parent. Single adults and those adults with higher levels of education are the most likely to live with a parent.

Older people gradually transition away from being economically active. Only 30 per cent of people aged 60 and over are in the labour force; 47 per cent of men and 18 per cent of women. Older people working in agriculture remain in the workforce for longer than workers in other occupations and sectors. However, even this form of employment is becoming less common, as can be seen by comparing the main activities of the older population in the 1983 and 2014 censuses.

A lack of rural infrastructure and low agricultural productivity means that many rural households with an older member live in bamboo, huts, or other types of dwelling units not suitable for habitation (37 per cent); lack access to electricity for lighting (84 per cent) and cooking (95 per cent); do not have access to improved sanitation (28 per cent); and lack access to communication devices such as phones, radios or televisions, or means of transport that are common in urban households.

The strong social conventions in Myanmar which enable older people to live with their adult children or other family members, bring economic benefits to everyone. Older people benefit from living with others. The most disadvantaged households are those where an older person lives on his or her own or without an employed person in the prime working ages, aged 15-59. Other members of the household also benefit from having a member aged

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60 or over. Larger households are more likely to be in a higher wealth quintile if at least one member is aged 60 or over.

Based on estimates from the 2014 Census, the average 60 year-old in Myanmar can expect to live an additional 16.3 years. Urban men have the shortest life expectancy; from age 60 they can expect to live on average only 12.7 years. A rural man at age 60 can expect to live another 14.8 years, whereas a 60 year-old woman can expect to live another 18.5 years in rural areas and another 17.7 years in urban areas.

The 2014 Census was the first census in Myanmar to attempt to measure the prevalence of disability in the population by asking if people experienced any difficulty in seeing, hearing, walking, or remembering or concentrating and, if so, the level of difficulty they experienced. Nearly one-quarter of older people have at least one form of disability and nearly 6 per cent have a moderate or severe disability. All types and severity of disabilities increase rapidly with advancing age. Among those aged 80 and over, 43 per cent have some form of disability and 16 per cent report having a moderate or severe disability. At each age women are slightly more likely to report a disability than men. The prevalence of disability is higher in rural areas and amongst older people in the lowest wealth quintiles.

Like the rest of the population, half of older people in Myanmar live in several of the largest States/Regions. Yangon is home to 14.4 per cent of all people in this age group and another 13 per cent live in Mandalay and Ayeyawady respectively. Sagaing and Bago each have about 11 per cent of the older population. Also like the total population, 49 per cent of urban people aged 60 and over live in urban areas of Yangon and Mandalay.

The extent of population ageing is greatest in Magway, Mon, Bago, Mandalay, Sagaing, Ayeyawady and Yangon. In all States/Regions, the urban population has a higher proportion of older people than the rural population. If present rates continue, the central States/Regions will experience the highest growth rate of the population aged 60 and over by 2030, accompanied by a declining total population. This is the result of a steady outflow of younger people in search of employment. However, all States/Regions are projected to have older populations growing at a rate of at least 3 per cent every year, at a faster rate than the total population between 2015 and 2030.

In every State/Region most older people – from 70 to 80 per cent – co-reside with an adult child. In a few States/Regions over 10 per cent of older persons live alone or with a spouse only, especially in rural areas. In the rural areas of Kayin, Tanintharyi and Mon, which have high rates of outmigration, over 10 per cent of older people are living with their grandchildren but no adult child.

Using three indicators of poor material well-being (housing made from bamboo, a hut, or other types of dwelling units; a lack of access to improved sanitation; and no electricity as a source of lighting), Yangon, Mon, Kayah, Nay Pyi Taw and Bago were ranked as the States/Regions which had the highest level of material well-being for older people. Sagaing, Magway and Rakhine had the lowest levels.

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The proportion of older people who never attended school also varied widely between States/Regions, from a low of 11 per cent in Yangon to a high of 66 per cent in Shan. The current gender gaps in education and literacy between States/Regions seen among older people, will narrow in the future given the much higher rates reported among youth in the 2014 Census.

The labour force participation of older people varies between States/Regions from 21.2 per cent in Yangon to 38.9 per cent in Chin. In all cases, older men are more likely to be in the labour force than older women, and older people living in rural areas are more likely to be working than those in urban areas.

The Government of Myanmar has approved several laws and policies to address the challenges of an ageing population. Among the priorities are to expand the pension scheme for government workers to private sector employees; introduce a social pension for people aged 65 and over; and to foster local support groups comprised of older people to conduct activities to benefit those in their communities. A social pension for people aged 90 and over started in 2017.

Myanmar has a number of significant advantages. Its population is ageing more slowly than many other countries in the region. This will provide a greater opportunity for older people of the future to benefit from the economic growth occurring in the country. On an individual level, the strong cultural values of respecting older people mean that most people are able to grow old surrounded by an extended family. This form of practical, social and economic support by families is likely to continue for many decades to come.

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Population ageing is the most significant demographic change in modern times. It is defined as the increasing share of older persons in the population and is caused by the transition from high to low levels of fertility and mortality. The pace and magnitude of these declines determines the numbers and relative size of the older population now and in the future. Every country and region in the world has or will experience population ageing.

Globally, the estimated number of people aged 60 and over has grown from 482 million in 1990 to 901 million in 2015. By 2050, the world's older population is projected to more than double, reaching nearly 2.1 billion (UN DESA, 2015a). From 1990 to 2015 the percentage of older people of the total population has increased from 9 per cent to 12 per cent and is expected to reach 21 per cent by 2050. Although the more developed regions were the first to experience population ageing, it is in the less developed regions where the numbers of the older population and their proportion of the total population are growing most rapidly. Two out of three older people lived in less developed regions in 2015, and this will increase to four out of five by 2050.

Myanmar is no exception to widespread population ageing. Of the 50.3 million people enumerated in the 2014 Census, 4.5 million, or 8.9 per cent, were aged 60 and over. The older population has been growing at an average annual rate of 2.4 per cent since 1973, compared to a total population growth rate of 1.4 per cent (see Table 3.1). Furthermore, the country's share of older persons is projected to rise to 15.5 per cent by 2035 and to 20.2 per cent by 2050 (Department of Population, 2017a).

The increasing number of older people is a triumph of the advances in health care and the economic development of past decades. Population ageing is a sign that many older people can expect to live longer, healthier lives than their parents and to continue to contribute to their family and community. The challenge for governments and broader society is to enable older people to have adequate income security through savings, continued participation in the workforce if they wish and are able, and through social programmes such as pensions.

However, population ageing is also viewed as having potentially negative consequences for societies, economies, families and individuals. The availability of labour, demand for goods and services and levels of savings are affected by the changes in the proportion of older people in the population. The demographic changes that lead to population ageing will mean that older people have fewer children to support them and that they will live into advanced ages, potentially experiencing increasing health problems for a longer time. Health systems will face larger numbers of older people requiring care. The concern for many low and middle-income countries is that their populations will grow old before they grow rich enough to support the increased numbers of older people.

Nationally and internationally, these benefits and challenges of population change are well understood. The 2030 Sustainable Development Agenda calls for all governments to 'leave no one behind'. Although the well-being of older people is not a specific focus of the Sustainable Development Goals (SDGs), they are mentioned as among those who are the most vulnerable and must be empowered. Most of the 17 SDGs specifically mention the importance of eliminating discrimination and increasing opportunities 'for all' or for 'all ages'. These include ending poverty for all (SDG 1); the right to health 'for all at all ages'

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(SDG 3); promoting lifelong learning (SDG 4); encouraging the development of sustainable, inclusive, and accessible urban environments, including for 'older persons' (SDG 11); and the production and use of age-disaggregated data to monitor the SDGs (United Nations 2015, UNDP 2016).

In Myanmar, a commitment to older people is laid down in the 2008 Constitution, which states 'the Union shall care for mothers and children, orphans, fallen Defence Services personnel's children the aged and the disabled.' A law related to older persons was passed in late 2016 and the National Social Protection Strategic Plan and the National Action Plan on Ageing, were both approved in 2014, outlining a comprehensive approach to provide for the economic, health and social needs of older people (Government of Myanmar 2014a and b).

1.1 Background to the report

A population census is "the total process of collecting, compiling, evaluating, analyzing and publishing or otherwise disseminating demographic, economic, and social data pertaining to a specified time, to all persons in a country or in a well delimited part of a country" (United Nations, 2008). A census provides benchmark data on population characteristics such as age and sex, marital, educational, occupational and disability status and household composition which are profoundly important for effective national development planning and policymaking.

The history of census taking in Myanmar dates back to 500 BC during the regime of King Thadodipa Mahadamayaza of the Tagaung Dynasty. The first modern census, as defined by the United Nations (2008), was carried out in the southern part of Myanmar as part of a census implemented by India under the British administration in 1872 (Department of Population, 2015, p ii). Decennial censuses were carried out throughout the country up until 1941. After independence in 1948 the country held its first census in 1973 followed by another in 1983.

The 2014 Myanmar Population and Housing Census is the first census in over 30 years. It was conducted from 29th March to 10th April, 2014 and enumerated all persons based on where they were on Census Night, 29 March, including those living in conventional households, institutions, the homeless, and persons living in other collective quarters. The Census provides the most comprehensive and reliable source of data on the size and the demographic and socioeconomic characteristics of older persons. It offers a unique opportunity to look in-depth at the situation of older people not only at the Union level but at the State/Region and District level. Such information is beneficial for socioeconomic development and health service planning and advocacy.

1.2 Definition of the older population

The definition of the threshold for the older population is somewhat arbitrary when considering the very different circumstances of older people across the world (Siddhisena, 2005). However, the United Nations has consistently used aged 60 and over as the definition of older people (United Nations 1983, 2002; UN DESA 2015b). Age 60 is also considered to

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be the threshold in identifying older persons in Myanmar since the mandatory retirement age in the public sector is 60 years with an extension of up to two to three years in some circumstances.

As the socio-demographic characteristics of older persons and the consequences of their ageing process vary by age, the entire older population (60 and over) is commonly divided into three broad age groups which are defined here as: the young old (those aged 60-69); the old (those aged 70-79); and the oldest (80 and over). Some information presented in this report uses these three age groups to explore patterns by age within the older population. Where a finer-grained analysis is required, five-year age groups from 60 to 85 and over or 90 and over are used. Almost all analysis is conducted for the total older population by sex and urban or rural residence, with reference as needed to younger age groups, and particularly people in the prime working ages of 15-59.

1.3 Previous research on older people in Myanmar

This report contributes to a small but growing body of evidence on the conditions of older people in Myanmar. Four studies on the older population have been conducted in Myanmar in the past 15 years. The first two were derived from the 2001 and 2007 Fertility and Reproductive Health Surveys and the 1973 and 1983 censuses (Department of Population and UNFPA 2005, 2012). The third study was a survey of the older population conducted by the Department of Social Welfare, Relief and Resettlement and HelpAge International in 2012 (Knodel 2014). The 2012 survey is the first survey conducted in Myanmar that exclusively focuses on the older population. A number of papers have been published from the survey data, with more detailed analysis on the health and socioeconomic conditions of older people (Teerawichitchainan and Knodel 2015; Teerawichitchainan, Knodel and Pothisiri 2015; Knodel and Teerawichitchainan 2017). The fourth study, restricted to the older population in five Townships from different geographic States/Regions in the country, focused on health status and access to health care services (Rajan and Sreerupa 2016). Findings from these studies will be used to extend or verify findings based on the 2014 Census.

1.4 Aim and objectives

The primary aim of this thematic report is to draw on the 2014 Census data to describe the current and future size, growth and characteristics of the older population in order to assist policymakers in the development of evidence-based policies and programmes to protect and enhance their well-being.

The objectives of the report are to:

- Describe the trends of population ageing in Myanmar up to and beyond the 2014 Census.
- Determine the demographic, social and economic characteristics of the older population.
- Analyse the living arrangements of older people and the implications for their well-being.
- Highlight policies and programmes needed to support the well-being of the older population now and in the future.

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1.5 Report structure

The structure of the thematic report is arranged as follows. Chapter 2 is devoted to the discussion of the data and methodology used in the analysis of the older population in Myanmar. An assessment is made of the quality of age reporting and the completeness of the coverage of the older population in the 2014 and 1983 censuses. Chapter 3 presents an overview of population ageing trends in Myanmar and other South-East Asian countries (defined as members of the Association of Southeast Asian Nations (ASEAN)). It explores the current size, age and composition of the older population, how it has changed since 1973 and how it is expected to change up to 2050.

Chapters 4, 5, 6 and 7 are concerned with individual ageing and the conditions in which older people live. Chapter 4 explores the social and demographic characteristics of older people including place of residence and residential mobility, marital status and number of living children, and education. Chapter 5 describes older people's living arrangements in institutions and conventional households, with particular attention to household composition and how this differs by sex, marital status, number of children and age.

Around the world, economic security and health are older people's primary concerns (UNFPA and HelpAge International 2012). Chapter 6 considers the economic conditions of older people. Three in ten of the older population are economically active, but they eventually transition out of the labour force. This chapter also looks at other indicators of economic well-being, including housing conditions, amenities, assets and a wealth index, by age, sex and household composition. Chapter 7 presents information on older people's life expectancy and the prevalence of disabilities.

Chapter 8 explores regional variations in the rate of population ageing and the social and economic conditions of older people. Information is presented by urban and rural areas of States/Regions. In Chapter 9, existing policies and programmes for the older population in Myanmar are discussed within the context of the probable size, composition and social and economic characteristics of the older population in the future. Chapter 10 offers recommendations concerning policy, future research and the next census.

Chapter 2. Methodology and data quality assessment

The quality of a census is determined by the completeness of its coverage and the accuracy of the responses given by householders, especially in the reporting of age. The better the quality of the data, the more reliable the findings. Hence, this chapter discusses the source of data used in the analyses in this report and, in particular, evaluates the quality of age reporting.

2.1 Sources of data and their limitations

One of the objectives of this report is to describe trends in population ageing and the characteristics of the older population. Where possible this is done by referring to data from the 1973 and 1983 censuses. The 2014 Census was a much more ambitious undertaking than the previous censuses, covering more topics and with a more extensive programme of analysis. There is no comparable data in the 1973 and 1983 censuses on a number of important topics including household composition, mortality and fertility rates, and disability.

The 2014 Census adopted a *de facto* methodology where, with some exceptions, the majority of people (95 per cent) were enumerated in the houses/dwelling units where they were staying on March 29, 2014 (Census Night). They were interviewed using the main Census questionnaire. The remaining 5 per cent were enumerated in institutions; in other collective quarters; or were enumerated as the homeless population. An institution questionnaire was completed for these people, which did not contain all of the questions asked in the main questionnaire. In particular, no information was collected for people in institutions on literacy, number of children (of ever-married women only), residential moves between Townships (used to derive migration rates), occupation and industry of employment.

The field operation was completed in almost all areas within 12 days after the start of the fieldwork. The total enumerated population stood at 50,279,900. Some populations in three areas of the country were not enumerated. These included an estimated 1,090,000 persons in Rakhine State, 69,753 persons in Kayin State and 46,600 persons in Kachin State (see Department of Population, 2015 for the reasons that these populations were not enumerated). In total, therefore, it is estimated that 1,206,400 persons were not enumerated in the 2014 Census. The total estimated population of Myanmar on Census Night, both enumerated and non-enumerated, was 51,486,253.

The analysis in this report covers only the enumerated population. It is worth noting that in Rakhine State an estimated 34 per cent of the population were not enumerated as members of some communities were not counted because they were not allowed to self-identify using a name that was not recognized by the Government. The Government made the decision in the interest of security and to avoid the possibility of violence occurring due to inter-communal tension. Consequently, data for Rakhine State, as well as for several Districts and Townships within it, are incomplete, and only represent about two-thirds of the estimated population.

2.2 Assessment of data quality for the older population

Two types of errors can occur during the enumeration phase of a census. The first is coverage errors, occurring due to omission or duplication of individuals and/or households. The second type of errors is content or response errors, due to inaccurate, or lack of, information provided by the respondents or errors made in reporting or recording of the information by enumerators. Both types of errors could be of concern for the older population, potentially limiting the data accuracy and usefulness. The most robust way to determine the quality of data is to check the accuracy of the information by collecting information more than once, using different methods. For censuses, this is done through a post-enumeration survey where an independent team interviews a randomly selected sample of respondents. A post-enumeration survey was not undertaken for the 2014 Census.

The quality of data of the older population has been a neglected topic, especially in developing countries where the focus of data collection efforts has been on children and women in their reproductive years. However, with the growing interest in the welfare of the older population and in the increasing importance of non-communicable diseases as a cause of death, researchers have been taking a closer and more critical look at the quality of data for older ages (Randall and Coast 2016).

The systematic omission of older people in population censuses would be a major concern, resulting in data which underestimated the size of the older population. This is especially troubling because it is the poorest older people who would most likely be omitted (Zimmer and Das 2014). Research on older people in Africa have hypothesized that older females are most likely to be omitted in censuses and surveys because, due to higher male mortality and the practice of marrying males older than themselves, older women are more likely to be living alone or semi-independently from their adult children. An examination of the sex ratios (number of men per 100 women) in the older population from 29 African censuses and surveys found that in most data sets, sex ratios were unreasonably high, indicating that older females had been omitted (Randall and Coast 2016).

There is no evidence that females are omitted from the three most recent Myanmar censuses. Figure 2.1 shows that the sex ratio declines with age, starting from the age group 55-59, in all three censuses. Furthermore, as will be shown in Chapter 5, very few older people in Myanmar live alone and therefore are less likely to be missed by enumerators. The reason for the much lower sex ratios in the 2014 Census is not clear. While it could be the result of a more complete enumeration of older women in 2014 compared to the earlier censuses, it is more likely to reflect the high male mortality rates found in 2014. Mortality levels were not derived from the 1983 and 1973 censuses; it is conceivable that the gap between male and female mortality (which will be discussed in Chapter 7) emerged between 1983 and 2014.

Figure 2.1

Sex ratios by five-year age group from 50 to 90 years and over, 1973, 1983 and 2014 censuses

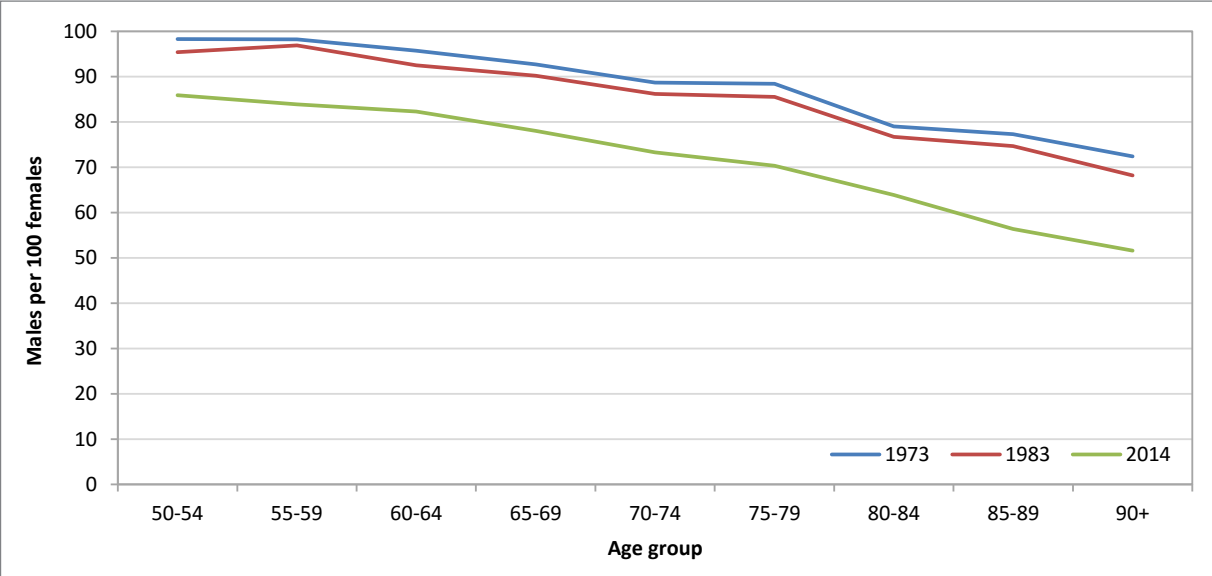
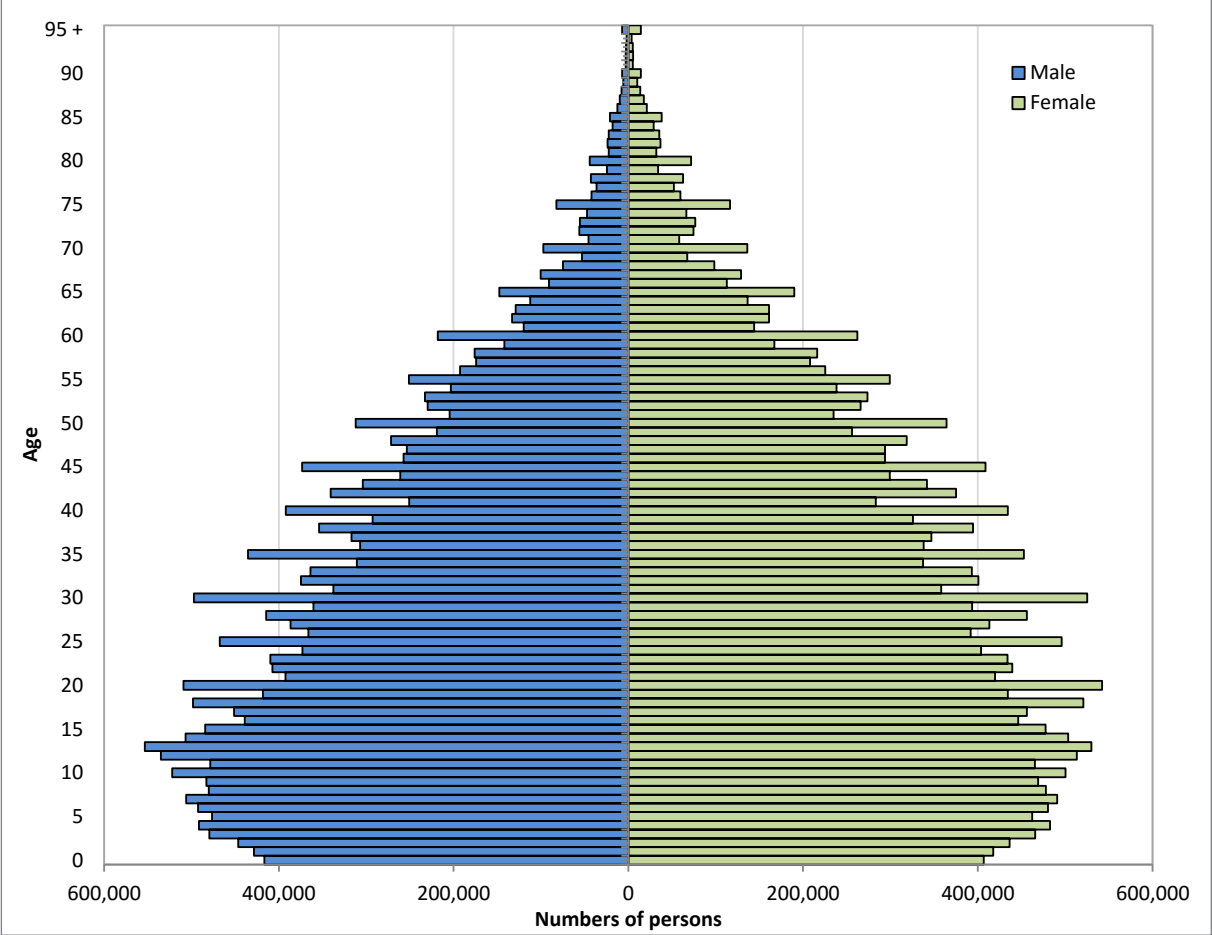


Figure 2.2

Age-sex pyramid by single year of age, 2014 Census



Chapter 2. Methodology and data quality assessment

The resulting distribution of the population by single year of age shows signs of reporting ages in ‘round digits’ ending at 0 or 5 and in certain ages ending with an even number. The resulting ‘heaping’, ‘inflation’ and ‘deflation’ of particular ages are apparent in the age pyramid at Figure 2.2.

Whipple’s Index is a common indicator of the quality of age reporting (Shryock and Siegel 1976). It measures the proportion of people reporting an age ending in 0 or 5 out of the total population. The values can range from 100, where there is no preference for reporting ages ending in 0 or 5, to 500, where all people are reporting ages ending in 0 or 5. The convention is to view scores less than 105 as indicating highly accurate data; 105 up to 110 as fairly accurate; 110 up to 125 as approximate data; 125 up to 175 as rough data; and 175 and over as very rough data.

Whipple’s Index uses the population aged 23-62; a range which has the same number of ages ending in 0 and 5. Obviously, the conventional Whipple’s Index fails to capture the quality of age reporting among the older population (Randall and Coast 2016). In Table 2.1 the conventional Whipple’s Index reported for the 1983 and 2014 censuses are shown with a Whipple Index for ages 63-92.

Table 2.1

Whipple’s Index for ages 23-62 and 63-92 by sex, urban and rural areas, 1983 and 2014 censuses

Census year/ Age group	Union			Urban			Rural		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
1983									
23-62	142.8	141.9	143.7	114.8	114.4	115.1	152.6	151.5	153.7
63-92	162.0	158.9	164.8	125.8	122.9	128.0	173.9	169.7	177.7
2014									
23-62	123.3	124.0	122.6	115.8	116.0	115.6	126.7	127.6	125.8
63-92	142.1	139.0	144.4	129.9	126.7	132.1	147.5	144.2	150.1

At the Union level, the quality of age reporting for 23-62 year olds and 63-92 year olds improved between 1983 and 2014 overall for both males and females. Using the standard Whipple classifications, the quality of age reporting among those aged 23-62 would be considered approximately accurate and the age data for those aged 63-92 would be considered rough.

Table 2.1 also shows that although there is relatively little difference in the quality of age reporting for males and females, there are large differences between urban and rural populations. The quality of urban age reporting for the 23-62 age group was considered ‘approximate’ in 1983 and has remained so in 2014. In rural areas, there was a substantial improvement in the quality of age reporting for those aged 23-62. The quality of age reporting for the 63-92 age group in 2014 (142.1) is very similar to the quality of age reporting for the 23-62 age group in 1983 (142.8).

Chapter 3. Demographic change and the older population in Myanmar

This chapter presents the trends in the size, growth and composition of the older population aged 60 and over. It describes the demographic forces that drive population ageing in Myanmar and projects the older population up to 2050. Population ageing in Myanmar is contrasted with the experiences of other South-East Asian countries.

3.1 Population ageing in Myanmar

3.1.1 The size and growth of the older population

The growth in the absolute number and relative proportion of the older population can be traced through Myanmar's censuses of 1973, 1983 and 2014 (Table 3.1). The 1973 census enumerated 1.7 million people aged 60 and over, comprising 6.0 per cent of the total population. By 2014, the enumerated older population was 4.5 million; 8.9 per cent of the total population. In the past 40 years the older population has been growing much faster than the total population and the populations of children aged 0-14 and persons who are in their prime working ages, aged 15-59. Myanmar's population is becoming older, with the median age rising from 19.1 years in 1973 to 27.1 years in 2014. Interested readers can calculate these and other measures of Myanmar's population size, growth and composition from Appendix 1, Table 1, which contains the enumerated population by five-year age group, by sex, and functional age groups from the three censuses.

Table 3.1

Indicators of population ageing, size and growth of broad age groups, 1973, 1983 and 2014 censuses

	1973	1983	2014	1973-2014
Total enumerated population				
Total	28,084,513	34,124,908	50,279,900	
0-14	11,643,840	13,159,645	14,399,569	
15-59	14,749,083	18,794,731	31,405,923	
60 and over	1,691,590	2,170,532	4,474,408	
Percentage of total population				
Total	100	100	100	
0-14	41.5	38.6	28.6	
15-59	52.5	55.1	62.5	
60 and over	6.0	6.4	8.9	
Average annual growth rate				
Total	-	2.0	1.3	1.4
0-14		1.2	0.3	0.5
15-59		2.4	1.7	1.8
60 and over	-	2.5	2.3	2.4
Median age	19.1	20.2	27.1	--

3.1.2 Measures of age dependency of the total population

Demographers use several indicators of population ageing based on three functional age groups: children (0-14 years), persons in their prime working age years (15-59 years) and older people (60 and over). As discussed in the introduction, this report uses 60 and over

Chapter 3. Demographic change and the older population in Myanmar

to define the older population, as it is the preferred age grouping for studying population ageing and the conditions of older people in less developed countries. To distinguish the definition of the middle age group from the definition of working-age adults aged 15-64 used in other thematic census reports, 15-59 year olds will be called the 'prime' working-age group throughout this report.

The demographic indicators of ageing presented in this section are the index of ageing, the older age dependency ratio, the potential support ratio and the parent support ratio. Each of these indicators can be calculated using the population numbers provided in Appendix 1, Table 1. Each indicator captures some aspect of the population-wide implications of ageing by comparing the numbers of children and older people who may be dependent on the support of prime working-aged adults. The indicators for Myanmar will be compared to other ASEAN countries in the final section of this chapter. The values of these indicators for States/Regions are given in Chapter 8.

The index of ageing is the number of people aged 60 and over per 100 children aged 0-14. The higher the index value, the greater the relative size of the older population compared to the population of children. The United Nations Population Division has estimated that globally there are 47 older people to 100 children, with a stark difference between more developed regions where there are almost 50 per cent more older people than children (index of ageing equals 145.7) compared to less developed regions where there is only one older person for every three children (index of ageing equals 35.2) (UN DESA 2015b).

In Myanmar, children still outnumber the older population by a wide margin, but the index of ageing is increasing (Table 3.2). In 1973, there were only 14.5 older people per 100 children while in 2014 there were 31.1.

Table 3.2

Indicators of population ageing, 1973, 1983, and 2014 censuses

Indicators of population ageing	1973	1983	2014
Index of ageing	14.5	16.5	31.1
Total dependency ratio	90.4	81.6	60.1
Child dependency ratio	78.9	70.0	45.8
Older age dependency ratio	11.5	11.5	14.2
Potential support ratio	8.7	8.7	7.0
Parent support ratio	1.4	1.7	3.7

The dependency ratios also show that while Myanmar's population is ageing, it is still young. The older age dependency ratio (the number of persons aged 60 and over per 100 persons aged 15-59) has only increased from 11.5 in 1973 to 14.2 in 2014. Over the same period the total dependency ratio (the population aged under 15 plus the population aged 60 and over per 100 people aged 15-59) has decreased from 90.4 to 60.1 due to the substantial decline in the proportion of children. The child dependency ratio (the population under 15 per 100 persons aged 15-59) has declined from 78.9 to 45.8.

The potential support ratio measures population ageing from the perspective of the older

Chapter 3. Demographic change and the older population in Myanmar

population. It captures people in the prime working ages available to support older people and is defined as the ratio of the population aged 15-59 to the population aged 60 and over. Between 1973 and 2014 this ratio has declined only modestly, from 8.7 to 7.0. The indicator, like all of the indicators of population ageing, has its limitations. The assumptions that all people over age 60 are dependent and that all members of younger cohorts in the prime working-age population are economically active are not true. Thus, this ratio does not provide a precise measure to indicate the support base for the older population (Mujahid and Siddhisena, 2009). Nevertheless, the potential support ratio does capture the shrinking of the support base of economically active adults on whom older people can depend as the population ages.

The parent support ratio relates to the oldest group to those (presumed) offspring who were born when their parents were in their twenties or thirties. It is defined here as the number of persons aged 85 and over to 100 people aged 50-64. As such this ratio provides an indicator of the level of demand put on families to provide support for their oldest members. These 'offspring' may not be the actual children of the oldest persons and therefore they can only be considered as 'hypothetical offspring' (Mujahid and Siddhisena, 2009). Notwithstanding this limitation, the increase in the parent support ratio at the Union level from 1.4 in 1973 to 3.7 in 2014 shows that people in their late working ages are now responsible for a larger number of older parents than in the past (Table 3.2).

3.1.3 Population ageing in urban and rural areas

Table 3.3 presents the indicators of population ageing for urban and rural populations in 1983 and 2014. Myanmar's urban and rural populations have both gone through significant demographic changes in the past 30 years which influence population ageing in different and sometimes opposing ways. As will be discussed in more detail in Section 3.2, fertility and mortality have declined in both areas, but more rapidly in urban areas. That should lead to rural areas having a younger population. However, a countervailing influence has been the migration of younger adults to urban areas, increasing both the relative population of younger adults and the rates of natural increase because these younger adults are having children, even though their fertility rate is lower than the fertility rate in rural areas.

The result of these different demographic trends is that over time the support base for older people has diminished in both urban and rural areas but for different reasons. Between 1983 and 2014 the index of ageing increased much more in urban areas than in rural areas but the older age dependency ratio increased only slightly in both areas (Table 3.3). People in the prime working age group living in rural areas have to support more children and slightly more older people than urban people in their prime working ages. The inverse of the older age dependency ratio is the potential support ratio, which shows that urban older people have slightly more adults in their prime working ages on whom they can rely on for support (7.3 against 6.9). Since migration to urban areas is concentrated among young adults, the parent support ratio, which is only concerned with the number of the very old (aged 85 and over) and their older adult children (aged 50-64) shows that older adults in urban areas have more parents aged 85 years and over to support (4.0 against 3.6). See Appendix 1, Table 2 for the numbers of people in functional age groups and broad age groups within the older population for 1983 and 2014 by sex and urban or rural residence.

Table 3.3

Indicators of population ageing, urban and rural areas, 1983 and 2014 censuses

Indicators of population ageing	1983			2014		
	Union	Urban	Rural	Union	Urban	Rural
Index of ageing	16.5	17.3	16.3	31.1	38.1	28.8
Total dependency ratio	81.6	71.9	85.0	60.1	49.8	64.8
Child dependency ratio	70.0	61.3	73.1	45.8	36.1	50.4
Older age dependency ratio	11.5	10.6	11.9	14.2	13.7	14.5
Potential support ratio	8.7	9.4	8.4	7.0	7.3	6.9
Parent support ratio	1.7	1.9	1.6	3.7	4.0	3.6

3.1.4 Age and sex composition within the older population

The age and sex composition of the older population in Myanmar is changing rapidly and this has important policy implications because as people age their capacities and needs change. The ageing population is characterized not only by an increasing proportion of older persons and an absolute growth in their numbers but also by ageing within the total population aged 60 and over. Furthermore, because females have lower mortality rates at all ages; by the advanced years there are more females than males.

Table 3.4, derived from the population numbers in Appendix 1, Table 1, shows the relative size and growth of the older population in five-year age groups. In 1973 only 6.5 per cent of the older population was over 80 years old; in 2014, the figure had nearly doubled to 12.6 per cent. The oldest age groups are growing the fastest.

Table 3.4

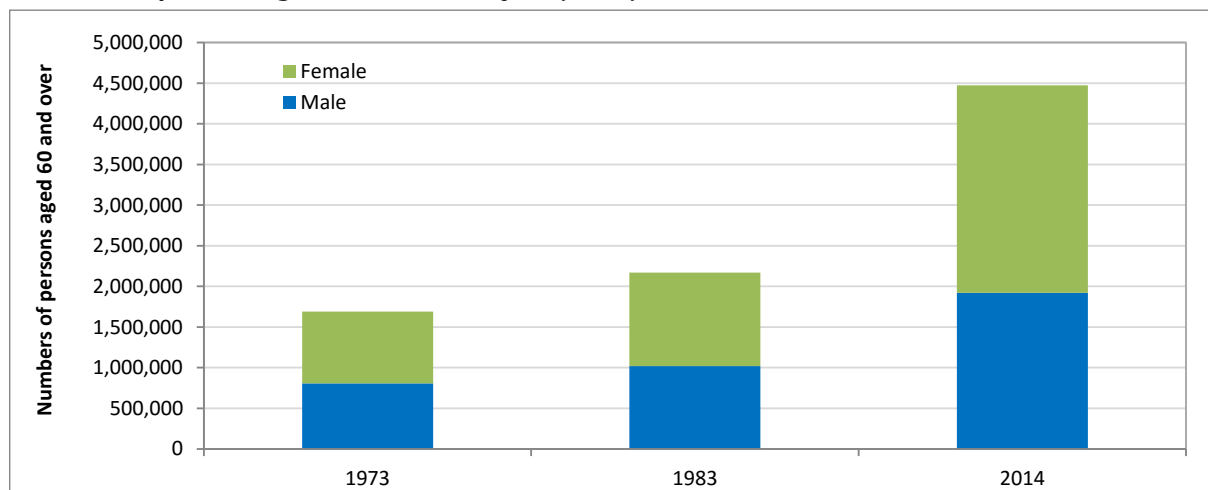
Relative size and growth rate of the older population by five-year age group, 1973, 1983 and 2014 censuses

Age group	Percentage			Average annual growth rate	
	1973	1983	2014	1973-2014	1983-2014
60-64	39.1	38.3	35.2	2.1	2.1
65-69	26.4	24.7	23.8	2.1	2.2
70-74	19.3	19.2	15.9	1.9	1.7
75-79	8.7	9.9	12.4	3.2	3.1
80-84	4.4	5.6	7.5	3.7	3.3
85-89	1.3	1.7	3.5	4.8	4.8
90+	0.8	0.8	1.6	4.3	4.6
Per cent	100	100	100		
Total Number	1,691,590	2,170,532	4,474,408	2.4	2.3

Figure 3.1 shows that females outnumber males in the older population and that at older age groups the number of men to women is lower and that the relative proportion of females has also been increasing. In 2014, there were 1.9 million older men and 2.6 million older women. Women comprised 57.1 per cent of the older population in 2014, compared to 52.2 per cent in 1973.

Figure 3.1

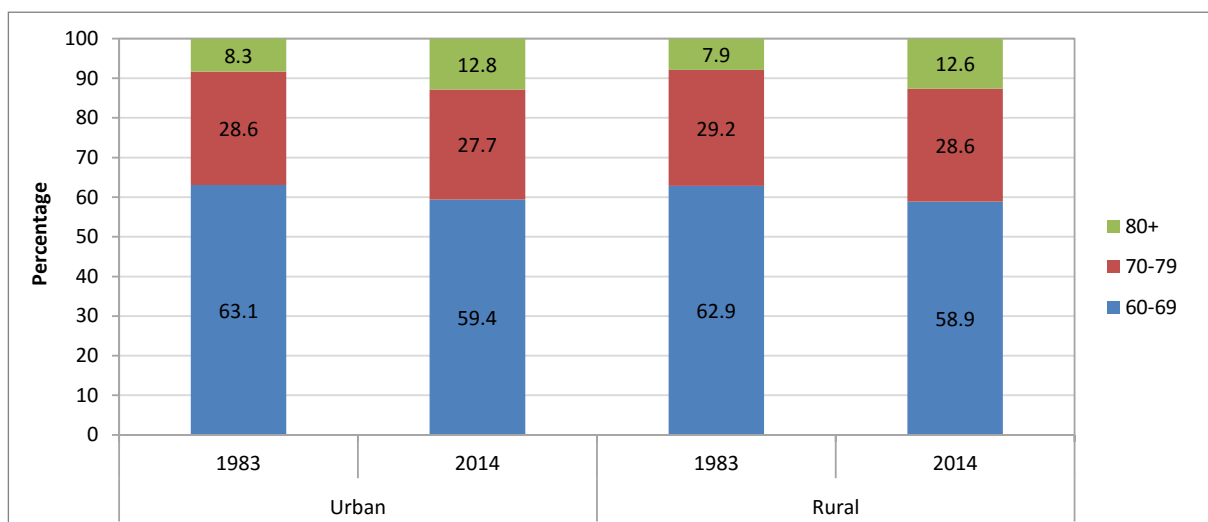
Numbers of persons aged 60 and over by sex, 1973, 1983 and 2014 censuses



The increase in the proportion of the oldest old within the 60 years and over population is taking place equally in urban and rural areas (Figure 3.2 and Appendix 1, Table 2).

Figure 3.2

Percentage of the older population by broad age groups, urban and rural areas, 1983 and 2014 censuses



3.2 The determinants of population ageing

A population changes its size and composition through a combination of three demographic actions: births, deaths and net migration. Population ageing is the consequence of these three components over the course of time. Children born in one year become part of the older population 60 years later. The relative proportion of the older population depends on the size of the younger population, and that is determined primarily by how many children are born in the intervening years and, to a lesser extent, the rates of mortality and net migration.

Chapter 3. Demographic change and the older population in Myanmar

Myanmar does not have an accurate and comprehensive vital registration system. The level and trends in fertility, mortality and net migration in Myanmar can only be estimated. Other 2014 Census thematic reports have used evidence from the 2014 and past censuses and surveys to piece together the most plausible trends. This report uses these findings to describe the broad demographic forces that have shaped the current older population and which will determine the future of population ageing.

There is strong evidence that the level of fertility has been declining for the past 40 to 50 years (Department of Population 2016b). In the mid-1960s the average woman in Myanmar had five and a half children throughout her life. This declined to about three and a half children around 1990. Based on the 2014 Census, in 2013 the average woman had two and a half children. Most of the decline occurred in the 1980s and 1990s. Fertility has been at approximately the same level since the late 1990s. Fertility in urban and rural areas is strikingly different: based on the 2014 Census urban women can now expect to have an average of 1.9 children and rural women 2.8 children. All else being equal, the rural population will grow faster than the urban population and will have a younger population than urban areas.

But all things are not equal. Urban and rural differences in mortality and net migration also affect population ageing.

The 2014 Census thematic report on Mortality found much higher mortality rates of males than females at all ages (Department of Population 2016c). The estimated life expectancy at birth for urban males was 59.7 years and 71.0 years for females. Rural males' life expectancy was slightly higher at 60.7 years and females slightly lower at 68.8 years. In low income countries such as Myanmar, infant and child mortality are the most important determinants of total life expectancy. Infants and children in Myanmar still experience high rates of mortality due to infectious diseases, exacerbated by poor environmental conditions and a weak health system (MNPED and UNICEF 2012). Using data from the 2014 Census and past surveys and censuses, it was concluded that there was a rapid decline in infant and child mortality during the 1970s to mid-1980s, followed by stagnation and then a further decline starting in the mid-2000s (2014 Census thematic report on Mortality, Department of Population).

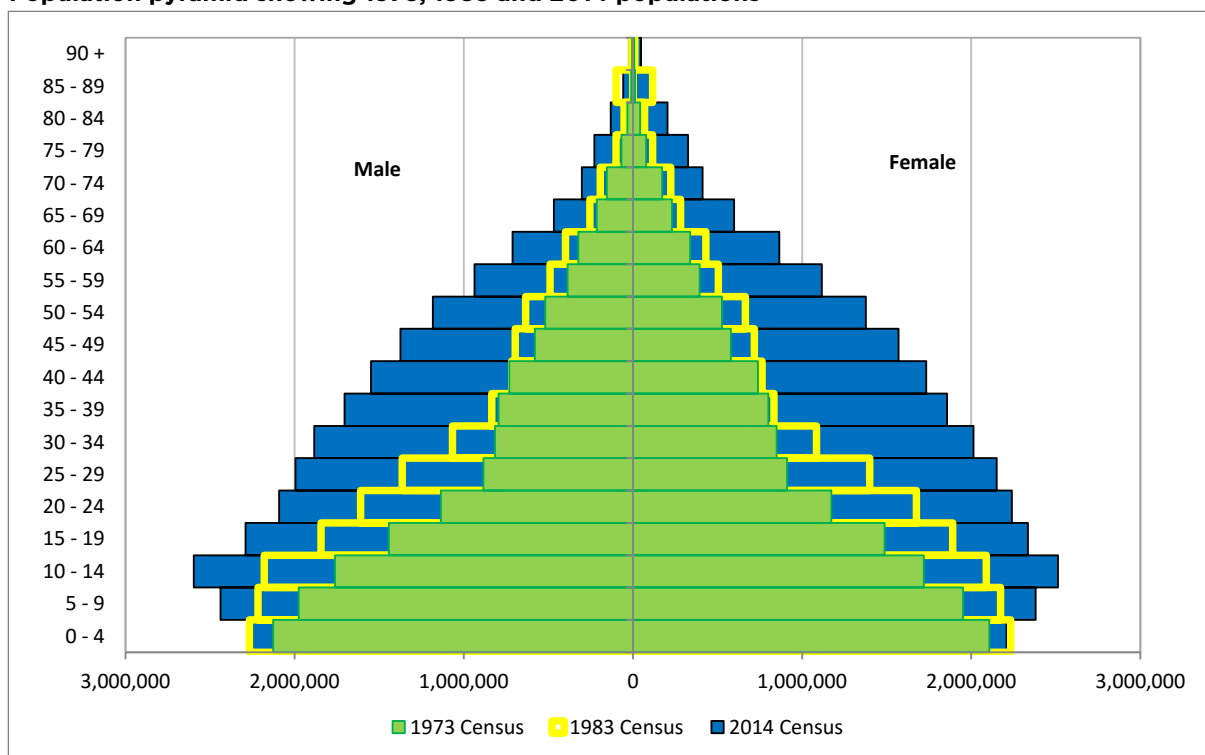
Higher infant and child mortality in rural areas is not likely to affect the proportion of the older population. However, the higher urban adult mortality, especially for urban males, could slow urban population ageing and increase the proportions of older urban widowed females. At the local and State/Region level, net migration can have a profound effect on the composition of the population and therefore the proportion of older persons. The 2014 Census thematic report on Migration and Urbanization reported that some States/Regions gained many migrants while others lost population to other States/Regions (Department of Population 2016d). For example, as reported in the 2014 Census, Yangon had an additional 246 migrants per 1,000 people while Chin lost 168 migrants per 1,000 people. In addition, in the 2014 Census households reported a total of 2 million former household members living abroad; an estimate which, for several reasons, is considered an undercount. A large proportion of international emigrants come from Districts and Townships along international borders and most moved for the first time when they were young adults.

3.3 Projecting the future older population

Myanmar’s population has been gradually ageing over the past forty years, driven by declines in fertility and mortality. However, in the next forty years, population ageing will be much more rapid. Figure 3.3 illustrates this, which superimposes the populations enumerated in 1973, 1983 and 2014. Both the 1973 and 1983 population pyramids have a deficit in the middle age groups, which may have been the result of high mortality in the late twentieth century or low fertility during WWII and its aftermath. This is one of the reasons the older population in 2014 is relatively small compared to the rest of the population, although much larger than the older populations enumerated in previous censuses. What is very noticeable in Figure 3.3 is the expanded width of the working-age population in 2014. It is this swelling of the population pyramid, combined with the fertility decline which is reducing the number of children born each year, that will result in rapid population ageing in the future.

Figure 3.3

Population pyramid showing 1973, 1983 and 2014 populations



Projections of the future population of Myanmar have been made based on the 2014 Census thematic report on Population Projections (Department of Population 2017a). They show the total population growing at an increasingly slower rate, but the older population accelerating quickly (Table 3.5). By 2050, Myanmar is projected to have a population of 65.0 million. Although the total population will be growing at less than 1 per cent a year between 2015 and 2050, the population aged 60 and over will be growing at an annual rate of 3 per cent or more until 2030-35 and then decelerate. Between 2045 and 2050, the older population will still be growing at 1.76 per cent. The population in the oldest ages, above 80 years, will increase even faster, at about 5 per cent or more between 2025-30 and 2035-2040. Note

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that the population projections are based on the total population, including an estimate of the size of the population not enumerated in the 2014 Census. Therefore, there will be differences between the 2015 population totals in Table 3.5 and the 2014 Census figures used elsewhere in the report.

Table 3.5

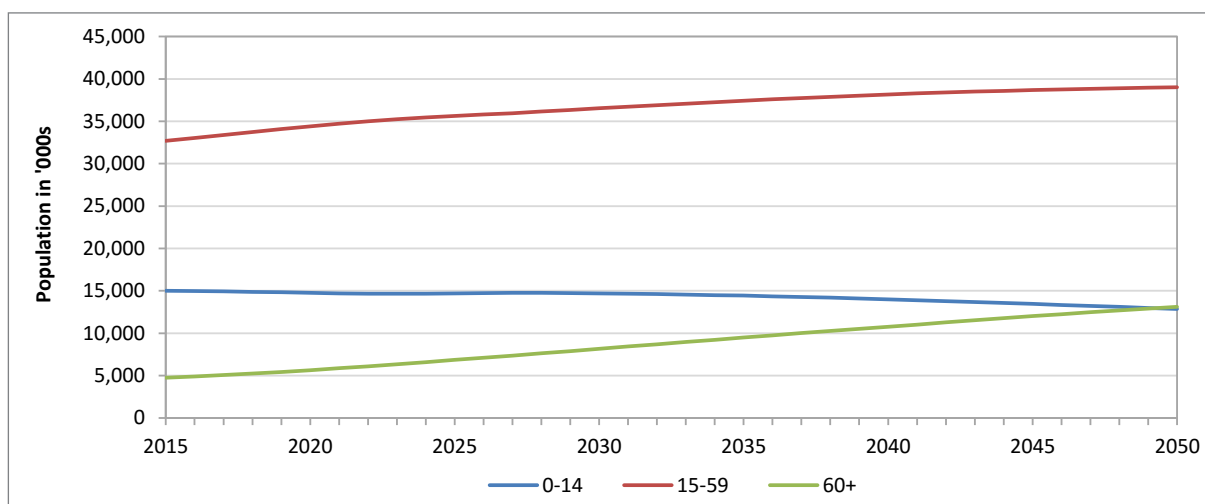
Projected growth of the total and older population, 2015-2050, medium variant

Year	Number of persons ('000s)			Percentage			Average annual growth rate		
	Total population	60+	80+	Total population	60+	80+	Total population	60+	80+
2015	52,451	4,750	557	100	9.1	1.1			
2020	54,818	5,649	576	100	10.3	1.1	0.88	3.47	0.67
2025	57,178	6,848	639	100	12.0	1.1	0.84	3.85	2.08
2030	59,399	8,160	832	100	13.7	1.4	0.76	3.51	5.28
2035	61,343	9,490	1,143	100	15.5	1.9	0.64	3.02	6.35
2040	62,932	10,771	1,527	100	17.1	2.4	0.51	2.53	5.79
2045	64,147	12,010	1,956	100	18.7	3.0	0.38	2.18	4.95
2050	64,984	13,113	2,373	100	20.2	3.7	0.26	1.76	3.87
2015-2035							0.78	3.46	3.59
2015-2050							0.61	2.90	4.14

Figure 3.4 shows the absolute number of children, prime working-age adults and older people between 2015 and 2050. The number of children stays fairly constant until it starts to decline visibly from 2035. The number of people in the prime working ages continues to increase but at a slower rate. The growth in the prime working ages will result in more older people than children by 2050.

Figure 3.4

Projected numbers of people in functional age groups, 2015-2050, medium variant



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Table 3.6 shows how the indicators of population ageing will change over time, and how the urban and rural populations will differ. It is based on assumptions about the fertility, mortality and net migration rates for urban and rural populations. While the urban population was somewhat older than the rural population in 2014, continued fertility declines in rural areas are projected to reverse this in the future.

In 2050, the proportion of the older population in urban areas is projected to be 18.7 per cent and 21.0 per cent in rural areas. The index of ageing (number of older people per 100 children) will increase substantially, resulting in slightly more older people than children in urban and rural areas by 2050. The number of children supported per 100 adults in the prime working ages will decline but the number of older people per prime working-age adults will increase, resulting in an overall increase in the total dependency ratio. In 2050, 100 prime working-age adults will be supporting 57.7 dependents in urban areas and 71.7 dependents in rural areas. The number of prime working-age adults per older person (the potential support ratio) will decline from 7.2 to 3.4 in urban areas and from 6.8 to 2.8 in rural areas. The parent support ratio (the population aged 85 and over to 100 adults aged 50-64) also increases but remains at a fairly low level of 8.9 in urban areas and 10.4 in rural areas.

