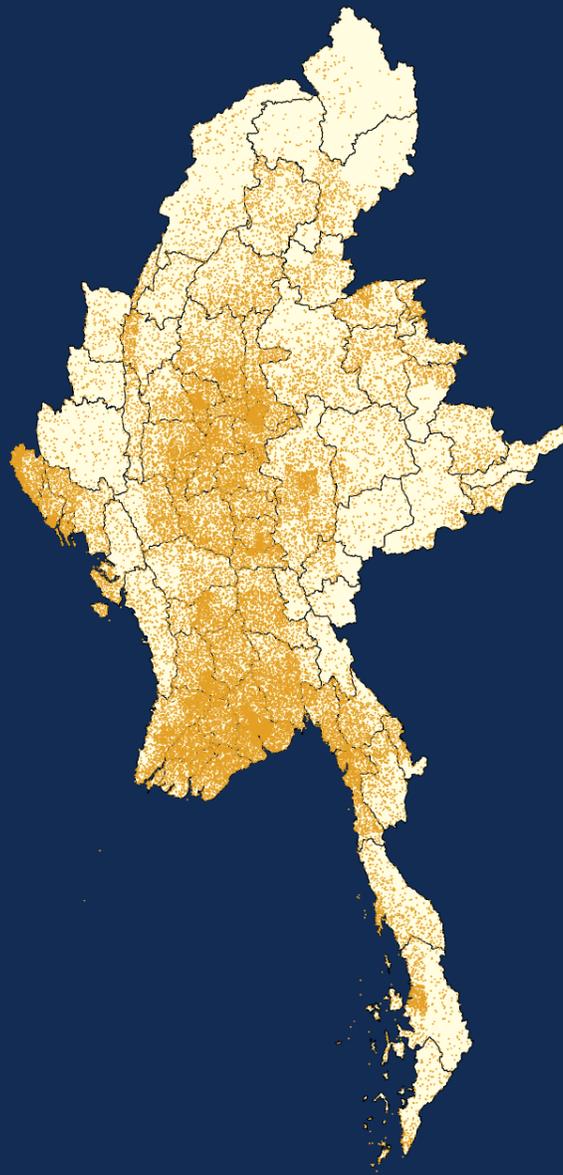




The Republic of the Union of Myanmar

CENSUS ATLAS MYANMAR

THE 2014 MYANMAR
POPULATION AND HOUSING CENSUS



Department of Population
Ministry of Labour, Immigration and Population
With technical assistance from UNFPA



CENSUS ATLAS
MYANMAR

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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 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 objective of the 2014 Census is to provide the Government and other stakeholders with essential information on the population, in regard to demographic, social and economic characteristics, housing conditions and household amenities. By generating such 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 so far in a number of volumes. The first was the *Provisional Results* (Census Volume 1), 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 the 2014 Census publications comprises 13 Thematic Reports and a Census Atlas. They address issues on Fertility and Nuptiality; Mortality; Maternal Mortality; Migration and Urbanization; Population Projections; Population Dynamics; the Elderly; 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 first set of Thematic Reports (Fertility and Nuptiality; Mortality; Maternal Mortality; Migration and Urbanization; Population Dynamics; and Population Projections) has been published.

Data capture for 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, cleaning 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 earlier set of volumes.

This Census Atlas is somewhat different in its concept, approach and content from the set of Thematic Reports. Rather than focusing in-depth on one particular topic and examining the variations in the socio-demographic characteristics of different subgroups of the population in Myanmar, the Atlas attempts to present a broader picture of the population as a whole over a wide range of topics, such that the geography of the Census – the way that different characteristics vary in different parts of the country, and among urban and rural populations – is shown graphically in the form of a range of figures and, most importantly, maps. It is often said that a picture tells a thousand words, and that is certainly true of maps, which are an effective way of getting sometimes statistically subtle messages across to a wider audience. Moreover, while the Thematic Reports generally analyse Census data only at the State/Region and District levels, this Atlas probes deeper into Myanmar society by looking at the profiles of the population at the finer and more detailed Township geography, revealing, on the way, some interesting results.

The main geographic feature of the distribution of Myanmar society drawn out by this Atlas is the difference in the demographic characteristics of the people living in the central corridor of Districts and Townships that runs between Yangon and Mandalay compared with those residents living in the surrounding outer ring of areas whether they be to the north, east, west, or south of the corridor. This pattern is persistent across a wide range of Census variables such as school attendance, literacy, prevalence of disability, employment, quality of housing, household size, and access to household services and amenities, such as safe drinking water and electricity. Though some

comparisons are made between the profiles of males and females, more emphasis has been put here on comparing the long-standing traditional rural areas, with the more dynamic, demographically diverse and growing urban populations.

Many of the observations made will have an impact on the progress that Myanmar makes in its attempt to meet several of the Sustainable Development Goals. The Atlas thus serves as a visual reminder of not only what has already been achieved, but also the extent of the work that is still necessary over the coming years.

It should be noted, however, that this publication should not be regarded as the *definitive* Census Atlas. It is just one atlas that can be produced from the Census data. To keep the publication to a practicable size, the set of data presented has had to be highly selective. This is inevitable because of the breadth and depth of the Census data now available. The Myanmar Government encourages other researchers, programme managers and policymakers to explore the geography of the 2014 Census data themselves; to do their own spatial analysis and to integrate the results of the Census with their own data; and to make their own maps and observations.

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 Atlas. 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

DoP	Department of Population
FAO	Food and Agriculture Organization of the United Nations
GAD	General Administration Department
GIS	Geographic Information System(s)
ISCED	International Standard Classification of Education
Lao PDR	Lao People's Democratic Republic
LFPRS	Labour Force Participation Rates
SDGs	Sustainable Development Goals
S-T	Sub-Township
UN	United Nations
UN DESA	United Nations Department of Economic and Social Affairs

Introduction

Background - Why a Census Atlas?

Myanmar's 2014 Population and Housing Census is the most recent in a long series of countrywide surveys that goes back to the 19th Century. Initially conducted every 10 years, censuses became more sporadic during worldwide armed conflicts and periods of political turbulence in the mid-20th Century. Myanmar did conduct population and housing censuses in 1973 and 1983, but then there was a gap of 31 years when none were undertaken. With Myanmar now embarking on a period of wide-ranging social and political transformation, the signs are encouraging that the successful enumeration in 2014 marks the resumption of decennial population and housing censuses for the country.

National population and housing censuses are important for several reasons. Firstly, the geographic scope of censuses is the entire territory of a country. Secondly, censuses attempt to collect information about every resident and every housing unit in the country on a particular date. Most other social and demographic surveys are forced to limit their geographic coverage and to enumerate only a sample of individuals and households. For providing a comprehensive snapshot of the social and demographic characteristics of the entire population of a country, censuses are invaluable and unique. Consistency in design is a third characteristic that sets censuses apart from other types of surveys. National censuses throughout the world strive to collect a standard set of basic social and demographic indicators. When different countries ask the same questions in the same way at the same time, it becomes possible to make valid comparisons between them. The fourth aspect of censuses that makes them uniquely important is contingent upon them being conducted on a regular basis over a long period of time. Repeatedly updating the socio-demographic profiles of entire national populations allows users to see how people have changed, both as individuals and collectively as members of families and communities. By maintaining consistency from year to year and from country to country, it is possible both to monitor the nature and rates of change in different parts of Myanmar, and also to make international comparisons to see how changes happening in Myanmar compare with changes occurring in other countries.

The process of conducting population and housing censuses follows a similar pattern around the world. The basic phases are planning and preparation, enumeration, data processing and dissemination, and analysis and evaluation of the data. In early 2017, Myanmar is in the fourth of these phases, with the Department of Population actively engaged in making the data it collected during enumeration accessible to as wide an audience as possible. It is disseminating information through a variety of channels, including: (a) websites such as <http://www.dop.gov.mm/moip/> and <http://myanmar.unfpa.org/node/4308/>; (b) workshops in different parts of the country; (c) a data-on-demand service operated from its offices in Nay Pyi Taw; and (d) a series of technical reports, of which this atlas is a part.

The first few technical reports, published in 2015, were a quick means of making basic census indicators available in tabular form. It was not intended that they would provide much in the way of analysis and interpretation. This is being presented in the set of publications called the "Thematic Reports", the first

of which were launched in the second half of 2016. Thematic reports on fertility and nuptiality, mortality, and maternal mortality were the first to be launched, followed by migration and urbanization, population dynamics and population projections. Releases will continue into 2017, with reports on disability, the labour force, children and youth, the elderly, education, housing conditions and household amenities, poverty and gender dimensions. Though very different in terms of size, format, content and structure, this atlas is also part of the series of Thematic Reports. But why an atlas? What does this publication offer that other Department of Population Census reports do not?

There are three main differences. Firstly, whereas the Thematic Reports focus on variations in the social and demographic characteristics of different groups in society, the atlas is primarily concerned with the geography of the Census data. In the Thematic Reports, the emphasis is on describing and explaining differences in, for example, fertility, mortality, literacy and migration rates among groups categorized by age, sex, employment status, educational attainment, marital status and mobility. The atlas presents similar kinds of analyses, but adds a geographic perspective by showing how socio-demographic characteristics vary for different groups of society in different parts of the country. And while geographic comparisons presented in the Thematic Reports are largely limited to State/Region level, the atlas delves much deeper, presenting maps, data, figures and critical analyses of differences among Districts and Townships.

Secondly, each Thematic Report presents in-depth analyses of a limited set of indicators related to a single theme. In contrast, the atlas provides a general overview of a selected group of indicators covering all the main social and demographic themes. In this sense, it is a compendium of Census highlights, summarizing the main findings and conclusions of the Thematic Reports and presenting them in a single, abridged form.

The third characteristic that sets the atlas apart from the Thematic Reports is its heavy reliance on graphics, and especially on maps. It is widely recognized that maps are powerful tools for communicating information, especially when that information is wide-ranging and complex, as it is with census data. Maps are also widely understood and very popular, and so using them is an effective way of reaching a large audience and presenting the Census data in a user-friendly and easy to understand format. The 96 maps presented in this atlas show regional patterns and local variations in the distributions of a large number of indicators covering all the main social and demographic themes. The goal is to portray the thematic breadth and geographic depth of the entire 2014 Census in a single, accessible publication.

Chapter 1, Myanmar - Land of Diversity, gives an overview of Myanmar's physical landscape and reflects on how populations have adapted and organized themselves to live in that physical environment. It also describes the administrative structure of the country, which is the framework within which the 2014 Census was first undertaken and is now being reported. The maps in Chapter 1, showing the locations of States/Regions, Districts and Townships, are the same as those on the fold-out poster, and are intended to provide

a reference for identifying specific administrative areas on the thematic maps in other chapters of the atlas.

The General Demographic Characteristics explored in Chapter 2 include how the population is distributed in 2014 and how this distribution has changed since 1973. The chapter also looks at geographic variations in population density, age and sex composition, degree of urbanization, and religious affiliation.

Chapter 3 presents key findings on fertility and mortality, with a particular emphasis on geographic differences in rates among children and youth. Fertility rates among adolescent females and estimated mortality rates for the under-fives are two of the topics explored in this chapter.

Education is the theme of Chapter 4, which compares geographic variations among males and females and among urban and rural populations for indicators related to school attendance, educational attainment and adult literacy.

The analysis of labour force and employment indicators in Chapter 5 also looks at male/female and urban/rural differences. It also explores aspects of child work and child labour. Labour force participation, unemployment and employment in different industry sectors are the main topics discussed in this chapter.

Chapter 6 looks at internal migration, presenting a summary analysis of the most significant flows of both lifetime and recent migrants. It also shows how net rates for recent migrants vary considerably among the Districts, and how differences in net rates for the two sexes are causing some Districts to become 'more male' and some to become 'more female'.

With disability as its theme, Chapter 7 shows that, for all four indicators analysed (disability among individuals; disability as it affects households; and the prevalence of multiple and single disability) differences among the Districts and between urban and rural populations are more substantial than differences between males and females.

Finally, Chapter 8 looks at geographic variations in household characteristics and housing conditions. It shows that parts of the country have marked differences in the average size of households and in the extent of their access to basic amenities such as safe drinking water, hygienic sanitation facilities and electricity. In general, households are found to be larger, and housing conditions worse, in rural areas than in urban areas.

The Department of Population hopes that this atlas will help raise awareness about the current social and demographic landscapes of Myanmar, and the opportunities and challenges inherent in these landscapes. If it informs and encourages further research by social scientists, academics and students; if it provides some guidance to policymakers, community leaders and planning authorities in their efforts to shape and steer socio-economic development; and if the general public finds it interesting, informative and, in some instances, surprising and even controversial, then the 2014 Myanmar Census Atlas will have achieved the results expected by the authors.

Data, Methods and Techniques

Enumerated and Estimated Populations

For the last three censuses undertaken in Myanmar, in 1973, 1983 and 2014, it was not possible to visit all parts of the country and conduct enumeration in 100 per cent of its territory. Reasons for this included inter-communal tensions, disagreements between government and community leaders over how the census was to be conducted, and security-related concerns. In the 2014 Census, some communities in Kachin and Kayin were not counted as some areas could not be accessed by Census enumerators. In Rakhine State, 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. For the 2014 Census, in an effort to include at least headcounts of the people who were not enumerated, the Census Office made estimates from information collected during pre-enumeration activities such as enumeration area mapping and pilot testing. The table below shows the numbers estimated for the Union as a whole and for the individual States/Regions where the entire population was not counted, for each of the last three censuses.

Enumerated and Estimated Populations from 1973, 1983 and 2014 censuses

Names in parenthesis are the terms that were used for administrative areas at the times of the 1983 and 1973 censuses.

		Population		
Administrative Area		Enumerated	Estimated	Estimated + Enumerated
2014	UNION	50,279,900	1,206,353	51,486,253
	Kachin State	1,642,841	46,600	1,689,441
	Kayin State	1,504,326	69,753	1,574,079
	Rakhine State	2,098,807	1,090,000	3,188,807
	Other States/Regions	45,033,926	0	45,033,926
1983	UNION	34,124,908	1,183,005	35,307,913
	Kachin State	819,774	85,020	904,794
	Kayah State	159,661	8,768	168,429
	Kayin (<i>Karen</i>) State	632,962	422,397	1,055,359
	Sagaing Region (<i>Division</i>)	3,825,158	37,014	3,862,172
	Tanintharyi Region (<i>Tenasserim Division</i>)	913,943	3,304	917,247
	Shan State	3,090,339	626,502	3,716,841
	Other States/Regions	24,683,071	0	24,683,071
1973	UNION	28,084,513	836,713	28,921,226
	Kachin State	687,218	50,721	737,939
	Kayah State	107,342	19,232	126,574
	Kayin (<i>Karen</i>) State	660,244	198,185	858,429
	Chin State	318,112	5,183	323,295
	Tanintharyi Region (<i>Tenasserim Division</i>)	716,441	3,000	719,441
	Bago Region	3,177,464	2,140	3,179,604
	Mon State	1,307,680	6,544	1,314,224
	Rakhine State	1,700,506	12,332	1,712,838
	Shan State	2,640,170	539,376	3,179,546
	Other States/Regions	16,769,336	0	16,769,336

Unless explicitly stated in the text, all data and indicators presented in this atlas are calculated based on the population that was enumerated in the 2014 Myanmar Population and Housing Census.

Myanmar People Living Overseas at the time of the 2014 Census

Population counts given in this atlas only include people living in Myanmar at the time of the 2014 Census. They do not include Myanmar people living overseas, with the exception of those who were working in Myanmar diplomatic missions abroad. This group of 972 people is included in the population count for Nay Pyi Taw Union Territory (Department of Population, 2015).

Townships and Sub-Townships

When the 2014 Myanmar Census was conducted in March/April 2014, the country's Districts were sub-divided into Townships, some of which were further divided into Sub-Townships. At that time there were 330 Townships and 83 Sub-Townships, giving a combined total of 413 administrative units.

In November 2014, the Government passed legislation to reorganize the administrative structure of the country. The Sub-Township level was removed, and units that previously had Sub-Township status were absorbed into the adjusted Townships. The number of Townships under the current constitutional arrangement is 330.

Since the 2014 Census provides a snapshot of the demographic characteristics of Myanmar in March/April 2014, this atlas generally presents the results according to the administrative structure at that time. However, in light of the subsequent reorganization and the absorption of Sub-Townships into Townships, it does not distinguish between the two levels – maps and analyses at sub-District level include data for all 413 of the Townships and Sub-Townships.

The terms 'Townships' or 'Township level' as used in this atlas refer to the combined total of 413 Townships and Sub-Townships that existed in March/April 2014.

Order for Listing States/Regions, Districts and Townships in Tables of Census Data

The order in which administrative units appear in the 2014 Census publications was determined based on two considerations. At the State and Region level, the order is as outlined in the Constitution of the Republic of the Union of Myanmar, Chapter II: State Structure, Article 49. The names of the seven States, the seven Regions and the Union Territory are listed under this article

At the subnational administrative levels, the names and order was sourced from the yearly publication, *List of Districts, Townships, Sub-townships and Towns, Wards, Village Tracts and Villages*, published by the Ministry of Home Affairs on February 25, 2011 (Ministry of Home Affairs, 2011). This was the basis for the naming and ordering of administrative units as presented in this atlas. Subsequently, the list was updated with editions published in 2012 and 2013, when new administrative units were created. In most cases, the sequencing of administrative units within each higher unit is in alphabetical order when written in the Myanmar language. Since it is assumed that most readers of the 2014 Census reports will be from Myanmar, and will be familiar with the administrative structure of the country in their own language, this order of presentation has been retained in this atlas and in all official Department of Population 2014 Census publications.

Data Classification Techniques

For the purposes of preparing the thematic maps presented in this atlas, values had to be classified. Classifying data is a common practice in thematic mapping because, by grouping administrative units with similar data values into a limited number of classes, it makes the map easier to interpret. Taking Myanmar as an example, it would be quite difficult for a reader to tell the difference between data values for the States/Regions if all 15 of them were mapped using a different colour; distinguishing between 74 different colours for the Districts and 413 different colours for the Townships would be impossible. Healthy human eyes have little difficulty distinguishing between six or eight different colours, but with any more than this, colour tones begin to look too similar and readers find it hard to tell the difference between one administrative unit and another. The more colours used on a map, the more difficult it becomes to understand and interpret.

To overcome this problem, cartographers classify datasets to show regional patterns and clusters of administrative units with similar characteristics. There are several different ways of classifying data, three of which were used to prepare the maps presented in this atlas. The three classification techniques used are called 'equal intervals', 'quantiles' and 'natural breaks'.

Equal intervals - This is the technique most commonly used for preparing the maps in this atlas. With equal intervals, the difference between the minimum and maximum value in each class is the same. The main advantages of equal interval classifications are that computing the class intervals is very simple, map legends are easy to interpret, and there are no gaps between classes or missing values within classes. Equal intervals portray datasets that are evenly distributed very well, but the technique does not work well for distributions that are skewed and in which values are grouped together in clusters separated by sizeable gaps (Slocum, T, 2009).

Quantiles - This classification technique puts an equal number of data values in each class. Using the 15 States and Regions of Myanmar as an example, a quantiles classification would assign, as closely as possible, an equal number of States/Regions to each class; the number depending on how many classes are used. If there were three classes, for example, there would be five States/Regions in each class. If there were five classes, there would be three States/Regions in each class. Where the number of data values does not divide equally into the number of classes, classes will be of a slightly different size. Classifying the States/Regions into four quantiles would produce three classes with four States/Regions and one class with just three States/Regions.