Table 3.6

Projected indicators of population ageing by urban and rural areas, 2015-2050, medium variant

	Union			Urban			Rural		
	2015	2035	2050	2015	2035	2050	2015	2035	2050
Numbers in '000s									
Total*	52,451	61,343	64,984	15,364	19,736	22,541	37,087	41,606	42,444
0-14	15,008	14,433	12,861	3,669	4,139	4,038	11,340	10,293	8,823
15-59	32,693	37,421	39,012	10,263	12,668	14,291	22,428	24,749	24,721
60+	4,750	9,490	13,113	1,432	2,928	4,212	3,319	6,563	8,899
Percentage									
0-14	28.6	23.5	19.8	23.9	21.0	17.9	30.6	24.7	20.8
15-59	62.3	61.0	60.0	66.8	64.2	63.4	60.5	59.5	58.2
60+	9.1	15.5	20.2	9.3	14.8	18.7	8.9	15.8	21.0
Indicators of population ageing									
Index of ageing	31.6	65.8	102.0	39.0	70.7	104.3	29.3	63.8	100.9
Dependency ratios									
Total	60.4	63.9	66.6	49.7	55.8	57.7	65.4	68.1	71.7
Child	45.9	38.6	33.0	35.7	32.7	28.3	50.6	41.6	35.7
Older age	14.5	25.4	33.6	14.0	23.1	29.5	14.8	26.5	36.0
Support ratios									
Potential	6.9	3.9	3.0	7.2	4.3	3.4	6.8	3.8	2.8
Parent	3.1	4.5	9.8	3.3	5.0	8.9	3.0	4.3	10.4
Median age**	26.8	31.8	35.8	28.2	33.1	36.1	26.1	31.1	35.6

*Totals from projections may not match the summations due to rounding errors.

** Calculated from five-year age groups.

3.3.1 Limitations of projections

Population projections are only estimates based on a set of assumptions that may or may not eventuate. The assumptions used in the projections cited in this chapter were taken from the medium variant. These are assumptions that fall between the two extremes of very rapid and very slow changes in fertility and mortality. Specifically, the assumptions underlying the projections are that:

- Fertility will decline steadily from a total fertility rate of 2.5 in 2015, to 1.8 in 2050 at a rate of 0.1 child every five years.
- Urban fertility, which is already very low, will fall more slowly than rural fertility.
- Life expectancy at birth will increase from 69.33 during 2014-2015 to 78.23 in 2049-2050, more rapidly over the first ten years and then by one year every five years.
- Life expectancy at birth for men will increase faster than life expectancy for women, narrowing the gender gap.
- Urban and rural life expectancies will converge until they are almost identical in 2050.
- The annual number of net international migrants will decline by half between 2015 and 2050.
- Age-specific net migration to urban and rural areas within the country is assumed to remain at current levels.

For a detailed account of the assumptions see the 2014 Census thematic report on Population Projections (Department of Population 2017a).

All, some or none of these scenarios may come true and the future is unlikely to be exactly as projected. Lacking access to jobs in the formal sector, rural areas may remain predominantly agricultural and fertility may not decline any further. Greater gender equality may lead to a more supportive environment for women to combine work and family, raising or at least halting the decline in urban fertility. Economic development and stronger health systems could lower mortality at all ages, but it is equally possible that there will be little improvement; life expectancy will improve more slowly and the high rates of male mortality will continue. Net international migration is sensitive to official relations between countries and changes in the relative differences in income. The increase of the urban population is influenced by fertility rates, the prosperity of rural areas and the supply of housing and jobs in urban areas. More dire scenarios could include a pandemic with high mortality, affecting, as pandemics often do, healthy middle-aged adults and frail older people.

Different assumptions will affect the rate of population ageing but will not change the fact that the country will continue to experience an increase in the size and relative proportion of the older population nor the importance for the Myanmar Government and civil society to plan to support the older population of today and of the future.

3.4 Myanmar's population ageing compared to other ASEAN countries

Compared to other ASEAN countries, Myanmar remains a relatively young population, with a moderately slow rate of population ageing. Table 3.7 compares the 2014 population ageing indicators presented earlier in this chapter with the estimated values based on the United Nations Population Division's World Population Prospects of 2015 (UN DESA 2015a). Although the methods by which these estimates were derived are not strictly comparable, the broad trends are accurate. Myanmar is younger than Singapore, Thailand, Viet Nam and Malaysia, all of which have higher GDP per capita and lower fertility. Myanmar sits as the oldest population of the group of lower income countries.

Table 3.7

Indicators of population ageing for ASEAN countries compared to Myanmar, circa 2015

Country	% of total population aged 60 and over	Index of ageing	Older age dependency ratio	Potential support ratio	Median age
Singapore	17.8	114.8	26.8	3.7	40.0
Thailand	15.8	89.2	23.7	4.2	38.0
Viet Nam	10.3	44.6	15.4	6.5	30.4
Malaysia	9.2	37.5	13.8	7.2	28.5
Myanmar	8.9	31.1	14.2	7.0	27.1
Indonesia	8.2	29.7	12.8	7.8	28.4
Brunei Darussalam	7.8	33.7	11.3	8.8	30.6
Philippines	7.3	22.8	12.0	8.4	24.2
Timor-Leste	7.2	16.9	14.3	7.0	18.5
Cambodia	6.8	21.4	11.0	9.1	23.9
Lao PDR	6.0	17.2	10.1	9.9	21.9

Source: 2014 Myanmar Census; data of other ASEAN countries are from the medium variant population projections (UN DESA 2015a).

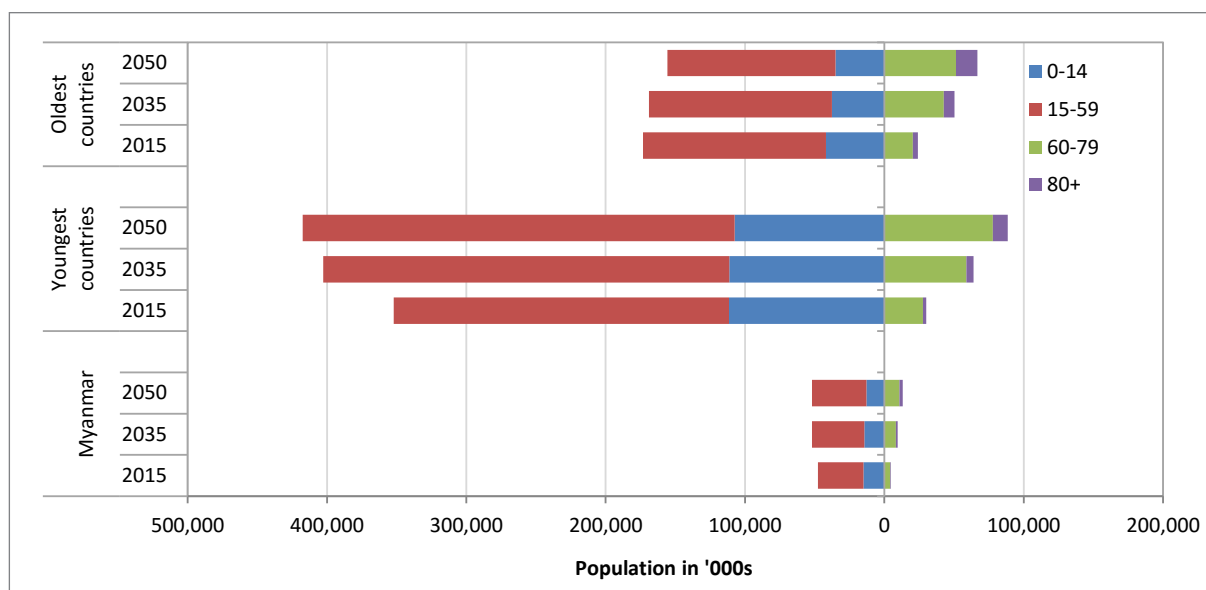
Figure 3.5 displays what may happen to the populations of these countries in 2035 and 2050. The countries have been grouped according to whether they were older or younger than Myanmar based on the proportion of the population aged 60 and over in Table 3.7. These estimates in Figure 3.5 are very sensitive to the projection assumptions which anticipate a convergence of fertility and mortality rates between countries over time. In Myanmar and the other countries, the number of children stays the same or declines over time. The number of prime working-age people increases in the 'youngest' countries and declines in the 'oldest' while increasing slightly in Myanmar. The older population, including those over the age of 80, continues to increase in Myanmar and the other countries. The population aged 60-79 grows faster in the youngest country group and the population over 80 years grows most rapidly in the oldest country group. These changes reflect the later onset of fertility decline in the youngest countries. Table 3.8 compares the projected indicators of population ageing for ASEAN countries in 2050 to the projected population for Myanmar from the 2014 Census analysis. In three countries, older people are expected to comprise more than 30 per cent of the total population, and the older age dependency ratio to exceed 50, meaning that every two persons in the prime working-age population will have at least one older person to support. Myanmar will maintain its position in the middle of the ASEAN countries, ageing less rapidly than the oldest countries and more rapidly than the other countries.

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See Appendix 1, Table 3 for the projected populations by functional age group for the ASEAN countries from the World Population Prospects, 2015.

Figure 3.5

Projected population by functional age groups for Myanmar and other ASEAN countries, 2015, 2035 and 2050



Note: 'Oldest countries' are Singapore, Thailand, Viet Nam and Malaysia. 'Youngest countries' are Indonesia, Brunei Darussalam, the Philippines, Timor-Leste, Cambodia and Lao PDR. These countries are grouped according to whether they are older or younger than Myanmar.

Table 3.8

Projected indicators of population ageing in 2050 for Myanmar and other ASEAN countries

Country	Total population in '000s	% 60+	% 80+	Index of ageing	Dependency ratios			Potential support ratio
					Total	Child	Older age population	
Singapore	6,682	40.4	13.8	366.7	105.8	22.7	83.1	1.2
Thailand	62,452	37.1	9.9	292.0	99.1	25.3	73.8	1.4
Brunei Darussalam	546	31.0	6.2	208.6	84.5	27.4	57.1	1.8
Viet Nam	112,784	27.9	6.2	161.7	82.2	31.4	50.8	2.0
Malaysia	40,725	23.6	3.6	139.6	67.9	28.3	39.5	2.5
Myanmar	64,984	20.2	3.7	102.0	66.6	33.0	33.6	3.0
Indonesia	322,236	19.2	2.3	96.0	64.5	32.9	31.6	3.2
Cambodia	22,547	17.6	2.6	81.1	64.7	35.7	29.0	3.4
Lao PDR	10,172	14.6	1.6	67.9	56.8	33.9	23.0	4.4
Philippines	148,260	14.0	1.6	59.1	60.6	38.1	22.5	4.4
Timor-Leste	2,162	8.0	0.9	24.6	68.6	55.1	13.6	7.4

3.5 Summary

Myanmar's population has aged between 1973 and 2014. While the total population increased at an annual rate of 1.4 per cent, the population aged 60 and over increased annually by 2.4 per cent. The median age of the 2014 enumerated population was 27.1 years. Indicators of population ageing show that people in the prime working ages have a higher burden of looking after older people, but this has been compensated for by a decreased ratio of children aged 0-14 to 100 working-age adults.

Within the older population, the oldest age group, those over 80 years old, has been growing much faster than those aged 60-79 years. With the increase in the oldest age group, there has also been an increase in the proportion of older women. This is the result of the longer life expectancy of women compared to men.

If the ASEAN countries are ranked by the degree of population ageing, Myanmar is in the middle. It is much younger than richer countries such as Singapore, Malaysia, Viet Nam, and Thailand, that had an earlier and more rapid fertility decline. It is slightly older than the other ASEAN countries which still have high fertility.

Population projections prepared based on the 2014 Census suggest that in 2050 Myanmar may have a population structure that looks like Singapore today, with equal numbers of older people and children and approximately 20 per cent of the population aged 60 and over. Myanmar's gradual fertility decline means that population ageing will occur more slowly than it has in other countries in the region.

In 2014, the urban population was slightly older than the rural population. This is the result of a more rapid decline in urban fertility, offset by net migration to urban areas by young people of working age. The urban population is projected to become younger than the rural population in the future, based on assumptions of a decline in rural fertility.

Chapter 4. Social characteristics of older persons

This chapter describes the social and demographic characteristics of the older population and, where relevant, compares them to younger age groups. The purpose is to understand the current composition of the older population, what it looked like in the past and what it might look like in the future. Section 4.1 looks at the proportion of older people living in urban and rural areas. In Myanmar, living in an urban area affects many aspects of life, including access to different forms of employment, more education opportunities, and better public infrastructure such as electricity and roads. Section 4.1 also documents the extent to which older people have moved residence over their lifetime and particularly in their older years.

A spouse and adult children are important sources of support and comfort in old age. Section 4.2 explores older people's marital status and, for females, the number of living children.

The ability to read and write and the experience of going to school provide lifelong benefits. Older adults who have attended secondary school should be better able to manage their economic affairs and acquire and act on information about services and healthy behaviours than their less educated peers. Section 4.3 examines the proportion of older people who are literate and their level of educational attainment.

The social characteristics of older people cannot be fully understood without an appreciation of the social and economic changes that have occurred in their lifetime. Table 4.1 shows when the currently older population was born and the years in which they had their twelfth and twentieth birthdays, corresponding roughly to schooling and starting life as an adult. The table also shows how old they were during key events in Myanmar's history: the Japanese occupation during WWII followed by independence from the United Kingdom in 1948. The youngest of the older population in 2014 would have finished their schooling in the mid-1960s; the oldest people would have gone to school (or been the age when they could have gone to school), in the colonial era of the 1930s. Virtually everyone aged 60 and over in 2014 spent most or all of their adult life after independence. The older population enumerated thirty years earlier in the 1983 census were born at the turn of the century up to the beginning of the 1920s. They spent most of their working adult life under British rule; the younger cohorts in 1983 would have been in their young middle ages during WWII.

Chapter 4. Social characteristics of older persons

Table 4.1

Birth cohorts of the older population in 2014 and 1983, by timing of significant ages and historical events

Age group	Birth years	Aged 12	Aged 20	Age in 1948
Age in 2014				
60-64	1950-54	1962-66	1970-74	
65-69	1945-49	1957-61	1965-69	Up to 3
70-74	1940-44	1952-56	1960-64	4-8
75-79	1935-39	1947-51	1955-59	9-13
80-84	1930-34	1942-46	1950-54	14-18
85-89	1925-29	1937-41	1945-49	19-23
90+	1924 and earlier	1936 and earlier	1944 and earlier	24 and older
Age in 1983				
60-64	1919-23	1931-35	1939-43	25-29
65-69	1914-18	1926-30	1934-38	30-34
70-74	1909-13	1921-25	1929-33	35-39
75-79	1904-08	1916-20	1924-28	40-44
80-84	1899-1903	1911-15	1919-23	45-49
85-89	1894-98	1906-10	1914-18	50-54
90+	1893 and earlier	1905 and earlier	1913 and earlier	55 and older

4.1 Place of residence and residential mobility

4.1.1 Urban - rural distribution of the older population

Myanmar remains a predominantly rural society, but it is gradually becoming more urban. In 1983, 24.8 per cent of the total population was enumerated in urban areas; in 2014, 29.6 per cent of the population was urban (Table 4.2). The percentage of older people living in urban areas increased slightly more than the total population, from 24.1 per cent in 1983 to 30.5 per cent in 2014. Men aged 70-79 had the largest shift towards urban living, increasing from only 21.7 per cent in 1983 to 29.0 per cent in 2014 (or 7.3 percentage points).

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Table 4.2

Percentage of the population living in urban areas by functional age group by sex by age groups within the older population, 1983 and 2014 censuses

Functional age group/Sex	1983		2014	
	Total population	% urban	Total population	% urban
Both sexes	34,124,908	24.8	50,279,900	29.6
0-14	13,159,645	22.9	14,399,569	24.9
15-59	18,794,731	26.2	31,405,923	31.6
60+	2,170,532	24.1	4,474,408	30.5
Male	16,939,593	24.9	24,228,714	29.4
0-14	6,663,105	23.1	7,296,904	25.2
15-59	9,257,232	26.4	15,010,470	31.4
60+	1,019,256	22.7	1,921,340	29.3
Female	17,185,315	24.7	26,051,186	29.8
0-14	6,496,540	22.8	7,102,665	24.6
15-59	9,537,499	26.0	16,395,453	31.8
60+	1,151,276	25.3	2,553,068	31.4
Within the older population				
Both sexes				
60-69	1,365,815	24.1	2,641,338	30.7
70-79	631,031	23.7	1,266,468	29.9
80+	173,686	25.0	566,602	30.9
Male				
60-69	652,904	23.2	1,178,658	29.4
70-79	291,693	21.7	529,994	29.0
80+	74,659	22.1	212,688	29.1
Female				
60-69	712,911	25.0	1,462,680	31.7
70-79	339,338	25.3	736,474	30.5
80+	99,027	27.2	353,914	32.0

Another feature of the urbanization of Myanmar's older population is that older females aged 60 and over were slightly more likely to be living in urban areas than older males in both 1983 and 2014. In 2014, the percentage in urban areas was higher for older females than older males in each broad older age group.

The increasing number of older people living in urban areas means that urban areas have aged faster than rural areas. This can be seen in Figures 4.1 and 4.2, based on the numbers in Appendix 1, Table 2. Figure 4.1 shows that children make up a smaller proportion while the prime working age and older adult populations make up a larger proportion of the 2014 population compared to the 1983 population and that the change is more pronounced in urban areas. Figure 4.2 shows that the population of urban females is older than the population of urban males and that the differences in age distribution between the sexes are greater in 2014 than in 1983.

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Figure 4.1

Percentage of population by functional age groups, urban and rural areas, 1983 and 2014 censuses

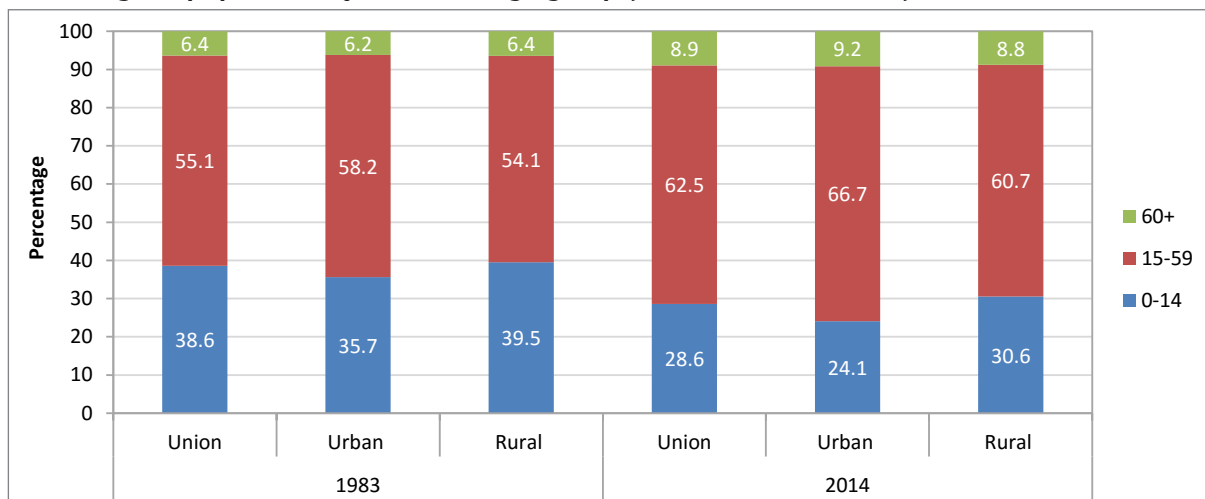
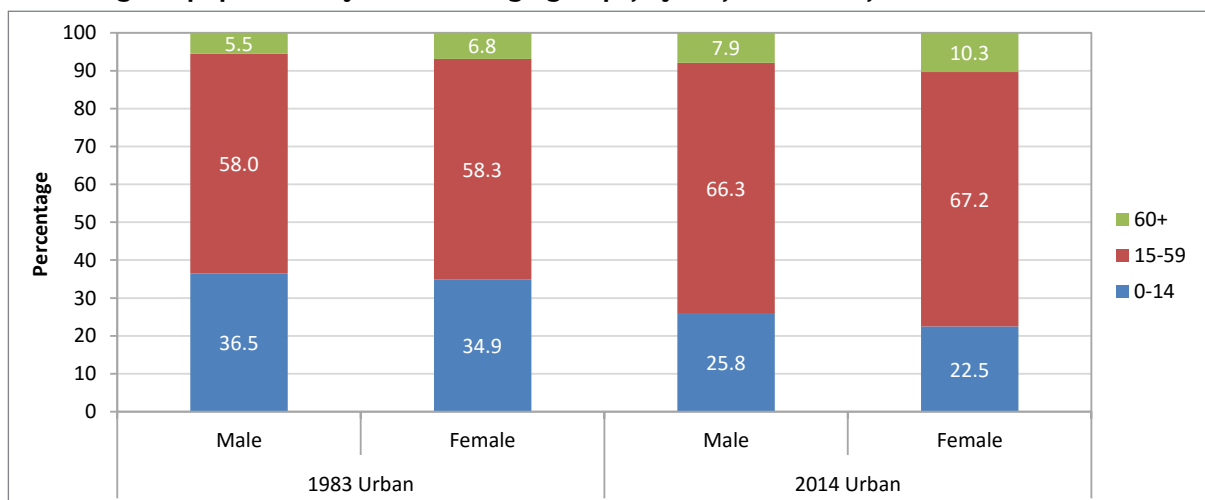


Figure 4.2

Percentage of population by functional age groups, by sex, urban area, 1983 and 2014 censuses



The balance in favour of older women living in urban areas could be caused by differences in life expectancy between urban males and females, which will be discussed in Chapter 7, and differences in movement to urban areas.

4.1.2 Older people's migration within Myanmar

Three quarters of older people are living in the same Township in which they were born. However, Table 4.3 shows the large difference between people in urban and rural areas. While almost all rural older people (88.8 per cent) are living in the same Township in which they were born, this is true for less than half of urban older people. Most urban residents who had moved from their birthplace came from another urban area in a different Township. This means that most of the urban older people (82.7 per cent) were born in an urban area. Appendix 1, Table 4, provides more detailed information on birthplace and usual residence by age group and sex. The rates of moving are slightly higher among older men than among

Chapter 4. Social characteristics of older persons

older women. Also, the proportions living in a different Township from that of their birthplace are stable from the youngest to the oldest age groups, indicating that these moves took place earlier in life.

Table 4.3

Older persons living in conventional households by area of usual residence and birthplace, 2014
Census

Area of usual residence	Population	Living in Township of birth	Area of birthplace		Total
			Urban area	Rural area	
Union	4,322,081	75.8	12.8	11.4	100
Urban	1,308,073	45.8	36.9	17.3	100
Rural	3,014,008	88.8	2.3	8.9	100

Note: Totals exclude persons whose area or Township of birth or usual place of residence could not be classified.

Nevertheless, some older people do move to other Townships. Worldwide, young adults are the most mobile group. In Myanmar, the rate of recent migration (persons moving to another Township in the five years prior to the Census as a percentage of all persons) is highest among those aged 15-29. However, in some countries there is a small increase in migration rates in the older age groups (Bernard *et al* 2014). Given the preference of older people to live with other family members and the extent of migration by young adults between urban areas and from rural to urban areas, it is possible that older people are moving to be with their adult children. Furthermore, it is likely that these moves are triggered by life events such as retirement, widowhood and increasing disability (Litwak and Longino 1987).

Figure 4.3 illustrates the recent migration rates for people from age 40, to show the effects of increasing age. In Myanmar, it appears that migration becomes less common as people age, reaching the lowest point between ages 75 and 84. However, the rates do plateau between ages 55 and 64, suggesting that there may be some residential moves as people reach those ages. From age 85, the migration rate increases slightly. At all ages, migration within States/Regions is more common than migration across State/Region borders. These rates underestimate the true extent of people moving because the 2014 Census only recorded moves between Townships.

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Figure 4.3

Percentage of population 40 years old and over living in conventional households by age and movement within and between State/Region, 2014 Census

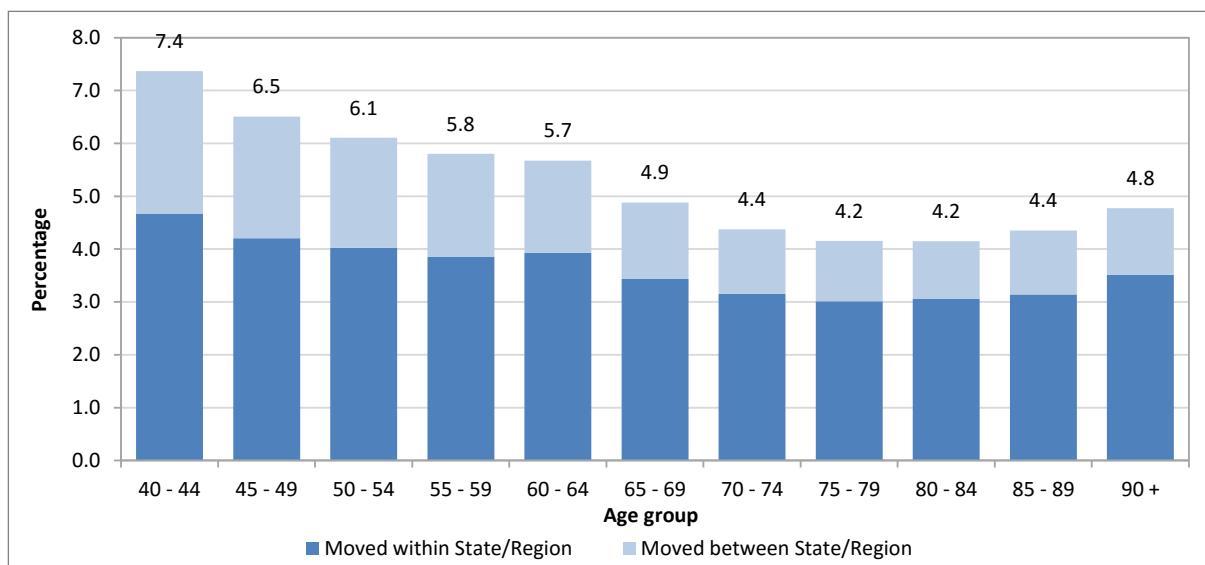
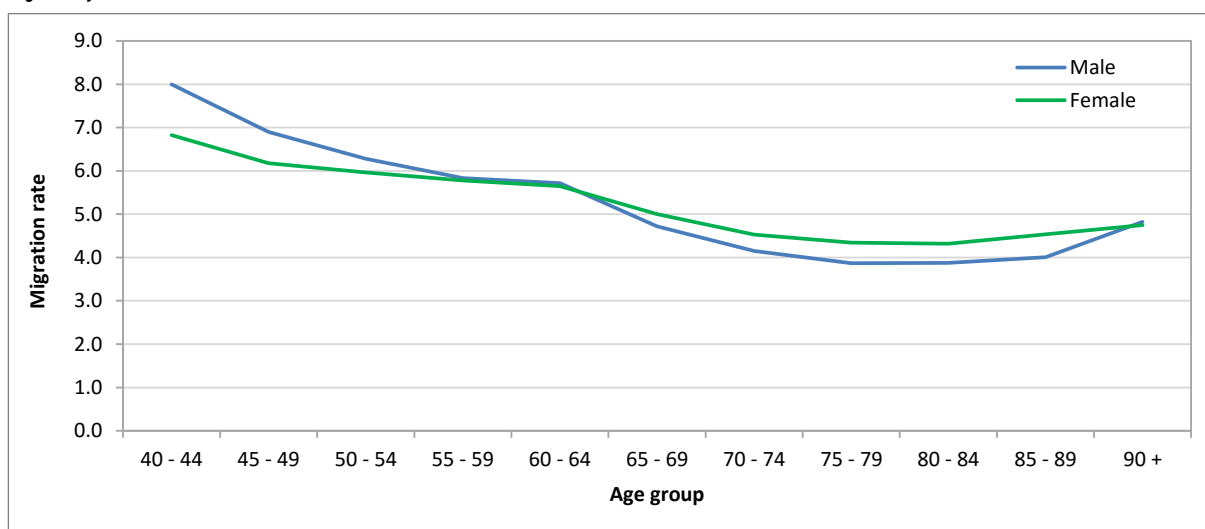


Figure 4.4 illustrates the difference in recent migration between males and females. Males in the older working ages from 40 to 54 years have higher recent migration rates. These rates crossover female rates between the ages of 55-64. From ages 65-69 females have higher migration rates, possibly because of residential moves following widowhood. The numbers from which Figures 4.3 and 4.4 are derived can be found in Appendix 1, Table 5.

Figure 4.4

Recent migration rates for population 40 years and over living in conventional households, by age by sex, 2014 Census



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4.2 Marital status and numbers of living children

The marital status of older males and females differs enormously. Although overall 56.9 per cent of older persons were married at the time of the 2014 Census, 73.9 per cent of older males and only 44.1 per cent of older females were married. As Table 4.4 shows, older females are more likely to be without a spouse, because of widowhood, divorce or separation or because they have never married (47.3 per cent). The percentages in Table 4.4 can be derived from Appendix 1, Table 6.

A small proportion of older men and women are listed as 'renounced'. This is equivalent to becoming a monk or a nun. Separate analysis revealed that over 95 per cent of older males and females reporting as renounced lived in an institution. This is discussed in more detail in Chapter 5 which explores living arrangements.

Table 4.4

Percentage of population 15 years old and over by marital status by broad age groups by sex, 2014 Census

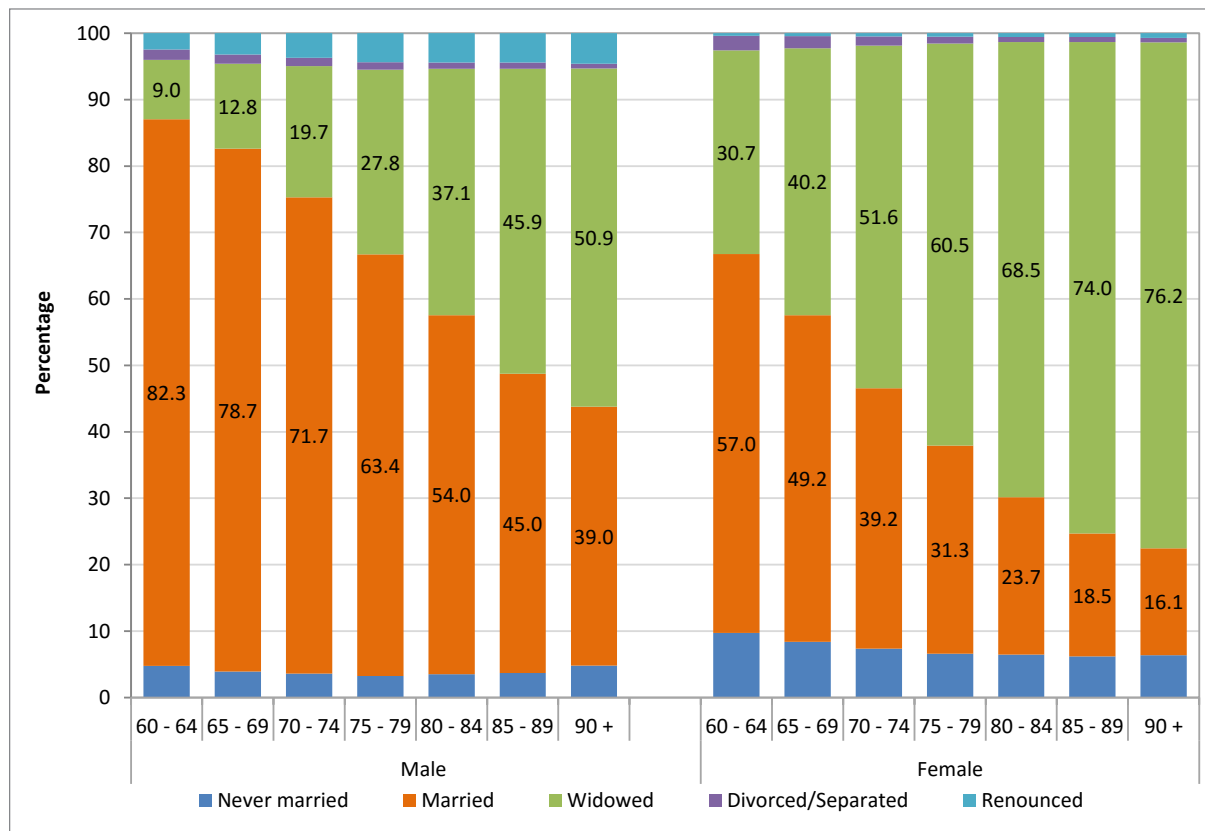
Sex/Age group	Total population	Percentage				
		Never married	Married	Widowed/ Divorced/ Separated	Renounced	Total
Both sexes						
15-29	13,103,192	62.8	34.8	1.3	1.1	100
30-59	18,302,731	13.9	77.8	7.6	0.8	100
60 and over	4,474,408	6.4	56.9	35.0	1.7	100
Male						
15-29	6,377,988	67.4	29.7	0.8	2.1	100
30-59	8,632,482	12.6	82.0	4.0	1.4	100
60 and over	1,921,340	4.1	73.9	18.7	3.3	100
Female						
15-29	6,725,204	58.5	39.6	1.7	0.2	100
30-59	9,670,249	15.0	74.0	10.8	0.2	100
60 and over	2,553,068	8.2	44.1	47.3	0.5	100

As men and women age, they are more likely to be widowed. However, as shown in Figure 4.5, at each age group, older women are more likely to be widowed and less likely to be married than older men. This difference is due to the higher life expectancy of females; the practice of women marrying men several years older; and the greater likelihood of widowed men remarrying (which cannot be derived from the Census data). Also notable in Figure 4.5 is the constant proportion of 'renounced' men from the age of 75 and the modest higher proportions of women who have never married.

Chapter 4. Social characteristics of older persons

Figure 4.5

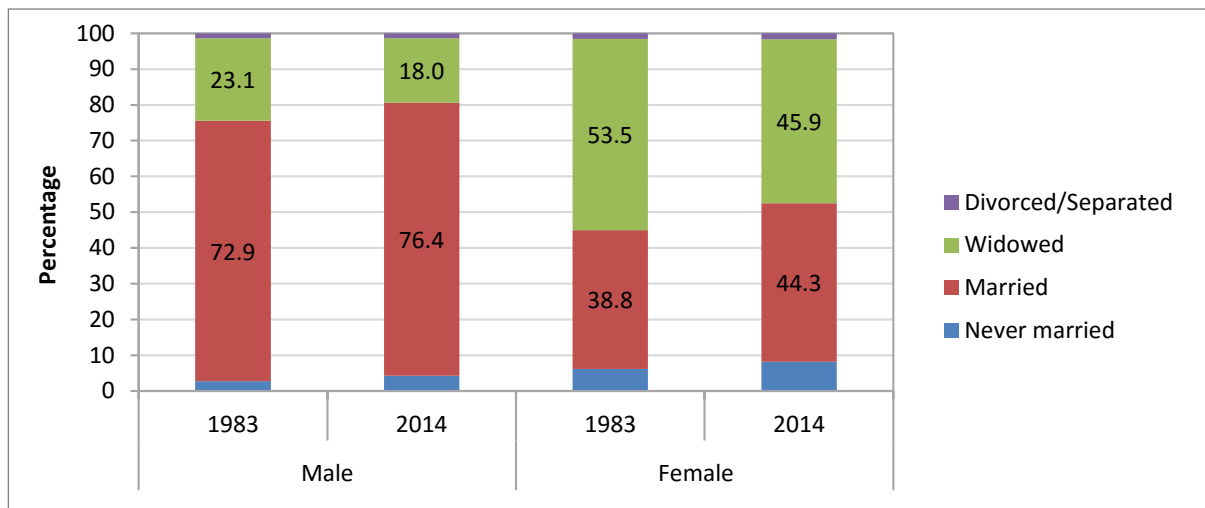
Percentage of older population by five-year age group by sex, 2014 Census



Over time, the proportion of older people who are married has increased, as can be seen in Figure 4.6. The percentage of older men and women who were married in 1983 was lower than the percentage in 2014. This is probably the result of increasing life expectancy and may have been the effects of years of conflict in the mid-twentieth century which would have had a large impact on the lives of people who were aged 60 and over in 1983.

Figure 4.6

Percentage of older population by marital status by sex, 1983 and 2014 censuses



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Another striking demographic change in Myanmar is that many urban females are postponing marriage and many may never marry. As Table 4.5 shows, over 6 per cent of older women aged 75 and over have never married. The percentage is a little lower in rural areas than in urban areas.

Table 4.5

Percentage of women never married aged 40 and over by five-year age group, urban and rural areas, 2014 Census

Age group	Union		Urban		Rural	
	Total	% never married	Total	% never married	Total	% never married
40-44	1,734,131	14.1	551,383	18.7	1,182,748	11.9
45-49	1,571,107	12.9	504,233	17.1	1,066,874	10.9
50-54	1,376,891	11.9	436,853	15.9	940,038	10.1
55-59	1,115,958	10.8	356,567	14.1	759,391	9.2
60-64	864,805	9.7	270,869	12.1	593,936	8.6
65-69	597,875	8.4	193,431	9.7	404,444	7.7
70-74	411,491	7.4	125,050	8.4	286,441	6.9
75-79	324,983	6.6	99,772	7.9	225,211	6.0
80-84	204,701	6.5	62,628	8.3	142,073	5.7
85+	149,213	6.3	50,758	8.0	98,455	5.4
60 and over	2,553,068	8.2	802,508	9.9	1,750,560	7.4

4.2.1 Childlessness among older women

The 2014 Census asked all ever-married women living in conventional households how many children they had ever had. To ensure a complete count, women were asked separately for the number of children currently living in the same household, living elsewhere, and no longer alive (see Figure 4.7 for the questions used in the 2014 Census). Women who had never married and those who were 'renounced' were not asked these questions. In this analysis both groups of women are assumed to have had no children. These questions were included in the Census to assist in estimating recent fertility and child mortality. Here they are used to determine the level of support available to older women. The Census did not ask men about their children.

Figure 4.7

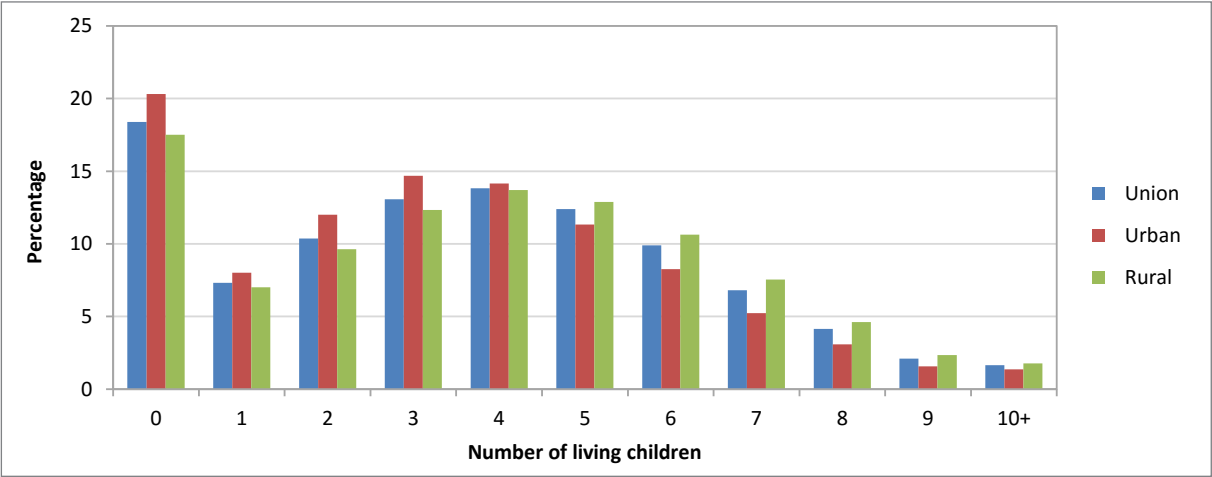
Questions 25 to 31 of the Questionnaire, 2014 Census

EVER MARRIED WOMEN (AGED 15 AND ABOVE)											
Number of children ever born alive						Particulars of last live birth					
25. Number of children ever born alive (If no children, write "00")		26. How many of those children are living in this household?		27. How many of those children are living elsewhere (not in this household)?		28. How many of those children are no longer alive (dead)?		29. Date of last live birth		30. Sex of last live birth	31. Is the child still alive?
Male	Female	Male	Female	Male	Female	Male	Female	Month	Year	Male Female	Yes No
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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Figure 4.8 shows that the majority of older women (64.0 per cent of all women aged 60 and over) have three or more living children, and 18 per cent of older women have no living children at all. (The numbers from which Figure 4.8 were derived are available in Appendix 1, Table 7).

Figure 4.8
Percentage of women aged 60 and over by number of living children, urban and rural areas, 2014
Census



More details about the availability of children to support older people are shown at Table 4.6 which displays the number of living children by women’s age and urban or rural residence. The table shows that nearly one third of older women are not living with a biological child. Urban women are slightly more likely than rural women to have no living children (20.3 per cent against 17.5 per cent), but rural women are more likely to have no biological children living with them in the same household than urban women (33.4 per cent against 31.5 per cent). The percentage of older women with no living children increases with age because they are more likely to survive their children as they grow older. That is, the older the children are, the more likely they are to have died.

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Table 4.6

Percentage of older women's children living and living in the same household by broad age group, urban and rural areas, 2014 Census

Age group/ Area	Total population	Number of living children (%)					Number of children living in the same household				
		None	1	2	3 or more	Total	None	1	2	3 or more	Total
Aged 60 and over											
Union	2,515,552	18.4	7.3	10.4	63.9	100	32.8	37.5	16.9	12.8	100
Urban	783,343	20.3	8.0	12.0	59.7	100	31.5	33.7	18.8	16.0	100
Rural	1,732,209	17.5	7.0	9.6	65.8	100	33.4	39.1	16.0	11.4	100
Aged 60-69											
Union	1,441,723	16.7	7.2	11.1	64.9	100	31.5	34.8	18.6	15.1	100
Urban	454,155	19.2	8.1	13.5	59.2	100	31.0	31.8	19.9	17.3	100
Rural	987,568	15.6	6.8	10.0	67.6	100	31.7	36.2	17.9	14.1	100
Aged 70-79											
Union	725,595	18.8	7.0	9.2	65.0	100	33.6	40.3	15.5	10.6	100
Urban	219,077	19.8	7.4	9.9	62.9	100	31.0	35.6	18.2	15.2	100
Rural	506,518	18.3	6.9	8.9	65.9	100	34.8	42.3	14.4	8.5	100
Aged 80 and over											
Union	348,234	24.4	8.3	9.9	57.4	100	36.7	42.5	12.8	8.0	100
Urban	110,111	25.8	8.9	9.8	55.5	100	34.7	37.7	15.5	12.1	100
Rural	238,123	23.7	8.0	9.9	58.4	100	37.6	44.7	11.6	6.1	100

As will be illustrated in Chapter 5 on living arrangements, being childless does not necessarily mean that older women live alone. In addition to their husband, women may have step-children or adopted children, or co-reside with other family members such as siblings, aunts and uncles, and nieces and nephews. However, the rate of childlessness does show that not all older people have children available to support them in their old age and the rising proportions of women never married, especially in urban areas, means that in the future there will be many more older women with no living children to support them.

4.3 Literacy and educational attainment

Literacy gives people the ability to function in the modern world. Literate people can read newspapers, write letters, and navigate government and financial services. Formal education, especially completion of primary school and higher levels, gives people opportunities to gain employment in government and private businesses. Parents, and especially mothers, who have been educated provide better care to their children and encourage them to complete school. Children who are healthy and educated are more likely to be able to give a higher level of support to their parents. Furthermore, studies from many countries have found that education is the one of the strongest predictors of longevity (Jasilionis and Shkolnikov 2016). However, the older population, and particularly older women, did not have the same educational opportunities as children and youth of today.

It should be noted that information on education attainment was collected for all older persons in the 2014 Census (including those in institutions) but the question on literacy was

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only asked of people in conventional households. The results presented in this chapter on these two topics refer to different population bases. For more information on education and literacy, and the numbers from which the tables and figures in this chapter are derived, see the 2014 Census thematic report on Education (Department of Population 2017b).

For everyone over the age of five, the 2014 Census recorded if they could read and write in any language. Table 4.7 shows that about one in five (20.9 per cent) of the older population enumerated in conventional households were reported as illiterate in the 2014 Census, compared with less than one in ten of the population in the prime working ages. Older women have an illiteracy rate which is two and a half times higher than older men. The difference is much smaller between males and females in the prime working ages.

Educational attainment was recorded by asking everyone the level of education they had completed. In Table 4.7, a person who had completed at least one year of a level, such as the first year of primary school, is included in that level. Nearly one-third (32.0 per cent) of older people reported having no formal education compared to a little more than 10 per cent (11.3 per cent) of adults in the prime working ages. As seen with literacy, older women have much lower levels of education, with 37.7 per cent reporting never having attended school compared to 24.6 per cent of older men. A lack of education is less common among the youngest of the older population and it rises with age to 45.1 per cent of people aged 80 and over. There is a large difference between male and female educational attainment at all ages within the older population.

As might be expected, completing at least one year of primary and lower secondary level is much lower among older people than younger age groups. Older women who did go to school were more likely not to progress beyond primary school than older men. From lower secondary school to university, older females lag far behind their male counterparts. There is a considerably smaller gender gap in educational attainment among the prime working-age population.

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Table 4.7

Population aged 15-59 and 60 and over by age by sex by literacy status by level of education, 2014
Census

Literacy status and level of education	Population aged 15-59		Population aged 60 and over				
	Number	%	Number	%	Percentage aged		
					60-69	70-79	80 and over
Literacy							
Both sexes							
Literate	26,945,166	91.1	3,433,653	79.1	82.9	75.6	68.9
Illiterate	2,648,006	8.9	907,806	20.9	17.1	24.4	31.1
Total	29,593,172	100	4,341,459	100	100	100	100
Male							
Literate	12,787,378	93.1	1,621,534	88.8	90.3	87.6	83.5
Illiterate	940,557	6.9	204,373	11.2	9.7	12.4	16.5
Total	13,727,935	100	1,825,907	100	100	100	100
Female							
Literate	14,157,788	89.2	1,812,119	72.0	77.2	67.3	60.5
Illiterate	1,707,449	10.8	703,433	28.0	22.8	32.7	39.5
Total	15,865,237	100	2,515,552	100	100	100	100
Level of education							
Both sexes							
No education	3,547,072	11.3	1,433,709	32.0	26.5	37.7	45.1
Primary	12,942,670	41.2	1,919,423	42.9	45.6	39.2	38.2
Lower secondary	7,024,548	22.4	484,709	10.8	12.1	9.9	6.8
Upper secondary	4,287,322	13.7	283,472	6.3	7.7	5.2	2.5
University	3,314,123	10.6	162,430	3.6	4.5	2.7	1.7
Other	290,188	0.9	190,665	4.3	3.5	5.2	5.6
Total	31,405,923	100	4,474,408	100	100	100	100
Male							
No education	1,492,325	9.9	472,385	24.6	21.0	28.6	34.5
Primary	5,786,483	38.5	793,519	41.3	42.5	38.9	40.4
Lower secondary	3,867,858	25.8	286,474	14.9	16.1	14.1	10.3
Upper secondary	2,265,642	15.1	175,507	9.1	10.5	8.0	4.4
University	1,422,511	9.5	98,198	5.1	5.8	4.3	3.1
Other	175,651	1.2	95,257	5.0	4.1	6.1	7.2
Total	15,010,470	100	1,921,340	100	100	100	100
Female							
No education	2,054,747	12.5	961,324	37.7	31.0	44.3	51.4
Primary	7,156,187	43.6	1,125,904	44.1	48.2	39.5	36.9
Lower secondary	3,156,690	19.3	198,235	7.8	8.9	6.9	4.8
Upper secondary	2,021,680	12.3	107,965	4.2	5.4	3.3	1.3
University	1,891,612	11.5	64,232	2.5	3.4	1.5	0.9
Other	114,537	0.7	95,408	3.7	3.1	4.5	4.7
Total	16,395,453	100	2,553,068	100	100	100	100

Note: The population base for literacy is persons in conventional households; the population base for educational attainment is for all persons, both in conventional households and institutions.

Chapter 4. Social characteristics of older persons

Not surprisingly, there are considerable differences in the levels of literacy and educational attainment between people living in urban and rural areas. Table 4.8 shows that the percentage of illiterate older persons in rural areas was noticeably higher (at 24.9 per cent) than among the urban older population (11.8 per cent).

Table 4.8

Population aged 15-59 and 60 and over by literacy status by level of education, urban and rural areas, 2014 Census

Literacy status and level of education	Population aged 15-59						Population aged 60 and over					
	Total		Urban		Rural		Total		Urban		Rural	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Literacy												
Literate	26,945,166	91.1	8,744,146	96.2	18,201,020	88.8	3,433,653	79.1	1,157,955	88.2	2,275,698	75.1
Illiterate	2,648,006	8.9	342,833	3.8	2,305,173	11.2	907,806	20.9	154,400	11.8	753,406	24.9
Total	29,593,172	100	9,086,979	100	20,506,193	100	4,341,459	100	1,312,355	100	3,029,104	100
Level of education												
No education	3,547,072	11.3	460,591	4.6	3,086,481	14.4	1,433,709	32.0	235,644	17.3	1,198,065	38.5
Primary	12,942,670	41.2	2,512,009	25.3	10,430,661	48.6	1,919,423	42.9	498,724	36.5	1,420,699	45.7
Lower secondary	7,024,548	22.4	2,539,985	25.6	4,484,563	20.9	484,709	10.8	266,723	19.5	217,986	7.0
Upper secondary	4,287,322	13.7	2,207,025	22.2	2,080,297	9.7	283,472	6.3	202,702	14.9	80,770	2.6
University	3,314,123	10.6	2,175,496	21.9	1,138,627	5.3	162,430	3.6	138,069	10.1	24,361	0.8
Other	290,188	0.9	34,452	0.3	255,736	1.2	190,665	4.3	22,727	1.7	167,938	5.4
Total	31,405,923	100	9,929,558	100	21,476,365	100	4,474,408	100	1,364,589	100	3,109,819	100

This urban-rural differential also exists for educational attainment. There is more than twice the proportion of persons aged 60 and over in rural areas with no education compared with their urban counterparts (38.5 per cent and 17.3 per cent respectively). As expected, due to better access to education and the prospects of better job opportunities when younger, noticeably higher proportions of urban older people had attained lower secondary (19.5 per cent), upper secondary (14.9 per cent) and university (10.1 per cent) education, than their rural counterparts (for whom the respective proportions were 7.0 per cent, 2.6 per cent and 0.8 per cent, respectively). The educational advantage of living in urban areas is still present. In fact, the literacy rates and educational attainment of the older population in urban areas in 2014 are similar to the levels present among rural adults in the prime working ages.

The increase in literacy among older persons from 1983 to 2014 is noteworthy (Table 4.9). Older men's literacy rates improved by 11 percentage points from 78.0 per cent to 88.8 per cent, whilst the rates for older women increased by 20 percentage points, from 51.6 to 72.0 per cent.

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Table 4.9

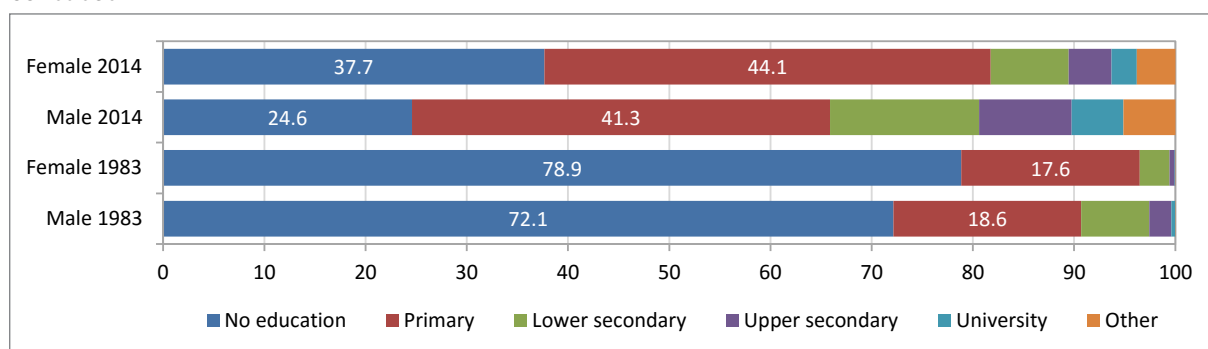
Number and percentage of literate population aged 60 and over living in conventional households by sex, 1983 and 2014 censuses

Sex	1983			2014		
	Total	Number literate	% literate	Total	Number literate	% literate
Both sexes	2,170,532	1,388,281	64.0	4,341,459	3,433,653	79.1
Male	1,019,256	794,702	78.0	1,825,907	1,621,534	88.8
Female	1,151,276	593,579	51.6	2,515,552	1,812,119	72.0

Improvements in the level of educational attainment since 1983 were also reported in the 2014 Census. Figure 4.9 shows that the percentage of both older males and females with no schooling decreased substantially between 1983 and 2014 and the percentage of older people who had attained primary, lower secondary, upper secondary and university levels increased. However, the gender gap widened, with older men having a much greater educational advantage over older women in 2014 compared to 1983. See Appendix 1, Table 8 for the numbers of persons reporting having completed at least one grade at each educational level.