Natural breaks - One of the most commonly used classification techniques in thematic cartography – using natural breaks - groups values into classes based on clusters and gaps inherent in individual datasets. It seeks to minimize variance within classes and maximise variance between classes. Mapping data using this method works very well when, for example, neighbouring Townships in one part of the country have similar scores for a particular indicator, but are much higher or lower than scores for Townships in other parts of the country. Where marked regional patterns exist, the natural breaks method is often the best technique for showing them clearly on maps.

Technical Specifications of Geographic Data

The maps presented in this atlas are generally compiled from two kinds of data - geographic data and Census variables and indicators (attribute data). The geographic data defines the areas that make up Myanmar's national territory, and also the boundaries of its administrative sub-divisions – the States/Regions, Districts and Townships. Geographic data used also includes the lines that define rivers and roads, and the points that define the locations of cities, towns and smaller settlements.

Census data is collected at the individual level, and for households and housing units, but it is both impractical and not generally useful to disseminate information at this level. It would also breach regulations concerning the protection of personal confidentiality. For this reason, census data are generally aggregated up to, and presented at different levels of, the administrative hierarchy which, in the case of Myanmar, are Village Tracts and Wards at the lowest level, and Townships, Districts, States/Regions and the Union at higher levels. Different users of Census data are interested in different levels of geographic detail; thus, while national policymakers, primary school teachers and the media might be most interested in general differences at the State/Region or perhaps District level, scientists, researchers, programme managers and local service providers will generally need more detailed information, and will therefore be looking for differences at lower geographic area levels.

Since the expected readership of this atlas is likely to include a very broad spectrum of users with interests in a wide range of topics to varying degrees of detail, the atlas attempts to strike a balance between presenting a broad regional overview and specific local detail. It does this by presenting geographic distributions at State/Region, District and Township levels but not for any smaller geography. This balance is evident on most of the two-page spreads covering specific Census themes or indicators. The main geographic patterns and distributions are explained in the text and summarized in graphs and figures; detailed spatial variations are revealed in District and Township level maps; and the numbers behind the maps and figures are presented in tables. Practical considerations of space and legibility limit the amount of data that can be given on each page, but most tables present data for States/Regions and Districts.

Map Scales and Resolution

The thematic maps in this atlas are at different scales, depending on the level of administrative unit for which data are being presented. The range of scales used for the different administrative levels are as follows:

State/Region maps: between 1:11,000,000 and 1:15,000,000.

District maps: between 1:7,000,000 and 1:14,000,000.

Township maps: between 1:7,000,000 and 1:8,000,000.

Insets showing detail for Yangon, Mandalay and Nay Pyi Taw: between 1:500,000 and 1:600,000.

Map resolution - the degree to which elements can be discriminated by the human eye - was established at the scale of 1:10,000,000. Taking into consideration the international accepted standard that two lines cannot be differentiated if they are less than 0.5 millimetres apart, the adopted map resolution at the scale of 1:10,000,000 is 5,000 metres, or 5 kilometres. This is the cartographic standard error in terms of positional accuracy at scales close to 1:10,000,000.

The minimum size of the features represented on the maps in this atlas is 25 km². Therefore, islands with a surface area smaller than 25 km² were not mapped as independent features and were not considered in the classification of Census data. They do, however, appear in the elevation model layer presented as background to the thematic maps.

The vector dataset representing administrative units on the maps in this atlas originally came from the Ministry of Home Affairs' General Administration Department. Since it was digitized from very detailed, large-scale source maps, the original dataset had to be generalized to make it suitable for the atlas's small-scale thematic maps. The generalization process included reducing the number of vertices to simplify coastlines and administrative boundaries, removing all features smaller than the minimum mapping unit size of 25 km², and checking that the topological integrity of the original dataset was retained in the modified version. Coding the geographic data so that it could be linked with data from the Census database was done by the Geographical Information System team in the Ministry of Labour, Immigration and Population's Department of Population.

Data Sources and References

The primary source for the data analysed and presented in this atlas was the official Department of Population (DoP) database for the 2014 Myanmar Population and Housing Census. In addition, reference was also made to the Census Thematic Reports that the DoP is in the process of producing. At the time this atlas was compiled and written (May 2016-February 2017), some of these reports had already been published and some were still in the process of preparation. Where the atlas presents material based on the contents of a report that has already been published, the name of the report and the publication date are given. Where unpublished reports are used as a source, citations are dated '2017' in anticipation of them being published and launched this year.

In conceptualizing and designing the 2014 Myanmar Census Atlas, the authors looked to atlases already published based on censuses in other countries for ideas and inspiration. The following were the most useful in this respect:

People and Places; a 21st-Century Atlas of the UK (published 2016, based on the 2011 census).

Census Atlas Albania (published 2014, based on the 2011 census).

Kosovo Census Atlas (published 2013, based on the 2011 census).

Timor-Leste Population and Housing Census Atlas, 2010 (published 2013, based on the 2010 census).

Socio-Economic Atlas of Kenya (published 2014, based on the 2009 census).

Socio-Economic Atlas of the Lao PDR (published 2008, based on the 2005 census).

See the list of references at the end of this atlas for full citations of these and all other sources.

Rounding

Most of the percentages given in this atlas are rounded to one decimal place. This might mean that, in a very few cases, proportions do not total to exactly 100 per cent but to either 99.9 per cent or 100.1 per cent. These rounding 'errors' do not reflect data inaccuracies but result from a simplification of numbers to make them easier to read and easier to compare.

Urban and Rural

Urban population includes all people living in Wards; rural population includes all people living in Village Tracts. According to the official designations released by the General Administration Department of the Ministry of Home Affairs, there were 3,071 Wards and 13,620 Village Tracts in Myanmar at the time of the 2014 Census (General Administration Department, 2013). Townships are comprised, in most cases, of a combination of both.

Institutional Households

The 2014 Census considered the following to be 'institutions': old-people's homes, orphanages, hospitals, boarding schools, hotels, hostels, guest houses, homes for people living with disabilities, prisons, monasteries, convents, military and police barracks, and camps for workers. Homeless persons were also enumerated and included in the institutional population. Individuals living in institutions such as these on Census Night (29 March 2014) were considered to be living in 'institutional households'. The questions asked of individuals living in institutional households were a subset of those asked of people living in conventional households. They included questions on sex, marital status, religion, ethnicity, disability, type of identity card, educational attainment and activity status as members of the labour force.

Glossary of Technical Terms and Definitions

Adolescent Fertility Rate	The age-specific fertility rate for women aged 15-19. Adolescent fertility rates presented in this atlas were calculated as the number of births to women aged 15-19 in the 12 months prior to the 2014 Census, divided by the number of women in the same age group, multiplied by 1,000.
Adult Literacy	The ability to read and write in one or more languages with reasonable understanding. Adult literacy rates presented in this atlas are based on the total enumerated population aged 15 years and above.
Average Size of Household	The number of people enumerated in a conventional household as being present on Census Night (between 29 th and 30 th March 2014). This may not necessarily be the same as the number of household members usually resident in the household.
Census Night	The night of 29/30 March 2014.
Conventional Household	The 2014 Census defined 'conventional households' as being comprised of one or more persons who are either related or unrelated and share living quarters in either a stand-alone unit or a compound. Members of a conventional household eat meals together, usually prepared from the same cooking pot. In most cases, one person is acknowledged by household members to be the head of the household.
Crude Birth Rate (CBR)	The number of births that occur in a particular year per 1,000 persons. CBRs presented in this atlas were calculated as the number of births that occurred during the 12 months prior to the Census, divided by the enumerated population.
Dependency Ratios	Express the relationship between the number of people of non-working age and the number of people of working age. Non-working ages include children aged 14 years and younger and elderly people aged 65 years and older. The working-age population includes all people aged 15-64 years. The dependency ratios presented in this atlas were calculated as follows: Child Dependency Ratio: (population 0-14 years / population 15-64 years) x 100 Old-Age Dependency Ratio: (population 65 years and over / population 15-64 years) x 100 Total Dependency Ratio: (population 0-14 years + population 65 years and over / population 15-64 years) x 100
Disability	Physical or mental conditions which put a person at greater risk than the general population of experiencing restrictions in performing routine activities (including activities of daily living) or participating in roles (such as work) if no supportive measures are offered. The difficulties covered in the 2014 Census included: a. Seeing difficulties (low vision, blind) b. Hearing difficulties (partially or completely deaf) c. Walking difficulties (use of wheel chairs or crutches, limping, problems climbing steps) d. Mental/intellectual difficulties (slow learning development making it hard to compete with counterparts at school, other mental conditions).
District	The 2 nd administrative level in Myanmar. Groups of Districts combine to form States, Regions, Self-Administered Divisions and Self-Administered Zones. Nay Pyi Taw Union Territory is comprised of two Districts.
Durable Housing	A housing unit is generally considered to be 'durable' if it is built in a non-hazardous location, is considered to be a permanent structure and is capable of protecting its inhabitants from the extremes of climatic conditions. The indicator for housing quality presented in this atlas gives the proportion of households that live in 'non-durable' housing. Houses were classified as 'non-durable' if the walls, roof or floors were mainly constructed from non-woody vegetation including dhani, theke, in phet and other leaves.
Economically Active	Includes all people who were enumerated as either 'employed' or 'unemployed'. The expression 'labour force' is sometimes used interchangeably with the term 'economically active'.
Educational Attainment	The highest grade/standard/diploma/degree completed in the education system of Myanmar. It covers both public and private institutions accredited by government.
Employed	Refers to those people who worked for more than 6 months in the 12 months prior to the Census, for pay or profit, such as a wage, salary, allowance, business profit, etc. Also included in this category were people working in family businesses on a farm, in a store, in a private hospital etc., even though they were not paid any wages.
Enumeration Area	The smallest geographic unit used traditionally in a census operation. In the 2014 Myanmar Census, enumeration areas included about 100 conventional households. Each enumeration area was enumerated by a single enumerator.
Geographical Information System(s) (GIS)	A computer system for capturing, storing, checking, and displaying data related to positions on the earth's surface. GIS can show many different kinds of data on one map. This enables people to see, analyse and understand geographic patterns and relationships more easily.
High School Level Attainment	Those who reported high school in this atlas as the highest grade completed includes all individuals who had received some higher education (college or undergraduate diploma), but who had not graduated, as well as those who had only completed the last grade in high school (upper secondary level) (Grade 11).
Improved Sanitation	Refers to sanitation facilities that allow for the hygienic disposal of human excreta without it coming into contact with humans. For the 2014 Myanmar Census, improved sanitation facilities included flush toilets and water-sealed pit latrines.

Infant Mortality Rate	The ratio of the number of deaths of infants aged under one year that occurred during the 12 months prior to the Census, to the number of live births in the same year. This rate is expressed per thousand live births.
In-Migrant	A person who has moved into one area from another area. As defined in Myanmar's 2014 Census, people who had moved into one Township from another Township were considered to be in-migrants. Migration data presented in this atlas only includes internal migrants - people who moved within Myanmar.
Institutional Households	The 2014 Census considered the following to be 'institutions': old people's homes, orphanages, hospitals, boarding schools, hotels, hostels, guest houses, homes for people living with disabilities, prisons, monasteries, convents, military and police barracks, and camps for workers. Individuals living in institutions such as these on Census Night, including homeless persons, were considered to be living in 'institutional households'.
Internal Migration	Movement of people involving a change of usual residence between Townships within Myanmar.
International Migration	Movement of people involving a change of country of usual residence.
Labour Force	A general term to mean those persons who were, collectively, 'employed' or 'unemployed' at the time of the Census. The expression 'economically active' is sometimes used interchangeably with the term 'labour force'.
Labour Force Participation Rate	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.
Life Expectancy at Birth	The average number of years that a newborn can be expected to live if he or she were subject to the age-specific mortality rates of the 12 months prior to the Census.
Lifetime Internal Migration	The total number of people who, at some time in their lives, lived in a Township different to the one they were born in. This includes people who moved to live in a different Township for a period of time, but later returned and were living in their Township of birth when they were enumerated.
Literacy	The ability to read and write in one or more languages with a reasonable level of understanding.
Median Age	The age that divides a given population numerically in half. Fifty per cent of the population is younger than the median age and 50 per cent of the population is older than the median age.
Migrant	A person who has changed his/her usual place of residence from one 'migration-defining' area (in the case of the 2014 Census, the Township) to another, at least once during the migration-defining period.
Net Internal Recent Migration Rate	For any given administrative unit: the number of in-migrants in the five years prior to the Census minus the number of outmigrants during the same five-year period, divided by the total enumerated population in 2014, multiplied by 1,000.
Outmigrant	A person who has moved from one area into another area. As defined for Myanmar's 2014 Census, people whose usual residence moved from one Township to another Township were considered to be outmigrants. Migration data presented in this atlas only includes internal migrants - people who moved within Myanmar.
Population Average Annual Growth Rate	Average amount of population change per year. The formula is: $r = 100 \times (P2 - P1) / (t2 - t1)$ Where P1 and P2 are the number of persons at times t1 and t2, 1983 and 2014 respectively, and the time interval (t2-t1) is expressed in years; 31 in the case of Myanmar. It is conventionally expressed in percentage units.
Population Density	A measure of the number of people living in a given amount of space, expressed as the number of people per unit area of land. The units used for land areas in this atlas are square kilometres, or km ² . The formula used to calculate the population density is: number of people / number of square kilometres of the territorial unit they live on.
Population Growth	An increase in the number of people that lives in a given territory between two points in time, depending on fertility, mortality and migration rates. As presented in this atlas, population growth between 1983 and 2014 was calculated as a percentage as follows: $[(\text{population in 2014} - \text{population in 1983}) / \text{population in 1983}] \times 100.$
Population Pyramid	Representation by means of a histogram of the age distribution of a population at a specific point in time, showing the proportion of the population by age and sex.
Primary School Level Attainment	Persons reported as attaining primary school level education in this atlas are those who reported completing primary school (Grade 5) and the first three grades of lower secondary school (Grades 6, 7 and 8), but who had not gone on to complete upper secondary level (Grade 11).
Recent Migration	For the 2014 Myanmar Census, it refers to the movement of people between Townships during the five-year period prior to the Census.
Rural Area	An area classified by the General Administration Department (GAD) of the Ministry of Home Affairs as a village tract. Generally, such areas have relatively low population density, and land use which is predominantly agricultural.

Safe Drinking Water	Drinking water from a source that is likely to be protected from outside contamination. For the 2014 Myanmar Census, such types of water sources included piped water delivered via a tap, tube wells and bore holes, protected wells and springs, and bottled water and water obtained from a vending machine.
School Attendance Rate	Percentage of children aged 5-15 that were attending school at the time of the Census, at any level and in any educational institution or programme accredited by Government, public or private, for organized learning.
Sex Ratio	Expresses the relationship between the number of males in a population group and the number of females in that same population group. Sex ratios are calculated as follows: (number of males / number of females) x 100.
State/Region	The 1 st administrative level of Myanmar. The 2014 Census includes Nay Pyi Taw Union Territory and the country's seven States and seven Regions in this administrative level.
Total Fertility Rate (TFR)	Expresses the average number of children that a woman would give birth to if all women lived to the end of their childbearing years and bore children according to the current schedule of age-specific fertility rates. It is the sum of five-year age-specific birth rates for females aged 15 to 49.
Township	The 3 rd administrative level of Myanmar. A group of Townships comprises a District.
Under-Five Mortality Rate	The ratio of the number of deaths of children less than five years old that occurred during the 12 months prior to the Census, to the number of live births in the same period. This rate is expressed per thousand live births.
Unemployed	As defined for the 2014 Myanmar Census, includes all people who had no work during the 12 months prior to the Census, but who were able to work and had been actually seeking a job during that 12-month period. The Census based its definition on the following International Labour Organization definition: All persons above a specified age who, during the reference period, were: a) "Without work", in other words, were not in paid employment or self-employment b) "Currently available for work", that is, were available for paid employment or self-employment during the reference period c) "Seeking work", that is, had taken specific steps in a specified reference period to seek paid employment or self-employment.
Unemployment Rate	The percentage of the total labour force that was unemployed but that was actively seeking employment and was willing to work.
University Level Attainment	The highest level of attainment in this atlas includes all individuals who had graduated with bachelor's degrees, post graduate diplomas, master's degrees or PhDs.
Urban Area	An area classified by the General Administration Department (GAD) of the Ministry of Home Affairs as a "ward". Generally, such areas have relatively high density of building structures, high population density and better infrastructure development than areas classified as rural.
Ward and Village Tract	The 4 th administrative level of Myanmar. A group of Wards and/or Village Tracts comprises a Township.
Working-Age Population	The number of people between the ages of 15 and 64.

1

Myanmar - Land of Diversity

1.1 People and the Physical Environment

The land area occupied by Myanmar is approximately 676,600 square kilometres, extending about 2,050 kilometres (1,270 miles) from north to south and 930 kilometres (580 miles) from east to west. It is slightly larger than the country of Afghanistan, and slightly smaller than the U.S. state of Texas. Myanmar has approximately 1,930 km of coastline on the Bay of Bengal and Andaman Sea. Elsewhere it shares approximately 6,500 kilometres (4,000 miles) of land borders with five neighbouring countries: Bangladesh to the west; India to the north-west; China to the north and north-east; Lao PDR to the east; and Thailand to the east and south-east. Based on geographic variations in relief, soils, drainage patterns and climate, Myanmar can be divided into five distinct physiographic regions: the northern mountains, the western ranges, the eastern plateau, the central basin and lowlands, and the coastal plains and deltas.

Population distribution is strongly influenced by the physical characteristics of a territory. The people of Myanmar show how populations are extremely adaptable and can thrive in a wide range of natural environments. Even so, local and regional differences in topography, climate, soils, water resources and natural vegetation have strong influences on where and how the people of Myanmar live. Generally, upland areas are much less densely populated than the lowlands of the central basin and coastal plains. However, people do live in some hilly and mountainous areas, where job opportunities provided by rich mineral and forest resources encourage large numbers of young, mostly male, people to live in remote areas under harsh conditions.

Relief - Many of Myanmar's international boundaries follow ranges of mountains and hills. For example: the Rakhine Mountains, which include the Patkai Range, Naga Hills and Chin Hills, between Myanmar and India; the Dawna Range and Tanintharyi Mountains between Myanmar and Thailand; and the Hengduan Range and Shan Plateau between Myanmar and China. The highest point in the country, Hkakabo Razi, at 5,881 metres (19,296 feet) above sea level, is on the border with China in the Hengduan Range. The mountains in the north are relatively young, formed over the last 50 million years along the line where the Eurasian Tectonic Plate is being pushed up by the northward-moving Indian-Australian Plate. This makes them generally higher, steeper and more rugged than the older, more heavily eroded mountains and hills to the south. The Rakhine Mountains run down the entire western side of Myanmar at an average elevation of 1,800 metres (6,000 feet) above sea level. The Shan Plateau in the east is, on average, only about 1,000 metres (3,300 feet) above sea level, and it is deeply dissected by a network of rivers. Some mountains have religious or other cultural significance. Kyauktiyo, Sagaing Hill and Mount Poppa are among Myanmar's most important cultural landmarks.