Figure 4.9

Percentage of population 60 years old and over by educational attainment by sex, 1983 and 2014 censuses



4.4 Summary

Most of the population aged 60 and over enumerated in the Census were born between 1925 and 1950. The oldest were in their youth during WWII and the Japanese occupation. Their access to education and choices about marriage and childbearing were influenced by the times through which they lived.

Myanmar is a predominantly rural country and only 29.6 per cent of the population live in urban areas. Older men are slightly less likely to be living in urban areas (29.3 per cent) than older women (31.4 per cent). Overall, urban populations are a little older than rural populations, largely because the higher fertility rate in rural areas results in a higher proportion of children.

Three quarters of older people are living in the Township where they were born. However, more than half of older people in urban areas were born elsewhere, although most of these people were born in another urban area. Older persons have the lowest recent migration

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rates of any age, however, there is a small increase in recent migration at the oldest ages suggesting that some older people are moving to other Townships to join family as they become frail.

Most older males are married (73.9 per cent) whereas only 44.1 per cent of older women are married. The proportion of older women who are widowed rises rapidly with age, from 30.7 per cent at ages 60-64 to 60.5 per cent at ages 75-79 to 74.0 per cent among those aged 85-89. This pattern is the result of a number of factors including women marrying men some years older than themselves; and poor life expectancy of males and much higher life expectancy of females. In the past 20 to 30 years there has been a trend of increasing proportions of urban women never marrying. Among urban women aged 60-64, 12.1 per cent were reported to have never married. Among urban women 20 years younger, i.e., aged 40-44, 18.7 per cent have never married.

Never marrying, early widowhood and the mortality of children have contributed to 18.4 per cent of older women having no living biological children. Among women aged 80 and over, 24.4 per cent have no living children. The rates of childlessness are higher in urban areas.

The older population and especially older women, have lower levels of education and literacy than prime working-age adults. This is a result of the lack of opportunities they had when they were young. People who are reported as not being able to read or write comprise 20.9 per cent of the older population: 11.2 per cent of males and 28.0 per cent of females. At every broad age group within the older population, females are more than twice as likely as males to be illiterate. Similarly, 24.6 per cent of older males and 37.7 per cent of older women never attended school. Among today's youth, literacy and at least some school attendance is nearly universal and this will give them lifelong advantages they will be able to take into old age.

The place of residence, marital status and numbers of children, and the ability to function in the modern world through literacy are important factors which influence the living arrangements and household composition of the older population, which is the subject of the next chapter.

Chapter 5. Living arrangements of the older population

This chapter explores the living arrangements of older persons. It first considers whether older people are living in institutions. The rest of the chapter focuses on the vast majority of older people living in conventional households. The chapter also includes a brief examination of the characteristics of adults who live with their parents.

Myanmar society places a high value on the reciprocal duties of parents and children. There is a very strong belief in the importance of looking after older members of the family (Department of Population 2012; Teerawichitchainan, Knodel and Pothisiri 2015). This chapter and Chapter 6 will show that these values are widely practiced; most older people live with other relatives and particularly their children, and older members and other family members benefit from this arrangement.

The literature on population ageing in Asia expresses concern that fertility decline, urbanization and economic growth will erode the cultural values of children's duty to their parents and lead to more older people living alone without support from their children (Teerawichitchainan, Knodel and Pothisiri 2015). These large-scale changes will be discussed in Chapter 9. This chapter focuses on the current pattern of living arrangements for older people and their adult children. Particular attention is directed towards older people who have never married, are widowed, childless or living alone. They are currently likely to be the most vulnerable people and their proportion within the older population can be expected to increase in the future.

5.1 Older people living in institutions

One of the striking features of Myanmar's older population is that nearly all live in conventional households. It is very rare for an older person to live in an institution.

The most common types of institutions and other collective quarters enumerated in the 2014 Census were related to work, such as work camps and barracks. As Table 5.1 shows, young males aged 15-29 have the highest rates of living in institutions. Only 3.0 per cent of people aged 60 and over were enumerated in places other than conventional households. Older males were more likely to be living in an institution on Census Night than older females (5.0 per cent compared to 1.5 per cent).

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Table 5.1

Number and percentage of people enumerated in an institution by sex by functional age group, 2014 Census

Age group	Both sexes			Male			Female		
	Total population	In institutions		Total population	In institutions		Total population	In institutions	
		Number	%		Number	%		Number	%
Total	50,279,900	2,349,901	4.7	24,228,714	1,674,136	6.9	26,051,186	675,765	2.6
0-14	14,399,569	404,201	2.8	7,296,904	296,168	4.1	7,102,665	108,033	1.5
15-29	13,103,192	1,085,333	8.3	6,377,988	753,691	11.8	6,725,204	331,642	4.9
30-59	18,302,731	727,418	4.0	8,632,482	528,844	6.1	9,670,249	198,574	2.1
60+	4,474,408	132,949	3.0	1,921,340	95,433	5.0	2,553,068	37,516	1.5
60-64	1,576,845	43,513	2.8	712,040	31,290	4.4	864,805	12,223	1.4
65-69	1,064,493	31,665	3.0	466,618	22,931	4.9	597,875	8,734	1.5
70-74	713,170	21,495	3.0	301,679	15,492	5.1	411,491	6,003	1.5
75-79	553,298	17,967	3.2	228,315	13,091	5.7	324,983	4,876	1.5
80-84	335,576	10,809	3.2	130,875	7,630	5.8	204,701	3,179	1.6
85-89	158,069	5,072	3.2	56,979	3,422	6.0	101,090	1,650	1.6
90+	72,957	2,428	3.3	24,834	1,577	6.4	48,123	851	1.8

Table 5.1 should not be interpreted as older people being institutionalized and living in long-term care facilities. For many Buddhists, old age is the time to devote themselves to religious practices. As noted in Table 4.4, a small proportion of older people renounce their former life. Over 95 per cent of these older people were recorded as living in an institution, presumably a religious order. If the number of older men and women who were reported as 'renounced' are subtracted from the total number of the older population in institutions, the older population in institutions is reduced to 32,221 men (1.7 per cent of the male population over age 60) and 25,733 women (1.0 per cent of the female population over age 60).

These figures from the Census are broadly consistent with the official statistics from the Department of Social Welfare that state that there are not many registered homes for the older population; only 78 in 2015, which housed 3,402 older residents (HelpAge International 2015).

5.2 Household composition

The living arrangements of the vast majority of older people who live in conventional households are derived from the list of all household residents collected by the Census. Like most censuses, the 2014 Census asked people about their relationship to the head of the household. The head of household was defined as 'the member who makes most of the household decisions and is acknowledged by all members' (Department of Population 2014). Enumerators were instructed that every household should have a household head who was present on Census Night. In the main questionnaire each individual was recorded as either the head of household or related to the head. Examples of a relationship to a head are spouse, son or daughter, son- or daughter in-law, and non-relative. The coding of the relationship to the head of household made it possible to infer some information about the

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composition of the household but some complex household forms may not be clear. For example, if an older man was a head of household and he lived with people classified as his son and his granddaughter, the granddaughter is probably the son's daughter, but could be the daughter of another son or daughter not living in the household.

Based on information on the relationship to the head of household, a classification of household composition has been developed to capture the issues most relevant for older people. The purpose is to distinguish between those older people who live alone from those who live with a child and those who have other living arrangements with relatives or non-relatives but without a child. The classification has eight categories: living alone; living only with a spouse; living with a child with or without grandchildren and other residents; living with grandchildren without the adult children, although other family members may live in the house; living with a sibling but not a child; living with other relatives but not a child, grandchild or sibling; living with non-relatives only; and a final category of household arrangements that could not be classified. For example, an older woman living with a grandchild and a sibling would be classified as living with a grandchild without someone from the parental generation.

The proportions of older people living in each of these household types are shown at Table 5.2. The majority of older people, about three-quarters, live with a child with or without other residents. Men are more likely to live with their children than women (76.6 per cent compared to 70.9 per cent). Living alone is rare, although more frequent for women than men. Twelve per cent of older men live alone with a spouse compared to only less than 1 per cent of older women. Other household forms are less common.

Table 5.2

Percentage of household heads aged 60 and over living in conventional households by household composition by sex, 2014 Census

Household composition		Both sexes	Male	Female
Total persons	Number	2,530,908	1,549,758	981,150
	Per cent	100	100	100
Living alone		7.9	3.9	14.2
Living only with spouse		7.3	11.5	0.7
Living with a child and anyone else		74.4	76.6	70.9
Living with a grandchild and no children but may live with others		5.7	4.6	7.4
Living with a sibling, no children, no grandchildren but may live with others		2.3	1.3	3.8
Living with other relatives, no children, no grandchildren, and no sibling		1.7	1.3	2.3
Living with non-relatives only		0.5	0.5	0.6
Unclassifiable		0.2	0.2	0.1

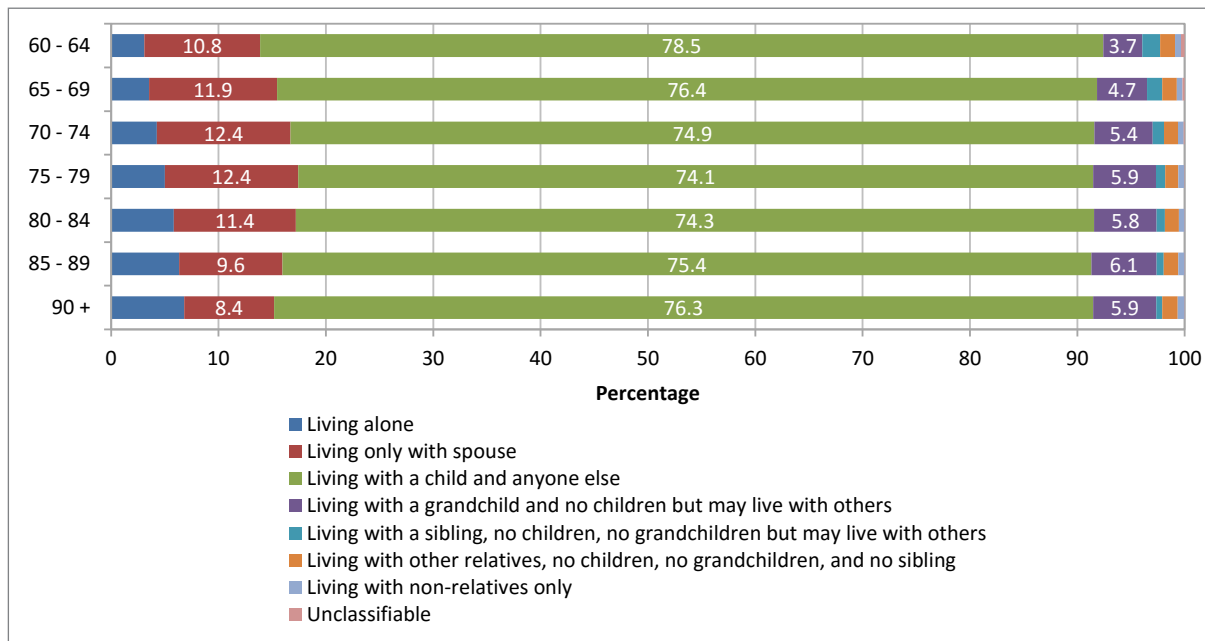
The relative proportion of different household forms is remarkably stable as people age. As seen at Figure 5.1, the percentage of older people living with their children remains almost constant from ages 60-64 to 90 and over. The numbers from which Table 5.2 and Figure 5.1 were derived can be found in Appendix 1, Table 9.

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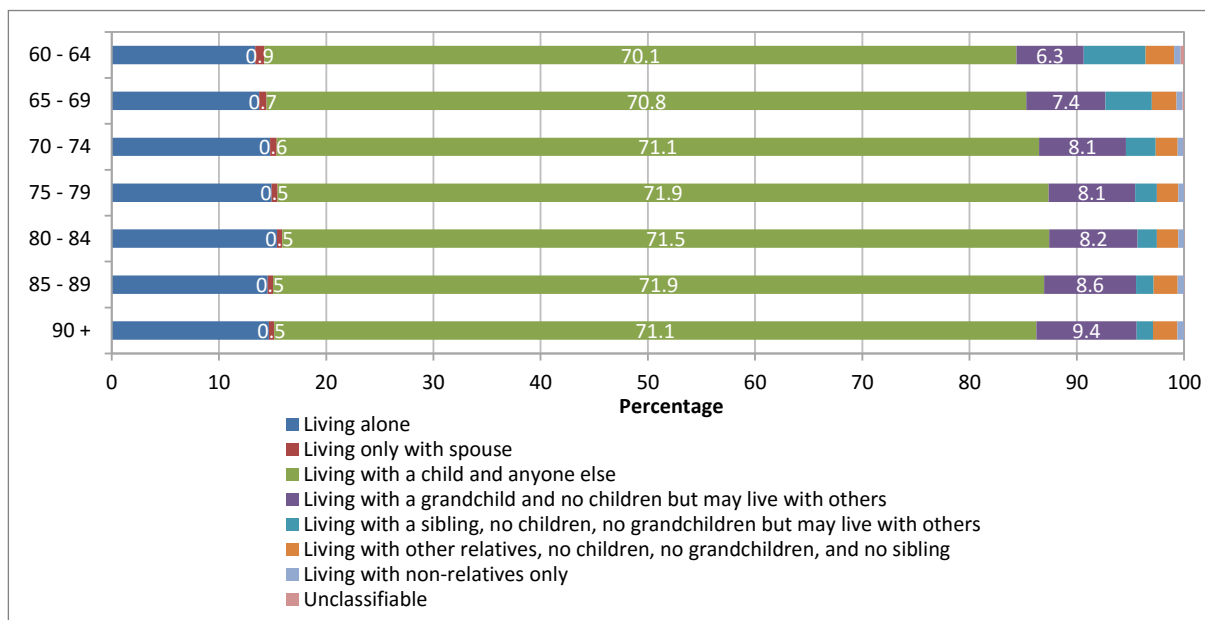
Figure 5.1

Percentage of household heads aged 60 and over by household composition by sex by age, 2014
Census

a) Male



b) Female



Older people in urban and rural areas have similar household compositions (Table 5.3). Living with a child is the most common arrangement in both areas. Living with a grandchild without the child is slightly more common in rural areas, and living with a sibling is more common in urban areas. The local social and economic environment is a major factor influencing household composition. These patterns and their possible causes are discussed in more detail in Chapter 8 on State/Region variations.

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Table 5.3

Percentage of household heads aged 60 and over by household composition, urban and rural areas, 2014 Census

Household composition		Union	Urban	Rural
Total persons	Number	2,530,908	767,067	1,763,841
	Per cent	100	100	100
Living alone		7.9	5.8	8.8
Living only with spouse		7.3	5.6	8.0
Living with a child and anyone else		74.4	76.9	73.3
Living with a grandchild and no children but may live with others		5.7	5.0	6.0
Living with a sibling, no children, no grandchildren but may live with others		2.3	3.1	1.9
Living with other relatives, no children, no grandchildren, and no sibling		1.7	2.3	1.5
Living with non-relatives only		0.5	1.0	0.3
Unclassifiable		0.2	0.2	0.2

Marital status influences household composition but, as Table 5.4 shows, not as strongly as might be expected. Only 12.9 per cent of older people who are married live alone with their spouse. Even those older people reported to be single (meaning never married as defined by the Census) live with household members described as their child/adopted child.

Table 5.4

Percentage of household heads aged 60 and over by household composition by marital status, 2014 Census

Household composition	Total	Single	Married	Widowed	Divorced/ Separated	Renounced
Total (=100%)	2,530,908	112,933	1,410,975	968,653	37,929	418
Living alone	7.9	29.9	1.8	13.3	29.7	35.2
Living only with spouse	7.3	0.3	12.9	0.3	0.3	3.1
Living with a child and anyone else	74.4	7.2	78.1	77.6	55.8	45.5
Living with a grandchild and no children but may live with others	5.7	8.5	4.9	6.6	6.1	4.5
Living with a sibling, no children, no grandchildren but may live with others	2.3	37.8	0.4	0.7	4.1	3.6
Living with other relatives, no children, no grandchildren, and no sibling	1.7	14.0	1.2	1.0	2.4	4.5
Living with non-relatives only	0.5	1.8	0.5	0.4	1.2	3.3
Unclassifiable	0.2	0.6	0.2	0.1	0.4	0.2

As discussed in Chapter 4, the current cohort of older women had most of their children prior to the fertility decline in the 1970s and 1980s. This means that most older women have a living child. However, 18.4 per cent of older women reported that they had no living biological children. Table 5.5 shows that, unsurprisingly, women with more living children are more likely to live with at least one child; 66.3 per cent of women with only one living child lives with a child (or a son-/daughter-in-law or adopted child) whereas 81.5 per cent of women with three or more living children live with a child. Among ever-married women, 42.5 per cent who reported they had no living biological children were living with a person described as their child. This could include women living with the widowed spouse of a deceased child, an adopted child or a step-child.

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Table 5.5 also shows the difference in urban and rural women's living arrangements. Rural women are nearly twice as likely to be living alone or only with their husband than urban women, regardless of how many living children they have. This may be the result of more housing availability in rural areas, permitting older persons to live near but not with their adult children. Unfortunately, information on the proximity to adult children is not available from the Census.

Table 5.5

Percentage of ever-married women aged 60 and over who are household heads by household composition by number of living children, urban and rural areas, 2014 Census*

Area/Household Composition		Number of living children				
		Total	None	One	Two	Three or more
Union						
Total	Number	899,352	57,392	67,920	99,637	674,403
	Per cent	100	100	100	100	100
Living alone		12.7	32.3	17.7	15.3	10.1
Living only with spouse		0.7	1.4	0.9	0.8	0.7
Living with a child and anyone else		76.8	42.5	66.3	71.9	81.5
Living with a grandchild and no children but may live with others		7.3	11.5	10.0	8.9	6.5
Living with a sibling, no children, no grandchildren but may live with others		0.8	4.6	2.1	1.1	0.3
Living with other relatives, no children, no grandchildren and no sibling		1.1	5.9	1.9	1.2	0.6
Living with non-relatives only		0.4	1.5	0.8	0.6	0.3
Unclassifiable		0.1	0.3	0.2	0.2	0.1
Urban						
Total	Number	295,038	19,041	24,484	37,661	213,852
	Per cent	100	100	100	100	100
Living alone		7.7	22.4	12.3	9.2	5.6
Living only with spouse		0.7	1.3	1.0	0.8	0.6
Living with a child and anyone else		81.9	46.9	70.9	78.6	86.9
Living with a grandchild and no children but may live with others		6.3	12.5	9.0	7.3	5.3
Living with a sibling, no children, no grandchildren but may live with others		1.1	6.4	2.5	1.3	0.4
Living with other relatives, no children, no grandchildren and no sibling		1.4	7.5	2.6	1.6	0.7
Living with non-relatives only		0.8	2.7	1.5	1.1	0.5
Unclassifiable		0.1	0.2	0.2	0.1	*
Rural						
Total	Number	604,314	38,351	43,436	61,976	460,551
	Per cent	100	100	100	100	100
Living alone		15.1	37.2	20.8	19.0	12.2
Living only with spouse		0.8	1.4	0.9	0.8	0.7
Living with a child and anyone else		74.3	40.4	63.8	67.9	79.0
Living with a grandchild and no children but may live with others		7.8	11.1	10.5	9.9	7.0
Living with a sibling, no children, no grandchildren but may live with others		0.7	3.7	1.8	0.9	0.3
Living with other relatives, no children, no grandchildren and no sibling		0.9	5.1	1.5	1.0	0.5
Living with non-relatives only		0.3	0.8	0.4	0.3	0.2
Unclassifiable		0.1	0.3	0.2	0.2	0.1

* Less than 0.1 per cent.

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5.3 Children who co-reside with their parents

Even though most older people live with an adult child, not all adults live with their parents. Table 5.6 is constructed using the relationship to the head of household. Adults are considered to be living with a parent if they are reported to be: 1) the child, son- or daughter-in-law or adopted child of the head of household; or 2) the head of a household or spouse of the head of a household that contains a household member classified as the parent or parent-in-law of the head of household. This method could miss some adults living with their parents under other household arrangements, such as if the head of household was a sibling or other relative. The table shows that 15.7 per cent of adults aged 40-59 are living in the same household as their parent or parent-in-law. Considering that older women who have a living child have an average of 4.4 children, it is to be expected that not all adult children would live with their parents (see Appendix 1, Table 7).

Men and women are equally likely to be living with a parent or parent-in-law. Adults who are single or divorced/separated are much more likely to be living with the parental generation than those who are married, widowed, or renounced. Co-residence with a parent or parent-in-law is more common in urban than in rural areas but the difference is not large.

There are very large differences in the percentage of adults co-residing with parents by their education level. Adults with no education have the lowest percentage of co-residence. Adults with post-secondary school education are almost three times as likely as those with no education to be co-residing. This is probably because the parents of educated adult children and the children themselves are likely to have more resources than the parents of children with no education. These educated households may be in a better position to afford co-residence.

Table 5.6

Percentage of adults aged 40-59 in conventional households who are residing with their parents or parent-in-laws, by sex by marital status by level of education, urban and rural areas, 2014 Census

Marital status/Level of education	Union			Urban	Rural
	Both sexes	Male	Female		
Total population 40-59	10,478,171	4,779,077	5,699,094	3,212,469	7,265,702
% living with parents	15.7	15.3	16.0	19.3	14.1
Marital status					
Single	45.0	44.1	45.4	42.9	46.5
Married	11.8	12.4	11.2	14.9	10.5
Widowed	12.7	14.3	12.3	15.1	11.5
Divorced/Separated	28.3	31.7	26.4	28.9	28.0
Renounced	13.1	9.4	19.6	17.1	11.3
Level of education					
None	10.6	11.7	9.9	11.3	10.5
Primary	13.7	13.0	14.2	13.6	13.7
Lower secondary	18.1	17.2	19.3	18.9	17.4
Upper secondary	22.1	21.2	23.2	23.0	20.5
University	29.7	25.1	33.4	30.0	29.0
Other	10.1	10.0	10.3	11.4	10.0

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Table 5.7 reveals more about the dynamics of co-residence. The table contains only adults living with a parent or parent-in-law and shows the percentage living in a house where the parent is the head of household. This is a more common living arrangement than the adult child being the head of household. Among males living with a parent or parent-in-law, 62.8 per cent are classified as a member of the household. Females are even more likely to be classified as a member of a parental household (70.5 per cent). This arrangement is more common in urban than in rural areas. Married adults are the least likely to live with a parent as a household member rather than as a head of household; single, divorced/separated or renounced persons are the most likely. The more education an adult has, the more likely he or she will be classified as a member of the parental household rather than as the head of household or the spouse of the head. This reinforces the finding that co-residence in the parental household is more common among urban families. In rural areas and among households with less education, it is more common for older parents to join their children's home – or to transfer the role of head of household to the next generation.

The numbers from which Tables 5.6 and 5.7 have been derived are in Appendix 1, Table 10.

Table 5.7

Percentage of adults aged 40-59 classified as the child or daughter/son-in-law of the household head by marital status by level of education by sex, urban and rural areas, 2014 Census

Marital status/Level of education	Male			Female		
	Union	Urban	Rural	Union	Urban	Rural
Population living with a parent	731,469	270,802	460,667	913,318	347,908	565,410
% living in a household with parent as head	62.8	71.7	57.6	70.5	76.4	66.9
Marital status						
Single	92.4	95.3	90.4	95.2	95.4	95.0
Married	51.6	61.6	46.0	51.7	61.4	46.0
Widowed	70.2	79.1	66.5	71.7	76.8	68.2
Divorced/Separated	89.9	93.5	87.8	86.0	87.2	85.3
Renounced	92.3	92.5	92.1	93.0	89.1	95.3
Level of education						
None	53.4	65.2	51.7	58.6	64.5	57.7
Primary school	58.1	66.2	56.3	67.4	70.1	66.7
Lower secondary	65.9	72.6	60.5	73.4	75.9	70.7
Upper secondary	71.5	75.0	64.8	77.2	78.7	73.6
University	71.7	72.8	68.4	82.0	82.3	81.1
Other	51.4	58.0	50.6	63.6	62.8	63.7

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5.4 Summary

The custom of older people living with their adult children is firmly entrenched in Myanmar. It is rare for an older person to live in an institution other than a religious order. About three-quarters of older people living in conventional households co-reside with one or more son or daughter or son- or daughter-in-law. Older men and women living in urban and rural areas are equally likely to live with their children. Some 15 per cent of older men and women live alone or with only a spouse and this proportion decreases with age. Approximately 6 per cent of older people live with a grandchild but no child, and another 2 per cent live with a sibling.

The preference for living with younger family members is so strong that marital status has very little effect on household composition. Older people who are married and those who are widowed are equally likely to live with their children.

The parents of adults aged 40-59 can be assumed to be aged 60 and over. Among adults aged 40-59, at least 15.7 per cent live with a parent. Single adults are most likely to live with a parent as well as adults with more education than those with little or no education. The most common arrangement is for adults to live in households in which their parent is the household head. However, this arrangement is less common for rural adults and adults with lower levels of education. Housing shortages in urban areas may be another factor leading to higher rates of co-residence than in rural areas.

The influence of household composition by the wealth of households with older members will be discussed in Chapter 6.

Chapter 6. Economic conditions of the older population

This chapter reviews the economic conditions of older people in Myanmar. The first section examines their main activities as economically productive persons. It describes the proportion in the labour force, their type of economic activity and the occupations and industries in which they work. To the extent possible, the situation of the older population in 2014 is compared to their situation in 1983.

The second section considers the diversity of economic circumstances experienced by older adults: their quality of housing, access to services such as water, sanitation and electricity, and access to communication devices and transport facilities that affect their material well-being.

In the absence of government support, care by family members within and outside of the household is essential for most older people. Although it is not possible to directly measure support from family members, this chapter describes how they benefit from living with economically active adult children, building on the analysis of household composition in Chapter 5. Using a Wealth Index comprised of those measures, households with older members are compared to those without older members, controlling for the size of the household and number of employed people in the prime working ages. Despite the prevalence of older people living with their children, as shown in Chapter 5, many older people live in very disadvantaged circumstances, in poor quality housing and with relatively few amenities or assets. Those living alone are the most disadvantaged.

6.1 Main activities of the older population

The 2014 Census recorded the 'usual activity' of all people over the age of 10. Figure 6.1 illustrates the transition in usual activities from prime working age to older age. In part because of mandatory retirement, employment in government and private organizations is much less common for people aged 60 and over, compared to prime working-aged adults in other occupations. Working as an own account worker declines with age, although it is more common among older persons in their sixties than it is for prime working-aged adults. Contributing to a family business also becomes less common with age, possibly because the family business has been passed on to the next generation. Even the relative proportion of people reporting that they are involved in household work diminishes with age. In each successive age group, a larger proportion of people describe themselves as 'pensioners, retired or an older person'. More details on the main activities of the older population by sex, urban or rural location and age group can be found in Appendix 1, Tables 11 and 12.

Figure 6.1

Percentage of prime working age (15-59) persons and the older population by main activity in the past 12 months by age group, 2014 Census



Transitioning to retirement occurs in both urban and rural areas and for males and females. Table 6.1, taken from Appendix 1, Tables 11 and 12, shows that women transition out of the labour force slightly earlier than men. Those living in rural areas transition out of the labour force at older ages than those living in urban areas. Those in rural areas continue to work longer than their urban counterparts in other Asian countries as well, primarily because they lack the resources to retire earlier (World Bank 2016).

Table 6.1

Percentage of population 60 years and over who reported being retired, by sex by age group, urban and rural areas, 2014 Census

Sex/Area	60-64	65-69	70-74	75-79	80-84	85-89	90+
Male	24.3	38.2	56.2	66.3	73.3	74.7	71.7
Female	24.3	39.5	59.7	70.0	77.4	78.2	76.8
Urban	33.2	48.1	63.7	71.4	75.9	75.6	73.2
Rural	20.5	34.8	55.9	67.3	75.8	77.6	76.0

6.1.1 Unpaid work by the older population

Older people actively participate in their family and community. The 2012 Survey of Older Persons found that 79 per cent of people aged 60 and over attended community or religious ceremonies at least occasionally and 48 per cent attended community meetings at least occasionally (Knodel 2014). The same report found that 45 per cent of older men and 64 per cent of older women who lived with one or more children were doing some housework, although in the majority of cases they were not the main person responsible for the housework in the household.

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These important contributions of older people are not captured directly by the Census. The main or usual activities only capture contributing to a family business as an unpaid worker and household work. If a person was doing this work but did not consider it as his or her 'usual' activity', it would not be reported. Table 6.2 shows that the proportion of older persons contributing as a family worker is very low and declines with age. Rural older people are more likely to report that they are contributing family workers than urban older people. Only 1 per cent of males reported that their main activity was household work. Nearly 30 per cent of older females reported household work as their main activity; this proportion declines from over 40 per cent among women aged 60-64 to about 15 per cent of those aged 75-79 and less than 10 per cent among women aged 80-84.

Table 6.2

Proportion of older population and prime working aged adults whose main activity is 'contributing family worker' or 'household worker' by sex by age group, urban and rural areas, 2014 Census

Age group/ Main activity	Male			Female		
	Union	Urban	Rural	Union	Urban	Rural
Contributing family worker						
15-59	9.4	3.7	12.0	13.0	4.0	17.1
60+	2.2	1.1	2.7	4.4	1.6	5.7
60-64	2.9	1.4	3.5	6.9	2.5	8.9
65-69	2.5	1.1	3.1	5.0	1.8	6.6
70-74	1.8	0.8	2.2	3.0	1.1	3.8
75-79	1.2	0.5	1.5	1.9	0.8	2.4
80-84	1.0	0.5	1.2	1.3	0.5	1.6
85+	1.0	0.5	1.3	1.1	0.5	1.4
Household worker						
15-59	1.2	1.5	1.1	38.5	39.0	38.3
60+	1.2	1.4	1.1	29.4	31.1	28.6
60-64	1.3	1.6	1.1	43.4	44.9	42.8
65-69	1.3	1.6	1.2	35.2	36.2	34.7
70-74	1.2	1.2	1.2	22.0	24.3	20.9
75-79	1.1	1.2	1.1	14.6	17.0	13.6
80-84	0.9	1.0	0.9	8.2	10.6	7.1
85+	0.9	1.0	0.8	6.0	7.9	5.1

6.1.2 Labour force participation of the older population

People who described their main activity in the past 12 months as employers; employed by a private organization or by government; working as an own account worker (self-employed); working as a contributing family worker (unpaid); or seeking work are classified as being in the labour force.

Labour force participation declines with age. However, because of the limited coverage of pensions and other social security schemes in Myanmar, many older people continue to work. As shown in Table 6.3, 30.3 per cent of people aged 60 and over were recorded as being in the labour force in 2014. This is more than half the level of participation among those aged 15-59, recorded at 68.1 per cent. There was an even larger difference between the sexes

Chapter 6. Economic conditions of the older population

in the percentage of older people reported as being active in the labour force: less than one in five older females (17.8 per cent) compared to almost a half (46.8 per cent) of older males.

Table 6.3

Labour force participation of the population aged 15-59 and 60 and over by sex, 2014 Census

Labour force participation	Population aged 15-59						Population aged 60 and over					
	Both sexes		Male		Female		Both sexes		Male		Female	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Total population	31,405,923	100	15,010,470	100	16,395,453	100	4,474,408	100	1,921,340	100	2,553,068	100
In the labour force	21,395,550	68.1	12,927,584	86.1	8,467,966	51.6	1,354,213	30.3	899,536	46.8	454,677	17.8
Employed	20,526,532	65.4	12,413,267	82.7	8,113,265	49.5	1,346,007	30.1	893,783	46.5	452,224	17.7
Unemployed	869,018	2.8	514,317	3.4	354,701	2.2	8,206	0.2	5,753	0.3	2,453	0.1
Not in the labour force	10,010,373	31.9	2,082,886	13.9	7,927,487	48.4	3,120,195	69.7	1,021,804	53.2	2,098,391	82.2
Unemployment rate	-	4.1	-	4.0	-	4.2	-	0.6	-	0.6	-	0.5

Note: The population includes both the conventional and institutional populations.

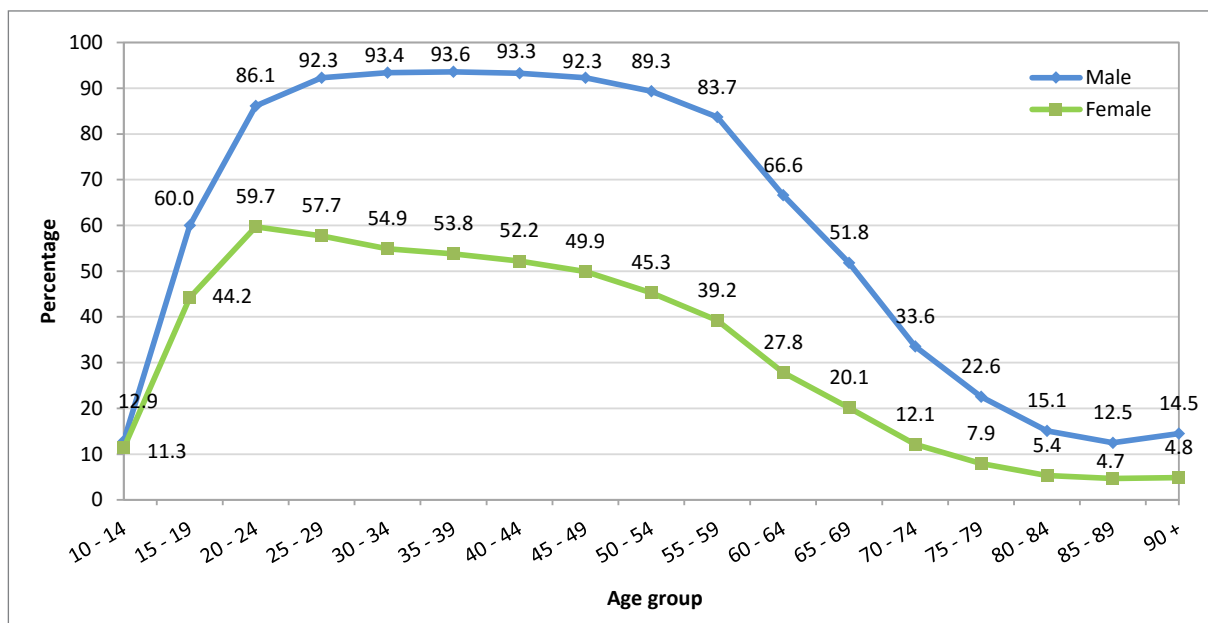
Figure 6.2 shows that men's labour force participation declines very quickly from the age of 55. Women's labour force participation begins to gradually decline from ages 20-24 and then there is a more rapid decline from ages 50-54. Among those people aged 80 and over, about 15 per cent of men and 5 per cent of women remain in the labour force. (See Table E-1a in Department of Population 2015 to derive the rates in Figure 6.2).

The labour force participation of the older population has declined since 1983. In the 1983 Census, 60.8 per cent of men aged 60 and over were economically active, compared to 46.8 per cent in 2014 (Census Division 1986). The labour force participation of older women was 29.1 per cent in 1983 and 17.8 per cent in 2014. Unfortunately, the 1983 census report did not break down the older population into smaller age groups, so it is not possible to examine if the decline in the labour force participation occurred at younger ages or only at the oldest ages.

The Census question about 'usual' activity in the 12 months prior to the Census may underestimate the labour force participation by older age groups; people may not have reported part-time and episodic or seasonal work. This is relevant because studies in other Asian countries have found that income from labour comprises the largest proportion of older people's income in countries where there is not a widespread pension scheme (World Bank 2016). The same continuing importance of labour is likely to be true in Myanmar as well. Nevertheless, the contribution from older people's own labour may be less important than the direct support from adult children. The 2012 Survey of Older Persons found that children were the main source of economic support (or other family members for older people with no children) and that this increased with age as support from older people's own labour declined (Knodel 2014).

Figure 6.2

Labour force participation rates by age by sex, 2014 Census



6.1.3 Occupations of the employed older population

The 2014 and 1983 censuses recorded the usual occupations of people living in conventional households who reported being employed in the past 12 months. In 2014, some form of agricultural work was the most common occupation for older people, reflecting that Myanmar is predominantly a rural country. The majority of employed older persons (59.8 per cent) were working in skilled agriculture-related occupations. This proportion is higher than the 41.8 per cent in the prime working ages of 15-59 who were employed in agriculture. Employed older people are more likely to be working in agriculture than younger adults in rural and urban areas. The greater proportion of older workers in agriculture is found among both men and women.

Table 6.4 reveals other interesting differences between older and other workers. Elementary occupations, which require no skill and often involve strenuous manual labour, are the second most common occupation for prime aged workers (16.3 per cent of all those who are employed) but are less common among older workers (10.6 per cent). Older workers are less likely to be machine operators, professionals, clerical support workers or in crafts or trades. In urban areas, older workers are more likely to be in services and sales than prime aged workers. As noted in the 2012 Survey of Older Persons, employees in government and some businesses are expected to retire at or soon after the age of 60 (Knodel 2014). People who work in agriculture or as own account workers are able to continue to work for as long as they are physically capable. The numbers on which Table 6.4 are based can be found in Census Report Volume 2-B on Occupation and Industry (Department of Population 2016e).

Table 6.4
Percentage of employed persons aged 15-59 and 60 and over, by occupation by sex, urban and rural areas, 2014 Census

Occupation	Total		Urban		Rural		Male		Female	
	15-59	60+	15-59	60+	15-59	60+	15-59	60+	15-59	60+
Total	19,228,355	1,317,252	5,464,885	277,266	13,763,470	1,039,986	11,482,321	872,401	7,746,034	444,851
	100	100	100	100	100	100.0	100	100	100	100
Managers	0.6	0.6	1.5	2.1	0.3	0.2	0.6	0.7	0.6	0.3
Professionals	2.5	1.1	5.2	4.0	1.4	0.3	1.1	1.2	4.5	0.7
Technicians and Associate Professionals	1.9	1.5	4.5	4.9	0.8	0.5	2.0	1.7	1.6	1.0
Clerical Support Workers	2.4	0.7	6.0	2.6	0.9	0.2	2.0	0.9	2.9	0.4
Services and Sales Workers	12.8	12.6	28.0	36.3	6.8	6.3	9.1	8.8	18.3	20.2
Skilled Agricultural Forestry and Fishery Workers	41.8	59.8	7.3	16.8	55.5	71.3	44.7	64.5	37.5	50.5
Craft and Related Trade Workers	12.1	6.3	22.1	14.0	8.1	4.3	13.0	7.0	10.8	5.1
Plant and Machine Operators and Assemblers	3.9	1.6	8.3	5.3	2.2	0.6	6.0	2.2	0.9	0.4
Elementary Occupations	16.3	10.6	11.0	8.0	18.4	11.3	17.2	11.0	15.0	9.9
Other	0.8	0.1	1.2	0.2	0.6	0.1	1.3	0.1	0.0	0.0
Not Stated	5.0	5.1	4.9	5.8	5.0	4.9	3.0	1.9	7.8	11.5

Note: Includes population in conventional households only.

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Although the 2014 Census used different occupational categories than the 1983 census, some comparisons can be made. Table 6.5 shows that the main occupation profile of the older population in 2014 was broadly similar to that in the earlier census. The large majority of employed older males and females were engaged in agriculture and related occupations in 1983 (farmers, foresters, fishermen and hunters) (77.7 per cent of males and 67.4 per cent of females). As in 2014, in 1983 older people who were employed were more likely to be working in agriculture and less likely to be in professional, administrative, or clerical occupations or working as labourers. This pattern is also reflected among prime working-aged adults. Employment in agriculture declined from 62.6 per cent to 41.8 per cent between 1983 and 2014. This indicates a diversification of the economy and suggests that if it continues older people of the future will be even less likely to work in agriculture. It also suggests that in the future, when people are employed in non-agricultural occupations or formal employment, older people may find it difficult to continue to be in the labour force unless actions are taken to accommodate older workers.

Table 6.5

Percentage of employed population aged 15-59 and 60 and over by occupation by sex, 1983 census

Occupation		15-59 year olds			60 years and over		
		Both sexes	Male	Female	Both sexes	Male	Female
Total persons	Number	10,600,307	6,823,878	3,776,429	954,016	619,258	334,758
	Per cent	100	100	100	100	100	100
Professional, technical and related workers		2.6	2.3	3.2	1.3	1.7	0.7
Administrative and managerial workers		0.4	0.6	0.1	0.2	0.3	0.1
Clerical and related workers		2.5	3.0	1.8	0.1	0.2	0.0
Sales workers		9.4	6.0	15.4	12.5	7.9	21.1
Service workers		1.8	2.3	0.9	0.9	1.0	0.7
Farmers, foresters, fishermen and hunters		62.6	63.7	60.6	74.1	77.7	67.4
Production and transport operators and labourers		18.7	19.2	17.8	10.7	11.1	9.9
Not classifiable		1.9	2.9	0.2	0.1	0.1	0.1

6.1.4 Industry

A comparison of employment by industry for 1983 and 2014 in Table 6.6 shows that agriculture remains the main area of economic activity in Myanmar, especially for older people even if the proportions of the population of prime working-aged adults and older people working in agricultural industries have declined from 1983 to 2014. This decline has resulted in a shift to other industries specifically the service industries in 2014, especially for older persons and women in their prime working ages. See Appendix 1, Table 13 for a more detailed breakdown of industries reported in the 2014 and 1983 censuses.

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Table 6.6

Percentage of employed people in prime working ages and older people by industry group, 1983 and 2014 censuses

Industry group/Census year	15-59 year olds			60 and over		
	Both sexes	Male	Female	Both sexes	Male	Female
1983						
Total	10,600,307	6,823,878	3,776,429	954,016	619,258	334,758
Agriculture, forestry, fishing and hunting	63.1	64.4	60.7	74.0	77.6	67.3
Mining and quarrying	0.6	0.8	0.4	0.2	0.2	0.1
Manufacturing	9.5	7.6	13.0	5.7	5.3	6.4
Construction	1.4	2.0	0.3	0.9	1.3	*
Electricity, gas, water and sanitary services	0.2	0.3	*	*	0.1	*
Wholesale and retail trade, restaurants and hotels	11.5	7.9	17.9	13.5	9.0	21.9
Transport, storage and communication	3.2	4.8	0.2	1.0	1.5	0.2
Services	7.4	8.9	4.7	1.9	2.4	0.9
Not classified	3.2	3.4	2.8	2.8	2.6	3.2
2014						
Total	19,228,355	11,482,321	7,746,034	1,317,252	872,401	444,851
Agriculture, forestry and fishing	51.2	54.2	46.8	66.3	71.1	56.8
Mining and quarrying	0.8	1.2	0.4	0.2	0.3	0.1
Manufacturing	7.0	4.9	10.0	4.2	4.0	4.7
Construction	4.7	7.1	1.2	2.2	3.3	0.2
Electricity, gas, steam and air conditioning supply & water supply; sewerage, waste management and remediation activities	0.4	0.5	0.1	0.2	0.3	*
Wholesale and retail trade; repair of motor vehicles and motorcycles. Accommodation and food service activities	14.1	10.5	19.5	12.7	8.6	20.9
Transportation and storage Information and communication	4.3	6.9	0.5	1.9	2.8	0.3
Other services	11.3	10.3	12.8	6.2	7.0	4.7
Not stated	6.1	4.4	8.6	5.9	2.7	12.2

*Less than 0.1 per cent.

6.2 Quality of housing and access to facilities

The 2014 Census collected information on housing conditions and household amenities, including type of ownership; building materials; sources of drinking water; sources of energy for cooking and lighting; access to sanitation facilities; and access to common devices for communication and means of transport. A selection of these characteristics, distinguishing between urban and rural areas, is presented at Table 6.7. It should be noted that in this section analyses refer to the characteristics of households in which older persons live rather than the characteristics of older persons. Data relating to the full set of household conditions and housing amenities from the 2014 Census are presented in Appendix 1, Table 14.

For most characteristics, households with an older member are more advantaged than households with only younger members. Most households containing at least one person aged 60 and over owned their own dwelling (92.3 per cent). In rural areas, household ownership among households with an older member was almost universal (97.0 per cent)

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and fairly high (81.4 per cent) among urban households with an older member.

The relative advantage of households with an older member using electricity as a source of energy for lighting and cooking and access to improved water and sanitation is mixed, depending on the area of residence. Table 6.7 shows that most urban households have access to improved water and sanitation; households with an older member have only slightly higher rates of access to these amenities.

For example, 66.2 per cent of rural households with an older member have access to an improved source of drinking water compared to 61.3 per cent of households without an older member. Urban households with an older member are slightly more likely to use electricity as a source of energy for lighting and cooking, but there is almost no difference in electricity use between households with and without an older person in rural areas. Similarly, most urban households have a roof made from a permanent material (tile/concrete/brick/corrugated iron sheet), because semi-permanent materials (wood/bamboo) and temporary materials (dhani/theke/in leaf) are rarely used for roofing in urban residential structures. In rural areas, where permanent roofing material is a capital investment, households with an older member are more advantaged than households consisting of younger members.

Urban and rural households with an older member are much less likely to be living in housing constructed from bamboo, a hut, or other types of dwelling units than households without an older member. However, there is still a large proportion of households with older people living in these types of housing units: 19.6 per cent in urban areas and 37.2 per cent in rural areas.

Similarly, households with an older member are more likely to have access to communication devices such as a radio or television and a telephone (landline or mobile) than households without an older member. There is not much difference, however, in both groups, when it comes to the proportion of households without access to a car, motorbike, or bicycle. It was observed though, that many households with an older member live without these important items of modern life, which facilitate links with family members, local markets and services and the wider world.

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Table 6.7

Summary of housing conditions and amenities, by households with and without an older member, urban and rural areas, 2014 Census

Housing conditions and amenities	Households with at least one older member			Households with no older member		
	Union	Urban	Rural	Union	Urban	Rural
Total households (=100%)	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Housing tenure						
Owner	92.3	81.4	97.0	82.6	58.6	91.5
Renter	4.0	11.0	1.0	8.9	24.7	3.0
Access to electricity						
For lighting	35.8	82.0	16.1	31.0	75.4	14.4
For cooking	17.2	44.9	5.4	16.0	43.5	5.7
Improved sources of drinking water	72.7	87.7	66.2	68.1	86.3	61.3
Improved sanitation	79.0	94.1	72.5	72.3	91.4	65.2
Permanent materials for roof*	70.7	89.1	62.8	60.6	84.1	51.8
Type of dwelling: Bamboo, hut, other types	31.9	19.6	37.2	44.9	28.9	50.9
No radio or television	27.9	13.3	34.1	36.3	21.9	41.6
No landline or mobile	62.6	30.8	76.2	67.2	37.9	78.2
No car, motorbike or bicycle	41.9	30.0	47.1	41.8	30.9	45.8

* Includes tile/brick/concrete/corrugated sheets

The differences between households with an older member and those without probably have multiple causes. Firstly, households with older members have, on average, older household heads. That is, the household head is either the older person or their adult child. Over time people acquire the resources to improve their housing quality. Secondly, households with more economic resources are more likely to be able to afford to live with two or three generations under the same roof. These reasons are not mutually exclusive. The next section of this chapter will examine the relationship between the size of households and their economic conditions to explore these two explanations.

6.3 Household size and wealth

The material well-being of older people is of critical importance. The Department of Population constructed a Wealth Index based on questions concerning household conditions and household assets such as construction materials; access to an electricity supply; access to improved drinking water and sanitation; and access to communication and transport assets described in the previous section. Characteristics of individuals, such as occupation or educational attainment are not included in the index. The household variables were combined using a statistical method and the resulting scores were applied to each household. Based on the household scores, each household was assigned to one of five groups, each totalling 20 per cent of all households. Households in Quintile 1 have the lowest Wealth Index, indicating that they have the most disadvantaged material conditions. Households in Quintile 5 have the most advantaged material conditions. The Wealth Index is designed as a measure of the amount of assets that households can access. It shows the relative position of a household compared to other households in the country.

Chapter 6. Economic conditions of the older population

The Wealth Index is most often used to compare the assets of different groups. In this section the Wealth Index is used to explore the degree to which households with older persons are better or worse off than households without older persons. As shown in Chapter 5, in Myanmar very few older people live alone or only with their spouse. The vast majority of older people live with an adult child or other relatives. The number of people in a household can affect wealth in a number of ways. Individuals may bring in income or assets to the household or individuals may place a burden on households. In other words, large households have both more hands and more mouths to feed.

Households with an older member are more likely to be in the higher wealth quintiles than households without an older member, as long as there are three or more people in the household (Table 6.8). For small households, comprised of one or two people, households with older members are disproportionately in the lowest wealth quintile. At the most extreme, one third (32.8 per cent) of all older single person households (that is, the older person is living alone) are in the lowest wealth quintile and only 11 per cent are in the highest quintile.

Table 6.9 investigates if households with more employed people in the prime working ages of 15-59 are in higher wealth quintiles. Households with at least one older person but no one in the prime working ages who is economically active (24.3 per cent) are less likely to be in the lowest quintile than households without an older person and no employed person in the prime working ages (32.7 per cent). Regardless of the number of employed prime working-aged persons living in the house, households with an older person are more likely to be in a higher wealth quintile than households without an older member. This suggests that older people contribute economically to their households. The contribution could be in the form of assets acquired over a lifetime, through income that they are earning or have earned, or both. See Appendix 1, Table 15 for the numbers from which Tables 6.8 and 6.9 were derived.

Table 6.8

Percentage of households with and without an older member by wealth quintile and number of persons in the household, 2014 Census

Wealth quintile	All households		Single person households		Two person households		3-6 person households		7 or more person households	
	With older member	Without older member	With older member	Without older member	With older member	Without older member	With older member	Without older member	With older member	Without older member
1 (Lowest)	16.2	23.6	32.8	24.6	23.1	25.0	14.6	23.7	11.1	21.5
2	19.5	21.4	27.0	20.8	24.3	20.7	19.2	21.8	14.7	19.9
3	21.6	18.7	17.3	15.0	20.5	16.2	22.6	19.1	20.7	20.3
4	21.6	17.7	12.3	15.0	16.5	16.2	22.3	17.6	26.0	20.3
5 (Highest)	21.1	18.6	10.5	24.5	15.5	21.8	21.4	17.8	27.5	18.0
Total (Per cent)	100	100	100	100	100	100	100	100	100	100
Number of households	3,288,183	7,589,649	198,990	302,098	454,624	897,605	1,961,313	5,501,013	673,256	888,933

Chapter 6. Economic conditions of the older population

Table 6.9

Percentage of households with and without an older member by wealth quintile and number of prime aged workers (15-59) in the household, 2014 Census

Wealth quintile	All households		No prime age worker		Only one prime age worker		Two prime age workers		Three or more prime age workers	
	With older member	Without older member	With older member	Without older member	With older member	Without older member	With older member	Without older member	With older member	Without older member
1 (Lowest)	16.2	23.6	24.3	32.7	16.9	26.1	13.0	23.5	9.5	16.5
2	19.5	21.4	22.7	21.4	20.2	21.0	18.5	22.4	15.8	20.6
3	21.6	18.7	19.7	15.5	21.2	16.8	22.8	19.1	22.8	22.5
4	21.6	17.7	17.1	14.4	20.8	16.3	23.4	17.6	26.1	21.4
5 (Highest)	21.1	18.6	16.2	16.0	20.9	19.7	22.3	17.4	25.9	19.0
Total (Per cent)	100	100	100	100	100	100	100	100	100	100
Number of households	3,288,183	7,589,649	781,247	441,059	1,028,528	3,052,651	795,470	2,492,439	682,938	1,603,500

Another way to look at Tables 6.8 and 6.9 is from the perspective of older people in the households. Older people benefit from living with younger people who are employed. However, nearly one quarter (24.3 per cent) of households with an older person have no employed person in the prime working ages. Of all households with older members, these are the households which are most likely to be in the lowest wealth quintiles. The more prime working-aged adults living in the household, the higher the wealth quintile of the household. While this is true for all households, the advantage for households with an older member is greater.

6.4 Summary

An understanding of the economic situation of older people is extremely important for the development of policies to safeguard older people's well-being. This chapter started by considering the economic activity of older people over their life course and the changes since 1983.

Older people working in agriculture remain in the workforce for longer than workers in other occupations and sectors. However, compared to 1983, this form of employment by older people is becoming less common. The retreat from agricultural employment reflects a wider shift away from an agricultural labour force to a more diversified economy. To the extent that non-agricultural employment brings in higher wages and profits, the diversification has brought benefits to the total population, including the older population. On the other hand, barriers such as mandatory retirement may make it more difficult for older people to continue to be economically active, making it even more important to enable people to save for their retirement during their working life.

Lack of rural infrastructure and low agricultural productivity means that many older people in rural areas, like the rest of the rural population, live in housing made of poor quality materials; lack access to electricity as a source of energy for lighting and cooking; do not have access to improved sanitation; and cannot access communication devices and transportation means that are commonplace in urban households.

Chapter 6. Economic conditions of the older population

The strong social conventions in Myanmar that enable older people to live with their adult children or other family members bring economic benefits to everyone. Older people benefit from living with others. The most disadvantaged households are those where an older person lives on his or her own or without an employed person in the prime working ages. Other members of the household also benefit from having an older member. Even households with a large number of members and a large number of employed prime working-age people are more likely to be in a higher wealth quintile if at least one member is aged 60 or over.

Chapter 7. Health and life expectancy in old age

Increasing life expectancy is a triumph, resulting from lower fertility and better living conditions, supported by health services to prevent and treat diseases. As a result of declining mortality, people in Myanmar can study, work, marry and start a family with confidence that they and their children will probably survive into old age. However, those who reach old age by avoiding an early death through infectious diseases, non-communicable diseases, poor nutrition or injury, are likely to experience a decline in health in their later years.

This chapter reviews what is known about mortality within the older population and looks closely at the level of self-reported disability, which was the only health indicator included in the 2014 Census.

Underlying the older population's life expectancy and health are the significant changes in the pattern of diseases occurring in Myanmar and globally. The four main non-communicable diseases of cardiovascular disease, diabetes, cancer and chronic respiratory diseases are responsible for 59 per cent of total deaths and comprise an increasing proportion of deaths of males and females aged 30-69 (WHO 2014). These diseases, if uncontrolled, can result in a number of chronic conditions such as a shortness of breath, difficulty in walking and poor eyesight.

Risk factors for non-communicable diseases (NCDs) include obesity, smoking, harmful alcohol use, lack of physical activity and exposure to air pollution. All of these may become more prevalent as Myanmar becomes more urban and transitions from a low to a middle-income country, but with appropriate policies and programmes, these risk factors can be reduced. Chapter 9 will discuss the policy responses that could better provide social and economic protection and health services for older people in order to care for those who are sick and prevent premature mortality and preventable health problems from NCDs.

7.1 Mortality

This section will present what is known about mortality rates in regard to older people's life expectancy. Myanmar does not have a vital registration system that records all births and deaths. Without such a system, it is difficult to accurately measure gains in adult life expectancy over time. Myanmar only has the Census for estimating adult mortality, using statistical methods based on reported deaths in the household in the 12 months prior to the Census and the age and sex distribution of the population. Both reported deaths and age distribution have limitations. Reporting on recent deaths is subject to error about when the death occurred and dependent on the household remaining intact and a consensus about whether the deceased was a member of the household. Age reporting, as discussed in Chapter 2, is subject to error, especially in the older age groups. Therefore, estimates of the level of mortality in people of older ages should be treated with caution.

Since there is no robust data on the current level of mortality, it is not surprising that even less is known about whether death rates in older ages have been declining. There was no analysis from the 1983 census on adult mortality.

Despite the data shortcomings, the broad outlines of mortality change are known. As

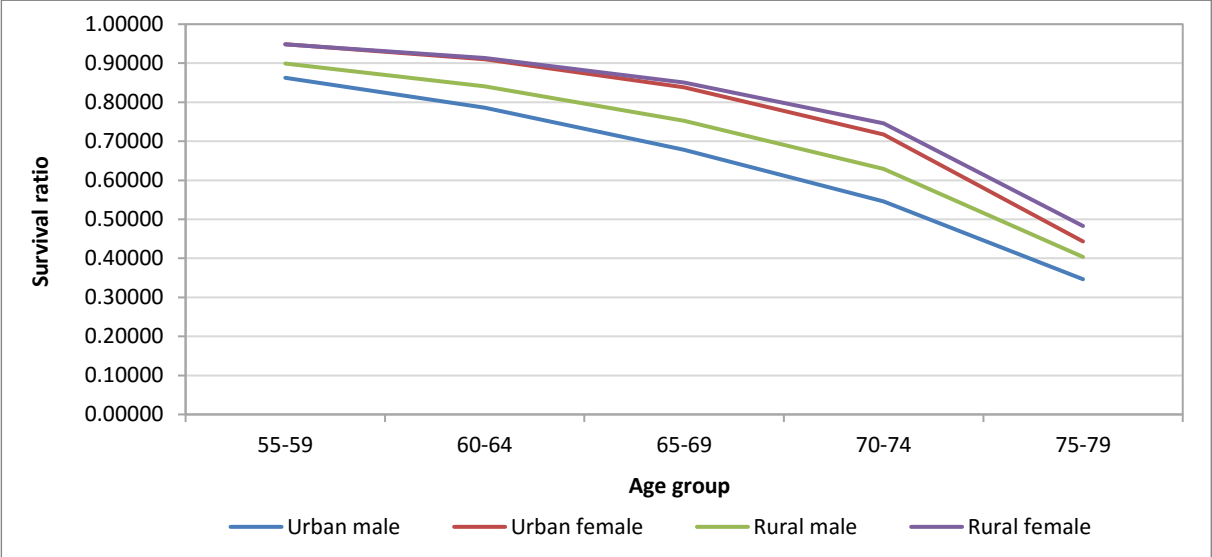
Chapter 7. Health and life expectancy in old age

discussed in Chapter 3, due to the decline in infant and child mortality, people in Myanmar can expect to live longer. Another fact which is clear from the Census data is that males are at a higher risk of dying in every age group than females. Male mortality is very high in Myanmar.

Figure 7.1 is presented with the preceding limitations in mind. It shows the probability of a person surviving another five years and has been derived from the adjusted life tables in the 2014 Census thematic report on Mortality (Department of Population 2016c). Urban men aged 55-59 have the lowest probability of surviving another five years; that disadvantage continues up to the age of 75-79. Rural men have the second lowest survival rates. Rural females have the highest survival rate at the oldest ages. The oldest age group in the life tables was 80 and over. Since every person who reaches age 80 will die sometime after 80, a survival rate for the 80 and over category is meaningless.

To use the life tables to describe mortality in another way, on his sixtieth birthday, a man living in urban Myanmar can expect to live, on average, an additional 12.7 years, whereas a woman of the same age can expect to live for another 17.7 years. A man turning 60 in rural Myanmar can expect to live for another 14.8 years and a rural woman can expect to live for an additional 18.5 years (see Appendix E, Table E in Department of Population 2016c).

Figure 7.1
Survival ratios for five more years, population aged 55 to 79 by sex, urban and rural areas, 2014



The extent of male disadvantage is highlighted by comparing male and female life expectancy estimates at age 60 with other ASEAN countries (Figure 7.2). The reader should note that the data sources for Myanmar and other countries are different. Nonetheless, a life expectancy for Myanmar males at 60 of 14.1 years would be the lowest among the ASEAN countries. Myanmar female life expectancy is at the top of the group of lower income countries, exceeded only by Singapore, Viet Nam, Brunei Darussalam, Thailand and Malaysia.

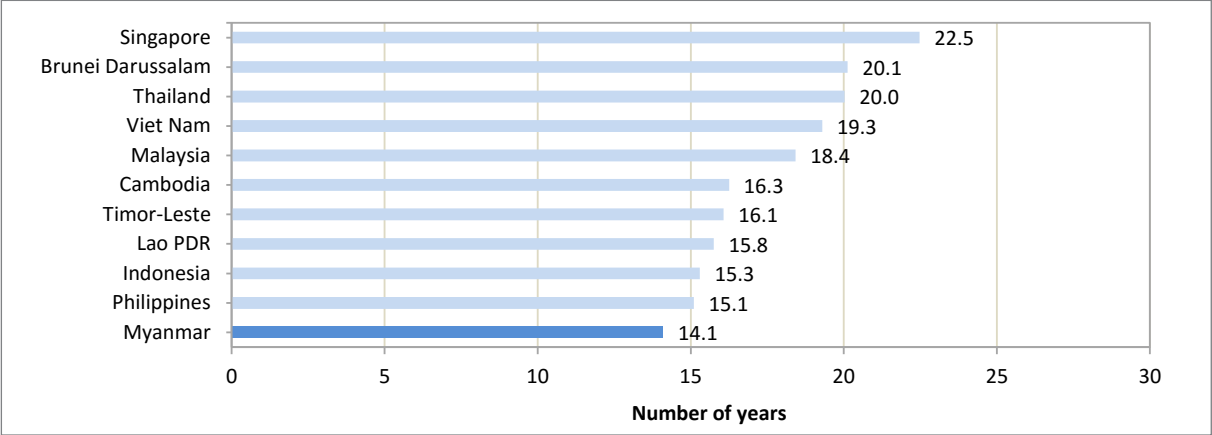
7.2 Disability

One of the great concerns about increasing life expectancy is that it will increase the number of years lived in poor health. Fortunately, that does not appear to be happening. As life expectancy has increased over the past few decades, so has the number of years lived in good health, although not quite as quickly. In Asia and the Pacific, for every year gained in life expectancy between 1970 and 2010, there have been 11 months gained in the number of years spent in good health. Low income countries such as Myanmar have had a faster increase in the number of healthy years than middle-income countries (World Bank 2016 based on the work of the Global Burden of Disease (IHME and World Bank 2013)).

Disability is increasingly common at older ages, particularly as a result of the cumulative effect of behaviours, the environment, illnesses and injuries over a lifetime. Chronic health problems and fragility in old age frequently manifests itself as a disability. The Myanmar National Plan of Action for Persons with Disabilities 2010-2012 defines disability as: ‘Disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others.’ The Department of Social Welfare currently classifies disability into four types: a) persons with visual impairments; b) persons with hearing impairments; c) persons with physical (mobility) impairments; and d) persons with intellectual impairments (Department of Population 2017d).

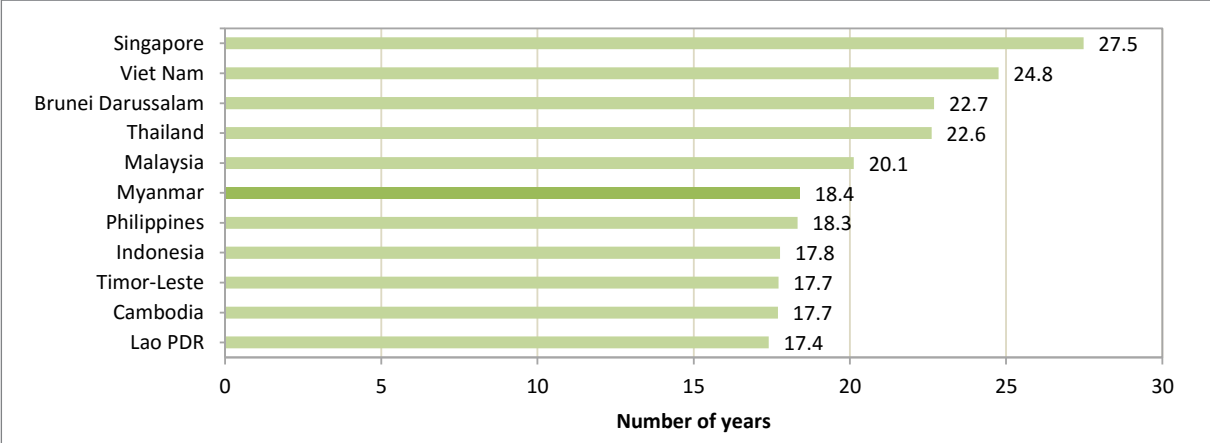
In the past, collecting information on health was beyond the scope of a census. However, many recent international censuses, including the 2014 Myanmar Census, have included questions on disability. Such information is invaluable for understanding the well-being of older people, as age-related infirmities often result in older people becoming unable to perform basic tasks for themselves, placing additional burdens on family and on other formal and informal social support systems.

Figure 7.2
Life expectancy at age 60 for ASEAN countries
a) Male



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b) Female



Source: For Myanmar, Department of Population (2016c) adjusted life tables; for other ASEAN countries UN DESA (2015a) medium variant for 2010-2015.

The disability questions in the Census measured the ability to perform functions of everyday life by recording if a person had difficulty in seeing, hearing, walking and remembering or concentrating, aligning with the Department of Social Work’s classification. For each function, the severity of disability was captured on a four-item scale: no difficulty, some difficulty, a lot of difficulty, and cannot do at all.

In interpreting the results on disability, it is important to recognize that the 2014 Census was the first time the prevalence of disability had been systematically measured in Myanmar for the whole population. Disability-focused surveys conducted earlier had only included people with a disability. The 2012 Survey of Older Persons asked questions about disability which were different from those in the 2014 Census (Knodel 2014). The findings from that survey are discussed in Section 7.2.2.

As in other countries where there are weaknesses in measuring disability from censuses, the disability rates from the 2014 Census are believed to underestimate the true rate of disability due to a number of reasons including unfamiliarity with the concept; reluctance to discuss disabilities with people outside of the family; and the range and wording of the Census questions (Department of Population 2017d). Dedicated surveys, with trained staff and more time allocated per interview, are more appropriate to assess the prevalence of disabilities than censuses.

7.2.1 Prevalence of disability from the 2014 Census

Nearly one quarter (23.3 per cent) of persons aged 60 and over were reported to have one or more of the four disabilities (those who responded with ‘some difficulty’, ‘a lot of difficulty’, and ‘cannot do at all’ in any one of the domains of disability – seeing, hearing, walking, remembering/concentrating) in the 2014 Census (Table 7.1). As is to be expected, this is a much higher prevalence than is found among younger people. Just 1.2 per cent of youth aged 15-24 years and 3.4 per cent of the prime working-age group of 15-59 years were reported to have at least one form of disability (Department of Population, 2017d).

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The prevalence of some form of disability is much higher for rural than urban older people (Table 7.1). This is a common finding around the world and is due to the relationship between poverty and disability (WHO and World Bank 2011). Poor rural people have a higher risk of trauma-related disabilities because of unsafe working conditions and domestic environments. They are more likely to suffer from preventable infections and, increasingly, non-communicable diseases, and for reasons of location or affordability, lack access to health services which can prevent lasting damage from diseases.

Table 7.1

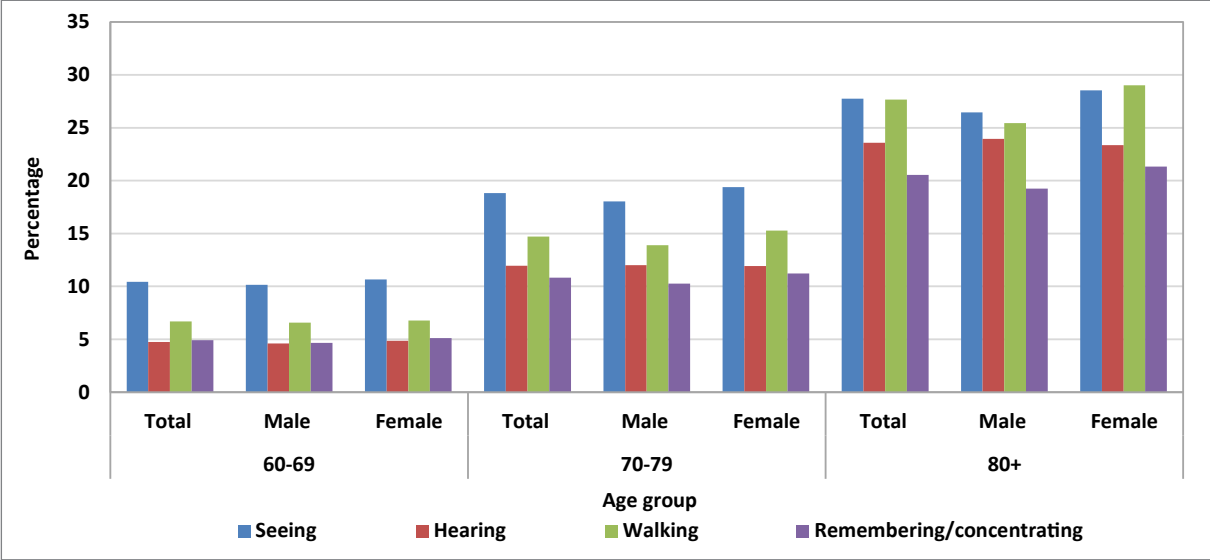
Number and percentage of population aged 60 and over by domain of disability by sex, urban and rural areas, 2014 Census

Area/Domain of disability	Both sexes		Male		Female	
	Number	%	Number	%	Number	%
Union						
Population 60 and over	4,474,408		1,921,340		2,553,068	
Seeing	671,052	15.0	271,418	14.1	399,634	15.7
Hearing	410,806	9.2	169,047	8.8	241,759	9.5
Walking	519,397	11.6	205,282	10.7	314,115	12.3
Remembering/concentrating	383,425	8.6	150,297	7.8	233,128	9.1
With a disability in any domain	1,043,170	23.3	430,070	22.4	613,100	24.0
Urban						
Population 60 and over	1,364,589		562,081		802,508	
Seeing	145,379	10.7	55,139	9.8	90,240	11.2
Hearing	87,892	6.4	34,535	6.1	53,357	6.6
Walking	124,895	9.2	45,755	8.1	79,140	9.9
Remembering/concentrating	73,073	5.4	26,947	4.8	46,126	5.7
With a disability in any domain	250,307	18.3	97,168	17.3	153,139	19.1
Rural						
Population 60 and over	3,109,819		1,359,259		1,750,560	
Seeing	525,673	16.9	216,279	15.9	309,394	17.7
Hearing	322,914	10.4	134,512	9.9	188,402	10.8
Walking	394,502	12.7	159,527	11.7	234,975	13.4
Remembering/concentrating	310,352	10.0	123,350	9.1	187,002	10.7
With a disability in any domain	792,863	25.5	332,902	24.5	459,961	26.3

Difficulties in seeing and walking are the most prevalent forms of disability for older men and women of all ages (Figure 7.3). In each broad age group, females have a slightly higher prevalence of disability than males.

Figure 7.3

Percentage of older population reporting four domains of disability by age group by sex, 2014 Census

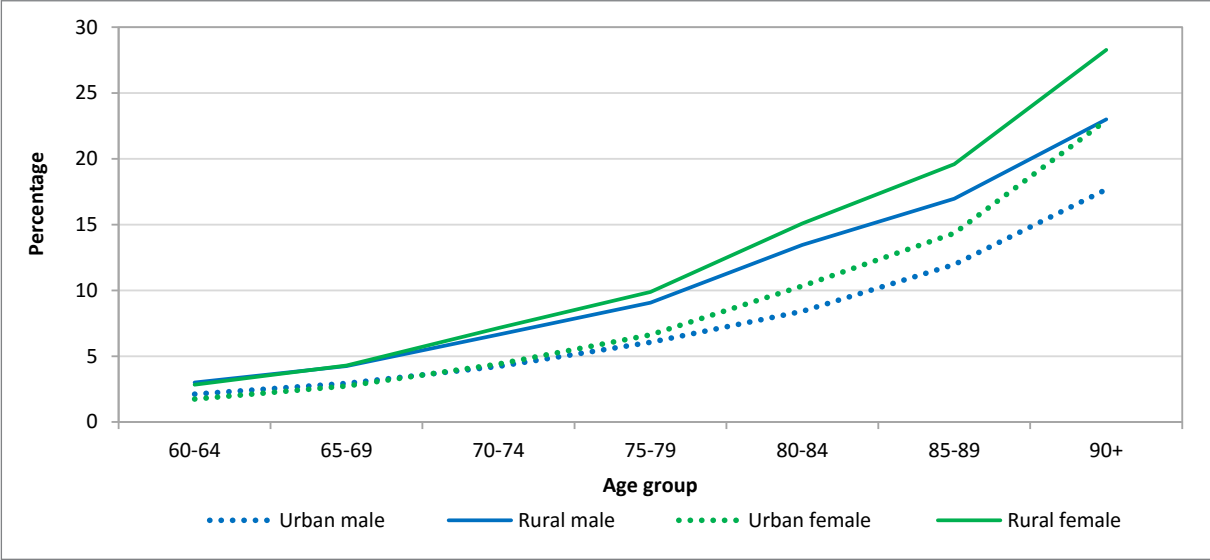


Most people who have a disability report a relatively mild form, agreeing with the description that they can see, hear, walk or remember/concentrate with ‘some difficulty’. When a person is described as having ‘a lot of difficulty’ or that they ‘cannot do at all’, they can be considered as having a moderate or severe level of disability. A disability of this severity may make it difficult for older people to participate in the regular activities of daily living.

Figure 7.4 shows the prevalence of moderate and severe disabilities for older men and women by age and whether they live in urban or rural areas. Older people in rural areas are more likely to have a moderate or severe disability. Likewise, women have higher rates of moderate and severe disabilities than men. Figure 7.4 was derived from numbers available in Appendix 1, Table 16, which also includes the numbers for the older population who reported only ‘some difficulty’ in performing routine daily activities.

Figure 7.4

Percentage of population aged 60 and over with moderate and severe disabilities by age by sex, urban and rural areas, 2014 Census



7.2.2 Other estimates of disability and health among the older population

The 2012 Survey of Older Persons asked respondents about many aspects of their health. One third (33.2 per cent) of respondents aged 60 and over described their overall health as ‘good’ or ‘very good’; 44.5 per cent said it was ‘fair’; and 22.2 per cent said it was ‘poor’ or ‘very poor’. Respondents aged 70 and over and females reported the poorest health.

The same survey asked similar questions of older people about their ability to undertake everyday tasks (Knodel 2014). As the survey was dedicated to older people with a particular interest in health conditions, it can be assumed that the data collected comes closer to measuring the actual extent of disability in this population. Table 7.2 compares the results. In all similar measures regarding walking, hearing, seeing and remembering or concentrating, the Survey of Older Persons recorded levels that were at least twice as high as those reported in the 2014 Census. Some of the differences may be due to the slightly different wording of the questions and response categories.

Table 7.2

Comparison of disability measures for the population aged 60 and over from the 2014 Census and the 2012 Survey of Older Persons

2012 Survey (Knodel 2014)	%	2014 Census	%
Walking 200-300 metres	33	At least some difficulty walking	12
Difficulty with hearing	15	At least some difficulty hearing	9
Difficulty with vision	29	At least some difficulty seeing	15
Memory poor or very poor	18	At least some difficulty remembering/concentrating	9

A higher rate of self-reported disability was also found in a survey of older people's use of health care services in five Myanmar Townships (Rajan and Seerupa 2016). Respondents aged 60 and over were asked if they experienced any difficulty in moving around. The survey used the same categories of severity as the Census: some difficulty, a lot of difficulty and cannot do at all. Overall, 42 per cent of older people said they experienced at least some difficulty and 13 per cent said they had a lot of difficulty or could not do at all. Among older people aged 80 and over, 32 per cent said they had a lot of difficulty or could not move at all. Similarly, 26 per cent of respondents reported at least some difficulty hearing and 60 per cent reported at least some difficulty seeing.

7.2.3 Living arrangements and economic conditions of older people with disabilities

Older people with disabilities have very similar living arrangements as older people without disabilities. Table 7.3 shows that older people with a disability are slightly more likely to live on their own (10.1 per cent for older people with a mild disability and 11.2 per cent for older people with a moderate/severe disability) and to be looking after a grandchild (6.8 per cent for a mild disability and 6.7 per cent for a moderate/severe disability) than older people without a disability.

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Table 7.3

Percentage of household heads aged 60 and over by household composition, degree of disability, urban and rural areas, 2014 Census

Area and household composition	Total	No disability	Mild disability	Moderate or severe disability
Union				
Total (=100%)	2,530,908	1,948,259	453,651	128,998
Living alone	7.9	7.1	10.1	11.2
Living only with spouse	7.3	7.2	7.8	7.8
Living with a child and anyone else	74.4	75.4	71.2	70.2
Living with a grandchild and no children but may live with others	5.7	5.4	6.8	6.7
Living with a sibling, no children, no grandchildren but may live with others	2.3	2.4	1.9	1.8
Living with other relatives, no children, no grandchildren and no sibling	1.7	1.8	1.6	1.6
Living with non-relatives only	0.5	0.6	0.5	0.5
Unclassifiable	0.2	0.2	0.1	0.1
Urban				
Total (=100%)	767,067	622,451	113,450	31,166
Living alone	5.8	5.5	7.1	6.5
Living only with spouse	5.6	5.7	5.4	4.9
Living with a child and anyone else	76.9	77.2	75.6	76.9
Living with a grandchild and no children but may live with others	5.0	4.8	6.1	6.1
Living with a sibling, no children, no grandchildren but may live with others	3.1	3.2	2.6	2.3
Living with other relatives, no children, no grandchildren and no sibling	2.3	2.4	2.2	2.2
Living with non-relatives only	1.0	1.0	1.0	1.0
Unclassifiable	0.2	0.2	0.1	0.1
Rural				
Total (=100%)	1,763,841	1,325,808	340,201	97,832
Living alone	8.8	7.9	11.1	12.7
Living only with spouse	8.0	7.8	8.6	8.7
Living with a child and anyone else	73.3	74.6	69.7	68.1
Living with a grandchild and no children but may live with others	6.0	5.7	7.1	6.9
Living with a sibling, no children, no grandchildren but may live with others	1.9	2.0	1.6	1.7
Living with other relatives, no children, no grandchildren and no sibling	1.5	1.5	1.4	1.5
Living with non-relatives only	0.3	0.3	0.4	0.3
Unclassifiable	0.2	0.2	0.1	0.1

The lower the wealth quintile of an older person's household, the more prevalent and the more severe the disabilities are. This gradation is particularly pronounced in rural areas (Table 7.4).

Table 7.4

Percentage of population aged 60 and over in conventional households by degree of disability, wealth quintiles, urban and rural areas, 2014 Census

Area/Wealth Quintile	Total (=100%)	No disability	Mild disability	Moderate disability	Severe disability
Union (=100%)	4,341,459	76.6	17.5	3.8	2.1
1	660,305	68.0	22.8	6.0	3.1
2	826,963	73.2	19.8	4.5	2.5
3	943,006	76.0	18.1	3.8	2.1
4	957,277	79.0	16.1	3.1	1.8
5	953,908	83.7	12.6	2.3	1.4
Urban (=100%)	1,312,355	81.6	14.0	2.7	1.7
1	20,758	72.2	20.5	4.5	2.7
2	52,428	73.8	19.1	4.4	2.7
3	99,300	76.4	17.5	3.8	2.3
4	339,264	79.2	15.8	3.1	1.9
5	800,605	84.1	12.2	2.2	1.4
Rural (=100%)	3,029,104	74.4	19.0	4.2	2.3
1	639,547	67.9	22.9	6.0	3.1
2	774,535	73.1	19.8	4.5	2.5
3	843,706	76.0	18.2	3.8	2.1
4	618,013	78.9	16.3	3.1	1.7
5	153,303	81.8	14.4	2.4	1.4

These findings are consistent with those reported in the 2012 Survey of Older Persons (Teerawichitchainan and Knodel 2015). The researchers found that most measures of health, including self-reported health, such as difficulties in seeing and hearing and a number of tasks that required walking or lifting, were directly related to economic status measured by the possession of various consumer items and housing infrastructure. Importantly, researchers showed that even older people in the economic quintile second from the bottom, who were nevertheless very poor, had better health than those in the bottom quintile. This same gradation can be seen from the Census data in Table 7.4.

Greater severity of disability is associated with being in the lowest wealth quintiles (Table 7.4), but only has a very weak relationship with household composition (Table 7.3). This suggests that regardless of a family's wealth, there is a strong preference for older persons to co-reside with their children. Older people with disabilities are more likely to be poor because of the relationship between poverty and disability and not because they are more likely to live alone.

7.2.4 Calculations based on disability prevalence

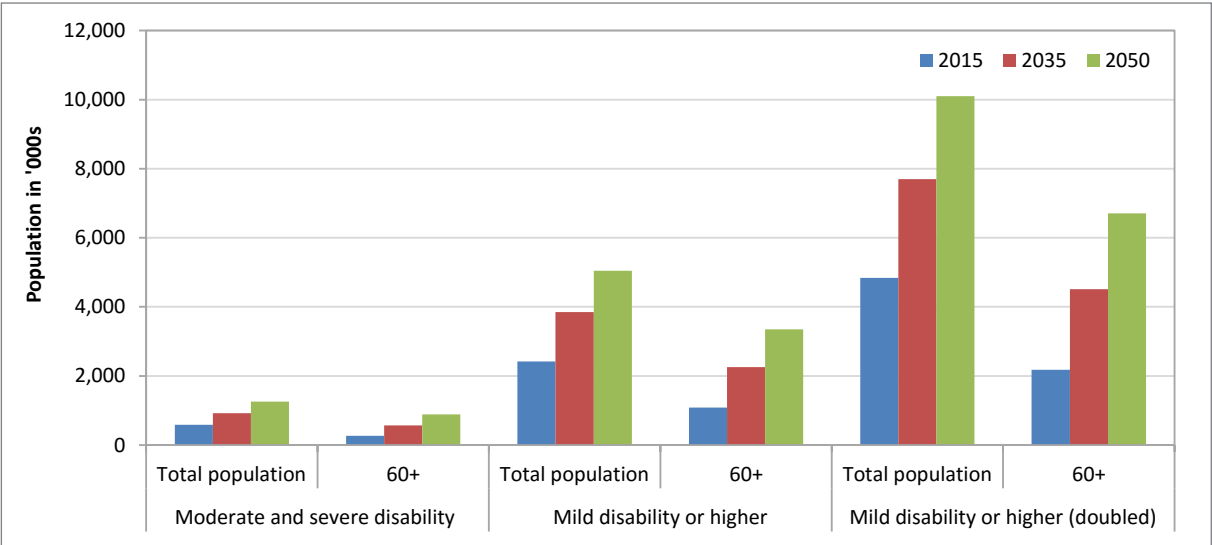
Despite the limitations of the measures of disability prevalence from the 2014 Census, they can be illustrative to understand the implications for population ageing and the burden of disability for older persons. This section makes two types of calculations to demonstrate these implications. The first calculation is to project the number of older people living with a disability in 2035 and 2050. The second calculation is to estimate the number of years that older people can expect to live free of a disability. Both calculations used several estimates

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of the prevalence of disabilities among older people in Myanmar, drawing on data presented in Section 7.2.1.

The 2014 Census thematic report on Disability attempted to project the impact of ageing on disability in the future by applying the age-specific disability rates to the projected population (Department of Population 2017d). That analysis is replicated here. In Figure 7.5 three age-specific disability rates are used: the rate of moderate and severe disability from the 2014 Census; the rate of any form of disability from the 2014 Census; and double the rate of any form of disability to reflect the higher rates found in the 2012 Survey of Older Persons and the 2016 Survey on the use of Health Care Services (see Table 7.2). These rates are applied to the projected population in 2035 and 2050 as presented in Chapter 3. Using the highest estimate of disability, in 2050 there could be 10 million people in Myanmar (out of nearly 65 million) who will have some form of disability. Among the 13 million projected older people, almost 7 million will have some form of disability. Details on the methodology can be found in the 2014 Census thematic report on Disability.

Figure 7.5
Estimates of the effect of population ageing on the absolute number of persons with a disability for aged 60 and over, 2015, 2035 and 2050



Another way to use the disability rates is to estimate the number of years older people can expect to live without a disability. Disability-free life expectancy is frequently calculated to capture the quality of life of a population. A particular interest in the study of ageing is whether, over time, older people are gaining more years of life only at the expense of more years of disability. Disability-free life expectancy is calculated from life tables, which create a hypothetical population based on the age-specific death rates experienced at a particular period (Jagger *et al* 2014).

The 2014 Census thematic report on Mortality created life tables for the Myanmar population one year prior to the Census (Department of Population 2016c). The life expectancy and survival ratios reported earlier in this chapter were taken from these life tables. By multiplying

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the disability prevalence rate for each age group by the total number of people expected to be alive in that age group using the hypothetical life table population, the expected number of years to be lived disability-free can be calculated. Table 7.5 shows the results, using both the prevalence of moderate and severe disability, any disability and an estimated rate derived by doubling the prevalence for any disability.

Table 7.5 shows that the average older person at age 60 can expect to live another 16.3 years. Based on the prevalence rates from the 2014 Census, three-quarters of those years (or 12.5 years) will be free of any disability and nearly all (94.1 per cent) will be without a severe disability. The proportion of life spent disability-free declines with age. If the true rate of disability among older people is closer to that found in the 2012 Survey of Older Persons, then a person at age 60 can only expect to live another 8.6 years disability-free or just over half of his or her remaining life. The calculations for disability-free life years can be found in Appendix 1, Table 17.

Table 7.5

Estimates of disability-free life expectancy for the older population, 2014 Census

Age	Life expectancy	Moderate or severe disability (a lot of difficulty or cannot do)		Mild disability or higher (some difficulty or more)		Estimated mild disability or higher (doubled prevalence reported in Census)	
		Disability-free life expectancy	% of remaining life disability-free	Disability-free life expectancy	% of remaining life disability-free	Disability-free life expectancy	% of remaining life disability-free
60	16.3	15.4	94.1	12.5	76.3	8.6	52.6
65	12.8	11.9	92.8	9.3	72.5	5.8	45.1
70	9.7	8.8	90.8	6.6	67.7	3.5	35.5
75	7.2	6.4	88.3	4.5	62.8	1.9	25.7
80	5.3	4.4	84.4	3.0	56.8	0.7	13.6

Source: Derived from the adjusted life tables in Department of Population (2016c). Disability rates are from the 2014 Census.

7.3 Summary

Reductions in mortality brought about through improved standards of living and better health care, means that more people in Myanmar can expect to live past the age of 60. Based on estimates from the 2014 Census, the average 60 year-old in Myanmar can expect to live an additional 16.3 years. Urban males have the shortest life expectancy from the age of 60, followed by rural males. Older urban females have slightly lower life expectancies than older rural females.

The 2014 Census was the first census in Myanmar to attempt to measure the prevalence of disability in the population by asking if people experienced any difficulty in seeing, hearing, walking or remembering/concentrating. Nearly one-quarter of older people have at least one form of disability and nearly 6 per cent have a moderate or severe disability. All types and severity of disabilities increase rapidly with advancing age and at each age females are slightly more likely to report a disability than males. The prevalence of disability is higher in rural areas and amongst older people in the lowest wealth quintiles. The living arrangements of older people with disabilities do not differ much from those without a disability.

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Using information from a dedicated survey of older people in Myanmar it is possible to adjust the disability prevalence rates upward to estimate the rapid increase in the number of people with a disability in the coming decades. It is also possible to calculate the number of years older people can expect to live disability-free. People turning age 60 may expect to live another 8.6 years free of a mild disability (based on an adjusted estimate of prevalence) to 15.4 years free of a moderate or severe disability.

Chapter 8. Regional variations in ageing

Population ageing is occurring in all parts of the country, but at different paces. As a result of history and the diverse levels of economic development, the social and material conditions of older people and their living arrangements also vary. This chapter highlights those variations in ageing at the subnational level. At the time of the 2014 Census, Myanmar had 15 States/Regions. Within these were 74 Districts and beneath the Districts were 412 Townships and sub-townships. This chapter focuses on variations by State/Region. Some detailed information is available in the Appendix tables by District. The chapter covers trends in population ageing and characteristics of the older population, including marital status; proportions of women with no living children; literacy and attendance in formal education; household composition; and some aspects of housing conditions and assets.

8.1 Population ageing

Half of Myanmar's older population live in the populous States/Regions of Yangon, Mandalay, Ayeyawady, Sagaing, and Bago. This is similar to the distribution of the total population, with one notable difference. Shan State comprises 11.6 per cent of the total population of Myanmar but the proportion of the older population is only 9.1 per cent.

Table 8.1

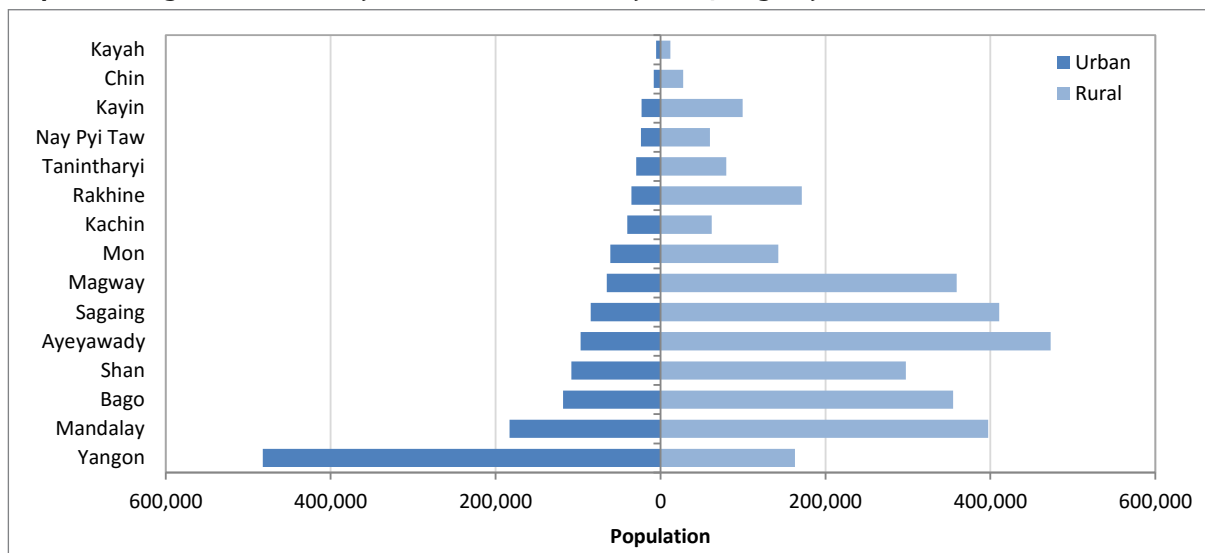
Percentage of the total and older population by State/Region, 2014 Census

State/Region	Total population			State/Region	Population aged 60 and over		
	Number	%	Cumulative %		Number	%	Cumulative %
Union	50,279,900	100	100	Union	4,474,408	100	100
Yangon	7,360,703	14.6		Yangon	645,329	14.4	
Ayeyawady	6,184,829	12.3	14.6	Mandalay	580,359	13.0	14.4
Mandalay	6,165,723	12.3	26.9	Ayeyawady	569,906	12.7	27.4
Shan	5,824,432	11.6	39.2	Sagaing	495,140	11.1	40.1
Sagaing	5,325,347	10.6	50.8	Bago	472,847	10.6	51.2
Bago	4,867,373	9.7	61.4	Magway	424,498	9.5	61.8
Magway	3,917,055	7.8	71.1	Shan	405,631	9.1	71.3
Rakhine	2,098,807	4.2	78.8	Rakhine	206,515	4.6	80.3
Mon	2,054,393	4.1	83.0	Mon	203,481	4.5	84.9
Kachin	1,642,841	3.3	87.1	Kayin	122,317	2.7	89.5
Kayin	1,504,326	3.0	90.4	Tanintharyi	109,051	2.4	92.2
Tanintharyi	1,408,401	2.8	93.4	Kachin	102,612	2.3	94.7
Nay Pyi Taw	1,160,242	2.3	96.2	Nay Pyi Taw	83,747	1.9	96.9
Chin	478,801	1.0	98.5	Chin	35,796	0.8	98.8
Kayah	286,627	0.6	99.4	Kayah	17,179	0.4	99.6

The major metropolitan areas of Myanmar, Yangon and Mandalay, contain 49 per cent of the urban older population. This is the same proportion as for the total urban population. Again, the greatest deviation in ranking from the distribution of the total population is Shan State, which is home to 9.4 per cent of urban people enumerated in the 2014 Census but is only home to 7.9 per cent of the urban older population. Half of rural older people live in Ayeyawady (15.2 per cent), Sagaing (13.2 per cent), Mandalay (12.8 per cent) and Magway (11.6 per cent). Appendix 1, Table 18 has the numbers from which Table 8.1 and Figure 8.1 were derived.

Figure 8.1

Population aged 60 and over, urban and rural areas, State/Region, 2014 Census



8.1.1 Indicators of population ageing

Table 8.2 lists the population ageing indicators for every State/Region, ordered by the percentage of the population aged 60 and over. Magway Region is the oldest. The Region, which is in the country’s dry zone, has the highest proportion of older people (10.8 per cent), the highest older age dependency ratio (17.4), the lowest potential support ratio (5.7) and one of the lowest child dependency ratios (43.4).

Each State/Region has its unique demographic history concerning the pace and magnitude of fertility decline and the extent of net outmigration of youth and working-aged adults. Therefore, there is no consistent pattern between the proportion of children and working-age population and the level of population ageing. For example, the States/Regions with the youngest populations include Chin and Nay Pyi Taw. Chin has very high fertility and therefore a very high child dependency ratio. Nay Pyi Taw attracts many migrants for work and has a high proportion of working-aged people and relatively few children and older people.

Chapter 8. Regional variations in ageing

Table 8.2

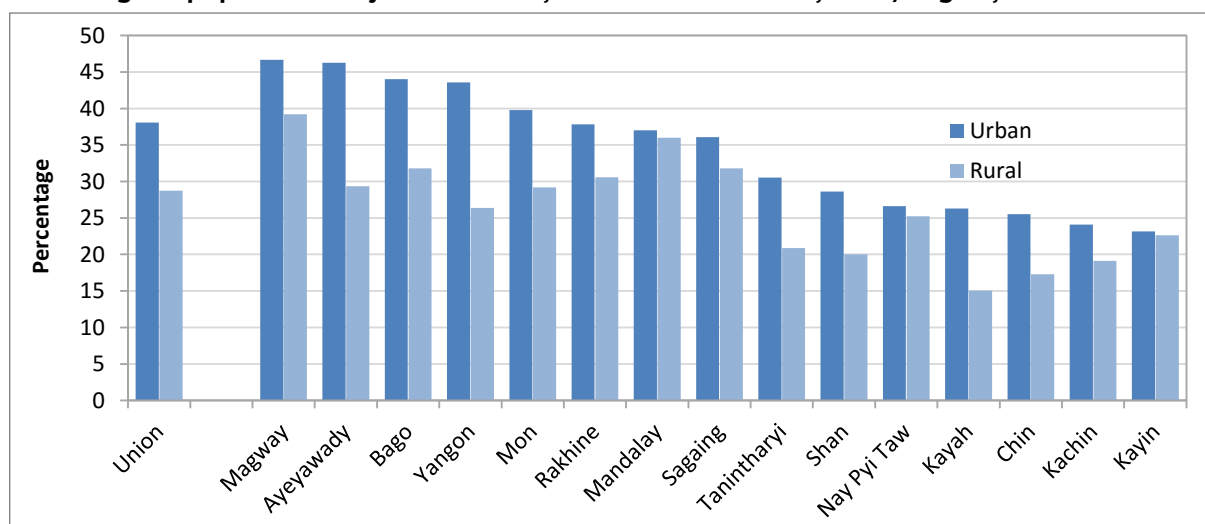
Indicators of population by State/Region, 2014 Census

State/Region	Total population	% in functional age groups			Index of ageing	Dependency ratios			Potential support ratio
		0-14	15-59	60+		Total	Child	Older population	
Union	50,279,900	28.6	62.5	8.9	31.1	60.1	45.8	14.2	7.0
Magway	3,917,055	27.0	62.2	10.8	40.2	60.8	43.4	17.4	5.7
Mon	2,054,393	31.2	58.8	9.9	31.7	69.9	53.1	16.8	5.9
Rakhine	2,098,807	31.1	59.0	9.8	31.6	69.4	52.7	16.7	6.0
Bago	4,867,373	28.4	61.9	9.7	34.2	61.7	46.0	15.7	6.4
Mandalay	6,165,723	25.9	64.7	9.4	36.3	54.7	40.1	14.6	6.9
Sagaing	5,325,347	28.7	62.0	9.3	32.4	61.2	46.2	15.0	6.7
Ayeyawady	6,184,829	29.4	61.3	9.2	31.3	63.0	48.0	15.0	6.7
Yangon	7,360,703	23.4	67.8	8.8	37.4	47.5	34.6	12.9	7.7
Kayin	1,504,326	35.8	56.1	8.1	22.7	78.4	63.9	14.5	6.9
Tanintharyi	1,408,401	33.9	58.3	7.7	22.8	71.5	58.2	13.3	7.5
Chin	478,801	40.0	52.6	7.5	18.7	90.2	76.0	14.2	7.0
Nay Pyi Taw	1,160,242	28.2	64.6	7.2	25.6	54.8	43.6	11.2	9.0
Shan	5,824,432	32.0	61.0	7.0	21.7	63.9	52.5	11.4	8.8
Kachin	1,642,841	30.0	63.8	6.2	20.8	56.9	47.1	9.8	10.2
Kayah	286,627	34.5	59.5	6.0	17.4	68.2	58.1	10.1	9.9

Despite the variations in age structure, in every State/Region the urban population has a higher percentage of older people than the rural population (Figure 8.2).

Figure 8.2

Percentage of population 60 years and over, urban and rural areas, State/Region, 2014 Census



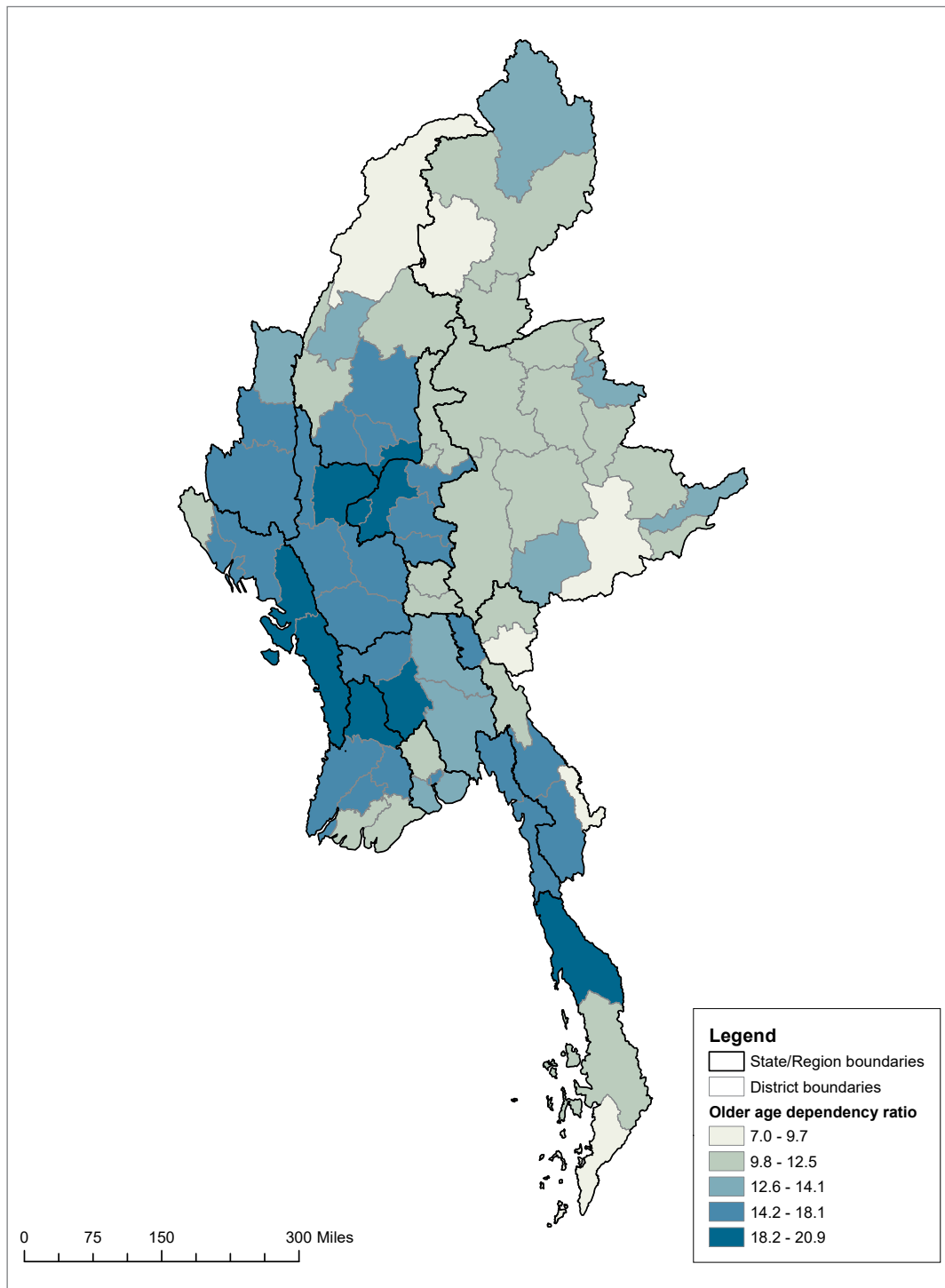
At smaller geographic areas, there is greater diversity in age structure. At one extreme, 12.2 per cent of the population is aged 60 and over in Kyaukpyu, Rakhine State, and, at the other extreme, Bawlakhe in Kayah State has only 4.4 per cent. The map at Figure 8.3 shows that the Districts with the highest older age dependency ratios are in the central, western and southern parts of the country and the largest cities. The Districts with the lowest

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older age dependency ratios are, for the most part, in the northern and eastern parts of the country. Appendix 1, Table 19 gives the population by functional age groups and indicators of population ageing by District.

Figure 8.3

Map of the older age dependency ratio by District, 2014 Census



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8.1.2 Population ageing from 1983 to 2050

Trends in population ageing since the last census show how the current patterns of variation between States/Regions emerged. In every State/Region, the older population grew faster than the total population between the censuses (Table 8.3).

Table 8.3

Annual growth rates for the total and older population between 1983 and 2014 by State/Region, 2014 Census

State/Region	1983		2014		Growth rates 1983 - 2014		
	Total	60+	Total	60+	Total	60+	Difference
Union	34,117,198	2,170,351	50,279,900	4,474,408	1.3	2.3	1.1
Kachin	819,774	45,769	1,642,841	102,612	2.2	2.6	0.4
Kayah	159,661	6,410	286,627	17,179	1.9	3.2	1.3
Kayin	632,962	34,848	1,504,326	122,317	2.8	4.1	1.3
Chin	368,949	17,717	478,801	35,796	0.8	2.3	1.4
Sagaing	3,825,158	237,057	5,325,347	495,140	1.1	2.4	1.3
Tanintharyi	913,943	52,285	1,408,401	109,051	1.4	2.4	1.0
Bago	3,799,791	270,124	4,867,373	472,847	0.8	1.8	1.0
Magway	3,243,166	222,985	3,917,055	424,498	0.6	2.1	1.5
Mandalay	4,577,762	278,465	6,165,723	580,359	1.0	2.4	1.4
Mon	1,680,157	96,817	2,054,393	203,481	0.7	2.4	1.8
Rakhine	2,045,559	125,810	2,098,807	206,515	0.1	1.6	1.5
Yangon	3,965,916	231,967	7,360,703	645,329	2.0	3.3	1.3
Shan	3,090,339	176,973	5,824,432	405,631	2.0	2.7	0.6
Ayeyawady	4,994,061	373,124	6,184,829	569,906	0.7	1.4	0.7
Nay Pyi Taw			1,160,242	83,747			

The projected populations for States/Regions in 2030 illustrate what may happen if present trends continue (Table 8.4). In 15 years, the oldest States/Regions are projected to be the same ones that were the oldest in the 2014 Census. The four oldest States/Regions are also projected to have declining or only modestly growing total populations, indicating that the outmigration of working-age adults is driving population ageing. Most States/Regions have growth rates of the older population which are three to six times the growth rate of the total population, except in Yangon where the older population is growing at a comparatively slow rate; twice as fast as the total population.