Drainage - Lakes and rivers are vital sources of fresh water for human consumption, industry and irrigated agriculture. Large volumes of water that falls in the uplands in the west, north and east, drains to the coasts through the central basin and lowlands. The central basin is dominated by the Ayeyawady River which, with a navigable length of almost 1,600 km (1,000 miles), is the longest river in Myanmar and,

from a socio-economic point of view, by far the most important (Geographia, 2016). The Ayeyawady drains about 60 per cent of the land area of the country. Other important rivers include: the Chindwin, a tributary of the Ayeyawady in the north-west; the Patheingyi and Yangon Rivers in the south; the Sittoung, which drains into the Gulf of Martaban, in the east; and the Than Lwin, which is the largest of the many rivers that drain the Shan Plateau. All of these rivers, and especially the Ayeyawady, attract people in large numbers to live and farm near them; provide corridors for travel around the country; and facilitate the movement of large volumes of agricultural produce, minerals, forest products and manufactured goods to the country's population centres and ports.

Lakes also attract people because they provide a source of water and food. Indawgyi Lake in the northern hills of Kachin State is Myanmar's largest lake. Measuring 24 km (15 miles) by 13 km (8 miles), it is also one of South-East Asia's largest natural inland water bodies. Inle Lake, on the Shan Plateau, is also important for its natural resources, as a site of social and religious significance, and as a major tourist attraction.

Soils - After water, food is the most important requirement to sustain life. To meet this need, historically people have lived in the largest numbers and at the highest densities on the most productive land. In Myanmar, this is found on the deep, alluvial silts and clays in the central basin and lowlands. The lowland soils are not naturally high in nutrients or organic matter, but they are very productive when fertilized. Over the millennia, Myanmar has increasingly adopted sophisticated agricultural practices to raise the productivity of the central basin and coastal plains and feed its ever-growing population. In contrast, soils in the uplands are relatively shallow and poor in nutrients. They are easily eroded, especially in steep areas with heavy rainfall, and where forest cover has been cleared. Myanmar's uplands are generally less densely settled than its lowlands, partly because the soils in the mountains are not as productive. Though the soils in the uplands generally cannot support the intensive growing of staples such as rice, wheat or potatoes, they are adequate for less demanding perennial crops such as tea, coffee and rubber, for seasonal plantings of a wide variety of grains, pulses and vegetables, and for grazing livestock.

Climate - Monsoon winds are the main drivers of Myanmar's climate. Combined with the predominantly north-south alignment of the country's mountain ranges and valleys, the winds create a pattern of alternating wet and dry zones during both the north-east (November to February) and south-west (June to October) monsoon seasons. All parts of the country have adequate rainfall for agriculture year-round, though irrigation is needed in many lowland areas, particularly during the dry inter-monsoonal season from February to May. Cold temperatures are the limiting factors in the high north, where cold air masses from Central Asia bring snow for two months each year. The wettest parts of the country are the coasts and mountain ranges in the west and south-east, which receive more than 5,000 millimetres (200 inches) of rainfall annually. About 2,500 millimetres (100 inches) of rain falls on the Ayeyawady delta each

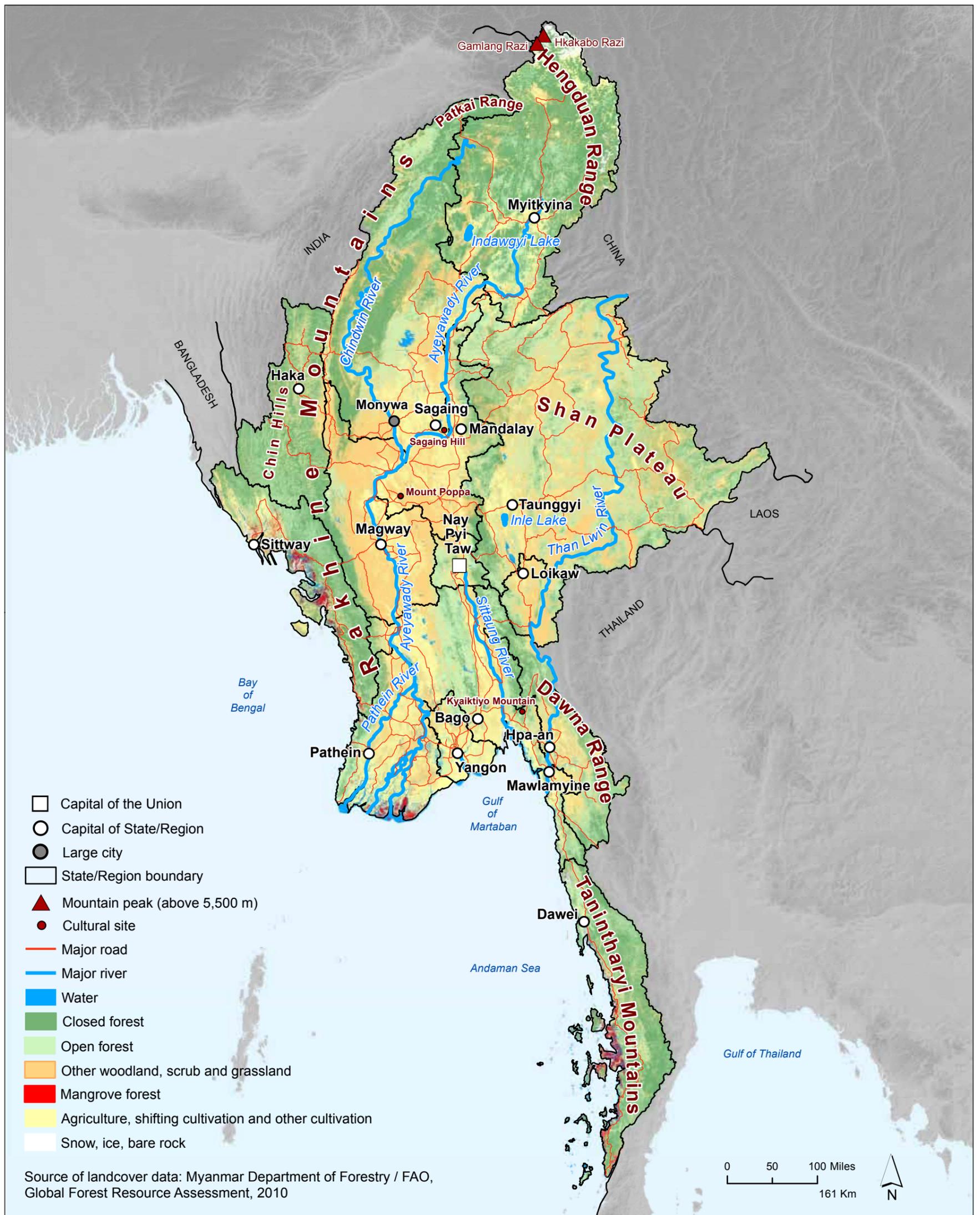
year. Proximity to the coast and the low, flat terrain of this part of Myanmar makes it particularly vulnerable to risks associated with the tropical cyclones that occasionally form in the Andaman Sea. The central basin is known as the dry zone. Sheltered from the wet westerly winds by the Rakhine Mountains, this part of the country only receives between 500 and 1,000 millimetres (20 to 40 inches) of rainfall per year.

Agriculture - The combined influences of the natural elements described above are reflected in Myanmar's three distinct agricultural zones: the Ayeyawady and other deltas, where paddy rice is the dominant crop; the dry lowlands, where production of a wide variety of crops, including rice, are made possible by irrigation; and hill and plateau regions, where tree crops and shifting agriculture predominate. Important crops raised in the dry zone include sugarcane, legumes, groundnuts, maize, onions, sesame and rubber. Upland crops include some extensive tea and coffee estates and large areas of mixed agriculture where the principle crops are upland rice, yams, maize and millet. In addition large numbers of pigs, poultry, goats and chickens are kept. Bullocks and buffalo are commonly used as working animals.

Settlements and Transportation - For centuries, Myanmar has been a country of small towns and villages, linked together by extensive networks of narrow roads, tracks and rivers. However, the last 150 years have seen some major changes as transportation and communication links have modernized and the growth of urban centres such as Yangon, Mandalay, Mawlamyine, Taunggyi and Monywa has accelerated. Powering boats with steam engines was the first major innovation to make a big impact in this regard. Then followed the railways, which helped make the movement of people and products between the country's major towns and cities faster, efficient and less expensive. Myanmar is now expanding and upgrading its road network and air linkages to further improve accessibility and boost the productive capacity of more people in more remote parts of the country. Further improvements in the mobile/cell phone network and internet connectivity are also contributing to Myanmar's accelerating transition from a traditional, agriculture-based past to a natural resource processing, manufacturing and service sector-based future.

Primary reference for this section:
Encyclopaedia Britannica, 2016.

Map 1.1 Myanmar - Physical and Human Landscape



1.2 Administrative Structure

When the Census was conducted in March and April 2014, Myanmar was divided for administrative purposes into 15 States/Regions, 74 Districts, 330 Townships and 83 Sub-Townships. The maps on the following pages show the locations of all these administrative areas and identifies them by name: Map 1.2a for States/Regions; Map 1.2b for Districts; and Map 1.3 for Townships and Sub-Townships.

The Census used this administrative structure as the framework within which it delineated areas for the purposes of planning and managing the enumeration of the population. The entire territory of Myanmar was divided into enumeration areas, most of them containing between 100 and 150 households. In remote, sparsely populated parts of the country, enumeration areas had fewer than 100 households. This approach is the international standard practice for conducting censuses, and it is applied so that, in principle, no households are left out of the enumeration, and no household is counted more than once.

Following a restructuring of the administrative system by the Ministry of Home Affairs' General Administration Department in November 2014, the Sub-Township level was removed, and units that previously had Sub-Township status were absorbed into the adjusted Townships. The number of Townships under the current constitutional arrangement is 330. However, since the 2014 Census provides a snapshot of the demographic characteristics of Myanmar in March/April 2014, this atlas presents the results according to the administrative structure in place at that time. The locations of the 83 Sub-Townships that were absorbed into Townships in November 2014 are shown on Map 1.3. They are identified with the assignation 'S-T' in the map's key.

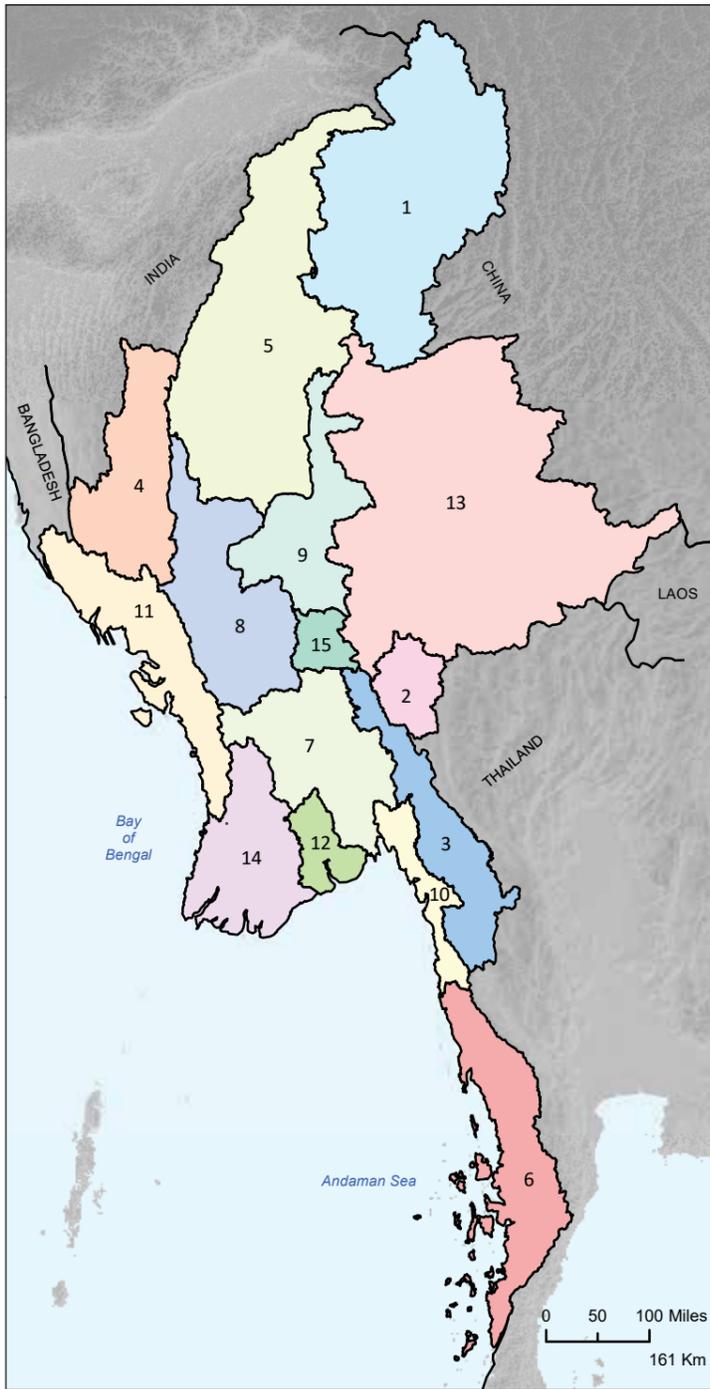
Though Map 1.3 distinguishes between Townships and Sub-Townships, the analysis and maps presented for this administrative level in all subsequent chapters refers to both, collectively, as 'Townships'. This is in the interests of brevity and clarity, and also in recognition

of the fact that the Sub-Township level was removed from the administrative hierarchy shortly after the Census was completed.

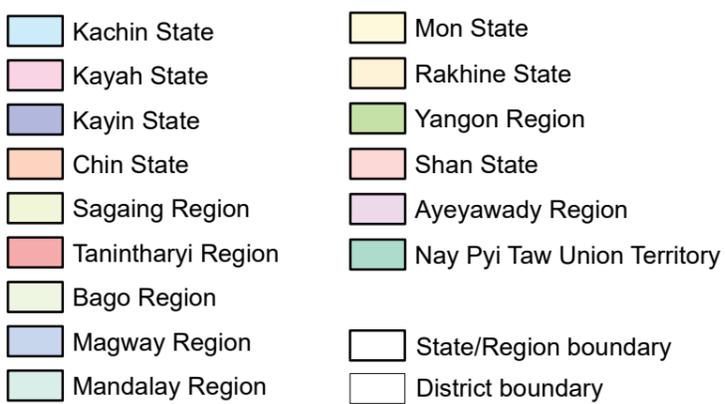
The maps presented here provide a reference to help readers identify the administrative areas for which Census data are presented on the other maps in this atlas, most of them without place names. By omitting place names, the cartographers who made the maps were able to present the geographic patterns and distributions inherent in the Census data clearly and in great detail. The poster included with this atlas shows the same three reference maps. Opening up the poster as a ready reference while leafing through the atlas will save readers the inconvenience of continually flipping back to this introductory chapter to identify individual States/Regions, Districts and Townships. The poster also makes a good wall chart.