Table 8.4

Projected population and annual growth rate of persons aged 60 years old and over from 2015 to 2030 by State/Region

State/Region	2015			2030			Annual growth rate 2015-2030	
	Total	60+	% 60+	Total	60+	% 60+	Total	60+
Magway	3,944,972	433,035	11.0	3,845,976	647,583	16.8	-0.2	2.7
Mon	2,034,439	208,145	10.2	1,893,405	316,297	16.7	-0.5	2.8
Bago	4,896,520	489,996	10.0	4,999,430	809,358	16.2	0.1	3.3
Ayeyawady	6,262,164	593,810	9.5	6,135,794	972,382	15.8	-0.1	3.3
Sagaing	5,411,440	509,237	9.4	5,942,547	850,704	14.3	0.6	3.4
Mandalay	6,274,139	598,360	9.5	7,122,580	1,007,720	14.1	0.8	3.5
Rakhine	3,266,405	319,183	9.8	3,495,118	485,352	13.9	0.5	2.8
Kayin	1,575,826	132,521	8.4	1,712,637	228,069	13.3	0.6	3.6
Nay Pyi Taw	1,196,717	89,565	7.5	1,499,213	192,974	12.9	1.5	5.1
Yangon	7,595,018	675,899	8.9	10,397,969	1,320,109	12.7	2.1	4.5
Tanintharyi	1,434,723	112,896	7.9	1,631,909	202,244	12.4	0.9	3.9
Shan	6,001,082	423,637	7.1	7,450,683	812,210	10.9	1.4	4.3
Kachin	1,762,901	109,620	6.2	2,292,682	222,958	9.7	1.8	4.7
Chin	497,009	36,482	7.3	578,431	55,916	9.7	1.0	2.8
Kayah	297,162	18,013	6.1	400,663	37,337	9.3	2.0	4.9

The high proportion of the older population in Magway and several other States/Regions are not so much greater as to warrant special policy attention, because they have originated through smaller families and greater outmigration. These trends are likely to influence the social and economic conditions of the older population.

8.2 Regional variations in the social and economic characteristics of the older population

8.2.1 Marital status

Most older people in Myanmar would have married at some time during their lifetime. As discussed in Chapter 4, a small proportion of females never married, amounting to 8.2 per cent of older women throughout the country. Older males were much more likely to be ever-married than females, but there is a small proportion of males who, at the time of the Census, had 'renounced' marriage and other aspects of routine life to join religious orders. These men may have been married at some point in their life or they may have joined an order as a single person. However, at the time of the Census, older men who were reported as renounced would have been living without a spouse. If the proportion of older men who were reported to be renounced (3.3 per cent) is added to the proportion of older men who never married (4.1 per cent) the total (7.4 per cent) is similar to the proportion of older women who never married.

Figure 8.4 shows the marital status of older men and women by State/Region. In every State/Region, there is a higher proportion of women who never married than men. At least 10 per cent of older women are never married or renounced in Mandalay and Bago. In those same areas and adding Yangon and Mon, at least 8 per cent of older men have never married

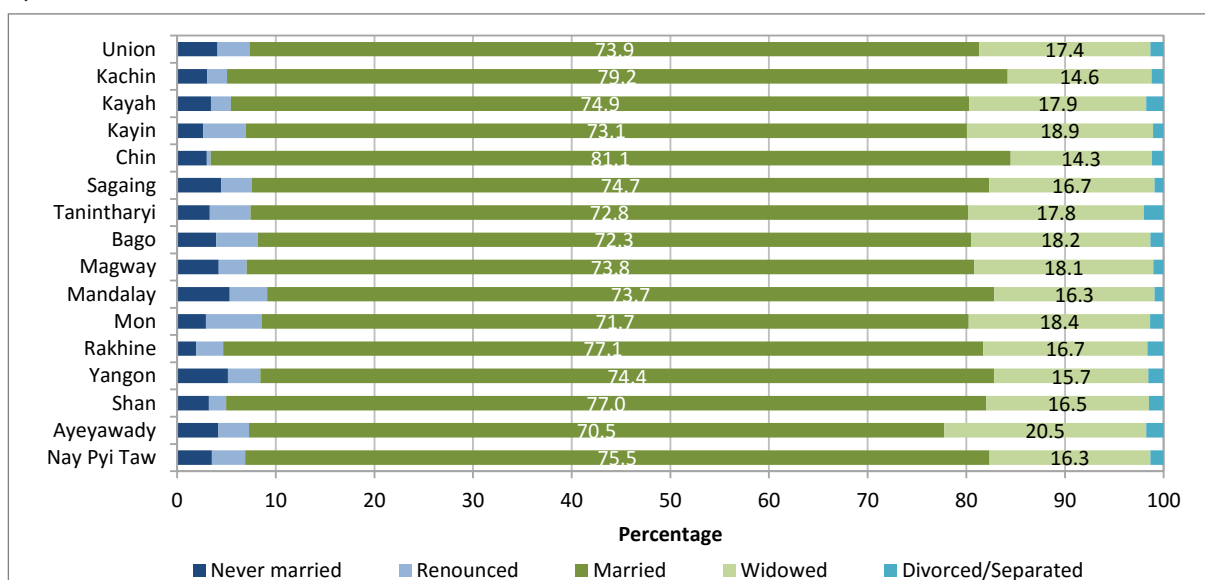
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or are renounced. Older women are much more likely to have been widowed than older men because of higher female life expectancy and the gap in the ages of husbands and wives. The proportion of older women living as widows is lowest in Mandalay at 41.6 per cent and highest in Kachin at 53.6 per cent. The ranking is almost the reverse for men in Kachin, which together with Chin, has the lowest proportion of older men who are widowers, while Ayeyawady has the highest at 20.5 per cent. The numbers and percentages used to derive Figure 8.4 and to investigate urban and rural differences within States/Regions can be found in Appendix 1, Table 20.

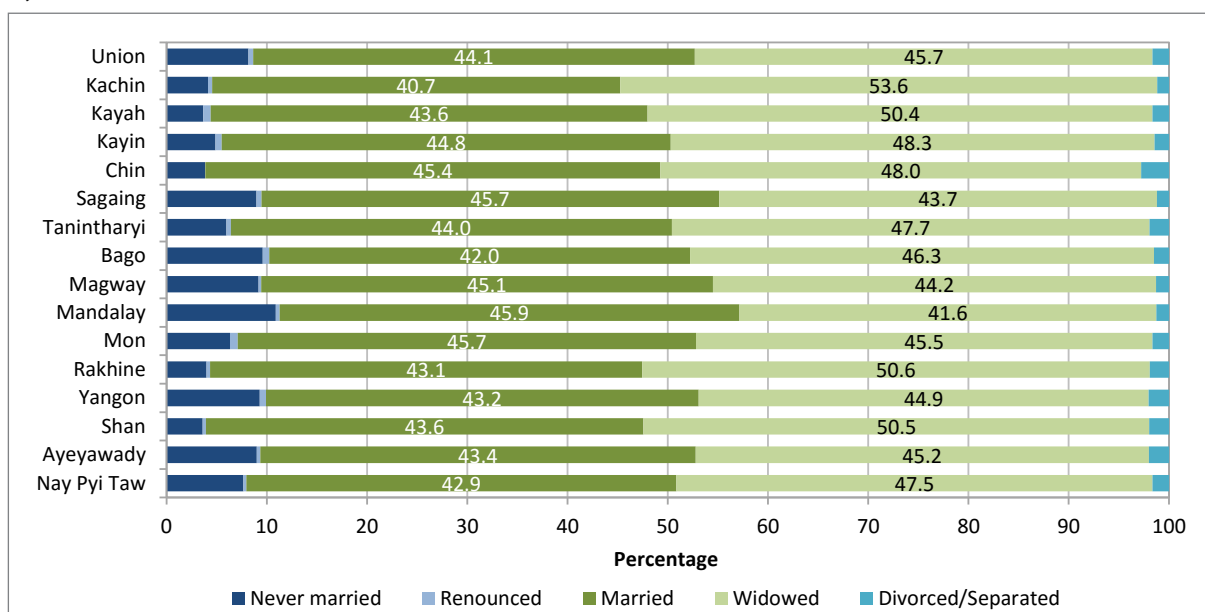
Figure 8.4

Percentage of older population, by marital status by sex, State/Region, 2014 Census

a) Male



b) Female



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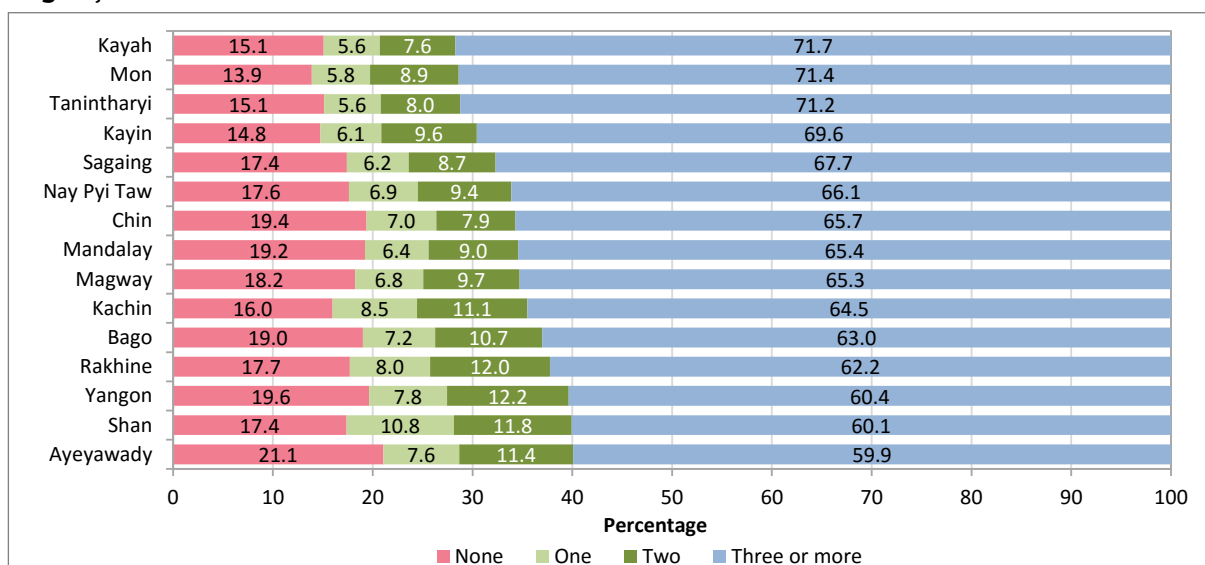
8.2.2 Number of living children

Chapters 5 and 6 describe the importance of adult children for older people. The majority of older people in Myanmar live with at least one of their children or the spouse of a child. However, there are also older people who do not have any living children and must find other living arrangements. At the Union level, 18.4 per cent of women aged 60 and over have no living children, either because they were childless or because they survived their children. Nearly two-thirds or 63.9 per cent of older women have three or more living children, giving them several opportunities to co-reside with an adult child.

Figure 8.5 shows that the proportion of older women with no living children ranges from under 14 per cent in Mon to over 20 per cent in Ayeyawady. The proportion of older women with three or more living children varies from 59.9 per cent in Ayeyawady to 71.7 per cent in Kayah. The differences are the result of earlier fertility decline in States/Regions such as Yangon and Ayeyawady and higher fertility in States/Regions such as Kayah and Chin. The pattern by Districts (given in Appendix 1, Table 21) is even more diverse. Two Districts in eastern Shan State have very high proportions of older women with no living children, 41 per cent in Makman and 39 per cent in Hopan. There are another 18 Districts where at least 20 per cent of older women have no living children. These include West Yangon, two districts in Mandalay, all six districts in Ayeyawady, three in Sagaing, two in Bago, two other Districts in Shan and one in Rakhine, and Chin. Shan also has Districts where a low percentage of older women are childless, such as in Laukine (10.2 per cent), Kunlon (12.5 per cent) and Muse (12.6 per cent).

Figure 8.5

Percentage of older women in conventional households by number of living children, State/Region, 2014 Census



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8.2.3 Household composition

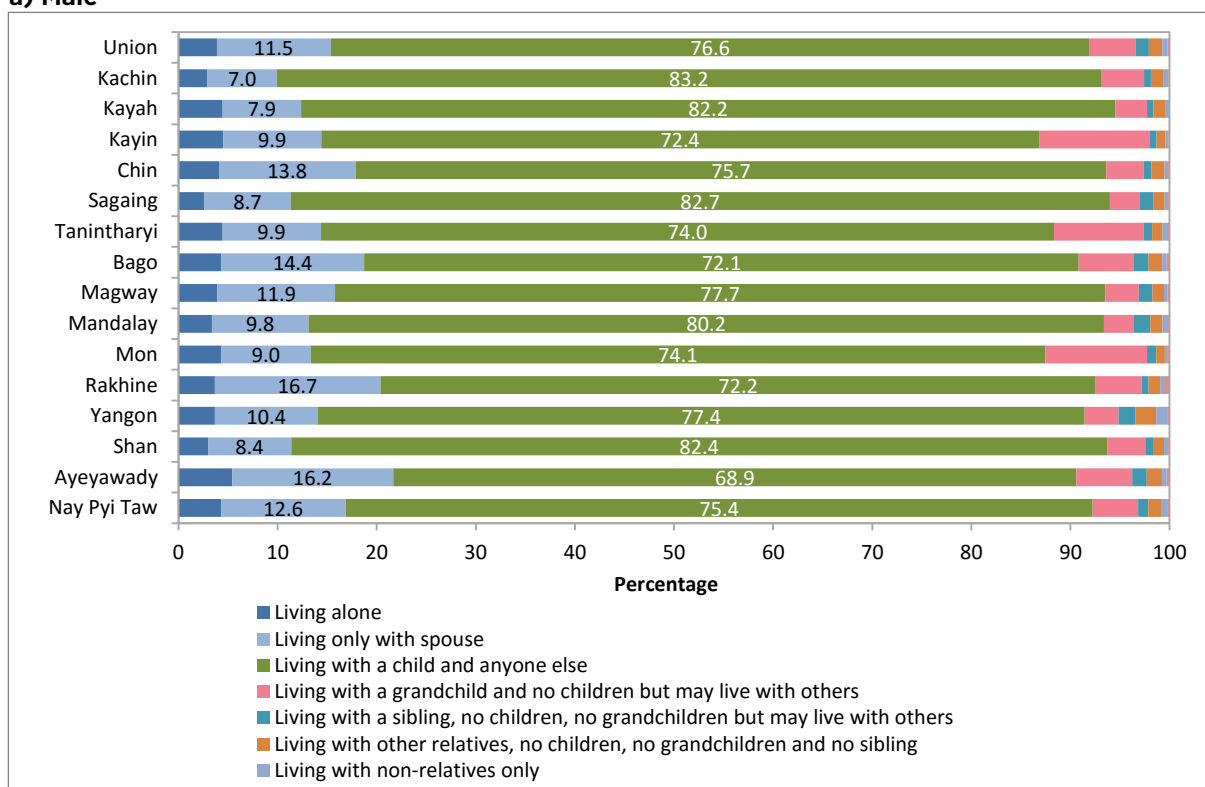
The prevalence of different forms of household composition in States/Regions follows the same pattern as at the Union level (Figure 8.6). The majority of older men and women live with their adult children. Older men are more likely to be living with their children than older women. The proportion of older people living with their children is highest in Shan, Sagaing, Kayah and Kachin (over 80 per cent for men and 75 per cent for women) and lowest in Ayeyawady (69 per cent for men) and Chin (59 per cent for women).

Figure 8.6 also highlights small but meaningful State/Region variations in the proportion of older people living alone or with only their spouse and with their grandchildren without the presence of a parental generation. For men, Ayeyawady and Rakhine have higher proportions of older people living alone or with a spouse only than other States/Regions. For women, this is the case in Chin and Rakhine. Mon, Tanintharyi and Kayin have larger percentages of older people living with grandchildren but no parents. Table 8.5 gives these percentages by urban and rural area.

Figure 8.6

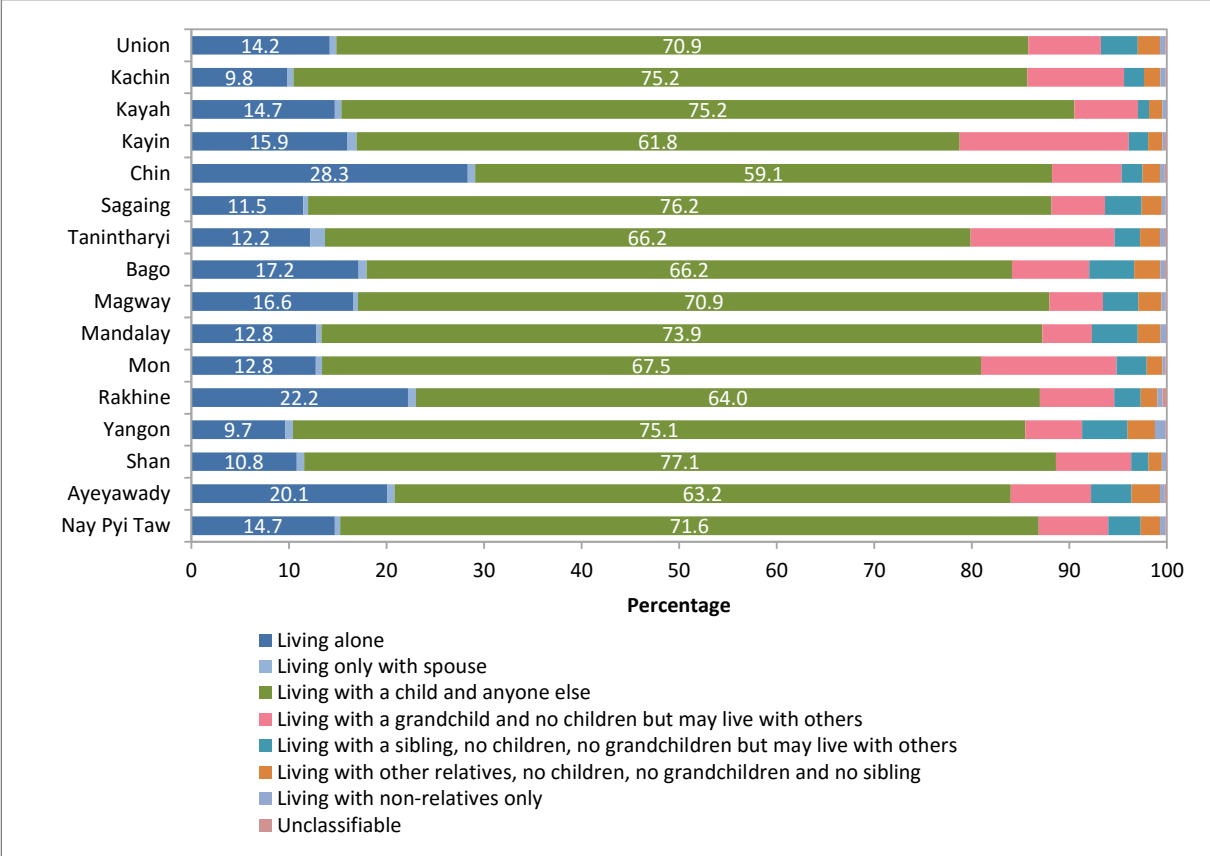
Population of household heads aged 60 years and over by household composition, State/Region, 2014 Census

a) Male



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b) Female



The proportion of older people living with a grandchild and no adult children is higher in rural than urban areas (Table 8.5). It is most prevalent in Kayin, Tanintharyi and Mon and is almost certainly related to outmigration.

More than 13 per cent of urban older people live either alone or with their spouse only in Chin, Bago, Magway, Ayeyawady and Nay Pyi Taw. More than 19 per cent of rural older people live alone or with their spouse only in Chin, Bago, Rakhine, Ayeyawady, and Yangon. In Bago, Magway, Ayeyawady, Rakhine and rural Yangon, these high rates are likely to be the result of adult children having moved away for work. Migration or the greater availability of housing enabling rural older people to maintain separate housing near to their adult children could be a factor in Chin.

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Table 8.5

Proportion of household heads 60 years old and over by living arrangement, urban and rural areas, State/Region, 2014 Census

State/Region/Area	Total	Living alone	Living with spouse only	Living alone + with spouse	Living with grandchildren and no children
Urban					
Union	767,067	5.8	5.6	11.4	5.0
Kachin	21,163	4.7	3.5	8.3	6.5
Kayah	3,158	6.1	4.3	10.4	5.1
Kayin	12,826	5.9	5.0	10.9	9.4
Chin	4,769	7.7	7.2	14.9	5.5
Sagaing	47,797	5.8	5.5	11.3	4.6
Tanintharyi	16,294	6.2	4.5	10.7	8.4
Bago	66,607	7.2	7.3	14.5	5.7
Magway	39,179	7.5	6.1	13.6	4.6
Mandalay	103,418	5.1	4.7	9.8	3.8
Mon	35,339	6.1	4.5	10.6	8.7
Rakhine	18,059	6.0	6.3	12.3	4.6
Yangon	269,056	4.8	5.3	10.1	4.0
Shan	61,839	6.1	5.7	11.8	6.4
Ayeyawady	55,562	8.1	7.9	16.0	6.0
Nay Pyi Taw	12,001	7.0	7.0	14.1	5.2
Rural					
Union	1,763,841	8.8	8.0	16.8	6.0
Kachin	31,381	6.5	4.9	11.4	6.8
Kayah	6,162	9.1	5.9	15.0	4.0
Kayin	56,998	9.7	6.7	16.4	14.5
Chin	14,898	12.3	10.9	23.2	4.5
Sagaing	233,754	6.2	5.4	11.6	3.9
Tanintharyi	42,518	8.1	7.3	15.4	12.5
Bago	200,198	10.0	9.7	19.8	6.7
Magway	212,038	9.3	7.5	16.8	4.1
Mandalay	232,312	8.2	6.5	14.7	3.9
Mon	84,349	8.4	6.1	14.5	13.0
Rakhine	85,605	10.2	12.9	23.1	5.8
Yangon	96,756	9.7	9.7	19.3	5.6
Shan	159,120	5.6	5.7	11.3	4.7
Ayeyawady	272,255	11.1	11.3	22.5	6.7
Nay Pyi Taw	35,497	9.1	7.8	16.9	5.8

8.2.4 Housing quality and amenities

Myanmar is one of the lowest income countries in Asia and this has an implication for the living conditions of older people. This section describes the State/Region variations for three indicators of material well-being for older people: housing type, access to improved sanitation, and electricity as the main source of lighting. To conclude the section, States/Regions are ranked based on their combined score across the three variables in order to establish if older people in some locations are particularly disadvantaged.

Type of Housing

The type of housing people live in is influenced by their economic resources; building conventions in the local area; and the wider stock of housing available. As Chapter 6 described, housing types recorded in the Census questionnaire are classified into condominiums/apartments and bungalows/brick houses; those categorized as wooden and semi-pacca; and those which need constant maintenance to provide protection such as housing units made from bamboo, huts and 'other'. The type of housing is an indicator of the households' economic resources and of the level of material well-being. While a semi-pacca or wooden house may be as comfortable, safe and healthy as a condominium/apartment or bungalow/brick house, other types of dwelling units such as housing units made from bamboo or huts, or other types of units are constructed using poorer standard building materials.

Figure 8.7

Proportion of population aged 60 and over by type of housing, State/Region, 2014 Census

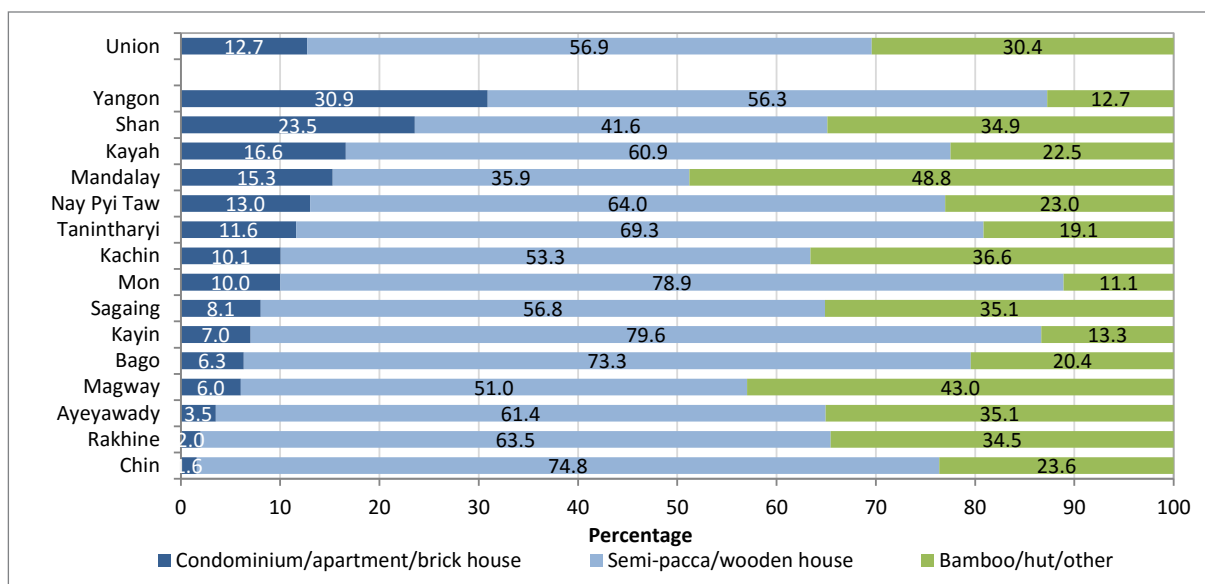


Figure 8.7 shows the wide variation in older people's housing type between States/Regions. Living in a condominium/apartment is rare in most areas, accounting for the housing of less than 11 per cent of the older population in nine States/Regions. Only in Yangon and Shan do more than 20 per cent of older people live in condominiums/apartments/brick houses. Nearly half of the older population in Mandalay and over 30 per cent in Shan, Kachin, Sagaing, Magway, Ayeyawady, and Rakhine live in a housing unit made from bamboo, a hut, or other types of dwelling units.

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Table 8.6 gives the percentages of housing type for the older population in urban and rural areas. As would be expected, a higher proportion of urban older people compared to rural older people live in condominiums/apartments/bungalows/brick houses, but more than a quarter of urban older people live in a house constructed from bamboo, a hut or other types of dwelling units in Kachin, Sagaing, Magway, Mandalay and Rakhine. The numbers from which Figure 8.7 and Table 8.6 were derived can be found in Appendix 1, Table 22.

Table 8.6

Percentage of older population by type of housing units they are staying in, urban and rural areas, State/Region, 2014 Census

State/ Region	Urban				Rural			
	Condominiums/ apartments	Semi-pacca/ wooden houses	Bamboo/ hut/other	Total	Condominiums/ Apartments	Semi-pacca/ wooden houses	Bamboo/ hut/ other	Total
Union	28.6	53.1	18.3	100	5.8	58.5	35.7	100
Kachin	17.9	53.4	28.8	100	5.0	53.3	41.7	100
Kayah	29.2	58.6	12.3	100	11.0	61.9	27.0	100
Kayin	17.8	74.6	7.6	100	4.6	80.8	14.6	100
Chin	6.1	85.3	8.6	100	0.2	71.6	28.2	100
Sagaing	17.7	51.0	31.3	100	6.1	58.0	35.9	100
Tanintharyi	20.5	66.4	13.1	100	8.3	70.3	21.3	100
Bago	16.6	70.4	13.0	100	3.0	74.2	22.8	100
Magway	17.4	37.4	45.2	100	4.0	53.4	42.6	100
Mandalay	27.7	33.8	38.5	100	9.7	36.9	53.4	100
Mon	18.8	74.0	7.2	100	6.2	81.0	12.7	100
Rakhine	8.7	64.2	27.1	100	0.6	63.3	36.1	100
Yangon	39.0	54.1	6.9	100	6.7	63.1	30.1	100
Shan	46.5	33.0	20.4	100	15.3	44.6	40.1	100
Ayeyawady	13.0	69.5	17.5	100	1.6	59.8	38.6	100
Nay Pyi Taw	34.5	50.0	15.5	100	4.7	69.4	25.9	100

Electricity as a source of energy for lighting

An indicator of the poor quality of public infrastructure in Myanmar is the very low proportion of older people who use electricity as their main source of lighting, especially in rural areas. Throughout the Union, a little more than a third of older people (36.6 per cent) have electric lighting. In rural areas only 16.4 per cent have electric lighting compared to 83.2 per cent in urban areas. Variations between States/Regions are considerably – from only 7.5 per cent of older people with electrical lighting in their houses in Tanintharyi to 78.9 per cent in Yangon. In all States/Regions, older people in urban areas are more likely to live in a household with electric lighting than older people in rural areas. However, even in urban areas there is a wide range from only 10.3 per cent in Tanintharyi to over 90 per cent in Yangon, Mandalay, Kayah and Magway. In only three States/Regions is the percentage of older rural people with electric lighting 30 per cent or higher. In another four States/Regions, less than 10 per cent of older people have electric lighting in rural areas.

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Table 8.7

Percentage of population aged 60 and over living in conventional households whose main source of lighting is electricity, urban and rural areas, State/Region, 2014 Census

State/ Region	Union		Urban		Rural	
	Total	% with electricity for lighting	Total	% with electricity for lighting	Total	% with electricity for lighting
Union	4,341,459	36.6	1,312,355	83.2	3,029,104	16.4
Tanintharyi	105,619	7.5	28,236	10.3	77,383	6.4
Rakhine	202,039	13.7	34,102	52.6	167,937	5.8
Chin	35,417	16.4	8,226	40.1	27,191	9.2
Ayeyawady	556,054	16.9	93,096	73.3	462,958	5.5
Magway	414,654	23.8	62,862	91.7	351,792	11.6
Kayin	118,473	26.6	22,087	71.7	96,386	16.2
Sagaing	481,249	28.1	81,426	73.2	399,823	19.0
Bago	458,347	34.3	112,775	82.9	345,572	18.4
Kachin	95,879	36.0	37,970	66.2	57,909	16.2
Shan	396,996	37.0	104,692	80.9	292,304	21.3
Mandalay	562,146	40.9	174,208	91.5	387,938	18.2
Nay Pyi Taw	80,594	42.7	22,349	88.4	58,245	25.1
Mon	194,498	43.3	58,092	74.4	136,406	30.0
Kayah	16,735	53.4	5,151	93.8	11,584	35.5
Yangon	622,759	78.9	467,083	93.3	155,676	35.7

Table 8.8 compares the percentage of older people with electric lighting in their houses with that of children and prime working-age adults. The differences between age groups are not large, but there are some patterns. In every State/Region, children are least likely to live in a house with electric lighting. In nine States/Regions older people have higher rates of electric lighting in their houses than prime working-age adults and in six the reverse is true.

Table 8.8

Percentage of population living in a conventional household with electricity in their house as main source of lighting by functional age group by State/Region, 2014 Census

State/ Region	Total		Children		Prime working-age		Older persons	
	Total	% with electricity for lighting	Total	% with electricity for lighting	Total	% with electricity for lighting	Total	% with electricity for lighting
Union	47,929,999	33.3	13,995,368	27.4	29,593,172	35.5	4,341,459	36.6
Kachin	1,370,748	31.4	451,502	27.6	823,367	33.0	95,879	36.0
Kayah	272,730	47.8	97,160	42.2	158,835	50.7	16,735	53.4
Kayin	1,454,264	26.3	529,818	22.3	805,973	28.8	118,473	26.6
Chin	469,109	14.9	189,862	13.1	243,830	16.0	35,417	16.4
Sagaing	5,076,326	24.2	1,477,357	19.5	3,117,720	25.7	481,249	28.1
Tanintharyi	1,352,283	8.1	470,653	7.5	776,011	8.6	105,619	7.5
Bago	4,743,808	28.1	1,364,369	23.1	2,921,092	29.5	458,347	34.3
Magway	3,786,538	23.1	1,033,009	20.5	2,338,875	24.1	414,654	23.8
Mandalay	5,843,424	41.6	1,544,174	36.8	3,737,104	43.7	562,146	40.9
Mon	1,949,821	36.8	621,619	31.2	1,133,704	38.8	194,498	43.3
Rakhine	2,034,148	13.0	642,837	10.2	1,189,272	14.4	202,039	13.7
Yangon	6,949,440	71.1	1,677,494	62.5	4,649,187	73.2	622,759	78.9
Shan	5,500,933	33.3	1,785,380	29.7	3,318,557	34.9	396,996	37.0
Ayeyawady	6,053,594	12.2	1,795,695	8.8	3,701,845	13.2	556,054	16.9
Nay Pyi Taw	1,072,833	42.5	314,439	37.2	677,800	44.8	80,594	42.7

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Access to improved sanitation

The 2014 Census defined improved sanitation as a 'flush toilet' or a water sealed pit latrine. At the Union level, nearly 80 per cent of older people live in a household with access to improved sanitation. In urban areas, nearly 95 per cent have such access and in rural areas about three-quarters have access (Table 8.9). Older people in Rakhine stand out as those with the least access to improved sanitation.

Table 8.9

Percentage of older people living in a household with access to improved sanitation, urban and rural areas, State/Region, 2014 Census

State/ Region	Union		Urban		Rural	
	Total	% with improved sanitation	Total	% with improved sanitation	Total	% with improved sanitation
Union	4,341,459	79.8	1,312,355	94.6	3,029,104	73.4
Rakhine	202,039	37.2	34,102	81.5	167,937	28.2
Shan	396,996	65.7	104,692	93.2	292,304	55.8
Kayin	118,473	73.3	22,087	96.0	96,386	68.1
Magway	414,654	75.4	62,862	87.2	351,792	73.3
Tanintharyi	105,619	75.4	28,236	93.3	77,383	68.9
Sagaing	481,249	78.4	81,426	93.2	399,823	75.4
Chin	35,417	79.0	8,226	94.5	27,191	74.3
Bago	458,347	81.7	112,775	93.0	345,572	78.0
Ayeyawady	556,054	82.4	93,096	93.9	462,958	80.1
Mandalay	562,146	85.6	174,208	95.3	387,938	81.2
Mon	194,498	86.6	58,092	95.7	136,406	82.7
Kachin	95,879	87.4	37,970	92.2	57,909	84.3
Kayah	16,735	90.5	5,151	95.7	11,584	88.2
Nay Pyi Taw	80,594	90.6	22,349	95.0	58,245	88.9
Yangon	622,759	94.7	467,083	97.3	155,676	87.1

Summary of the material conditions of older people

Designing policies and programmes to support older people means, in part, targeting areas where the older population experiences the most difficult living conditions. To contribute to policy development, Figure 8.8 draws together the information on the material conditions of the older population. A ranking of States/Regions from the most to the least disadvantaged was created by summing the three measures presented above: access to improved sanitation, living in a bamboo/hut/other type of dwelling unit and the use of electricity for lighting. Yangon was ranked first since it has the lowest proportion of older persons living without access to improved sanitation (score of 1); the second lowest proportion of older persons living in a bamboo/hut/other type of dwelling unit (score of 2); and the lowest proportion of older persons living without electric lighting (score of 1). When summed, Yangon had a score of 4, meaning it ranked in first place (having the lowest score) out of all States/Regions.

As Figure 8.8 shows, there is no perfect relationship between these three variables. Some States/Regions rank relatively high on one or more indicators and low on others; however, there is a general pattern. The final ranking, shown in the first column, shows that Yangon is the Region where older people have the highest material wealth. Sagaing, Magway and

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Rakhine rank the lowest; that is, older persons are most likely to lack access to improved sanitation, live in a condominium/apartment/bungalow or semi-pacca or wooden house or use electric lighting, although they are not necessarily the States/Regions with the greatest deprivation for each indicator.

Figure 8.8

Ranking of State/Region by indicators of material comfort for older people, 2014 Census



8.2.5 Formal education and literacy

Attending formal schooling gives children a lifelong advantage. In addition to basic literacy and numeracy, education provides a better understanding of how society and government functions. A person who has attended school is better able to acquire and act on new knowledge and have greater confidence dealing with government and the private sector. Table 8.10 gives the percentage of older people who have never attended school, ranked from the lowest to the highest. Yangon has the lowest percentage of older people who have never attended school (11.1 per cent) and Shan has the highest (65.7 per cent). Between 18 and 25 per cent of older people in the central States/Regions, with the exception of Mon and Magway, have never attended school. Between 30 and 50 per cent of older people in the more remote States/Regions of Rakhine, Kachin, Kayah, Kayin and Chin have never attended school. In all States/Regions, older females are less likely to have attended school than older males. In most States/Regions, the proportion of those who have never attended school in rural areas is at least twice as high as the urban proportion. The numbers from which Table 8.10 were derived can be found in Appendix 1, Table 23.

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Table 8.10

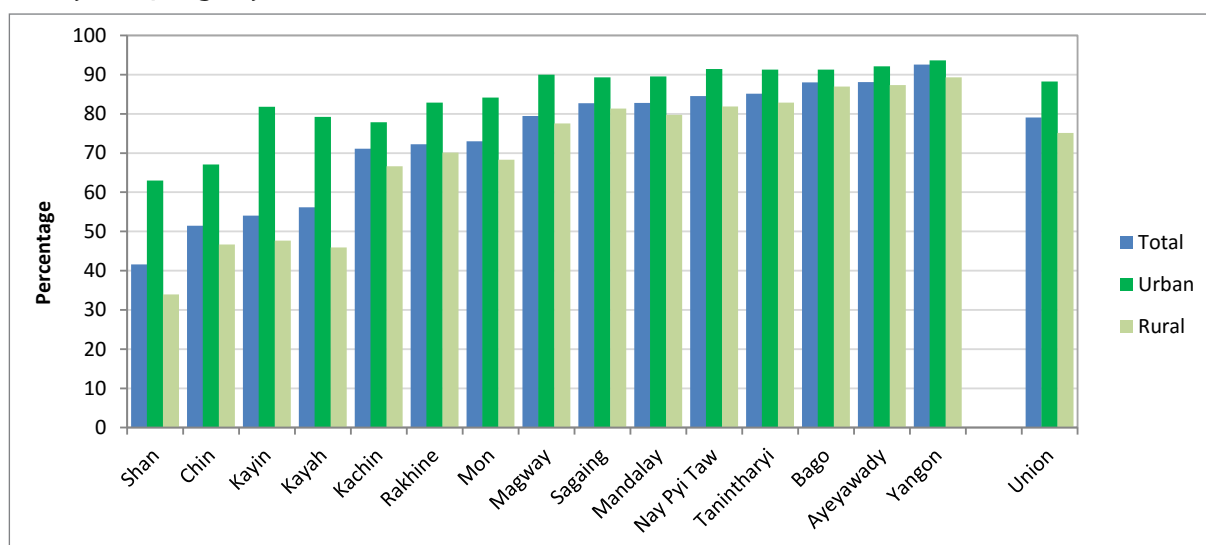
Percentage of population aged 60 and over who have never attended school by sex, urban and rural areas, State/Region, 2014 Census

State/ Region	Both sexes			Male			Female		
	Union	Urban	Rural	Union	Urban	Rural	Union	Urban	Rural
Union	28.7	15.0	34.6	20.9	8.4	26.0	34.3	19.5	41.0
Yangon	11.1	8.5	18.9	6.4	3.8	13.5	14.5	11.8	23.0
Tanintharyi	17.9	10.0	20.8	13.7	5.6	16.4	21.1	13.0	24.3
Nay Pyi Taw	18.9	10.6	22.1	7.0	3.3	8.5	26.9	15.4	31.3
Bago	20.8	12.8	23.4	14.8	7.0	17.1	25.0	16.5	28.0
Ayeyawady	21.8	12.7	23.7	16.2	7.1	17.9	26.3	16.5	28.4
Sagaing	24.1	13.7	26.2	14.0	5.7	15.7	30.9	19.0	33.4
Mandalay	25.2	13.7	30.3	14.4	6.1	18.0	32.4	18.6	38.8
Mon	30.1	18.0	35.2	22.5	11.0	26.9	35.8	22.8	41.8
Rakhine	32.8	20.1	35.3	19.9	10.4	21.6	42.5	26.6	46.0
Kachin	35.2	26.3	41.1	25.5	16.4	31.3	41.7	32.6	47.7
Magway	40.1	16.5	44.3	32.1	9.6	35.9	45.6	20.8	50.3
Kayah	45.0	22.4	55.1	32.2	11.6	40.6	55.3	30.2	67.3
Kayin	48.4	20.0	54.9	38.8	11.7	44.6	55.8	25.9	63.1
Chin	49.1	34.9	53.4	27.7	14.6	31.6	67.5	51.8	72.4
Shan	65.7	42.3	74.0	57.3	31.4	65.6	72.5	50.1	81.3

In the 2014 Census, people living in conventional households were asked if they could read and write in any language. The results for the older population reflect the same pattern as found in the percentage of those who had never attended school as shown at Table 8.10. Literacy rates are highest in Yangon, followed by Ayeyawady and Bago and lowest in Chin and Shan States. See Appendix 1, Table 24 for the numbers used to derive Figure 8.9.

Figure 8.9

Percentage of older persons living in conventional households who are literate, urban and rural areas, State/Region, 2014 Census



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Many States/Regions have made impressive gains in literacy in recent decades. Table 8.11 shows these gains by comparing the literacy rates of youth and older people. With the exception of Kayah and Shan States, the youth literacy rates in all States/Regions are over 90 per cent. The progress in literacy rates has been particularly pronounced for females. For example, older women in Kachin have a literacy rate of 63.2 per cent but 97.8 per cent of female youth are literate. Even in Shan, Chin, Kayah and Kayin States there has been remarkable progress, considering the low level of literacy among people aged 60 and over. The literacy rates for the older population can be found in Appendix 1, Table 24 and the youth literacy rates can be found in the 2014 Census thematic report on Children and Youth (Department of Population 2017c).

Table 8.11

Literacy rates for youth and the older population by State/Region, 2014 Census

State/Region	Youth aged 15-24			Population aged 60 and over			Difference		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Union	94.0	94.5	93.5	79.1	88.8	72.0	14.9	5.7	21.5
Kachin	97.8	97.8	97.8	71.1	83.0	63.2	26.7	14.8	34.6
Kayah	94.5	95.2	93.7	56.2	69.2	45.8	38.3	26.0	47.9
Kayin	86.8	86.0	87.5	54.0	65.2	45.3	32.8	20.8	42.2
Chin	93.3	95.7	91.2	51.4	72.6	33.3	41.9	23.1	57.9
Sagaing	97.4	97.7	97.2	82.7	94.0	75.1	14.7	3.7	22.1
Tanintharyi	96.1	95.9	96.1	85.1	91.7	80.1	11.0	4.2	16.0
Bago	96.7	97.1	96.3	88.0	95.4	82.8	8.7	1.7	13.5
Magway	97.1	97.6	96.7	79.4	93.5	69.7	17.7	4.1	27.0
Mandalay	97.6	98.0	97.2	82.8	95.0	74.6	14.8	3.0	22.6
Mon	93.8	93.5	94.1	73.0	82.8	65.7	20.8	10.7	28.4
Rakhine	91.3	94.1	89.1	72.2	87.9	60.4	19.1	6.2	28.7
Yangon	97.9	98.1	97.7	92.6	97.6	89.0	5.3	0.5	8.7
Shan	76.8	78.4	75.3	41.6	54.1	31.4	35.2	24.3	43.9
Ayeyawady	95.9	96.3	95.5	88.1	94.8	82.8	7.8	1.5	12.7
Nay Pyi Taw	97.3	98.2	96.6	84.5	96.9	76.2	12.8	1.3	20.4

8.2.6 Main/usual activity of the older population

Chapter 4 discussed older people's transition out of the labour force in their older years. At the Union level, older men have higher labour force participation rates than older women and older people in rural areas are more likely to be economically active than urban older people. These patterns also occur in each State/Region.

Table 8.12 shows that the older population in Yangon has a much lower labour force participation rate than any other State/Region. Shan and Chin have the highest rates. The percentage of older people who were recorded as pensioner, retired, or classified themselves as an older person ranged from 39.2 per cent in Ayeyawady to 50.3 per cent in Yangon.

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Table 8.12

Percentage of older population by main/usual activity, State/Region, 2014 Census

State/Region	Older population	In labour force	Pensioner, retired, older persons	Other
Union	4,474,408	30.3	45.2	24.5
Yangon	645,329	21.2	50.3	28.4
Mon	203,481	28.6	41.6	29.9
Mandalay	580,359	28.6	46.9	24.6
Bago	472,847	29.1	43.2	27.7
Kayin	122,317	29.6	42.1	28.3
Sagaing	495,140	30.0	49.5	20.5
Kachin	102,612	31.0	47.6	21.3
Tanintharyi	109,051	31.2	41.0	27.9
Magway	424,498	31.7	45.5	22.8
Rakhine	206,515	32.0	43.5	24.5
Nay Pyi Taw	83,747	32.1	43.2	24.7
Kayah	17,179	33.9	45.1	21.0
Ayeyawady	569,906	35.3	39.2	25.5
Shan	405,631	38.7	45.0	16.4
Chin	35,796	38.9	41.1	20.0

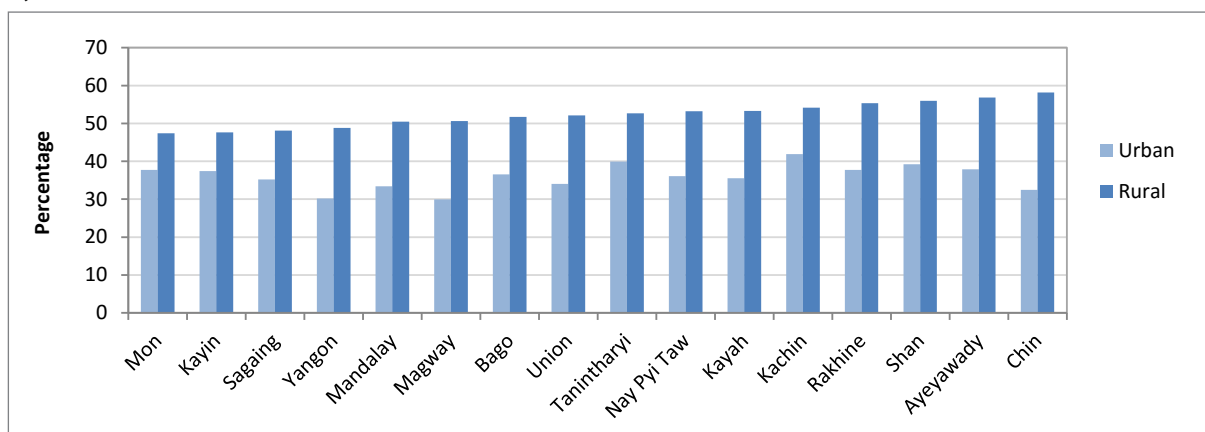
Note: 'Other' in this table is comprised of 'household work', 'did not seek work', 'full-time student', 'ill, disabled' and 'other'.

Figure 8.10 breaks down labour force participation rates by urban and rural areas for males and females. States/Regions are ranked by the rate in rural areas. There are no clear patterns between the labour force participation rates of older people in urban and rural areas. For example, older rural men in Chin have the highest labour force participation rates but urban men in that State have among the lowest rates. There is also no consistency between male and female labour force participation rates. In Chin and Shan, rural labour force participation is high for both males and females, but in Bago the rate for older rural females is low while it is moderately high for males. Table 8.12 and Figure 8.10 were calculated from numbers provided in Appendix 1, Table 25.

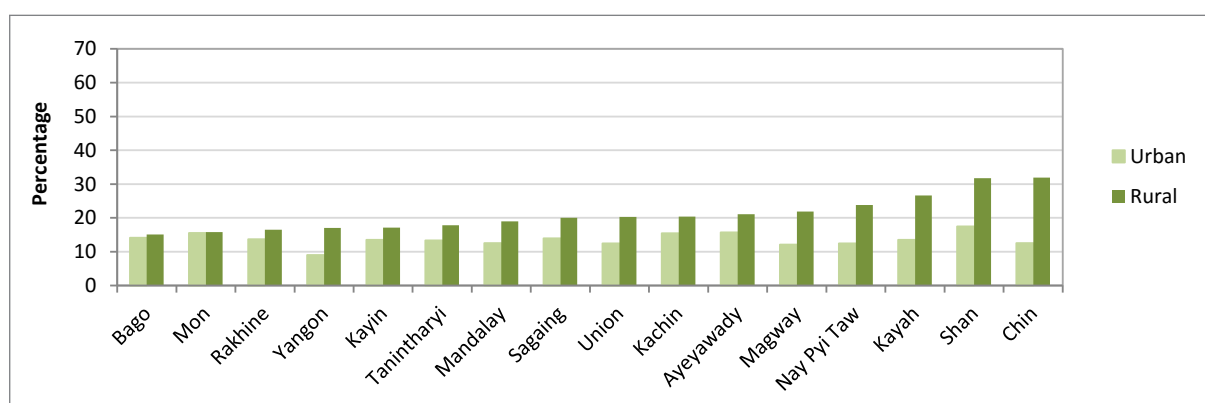
Figure 8.10

Labour force participation rates of older population by sex, urban and rural areas, State/Region, 2014 Census

a) Male



b) Female



8.3 Summary

Like the rest of the population, half of the older population in Myanmar live in several of the largest States/Regions. There are 14.4 per cent of all older people in Yangon; 13 per cent in Mandalay; and 12.7 per cent in Ayeyawady. Sagaing and Bago are home to about 11 per cent of the older population. Also like the total population, 49 per cent of urban older people live in the urban areas of Yangon and Mandalay.

The extent of population ageing is greatest in several of the central States/Regions. Magway has the oldest population, followed by Mon, Bago, Mandalay, Sagaing, Ayeyawady and Yangon. The enumerated population of Rakhine is also relatively old, but this may not be true for the non-enumerated population. In all States/Regions, the urban population has the same or a higher proportion of the older population as the rural population. A map of the older age dependency ratio shows that Districts with the highest ratios are in the centre of the country while Districts with the lowest older age dependency ratios are along the eastern and northern borders. If present rates continue, the central States/Regions will experience the highest growth rate of the older population by 2030, accompanied by a declining

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total population. This is the result of a steady outflow of the population for employment opportunities. All States/Regions are projected to have older populations growing at a rate of at least 3 per cent every year, faster than the total population.

The combination of outmigration and fertility decline also affects household composition. Most older people - from 70 to 80 per cent - co-reside with an adult child. However, a few States/Regions have over 10 per cent of older persons living alone or with a spouse only. This is more common in rural areas. In the rural areas of three States/Regions (Kayin, Tanintharyi and Mon) with high rates of outmigration of adults, over 10 per cent of older people are living with their grandchildren but no adult child.

Highlighting three indicators of poor material well-being (poorer quality of housing, lack of access to improved sanitation and no electrical lighting), a large proportion of older people live in difficult conditions. Some patterns in State/Region variations were observed. Yangon, Mon, Kayah, Nay Pyi Taw and Bago were ranked as the States/Regions which had the highest level of material well-being for older people. Sagaing, Magway and Rakhine were ranked the lowest for the material well-being of older people.

The proportion of older people who have never attended school and who were illiterate also varied widely among States/Regions. An encouraging finding is that by comparing the literacy rates of youth and older people, it can be seen that all States/Regions have made substantial gains (or maintained a high level) of literacy, especially for females. The gender gaps in education and literacy among States/Regions seen among older people, will narrow in the future.

The labour force participation of older people varies among States/Regions from 21.2 per cent in Yangon to 38.9 per cent in Chin. In all cases, older men are more likely to be in the labour force than older women. Older people living in rural areas are more likely to be working than those in urban areas. However, patterns are not consistent. Some States/Regions may have a high labour force participation rate for older males compared to other States/Regions, but a lower labour force participation rate among older females. Cultural factors as well as the local economy influences the main activities of older people.

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As discussed in Chapter 3 and throughout this report, the ageing of a population is a natural outcome of the demographic transition from high to low fertility and mortality and, to some extent, of greater mobility. These have been fundamental changes that have brought profound improvements to individuals and society. However, these forces also bring concerns about the implications for economic growth and the well-being of the older population.

The Government of Myanmar is developing policies that take into account the needs of the current and future older population, informed by the experiences of countries that have already experienced population ageing. This chapter starts with a review of what the 2014 Census reveals about the older population 20 to 30 years in the future. It also reviews the range of policies and programmes promoted through international declarations and backed by evidence. Finally, it describes the Government of Myanmar's plans for addressing the growing number of older people.

9.1 Challenges in supporting the current and future older population

A major concern about population ageing in Asia and elsewhere has been its potential impact on economic growth through a proportionate decrease in the relative size of the economically active population (Park *et al* 2012). With proportionately fewer workers there is less capacity to increase production and fewer people receiving wages which they spend and invest.

Unlike countries that have had a rapid fertility decline, Myanmar's population profile will contribute to economic growth in the short to medium term. Up to 2050, Myanmar will experience continuous growth in the working-age population and a decline in the proportion of children. Although the proportion of the older population will grow from 9 per cent in 2015 to 20 per cent in 2050, the total dependency ratio will only increase from 60 to 67 children and older people per 100 persons in the prime working ages. Furthermore, as Chapter 6 showed, 47 per cent of men and 18 per cent of women aged 60 and over are still in the labour force.

Therefore, population ageing in Myanmar should not be seen as a threat to economic growth. The policy challenges for continuing to grow the Myanmar economy are to create productive employment opportunities for youth entering the labour force and to encourage women to remain in the workforce for longer.

Although population ageing is not a threat, it does present challenges. The Government of Myanmar is committed to providing social protection to the most vulnerable in society, including older people. The characteristics of the older population in the future and the implications for policy can be forecast with a great deal of accuracy, based on the detailed information available from the Census and recent studies of older people.

From population projections, it can be seen that in the future the older population in Myanmar will be larger, both in absolute numbers and proportionately. As a result of a steady net migration from rural to urban areas and from small towns and cities to larger ones, an increasing proportion of the total population and older people will be living in urban areas

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and, probably, in the largest cities of Yangon and Mandalay. However, the majority of older people will continue to live in rural areas. In rural areas with large volumes of outmigration of youth and young adults, a higher proportion of the remaining population will be older people. Targeted programmes may be required to assist those older people who do not have adult children living nearby and, in some cases, take on responsibilities for caring for grandchildren.

Marriage and childbearing is going through a profound change in Myanmar which will affect the older people of today and the future. An increasing proportion of women, especially in urban areas, are choosing not to marry. In the 2014 Census, 18.7 per cent of women aged 40-44 in urban areas and 11.9 per cent in rural areas were single. This compares to 12.1 and 8.6 per cent of urban and rural women aged 60-64. Using the population projections described in Chapter 3 and the proportions never married (single) from Chapter 4, it is possible to project the population of single older women in 2035 and 2050. This is based on the assumption that single women aged 40-44 do not marry and that the proportion single stays at that level for younger cohorts. The result of this projection is that compared to an estimated 224,000 single older women in 2015, there will be 691,000 in 2035 and 1,076,000 in 2050. The proportion of older women who are single will increase from 8 per cent in 2015 to 14 per cent in 2050.

In the short-term, older people will benefit from a higher proportion of daughters remaining single. Single adults are more likely to live with their parents than married or widowed adults. Chapter 5 also showed that the majority of older people who are single live with family members. The average woman in her childbearing years at the time of the Census can expect to have an average of only 2.5 children (Department of Population 2016b).

Over time the older population will become much better educated. Chapter 4 showed that more than one quarter (26.5 per cent) of people aged 60-69 in 2014 had never attended school. Among 40-49 year olds, only 5.8 per cent had no education (Department of Population 2015). A more educated older population will be more informed about how to safeguard their future. They will be better able to make financial decisions and follow advice about preventive and primary health to lower their risk of illness.

Continued rural economic development will also affect the well-being of older people. Myanmar is primarily a rural country. Seventy per cent of the population live in rural areas; that is projected to continue for many decades. Therefore, the well-being of older people will largely be determined by the prosperity of the agricultural sector, supplemented by public and private investment in infrastructure such as electricity, water and sanitation and roads.

Agriculture is the main source of employment for the total population and for the older population. The agricultural sector has very low productivity; most people working in the sector earn very little. Increasing agricultural productivity is a priority for the Government of Myanmar, both to increase economic growth and to reduce poverty (World Bank Group 2014). Productivity gains will directly lead to improved well-being for older people. Chapter 6 showed that households in the lowest wealth quintiles were least likely to have an older member.

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Economic development for Myanmar will also involve continuing a trend that can be seen since 1983 of increasing non-agricultural employment. Without other changes, as more adults take jobs in non-agricultural sectors, they will be more likely to withdraw from the workforce at around the age of 60. Income security in old age will become a more pressing policy issue. Four policy approaches will need to be considered. Individuals will need opportunities to save for their old age while they are working through a range of financial products including contributory pensions. Only an estimated 12 per cent of the older population in Myanmar have access to a pension (HelpAge International 2015); expanding pension schemes for workers in the formal and informal sector will need to be considered. Older people's low labour force participation rates in Yangon and in most urban areas in other States/Regions suggests that there is a need for more flexible opportunities for older people to continue to be economically active if they wish. Lastly, older people and their families who cannot meet their basic needs require the security of social protection schemes.

The strong emphasis on supporting older people and the preference for co-residence can be expected to continue in Myanmar for many decades. The high proportion of educated adult children who live with their parents suggests that co-residence is compatible with economic growth. International studies have shown that in the short and medium term, economic growth increases the proportion of multi-generational households (Ruggie and Heggeness 2008). Chapter 6 showed that households with an older person had greater wealth per number of persons in the household than households without an older person, and the higher the level of education of children, the more likely an adult was to live with a parent.

However, the demographic changes discussed above will result in a higher proportion of older people not living with family members. Other Asian countries with similar cultural values have seen an increase in the proportion of older people living alone as a result of economic development (Teerawichitchainan, Knodel and Pothisiri 2015; World Bank 2016). Along with a shift away from co-residence, economic development has seen older people providing an increasing amount of economic support to younger generations rather than an increase in financial support from children to their parents (World Bank 2016).

Improvements in life expectancy and in disability-free life years will be dependent on policies implemented by the Ministry of Health and Sports as well as through improved standards of living as a result of economic development.

The rising prevalence of non-communicable diseases (NCDs) could result in little improvements or even a worsening of adult mortality rates. Furthermore, uncontrolled diabetes and hypertension can increase disabilities due to a lack of mobility and failing vision. Many of the risk factors for non-communicable diseases are prevalent in Myanmar. A 2014 national survey of adults aged 25-64 found that males were particularly at risk: 34 per cent smoke daily, and 20 per cent engage in heavy episodic or binge drinking. Although 84 per cent of Myanmar adults are physically active, 87 per cent ate less than the recommended servings of fruit or vegetables per day. Women are more likely to be overweight (31 per cent) and to have raised cholesterol (43 per cent). About one-quarter of males and females have high blood pressure. As a result WHO estimates that 18 per cent of males and 21 per cent of females have three out of the five risk factors for NCDs (MOH and WHO 2014).

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Lastly, an analysis of the older population in Myanmar requires a gender lens. More females than males will survive to older ages and they will live longer. However, older females are also more likely to suffer from disabilities, to live alone and to live in poverty. Older females have been found to access health care less often than older males (Rajan and Sreerupa 2016). They are less likely to be economically active and they are more likely to have never attended school or to be able to read and write. Any programmes to support the well-being of older people need to take into account the greater needs of older women and to be designed and implemented in a manner that increases gender equity.

9.2 Evidence-based policies to support the older population

Myanmar is not unique in its population ageing. In fact, its current level and projected situation in 2050 is almost the same as the global pattern. This means that Myanmar can learn from, and share with other countries successful strategies to address the challenges and opportunities of the increasingly older population.

The World Bank's (2016) overview of the experiences and lessons learned from Asia's population ageing makes the following broad points:

- The scale of population ageing in the medium term is known and the need for planning is great because the growth of the older population is occurring faster than economic growth in many countries.
- Addressing issues arising from population ageing needs a multi-sectoral approach.
- Meeting the challenges of an ageing population is not just about supporting older people. Improving the education, health and economic opportunities of younger generations will enable them to support their older family members and to transition into a healthy and prosperous old age.

9.2.1 International declarations

For decades, international conferences have been urging countries to address the challenges of population ageing and the well-being of the older population. The first was the United Nations International Plan of Action for the Ageing that was presented to the World Assembly on Ageing, in Vienna in 1982. The Plan pointed out “the vast and multifaceted impact which the ageing of population will have on the structure, functioning and further development of all societies of the world” (United Nations, 1983). At this World Assembly some 62 recommendations for action were suggested under the main headings of Health and Nutrition; Protection of Elderly Consumers; Housing and Environment; Family; Social Welfare; Income Security and Employment; Education; Care; and Self-fulfilment and Dignity - all of which are important for the formulation of policy in Myanmar.

At the World Population Conference in Mexico City in 1984, a general global consensus emerged that emphasized that: “The ageing section of the population should be viewed not merely as a dependent group, but also the group which has actively contributed to the economic, social and cultural life of their families and community” (Siddhisena and Ratnayaka, 1998).

The Second World Assembly on Ageing, in Madrid in 2002, was a landmark in forming

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an international consensus on interventions. The Political Declaration and Plan of Action identified three priority directions: full participation of older people in development including its benefits; advancing health and well-being into old age; and ensuring enabling and supportive environments. Myanmar has indicated its support for the Madrid Plan of Action, and the five elements of the National Action Plan on Ageing, discussed below, are derived from these three priorities.

One of the most pervasive messages from several decades of advocacy for greater attention to population ageing is that it is affected by all dimensions of people's lives and public policy. An integrated approach to ageing is required: one that addresses livelihoods, savings, fiscal programmes, health, education and social welfare. Most recently this multi-sectoral approach has been reflected in the Sustainable Development Goals which are committed to 'leaving no one behind' in the effort to create a safer, healthier, more equitable and prosperous world for current and future populations. Many of the 17 goals explicitly target improvements for older people or emphasize the importance of all age groups sharing in the benefits. At a national level, most countries have adopted national plans on ageing that bring a common purpose to the work of many sectors.

9.2.2 Policies and programmes

The views of older people from around the world have highlighted two universal concerns and one wish (UNFPA and HelpAge International 2012). The concerns are income security in old age and being able to meet their health needs. The wish is to continue to contribute to society.

These individual concerns are also the primary concerns of governments: the consequences that population ageing will have on economic growth and their capacity to support the needs of a growing older population. This section discusses the primary approaches governments have taken to provide income security and affordable and accessible health care.

During the 21st century Asian countries have been introducing diverse pension schemes to cover workers in the formal and informal sector (Park *et al* 2012). They have also been striving to ensure universal access to health care, including meeting the essential health needs of older people. The concern is that governments may not be able to afford these programmes, leading them into unsustainable debt.

9.2.3 Income security

Asian countries are at the early stages of developing and institutionalizing mechanisms to financially support older people. There are four broad approaches that can be taken. The first is the transfer of public money to older people, either to everyone or targeted to those with the greatest need. The second are strategies which facilitate private savings during older people's working years to self-fund their last decades of life. The third policy is to reduce barriers to older people being economically active. The fourth policy is to invest in future economic growth through the education of younger generations and to facilitate their entry into the labour force, as well as economic investment friendly policies. These approaches are not mutually exclusive. Successfully meeting the challenges of population ageing will involve striking a balance between all four.

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Social security

Several Asian countries have adopted non-contributory pension schemes to support older people. Nepal, Viet Nam and Thailand have universal social pensions. China has new rural pension schemes and the Philippines has means-tested social pensions. A continuing issue with all of these schemes is the relatively low benefit levels to individuals resulting from proportionately smaller amounts of money spent on these programmes. The Asian programmes spend about 1 to 2 per cent of the GDP on pensions compared to 5 per cent or more in other countries with a similar GDP in other regions such as Latin America and parts of Africa. In fact, in the Philippines, Thailand and Indonesia older people pay more in taxes than they receive in benefits (Park *et al* 2012 p 14).

As pressure increases to provide greater income security, the most appropriate course will be to adopt two policy approaches (World Bank 2016). The first is to encourage voluntary contribution pension schemes for an increasing proportion of workers in the government and private sector. By enabling individuals to save for their retirement there will be less pressure on government transfers. However, this approach needs to be complemented by social protection measures which ensure basic rights are enshrined in law to provide social pensions for the most vulnerable.

Flexible arrangements for working older people

Increasing the age of retirement, typically aged 60 in government and many businesses, has proved to be politically unpopular in many countries. Opposition comes from cultural views of the importance of old age as a time for other activities; the demands of younger workers to assume leadership roles held by older workers; and the fiscal implications of keeping on cohorts of less productive workers as they age.

For the majority of people, the retirement age is not relevant as they are employed in agriculture, the informal economy or in family businesses and household production. Programmes to train or re-train older people who wish to be in the workforce or support for older people to start small businesses are likely to be more appropriate and effective as well as politically acceptable.

9.2.4 Health and health care

An ageing population can increase pressure on tertiary health care systems unless primary health care systems are strengthened. In fact, it is a vicious cycle with poor primary health care exacerbating the episodic use of more expensive hospital care, for those who can afford to access it (World Bank 2016).

The best investment for good health in older people is in primary and preventive health care earlier in life. Healthy women, giving birth to healthy infants who receive good nutrition; immunizations; prompt treatment for infectious diseases; and who are kept safe from trauma is the best predictor of a healthy older population in the future (World Bank 2016). Programmes to encourage and enable people to practice healthy behaviours such as not smoking, remaining active and eating nutritious food will contribute to people having a healthier old age. Action is needed to address the causes of the extremely high levels of male mortality.

Chapter 9. Policy challenges and implications

However, age-related illnesses and disabilities cannot be completely prevented. Providing home- and community-based care to older people and their family carers through health care workers and volunteers is more affordable and more culturally acceptable than long-term care facilities.

Enabling better health throughout the lifecycle requires that governments work towards ensuring universal access to a range of quality primary and hospital facilities without causing financial hardship. This is the primary goal of national public health programmes.

9.3 Government of Myanmar approaches

Since 2010, the Government of Myanmar has been introducing policies and programmes to improve the quality of health and social services. These include strategies that directly target older people as well as those that indirectly affect older people by benefiting those who are poor or vulnerable. The Ministry of Social Welfare, Relief and Resettlement (MSWRR) is responsible for the majority of the government's social protection programmes to support older people. An unpublished report by the non-governmental organization HelpAge International mapped out existing and planned government strategies as of late 2015 and forms the basis of this section. Given that population ageing and social protection are government priorities, more services and programmes can be expected to be introduced in the next few years in line with the five-year National Plan on Ageing and the National Social Protection Strategic Plan, both passed in 2014, and the law related to older people passed in late 2016. In early 2017, a 20-year National Policy on Ageing was being drafted and is expected to be approved later in the year.

9.3.1 Income security

Access to some form of retirement pension or social security has been considered by the Myanmar Government since independence, initially with very limited coverage but gradually expanding over time (Department of Population, 2012). However, the pension scheme is limited and applies mainly to public service employees; it continues to be a non-contributory programme for those who have worked, up to the age of 60, for the government including civil servants, military and political personnel. The latest figures suggest that for the period 2014-2015, 365,573 persons received a civil service pension; 49,089 persons received a political pension and 253,873 received a military pension which, together, covered about 12 per cent of the population aged 55 and over (HelpAge International, 2015).

Permanent employees in the private sector in Myanmar do not receive a pension on their retirement. Under the current social security system, the Government has recently adopted some social protection programmes to cover small-scale agriculture and fishing communities, but this has not yet been implemented. Older people in NGOs or the informal sector do not receive any of the protection provided by the Government.

The 2014 National Social Protection Strategic Plan has committed the government to a non-contributory social pension programme to support the income security of those aged 65 and over through a cash benefit of MMK 25,000 per month. Towards fulfilling this commitment, the government has approved a social pension for all older persons aged 90 and over of MMK 10,000 per month, starting in the fiscal year beginning April 2017.

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9.3.2 Older people care services and residential facilities

The long-term care system is largely fragmented with a heavy reliance on informal care provided by family and neighbours as well as the over-utilization of hospitalization. However, several models of services for older people are being implemented in Myanmar, including home care, community-based support, day care centres and residential facilities. Services that do exist are disproportionately in urban areas and in Yangon in particular. Most programmes are managed by non-government and community organizations in partnership with the Government. They are reliant on volunteers and project funding. Monitoring and evaluation and analysis of cost effectiveness are uncommon and therefore these programmes may not be useful models to scale-up across the country.

Private and charitable organizations offer home care programmes to some 41,219 older people through Older People Self-Help Groups and Village Development Committees in selected Townships (HelpAge International, 2015). The five-year National Action Plan on Ageing proposes to expand the formation and roles of Older People Self-Help Groups.

As noted in Chapter 4, there were only 78 registered old people's homes in Myanmar providing care for 3,402 older residents in 2015. These existing homes are reported to have long waiting lists (HelpAge International 2015). There are also government and private charitable Day Care Centres that offer meals and basic health care to older people and others who are destitute. These services often require that beneficiaries have no family members.

9.3.3 Health care services

Health care services in Myanmar have suffered from a long period of neglect. WHO has estimated that between 2000 and 2011 the total expenditure on health averaged only 2 per cent of the GDP, the lowest in South-East Asia and the Pacific (WHO 2014b). Rural health care facilities are particularly under-resourced (Rajan and Sreerupa 2016). Despite the recent expansion of health services, there is still much to be done before the government can achieve its goal of universal health coverage (Ministry of Health and Sports 2016).

There are government and private health services in Myanmar. According to the policies of the Ministry of Health, older people can obtain annual check-ups or other consultations from government hospitals free of charge, but patients are required to pay for the medication and treatment. Many organizations and voluntary contributors assist in funding such medical expenses as there is no Medicare insurance coverage in Myanmar, but there is no evidence about how many people are assisted in this way. Private drug stores, clinics and hospitals are an important source of health care for older people. The 2012 Survey of Older Persons reported that 35 per cent of older people were ill or injured in the past 12 months which prevented them from carrying out normal activities. Of those, nearly all (95 per cent) said they received some treatment. Forty-four per cent received that treatment from a private source.

Access and affordability are major barriers to older people using health services. A study of older people's use of health services in five Townships found that older people from rural areas and the poorest households were the least likely to have used outpatient or inpatient services (Rajan and Sreerupa 2016). Cost is likely to be a factor discouraging use. Older

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people from poor households faced a cost burden for outpatient care that was double the cost burden (defined as expenditure in relation to their average total monthly expenditure) faced by wealthier households.

In order to promote active and healthy ageing, the Ministry of Health and Sports has, since 1992-1993, implemented its Health Care of the Elderly project; first initiated in six Townships and subsequently expanded to four to six Townships yearly. This programme was developed as an integral part of a primary health care programme focusing on health care for older people under the umbrella of the Community Health Care programme as part of the National Health Plan of 1993-1996 (Han, 2012). By 2013, this programme had been implemented in 161 Townships where hospitals and rural health centres opened clinics for the specific care of older people every Wednesday. These clinics provide comprehensive health care, including promotive, preventive, curative and rehabilitative care. The health care programme also encourages home-based care of older persons by families, health volunteers and NGOs through advocacy and training of health staff, voluntary health workers, family members and community volunteers (Han, 2012). The programme has not been evaluated.

In the future the prevalence of non-communicable diseases will be a major factor in determining how long older people can expect to live disability-free. Myanmar is developing a national non-communicable disease strategic plan which will establish mechanisms to advocate for more resources to be allocated towards preventing and managing the adverse impacts of cardiovascular disease, diabetes and cancer.

9.3.4 Participation of older people

Building on previous experience, the National Social Protection Strategic Plan and the National Action Plan on Ageing calls for village level Older People Self-Help Groups to be expanded nationwide. These groups would empower older people to meet their own needs by designing and implementing programmes such as home-based care; health awareness and self-care; age-friendly livelihoods; disaster risk reduction; microcredit; and rights and entitlements.

One of the five areas of action in the National Action Plan on Ageing is increasing the engagement of older people in disaster management planning, risk reduction and in emergency response, recognizing that older people are frequently the most vulnerable in times of disaster.

9.4 Summary

Myanmar's population is ageing gradually. Although the proportion of the population aged 60 and over will continue to rise, the proportion of younger adults who have higher labour force participation rates will also increase over much of the period.

Future older people in Myanmar will benefit from a higher level of education. If mortality, and the underlying causes of death, continues to decline, a greater proportion of older people should be able to enjoy good health for a longer period.

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The challenges for older persons in the future include an apparent trend towards lower labour force participation. The higher proportion of older women who will not have a spouse or a surviving child, primarily because of an increasing proportion of women who never marry, means that the number of vulnerable older women living on their own may increase. In areas of the country where high proportions of youth and young adults move away for employment, older people may be left responsible for all of the agricultural work. Poor health in older age is an accumulation of a lifetime of living in an unhealthy environment without access to health care. Without improvements in water and sanitation, food security and health care, the health of older people in the future may not be better than it is now.

Policies and programmes are being designed which are aligned with international declarations. These include policies to increase income security; provide opportunities for labour force participation for older people who wish to be employed; strengthened primary health care which addresses the specific needs of older adults; and the establishment of mechanisms to increase the participation of older people in the community and in decision-making processes that affect them.

The recent policies and programmes of the Government of Myanmar have confirmed the importance of addressing the challenges and opportunities of population ageing and safeguarding the well-being of the older population. However, programmes are still in an early stage of development and do not reach all 4.5 million people currently aged 60 and over. However, they have been designed in the spirit of international conferences that have highlighted the rights of older people, with a view to integrating lessons learned from other countries.

Chapter 10. Recommendations and conclusions

10.1 Recommendations

10.1.1 Recommendations for policy

Myanmar's strong cultural and religious traditions of respecting and caring for older people means that most older people receive social and material support from family members. However, government, along with civil society and the private sector, has an important role to play in establishing a supportive environment for older people and their families.

As a low income country, Myanmar faces challenges in providing social protection to an increasing number of older people. The government's focus on economic development, poverty elimination and increased agricultural productivity will ultimately enhance the well-being of older people and their families.

Increasing affordable access to basic primary health care, including support to prevent non-communicable diseases, will help more people enjoy a healthy old age. Investing in developing a long-term care system integrated with strengthened primary health care will be essential to meet the needs of the growing older population. Practically, the use of home- and community-based care offered by trained volunteers will help ill, frail, and older people with a disability to live with dignity and provide support to family members who may find it difficult to give the care that is needed.

As the economy modernizes and diversifies, wage earners and employees in the formal sector should be given incentives to save for their retirement. Older people who wish to work should have the opportunities to do so. Development of social protection including a sufficient universal social pension, as outlined in the National Law on Ageing passed in 2016, will provide essential protection to older people.

10.1.2 Recommendations for further research

This thematic report covered the information available on the older population from the 2014 Census. Recommendations for further research include methodological approaches in substantive areas of interest, such as the labour force participation of the older population and the increasing proportion of never married women.

Modelling and multivariate analysis is called for to better understand the predictors of important indicators such as recent residential moves by older people, those who live alone and adult children who co-reside with their parents. For example, a simple cross-tabulation between the severity of disability and household composition, controlling for urban and rural residence was presented in Chapter 7. No meaningful differences in household composition were detected. This finding may be accurate. Given the preference for living with family and particularly with living children, age-related disability may not have an impact in the decision to co-reside. However, a much more complete understanding requires controlling for more factors such as age, sex, type of disability, number of living children and assets.

When the unit level data is made available for a sample of the population it is hoped that researchers will take up this challenge to perform detailed, policy-relevant analysis. In preparing the unit record file, consideration should be given to ensure that it contains an

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adequate number of older persons to make detailed analysis meaningful.

Dedicated surveys on the older population should be conducted on a regular basis, building on the comprehensive work of the 2012 Survey of Older Persons. Such surveys could provide more information on inter-generational flows of financial and non-financial assistance and about older people's health conditions and use of health services.

Some findings in this thematic report call out for further analysis of the Census data and new studies. For example, findings in Chapters 6 and 8 raise concerns about the effects of population ageing on agricultural production. Two trends were observed. Firstly, there has been a decline over time in the proportion of older people reporting to be employed in farming. Secondly, there are reasons for concern about the effects on agricultural productivity in the rapidly ageing dry zone, which is experiencing a loss of young people due to migration for employment.

10.1.3 Recommendations for future censuses

In order to monitor progress of the National Action Plan on Ageing, the National Social Protection Strategic Plan and the pending National Policy on Ageing, all standard tables should include sex and age-disaggregated data for the older population at least up until the age of 80 and over. The education tables in the Union report, for example, only go up to age 50 and over (Department of Population 2015). Age-disaggregated data are also important for targeting geographic areas where the needs of older people are particularly acute.

Censuses are massive exercises, relying on the skill and integrity of a large number of enumerators to correctly identify and record information on every resident. This report found that the completeness of the coverage of the older population appears to be very good and that, over time, the quality of age reporting can expect to improve as a result of increasing levels of education.

Training for enumerators in the next census should address problems encountered when enumerating older people. Disability, marital status and the number of living children are areas in which the quality of reporting would probably improve if enumerators were sensitive to the potential for misreporting.

10.2 Conclusion

The vast majority of older people in Myanmar are supported by family members. In return, older people contribute to these extended households through their income and assets and by providing advice and practical assistance.

Compared to many other countries in the region, Myanmar's older population has grown at a relatively slow rate and will continue to do so. This gives the government and civil society the opportunity to make gradual adjustments to meet the challenges and opportunities of a projected older population of 64 million, or 20 per cent of the total population, by 2050.

Many of the 4.5 million older people enumerated in the 2014 Census live in poor quality

Chapter 10. Recommendations and conclusions

housing, without access to improved sanitation and drinking water, and do not use electricity as a source of energy for lighting and cooking. They also lack access to basic amenities, communication devices and transport facilities. Policies and programmes that lead to economic development, poverty reduction and increased agricultural productivity will benefit the whole of society. For those who advocate for the well-being of older people, the priority is to ensure that these benefits are shared with the most vulnerable.

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Glossary of terms and definitions

Ageing index: is the ratio of the population aged 60 and over to the population aged under 15. It takes into account the size and changes at both ends of the age distribution, or the shift in the balance between the populations of children and older persons.

Annual growth rate: a growth rate (r) can be calculated either arithmetically or exponentially. This report uses the exponential method.

Exponential method:

$$r = [\log_e (P_n / P_0)] / n$$

Where, P_n is the older population in the current census

P_0 is the older population in the previous census

n = the number of years between the censuses

r is conventionally multiplied by 100.

Census Night: the night between the 29th and 30th March 2014. Every person in Myanmar was enumerated where they spent Census Night.

Child dependency ratio: in this report the child dependency ratio is the number of persons aged 0-14 per 100 persons aged 15-59.

Conventional household: includes one or more persons who are either related or unrelated and share living quarters (single quarter or compound) and meals. The household members would usually eat food from the same cooking pot. In most cases, there would be one person acknowledged by the household members as the head of the household.

Economically active: refers to the status of those persons who are 'employed' or 'unemployed' at the Census date. The report sometimes refers to these people as 'active', but they are also commonly referred to as the 'labour force'.

Educational attainment: is the highest grade/standard/diploma/degree completed within the most advanced level attended in the education system of the country where the education was received. It covers both public and private institutions accredited by government.

Functional age groups: three broad age groups are used to compare children aged 0-14, people in the prime working-age group, aged 15-59, and persons aged 60 and over.

Improved drinking water: is drinking water from a source that is defined as one that, by nature of its construction or through active intervention, is likely to be protected from outside contamination, in particular from contamination with faecal matter. The Census identified the following sources as 'Improved': Tap/piped water; Tube well/borehole; Protected well/spring; and Bottled/purified water. All other sources of drinking water identified in the Census were classified as 'Unimproved'.

Improved sanitation: is a toilet facility that hygienically separates human excreta from human contact. The Census identified the following toilet facilities as 'Improved': Flush; Water seal (improved latrine); and Pit latrine. All other types of toilet identified in the Census were classified as 'Unimproved'.

Glossary of terms and definitions

Institutional population: is a unit where a group of people are living together other than in a conventional household. Examples include: old people's homes; orphanages; hospitals; boarding schools; hotels, hostels and guest houses; institutions for persons with disabilities; prisons; monasteries; convents; military and police barracks; and camps for workers.

Labour force: is a general term to mean those persons who were, collectively, 'Employed' or 'Unemployed' at the time of the Census. The report sometimes refers to such persons as 'Economically active'.

Labour force participation rate: is the ratio between the number of people in the labour force in a particular age group and the overall size of the total population in the same age group. This is an important indicator as it represents the proportion of the population that is economically active.

Level of education: this refers to primary, secondary and post-secondary education. Primary education includes grades 1 to 5, while secondary education includes grades 6 to 11. Post-secondary education starts at the age of 16 progressing to diplomas, university attendance, and postgraduate degrees.

Life expectancy: is the average number of additional years that a person could expect to live if current mortality levels were to continue for the rest of that person's life.

Literacy: is the ability to both read and write in any one language with reasonable understanding. A literate person is one who can read and write a short simple statement on everyday life in any one language. An illiterate person cannot.

Marital status: is the status of the enumerated person in relation to the institution of marriage. The marital status was classified as: single/never married, married, widowed, divorced/separated and renounced.

Median age: is the age at which exactly half the population is younger and half is older than that age.

Natural increase: is the difference between the number of births and the number of deaths in a year divided by the midyear population and conventionally expressed per 1,000 people.

Older age dependency ratio: in this report the older age dependency ratio is the number of persons aged 60 and over to the population aged 15-59.

Parent support ratio: is the number of persons aged 85 and over per 100 persons aged 50-64.

Population ageing: is the increasing share of older persons in the population.

Potential support ratio: is the number of persons aged 15-59 per number of persons aged 60 and over.

Glossary of terms and definitions

Recent migrant: in the context of the 2014 Census recent migrants are persons who changed their place of usual residence to another Township during the five year period prior to the 2014 Census.

Rural area: is an area classified by the General Administration Department (GAD) as a village tract. Generally, such areas have a low population density and a land use which is predominantly agricultural.

Sex ratio: is the number of males per 100 females in the total population. Age-specific sex ratios are the number of males per 100 females in a specific age group.

Survival ratio: is the life table function $S(x,n)$. It is the proportion of people expected to survive five years in a specific age group where x is the starting age in the age group and n is the number of years in the age group. For example, the survival ratio for persons aged 60 to 64 surviving 5 years to ages 65 to 69.

Total dependency ratio: in this report the total dependency ratio is the number of persons aged 0-14 and 60 and over per 100 persons aged 15-59. The total dependency ratio equals the sum of the child and the older age dependency ratios.

Unemployed: refers to those persons who had no work but were able to work and were actually seeking a job during the reference period, or at the time of the 2014 Census enumeration.

Unemployment rate: is the percentage of the total labour force that was unemployed but actively seeking employment and willing to work. These are people who were without work, looking for jobs and were available for work.

Urban area: is an area classified by the General Administration Department (GAD) as a ward. Generally such areas have an increased density of building structures, population and better infrastructural development.

Appendices

Appendix 1. Appendix tables

Table 1

Population by sex by five-year age group by functional age groups, 1973, 1983 and 2014 censuses

Age group	1973			Both sexes	1983		Both sexes	2014	
	Both sexes	Male	Female		Male	Female		Male	Female
Union	28,084,513	13,962,774	14,121,739	34,124,908	16,939,593	17,185,315	50,279,900	24,228,714	26,051,186
0-4	4,234,177	2,127,734	2,106,443	4,501,934	2,267,826	2,234,108	4,472,130	2,262,783	2,209,347
5-9	3,928,501	1,975,913	1,952,588	4,389,041	2,216,323	2,172,718	4,819,077	2,438,372	2,380,705
10-14	3,481,162	1,761,969	1,719,193	4,268,670	2,178,956	2,089,714	5,108,362	2,595,749	2,512,613
15-19	2,930,986	1,442,923	1,488,063	3,735,435	1,844,414	1,891,021	4,625,989	2,290,998	2,334,991
20-24	2,308,487	1,135,581	1,172,906	3,286,324	1,610,144	1,676,180	4,331,069	2,091,525	2,239,544
25-29	1,795,550	884,403	911,147	2,763,545	1,363,835	1,399,710	4,146,134	1,995,465	2,150,669
30-34	1,664,751	815,471	849,280	2,152,965	1,067,173	1,085,792	3,898,861	1,884,549	2,014,312
35-39	1,594,730	794,586	800,144	1,668,631	835,177	833,454	3,563,480	1,705,630	1,857,850
40-44	1,470,252	730,791	739,461	1,479,520	716,619	762,901	3,283,073	1,548,942	1,734,131
45-49	1,159,092	579,833	579,259	1,413,759	695,833	717,926	2,946,148	1,375,041	1,571,107
50-54	1,043,704	517,465	526,239	1,299,152	634,222	664,930	2,559,232	1,182,341	1,376,891
55-59	781,531	387,127	394,404	995,400	489,815	505,585	2,051,937	935,979	1,115,958
60-64	661,958	323,737	338,221	830,334	398,942	431,392	1,576,845	712,040	864,805
65-69	446,147	214,634	231,513	535,481	253,962	281,519	1,064,493	466,618	597,875
70-74	327,217	153,791	173,426	416,223	192,715	223,508	713,170	301,679	411,491
75-79	146,774	68,884	77,890	214,808	98,978	115,830	553,298	228,315	324,983
80-84	74,818	33,019	41,799	120,466	52,281	68,185	335,576	130,875	204,701
85-89	21,972	9,580	12,392	35,851	15,334	20,517	158,069	56,979	101,090
90+	12,704	5,333	7,371	17,369	7,044	10,325	72,957	24,834	48,123
0-14	11,643,840	5,865,616	5,778,224	13,159,645	6,663,105	6,496,540	14,399,569	7,296,904	7,102,665
15-59	14,749,083	7,288,180	7,460,903	18,794,731	9,257,232	9,537,499	31,405,923	15,010,470	16,395,453
60 and over	1,691,590	808,978	882,612	2,170,532	1,019,256	1,151,276	4,474,408	1,921,340	2,553,068

Appendix 1. Appendix tables

Table 2

Population by functional age groups and age groups within the older population by sex, urban and rural areas, 1983 and 2014 censuses

Age group/ Sex	1983				2014			
	Union	Urban	Rural	% urban	Union	Urban	Rural	% urban
Functional age groups								
Both sexes	34,124,908	8,466,292	25,658,616	24.8	50,279,900	14,877,943	35,401,957	29.6
0-14	13,159,645	3,019,589	10,140,056	22.9	14,399,569	3,583,796	10,815,773	24.9
15-59	18,794,731	4,924,393	13,870,338	26.2	31,405,923	9,929,558	21,476,365	31.6
60+	2,170,532	522,310	1,648,222	24.1	4,474,408	1,364,589	3,109,819	30.5
Male	16,939,593	4,214,463	12,725,130	24.9	24,228,714	7,114,224	17,114,490	29.4
0-14	6,663,105	1,537,161	5,125,944	23.1	7,296,904	1,836,199	5,460,705	25.2
15-59	9,257,232	2,446,237	6,810,995	26.4	15,010,470	4,715,944	10,294,526	31.4
60+	1,019,256	231,065	788,188	22.7	1,921,340	562,081	1,359,259	29.3
Female	17,185,315	4,251,829	12,933,486	24.7	26,051,186	7,763,719	18,287,467	29.8
0-14	6,496,540	1,482,428	5,014,112	22.8	7,102,665	1,747,597	5,355,068	24.6
15-59	9,537,499	2,478,156	7,059,343	26.0	16,395,453	5,213,614	11,181,839	31.8
60+	1,151,276	291,245	860,031	25.3	2,553,068	802,508	1,750,560	31.4
Older population								
Both sexes								
60-69	1,365,815	329,621	1,036,194	24.1	2,641,338	810,788	1,830,550	30.7
70-79	631,031	149,265	481,766	23.7	1,266,468	378,479	887,989	29.9
80+	173,686	43,424	130,262	25.0	566,602	175,322	391,280	30.9
Male								
60-69	652,904	151,202	501,702	23.2	1,178,658	346,488	832,170	29.4
70-79	291,693	63,363	228,330	21.7	529,994	153,657	376,337	29.0
80+	74,659	16,500	58,156	22.1	212,688	61,936	150,752	29.1
Female								
60-69	712,911	178,419	534,492	25.0	1,462,680	464,300	998,380	31.7
70-79	339,338	85,902	253,436	25.3	736,474	224,822	511,652	30.5
80+	99,027	26,924	72,103	27.2	353,914	113,386	240,528	32.0

Appendix 1. Appendix tables

Table 3

Population projections for ASEAN countries from medium variant of World Population Prospects, 2015, 2035 and 2050

Year and Country	Population in '000s					Percentage				
	0-14	15-59	60+	80+	Total	0-14	15-59	60+	80+	Total
2015										
All ASEAN less Myanmar	153,306	372,064	54,221	6,122	579,591	26.5	64.2	9.4	1.1	100
Brunei Darussalam	98	292	33	3	423	23.2	69.0	7.8	0.7	100
Cambodia	4,924	9,602	1,052	78	15,578	31.6	61.6	6.8	0.5	100
Indonesia	71,326	165,042	21,195	1,729	257,563	27.7	64.1	8.2	0.7	100
Lao PDR	2,366	4,030	406	35	6,802	34.8	59.2	6.0	0.5	100
Malaysia	7,433	20,114	2,784	236	30,331	24.5	66.3	9.2	0.8	100
Philippines	32,172	61,207	7,321	596	100,700	31.9	60.8	7.3	0.6	100
Singapore	871	3,732	1,000	133	5,603	15.5	66.6	17.8	2.4	100
Thailand	12,036	45,192	10,731	1,430	67,959	17.7	66.5	15.8	2.1	100
Timor-Leste	503	596	85	5	1,184	42.5	50.3	7.2	0.4	100
Viet Nam	21,577	62,257	9,614	1,877	93,448	23.1	66.6	10.3	2.0	100
2035										
All ASEAN less Myanmar	148,880	422,777	114,325	12,957	685,982	21.7	61.6	16.7	1.9	100
Brunei Darussalam	88	320	108	12	516	17.1	62.0	20.9	2.3	100
Cambodia	5,052	12,608	2,328	240	19,988	25.3	63.1	11.6	1.2	100
Indonesia	67,881	191,028	45,938	3,474	304,847	22.3	62.7	15.1	1.1	100
Lao PDR	2,393	5,762	819	72	8,974	26.7	64.2	9.1	0.8	100
Malaysia	7,668	23,914	6,034	726	37,616	20.4	63.6	16.0	1.9	100
Philippines	35,299	80,657	14,600	1,291	130,556	27.0	61.8	11.2	1.0	100
Singapore	800	3,512	2,247	481	6,559	12.2	53.5	34.3	7.3	100
Thailand	8,992	37,964	20,486	3,430	67,442	13.3	56.3	30.4	5.1	100
Timor-Leste	637	951	123	13	1,711	37.2	55.6	7.2	0.8	100
Viet Nam	20,070	66,061	21,642	3,218	107,773	18.6	61.3	20.1	3.0	100
2050										
All ASEAN less Myanmar	142,471	430,743	155,352	26,164	728,566	19.6	59.1	21.3	3.6	100
Brunei Darussalam	81	296	169	34	546	14.8	54.2	31.0	6.2	100
Cambodia	4,892	13,686	3,969	577	22,547	21.7	60.7	17.6	2.6	100
Indonesia	64,470	195,870	61,896	7,417	322,236	20.0	60.8	19.2	2.3	100
Lao PDR	2,196	6,486	1,490	158	10,172	21.6	63.8	14.6	1.6	100
Malaysia	6,871	24,262	9,592	1,455	40,725	16.9	59.6	23.6	3.6	100
Philippines	35,154	92,328	20,778	2,437	148,260	23.7	62.3	14.0	1.6	100
Singapore	736	3,247	2,699	921	6,682	11.0	48.6	40.4	13.8	100
Thailand	7,928	31,371	23,153	6,171	62,452	12.7	50.2	37.1	9.9	100
Timor-Leste	706	1,282	174	20	2,162	32.7	59.3	8.0	0.9	100
Viet Nam	19,437	61,915	31,432	6,974	112,784	17.2	54.9	27.9	6.2	100

Appendix 1. Appendix tables

Table 4

Distribution of older population living in conventional households by area of usual residence and area of birthplace, by age by sex, 2014 Census

Sex/ Age group	Total population	Non- migrant	Urban usual residents				Rural usual residents				Not classifiable
			Total	Born in:		Living in Township of birth	Total	Born in:		Living in Township of birth	
				Another urban area	A rural area			An urban area	Another rural area		
Both sexes											
60 - 64	1,527,346	75.5	459,594	37.2	15.9	46.9	1,067,752	2.7	9.5	87.8	5,978
65 - 69	1,028,499	74.6	320,487	37.6	17.9	44.5	708,012	2.4	9.3	88.2	4,327
70 - 74	688,520	76.0	203,696	36.8	18.9	44.3	484,824	2.0	8.7	89.3	3,154
75 - 79	532,709	76.8	157,853	36.7	18.2	45.1	374,856	1.9	8.0	90.1	2,619
80 - 84	322,931	78.4	94,499	35.6	17.1	47.3	228,432	1.6	7.2	91.2	1,835
60+	4,322,081	75.8	1,308,073	36.9	17.3	45.8	3,014,008	2.3	8.9	88.8	19,363
Male											
60 - 64	678,198	74.6	195,078	38.2	17.0	44.8	483,120	3.0	10.4	86.6	2,546
65 - 69	441,925	73.5	132,276	39.1	19.2	41.7	309,649	2.7	10.2	87.1	1,760
70 - 74	284,993	74.6	82,365	38.3	20.7	41.0	202,628	2.3	9.5	88.2	1,194
75 - 79	214,233	75.5	61,292	38.2	20.2	41.6	152,941	2.1	8.8	89.1	990
80 - 84	122,633	77.5	34,164	37.9	18.4	43.8	88,469	1.7	7.8	90.5	612
60+	1,818,351	74.7	528,296	38.3	18.6	43.1	1,290,055	2.6	9.8	87.7	7,547
Female											
60 - 64	849,148	76.2	264,516	36.4	15.1	48.5	584,632	2.4	8.8	88.8	3,432
65 - 69	586,574	75.4	188,211	36.6	17.0	46.4	398,363	2.2	8.6	89.1	2,567
70 - 74	403,527	77.0	121,331	35.7	17.7	46.6	282,196	1.9	8.1	90.1	1,960
75 - 79	318,476	77.6	96,561	35.7	17.0	47.4	221,915	1.7	7.5	90.8	1,629
80 - 84	200,298	78.9	60,335	34.3	16.4	49.4	139,963	1.5	6.8	91.6	1,223
60+	2,503,730	76.6	779,777	36.0	16.4	47.7	1,723,953	2.1	8.2	89.7	11,816

Note: Totals exclude persons with unclassifiable area of Township of birth or usual place of residence.

Appendix 1. Appendix tables

Table 5

Recent migration of population 40 years old and over by sex by age group, 2014 Census

Sex/Age group	Total population	Non-migrant	Number		Percentage		
			Intra-State/ Region migrant	Inter-State/ Region migrant	Intra-State/ Region migrant	Inter-State/ Region migrant	Total migrants
Both sexes							
40 - 44	3,158,439	2,925,788	147,637	85,014	4.7	2.7	7.4
45 - 49	2,846,351	2,661,148	119,631	65,572	4.2	2.3	6.5
50 - 54	2,480,704	2,329,258	99,861	51,585	4.0	2.1	6.1
55 - 59	1,992,677	1,877,053	76,758	38,866	3.9	2.0	5.8
60 - 64	1,533,332	1,446,282	60,279	26,771	3.9	1.7	5.7
65 - 69	1,032,828	982,421	35,491	14,916	3.4	1.4	4.9
70 - 74	691,675	661,430	21,807	8,438	3.2	1.2	4.4
75 - 79	535,331	513,103	16,122	6,106	3.0	1.1	4.2
80 - 84	324,767	311,287	9,953	3,527	3.1	1.1	4.2
85 - 89	152,997	146,340	4,808	1,849	3.1	1.2	4.4
90+	70,529	67,164	2,479	886	3.5	1.3	4.8
Male							
40 - 44	1,457,800	1,341,215	73,131	43,454	5.0	3.0	8.0
45 - 49	1,302,390	1,212,570	57,253	32,567	4.4	2.5	6.9
50 - 54	1,125,573	1,054,904	46,060	24,609	4.1	2.2	6.3
55 - 59	893,314	841,197	34,117	18,000	3.8	2.0	5.8
60 - 64	680,750	641,828	26,773	12,149	3.9	1.8	5.7
65 - 69	443,687	422,753	14,776	6,158	3.3	1.4	4.7
70 - 74	286,187	274,305	8,664	3,218	3.0	1.1	4.2
75 - 79	215,224	206,899	6,070	2,255	2.8	1.0	3.9
80 - 84	123,245	118,466	3,530	1,249	2.9	1.0	3.9
85 - 89	53,557	51,411	1,542	604	2.9	1.1	4.0
90+	23,257	22,136	832	289	3.6	1.2	4.8
Female							
40 - 44	1,700,639	1,584,573	74,506	41,560	4.4	2.4	6.8
45 - 49	1,543,961	1,448,578	62,378	33,005	4.0	2.1	6.2
50 - 54	1,355,131	1,274,354	53,801	26,976	4.0	2.0	6.0
55 - 59	1,099,363	1,035,856	42,641	20,866	3.9	1.9	5.8
60 - 64	852,582	804,454	33,506	14,622	3.9	1.7	5.6
65 - 69	589,141	559,668	20,715	8,758	3.5	1.5	5.0
70 - 74	405,488	387,125	13,143	5,220	3.2	1.3	4.5
75 - 79	320,107	306,204	10,052	3,851	3.1	1.2	4.3
80 - 84	201,522	192,821	6,423	2,278	3.2	1.1	4.3
85 - 89	99,440	94,929	3,266	1,245	3.3	1.3	4.5
90+	47,272	45,028	1,647	597	3.5	1.3	4.7

Appendix 1. Appendix tables

Table 6

Population 15 years old and over by marital status by age group by sex, 2014 Census

Sex/Age group	Total	Single	Married	Widowed	Divorced/ Separated	Renounced
Both sexes						
15 - 29	13,103,192	8,231,417	4,561,848	40,553	125,830	143,544
30 - 59	18,302,731	2,539,777	14,239,391	958,789	423,545	141,229
60 and over	4,474,408	287,475	2,545,077	1,499,541	67,320	74,995
60 - 64	1,576,845	118,227	1,078,818	328,827	30,193	20,780
65 - 69	1,064,493	68,579	661,025	299,792	17,317	17,780
70 - 74	713,170	41,281	377,590	271,673	9,391	13,235
75 - 79	553,298	28,896	246,639	260,266	5,786	11,711
80 - 84	335,576	17,832	119,237	188,758	2,852	6,897
85 - 89	158,069	8,388	44,343	100,939	1,281	3,118
90+	72,957	4,272	17,425	49,286	500	1,474
Male						
15 - 29	6,377,988	4,295,757	1,895,411	11,086	42,732	133,002
30 - 59	8,632,482	1,087,448	7,080,368	179,416	162,339	122,911
60 and over	1,921,340	78,772	1,419,946	333,773	25,637	63,212
60 - 64	712,040	34,099	585,699	63,752	10,923	17,567
65 - 69	466,618	18,396	367,081	59,630	6,443	15,068
70 - 74	301,679	10,941	216,277	59,489	3,769	11,203
75 - 79	228,315	7,431	144,857	63,539	2,537	9,951
80 - 84	130,875	4,605	70,694	48,550	1,260	5,766
85 - 89	56,979	2,105	25,659	26,173	523	2,519
90+	24,834	1,195	9,679	12,640	182	1,138
Female						
15 - 29	6,725,204	3,935,660	2,666,437	29,467	83,098	10,542
30 - 59	9,670,249	1,452,329	7,159,023	779,373	261,206	18,318
60 and over	2,553,068	208,703	1,125,131	1,165,768	41,683	11,783
60 - 64	864,805	84,128	493,119	265,075	19,270	3,213
65 - 69	597,875	50,183	293,944	240,162	10,874	2,712
70 - 74	411,491	30,340	161,313	212,184	5,622	2,032
75 - 79	324,983	21,465	101,782	196,727	3,249	1,760
80 - 84	204,701	13,227	48,543	140,208	1,592	1,131
85 - 89	101,090	6,283	18,684	74,766	758	599
90+	48,123	3,077	7,746	36,646	318	336

Appendix 1. Appendix tables

Table 7

Number of older women by total number of living children and number of children living in the same household, by broad age group, urban and rural areas, 2014 Census

Age group/Area	Total number of women	Number of children										10 or more	Mean no. of children	Mean no. of children for women with a living child	
		None	One	Two	Three	Four	Five	Six	Seven	Eight	Nine				
Number of older women with children living in the same household															
Aged 60 and over															
Union	2,515,552	826,098	942,219	424,807	186,790	78,878	32,287	13,656	5,684	2,645	1,325	1,163	1.2	1.8	
Urban	783,343	246,781	264,117	147,501	70,902	30,875	12,948	5,569	2,422	1,135	581	512	1.3	1.9	
Rural	1,732,209	579,317	678,102	277,306	115,888	48,003	19,339	8,087	3,262	1,510	744	651	1.1	1.7	
Aged 60-69															
Union	1,441,723	454,303	501,931	267,506	125,128	54,351	22,336	9,320	3,738	1,652	812	646	1.3	1.9	
Urban	454,155	140,772	144,492	90,523	44,852	19,503	8,033	3,366	1,412	630	323	249	1.4	2.0	
Rural	987,568	313,531	357,439	176,983	80,276	34,848	14,303	5,954	2,326	1,022	489	397	1.2	1.8	
Aged 70-79															
Union	725,595	244,071	292,255	112,699	45,085	18,120	7,376	3,162	1,399	725	353	350	1.1	1.7	
Urban	219,077	67,851	78,059	39,884	18,584	8,163	3,569	1,555	710	355	167	180	1.3	1.9	
Rural	506,518	176,220	214,196	72,815	26,501	9,957	3,807	1,607	689	370	186	170	1.0	1.6	
Aged 80 and over															
Union	348,234	127,724	148,033	44,602	16,577	6,407	2,575	1,174	547	268	160	167	1.0	1.5	
Urban	110,111	38,158	41,566	17,094	7,466	3,209	1,346	648	300	150	91	83	1.1	1.8	
Rural	238,123	89,566	106,467	27,508	9,111	3,198	1,229	526	247	118	69	84	0.9	1.4	
Number of older women with living children															
Aged 60 and over															
Union	2,515,552	462,498	184,161	260,975	328,708	348,091	311,953	249,021	171,528	104,192	52,977	41,448	3.6	4.4	
Urban	783,343	159,082	62,746	94,003	115,129	110,845	88,824	64,758	40,935	24,090	12,288	10,643	3.3	4.1	
Rural	1,732,209	303,416	121,415	166,972	213,579	237,246	223,129	184,263	130,593	80,102	40,689	30,805	3.7	4.5	
Aged 60-69															
Union	1,441,723	241,475	104,104	159,814	203,185	208,992	181,170	140,906	95,284	56,940	28,517	21,336	3.6	4.3	
Urban	454,155	87,336	36,729	61,381	74,963	67,820	50,189	34,002	20,159	11,423	5,611	4,542	3.2	3.9	
Rural	987,568	154,139	67,375	98,433	128,222	141,172	130,981	106,904	75,125	45,517	22,906	16,794	3.8	4.5	
Aged 70-79															
Union	725,595	136,117	51,105	66,816	85,242	96,400	91,997	76,963	54,709	34,148	17,824	14,274	3.7	4.6	
Urban	219,077	43,367	16,199	21,782	27,884	30,177	27,117	21,266	14,153	8,640	4,530	3,962	3.5	4.4	
Rural	506,518	92,750	34,906	45,034	57,358	66,223	64,880	55,697	40,556	25,508	13,294	10,312	3.8	4.7	
Aged 80 and over															
Union	348,234	84,906	28,952	34,345	40,281	42,699	38,786	31,152	21,535	13,104	6,636	5,838	3.3	4.3	
Urban	110,111	28,379	9,818	10,840	12,282	12,848	11,518	9,490	6,623	4,027	2,147	2,139	3.2	4.3	
Rural	238,123	56,527	19,134	23,505	27,999	29,851	27,268	21,662	14,912	9,077	4,489	3,699	3.3	4.4	

Appendix 1. Appendix tables

Table 8

Population 60 years old and over by literacy status by level of education by sex, 1983 and 2014 censuses

Literacy status/Level of education	1983		2014	
	Male	Female	Male	Female
Literacy				
Literate	794,702	593,579	1,621,534	1,812,119
Illiterate	224,554	557,697	204,373	703,433
Total	1,019,256	1,151,276	1,825,907	2,515,552
Level of education				
No education	732,131	907,734	472,385	961,324
Grade 1-4	188,255	202,778	-	-
Primary	-	-	793,519	1,125,904
Lower secondary	68,130	33,866	282,931	196,679
Upper secondary	22,182	5,878	175,507	107,965
University	3,905	792	98,198	64,232
Vocational training	-	-	3,543	1,556
Certificate	53	49	-	-
Other	88	11	95,257	95,408
Total	1,014,744	1,151,108	1,921,340	2,553,068

Note: Literacy was only recorded for persons in conventional households.