Map 1.2 Administrative Areas

a) States/Regions

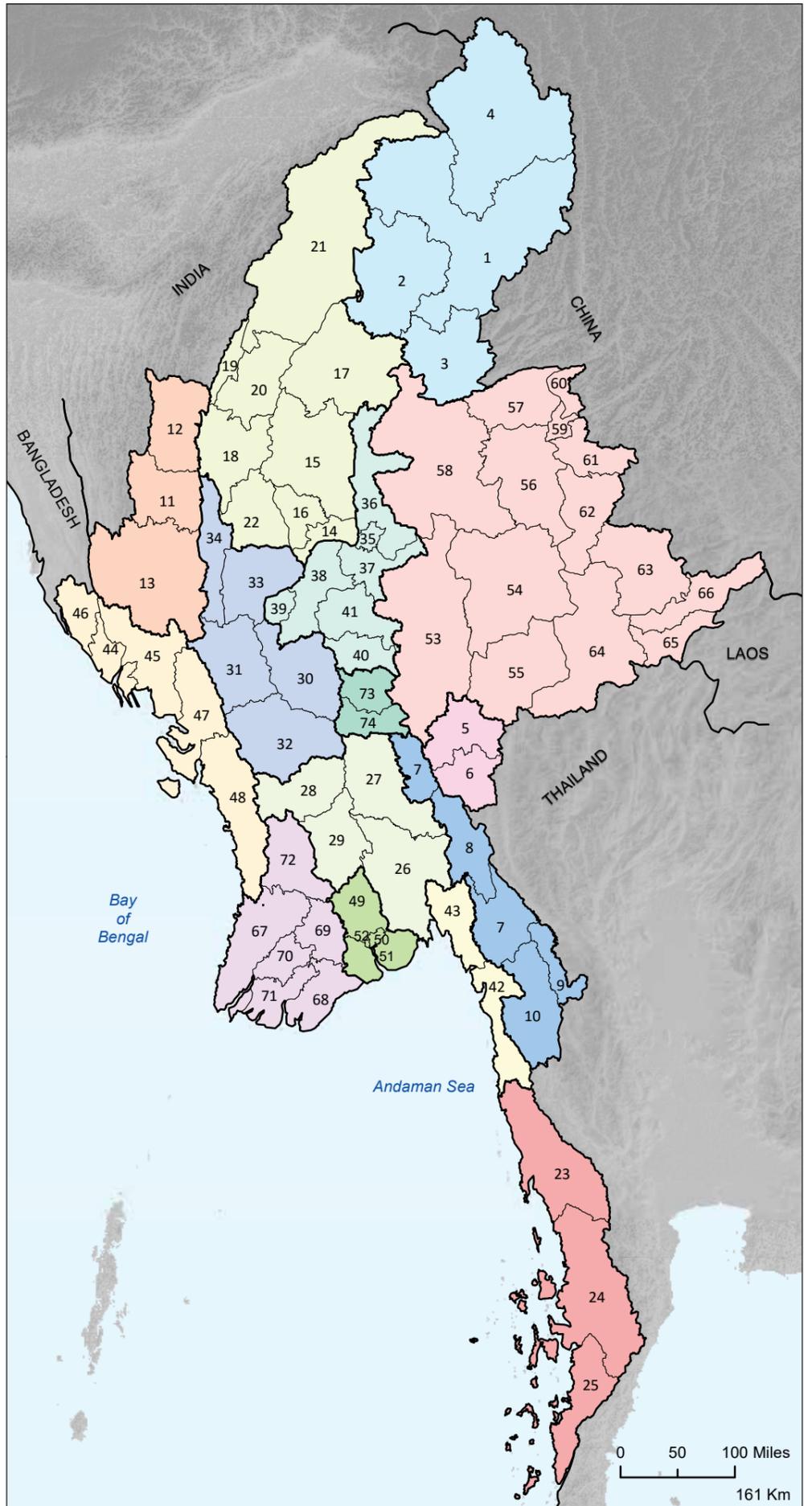


States/Regions



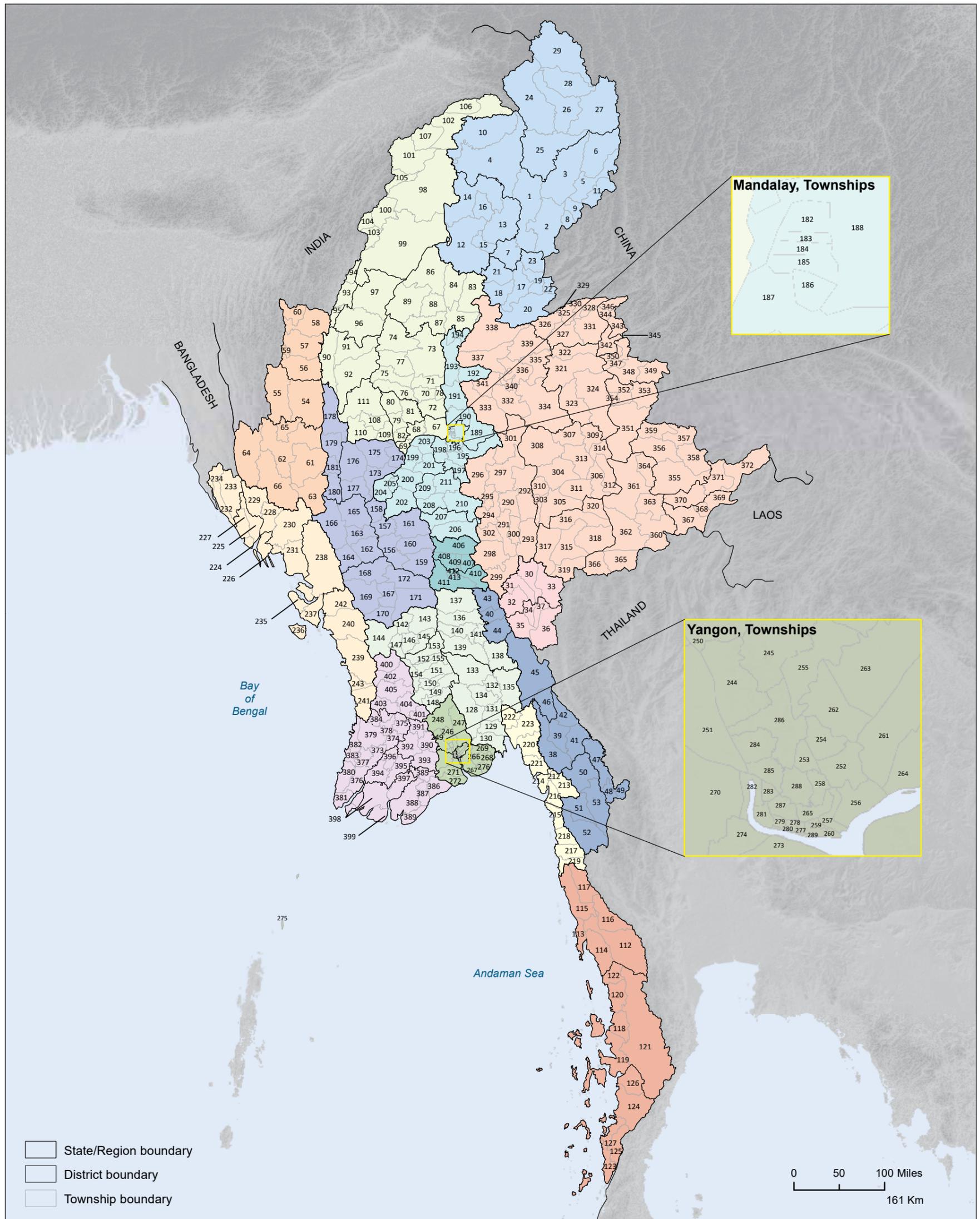
1. Kachin State
2. Kayah State
3. Kayin State
4. Chin State
5. Sagaing Region
6. Tanintharyi Region
7. Bago Region
8. Magway Region
9. Mandalay Region
10. Mon State
11. Rakhine State
12. Yangon Region
13. Shan State
14. Ayeyawady Region
15. Nay Pyi Taw Union Territory

b) Districts



- | | | | | | |
|---------------|----------------|--------------------|------------------|------------------|----------------------|
| Kachin | Chin | Tanintharyi | Mandalay | 48. Thandwe | 62. Makman |
| 1. Myitkyina | 11. Haka | 23. Dawei | 35. Mandalay | Yangon | 63. Kengtung |
| 2. Mohnyin | 12. Falam | 24. Myeik | 36. Pyin Oo Lwin | 49. North Yangon | 64. Minesat |
| 3. Bhamo | 13. Mindat | 25. Kawthoung | 37. Kyaukse | 50. East Yangon | 65. Tachileik |
| 4. Putao | Sagaing | Bago | 38. Myingyan | 51. South Yangon | 66. Minephyat |
| Kayah | 14. Sagaing | 26. Bago | 39. Nyaung U | 52. West Yangon | Ayeyawady |
| 5. Loikaw | 15. Shwebo | 27. Toungoo | 40. Yame`thin | Shan | 67. Pathein |
| 6. Bawlakhe | 16. Monywa | 28. Pyay | 41. Meiktila | 53. Taunggyi | 68. Phyapon |
| Kayin | 17. Katha | 29. Thayawady | Mon | 54. Loilin | 69. Maubin |
| 7. Hpa-An | 18. Kalay | Magway | 42. Mawlamyine | 55. Linkhe` | 70. Myaungmya |
| 8. Pharpon | 19. Tamu | 30. Magway | 43. Thaton | 56. Lashio | 71. Labutta |
| 9. Myawady | 20. Mawlaik | 31. Minbu | Rakhine | 57. Muse | 72. Hinthada |
| 10. Kawkareik | 21. Hkamti | 32. Thayet | 44. Sittway | 58. Kyaukme | Nay Pyi Taw |
| | 22. Yinmarpin | 33. Pakokku | 45. Myauk U | 59. Kunlon | 73. Ottara (North) |
| | | 34. Gangaw | 46. Maungtaw | 60. Laukine | 74. Dekkhina (South) |
| | | | 47. Kyaukpyu | 61. Hopan | |

Map 1.3 Administrative Areas, Townships



General Population Characteristics

This chapter covers a broad range of topics that describe the general socio-demographic characteristics of the people of Myanmar at the time of the 2014 Census. Themes explored include where people live and in what numbers; the age and sex composition of people in different parts of the country; relationships between potentially productive and dependent groups; differences between urban and rural populations; and spatial variations in the distribution of followers of different religions. The main questions asked to obtain this information are shown in the extract from the Census questionnaire below.

A pattern which becomes clear in this chapter, and which occurs repeatedly throughout the atlas, shows substantial differences between the people who inhabit the middle corridor between Mandalay and Yangon, and those who live in the Districts and Townships surrounding this corridor. In terms of basic population characteristics, the Census showed that, in general, people in the middle corridor live at higher densities; have larger proportions of potentially productive working-age people; have more females than males; and are more likely to live in urban rather than rural areas, than people who live in outlying areas.

Indicators explored in subsequent chapters reveal a similar horseshoe pattern. Whether it be attendance and attainment at school, literacy, prevalence of disabilities, job opportunities, access to household services, or quality of housing, people living in the middle corridor generally fare better than those living in the outer ring. This is not a new observation, since the Ayeyawady River catchment has long been recognized as the wealthiest and most productive and accessible part of the country. However, the 2014 Population and Housing Census has generated a wealth of empirical data to support (and occasionally refute) observations and conclusions that until now have largely been anecdotal.

FOR ALL MEMBERS OF THE HOUSEHOLD							
1. Serial number of household member	2. Name (Write all persons who spent the night of 29 March 2014 in this household. Make sure to include babies, elderly persons, disabled persons and visitors) ONLY PERSONS WHO SPENT THE CENSUS NIGHT IN THIS HOUSEHOLD	3. Relationship to the head of the household Head of Household Spouse Son/Daughter Son/Daughter-in-law Grandchild/Great grandchild Parent/Parent-in-Law Sibling Grandparent Other Relative Adopted Child Non Relative	4. Sex Male Female	5. Completed Age <i>If age greater than or equal to 98, write "98". If less than one write "00".</i> In Years	6. Marital status Single (Never married) Married Widowed Divorced/Separated Renounced	7. Religion Buddhist Christian Islam Hindu Animist Other Religion No Religion	8. Ethnicity

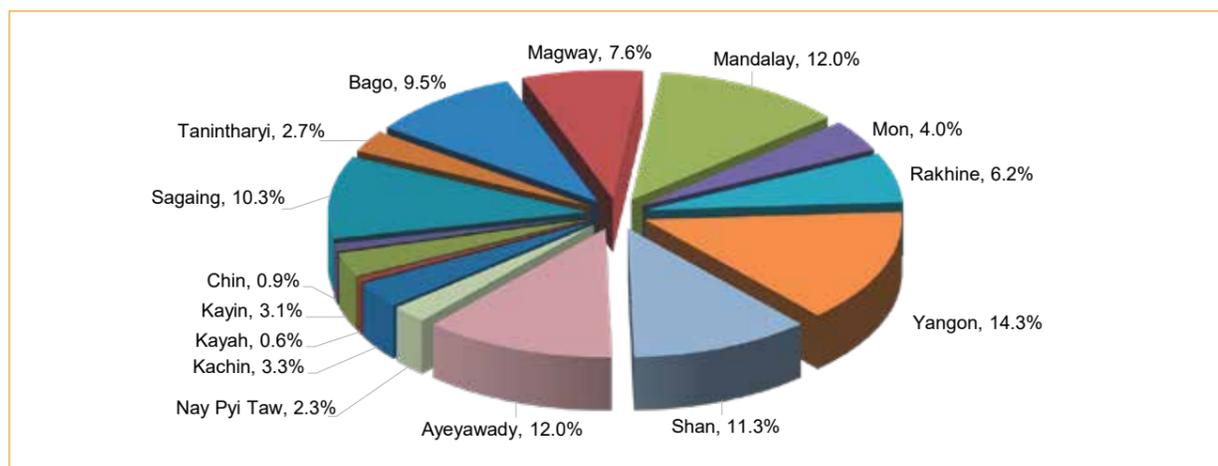
2.1 Population Distribution

As at midnight, between 29 and 30 March 2014, the 2014 Myanmar Census estimated the total population of the country at 51,486,253. This figure includes 50,279,900 people enumerated through the field data collection operation, and an additional estimated 1,206,353 people, based on the Census mapping activity, who were not counted. This estimate includes 1,090,000 people in Rakhine State, 69,753 people in Kayin State, and 46,600 people in Kachin State (see Introduction, Enumerated and Estimated Populations, page XIII).

The population of Myanmar is most heavily concentrated in the central part of the country, along a corridor connecting the cities of Yangon, Nay Pyi Taw and Mandalay. Geographical information system (GIS) analysis shows that approximately 50 per cent of the total population lives within 100 kilometres of these three urban centres. The other half of the population is distributed relatively sparsely in largely rural areas to the north, south, east and west, though there are smaller urban concentrations in all of these areas.

This second tier of densely settled urban areas can be seen on Map 2.1 and includes, for example, Sittway and Maungtau in Rakhine State, Taunggyi in Shan State, Patheingyi in Ayeyawady Region, Mawlamyine in Mon State, and Myeik in Tanintharyi Region. Myanmar's middle corridor is relatively heavily populated, but far

Figure 2.1 Proportion of Union Population, States/Regions



more people live in the Districts and Townships of the outer ring, albeit at much lower densities. The Census reported more than 70 per cent of the population living in rural areas in 2014.

Among the States and Regions, Yangon Region has the largest population at 7.3 million, followed by Ayeyawady and Mandalay Regions, each with approximately 6.2 million, and Shan State, with 5.8 million (see Table 2.1). Figure 2.1 shows that these four States/Regions are home to just under half of the total population of the country. The other half of the population, some 26 million people, is distributed

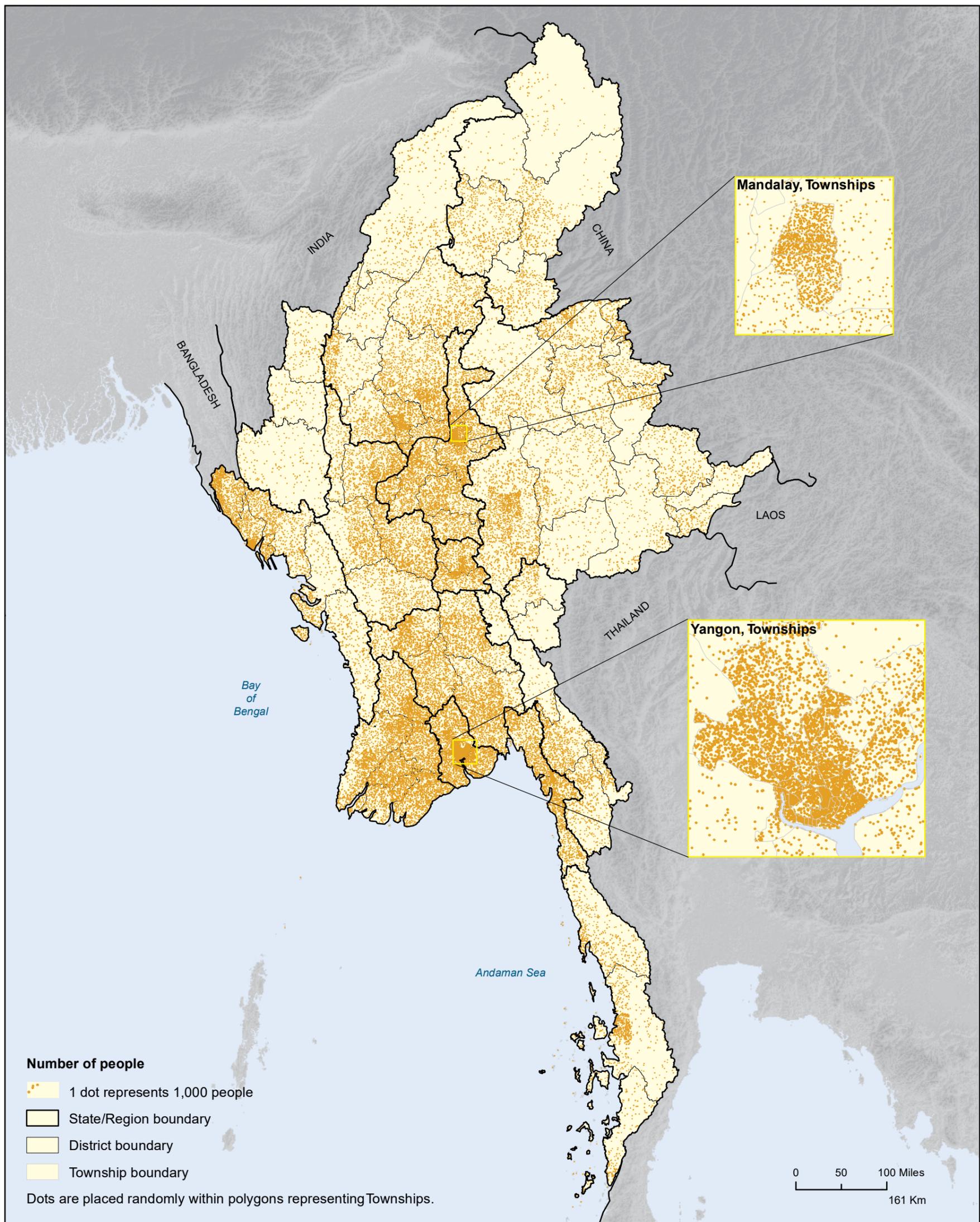
unevenly throughout the other 11 States and Regions. Moderately large numbers of people live in Bago Region, Magway Region, Rakhine State and Sagaing Region; large territories that are home to approximately a third of the total population. The remaining 17 per cent of the population live in the other seven States and Regions. Their numbers are relatively small either because they live in administrative areas occupying small land areas, such as Nay Pyi Taw Union Territory, Mon State and Kayah State, or because they live at very low densities in large administrative areas, as in Tanintharyi Region and in Chin, Kachin and Kayin States.

Table 2.1 Total Population (Enumerated plus Estimated) and Population Density, States/Regions and Districts

State/Region District	Area (Km ²)	Total Population	Population Density per Km ²
UNION	676,577	51,486,253	76
Kachin	89,042	1,689,441	19
Myitkyina	35,455	531,456	15
Mohnyin	15,362	673,608	44
Bhamo	10,743	393,120	37
Putao	27,482	91,257	3
Kayah	11,732	286,627	24
Loikaw	6,565	243,718	37
Bawlakhe	5,166	42,909	8
Kayin	30,383	1,574,079	52
Hpa-An	10,890	783,510	72
Pharpon	6,723	104,838	16
Myawady	3,136	210,540	67
Kawkareik	9,634	475,191	49
Chin	36,019	478,801	13
Haka	7,716	98,726	13
Falam	8,547	167,578	20
Mindat	19,755	212,497	11
Sagaing	93,702	5,325,347	57
Sagaing	2,483	520,591	210
Shwebo	14,877	1,433,343	96
Monywa	3,474	757,358	218
Katha	15,862	861,283	54
Kalay	8,642	509,368	59
Tamu	1,325	114,869	87
Mawlaik	7,682	164,008	21
Hkamti	32,790	422,692	13
Yinmarpin	6,567	541,835	83
Tanintharyi	43,345	1,408,401	32
Dawei	14,004	493,576	35
Myeik	20,158	693,087	34
Kawthoung	9,183	221,738	24
Bago	39,404	4,867,373	124
Bago	13,855	1,770,785	128
Toungoo	10,645	1,123,355	106
Pyay	7,644	910,902	119
Thayawady	7,261	1,062,331	146
Magway	44,821	3,917,055	87
Magway	9,630	1,235,030	128
Minbu	9,314	687,575	74
Thayet	11,995	738,047	62
Pakokku	8,302	1,005,545	121
Gangaw	5,579	250,858	45
Mandalay	30,888	6,165,723	200
Mandalay	915	1,726,889	1,887
Pyin Oo Lwin	8,307	1,001,945	121
Kyaukse	4,157	741,071	178
Myingyan	6,415	1,055,957	165
Nyaung U	1,483	239,947	162
Yame`Thin	3,821	518,384	136
Meiktila	5,789	881,530	152
Mon	12,297	2,054,393	167
Mawlamyine	6,662	1,232,221	185
Thaton	5,635	822,172	146
Rakhine	36,778	3,188,807	87
Sittway	3,576	792,149	222
Myauk U	8,928	756,304	85
Maungtau	3,538	842,591	238
Kyaukpyu	9,593	439,923	46
Thandwe	11,143	357,840	32
Yangon	10,277	7,360,703	716
North Yangon	4,687	2,606,670	556
East Yangon	365	2,366,659	6,488
South Yangon	5,031	1,417,724	282
West Yangon	194	969,650	4,990
Shan	155,801	5,824,432	37
Taunggyi	24,133	1,701,338	70
Loilin	19,748	565,162	29
Linkhe`	12,199	139,483	11
Lashio	12,324	612,248	50
Muse	7,817	453,495	58
Kyaukme	25,793	770,065	30
Kunlon	983	58,774	60
Laukine	1,894	154,912	82
Hopan	4,688	228,880	49
Makman	7,769	241,884	31
Kengtung	11,305	366,861	32
Minesat	17,521	243,571	14
Tachileik	3,587	177,313	49
Minephyat	6,039	110,446	18
Ayeyawady	35,032	6,184,829	177
Patheingyi	10,900	1,630,716	150
Phyayon	5,522	1,033,053	187
Maubin	4,277	973,948	228
Myaungmya	3,085	781,844	253
Labutta	4,262	626,558	147
Hinthada	6,986	1,138,710	163
Nay Pyi Taw	7,057	1,160,242	164
Ottara (North)	3,473	526,497	152
Dekkhina (South)	3,585	633,745	177

Source of land area data: Department of Settlement and Land Records, 2015.

Map 2.1 Population Distribution



The base population for this indicator is the number of individuals, both enumerated and estimated, that were living in conventional and institutional households at the time of the 2014 Census.