Appendix 1. Appendix tables

Table 9

Household heads aged 60 and over by household composition by age by sex, 2014 Census

Sex/ Age group	Total	Living alone	Living only with spouse	Living with a child and anyone else	Living with a grandchild and no children but may live with others	Living with a sibling, no children, no grandchildren but may live with others	Living with other relatives, no children, no grandchildren and no sibling	Living with non- relatives only	Unclassifiable
Both sexes									
Total	2,530,908	198,990	184,971	1,882,913	144,707	57,554	43,437	13,914	4,422
60 - 64	895,808	57,617	67,833	678,957	40,334	26,807	16,285	4,973	3,002
65 - 69	625,888	46,004	48,351	465,147	35,573	15,584	10,728	3,420	1,081
70 - 74	415,567	35,964	31,126	304,680	27,200	7,365	6,711	2,261	260
75 - 79	315,866	29,941	22,291	230,885	21,642	4,376	4,947	1,717	67
80 - 84	175,050	18,386	10,642	127,724	12,258	2,231	2,873	929	7
85 - 89	74,364	7,945	3,559	54,678	5,501	885	1,355	438	3
90+	28,365	3,133	1,169	20,842	2,199	306	538	176	2
Male									
Total	1,549,758	59,863	178,265	1,186,943	71,803	20,494	20,906	8,435	3,049
60 - 64	604,707	18,640	65,316	474,861	22,098	9,999	8,463	3,269	2,061
65 - 69	392,078	13,880	46,701	299,495	18,302	5,474	5,353	2,128	745
70 - 74	241,762	10,303	30,078	181,085	13,115	2,537	3,137	1,315	192
75 - 79	173,412	8,689	21,508	128,448	10,158	1,472	2,127	965	45
80 - 84	89,685	5,240	10,199	66,675	5,234	700	1,166	467	4
85 - 89	35,063	2,224	3,369	26,420	2,131	238	471	209	1
90+	13,051	887	1,094	9,959	765	74	189	82	1
Female									
Total	981,150	139,127	6,706	695,970	72,904	37,060	22,531	5,479	1,373
60 - 64	291,101	38,977	2,517	204,096	18,236	16,808	7,822	1,704	941
65 - 69	233,810	32,124	1,650	165,652	17,271	10,110	5,375	1,292	336
70 - 74	173,805	25,661	1,048	123,595	14,085	4,828	3,574	946	68
75 - 79	142,454	21,252	783	102,437	11,484	2,904	2,820	752	22
80 - 84	85,365	13,146	443	61,049	7,024	1,531	1,707	462	3
85 - 89	39,301	5,721	190	28,258	3,370	647	884	229	2
90+	15,314	2,246	75	10,883	1,434	232	349	94	1

Appendix 1. Appendix tables

Table 10

Population aged 40-59 in conventional households classified as living with a parent or parent-in-law by household headship by sex by marital status by level of education, urban and rural areas, 2014 Census

Sex/marital status/ level of education	Population aged 40-59 in conventional households			Adults aged 40-59 living as the son/daughter or son/daughter- in-law or adopted child of the household head			Adults aged 40-59 who are the head or the spouse of the head of household living with parent or parent-in-law		
	Union	Urban	Rural	Union	Urban	Rural	Union	Urban	Rural
Both sexes									
Total	10,478,171	3,212,469	7,265,702	1,103,403	459,973	643,430	541,384	158,737	382,647
Single	1,083,524	452,881	630,643	459,253	185,209	274,044	28,028	8,978	19,050
Married	8,317,101	2,403,059	5,914,042	507,159	220,436	286,723	474,586	137,940	336,646
Widowed	825,199	266,089	559,110	74,696	30,943	43,753	29,951	9,168	20,783
Divorced/Separated	249,958	89,673	160,285	62,004	23,266	38,738	8,796	2,639	6,157
Renounced	2,389	767	1,622	291	119	172	23	12	11
Male									
Total	4,779,077	1,409,846	3,369,231	459,559	194,177	265,382	271,910	76,625	195,285
Single	372,439	156,058	216,381	151,604	64,322	87,282	12,508	3,192	9,316
Married	4,165,037	1,186,425	2,978,612	266,771	114,778	151,993	250,115	71,425	178,690
Widowed	148,563	35,460	113,103	14,946	4,900	10,046	6,346	1,295	5,051
Divorced/Separated	91,521	31,500	60,021	26,106	10,115	15,991	2,930	708	2,222
Renounced	1,517	403	1,114	132	62	70	11	5	6
Female									
Total	5,699,094	1,802,623	3,896,471	643,844	265,796	378,048	269,474	82,112	187,362
Single	711,085	296,823	414,262	307,649	120,887	186,762	15,520	5,786	9,734
Married	4,152,064	1,216,634	2,935,430	240,388	105,658	134,730	224,471	66,515	157,956
Widowed	676,636	230,629	446,007	59,750	26,043	33,707	23,605	7,873	15,732
Divorced/Separated	158,437	58,173	100,264	35,898	13,151	22,747	5,866	1,931	3,935
Renounced	872	364	508	159	57	102	12	7	5
Both sexes									
Total	10,478,171	3,212,469	7,265,702	1,103,403	459,973	643,430	541,384	158,737	382,647
No education	1,706,742	211,169	1,495,573	101,875	15,421	86,454	78,689	8,386	70,303
Primary school	5,079,872	1,002,360	4,077,512	442,032	93,384	348,648	252,212	42,667	209,545
Lower secondary	1,945,954	883,767	1,062,187	244,241	124,221	120,020	107,946	43,059	64,887
Upper secondary	871,916	567,435	304,481	143,093	100,311	42,782	49,643	30,158	19,485
Higher than high school	697,290	531,836	165,454	162,023	125,545	36,478	45,223	33,742	11,481
Other	176,397	15,902	160,495	10,139	1,091	9,048	7,671	725	6,946
Male									
Total	4,779,077	1,409,846	3,369,231	459,559	194,177	265,382	271,910	76,625	195,285
None	654,591	66,959	587,632	40,756	6,146	34,610	35,586	3,285	32,301
Primary school	2,141,490	365,945	1,775,545	161,743	34,286	127,457	116,470	17,495	98,975
Lower secondary	1,103,593	449,653	653,940	124,805	61,345	63,460	64,617	23,125	41,492
Upper secondary	473,003	289,942	183,061	71,618	49,131	22,487	28,562	16,341	12,221
Higher than high school	308,484	228,761	79,723	55,632	42,670	12,962	21,937	15,945	5,992
Other	97,916	8,586	89,330	5,005	599	4,406	4,738	434	4,304
Female									
Total	5,699,094	1,802,623	3,896,471	643,844	265,796	378,048	269,474	82,112	187,362
None	1,052,151	144,210	907,941	61,119	9,275	51,844	43,103	5,101	38,002
Primary school	2,938,382	636,415	2,301,967	280,289	59,098	221,191	135,742	25,172	110,570
Lower secondary	842,361	434,114	408,247	119,436	62,876	56,560	43,329	19,934	23,395
Upper secondary	398,913	277,493	121,420	71,475	51,180	20,295	21,081	13,817	7,264
Higher than high school	388,806	303,075	85,731	106,391	82,875	23,516	23,286	17,797	5,489
Other	78,481	7,316	71,165	5,134	492	4,642	2,933	291	2,642

Appendix 1. Appendix tables

Table 11

Population aged 15 years and over by main/usual activity by sex by age group, urban and rural areas, 2014 Census

Sex/Age group/Area	Main/usual activity during 12 months												
	Total	Employee (government)	Employee (private org.)	Employer	Own account worker	Contributing family worker	Sought work	Did not seek work	Full-time student	Household work	Pensioner, retired, older person	Ill, disabled	Other
Union													
Both sexes													
15-59	31,405,923	1,326,180	6,935,944	866,597	7,864,891	3,532,920	869,018	128,828	1,736,568	6,498,506	311,059	166,811	1,168,601
60+	4,474,408	20,784	229,291	175,638	764,972	155,322	8,206	5,455	4,991	773,030	2,023,339	129,851	183,529
60-64	1,576,845	14,577	133,366	77,116	405,091	80,772	4,410	2,427	1,283	384,658	383,394	28,859	60,892
65-69	1,064,493	3,212	59,873	46,514	208,784	41,570	2,025	1,418	1,115	216,648	414,829	24,825	43,680
70-74	713,170	1,198	20,425	25,220	85,853	17,659	767	642	1,040	93,922	415,224	21,781	29,439
75-79	553,298	675	9,049	16,609	41,611	8,875	463	500	716	50,140	379,066	21,421	24,173
80-84	335,576	513	3,602	7,181	15,220	3,923	291	266	400	17,925	254,414	17,018	14,823
85-89	158,069	330	1,752	2,334	5,644	1,649	136	131	246	6,976	121,647	10,035	7,189
90+	72,957	279	1,224	664	2,769	874	114	71	191	2,761	54,765	5,912	3,333
Male													
15-59	15,010,470	754,491	4,530,147	645,719	5,074,821	1,408,089	514,317	79,246	815,863	181,752	140,332	100,447	765,246
60+	1,921,340	16,746	167,722	129,478	536,957	42,880	5,753	3,409	1,723	23,299	828,765	52,659	111,949
60-64	712,040	12,028	97,904	57,875	282,473	20,937	3,300	1,605	380	8,933	172,977	14,655	38,973
65-69	466,618	2,591	44,018	34,333	147,799	11,563	1,426	942	358	6,244	178,458	11,338	27,548
70-74	301,679	951	14,785	18,397	61,277	5,396	487	361	402	3,595	169,626	8,690	17,712
75-79	228,315	528	6,521	11,838	29,557	2,805	263	285	272	2,595	151,440	7,891	14,320
80-84	130,875	322	2,445	5,068	10,460	1,333	144	132	134	1,220	95,893	5,538	8,186
85-89	56,979	184	1,179	1,511	3,637	538	68	53	93	503	42,569	3,007	3,637
90+	24,834	142	870	456	1,754	308	65	31	84	209	17,802	1,540	1,573
Female													
15-59	16,395,453	571,689	2,405,797	220,878	2,790,070	2,124,831	354,701	49,582	920,705	6,316,754	170,727	66,364	403,355
60+	2,553,068	4,038	61,569	46,160	228,015	112,442	2,453	2,046	3,268	749,731	1,194,574	77,192	71,580
60-64	864,805	2,549	35,462	19,241	122,618	59,835	1,110	822	903	375,725	210,417	14,204	21,919
65-69	597,875	621	15,855	12,181	60,985	30,007	599	476	757	210,404	236,371	13,487	16,132
70-74	411,491	247	5,640	6,823	24,576	12,263	280	281	638	90,327	245,598	13,091	11,727
75-79	324,983	147	2,528	4,771	12,054	6,070	200	215	444	47,545	227,626	13,530	9,853
80-84	204,701	191	1,157	2,113	4,760	2,590	147	134	266	16,705	158,521	11,480	6,637
85-89	101,090	146	573	823	2,007	1,111	68	78	153	6,473	79,078	7,028	3,552
90+	48,123	137	354	208	1,015	566	49	40	107	2,552	36,963	4,372	1,760

Appendix 1. Appendix tables

Table 11 (continued) Population aged 15 years and over by main/usual activity by sex by age group, urban and rural areas, 2014 Census

Sex/Age group/Area	Main/usual activity during 12 months												
	Total	Employee (government)	Employee (private org.)	Employer	Own account worker	Contributing family worker	Sought work	Did not seek work	Full-time student	Household work	Pensioner, retired, older person	Ill, disabled	Other
Urban													
Both sexes													
15-59	9,929,558	739,228	2,695,751	222,112	2,005,243	380,739	312,802	51,562	784,664	2,104,115	149,082	52,318	431,942
60+	1,364,589	12,599	67,433	28,674	161,593	18,817	1,973	2,142	2,084	257,605	705,033	38,653	67,983
60-64	477,041	8,400	39,457	14,329	88,801	9,668	1,058	964	554	124,936	158,330	8,515	22,029
65-69	333,747	2,221	17,592	7,514	43,644	5,024	443	546	463	72,175	160,687	7,257	16,181
70-74	212,747	842	5,651	3,495	16,239	2,128	162	229	395	31,388	135,539	6,100	10,579
75-79	165,732	463	2,428	1,943	7,819	1,107	123	186	317	17,823	118,277	6,198	9,048
80-84	99,573	317	1,168	901	3,066	524	100	107	164	7,007	75,551	4,989	5,679
85-89	51,127	201	682	340	1,307	246	44	72	100	3,090	38,636	3,431	2,978
90+	24,622	155	455	152	717	120	43	38	91	1,186	18,013	2,163	1,489
Male													
15-59	4,715,944	401,370	1,745,516	153,364	1,180,296	173,061	192,180	33,519	371,630	71,789	73,440	34,497	285,282
60+	562,081	9,605	53,483	20,423	100,592	5,929	1,403	1,255	675	8,004	308,903	14,489	37,320
60-64	206,172	6,443	31,400	10,347	54,976	2,983	820	608	151	3,322	77,660	4,301	13,161
65-69	140,316	1,762	14,092	5,344	27,212	1,578	316	351	131	2,188	74,832	3,180	9,330
70-74	87,697	659	4,472	2,493	10,367	717	91	119	155	1,053	59,639	2,248	5,684
75-79	65,960	360	1,894	1,301	4,914	350	68	85	107	816	49,394	2,019	4,652
80-84	36,945	205	823	618	1,936	185	52	50	55	370	28,610	1,379	2,662
85-89	17,118	110	469	221	753	82	25	27	36	175	13,112	866	1,242
90+	7,873	66	333	99	434	34	31	15	40	80	5,656	496	589
Female													
15-59	5,213,614	337,858	950,235	68,748	824,947	207,678	120,622	18,043	413,034	2,032,326	75,642	17,821	146,660
60+	802,508	2,994	13,950	8,251	61,001	12,888	570	887	1,409	249,601	396,130	24,164	30,663
60-64	270,869	1,957	8,057	3,982	33,825	6,685	238	356	403	121,614	80,670	4,214	8,868
65-69	193,431	459	3,500	2,170	16,432	3,446	127	195	332	69,987	85,855	4,077	6,851
70-74	125,050	183	1,179	1,002	5,872	1,411	71	110	240	30,335	75,900	3,852	4,895
75-79	99,772	103	534	642	2,905	757	55	101	210	17,007	68,883	4,179	4,396
80-84	62,628	112	345	283	1,130	339	48	57	109	6,637	46,941	3,610	3,017
85-89	34,009	91	213	119	554	164	19	45	64	2,915	25,524	2,565	1,736
90+	16,749	89	122	53	283	86	12	23	51	1,106	12,357	1,667	900

Appendix 1. Appendix tables

Table 11 (continued) Population aged 15 years and over by main/usual activity by sex by age group, urban and rural areas, 2014 Census

Sex/Age group/Area	Main/usual activity during 12 months												
	Total	Employee (government)	Employee (private org.)	Employer	Own account worker	Contributing family worker	Sought work	Did not seek work	Full-time student	Household work	Pensioner, retired, older person	Ill, disabled	Other
Rural													
Both sexes													
15-59	21,476,365	586,952	4,240,193	644,485	5,859,648	3,152,181	556,216	77,266	951,904	4,394,391	161,977	114,493	736,659
60+	3,109,819	8,185	161,858	146,964	603,379	136,505	6,233	3,313	2,907	515,425	1,318,306	91,198	115,546
60-64	1,099,804	6,177	93,909	62,787	316,290	71,104	3,352	1,463	729	259,722	225,064	20,344	38,863
65-69	730,746	991	42,281	39,000	165,140	36,546	1,582	872	652	144,473	254,142	17,568	27,499
70-74	500,423	356	14,774	21,725	69,614	15,531	605	413	645	62,534	279,685	15,681	18,860
75-79	387,566	212	6,621	14,666	33,792	7,768	340	314	399	32,317	260,789	15,223	15,125
80-84	236,003	196	2,434	6,280	12,154	3,399	191	159	236	10,918	178,863	12,029	9,144
85-89	106,942	129	1,070	1,994	4,337	1,403	92	59	146	3,886	83,011	6,604	4,211
90+	48,335	124	769	512	2,052	754	71	33	100	1,575	36,752	3,749	1,844
Male													
15-59	10,294,526	353,121	2,784,631	492,355	3,894,525	1,235,028	322,137	45,727	444,233	109,963	66,892	65,950	479,964
60+	1,359,259	7,141	114,239	109,055	436,365	36,951	4,350	2,154	1,048	15,295	519,862	38,170	74,629
60-64	505,868	5,585	66,504	47,528	227,497	17,954	2,480	997	229	5,611	95,317	10,354	25,812
65-69	326,302	829	29,926	28,989	120,587	9,985	1,110	591	227	4,056	103,626	8,158	18,218
70-74	213,982	292	10,313	15,904	50,910	4,679	396	242	247	2,542	109,987	6,442	12,028
75-79	162,355	168	4,627	10,537	24,643	2,455	195	200	165	1,779	102,046	5,872	9,668
80-84	93,930	117	1,622	4,450	8,524	1,148	92	82	79	850	67,283	4,159	5,524
85-89	39,861	74	710	1,290	2,884	456	43	26	57	328	29,457	2,141	2,395
90+	16,961	76	537	357	1,320	274	34	16	44	129	12,146	1,044	984
Female													
15-59	11,181,839	233,831	1,455,562	152,130	1,965,123	1,917,153	234,079	31,539	507,671	4,284,428	95,085	48,543	256,695
60+	1,750,560	1,044	47,619	37,909	167,014	99,554	1,883	1,159	1,859	500,130	798,444	53,028	40,917
60-64	593,936	592	27,405	15,259	88,793	53,150	872	466	500	254,111	129,747	9,990	13,051
65-69	404,444	162	12,355	10,011	44,553	26,561	472	281	425	140,417	150,516	9,410	9,281
70-74	286,441	64	4,461	5,821	18,704	10,852	209	171	398	59,992	169,698	9,239	6,832
75-79	225,211	44	1,994	4,129	9,149	5,313	145	114	234	30,538	158,743	9,351	5,457
80-84	142,073	79	812	1,830	3,630	2,251	99	77	157	10,068	111,580	7,870	3,620
85-89	67,081	55	360	704	1,453	947	49	33	89	3,558	53,554	4,463	1,816
90+	31,374	48	232	155	732	480	37	17	56	1,446	24,606	2,705	860

Appendix 1. Appendix tables

Table 12

Percentage of population aged 15 years and over by main activity in the past 12 months, by sex by age group, urban and rural areas, 2014 Census

Sex/Age group/Area	Main activity in the past 12 months											Total	
	Employee (government)	Employee (private org.)	Employer	Own account worker	Contributing family worker	Sought work	Did not seek work	Full-time student	Household work	Pensioner, retired, older person	Ill, disabled		Other
Union													
Both sexes													
15-59	4.2	22.1	2.8	25.0	11.2	2.8	0.4	5.5	20.7	1.0	0.5	3.7	100
60+	0.5	5.1	3.9	17.1	3.5	0.2	0.1	0.1	17.3	45.2	2.9	4.1	100
60-64	0.9	8.5	4.9	25.7	5.1	0.3	0.2	0.1	24.4	24.3	1.8	3.9	100
65-69	0.3	5.6	4.4	19.6	3.9	0.2	0.1	0.1	20.4	39.0	2.3	4.1	100
70-74	0.2	2.9	3.5	12.0	2.5	0.1	0.1	0.1	13.2	58.2	3.1	4.1	100
75-79	0.1	1.6	3.0	7.5	1.6	0.1	0.1	0.1	9.1	68.5	3.9	4.4	100
80-84	0.2	1.1	2.1	4.5	1.2	0.1	0.1	0.1	5.3	75.8	5.1	4.4	100
85-89	0.2	1.1	1.5	3.6	1.0	0.1	0.1	0.2	4.4	77.0	6.3	4.5	100
90+	0.4	1.7	0.9	3.8	1.2	0.2	0.1	0.3	3.8	75.1	8.1	4.6	100
Male													
15-59	5.0	30.2	4.3	33.8	9.4	3.4	0.5	5.4	1.2	0.9	0.7	5.1	100
60+	0.9	8.7	6.7	27.9	2.2	0.3	0.2	0.1	1.2	43.1	2.7	5.8	100
60-64	1.7	13.7	8.1	39.7	2.9	0.5	0.2	0.1	1.3	24.3	2.1	5.5	100
65-69	0.6	9.4	7.4	31.7	2.5	0.3	0.2	0.1	1.3	38.2	2.4	5.9	100
70-74	0.3	4.9	6.1	20.3	1.8	0.2	0.1	0.1	1.2	56.2	2.9	5.9	100
75-79	0.2	2.9	5.2	12.9	1.2	0.1	0.1	0.1	1.1	66.3	3.5	6.3	100
80-84	0.2	1.9	3.9	8.0	1.0	0.1	0.1	0.1	0.9	73.3	4.2	6.3	100
85-89	0.3	2.1	2.7	6.4	0.9	0.1	0.1	0.2	0.9	74.7	5.3	6.4	100
90+	0.6	3.5	1.8	7.1	1.2	0.3	0.1	0.3	0.8	71.7	6.2	6.3	100
Female													
15-59	3.5	14.7	1.3	17.0	13.0	2.2	0.3	5.6	38.5	1.0	0.4	2.5	100
60+	0.2	2.4	1.8	8.9	4.4	0.1	0.1	0.1	29.4	46.8	3.0	2.8	100
60-64	0.3	4.1	2.2	14.2	6.9	0.1	0.1	0.1	43.4	24.3	1.6	2.5	100
65-69	0.1	2.7	2.0	10.2	5.0	0.1	0.1	0.1	35.2	39.5	2.3	2.7	100
70-74	0.1	1.4	1.7	6.0	3.0	0.1	0.1	0.2	22.0	59.7	3.2	2.8	100
75-79	0.0	0.8	1.5	3.7	1.9	0.1	0.1	0.1	14.6	70.0	4.2	3.0	100
80-84	0.1	0.6	1.0	2.3	1.3	0.1	0.1	0.1	8.2	77.4	5.6	3.2	100
85-89	0.1	0.6	0.8	2.0	1.1	0.1	0.1	0.2	6.4	78.2	7.0	3.5	100
90+	0.3	0.7	0.4	2.1	1.2	0.1	0.1	0.2	5.3	76.8	9.1	3.7	100

Appendix 1. Appendix tables

Table 12 (continued) Percentage of population aged 15 years and over by main activity in the past 12 months, by sex by age group, urban and rural areas, 2014 Census

Sex/Age group/Area	Main activity in the past 12 months											Total	
	Employee (government)	Employee (private org.)	Employer	Own account worker	Contributing family worker	Sought work	Did not seek work	Full-time student	Household work	Pensioner, retired, older person	Ill, disabled		Other
Urban													
Both sexes													
15-59	7.4	27.1	2.2	20.2	3.8	3.2	0.5	7.9	21.2	1.5	0.5	4.4	100
60+	0.9	4.9	2.1	11.8	1.4	0.1	0.2	0.2	18.9	51.7	2.8	5.0	100
60-64	1.8	8.3	3.0	18.6	2.0	0.2	0.2	0.1	26.2	33.2	1.8	4.6	100
65-69	0.7	5.3	2.3	13.1	1.5	0.1	0.2	0.1	21.6	48.1	2.2	4.8	100
70-74	0.4	2.7	1.6	7.6	1.0	0.1	0.1	0.2	14.8	63.7	2.9	5.0	100
75-79	0.3	1.5	1.2	4.7	0.7	0.1	0.1	0.2	10.8	71.4	3.7	5.5	100
80-84	0.3	1.2	0.9	3.1	0.5	0.1	0.1	0.2	7.0	75.9	5.0	5.7	100
85-89	0.4	1.3	0.7	2.6	0.5	0.1	0.1	0.2	6.0	75.6	6.7	5.8	100
90+	0.6	1.8	0.6	2.9	0.5	0.2	0.2	0.4	4.8	73.2	8.8	6.0	100
Male													
15-59	8.5	37.0	3.3	25.0	3.7	4.1	0.7	7.9	1.5	1.6	0.7	6.0	100
60+	1.7	9.5	3.6	17.9	1.1	0.2	0.2	0.1	1.4	55.0	2.6	6.6	100
60-64	3.1	15.2	5.0	26.7	1.4	0.4	0.3	0.1	1.6	37.7	2.1	6.4	100
65-69	1.3	10.0	3.8	19.4	1.1	0.2	0.3	0.1	1.6	53.3	2.3	6.6	100
70-74	0.8	5.1	2.8	11.8	0.8	0.1	0.1	0.2	1.2	68.0	2.6	6.5	100
75-79	0.5	2.9	2.0	7.4	0.5	0.1	0.1	0.2	1.2	74.9	3.1	7.1	100
80-84	0.6	2.2	1.7	5.2	0.5	0.1	0.1	0.1	1.0	77.4	3.7	7.2	100
85-89	0.6	2.7	1.3	4.4	0.5	0.1	0.2	0.2	1.0	76.6	5.1	7.3	100
90+	0.8	4.2	1.3	5.5	0.4	0.4	0.2	0.5	1.0	71.8	6.3	7.5	100
Female													
15-59	6.5	18.2	1.3	15.8	4.0	2.3	0.3	7.9	39.0	1.5	0.3	2.8	100
60+	0.4	1.7	1.0	7.6	1.6	0.1	0.1	0.2	31.1	49.4	3.0	3.8	100
60-64	0.7	3.0	1.5	12.5	2.5	0.1	0.1	0.1	44.9	29.8	1.6	3.3	100
65-69	0.2	1.8	1.1	8.5	1.8	0.1	0.1	0.2	36.2	44.4	2.1	3.5	100
70-74	0.1	0.9	0.8	4.7	1.1	0.1	0.1	0.2	24.3	60.7	3.1	3.9	100
75-79	0.1	0.5	0.6	2.9	0.8	0.1	0.1	0.2	17.0	69.0	4.2	4.4	100
80-84	0.2	0.6	0.5	1.8	0.5	0.1	0.1	0.2	10.6	75.0	5.8	4.8	100
85-89	0.3	0.6	0.3	1.6	0.5	0.1	0.1	0.2	8.6	75.1	7.5	5.1	100
90+	0.5	0.7	0.3	1.7	0.5	0.1	0.1	0.3	6.6	73.8	10.0	5.4	100

Appendix 1. Appendix tables

Table 12 (continued) Percentage of population aged 15 years and over by main activity in the past 12 months, by sex by age group, urban and rural areas, 2014 Census

Sex/Age group/Area	Main activity in the past 12 months											Total	
	Employee (government)	Employee (private org.)	Employer	Own account worker	Contributing family worker	Sought work	Did not seek work	Full-time student	Household work	Pensioner, retired, older person	Ill, disabled		Other
Rural													
Both sexes													
15-59	2.7	19.7	3.0	27.3	14.7	2.6	0.4	4.4	20.5	0.8	0.5	3.4	100
60+	0.3	5.2	4.7	19.4	4.4	0.2	0.1	0.1	16.6	42.4	2.9	3.7	100
60-64	0.6	8.5	5.7	28.8	6.5	0.3	0.1	0.1	23.6	20.5	1.8	3.5	100
65-69	0.1	5.8	5.3	22.6	5.0	0.2	0.1	0.1	19.8	34.8	2.4	3.8	100
70-74	0.1	3.0	4.3	13.9	3.1	0.1	0.1	0.1	12.5	55.9	3.1	3.8	100
75-79	0.1	1.7	3.8	8.7	2.0	0.1	0.1	0.1	8.3	67.3	3.9	3.9	100
80-84	0.1	1.0	2.7	5.1	1.4	0.1	0.1	0.1	4.6	75.8	5.1	3.9	100
85-89	0.1	1.0	1.9	4.1	1.3	0.1	0.1	0.1	3.6	77.6	6.2	3.9	100
90+	0.3	1.6	1.1	4.2	1.6	0.1	0.1	0.2	3.3	76.0	7.8	3.8	100
Male													
15-59	3.4	27.0	4.8	37.8	12.0	3.1	0.4	4.3	1.1	0.6	0.6	4.7	100
60+	0.5	8.4	8.0	32.1	2.7	0.3	0.2	0.1	1.1	38.2	2.8	5.5	100
60-64	1.1	13.1	9.4	45.0	3.5	0.5	0.2	0.0	1.1	18.8	2.0	5.1	100
65-69	0.3	9.2	8.9	37.0	3.1	0.3	0.2	0.1	1.2	31.8	2.5	5.6	100
70-74	0.1	4.8	7.4	23.8	2.2	0.2	0.1	0.1	1.2	51.4	3.0	5.6	100
75-79	0.1	2.8	6.5	15.2	1.5	0.1	0.1	0.1	1.1	62.9	3.6	6.0	100
80-84	0.1	1.7	4.7	9.1	1.2	0.1	0.1	0.1	0.9	71.6	4.4	5.9	100
85-89	0.2	1.8	3.2	7.2	1.1	0.1	0.1	0.1	0.8	73.9	5.4	6.0	100
90+	0.4	3.2	2.1	7.8	1.6	0.2	0.1	0.3	0.8	71.6	6.2	5.8	100
Female													
15-59	2.1	13.0	1.4	17.6	17.1	2.1	0.3	4.5	38.3	0.9	0.4	2.3	100
60+	0.1	2.7	2.2	9.5	5.7	0.1	0.1	0.1	28.6	45.6	3.0	2.3	100
60-64	0.1	4.6	2.6	14.9	8.9	0.1	0.1	0.1	42.8	21.8	1.7	2.2	100
65-69	0.0	3.1	2.5	11.0	6.6	0.1	0.1	0.1	34.7	37.2	2.3	2.3	100
70-74	0.0	1.6	2.0	6.5	3.8	0.1	0.1	0.1	20.9	59.2	3.2	2.4	100
75-79	0.0	0.9	1.8	4.1	2.4	0.1	0.1	0.1	13.6	70.5	4.2	2.4	100
80-84	0.1	0.6	1.3	2.6	1.6	0.1	0.1	0.1	7.1	78.5	5.5	2.5	100
85-89	0.1	0.5	1.0	2.2	1.4	0.1	0.0	0.1	5.3	79.8	6.7	2.7	100
90+	0.2	0.7	0.5	2.3	1.5	0.1	0.1	0.2	4.6	78.4	8.6	2.7	100

Appendix 1. Appendix tables

Table 13

Distribution of prime working age and older population by industry group by sex, 2014 and 1983 censuses

Industry group/Census year	15-59 year olds			60 and over		
	Both sexes	Male	Female	Both sexes	Male	Female
2014						
Total	19,228,355	11,482,321	7,746,034	1,317,252	872,401	444,851
Agriculture, forestry and fishing	9,853,382	6,224,773	3,628,609	873,427	620,648	252,779
Mining and quarrying	162,170	133,660	28,510	2,711	2,271	440
Manufacturing	1,339,591	566,619	772,972	55,723	34,763	20,960
Electricity, gas, steam and air conditioning supply	42,874	38,613	4,261	1,562	1,510	52
Water supply; sewerage, waste management and remediation activities	24,875	20,437	4,438	995	871	124
Construction	910,687	817,757	92,930	29,544	28,522	1,022
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,811,043	840,353	970,690	112,357	52,811	59,546
Transportation and storage	787,073	762,109	24,964	23,552	22,749	803
Accommodation and food service activities	907,187	369,263	537,924	55,533	22,137	33,396
Information and communication	45,958	28,346	17,612	1,755	1,428	327
Financial and insurance activities	41,724	16,726	24,998	1,135	797	338
Real estate activities	10,028	6,469	3,559	772	546	226
Professional, scientific and technical activities	27,191	17,961	9,230	2,281	1,990	291
Administrative and support service activities	235,831	139,244	96,587	12,307	10,756	1,551
Public administration and defence; compulsory social security	604,683	429,323	175,360	11,874	10,018	1,856
Education	385,981	72,194	313,787	4,111	2,001	2,110
Human health and social work activities	104,767	38,461	66,306	8,199	6,231	1,968
Arts, entertainment and recreation	53,694	38,743	14,951	4,077	3,657	420
Other service activities	439,791	271,503	168,288	24,160	17,201	6,959
Activities of households as employers; undifferentiated goods and services	265,335	146,454	118,881	13,019	7,747	5,272
Activities of extraterritorial organizations and bodies	2,766	1,404	1,362	93	68	25
Not stated	1,171,724	501,909	669,815	78,065	23,679	54,386
1983						
Total	10,600,307	6,823,878	3,776,429	954,016	619,258	334,758
Agriculture, forestry, fishing and hunting	6,688,422	4,396,085	2,292,337	705,962	480,763	225,199
Mining and quarrying	66,717	51,326	15,391	1,600	1,147	453
Manufacturing	1,007,691	518,182	489,509	54,558	33,130	21,428
Construction	147,118	134,454	12,664	8,298	8,214	84
Electricity, gas, water and sanitary services	20,430	18,783	1,647	384	363	21
Wholesale and retail trade, restaurants and hotels	1,216,043	540,599	675,444	128,967	55,726	73,241
Transport, storage and communication	334,409	325,391	9,018	9,748	9,228	520
Services	784,749	608,697	176,052	17,792	14,635	3,157
Not classified	334,728	230,361	104,367	26,707	16,052	10,655

Appendix 1. Appendix tables

Table 14

Number of households by presence of older members, selected housing/household conditions, urban and rural areas, 2014 Census

Household/housing conditions	Households with someone aged 60 and over			Households with no one aged 60 and over		
	Union	Urban	Rural	Union	Urban	Rural
Type of ownership						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Owner	3,035,780	802,984	2,232,796	6,267,060	1,210,068	5,056,992
Renter	131,904	108,880	23,024	673,587	510,184	163,403
Provided free (individually)	45,968	24,520	21,448	226,589	108,505	118,084
Government quarters	53,659	37,394	16,265	300,496	176,481	124,015
Private company quarters	10,106	4,965	5,141	67,128	25,925	41,203
Other	10,766	7,166	3,600	54,789	32,361	22,428
Lighting						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Electricity	1,178,368	808,488	369,880	2,349,349	1,554,915	794,434
Kerosene	237,488	4,536	232,952	639,090	11,250	627,840
Candle	607,029	54,619	552,410	1,644,907	163,478	1,481,429
Battery	513,146	43,643	469,503	1,330,610	147,886	1,182,724
Generator (private)	331,858	50,849	281,009	681,291	126,460	554,831
Water mill (private)	54,980	7,970	47,010	122,527	17,816	104,711
Solar system/Energy	293,990	12,291	281,699	651,252	30,520	620,732
Other	71,324	3,513	67,811	170,623	11,199	159,424
Cooking fuel						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Electricity	566,449	443,093	123,356	1,213,886	898,243	315,643
LPG	19,080	17,718	1,362	29,812	25,605	4,207
Kerosene	5,844	244	5,600	15,354	677	14,677
Biogas	9,662	7,331	2,331	23,301	15,315	7,986
Firewood	2,284,167	253,394	2,030,773	5,248,494	528,653	4,719,841
Charcoal	357,933	250,186	107,747	924,185	557,555	366,630
Coal	9,168	6,227	2,941	22,499	12,929	9,570
Straw/Grass	1,344	314	1,030	3,703	787	2,916
Other	34,536	7,402	27,134	108,415	23,760	84,655
Drinking water						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Tap water/Piped	305,704	169,075	136,629	668,894	319,084	349,810
Tube well/Borehole	1,081,938	277,844	804,094	2,337,552	573,575	1,763,977
Protected well/Spring	676,976	123,314	553,662	1,377,552	227,683	1,149,869
Unprotected well/Spring	153,598	16,418	137,180	426,954	39,224	387,730
Pool/Pond/Lake	369,204	53,669	315,535	966,156	128,553	837,603
River/Stream/Canal	218,477	17,335	201,142	596,434	38,438	557,996
Waterfall/Rain water	93,455	9,890	83,565	246,523	15,419	231,104
Bottled water/Water from vending machine	324,664	294,292	30,372	784,342	660,511	123,831
Tanker/Truck	13,984	10,643	3,341	36,779	25,617	11,162
Other	50,183	13,429	36,754	148,463	35,420	113,043

Appendix 1. Appendix tables

Table 14 (continued) Number of households by presence of older members, selected housing/household conditions, urban and rural areas, 2014 Census

Household/housing conditions	Households with someone aged 60 and over			Households with no one aged 60 and over		
	Union	Urban	Rural	Union	Urban	Rural
Toilet						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Flush	84,912	63,614	21,298	144,063	95,159	48,904
Water seal (Improved pit latrine)	2,511,734	864,573	1,647,161	5,343,403	1,791,689	3,551,714
Pit (Traditional pit latrine)	244,115	33,504	210,611	611,330	83,468	527,862
Bucket (Surface latrine)	68,136	7,229	60,907	223,046	23,688	199,358
Other	19,534	1,807	17,727	64,346	6,591	57,755
None	359,752	15,182	344,570	1,203,461	62,929	1,140,532
Roof						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Dhani/Theke/In leaf	862,900	86,646	776,254	2,711,080	267,268	2,443,812
Bamboo	67,563	16,574	50,989	174,430	46,931	127,499
Wood	4,801	1,810	2,991	10,125	3,597	6,528
Corrugated sheet	2,246,474	828,613	1,417,861	4,438,134	1,645,610	2,792,524
Tile/Brick/Concrete	78,376	49,994	28,382	158,869	90,524	68,345
Other	28,069	2,272	25,797	97,011	9,594	87,417
Housing type						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Condominium/Apartment/Flat	117,192	105,363	11,829	371,293	271,511	99,782
Bungalow/Brick house	282,007	164,544	117,463	456,216	241,085	215,131
Semi-pacca house	286,496	136,781	149,715	424,579	198,552	226,027
Wooden house	1,553,304	385,717	1,167,587	2,929,080	755,748	2,173,332
Bamboo	976,607	179,825	796,782	3,088,249	540,341	2,547,908
Hut 2 - 3 years	39,404	5,017	34,387	167,369	20,661	146,708
Hut 1 year	14,704	2,326	12,378	81,635	12,750	68,885
Other	18,469	6,336	12,133	71,228	22,876	48,352
Radio and television						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Has no radio and no TV	916,513	131,054	785,459	2,752,232	452,649	2,299,583
Has radio but no TV	623,092	52,044	571,048	1,203,005	102,571	1,100,434
Has no radio but has TV	957,447	514,971	442,476	2,385,459	1,120,617	1,264,842
Has both radio and TV	791,131	287,840	503,291	1,248,953	387,687	861,266
Telephone						
Total	3,288,183	985,909	2,302,274	7,589,649	2,063,524	5,526,125
Has no landline or mobile	2,057,306	303,787	1,753,519	5,102,739	782,793	4,319,946
Has landline but no mobile	55,354	13,634	41,720	80,682	11,828	68,854
Has no landline but has mobile	1,002,771	541,594	461,177	2,190,503	1,135,592	1,054,911
Has both landline and mobile	172,752	126,894	45,858	215,725	133,311	82,414

Appendix 1. Appendix tables

Table 15

Wealth quintiles of households with and without an older member, by household size by number of employed members aged 15-59, 2014 Census

Household type	Wealth quintile	Household size										Total
		1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10+	
All households	1	139,685	329,841	505,820	487,820	362,543	232,523	133,964	78,095	25,559	28,037	2,323,887
	2	116,626	296,635	475,401	494,129	368,515	236,183	134,722	80,326	28,063	32,901	2,263,501
	3	79,895	238,811	405,260	463,258	372,857	250,083	148,742	93,132	33,663	44,034	2,129,735
	4	69,907	220,896	370,561	432,177	357,477	247,194	153,203	102,208	38,584	61,677	2,053,884
	5	94,975	266,046	408,158	442,905	332,335	217,127	135,578	96,198	37,434	76,069	2,106,825
	Total	501,088	1,352,229	2,165,200	2,320,289	1,793,727	1,183,110	706,209	449,959	163,303	242,718	10,877,832
Households with at least one older member	1	65,330	105,165	86,715	78,324	68,851	52,016	33,580	22,238	7,885	11,270	531,374
	2	53,801	110,515	107,125	104,227	94,478	70,698	44,436	28,716	10,867	15,277	640,140
	3	34,508	93,362	109,050	120,015	120,079	93,562	60,628	40,052	15,486	22,878	709,620
	4	24,497	75,160	97,464	115,072	122,180	102,323	70,256	49,174	19,991	35,618	711,735
	5	20,854	70,422	97,562	112,709	113,999	94,864	66,923	50,540	21,324	46,117	695,314
	Total	198,990	454,624	497,916	530,347	519,587	413,463	275,823	190,720	75,553	131,160	3,288,183
Households with no older member	1	74,355	224,676	419,105	409,496	293,692	180,507	100,384	55,857	17,674	16,767	1,792,513
	2	62,825	186,120	368,276	389,902	274,037	165,485	90,286	51,610	17,196	17,624	1,623,361
	3	45,387	145,449	296,210	343,243	252,778	156,521	88,114	53,080	18,177	21,156	1,420,115
	4	45,410	145,736	273,097	317,105	235,297	144,871	82,947	53,034	18,593	26,059	1,342,149
	5	74,121	195,624	310,596	330,196	218,336	122,263	68,655	45,658	16,110	29,952	1,411,511
	Total	302,098	897,605	1,667,284	1,789,942	1,274,140	769,647	430,386	259,239	87,750	111,558	7,589,649
Household type	Wealth quintile	Number of employed members aged 15-59 years										Total
		0	1	2	3	4	5	6	7	8	9+	
All households	1	333,993	970,838	689,681	204,798	82,220	28,347	9,287	2,843	1,053	827	2,323,887
	2	271,819	847,788	705,063	259,948	114,667	42,408	14,134	4,727	1,642	1,305	2,263,501
	3	222,241	732,743	658,290	288,594	140,597	56,085	20,118	6,702	2,438	1,927	2,129,735
	4	196,772	712,150	623,704	283,688	140,583	58,232	22,903	8,715	3,622	3,515	2,053,884
	5	197,481	817,660	611,171	255,822	121,212	52,673	23,530	11,161	6,175	9,940	2,106,825
	Total	1,222,306	4,081,179	3,287,909	1,292,850	599,279	237,745	89,972	34,148	14,930	17,514	10,877,832
Households with at least one older member	1	189,649	173,729	103,333	40,394	15,500	5,571	1,973	672	249	304	531,374
	2	177,294	207,300	147,533	65,213	27,038	10,036	3,551	1,242	459	474	640,140
	3	154,010	218,415	181,598	89,789	40,431	15,904	5,837	2,081	807	748	709,620
	4	133,452	214,279	185,890	97,874	46,811	19,527	7,867	3,181	1,365	1,489	711,735
	5	126,842	214,805	177,116	93,518	44,700	19,641	8,818	4,174	2,117	3,583	695,314
	Total	781,247	1,028,528	795,470	386,788	174,480	70,679	28,046	11,350	4,997	6,598	3,288,183
Households with no older member	1	144,344	797,109	586,348	164,404	66,720	22,776	7,314	2,171	804	523	1,792,513
	2	94,525	640,488	557,530	194,735	87,629	32,372	10,583	3,485	1,183	831	1,623,361
	3	68,231	514,328	476,692	198,805	100,166	40,181	14,281	4,621	1,631	1,179	1,420,115
	4	63,320	497,871	437,814	185,814	93,772	38,705	15,036	5,534	2,257	2,026	1,342,149
	5	70,639	602,855	434,055	162,304	76,512	33,032	14,712	6,987	4,058	6,357	1,411,511
	Total	441,059	3,052,651	2,492,439	906,062	424,799	167,066	61,926	22,798	9,933	10,916	7,589,649

Appendix 1. Appendix tables

Table 16

Number and percentage of persons 15 years old and over by degree of disability by age group by sex, urban and rural areas, 2014 Census

Sex/Age Group/Area	Number					Percentage			
	Total	No disability	Mild disability	Moderate disability	Severe disability	No disability	Mild disability	Moderate or severe	Total
Union									
Both sexes									
15-59	31,405,923	30,335,006	851,366	132,900	86,651	96.6	2.7	0.7	100
60+	4,474,408	3,431,238	781,587	167,741	93,842	76.7	17.5	5.8	100
60-64	1,576,845	1,346,967	188,831	27,784	13,263	85.4	12.0	2.6	100
65-69	1,064,493	862,541	161,378	27,220	13,354	81.0	15.2	3.8	100
70-74	713,170	525,808	143,462	29,085	14,815	73.7	20.1	6.2	100
75-79	553,298	374,202	131,506	30,938	16,652	67.6	23.8	8.6	100
80-84	335,576	199,921	92,012	27,300	16,343	59.6	27.4	13.0	100
85-89	158,069	86,830	44,410	15,712	11,117	54.9	28.1	17.0	100
90+	72,957	34,969	19,988	9,702	8,298	47.9	27.4	24.7	100
Male									
15-59	15,010,470	14,489,324	402,857	71,106	47,183	96.5	2.7	0.8	100
60+	1,921,340	1,491,270	326,062	68,382	35,626	77.6	17.0	5.4	100
60-64	712,040	608,025	84,498	13,089	6,428	85.4	11.9	2.7	100
65-69	466,618	379,758	68,871	12,081	5,908	81.4	14.8	3.9	100
70-74	301,679	224,025	59,719	12,031	5,904	74.3	19.8	5.9	100
75-79	228,315	155,885	53,710	12,487	6,233	68.3	23.5	8.2	100
80-84	130,875	79,062	36,067	10,186	5,560	60.4	27.6	12.0	100
85-89	56,979	31,962	16,207	5,430	3,380	56.1	28.4	15.5	100
90+	24,834	12,553	6,990	3,078	2,213	50.5	28.1	21.3	100
Female									
15-59	16,395,453	15,845,682	448,509	61,794	39,468	96.6	2.7	0.6	100
60+	2,553,068	1,939,968	455,525	99,359	58,216	76.0	17.8	6.2	100
60-64	864,805	738,942	104,333	14,695	6,835	85.4	12.1	2.5	100
65-69	597,875	482,783	92,507	15,139	7,446	80.7	15.5	3.8	100
70-74	411,491	301,783	83,743	17,054	8,911	73.3	20.4	6.3	100
75-79	324,983	218,317	77,796	18,451	10,419	67.2	23.9	8.9	100
80-84	204,701	120,859	55,945	17,114	10,783	59.0	27.3	13.6	100
85-89	101,090	54,868	28,203	10,282	7,737	54.3	27.9	17.8	100
90+	48,123	22,416	12,998	6,624	6,085	46.6	27.0	26.4	100

Appendix 1. Appendix tables

Table 16 (continued) Number and percentage of persons 15 years old and over by degree of disability by age group by sex, urban and rural areas, 2014 Census

Sex/Age Group/Area	Number					Percentage			
	Total	No disability	Mild disability	Moderate disability	Severe disability	No disability	Mild disability	Moderate or severe	Total
Urban									
Both sexes									
15-59	9,929,558	9,682,396	195,109	29,679	22,374	97.5	2.0	0.5	100
60+	1,364,589	1,114,282	190,332	36,984	22,991	81.7	13.9	4.4	100
60-64	477,041	425,140	42,827	5,849	3,225	89.1	9.0	1.9	100
65-69	333,747	285,724	38,643	6,017	3,363	85.6	11.6	2.8	100
70-74	212,747	170,385	33,159	5,874	3,329	80.1	15.6	4.3	100
75-79	165,732	123,113	32,030	6,624	3,965	74.3	19.3	6.4	100
80-84	99,573	66,184	23,813	5,861	3,715	66.5	23.9	9.6	100
85-89	51,127	31,039	13,165	3,948	2,975	60.7	25.7	13.5	100
90+	24,622	12,697	6,695	2,811	2,419	51.6	27.2	21.2	100
Male									
15-59	4,715,944	4,594,645	91,939	16,735	12,625	97.4	1.9	0.6	100
60+	562,081	464,913	74,471	14,267	8,430	82.7	13.2	4.0	100
60-64	206,172	183,519	18,294	2,772	1,587	89.0	8.9	2.1	100
65-69	140,316	120,653	15,557	2,597	1,509	86.0	11.1	2.9	100
70-74	87,697	70,920	13,081	2,348	1,348	80.9	14.9	4.2	100
75-79	65,960	49,664	12,307	2,571	1,418	75.3	18.7	6.0	100
80-84	36,945	25,150	8,687	1,958	1,150	68.1	23.5	8.4	100
85-89	17,118	10,718	4,352	1,211	837	62.6	25.4	12.0	100
90+	7,873	4,289	2,193	810	581	54.5	27.9	17.7	100
Female									
15-59	5,213,614	5,087,751	103,170	12,944	9,749	97.6	2.0	0.4	100
60+	802,508	649,369	115,861	22,717	14,561	80.9	14.4	4.6	100
60-64	270,869	241,621	24,533	3,077	1,638	89.2	9.1	1.7	100
65-69	193,431	165,071	23,086	3,420	1,854	85.3	11.9	2.7	100
70-74	125,050	99,465	20,078	3,526	1,981	79.5	16.1	4.4	100
75-79	99,772	73,449	19,723	4,053	2,547	73.6	19.8	6.6	100
80-84	62,628	41,034	15,126	3,903	2,565	65.5	24.2	10.3	100
85-89	34,009	20,321	8,813	2,737	2,138	59.8	25.9	14.3	100
90+	16,749	8,408	4,502	2,001	1,838	50.2	26.9	22.9	100

Appendix 1. Appendix tables

Table 16 (continued) Number and percentage of persons 15 years old and over by degree of disability by age group by sex, urban and rural areas, 2014 Census

Sex/Age Group/Area	Number					Percentage			
	Total	No disability	Mild disability	Moderate disability	Severe disability	No disability	Mild disability	Moderate or severe	Total
Rural									
Both sexes									
15-59	21,476,365	20,652,610	656,257	103,221	64,277	96.2	3.1	0.8	100
60+	3,109,819	2,316,956	591,255	130,757	70,851	74.5	19.0	6.5	100
60-64	1,099,804	921,827	146,004	21,935	10,038	83.8	13.3	2.9	100
65-69	730,746	576,817	122,735	21,203	9,991	78.9	16.8	4.3	100
70-74	500,423	355,423	110,303	23,211	11,486	71.0	22.0	6.9	100
75-79	387,566	251,089	99,476	24,314	12,687	64.8	25.7	9.5	100
80-84	236,003	133,737	68,199	21,439	12,628	56.7	28.9	14.4	100
85-89	106,942	55,791	31,245	11,764	8,142	52.2	29.2	18.6	100
90+	48,335	22,272	13,293	6,891	5,879	46.1	27.5	26.4	100
Male									
15-59	10,294,526	9,894,679	310,918	54,371	34,558	96.1	3.0	0.9	100
60+	1,359,259	1,026,357	251,591	54,115	27,196	75.5	18.5	6.0	100
60-64	505,868	424,506	66,204	10,317	4,841	83.9	13.1	3.0	100
65-69	326,302	259,105	53,314	9,484	4,399	79.4	16.3	4.3	100
70-74	213,982	153,105	46,638	9,683	4,556	71.6	21.8	6.7	100
75-79	162,355	106,221	41,403	9,916	4,815	65.4	25.5	9.1	100
80-84	93,930	53,912	27,380	8,228	4,410	57.4	29.1	13.5	100
85-89	39,861	21,244	11,855	4,219	2,543	53.3	29.7	17.0	100
90+	16,961	8,264	4,797	2,268	1,632	48.7	28.3	23.0	100
Female									
15-59	11,181,839	10,757,931	345,339	48,850	29,719	96.2	3.1	0.7	100
60+	1,750,560	1,290,599	339,664	76,642	43,655	73.7	19.4	6.9	100
60-64	593,936	497,321	79,800	11,618	5,197	83.7	13.4	2.8	100
65-69	404,444	317,712	69,421	11,719	5,592	78.6	17.2	4.3	100
70-74	286,441	202,318	63,665	13,528	6,930	70.6	22.2	7.1	100
75-79	225,211	144,868	58,073	14,398	7,872	64.3	25.8	9.9	100
80-84	142,073	79,825	40,819	13,211	8,218	56.2	28.7	15.1	100
85-89	67,081	34,547	19,390	7,545	5,599	51.5	28.9	19.6	100
90+	31,374	14,008	8,496	4,623	4,247	44.6	27.1	28.3	100

Appendix 1. Appendix tables

Table 17

Calculation of disability-free life expectancy for older population

Age/ Degree of disability	Age group	l_{n^x}	${}_nL_x$	Life expectancy	${}_n\text{dis}_x$	Person years lived without a disability	Total years lived without a disability from age x	Disability- free life expectancy	% of remaining life disability- free
Moderate or severe disability (a lot of difficulty or cannot do)									
60	60-64	73,198	349,056	16.31	0.026031	339969.7	1123603	15.35	94.1
65	65-69	65,949	304,970	12.81	0.038116	293345.8	783633.5	11.88	92.8
70	70-74	55,435	243,061	9.74	0.061556	228099.1	490287.7	8.84	90.8
75	75-79	41,243	165,795	7.2	0.086012	151534.7	262188.6	6.36	88.3
80	80+	24,987	131,129	5.25	0.156145	110653.9	110653.9	4.43	84.4
Mild disability or higher (some difficulty)									
60	60-64	73,198	349,056	16.31	0.145784	298169.4	911071.2	12.45	76.3
65	65-69	65,949	304,970	12.81	0.189717	247112.1	612901.8	9.29	72.5
70	70-74	55,435	243,061	9.74	0.262717	179204.7	365789.7	6.60	67.7
75	75-79	41,243	165,795	7.2	0.323688	112129.1	186585	4.52	62.8
80	80+	24,987	131,129	5.25	0.432194	74455.83	74455.83	2.98	56.8
Mild disability or higher (doubled)									
60	60-64	73,198	349,056	16.31	0.291567	247282.8	628131.4	8.58	52.6
65	65-69	65,949	304,970	12.81	0.379433	189254.3	380848.6	5.77	45.1
70	70-74	55,435	243,061	9.74	0.525434	115348.4	191594.3	3.46	35.5
75	75-79	41,243	165,795	7.2	0.647376	58463.25	76245.91	1.85	25.7
80	80+	24,987	131,129	5.25	0.864388	17782.66	17782.66	0.71	13.6

Source: l_{n^x} , ${}_nL_x$ and life expectancy are from the adjusted abridged life table for the Union and both sexes in Department of Population 2016c.

${}_n\text{dis}_x$ are disability rates derived from the 2014 Census (Appendix Table 16 of this report)

Persons years lived without a disability = $(1 - {}_n\text{dis}_x) \times {}_nL_x$

Total years lived without a disability from age x = Sum of persons years lived without a disability

Disability-free life expectancy = Total years lived without a disability from age x / l_{n^x}

% of remaining life disability-free = Disability-free life expectancy / life expectancy x 100

Appendix 1. Appendix tables

Table 18

Population by functional age groups, urban and rural areas, State/Region, 2014 Census

State/Region/Area	Total	0-14	15-59	60+	80+
Union	50,279,900	14,399,569	31,405,923	4,474,408	566,602
Kachin	1,642,841	492,879	1,047,350	102,612	12,852
Kayah	286,627	99,003	170,445	17,179	2,057
Kayin	1,504,326	538,596	843,413	122,317	13,859
Chin	478,801	191,290	251,715	35,796	4,262
Sagaing	5,325,347	1,525,943	3,304,264	495,140	64,084
Tanintharyi	1,408,401	478,027	821,323	109,051	15,893
Bago	4,867,373	1,383,846	3,010,680	472,847	62,424
Magway	3,917,055	1,056,659	2,435,898	424,498	52,085
Mandalay	6,165,723	1,599,216	3,986,148	580,359	71,809
Mon	2,054,393	641,960	1,208,952	203,481	27,215
Rakhine	2,098,807	653,333	1,238,959	206,515	28,602
Yangon	7,360,703	1,725,413	4,989,961	645,329	78,290
Shan	5,824,432	1,865,293	3,553,508	405,631	48,000
Ayeyawady	6,184,829	1,821,154	3,793,769	569,906	74,319
Nay Pyi Taw	1,160,242	326,957	749,538	83,747	10,851
Urban	14,877,943	3,583,796	9,929,558	1,364,589	175,322
Kachin	592,368	167,648	384,313	40,407	5,231
Kayah	72,418	20,365	46,697	5,356	696
Kayin	329,166	98,720	207,583	22,863	2,509
Chin	99,809	32,853	58,570	8,386	1,014
Sagaing	911,335	234,435	592,322	84,578	11,103
Tanintharyi	338,419	96,297	212,716	29,406	4,339
Bago	1,072,336	268,131	686,164	118,041	15,778
Magway	588,031	139,917	382,851	65,263	8,466
Mandalay	2,143,436	494,906	1,465,471	183,059	22,403
Mon	572,189	152,917	358,464	60,808	8,522
Rakhine	354,288	93,279	225,732	35,277	5,360
Yangon	5,160,512	1,107,103	3,571,193	482,216	60,056
Shan	1,395,847	378,172	909,471	108,204	13,198
Ayeyawady	872,600	209,317	566,438	96,845	13,753
Nay Pyi Taw	375,189	89,736	261,573	23,880	2,894
Rural	35,401,957	10,815,773	21,476,365	3,109,819	391,280
Kachin	1,050,473	325,231	663,037	62,205	7,621
Kayah	214,209	78,638	123,748	11,823	1,361
Kayin	1,175,160	439,876	635,830	99,454	11,350
Chin	378,992	158,437	193,145	27,410	3,248
Sagaing	4,414,012	1,291,508	2,711,942	410,562	52,981
Tanintharyi	1,069,982	381,730	608,607	79,645	11,554
Bago	3,795,037	1,115,715	2,324,516	354,806	46,646
Magway	3,329,024	916,742	2,053,047	359,235	43,619
Mandalay	4,022,287	1,104,310	2,520,677	397,300	49,406
Mon	1,482,204	489,043	850,488	142,673	18,693
Rakhine	1,744,519	560,054	1,013,227	171,238	23,242
Yangon	2,200,191	618,310	1,418,768	163,113	18,234
Shan	4,428,585	1,487,121	2,644,037	297,427	34,802
Ayeyawady	5,312,229	1,611,837	3,227,331	473,061	60,566
Nay Pyi Taw	785,053	237,221	487,965	59,867	7,957

Appendix 1. Appendix tables

Table 19

Percentage of population by functional age groups and older age dependency ratio, State/Region, District, 2014 Census

State/Region/ District	Total population	0-14	15-59	60 and over	80 and over	% 60+	Older age dependency ratio
Union	50,279,900	14,399,569	31,405,923	4,474,408	566,602	8.9	14.2
Kachin	1,642,841	492,879	1,047,350	102,612	12,852	6.2	9.8
Myitkyina	531,456	169,378	326,813	35,265	4,637	6.6	10.8
Mohnyin	673,608	179,545	457,984	36,079	4,296	5.4	7.9
Bhamo	346,520	109,417	212,328	24,775	2,904	7.1	11.7
Putao	91,257	34,539	50,225	6,493	1,015	7.1	12.9
Kayah	286,627	99,003	170,445	17,179	2,057	6.0	10.1
Loikaw	243,718	85,291	143,148	15,279	1,846	6.3	10.7
Bawlake	42,909	13,712	27,297	1,900	211	4.4	7.0
Kayin	1,504,326	538,596	843,413	122,317	13,859	8.1	14.5
Hpa-An	783,510	285,304	427,105	71,101	8,122	9.1	16.6
Pharpon	35,085	12,768	20,212	2,105	236	6.0	10.4
Myawady	210,540	69,753	130,366	10,421	922	4.9	8.0
Kawkareik	475,191	170,771	265,730	38,690	4,579	8.1	14.6
Chin	478,801	191,290	251,715	35,796	4,262	7.5	14.2
Hakha	98,726	36,902	53,217	8,607	1,129	8.7	16.2
Falam	167,578	67,294	88,879	11,405	1,266	6.8	12.8
Mindat	212,497	87,094	109,619	15,784	1,867	7.4	14.4
Sagaing	5,325,347	1,525,943	3,304,264	495,140	64,084	9.3	15.0
Sagaing	520,591	123,917	334,712	61,962	8,771	11.9	18.5
Shwebo	1,433,343	392,309	893,451	147,583	21,334	10.3	16.5
Monywa	757,358	186,990	486,871	83,497	10,901	11.0	17.1
Katha	861,283	268,582	528,610	64,091	7,580	7.4	12.1
Kalay	509,368	155,613	314,451	39,304	4,064	7.7	12.5
Tamu	114,869	40,558	67,200	7,111	708	6.2	10.6
Mawlaik	164,008	57,298	93,924	12,786	1,344	7.8	13.6
Hkamti	422,692	151,113	249,839	21,740	2,635	5.1	8.7
Yinmarpin	541,835	149,563	335,206	57,066	6,747	10.5	17.0
Tanintharyi	1,408,401	478,027	821,323	109,051	15,893	7.7	13.3
Dawei	493,576	160,192	282,125	51,259	8,207	10.4	18.2
Myeik	693,087	242,238	404,559	46,290	6,561	6.7	11.4
Kawthoung	221,738	75,597	134,639	11,502	1,125	5.2	8.5
Bago	4,867,373	1,383,846	3,010,680	472,847	62,424	9.7	15.7
Bago	1,770,785	563,413	1,061,109	146,263	16,659	8.3	13.8
Toungoo	1,123,355	348,788	678,895	95,672	12,583	8.5	14.1
Pyay	910,902	198,139	604,918	107,845	15,694	11.8	17.8
Thayawady	1,062,331	273,506	665,758	123,067	17,488	11.6	18.5
Magway	3,917,055	1,056,659	2,435,898	424,498	52,085	10.8	17.4
Magway	1,235,030	342,238	756,779	136,013	16,635	11.0	18.0
Minbu	687,575	185,337	433,304	68,934	8,448	10.0	15.9
Thayet	738,047	179,316	481,091	77,640	10,682	10.5	16.1
Pakokku	1,005,545	287,403	604,805	113,337	13,059	11.3	18.7
Gangaw	250,858	62,365	159,919	28,574	3,261	11.4	17.9

Appendix 1. Appendix tables

Table 19 (continued) Percentage of population by functional age groups and older age dependency ratio, State/Region, District, 2014 Census

State/Region/ District	Total population	0-14	15-59	60 and over	80 and over	% 60+	Older age dependency ratio
Mandalay	6,165,723	1,599,216	3,986,148	580,359	71,809	9.4	14.6
Mandalay	1,726,889	405,898	1,188,682	132,309	16,247	7.7	11.1
Pyin Oo Lwin	1,001,945	284,619	642,998	74,328	8,613	7.4	11.6
Kyaukse	741,071	195,317	478,227	67,527	8,142	9.1	14.1
Myingyan	1,055,957	278,744	649,938	127,275	16,510	12.1	19.6
Nyaung U	239,947	60,266	152,005	27,676	3,001	11.5	18.2
Yame` Thin	518,384	139,538	326,573	52,273	6,742	10.1	16.0
Meiktila	881,530	234,834	547,725	98,971	12,554	11.2	18.1
Mon	2,054,393	641,960	1,208,952	203,481	27,215	9.9	16.8
Mawlamyine	1,232,221	369,719	733,039	129,463	18,002	10.5	17.7
Thaton	822,172	272,241	475,913	74,018	9,213	9.0	15.6
Rakhine	2,098,807	653,333	1,238,959	206,515	28,602	9.8	16.7
Sittway	535,583	173,575	316,417	45,591	5,946	8.5	14.4
Myauk U	669,131	224,171	386,634	58,326	7,203	8.7	15.1
Maungtau	96,330	32,386	57,903	6,041	793	6.3	10.4
Kyaukpyu	439,923	130,349	256,056	53,518	7,894	12.2	20.9
Thandwe	357,840	92,852	221,949	43,039	6,766	12.0	19.4
Yangon	7,360,703	1,725,413	4,989,961	645,329	78,290	8.8	12.9
North Yangon	2,606,670	659,290	1,754,574	192,806	21,633	7.4	11.0
East Yangon	2,366,659	505,319	1,631,166	230,174	28,559	9.7	14.1
South Yangon	1,417,724	396,251	903,902	117,571	13,453	8.3	13.0
West Yangon	969,650	164,553	700,319	104,778	14,645	10.8	15.0
Shan	5,824,432	1,865,293	3,553,508	405,631	48,000	7.0	11.4
Taunggyi	1,701,338	524,251	1,064,648	112,439	12,537	6.6	10.6
Loilin	565,162	184,378	341,578	39,206	4,681	6.9	11.5
Linkhe`	139,483	40,430	87,081	11,972	1,562	8.6	13.7
Lashio	612,248	195,984	370,937	45,327	5,253	7.4	12.2
Muse	453,495	145,629	275,305	32,561	4,324	7.2	11.8
Kyaukme	770,065	235,846	477,043	57,176	6,398	7.4	12.0
Kunlon	58,774	22,363	32,287	4,124	601	7.0	12.8
Laukine	154,912	53,290	92,139	9,483	1,274	6.1	10.3
Hopan	228,880	87,228	124,914	16,738	2,280	7.3	13.4
Makman	241,884	89,611	137,651	14,622	1,977	6.0	10.6
Kengtung	366,861	113,318	225,753	27,790	3,495	7.6	12.3
Minesat	243,571	90,932	139,864	12,775	1,353	5.2	9.1
Tachileik	177,313	49,528	115,365	12,420	1,318	7.0	10.8
Minephyat	110,446	32,505	68,943	8,998	947	8.1	13.1
Ayeyawady	6,184,829	1,821,154	3,793,769	569,906	74,319	9.2	15.0
Pathein	1,630,716	466,235	1,016,802	147,679	19,818	9.1	14.5
Phyapon	1,033,053	332,255	622,965	77,833	8,641	7.5	12.5
Maubin	973,948	287,173	594,731	92,044	11,781	9.5	15.5
Myaungmya	781,844	238,315	475,744	67,785	8,284	8.7	14.2
Labutta	626,558	198,874	381,236	46,448	5,209	7.4	12.2
Hinthada	1,138,710	298,302	702,291	138,117	20,586	12.1	19.7
Nay Pyi Taw	1,160,242	326,957	749,538	83,747	10,851	7.2	11.2
Ottara	526,497	151,007	337,656	37,834	4,908	7.2	11.2
Dekkhina	633,745	175,950	411,882	45,913	5,943	7.2	11.1

Appendix 1. Appendix tables

Table 20

Percentage of population aged 60 and over by sex by marital status, urban and rural areas, State/Region, 2014 Census

State/Region/Area	Male							Female						
	Total population	Never married	Renounced	Married	Widowed	Divorced or separated	Total	Total population	Never married	Renounced	Married	Widowed	Divorced or separated	Total
Union	1,921,340	4.1	3.3	73.9	17.4	1.3	100	2,553,068	8.2	0.5	44.1	45.7	1.6	100
Kachin	41,737	3.0	2.0	79.2	14.6	1.2	100	60,875	4.1	0.4	40.7	53.6	1.2	100
Kayah	7,720	3.4	2.0	74.9	17.9	1.8	100	9,459	3.6	0.8	43.6	50.4	1.6	100
Kayin	55,035	2.6	4.3	73.1	18.9	1.1	100	67,282	4.9	0.6	44.8	48.3	1.4	100
Chin	16,616	3.0	0.4	81.1	14.3	1.2	100	19,180	3.8	0.0	45.4	48.0	2.8	100
Sagaing	203,362	4.4	3.1	74.7	16.7	0.9	100	291,778	9.0	0.5	45.7	43.7	1.2	100
Tanintharyi	48,454	3.3	4.1	72.8	17.8	2.0	100	60,597	6.0	0.4	44.0	47.7	1.9	100
Bago	202,221	4.0	4.2	72.3	18.2	1.3	100	270,626	9.6	0.6	42.0	46.3	1.5	100
Magway	176,437	4.2	2.9	73.8	18.1	1.0	100	248,061	9.2	0.3	45.1	44.2	1.3	100
Mandalay	239,746	5.3	3.8	73.7	16.3	0.9	100	340,613	10.9	0.4	45.9	41.6	1.3	100
Mon	90,199	2.9	5.6	71.7	18.4	1.4	100	113,282	6.3	0.8	45.7	45.5	1.7	100
Rakhine	90,493	1.9	2.7	77.1	16.7	1.6	100	116,022	4.0	0.4	43.1	50.6	1.9	100
Yangon	274,143	5.2	3.3	74.4	15.7	1.5	100	371,186	9.3	0.6	43.2	44.9	2.0	100
Shan	184,019	3.2	1.7	77.0	16.5	1.5	100	221,612	3.6	0.3	43.6	50.5	2.0	100
Ayeyawady	256,417	4.2	3.1	70.5	20.5	1.8	100	313,489	9.0	0.4	43.4	45.2	2.0	100
Nay Pyi Taw	34,741	3.5	3.4	75.5	16.3	1.3	100	49,006	7.7	0.3	42.9	47.5	1.6	100
Urban	562,081	5.1	3.3	74.8	15.4	1.4	100	802,508	9.9	0.7	42.6	44.9	1.9	100
Kachin	16,119	3.3	1.6	79.8	14.1	1.2	100	24,288	5.5	0.5	41.2	51.7	1.2	100
Kayah	2,274	4.3	2.4	74.7	16.4	2.2	100	3,082	4.5	1.0	41.7	50.8	1.9	100
Kayin	9,761	3.3	4.0	74.5	16.5	1.7	100	13,102	5.4	0.6	42.6	49.2	2.2	100
Chin	3,825	2.6	0.4	84.8	11.3	0.9	100	4,561	4.1	0.0	46.9	47.2	1.8	100
Sagaing	34,197	5.1	3.5	75.6	14.8	1.1	100	50,381	10.5	0.8	43.9	43.3	1.5	100
Tanintharyi	12,161	5.3	4.6	71.7	16.7	1.8	100	17,245	10.1	0.8	41.1	46.0	1.9	100
Bago	47,489	4.9	4.6	72.9	16.3	1.3	100	70,552	12.0	1.5	39.6	45.3	1.7	100
Magway	25,638	5.2	4.1	74.2	15.4	1.1	100	39,625	11.8	0.7	42.1	43.8	1.6	100
Mandalay	74,156	6.1	4.4	73.7	14.7	1.1	100	108,903	11.4	0.8	43.9	42.5	1.5	100
Mon	25,203	4.4	5.0	72.4	16.7	1.6	100	35,605	9.1	0.9	42.8	45.3	1.9	100
Rakhine	14,319	3.4	3.7	76.1	15.1	1.7	100	20,958	7.4	1.0	38.5	51.0	2.1	100
Yangon	201,574	5.6	2.6	75.2	15.0	1.6	100	280,642	10.0	0.5	43.4	43.9	2.1	100
Shan	45,353	3.6	1.9	78.6	14.4	1.5	100	62,851	5.0	0.5	44.4	48.3	1.8	100
Ayeyawady	40,133	4.9	3.6	71.2	18.4	1.8	100	56,712	12.4	1.0	39.3	45.0	2.3	100
Nay Pyi Taw	9,879	4.5	2.8	77.1	14.6	1.0	100	14,001	9.6	0.5	43.1	45.2	1.5	100
Rural	1,359,259	3.7	3.3	73.5	18.2	1.3	100	1,750,560	7.4	0.3	44.7	46.0	1.5	100
Kachin	25,618	2.9	2.3	78.8	14.8	1.2	100	36,587	3.2	0.4	40.4	54.9	1.2	100
Kayah	5,446	3.1	1.8	74.9	18.6	1.6	100	6,377	3.2	0.6	44.5	50.2	1.5	100
Kayin	45,274	2.5	4.4	72.8	19.4	0.9	100	54,180	4.7	0.6	45.3	48.1	1.3	100
Chin	12,791	3.1	0.4	80.0	15.2	1.3	100	14,619	3.7	0.0	44.9	48.2	3.1	100
Sagaing	169,165	4.3	3.1	74.6	17.1	0.9	100	241,397	8.6	0.4	46.0	43.8	1.1	100
Tanintharyi	36,293	2.7	4.0	73.1	18.2	2.1	100	43,352	4.3	0.3	45.1	48.3	1.9	100
Bago	154,732	3.7	4.0	72.2	18.7	1.3	100	200,074	8.8	0.3	42.8	46.7	1.4	100
Magway	150,799	4.0	2.6	73.7	18.6	1.0	100	208,436	8.7	0.2	45.6	44.3	1.2	100
Mandalay	165,590	5.0	3.5	73.7	16.9	0.8	100	231,710	10.7	0.2	46.8	41.2	1.1	100
Mon	64,996	2.4	5.9	71.4	19.1	1.3	100	77,677	5.0	0.7	47.0	45.6	1.6	100
Rakhine	76,174	1.7	2.5	77.2	16.9	1.6	100	95,064	3.2	0.2	44.1	50.6	1.9	100
Yangon	72,569	4.0	5.0	72.1	17.4	1.5	100	90,544	7.0	1.0	42.5	47.8	1.6	100
Shan	138,666	3.1	1.7	76.6	17.2	1.5	100	158,761	3.0	0.3	43.4	51.3	2.0	100
Ayeyawady	216,284	4.1	3.0	70.4	20.9	1.7	100	256,777	8.2	0.2	44.3	45.2	2.0	100
Nay Pyi Taw	24,862	3.2	3.6	74.8	17.0	1.5	100	35,005	6.9	0.2	42.8	48.4	1.7	100

Appendix 1. Appendix tables

Table 21

Number and percentage of women aged 60 and over living in conventional households by number of living children, State/Region and District, 2014 Census

State/Region/ District	Number of living children					Percentage				
	Total	None	One	Two	Three or more	None	One	Two	Three or more	Total
Union	2,515,552	462,498	184,161	260,975	1,607,918	18.4	7.3	10.4	63.9	100
Kachin	57,753	9,233	4,888	6,385	37,247	16.0	8.5	11.1	64.5	100
Myitkyina	19,995	3,723	1,829	2,320	12,123	18.6	9.1	11.6	60.6	100
Mohnyin	19,851	2,992	1,611	2,119	13,129	15.1	8.1	10.7	66.1	100
Bhamo	14,483	1,914	1,152	1,574	9,843	13.2	8.0	10.9	68.0	100
Putao	3,424	604	296	372	2,152	17.6	8.6	10.9	62.9	100
Kayah	9,292	1,402	524	702	6,664	15.1	5.6	7.6	71.7	100
Loikaw	8,328	1,234	441	626	6,027	14.8	5.3	7.5	72.4	100
Bawlakhe	964	168	83	76	637	17.4	8.6	7.9	66.1	100
Kayin	66,536	9,817	4,066	6,361	46,292	14.8	6.1	9.6	69.6	100
Hpa-An	39,349	5,623	2,486	3,932	27,308	14.3	6.3	10.0	69.4	100
Pharpon	1,126	141	55	95	835	12.5	4.9	8.4	74.2	100
Myawady	5,499	1,083	374	553	3,489	19.7	6.8	10.1	63.4	100
Kawkareik	20,562	2,970	1,151	1,781	14,660	14.4	5.6	8.7	71.3	100
Chin	19,067	3,694	1,334	1,513	12,526	19.4	7.0	7.9	65.7	100
Hakha	4,585	879	267	291	3,148	19.2	5.8	6.3	68.7	100
Falam	6,240	1,127	443	485	4,185	18.1	7.1	7.8	67.1	100
Mindat	8,242	1,688	624	737	5,193	20.5	7.6	8.9	63.0	100
Sagaing	287,390	50,024	17,816	25,040	194,510	17.4	6.2	8.7	67.7	100
Sagaing	35,492	7,745	2,112	3,232	22,403	21.8	6.0	9.1	63.1	100
Shwebo	87,138	14,751	5,153	7,118	60,116	16.9	5.9	8.2	69.0	100
Monywa	49,530	10,336	3,395	4,703	31,096	20.9	6.9	9.5	62.8	100
Katha	38,131	5,208	2,348	3,582	26,993	13.7	6.2	9.4	70.8	100
Kalay	21,315	2,745	1,166	1,669	15,735	12.9	5.5	7.8	73.8	100
Tamu	3,798	455	241	345	2,757	12.0	6.3	9.1	72.6	100
Mawlaik	7,362	1,097	395	583	5,287	14.9	5.4	7.9	71.8	100
Hkamti	12,419	2,589	1,243	1,432	7,155	20.8	10.0	11.5	57.6	100
Yinmarpin	32,205	5,098	1,763	2,376	22,968	15.8	5.5	7.4	71.3	100
Tanintharyi	59,948	9,082	3,382	4,778	42,706	15.1	5.6	8.0	71.2	100
Dawei	29,103	4,248	1,759	2,572	20,524	14.6	6.0	8.8	70.5	100
Myeik	24,998	3,891	1,243	1,705	18,159	15.6	5.0	6.8	72.6	100
Kawthoung	5,847	943	380	501	4,023	16.1	6.5	8.6	68.8	100
Bago	267,091	50,818	19,322	28,613	168,338	19.0	7.2	10.7	63.0	100
Bago	82,574	13,379	5,035	7,229	56,931	16.2	6.1	8.8	68.9	100
Toungoo	54,805	10,368	3,271	4,536	36,630	18.9	6.0	8.3	66.8	100
Pyay	60,233	12,413	5,310	7,797	34,713	20.6	8.8	12.9	57.6	100
Thayawady	69,479	14,658	5,706	9,051	40,064	21.1	8.2	13.0	57.7	100
Magway	245,466	44,761	16,745	23,744	160,216	18.2	6.8	9.7	65.3	100
Magway	79,511	15,395	5,121	7,053	51,942	19.4	6.4	8.9	65.3	100
Minbu	39,183	7,650	2,765	3,780	24,988	19.5	7.1	9.6	63.8	100
Thayet	44,162	7,156	3,364	5,038	28,604	16.2	7.6	11.4	64.8	100
Pakokku	66,807	12,366	4,497	6,237	43,707	18.5	6.7	9.3	65.4	100
Gangaw	15,803	2,194	998	1,636	10,975	13.9	6.3	10.4	69.4	100

Appendix 1. Appendix tables

Table 21 (continued) Number and percentage of women aged 60 and over living in conventional households by number of living children, State/Region and District, 2014 Census

State/Region/ District	Number of living children					Percentage				
	Total	None	One	Two	Three or more	None	One	Two	Three or more	Total
Mandalay	335,977	64,570	21,471	30,077	219,859	19.2	6.4	9.0	65.4	100
Mandalay	76,072	16,010	5,424	8,007	46,631	21.0	7.1	10.5	61.3	100
Pyin Oo Lwin	41,762	7,007	2,513	3,628	28,614	16.8	6.0	8.7	68.5	100
Kyaukse	38,972	7,060	2,119	3,223	26,570	18.1	5.4	8.3	68.2	100
Myingyan	75,104	15,176	4,715	6,298	48,915	20.2	6.3	8.4	65.1	100
Nyaung U	15,896	2,864	1,050	1,416	10,566	18.0	6.6	8.9	66.5	100
Yame`Thin	30,301	5,631	1,916	2,441	20,313	18.6	6.3	8.1	67.0	100
Meiktila	57,870	10,822	3,734	5,064	38,250	18.7	6.5	8.8	66.1	100
Mon	111,002	15,420	6,479	9,863	79,240	13.9	5.8	8.9	71.4	100
Mawlamyine	71,322	10,128	4,176	6,385	50,633	14.2	5.9	9.0	71.0	100
Thaton	39,680	5,292	2,303	3,478	28,607	13.3	5.8	8.8	72.1	100
Rakhine	115,023	20,357	9,258	13,823	71,585	17.7	8.0	12.0	62.2	100
Sittway	26,096	4,414	1,623	2,177	17,882	16.9	6.2	8.3	68.5	100
Myauk U	31,860	5,440	1,988	2,954	21,478	17.1	6.2	9.3	67.4	100
Maungtau	3,183	734	231	266	1,952	23.1	7.3	8.4	61.3	100
Kyaukpyu	30,173	5,637	2,740	3,958	17,838	18.7	9.1	13.1	59.1	100
Thandwe	23,711	4,132	2,676	4,468	12,435	17.4	11.3	18.8	52.4	100
Yangon	363,466	71,414	28,334	44,332	219,386	19.6	7.8	12.2	60.4	100
North Yangon	107,960	19,026	7,980	12,118	68,836	17.6	7.4	11.2	63.8	100
East Yangon	131,925	25,499	11,317	17,906	77,203	19.3	8.6	13.6	58.5	100
South Yangon	64,560	11,369	3,860	5,689	43,642	17.6	6.0	8.8	67.6	100
West Yangon	59,021	15,520	5,177	8,619	29,705	26.3	8.8	14.6	50.3	100
Shan	218,996	38,045	23,598	25,781	131,572	17.4	10.8	11.8	60.1	100
Taunggyi	61,542	9,594	4,251	5,762	41,935	15.6	6.9	9.4	68.1	100
Loilin	21,335	3,073	2,988	2,987	12,287	14.4	14.0	14.0	57.6	100
Linkhe`	6,114	1,062	661	864	3,527	17.4	10.8	14.1	57.7	100
Lashio	24,838	3,243	2,869	3,167	15,559	13.1	11.6	12.8	62.6	100
Muse	18,472	2,319	1,631	1,990	12,532	12.6	8.8	10.8	67.8	100
Kyaukme	31,821	5,037	3,151	3,908	19,725	15.8	9.9	12.3	62.0	100
Kunlon	2,280	284	174	210	1,612	12.5	7.6	9.2	70.7	100
Laukine	5,214	533	373	480	3,828	10.2	7.2	9.2	73.4	100
Hopan	7,724	2,985	1,255	783	2,701	38.6	16.2	10.1	35.0	100
Makman	6,691	2,751	1,025	798	2,117	41.1	15.3	11.9	31.6	100
Kengtung	14,843	3,343	2,268	2,009	7,223	22.5	15.3	13.5	48.7	100
Minesat	6,175	1,613	934	872	2,756	26.1	15.1	14.1	44.6	100
Tachileik	6,891	1,215	1,091	1,123	3,462	17.6	15.8	16.3	50.2	100
Minephyat	5,056	993	927	828	2,308	19.6	18.3	16.4	45.6	100
Ayeyawady	310,510	65,397	23,624	35,463	186,026	21.1	7.6	11.4	59.9	100
Patheingyi	79,734	16,269	6,196	9,983	47,286	20.4	7.8	12.5	59.3	100
Phyapone	42,101	8,546	2,693	3,564	27,298	20.3	6.4	8.5	64.8	100
Maubin	50,522	11,435	3,422	5,073	30,592	22.6	6.8	10.0	60.6	100
Myaungmya	36,752	7,355	2,342	3,332	23,723	20.0	6.4	9.1	64.5	100
Labutta	24,318	4,883	1,647	2,276	15,512	20.1	6.8	9.4	63.8	100
Hinthada	77,083	16,909	7,324	11,235	41,615	21.9	9.5	14.6	54.0	100
Nay Pyi Taw	48,035	8,464	3,320	4,500	31,751	17.6	6.9	9.4	66.1	100
Ottara	21,829	3,464	1,400	1,922	15,043	15.9	6.4	8.8	68.9	100
Dekkhina	26,206	5,000	1,920	2,578	16,708	19.1	7.3	9.8	63.8	100

Appendix 1. Appendix tables

Table 22

Number and percentage of population aged 60 and over by type of housing, urban and rural areas, State/Region, 2014 Census

State/Region/ Area	Number				Percentage			
	Total	Condominium/ apartment/ brick house	Semi-pacca/ wooden house	Bamboo/ hut/other types	Condominium/ apartment/ brick house	Semi-pacca/ wooden house	Bamboo/ hut/other types	Total
Union	4,341,459	551,727	2,468,881	1,320,851	12.7	56.9	30.4	100
Kachin	95,879	9,648	51,146	35,085	10.1	53.3	36.6	100
Kayah	16,735	2,782	10,192	3,761	16.6	60.9	22.5	100
Kayin	118,473	8,313	94,362	15,798	7.0	79.6	13.3	100
Chin	35,417	565	26,488	8,364	1.6	74.8	23.6	100
Sagaing	481,249	38,752	273,545	168,952	8.1	56.8	35.1	100
Tanintharyi	105,619	12,244	73,153	20,222	11.6	69.3	19.1	100
Bago	458,347	28,987	335,746	93,614	6.3	73.3	20.4	100
Magway	414,654	25,046	211,407	178,201	6.0	51.0	43.0	100
Mandalay	562,146	85,942	202,013	274,191	15.3	35.9	48.8	100
Mon	194,498	19,441	153,516	21,541	10.0	78.9	11.1	100
Rakhine	202,039	4,020	128,219	69,800	2.0	63.5	34.5	100
Yangon	622,759	192,543	350,918	79,298	30.9	56.3	12.7	100
Shan	396,996	93,485	165,000	138,511	23.5	41.6	34.9	100
Ayeyawady	556,054	19,481	341,600	194,973	3.5	61.4	35.1	100
Nay Pyi Taw	80,594	10,478	51,576	18,540	13.0	64.0	23.0	100
Urban	1,312,355	375,186	696,869	240,300	28.6	53.1	18.3	100
Kachin	37,970	6,778	20,267	10,925	17.9	53.4	28.8	100
Kayah	5,151	1,503	3,016	632	29.2	58.6	12.3	100
Kayin	22,087	3,925	16,473	1,689	17.8	74.6	7.6	100
Chin	8,226	502	7,016	708	6.1	85.3	8.6	100
Sagaing	81,426	14,416	41,548	25,462	17.7	51.0	31.3	100
Tanintharyi	28,236	5,796	18,736	3,704	20.5	66.4	13.1	100
Bago	112,775	18,702	79,359	14,714	16.6	70.4	13.0	100
Magway	62,862	10,920	23,533	28,409	17.4	37.4	45.2	100
Mandalay	174,208	48,179	58,931	67,098	27.7	33.8	38.5	100
Mon	58,092	10,946	42,960	4,186	18.8	74.0	7.2	100
Rakhine	34,102	2,960	21,903	9,239	8.7	64.2	27.1	100
Yangon	467,083	182,053	252,658	32,372	39.0	54.1	6.9	100
Shan	104,692	48,731	34,587	21,374	46.5	33.0	20.4	100
Ayeyawady	93,096	12,062	64,700	16,334	13.0	69.5	17.5	100
Nay Pyi Taw	22,349	7,713	11,182	3,454	34.5	50.0	15.5	100
Rural	3,029,104	176,541	1,772,012	1,080,551	5.8	58.5	35.7	100
Kachin	57,909	2,870	30,879	24,160	5.0	53.3	41.7	100
Kayah	11,584	1,279	7,176	3,129	11.0	61.9	27.0	100
Kayin	96,386	4,388	77,889	14,109	4.6	80.8	14.6	100
Chin	27,191	63	19,472	7,656	0.2	71.6	28.2	100
Sagaing	399,823	24,336	231,997	143,490	6.1	58.0	35.9	100
Tanintharyi	77,383	6,448	54,417	16,518	8.3	70.3	21.3	100
Bago	345,572	10,285	256,387	78,900	3.0	74.2	22.8	100
Magway	351,792	14,126	187,874	149,792	4.0	53.4	42.6	100
Mandalay	387,938	37,763	143,082	207,093	9.7	36.9	53.4	100
Mon	136,406	8,495	110,556	17,355	6.2	81.0	12.7	100
Rakhine	167,937	1,060	106,316	60,561	0.6	63.3	36.1	100
Yangon	155,676	10,490	98,260	46,926	6.7	63.1	30.1	100
Shan	292,304	44,754	130,413	117,137	15.3	44.6	40.1	100
Ayeyawady	462,958	7,419	276,900	178,639	1.6	59.8	38.6	100
Nay Pyi Taw	58,245	2,765	40,394	15,086	4.7	69.4	25.9	100

Appendix 1. Appendix tables

Table 23

Number and percentage of older persons who never attended school by sex, urban and rural areas, State/Region, 2014 Census

State/ Region/Sex	Union			Urban			Rural		
	Total population	Never attended		Total population	Never attended		Total population	Never attended	
		Number	%		Number	%		Number	%
Both sexes									
Total	4,341,459	1,245,362	28.7	1,312,355	196,801	15.0	3,029,104	1,048,561	34.6
Kachin	95,879	33,771	35.2	37,970	9,973	26.3	57,909	23,798	41.1
Kayah	16,735	7,535	45.0	5,151	1,154	22.4	11,584	6,381	55.1
Kayin	118,473	57,306	48.4	22,087	4,413	20.0	96,386	52,893	54.9
Chin	35,417	17,404	49.1	8,226	2,871	34.9	27,191	14,533	53.4
Sagaing	481,249	116,067	24.1	81,426	11,167	13.7	399,823	104,900	26.2
Tanintharyi	105,619	18,939	17.9	28,236	2,830	10.0	77,383	16,109	20.8
Bago	458,347	95,111	20.8	112,775	14,415	12.8	345,572	80,696	23.4
Magway	414,654	166,345	40.1	62,862	10,373	16.5	351,792	155,972	44.3
Mandalay	562,146	141,454	25.2	174,208	23,886	13.7	387,938	117,568	30.3
Mon	194,498	58,538	30.1	58,092	10,483	18.0	136,406	48,055	35.2
Rakhine	202,039	66,214	32.8	34,102	6,871	20.1	167,937	59,343	35.3
Yangon	622,759	69,281	11.1	467,083	39,890	8.5	155,676	29,391	18.9
Shan	396,996	260,760	65.7	104,692	44,327	42.3	292,304	216,433	74.0
Ayeyawady	556,054	121,420	21.8	93,096	11,787	12.7	462,958	109,633	23.7
Nay Pyi Taw	80,594	15,217	18.9	22,349	2,361	10.6	58,245	12,856	22.1
Male									
Total	1,825,907	382,106	20.9	529,012	44,276	8.4	1,296,895	337,830	26.0
Kachin	38,126	9,715	25.5	14,864	2,443	16.4	23,262	7,272	31.3
Kayah	7,443	2,397	32.2	2,154	250	11.6	5,289	2,147	40.6
Kayin	51,937	20,149	38.8	9,172	1,074	11.7	42,765	19,075	44.6
Chin	16,350	4,528	27.7	3,734	545	14.6	12,616	3,983	31.6
Sagaing	193,859	27,219	14.0	32,229	1,840	5.7	161,630	25,379	15.7
Tanintharyi	45,671	6,279	13.7	11,332	636	5.6	34,339	5,643	16.4
Bago	191,256	28,248	14.8	44,341	3,103	7.0	146,915	25,145	17.1
Magway	169,188	54,384	32.1	24,075	2,313	9.6	145,113	52,071	35.9
Mandalay	226,169	32,520	14.4	68,506	4,211	6.1	157,663	28,309	18.0
Mon	83,496	18,781	22.5	23,356	2,578	11.0	60,140	16,203	26.9
Rakhine	87,016	17,292	19.9	13,543	1,406	10.4	73,473	15,886	21.6
Yangon	259,293	16,474	6.4	191,806	7,367	3.8	67,487	9,107	13.5
Shan	178,000	101,970	57.3	43,236	13,556	31.4	134,764	88,414	65.6
Ayeyawady	245,544	39,860	16.2	37,699	2,659	7.1	207,845	37,201	17.9
Nay Pyi Taw	32,559	2,290	7.0	8,965	295	3.3	23,594	1,995	8.5
Female									
Total	2,515,552	863,256	34.3	783,343	152,525	19.5	1,732,209	710,731	41.0
Kachin	57,753	24,056	41.7	23,106	7,530	32.6	34,647	16,526	47.7
Kayah	9,292	5,138	55.3	2,997	904	30.2	6,295	4,234	67.3
Kayin	66,536	37,157	55.8	12,915	3,339	25.9	53,621	33,818	63.1
Chin	19,067	12,876	67.5	4,492	2,326	51.8	14,575	10,550	72.4
Sagaing	287,390	88,848	30.9	49,197	9,327	19.0	238,193	79,521	33.4
Tanintharyi	59,948	12,660	21.1	16,904	2,194	13.0	43,044	10,466	24.3
Bago	267,091	66,863	25.0	68,434	11,312	16.5	198,657	55,551	28.0
Magway	245,466	111,961	45.6	38,787	8,060	20.8	206,679	103,901	50.3
Mandalay	335,977	108,934	32.4	105,702	19,675	18.6	230,275	89,259	38.8
Mon	111,002	39,757	35.8	34,736	7,905	22.8	76,266	31,852	41.8
Rakhine	115,023	48,922	42.5	20,559	5,465	26.6	94,464	43,457	46.0
Yangon	363,466	52,807	14.5	275,277	32,523	11.8	88,189	20,284	23.0
Shan	218,996	158,790	72.5	61,456	30,771	50.1	157,540	128,019	81.3
Ayeyawady	310,510	81,560	26.3	55,397	9,128	16.5	255,113	72,432	28.4
Nay Pyi Taw	48,035	12,927	26.9	13,384	2,066	15.4	34,651	10,861	31.3

Appendix 1. Appendix tables

Table 24

Number and percentage of older persons living in conventional households who are literate, by sex, urban and rural areas, State/Region, 2014 Census

State/ Region/Sex	Union			Urban			Rural		
	Total population	Literate		Total population	Literate		Total population	Literate	
		Number	%		Number	%		Number	%
Both sexes									
Total	4,341,459	3,433,653	79.1	1,312,355	1,157,955	88.2	3,029,104	2,275,698	75.1
Kachin	95,879	68,143	71.1	37,970	29,569	77.9	57,909	38,574	66.6
Kayah	16,735	9,405	56.2	5,151	4,081	79.2	11,584	5,324	46.0
Kayin	118,473	64,015	54.0	22,087	18,060	81.8	96,386	45,955	47.7
Chin	35,417	18,221	51.4	8,226	5,519	67.1	27,191	12,702	46.7
Sagaing	481,249	398,007	82.7	81,426	72,737	89.3	399,823	325,270	81.4
Tanintharyi	105,619	89,894	85.1	28,236	25,768	91.3	77,383	64,126	82.9
Bago	458,347	403,480	88.0	112,775	102,931	91.3	345,572	300,549	87.0
Magway	414,654	329,285	79.4	62,862	56,574	90.0	351,792	272,711	77.5
Mandalay	562,146	465,504	82.8	174,208	156,002	89.5	387,938	309,502	79.8
Mon	194,498	142,049	73.0	58,092	48,870	84.1	136,406	93,179	68.3
Rakhine	202,039	145,970	72.2	34,102	28,260	82.9	167,937	117,710	70.1
Yangon	622,759	576,421	92.6	467,083	437,414	93.6	155,676	139,007	89.3
Shan	396,996	165,158	41.6	104,692	65,980	63.0	292,304	99,178	33.9
Ayeyawady	556,054	489,965	88.1	93,096	85,760	92.1	462,958	404,205	87.3
Nay Pyi Taw	80,594	68,136	84.5	22,349	20,430	91.4	58,245	47,706	81.9
Male									
Total	1,825,907	1,621,534	88.8	529,012	502,837	95.1	1,296,895	1,118,697	86.3
Kachin	38,126	31,633	83.0	14,864	13,098	88.1	23,262	18,535	79.7
Kayah	7,443	5,151	69.2	2,154	1,940	90.1	5,289	3,211	60.7
Kayin	51,937	33,881	65.2	9,172	8,281	90.3	42,765	25,600	59.9
Chin	16,350	11,871	72.6	3,734	3,236	86.7	12,616	8,635	68.4
Sagaing	193,859	182,281	94.0	32,229	31,216	96.9	161,630	151,065	93.5
Tanintharyi	45,671	41,876	91.7	11,332	10,951	96.6	34,339	30,925	90.1
Bago	191,256	182,456	95.4	44,341	43,104	97.2	146,915	139,352	94.9
Magway	169,188	158,156	93.5	24,075	23,461	97.4	145,113	134,695	92.8
Mandalay	226,169	214,883	95.0	68,506	66,495	97.1	157,663	148,388	94.1
Mon	83,496	69,121	82.8	23,356	21,467	91.9	60,140	47,654	79.2
Rakhine	87,016	76,477	87.9	13,543	12,608	93.1	73,473	63,869	86.9
Yangon	259,293	253,039	97.6	191,806	188,299	98.2	67,487	64,740	95.9
Shan	178,000	96,308	54.1	43,236	33,056	76.5	134,764	63,252	46.9
Ayeyawady	245,544	232,858	94.8	37,699	36,795	97.6	207,845	196,063	94.3
Nay Pyi Taw	32,559	31,543	96.9	8,965	8,830	98.5	23,594	22,713	96.3
Female									
Total	2,515,552	1,812,119	72.0	783,343	655,118	83.6	1,732,209	1,157,001	66.8
Kachin	57,753	36,510	63.2	23,106	16,471	71.3	34,647	20,039	57.8
Kayah	9,292	4,254	45.8	2,997	2,141	71.4	6,295	2,113	33.6
Kayin	66,536	30,134	45.3	12,915	9,779	75.7	53,621	20,355	38.0
Chin	19,067	6,350	33.3	4,492	2,283	50.8	14,575	4,067	27.9
Sagaing	287,390	215,726	75.1	49,197	41,521	84.4	238,193	174,205	73.1
Tanintharyi	59,948	48,018	80.1	16,904	14,817	87.7	43,044	33,201	77.1
Bago	267,091	221,024	82.8	68,434	59,827	87.4	198,657	161,197	81.1
Magway	245,466	171,129	69.7	38,787	33,113	85.4	206,679	138,016	66.8
Mandalay	335,977	250,621	74.6	105,702	89,507	84.7	230,275	161,114	70.0
Mon	111,002	72,928	65.7	34,736	27,403	78.9	76,266	45,525	59.7
Rakhine	115,023	69,493	60.4	20,559	15,652	76.1	94,464	53,841	57.0
Yangon	363,466	323,382	89.0	275,277	249,115	90.5	88,189	74,267	84.2
Shan	218,996	68,850	31.4	61,456	32,924	53.6	157,540	35,926	22.8
Ayeyawady	310,510	257,107	82.8	55,397	48,965	88.4	255,113	208,142	81.6
Nay Pyi Taw	48,035	36,593	76.2	13,384	11,600	86.7	34,651	24,993	72.1

Table 25
Percentage of population aged 60 and over by main activity, by sex, urban and rural areas, State/Region, 2014 Census

State/Region/ Area	Both sexes				Male				Female			
	Total (Number)	In the labour force (%)	Pensioner, retired, older person (%)	Other (%)	Total (Number)	In the labour force (%)	Pensioner, retired, older person (%)	Other (%)	Total (Number)	In the labour force (%)	Pensioner, retired, older person (%)	Other (%)
Union	4,474,408	30.3	45.2	24.5	1,921,340	46.8	43.1	10.0	2,553,068	17.8	46.8	35.4
Kachin	102,612	31.0	47.6	21.3	41,737	49.4	41.3	9.3	60,875	18.4	52.0	29.6
Kayah	17,179	33.9	45.1	21.0	7,720	48.0	43.7	8.3	9,459	22.4	46.3	31.3
Kayin	122,317	29.6	42.1	28.3	55,035	45.8	39.3	14.9	67,282	16.4	44.3	39.3
Chin	35,796	38.9	41.1	20.0	16,616	52.2	39.4	8.4	19,180	27.3	42.6	30.1
Sagaing	495,140	30.0	49.5	20.5	203,362	45.9	46.6	7.4	291,778	19.0	51.5	29.5
Tanintharyi	109,051	31.2	41.0	27.9	48,454	49.5	37.7	12.8	60,597	16.6	43.5	39.9
Bago	472,847	29.1	43.2	27.7	202,221	48.2	40.8	11.0	270,626	14.8	45.0	40.2
Magway	424,498	31.7	45.5	22.8	176,437	47.6	43.9	8.5	248,061	20.4	46.7	33.0
Mandalay	580,359	28.6	46.9	24.6	239,746	45.2	46.0	8.8	340,613	16.9	47.4	35.7
Mon	203,481	28.6	41.6	29.9	90,199	44.7	40.1	15.2	113,282	15.7	42.7	41.6
Rakhine	206,515	32.0	43.5	24.5	90,493	52.5	37.4	10.1	116,022	16.0	48.3	35.7
Yangon	645,329	21.2	50.3	28.4	274,143	35.1	53.9	11.0	371,186	11.0	47.7	41.3
Shan	405,631	38.7	45.0	16.4	184,019	51.8	40.4	7.7	221,612	27.7	48.7	23.6
Ayeyawady	569,906	35.3	39.2	25.5	256,417	53.8	35.0	11.2	313,489	20.1	42.7	37.2
Nay Pyi Taw	83,747	32.1	43.2	24.7	34,741	48.3	42.1	9.6	49,006	20.6	44.0	35.4

Appendix 1. Appendix tables

Table 25 (continued) Percentage of population aged 60 and over by main activity, by sex, urban and rural areas, State/Region, 2014 Census

State/Region/ Area	Both sexes			Male			Female					
	Total (Number)	In the labour force (%)	Pensioner, retired, older person (%)	Other (%)	Total (Number)	In the labour force (%)	Pensioner, retired, older person (%)	Other (%)	Total (Number)	In the labour force (%)	Pensioner, retired, older person (%)	Other (%)
Urban	1,364,589	21.3	51.7	27.0	562,081	34.1	55.0	11.0	802,508	12.4	49.4	38.2
Kachin	40,407	26.0	51.2	22.8	16,119	41.9	47.7	10.4	24,288	15.4	53.5	31.1
Kayah	5,356	22.9	52.1	25.0	2,274	35.5	55.5	9.1	3,082	13.5	49.7	36.8
Kayin	22,863	23.7	47.2	29.1	9,761	37.4	48.8	13.8	13,102	13.5	46.1	40.4
Chin	8,386	21.6	47.6	30.7	3,825	32.5	55.5	12.0	4,561	12.5	41.0	46.4
Sagaing	84,578	22.6	54.5	23.0	34,197	35.2	56.1	8.6	50,381	14.0	53.3	32.7
Tanintharyi	29,406	24.3	46.0	29.6	12,161	39.9	45.6	14.5	17,245	13.3	46.4	40.3
Bago	118,041	23.2	47.8	29.1	47,489	36.6	50.5	13.0	70,552	14.1	46.0	39.9
Magway	65,263	19.1	53.4	27.5	25,638	29.9	59.0	11.0	39,625	12.1	49.7	38.1
Mandalay	183,059	21.0	53.0	26.0	74,156	33.4	56.0	10.6	108,903	12.5	51.0	36.5
Mon	60,808	24.7	45.9	29.4	25,203	37.7	47.9	14.4	35,605	15.5	44.5	40.0
Rakhine	35,277	23.4	48.2	28.3	14,319	37.7	48.9	13.4	20,958	13.7	47.8	38.6
Yangon	482,216	17.9	53.4	28.7	201,574	30.2	59.3	10.5	280,642	9.1	49.2	41.8
Shan	108,204	26.6	53.0	20.5	45,353	39.2	52.5	8.3	62,851	17.5	53.3	29.3
Ayeyawady	96,845	24.9	48.7	26.4	40,133	37.9	49.7	12.4	56,712	15.7	47.9	36.4
Nay Pyi Taw	23,880	22.2	49.8	28.0	9,879	36.1	53.3	10.6	14,001	12.4	47.3	40.3
Rural	3,109,819	34.2	42.4	23.4	1,359,259	52.1	38.2	9.7	1,750,560	20.3	45.6	34.1
Kachin	62,205	34.3	45.3	20.4	25,618	54.2	37.2	8.6	36,587	20.4	51.0	28.6
Kayah	11,823	38.9	42.0	19.1	5,446	53.3	38.8	7.9	6,377	26.7	44.6	28.7
Kayin	99,454	31.0	40.9	28.1	45,274	47.6	37.3	15.1	54,180	17.1	43.9	39.0
Chin	27,410	44.2	39.1	16.7	12,791	58.1	34.6	7.3	14,619	31.9	43.1	25.0
Sagaing	410,562	31.6	48.5	19.9	169,165	48.1	44.7	7.2	241,397	20.0	51.1	28.9
Tanintharyi	79,645	33.7	39.1	27.2	36,293	52.7	35.1	12.2	43,352	17.8	42.4	39.8
Bago	354,806	31.0	41.7	27.3	154,732	51.7	37.8	10.5	200,074	15.1	44.7	40.3
Magway	359,235	33.9	44.1	22.0	150,799	50.6	41.3	8.1	208,436	21.9	46.1	32.0
Mandalay	397,300	32.1	44.0	23.9	165,590	50.5	41.6	8.0	231,710	18.9	45.8	35.3
Mon	142,673	30.2	39.7	30.1	64,996	47.4	37.1	15.5	77,677	15.8	41.9	42.3
Rakhine	171,238	33.7	42.5	23.7	76,174	55.3	35.2	9.5	95,064	16.5	48.4	35.1
Yangon	163,113	31.2	41.2	27.6	72,569	48.8	38.9	12.2	90,544	17.0	43.1	39.9
Shan	297,427	43.1	42.0	14.9	138,666	56.0	36.5	7.6	158,761	31.8	46.9	21.3
Ayeyawady	473,061	37.4	37.3	25.3	216,284	56.8	32.2	11.0	256,777	21.1	41.5	37.4
Nay Pyi Taw	59,867	36.0	40.6	23.4	24,862	53.2	37.6	9.2	35,005	23.8	42.7	33.5

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