The number of dots in each administrative unit represents the total population of that administrative unit divided by 1,000. Since the dots are distributed randomly within administrative units, they only give an impression of the density of the population; they do not show precisely where people live within each State/Region, District or Township.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

2.2 Land Area and Population Density

At 676,577 square kilometres, Myanmar is the 39th largest country in the world, and the 11th largest in Asia (UN DESA, 2014). On the world chart, Myanmar is slightly smaller than Chile and Zambia and slightly larger than Afghanistan and Ukraine (Table 2.2). China is by far the largest of Myanmar's immediate neighbours, followed closely by India, but Myanmar is slightly larger than Thailand and substantially larger than both Lao PDR and Bangladesh.

Table 2.2 shows that, compared with its neighbours in Asia, people in Myanmar generally live at a relatively low density, with only Lao PDR less densely populated. To the west, Myanmar shares a border with two of the most heavily and densely populated countries in the world - Bangladesh and India. At 1,087 people per square kilometre, population density in Bangladesh is by far the highest in the region. Lao PDR has the lowest, at only 29 people per square kilometre. Among neighbouring countries, Thailand is most similar in terms of population density with 131 people per square kilometre compared with Myanmar's 76. Interestingly, of all the countries in the world, Ukraine is closest to

Myanmar in terms of both land area and population density.

The overall sparse population density at the Union level hides substantial variations in different parts of the country. Maps 2.1 and 2.2 show a clear regional distinction between the relatively densely settled middle corridor, stretching from Mandalay in the north to Yangon in the south, and the sparsely settled Districts and Townships that form a ring around this middle corridor. Differences between the middle corridor and the outer ring are a recurring theme of Myanmar's social and economic geography, and are evident on many of the maps presented in this atlas.

Maps 2.1 and 2.2 also show the highly skewed nature of the population distribution, whereby a large proportion of the population is concentrated in relatively few Districts and Townships. The 35 Districts that are more densely populated than the national average contain 70 per cent of the country's population, but Figure 2.2 shows that they only occupy 30 per cent of its land area. In 2014, with 716 people per km², Yangon Region

was by far the most densely settled State/Region, with people living at 6,500 per km² in East Yangon District and almost 5,000 per km² in West Yangon District. Within these Districts, residents of Townships such as Sangyoung, Kyauktada and Pabedan were living at densities of more than 40,000 per km², whilst Pazuntaung in East Yangon District was the most densely populated Township in the country, with a very tightly packed 48,000 people living on its single square kilometre.

The remaining 30 per cent of the population was thinly spread across 38 Districts, occupying 70 per cent of the land area. Chin, Kachin, Kayah and Shan States, and Tanintharyi Region all had fewer than 50 people per km². Putao in Kachin State was the District with the lowest population density, at 3 people per km². Within Putao District, Sumparabum Township and Pannandin Sub-Township were both populated with fewer than 0.5 people per km², whilst Ingyanyan in Myitkyina District was the least densely populated Township, with each of its 1,732 residents occupying an average of almost 3 square kilometres of territory.

Figure 2.2 Proportion of Union Land Area, States/Regions

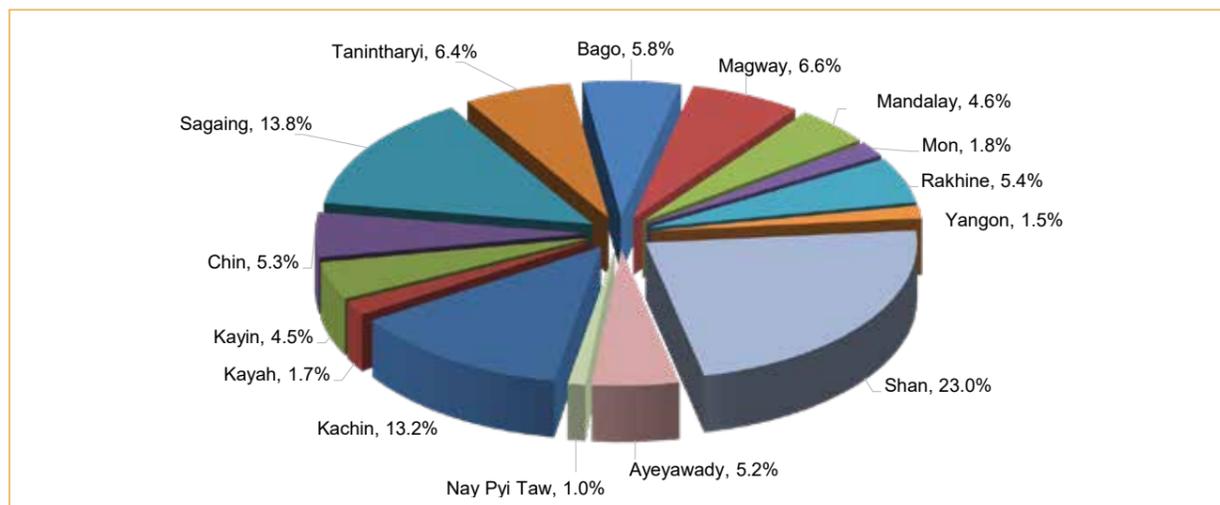


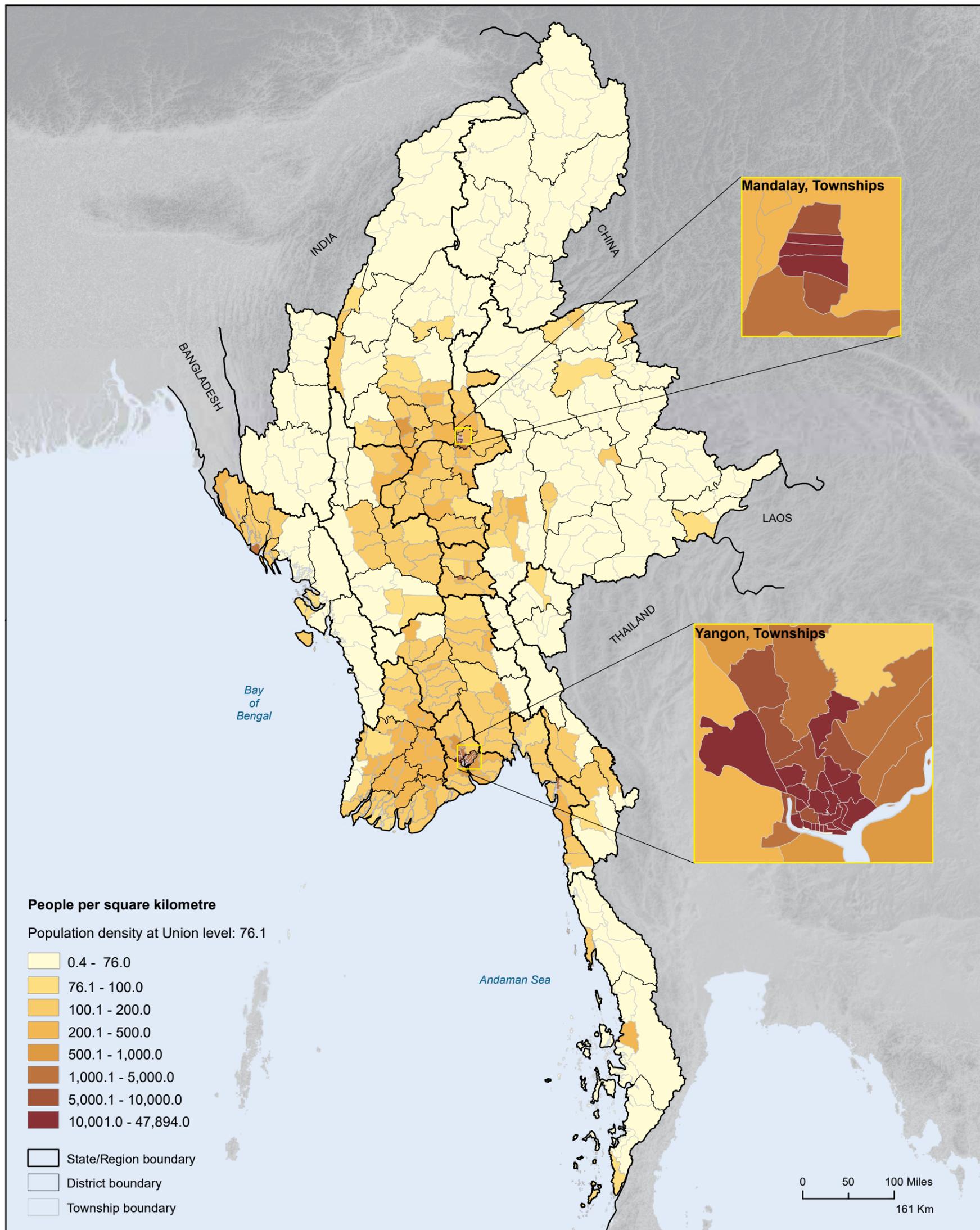
Table 2.2 Land Area and Population Density, International Comparisons

Country	Area (Km ²)	Population Density per Km ²
Myanmar	676,577	76
Similar-Sized Countries		
Afghanistan	652,864	47
Chile	756,102	23
South Sudan	658,841	18
Turkey	783,562	96
Ukraine	603,500	75
Zambia	752,612	19
Countries with Similar Population Densities		
Bosnia and Herzegovina	51,209	75
Croatia	56,594	76
Iraq	435,052	77
Kenya	591,958	76
Morocco	446,550	74
Ukraine	603,500	75
Neighbouring Countries		
Bangladesh	147,570	1,087
China	9,596,961	144
India	3,287,263	381
Lao PDR	236,800	29
Thailand	513,120	131

Sources:

1. Population densities from UN DESA, 2013.
2. Land areas from UN DESA, 2014.

Map 2.2 Population Density, Townships



The base population for this indicator is the number of individuals, both enumerated and estimated, that were living in conventional and institutional households at the time of the 2014 Census.

The indicator gives the number of people living in each Township divided by the area of the Township in square kilometres.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

2.3 Population Growth

Between the 1983 and 2014 censuses, Myanmar's population increased by almost 16.2 million people, or approximately 46 per cent (Table 2.3). This means that, on average, the population of the country increased by more than half a million people in each of the 31 years between the two censuses. The average annual growth rate during this period was 0.9 per cent, making Myanmar one of the slowest growing countries in South-East Asia (Department of Population, 2017a).

Figure 2.3 shows that the States/Regions with the largest population increases in terms of numbers were Yangon Region (increased by 3.4 million), Shan State (2.1 million), and Mandalay and Sagaing Regions (both 1.5 million). In percentage terms, the populations of Yangon Region and Kachin State almost doubled in size, with increases of more than 85 per cent, followed

by Kayah State with an increase of 70 per cent. Magway and Ayeyawady Regions and Mon State grew the least, with population increases of little more than 20 per cent during the 31-year intercensal period (see Table 2.3). Nay Pyi Taw Union Territory was officially established in 2006 (Department of Population, 2015); until then the territory it occupies was part of Mandalay Region.

The maps opposite show some clear regional differences in the extent and nature of population change since 1983. States/Regions in the central corridor have seen the largest increases in terms of absolute numbers, the exception being Shan State, where a large proportion of the 2 million increase can probably be attributed to in-migration from other parts of Myanmar (Maps 2.3a and 2.3b). Slow population

growth in Ayeyawady, Bago and Magway Regions and Mon State contrast sharply with the relatively rapid growth of Yangon Region (Map 2.3c). Perceived and real opportunities for economic advancement have attracted a steady stream of migrants into Yangon City, with net outmigration from neighbouring States/Regions tempering any natural growth that has occurred there. Map 2.3c also illustrates the most striking aspect of population growth in Myanmar in the last 30-40 years, which is that most parts of the country have experienced only very modest growth. As noted above, the annual growth rate for the country as a whole between 2003 and 2014 was only 0.9 per cent. Among Myanmar's South-East Asian neighbours, only Thailand (0.3 per cent) and China (0.6 per cent), had lower average annual growth rates (Department of Population, 2017a).

Figure 2.3 Total Population 1973, 1983 and 2014, States/Regions

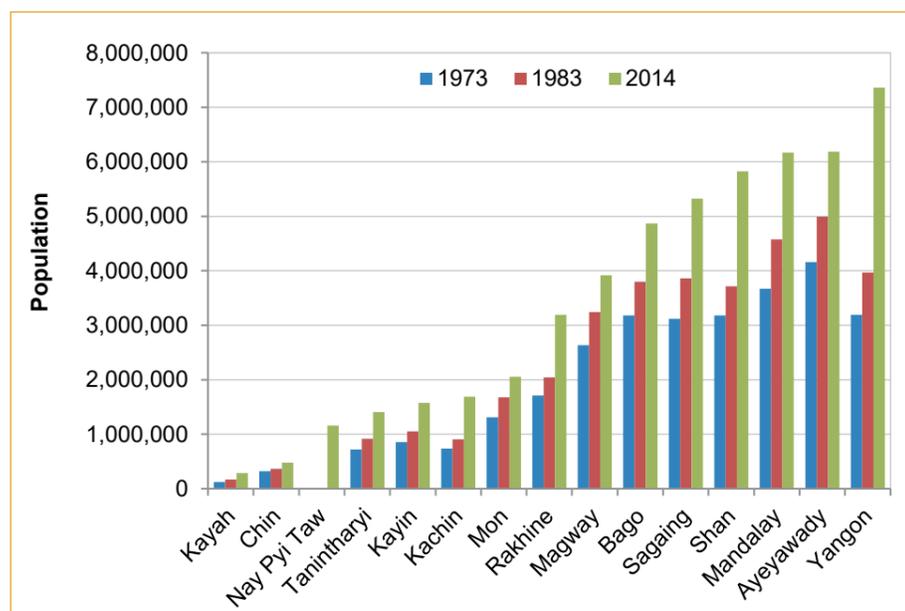


Table 2.3 Population Growth 1973-2014, States/Regions

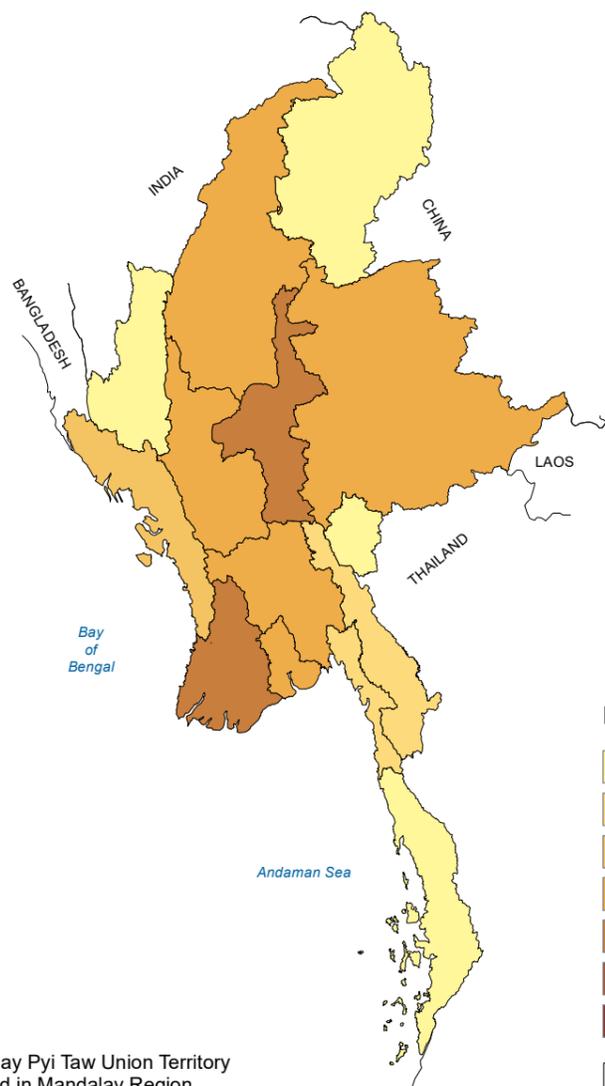
State/Region	Population			Percentage Growth	
	1973	1983	2014	1973 - 1983	1983 - 2014
UNION	28,921,226	35,307,913	51,486,253	22.1	45.8
Kachin	737,939	904,794	1,689,441	22.6	86.7
Kayah	126,574	168,429	286,627	33.1	70.2
Kayah	858,429	1,055,359	1,574,079	22.9	49.2
Chin	323,295	368,949	478,801	14.1	29.8
Sagaing	3,119,054	3,862,172	5,325,347	23.8	37.9
Tanintharyi	719,441	917,247	1,408,401	27.5	53.5
Bago	3,179,604	3,799,791	4,867,373	19.5	28.1
Magway	2,634,757	3,243,166	3,917,055	23.1	20.8
Mandalay	3,668,493	4,577,762	6,165,723	24.8	*60.0
Mon	1,314,224	1,680,157	2,054,393	27.8	22.3
Rakhine	1,712,838	2,045,559	3,188,807	19.4	55.9
Yangon	3,190,359	3,973,626	7,360,703	24.6	85.2
Shan	3,179,546	3,716,841	5,824,432	16.9	56.7
Ayeyawady	4,156,673	4,994,061	6,184,829	20.1	23.8
Nay Pyi Taw	n/a	n/a	1,160,242	n/a	n/a

* Percentage growth 1983-2014 in Mandalay Region includes the population of Nay Pyi Taw, calculated as follows: $((\text{Population Mandalay 2014} + \text{Population Nay Pyi Taw 2014} - \text{Population Mandalay 1983}) / \text{Population Mandalay 1983}) \times 100$.

Data Source: Department of Population, 2015 (Table 3, p. 15).

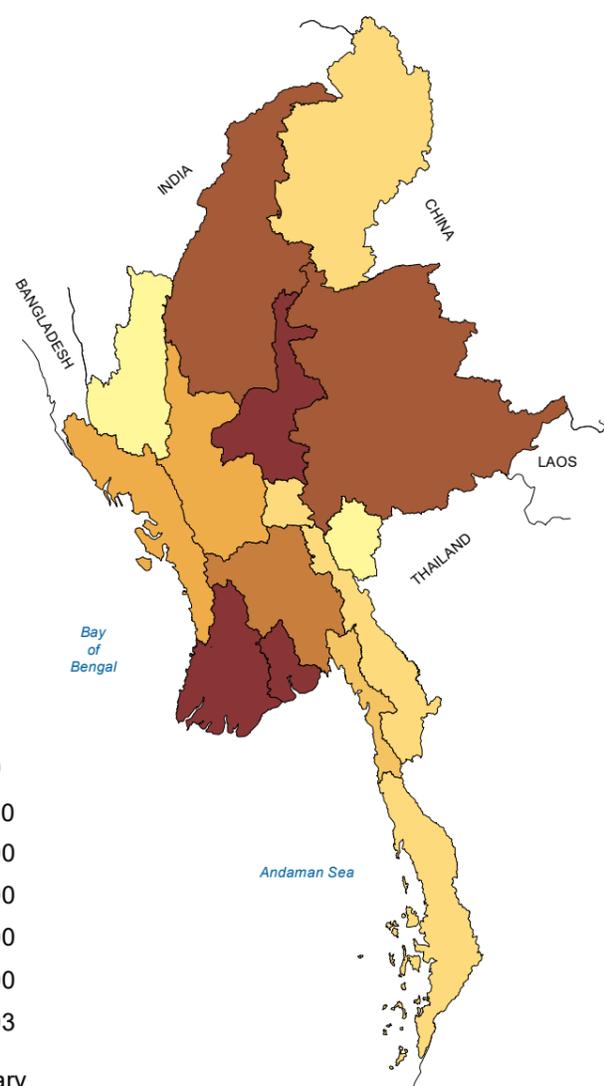
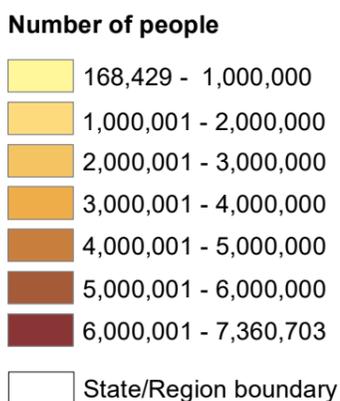
Map 2.3 Population Growth, States/Regions

a) 1983 population*



* In 1983, Nay Pyi Taw Union Territory was included in Mandalay Region.

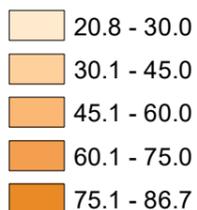
b) 2014 population



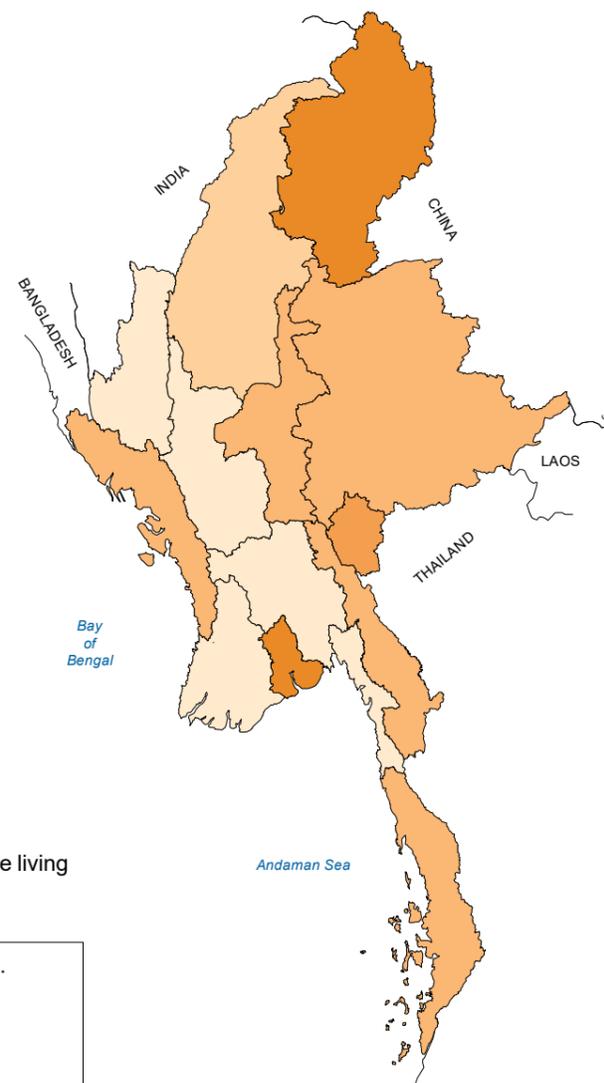
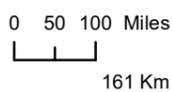
c) 1983 - 2014 population growth

Percentage of population growth 1983 - 2014

Population growth at Union level: 45.8



State/Region boundary



The base population for this indicator is the number of individuals, both enumerated and estimated, that were living in conventional and institutional households in 1983 and 2014.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

2.4 Age Composition: Age Groups

The most striking features of the age distribution shown in the population pyramid at Figure 2.4 are that Myanmar is a relatively young country (in terms of its age profile), with more than half the population younger than 30. There are fewer young children (0-9 years old) than adolescents (10-19 years old) and the proportion of elderly people (those older than 64) at just less than 6 per cent is around the regional average. The main reasons for these characteristics are likely to be declining mortality and fertility rates since World War II (Department of Population, 2017a), both of which have accelerated markedly in the last 20 years.

The 'youth bulge', showing clear evidence that more children were born between 1995 and 2004 than were born in the subsequent decade, is the clearest indication that fertility rates are dropping. It does not appear in either of the population pyramids from the 1973 and 1983 censuses.

Though still a relatively young country, Myanmar is ageing quite quickly, and it already has a larger proportion of elderly persons than many of its neighbours in South-East Asia. The proportion of the total population aged 65 and over in Myanmar is larger than in Brunei, Cambodia, Lao PDR, the Philippines and Timor-Leste but smaller than the proportion in Singapore, Thailand and Vietnam. It is even the same as the proportion of the over-60s in Malaysia (Department of Population, 2017a).

Regional and local variations in age structure are primarily caused by selective migration and geographic differences in fertility and mortality rates. Secondary causes include inequitable access to health, education and other social services. Predominantly rural Districts, where employment opportunities and access to social services are limited, tend to have higher proportions of children.

Districts in the middle corridor, where the largest urban centres are located and where access to jobs and social services is greater, have larger proportions of working-age and elderly people. Table 2.4 and Maps 2.4a, 2.4b and 2.4c show these distinct geographic patterns very clearly.

Figure 2.4 Population Pyramids, 1973, 1983 and 2014, Union

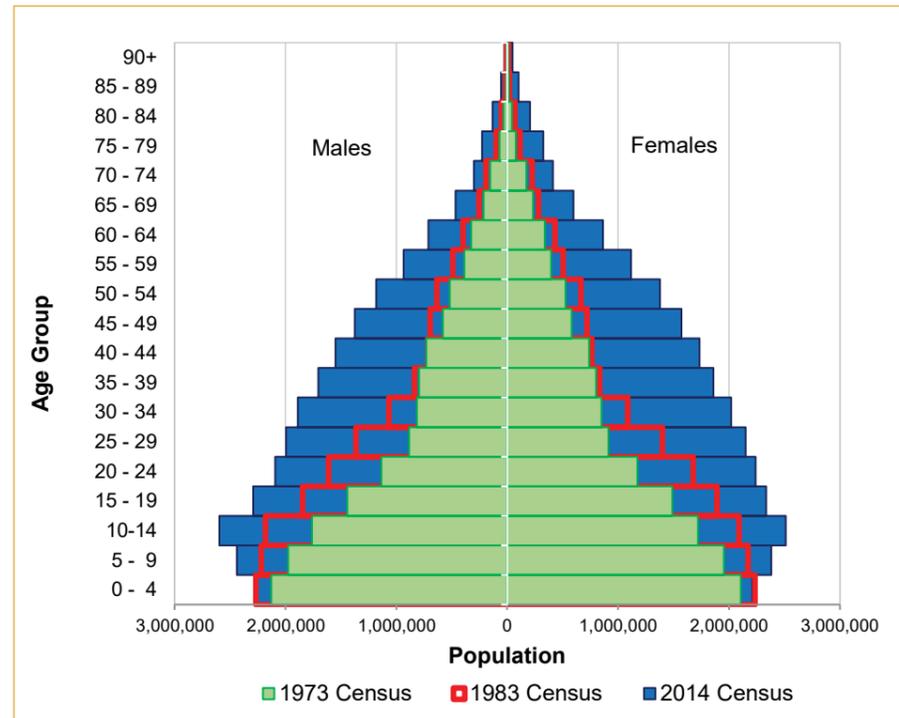
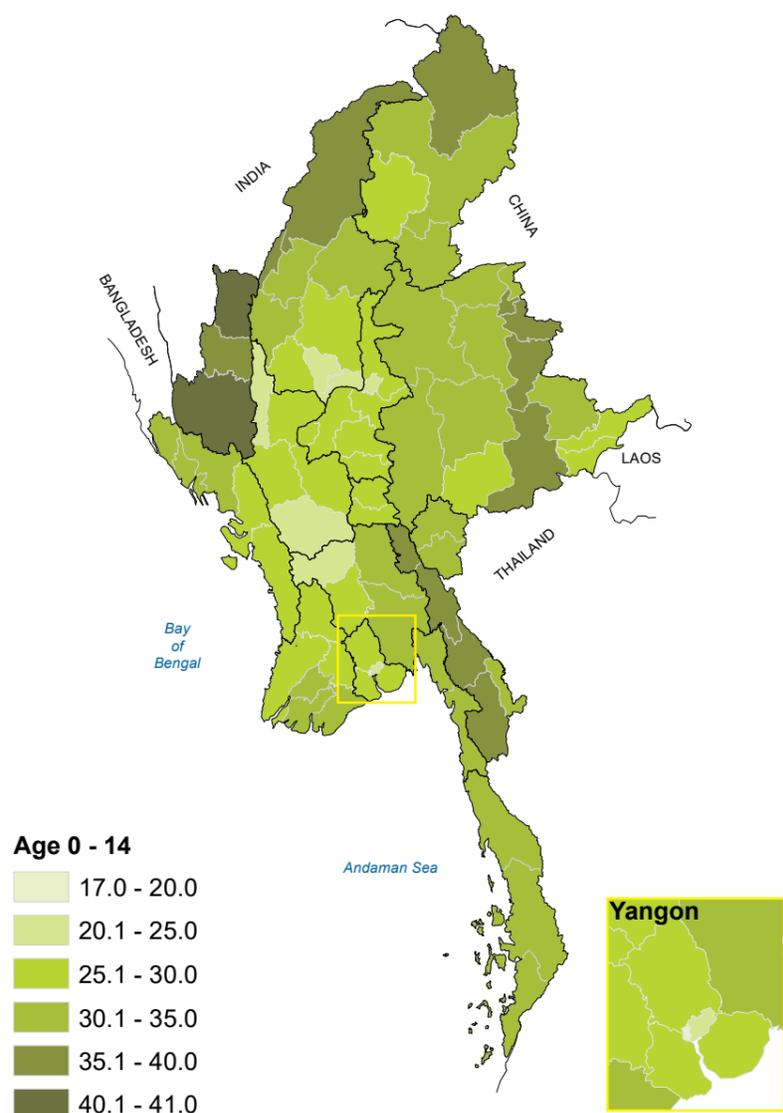


Table 2.4 Children, Working-Age and Elderly Share of Total Population, States/Regions and Districts

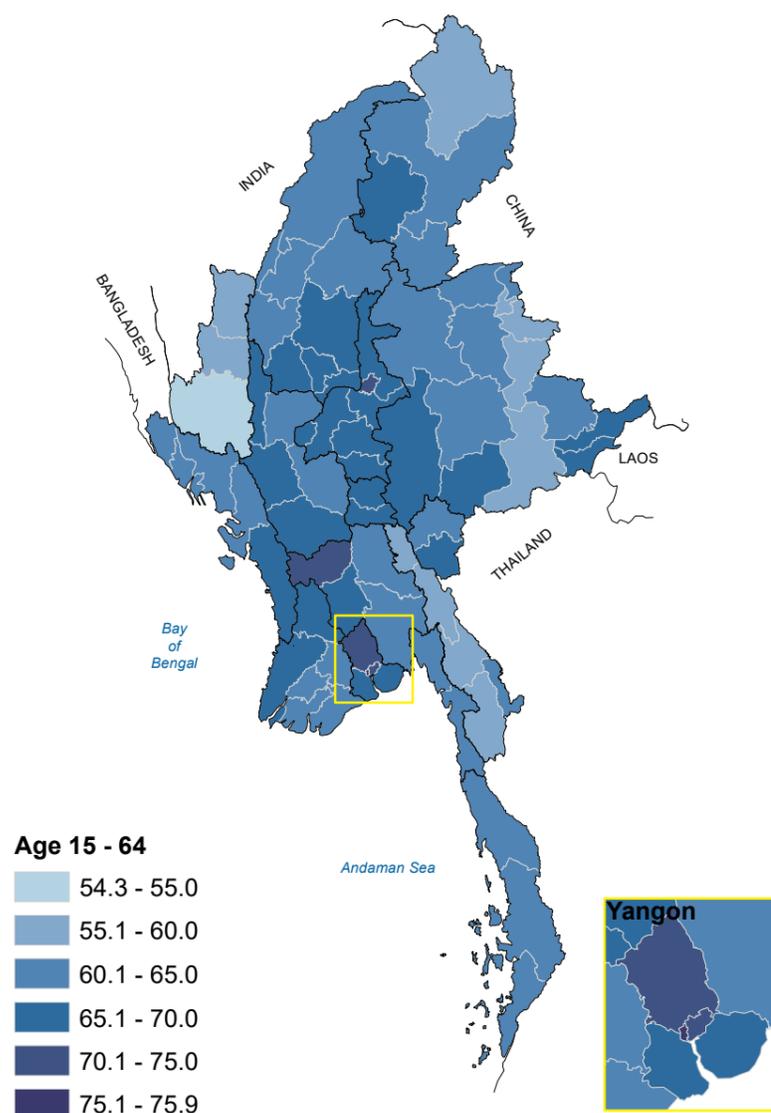
State/Region District	Percentage of Total Population			State/Region District	Percentage of Total Population			State/Region District	Percentage of Total Population		
	0 - 14 Years	15 - 64 Years	65 Years and Older		0 - 14 Years	15 - 64 Years	65 Years and Older		0 - 14 Years	15 - 64 Years	65 Years and Older
UNION	28.6	65.6	5.8	Myeik	35.0	60.7	4.4	Yangon	23.4	70.9	5.6
Kachin	30.0	66.0	4.0	Kawthoung	34.1	62.8	3.1	North Yangon	25.3	70.1	4.6
Myitkyina	31.9	63.8	4.3	Bago	28.4	65.2	6.3	East Yangon	21.4	72.3	6.4
Mohnyin	26.7	70.0	3.4	Bago	31.8	62.8	5.4	South Yangon	27.9	66.8	5.2
Bhamo	31.6	63.8	4.6	Toungoo	31.0	63.3	5.7	West Yangon	17.0	75.9	7.1
Putao	37.8	57.3	4.8	Pyay	21.8	70.5	7.7	Shan	32.0	63.7	4.2
Kayah	34.5	61.7	3.7	Thayawady	25.7	66.8	7.5	Taunggyi	30.8	65.1	4.1
Loikaw	35.0	61.1	3.9	Magway	27.0	65.8	7.2	Loilin	32.6	63.3	4.1
Bawlakhe	32.0	65.4	2.6	Magway	27.7	65.0	7.3	Linkhe`	29.0	65.9	5.1
Kayin	35.8	59.1	5.1	Minbu	27.0	66.4	6.7	Lashio	32.0	63.5	4.5
Hpa-An	36.4	57.8	5.8	Thayet	24.3	68.6	7.1	Muse	32.1	63.4	4.5
Pharpon	36.4	59.9	3.7	Pakokku	28.6	64.0	7.4	Kyaukme	30.6	64.9	4.5
Myawady	33.1	64.1	2.8	Gangaw	24.9	67.5	7.6	Kunlon	38.0	57.4	4.6
Kawkareik	35.9	58.9	5.1	Mandalay	25.9	67.9	6.2	Laukine	34.4	61.5	4.1
Chin	40.0	55.3	4.8	Mandalay	23.5	71.6	4.9	Hopan	38.1	57.5	4.4
Haka	37.4	56.8	5.8	Pyin Oo Lwin	28.4	66.9	4.7	Makman	37.0	59.4	3.5
Falam	40.2	55.6	4.3	Kyaukse	26.4	67.8	5.8	Kengtung	30.9	64.5	4.6
Mindat	41.0	54.3	4.7	Myingyan	26.4	65.5	8.1	Minesat	37.3	59.6	3.0
Sagaing	28.7	65.1	6.2	Nyaung U	25.1	67.4	7.4	Tachileik	27.9	67.9	4.2
Sagaing	23.8	68.0	8.2	Yame`thin	26.9	66.3	6.8	Minephyat	29.4	65.7	4.8
Shwebo	27.4	65.6	7.1	Meiktila	26.6	65.9	7.5	Ayeyawady	29.4	64.7	5.8
Monywa	24.7	67.9	7.4	Mon	31.2	62.3	6.5	Pathein	28.6	65.7	5.7
Katha	31.2	64.0	4.8	Mawlamyine	30.0	63.0	6.9	Phyapon	32.2	63.2	4.6
Kalay	30.6	64.5	4.9	Thaton	33.1	61.1	5.8	Maubin	29.5	64.5	6.0
Tamu	35.3	60.9	3.8	Rakhine	31.1	62.2	6.7	Myaungmya	30.5	64.2	5.3
Mawlaik	34.9	60.0	5.0	Sittway	32.4	61.9	5.6	Labutta	31.7	63.8	4.5
Hkamti	35.8	61.1	3.2	Myauk U	33.5	60.7	5.8	Hinthada	26.2	65.8	8.0
Yinmarpin	27.6	65.4	7.0	Maungtaw	33.6	62.6	3.8	Nay Pyi Taw	28.2	67.2	4.6
Tanintharyi	33.9	60.9	5.1	Kyaukpyu	29.6	61.8	8.6	Ottara (North)	28.7	66.8	4.5
Dawei	32.5	60.5	7.0	Thandwe	25.9	65.7	8.3	Dekkhina (South)	27.8	67.6	4.7

Map 2.4 Population Distribution by Age Group, Districts

a) Children



b) Working-Age population



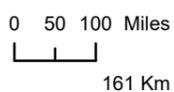
Percentage of population aged 0-14, 15-64, 65+

Average at Union level 0-14: 28.6

Average at Union level 15-64: 65.6

Average at Union level 65+: 5.8

-  State/Region boundary
-  District boundary



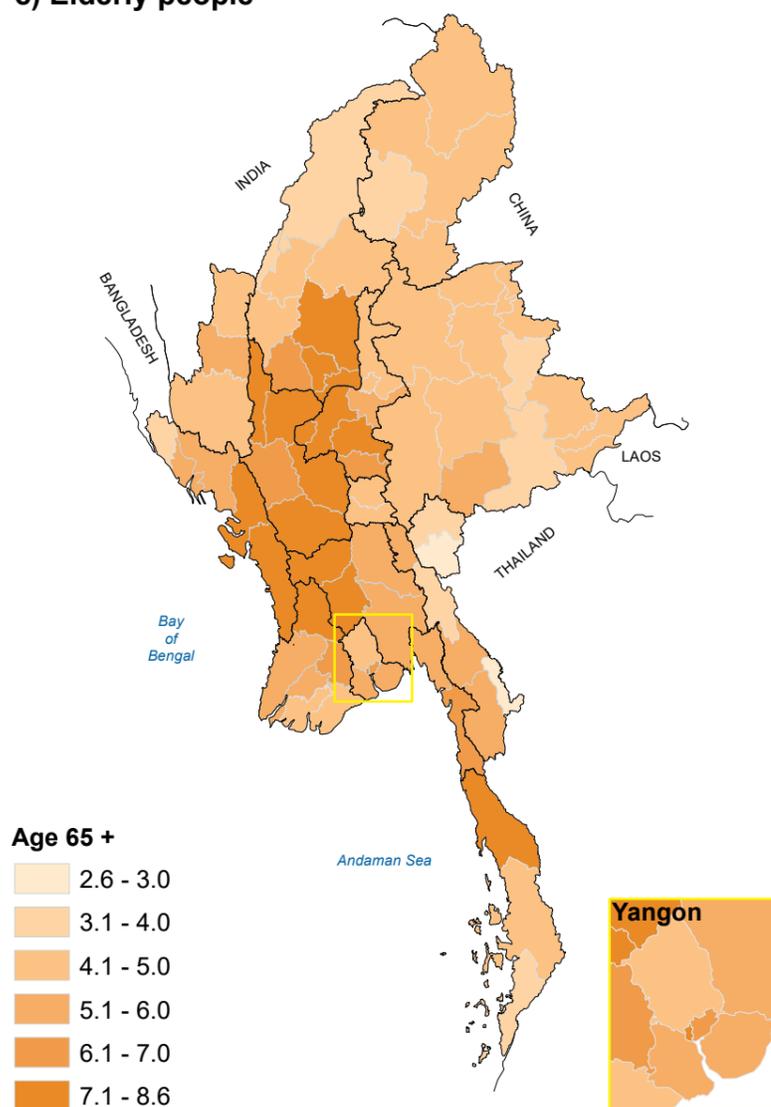
The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The percentages divide the population into three age groups: children, working-age population and elderly people.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

c) Elderly people



2.5 Age Composition: Median Age

The median age of a population is the age that divides the group into two numerically equal parts. Exactly half the population is older than the median age and half is younger than the median age. It is considered to be an index that summarizes the age distribution of a population. The 2014 Census revealed that the median age for Myanmar was 27.1 years. This shows a substantial increase from 1983 when the median age was 20.2 years (Department of Population, 2017a).

At the State/Region level, Sagaing, Bago, Magway, Mandalay, Yangon and Ayeyawady Regions all had median ages higher than 27.1. Median ages for all the other States/Regions were below the national median (Table 2.5). This indicates that the population living in Myanmar's middle corridor is generally older than the population living in its outer ring. This regional contrast

is even more distinct when examined at the District and Township levels, as Maps 2.5a and 2.5b show.

The median ages of District populations indicate that, in 2014, Mindat and Falam Districts in Chin State had the youngest populations in the country. For both these Districts the median age was less than 20. The four Districts with the next lowest median ages, Hopan, Makman, Kunlon and Minesat, are all in Shan State. As Chapter 3 shows, the main factors underlying the very young median ages in these and other outer ring Districts are high fertility and mortality rates.

At the other extreme, the Districts with the oldest populations in terms of median age are right in the heart of the middle corridor. Districts on the upper right in Figure 2.5 include Pyay, Gangaw, Sagaing,

Hinthada, Nyaung U, Thayawady, Thandwe, Thayet and West Yangon, where, at more than 30 years, the median age was more than 10 years older than in Mindat and Falam Districts. Not only are fertility and mortality rates generally lower in these central Districts, but net outmigration rates are also relatively high. Migrants tend to be younger people, and they leave behind a population that is gradually ageing.

In general, population groups living in administrative areas on or near international borders were much younger than the Union median (27.1 years). Interestingly, whilst this is the case in areas bordering Bangladesh, India, China, and Thailand, it does not apply to those Districts and Townships in Shan State that share a border with Laos; here the median age was much closer to the national average.

Figure 2.5 Median Age, Districts

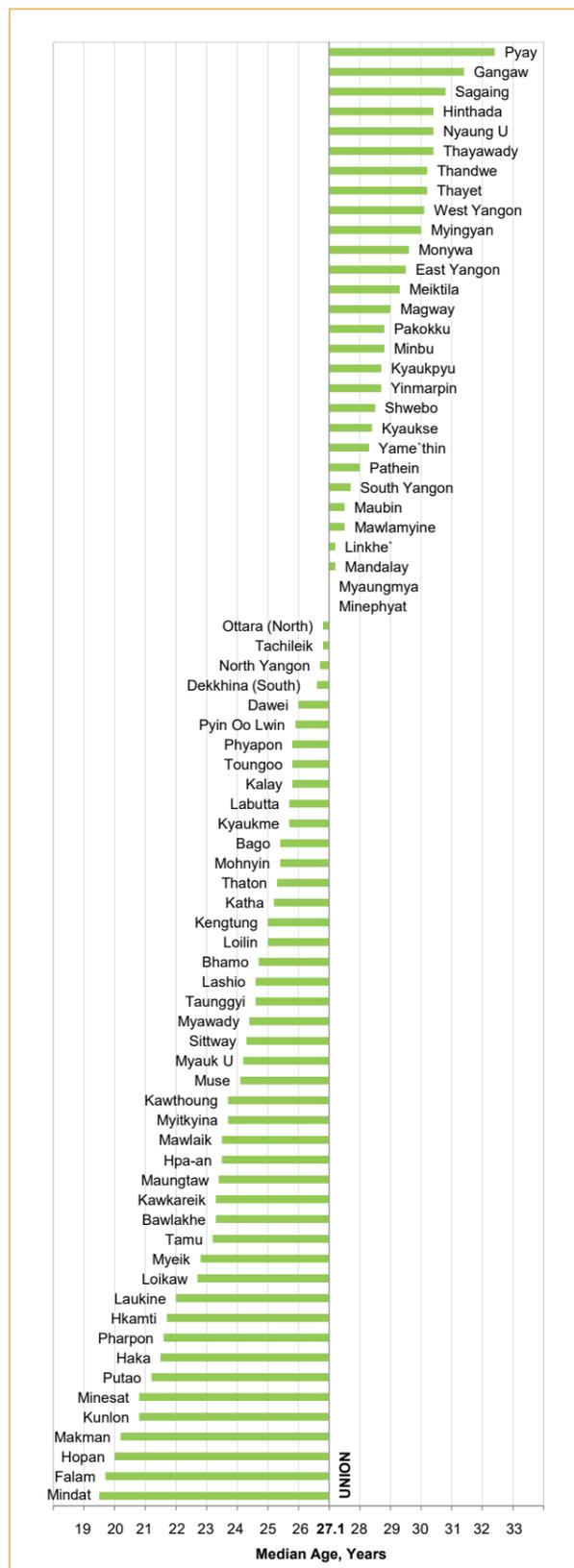
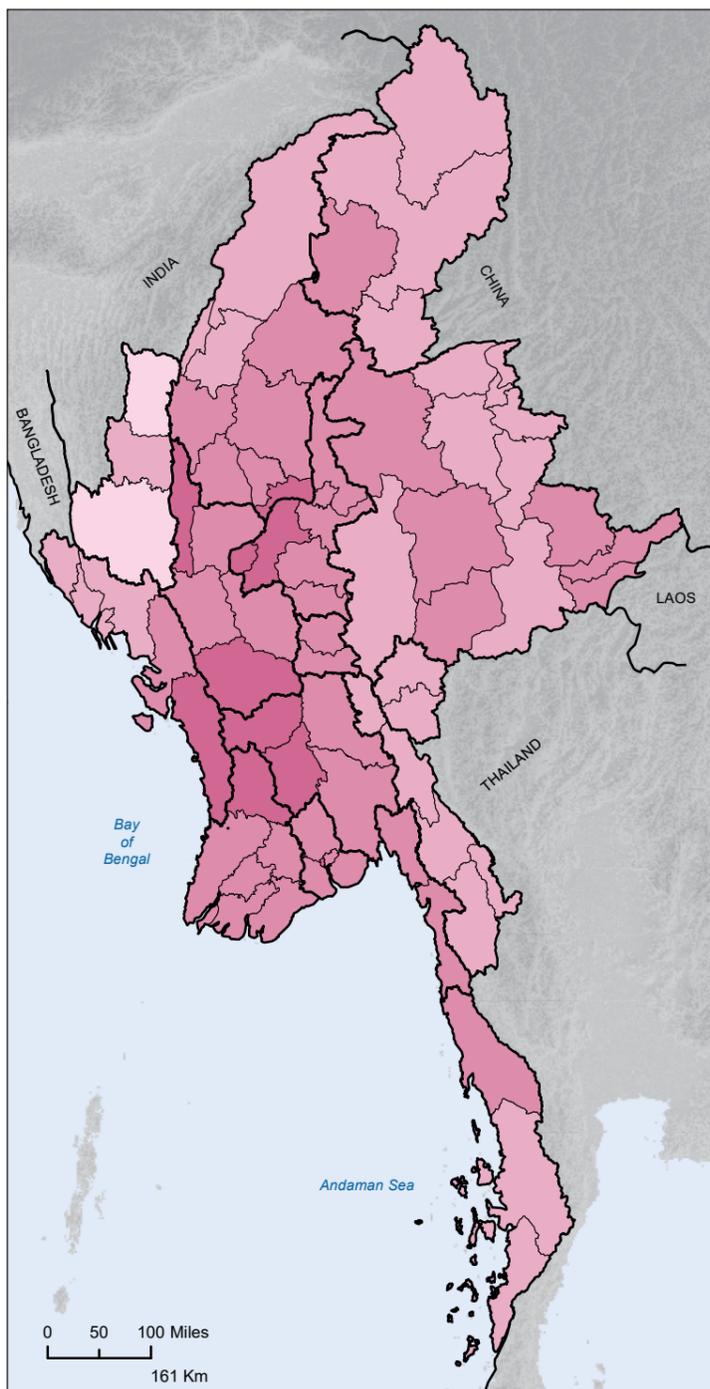


Table 2.5 Median Age, States/Regions and Districts

State/Region/District	Median Age	State/Region/District	Median Age	State/Region/District	Median Age
UNION	27.1	Myeik	22.9	Yangon	28.3
Kachin	24.7	Kawthoung	23.8	North Yangon	26.8
Myitkyina	23.8	Bago	28.1	East Yangon	29.6
Mohnyin	25.5	Bago	25.5	South Yangon	27.8
Bhamo	24.8	Toungoo	25.9	West Yangon	30.2
Putao	21.3	Pyay	32.5	Shan	24.4
Kayah	22.9	Thayawady	30.5	Taunggyi	24.7
Loikaw	22.8	Magway	29.4	Loilin	25.1
Bawlakhe	23.4	Magway	29.1	Linkhe'	27.3
Kayin	23.6	Minbu	28.9	Lashio	24.7
Hpa-An	23.6	Thayet	30.3	Muse	24.2
Pharpon	21.7	Pakokku	28.9	Kyaukse	25.8
Myawady	24.5	Gangaw	31.5	Kunlon	20.9
Kawkareik	23.4	Mandalay	28.2	Laukine	22.1
Chin	20.1	Mandalay	27.3	Hopan	20.1
Haka	21.6	Pyin Oo Lwin	26.0	Makman	20.3
Falam	19.8	Kyaukse	28.5	Kengtung	25.1
Mindat	19.6	Myingyan	30.1	Minesat	20.9
Sagaing	27.4	Nyaung U	30.5	Tachileik	26.9
Sagaing	30.9	Yame'thin	28.4	Minephyat	27.1
Shwebo	28.6	Meiktila	29.4	Ayeyawady	27.7
Monywa	29.7	Mon	26.7	Patheingyi	28.1
Katha	25.3	Mawlamyine	27.6	Phyappon	25.9
Kalay	25.9	Thaton	25.4	Maubin	27.6
Tamu	23.3	Rakhine	26.0	Myaungmya	27.1
Mawlaik	23.6	Sittway	24.4	Labutta	25.8
Hkamti	21.8	Myauk U	24.3	Hinthada	30.5
Yinmarpin	28.8	Maungtaw	23.5	Nay Pyi Taw	26.8
Tanintharyi	24.0	Kyaukpyu	28.8	Ottara (North)	26.9
Dawei	26.1	Thandwe	30.3	Dekkhina (South)	26.7

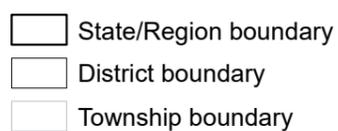
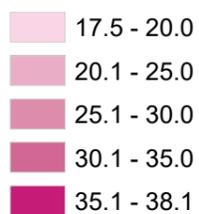
Map 2.5 Median Age

a) Districts

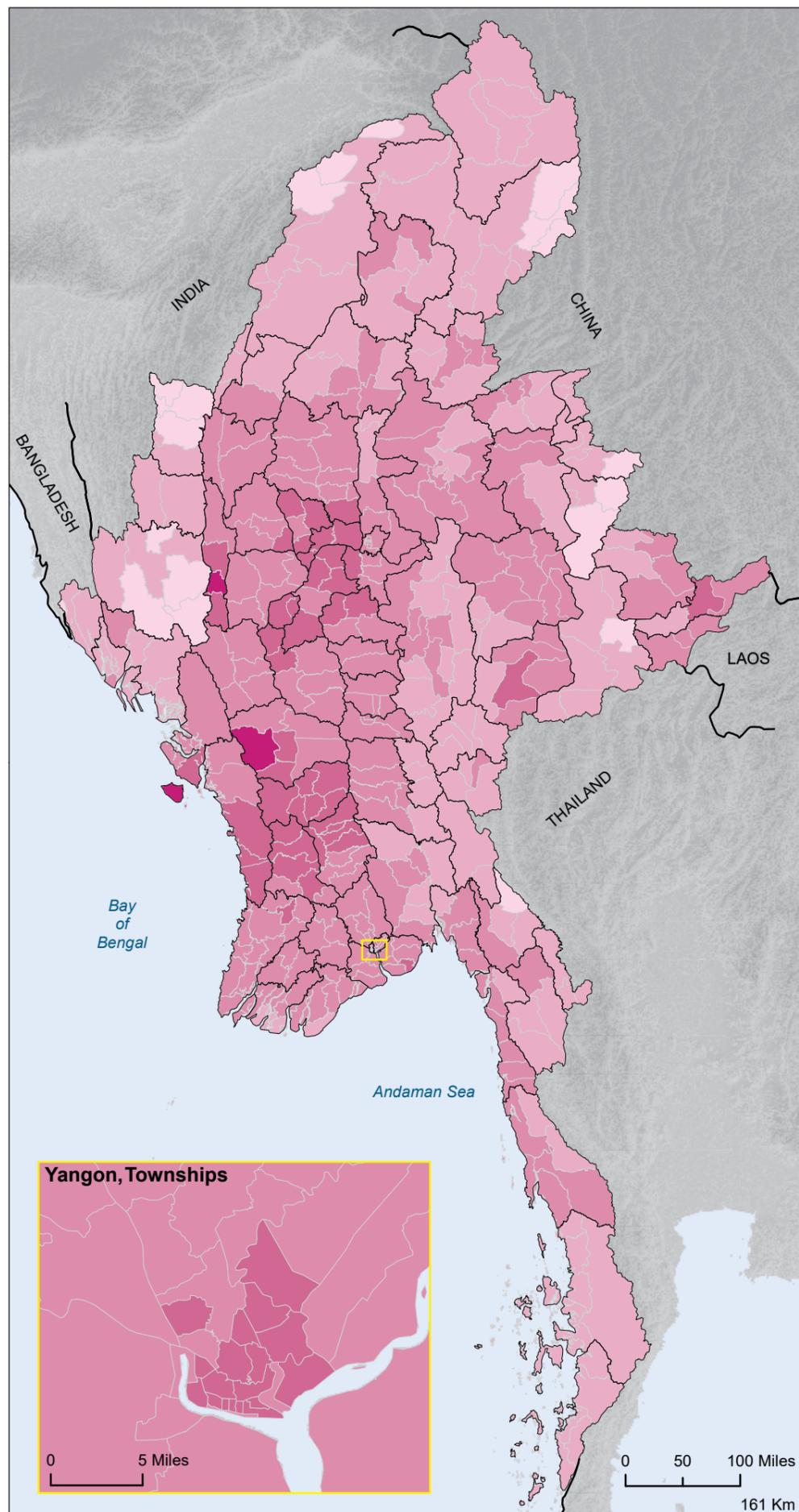


Median age of the population, in years

Average at Union level: 27.1



b) Townships



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census.

The median age for an administrative unit is the age that divides the population of that unit exactly in two, with half the population older and half the population younger than the median age.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

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2.6 Age Composition: Dependency Ratios

Dependency ratios express the relationship between the productive and non-productive proportions of population groups. The distinction is made based on age: productive members of the population are those of working age (15-64) and non-productive members are children (0-14) and the elderly (65 and over). Populations with high dependency ratios are of most concern to policymakers, because they indicate that large numbers of children and/or elderly are dependent on relatively small numbers of economically productive people.

The maps opposite show that, in general, child dependency rates are highest in the outer ring (Map 2.6b), whilst old-age dependency ratios are highest in the middle corridor (Map 2.6c). Table 2.6 shows that at the District level, Mindat has the highest child dependency ratio at 75.5. In Falam, Hopan, Kunlon, Putao and Haka, where child dependency ratios are all higher than 65, people of working age are supporting very large numbers of children. Districts with the highest proportions of elderly dependents include Kyaukpyu, highest at 13.9, and Thandwe, Myingyan, Hinthada and Sagaing, all with old-age dependency ratios of 12.0 or higher.

Figure 2.6 and Table 2.6 show that Chin and Kayin States and Tanintharyi Region have the highest total dependency ratios at the State/Region level. Yangon and Mandalay Regions and Nay Pyi Taw Union Territory have the lowest total dependency ratios. It is common throughout the world for total dependency ratios to be highest in predominantly rural areas and lowest in areas with large urban populations. High ratios for the remote, essentially rural Districts of Mindat, Falam, Haka, Putao, Kunlon, Hopan and Hpa-An, all of them 73.0 or higher, are consistent with this general pattern.

Figure 2.6 Dependency Ratios, Total, Child and Old-Age, States/Regions

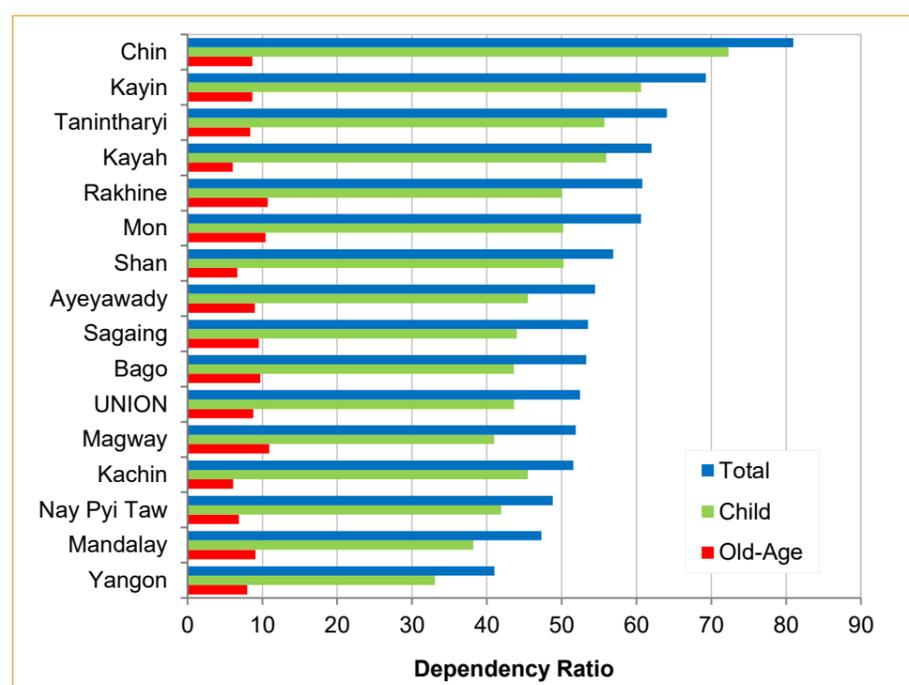


Table 2.6 Dependency Ratios, Total, Child and Old-Age, States/Regions and Districts

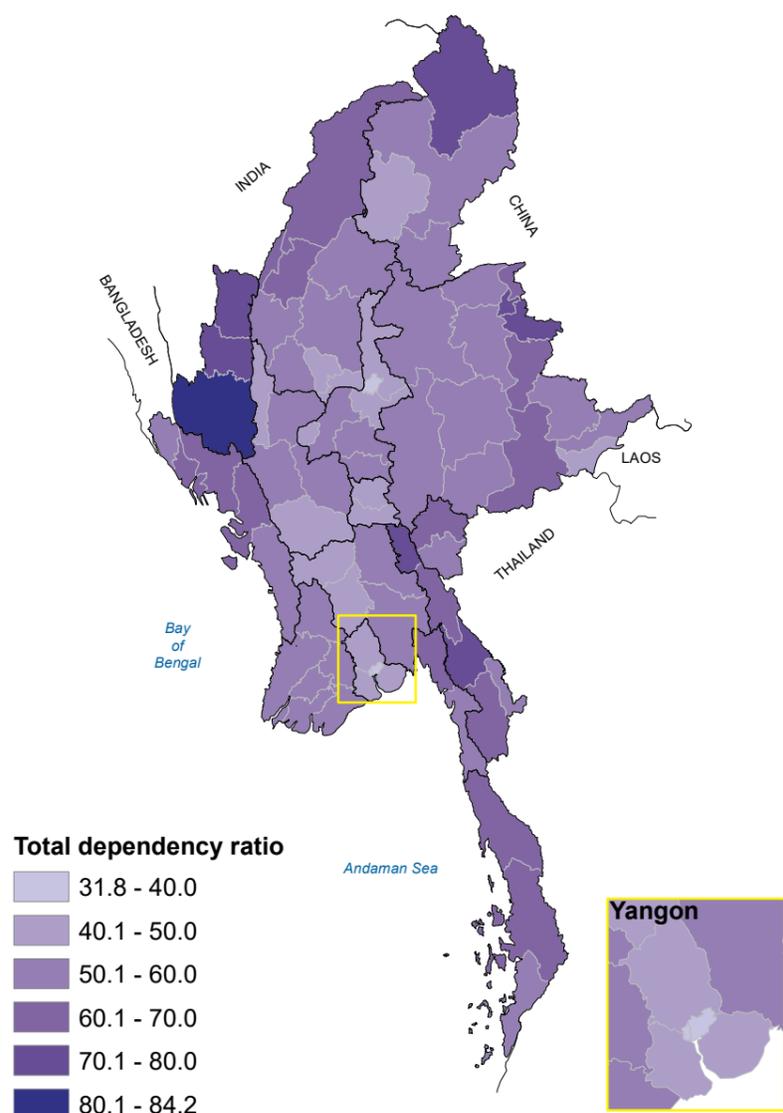
State/Region/District	Dependency Ratios		
	Total	Child	Old-Age
UNION	52.4	43.7	8.8
Kachin	51.5	45.5	6.1
Myitkyina	56.7	49.9	6.7
Mohnyin	42.9	38.1	4.8
Bhamo	56.7	49.5	7.2
Putao	74.4	66.0	8.4
Kayah	62.0	56.0	6.0
Loikaw	63.7	57.3	6.4
Bawlakhe	52.9	48.9	4.1
Kayin	69.3	60.6	8.7
Hpa-An	73.0	63.0	10.0
Pharpon	66.8	60.7	6.1
Myawady	56.1	51.7	4.4
Kawkareik	69.7	61.0	8.7
Chin	80.9	72.3	8.7
Haka	75.9	65.8	10.2
Falam	79.9	72.3	7.7
Mindat	84.2	75.5	8.7
Sagaing	53.5	44.0	9.5
Sagaing	47.0	35.0	12.0
Shwebo	52.5	41.8	10.8
Monywa	47.3	36.4	10.9
Katha	56.2	48.7	7.5
Kalay	55.0	47.3	7.6
Tamu	64.3	58.0	6.3
Mawlaik	66.6	58.2	8.4
Hkamti	63.7	58.5	5.2
Yinmarpin	52.8	42.2	10.7
Tanintharyi	64.1	55.7	8.4
Dawei	65.2	53.6	11.6

State/Region/District	Dependency Ratios		
	Total	Child	Old-Age
Myeik	64.9	57.6	7.2
Kawthoung	59.3	54.3	5.0
Bago	53.3	43.6	9.7
Bago	59.2	50.7	8.5
Toungoo	58.0	49.1	9.0
Pyay	41.8	30.8	10.9
Thayawady	49.7	38.5	11.2
Magway	51.9	41.0	10.9
Magway	53.9	42.6	11.2
Minbu	50.7	40.6	10.1
Thayet	45.7	35.4	10.3
Pakokku	56.1	44.6	11.5
Gangaw	48.1	36.8	11.3
Mandalay	47.3	38.2	9.1
Mandalay	39.7	32.8	6.9
Pyin Oo Lwin	49.5	42.5	7.1
Kyaukse	47.5	38.9	8.6
Myingyan	52.7	40.3	12.4
Nyaung U	48.3	37.2	11.0
Yame'thin	50.9	40.6	10.2
Meiktila	51.8	40.4	11.3
Mon	60.6	50.2	10.4
Mawlamyine	58.6	47.6	11.0
Thaton	63.7	54.2	9.5
Rakhine	60.8	50.0	10.7
Sittway	61.4	52.3	9.1
Myauk U	64.6	55.2	9.5
Maungtaw	59.8	53.7	6.1
Kyaukpyu	61.8	47.9	13.9
Thandwe	52.1	39.5	12.7

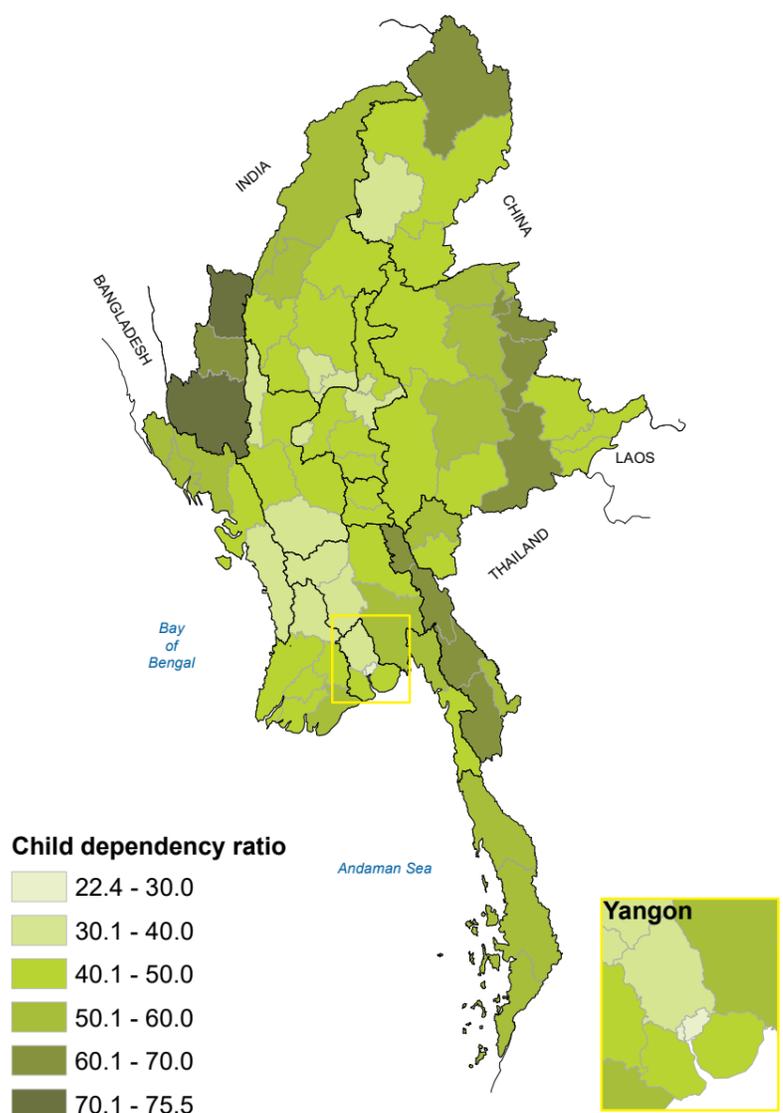
State/Region/District	Dependency Ratios		
	Total	Child	Old-Age
Yangon	41.0	33.1	8.0
North Yangon	42.7	36.1	6.6
East Yangon	38.4	29.5	8.8
South Yangon	49.7	41.8	7.9
West Yangon	31.8	22.4	9.4
Shan	56.9	50.2	6.7
Taunggyi	53.6	47.3	6.3
Lolilin	58.0	51.6	6.5
Linkhe'	51.8	44.0	7.8
Lashio	57.5	50.4	7.1
Muse	57.7	50.6	7.1
Kyaukme	54.2	47.2	7.0
Kunlon	74.2	66.3	7.9
Laukine	62.5	55.9	6.6
Hopan	73.9	66.3	7.6
Makman	68.3	62.4	6.0
Kengtung	55.0	47.9	7.1
Minesat	67.7	62.6	5.1
Tachileik	47.3	41.1	6.2
Minephyat	52.1	44.8	7.4
Ayeyawady	54.5	45.5	9.0
Pathein	52.1	43.5	8.6
Phyapon	58.1	50.9	7.3
Maubin	55.1	45.7	9.4
Myaungmya	55.7	47.5	8.3
Labutta	56.7	49.8	7.0
Hinthada	52.0	39.8	12.2
Nay Pyi Taw	48.8	41.9	6.9
Ottara (North)	49.7	42.9	6.8
Dekkhhina (South)	48.0	41.1	6.9

Map 2.6 Dependency Ratios, Districts

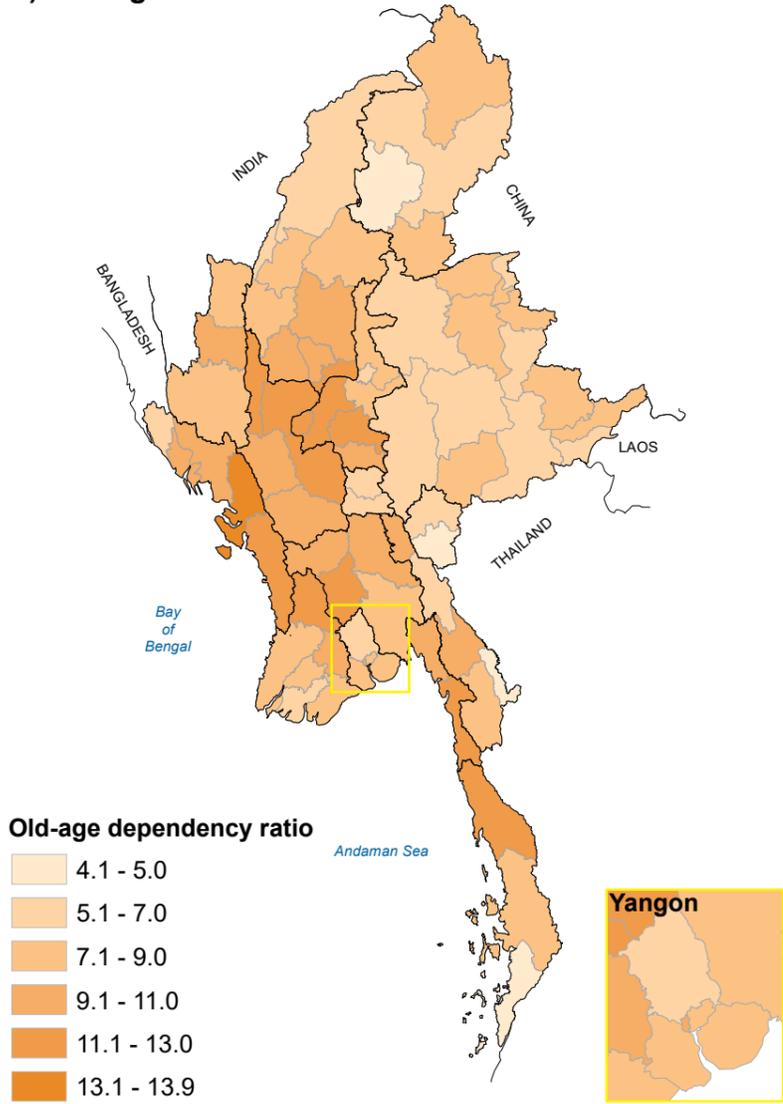
a) Total



b) Child



c) Old-Age



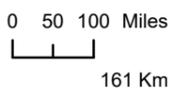
Dependency ratios

Total dependency ratio: people aged 0-14 and 65 and over per 100 persons aged 15-64
Average at Union level: 52.4

Child dependency ratio: people aged 0-14 per 100 persons aged 15-64
Average at Union level: 43.7

Old-age dependency ratio: people aged 65 and over per 100 persons aged 15-64
Average at Union level: 8.0

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

2.7 Sex Ratios

The sex ratio indicates the balance between the number of males and the number of females in any single population group. It is expressed as the number of males per 100 females in the group. For Myanmar's total population at the time of the 2014 Census, the sex ratio was 93 males per 100 females.

In comparison to the 1983 census, the 2014 Census showed a marked decrease in the number of males in relation to the number of females. The sex ratio fell from 98.6 in 1983 (Immigration and Manpower Department, 1986, pp 1-14), to 93 in 2014. This decrease is likely to be explained by a combination of physical and behavioural differences between the sexes. Physical

differences are evident in mortality rates, sex ratios at birth and life expectancy. Behavioural differences are found in migration rates, lifestyle choices and exposure to risk. The influence of sex-specific rates of international outmigration is particularly strong in Myanmar, where the relatively large numbers of males emigrating from the country is leaving behind an increasingly female-dominated population.

Sex ratios vary considerably between Myanmar's States/Regions (Figure 2.7 and Table 2.7), and its Districts and Townships (Table 2.7 and Map 2.7). Numbers of males and females are equal in Kayah and Shan States. Differences between numbers of males

and females are largest in Magway Region (86.3) and Kachin State (108.3). However, while in Magway and adjacent States/Regions low ratios are consistent among all Districts and Townships, in Kachin State only Mohnyin District shows a large imbalance between numbers of males and females (126.2). Map 2.7b shows geographic variations in sex ratios most clearly and in most detail. The most striking feature of the distribution is the large numbers of males in relation to females in Townships bordering China, Thailand and parts of India. This is largely caused by the greater mobility of males, who migrate towards international borders in larger numbers than females in search of work.

Figure 2.7 Sex Ratios, States/Regions

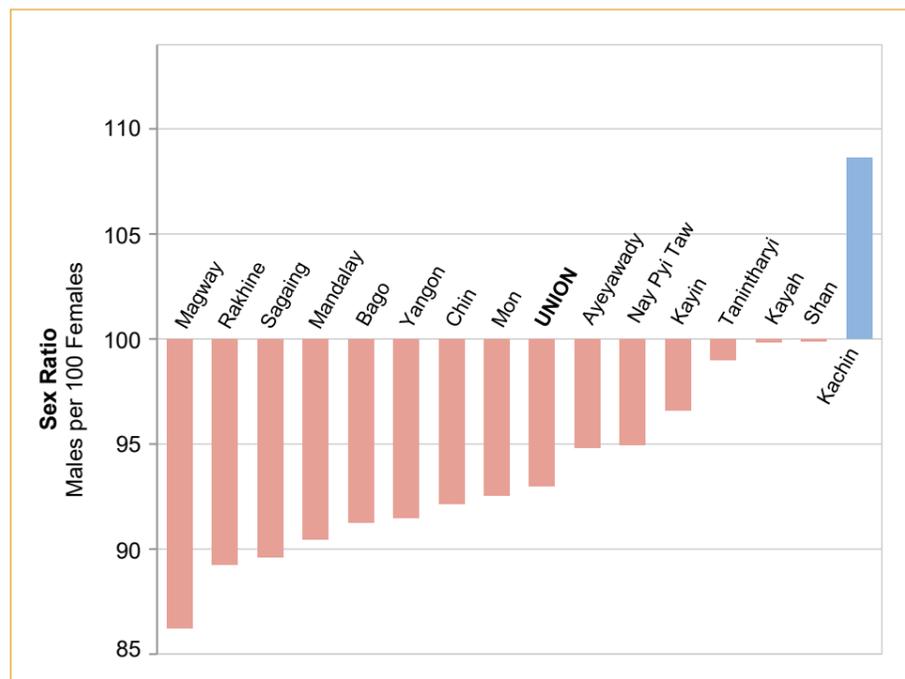


Table 2.7 Male and Female Populations and Sex Ratios, States/Regions and Districts

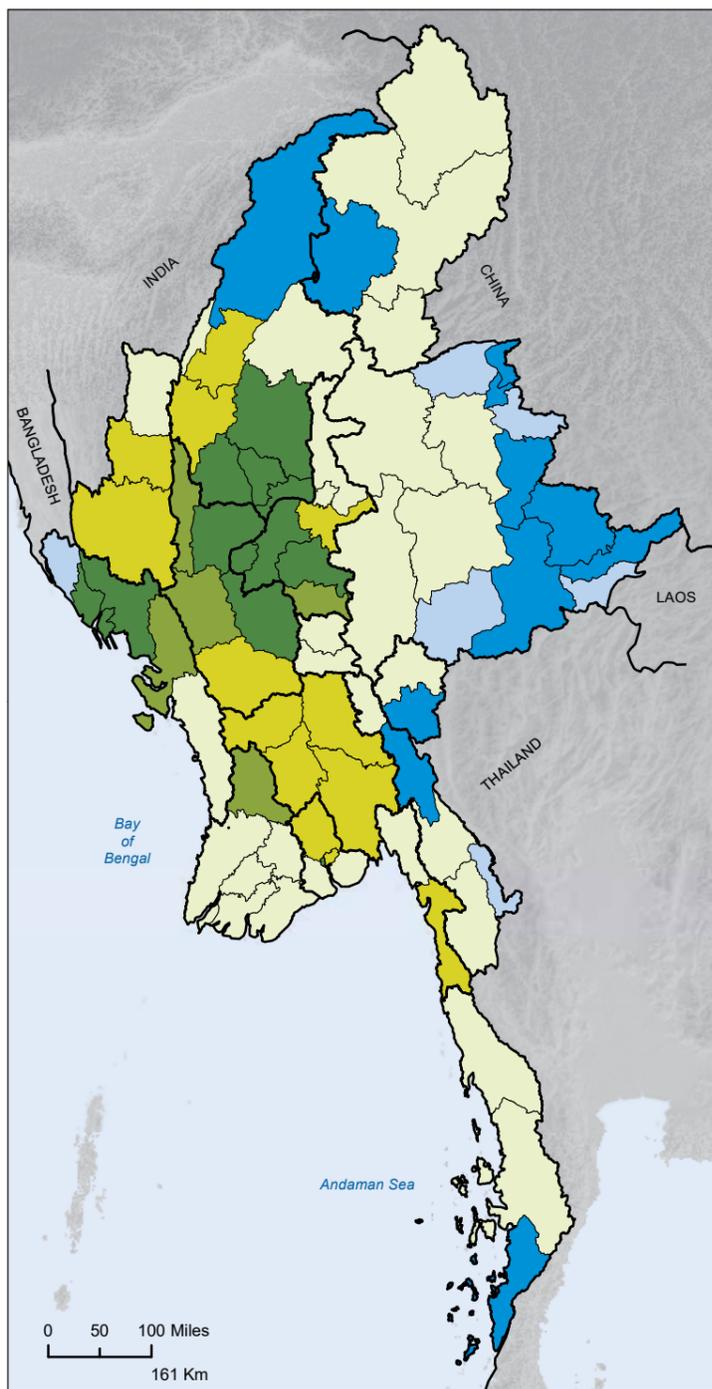
State/Region District	Enumerated Population			Sex Ratio
	Both Sexes	Male	Female	
UNION	50,279,900	24,228,714	26,051,186	93.0
Kachin	1,642,841	855,353	787,488	108.6
Myitkyina	531,456	263,088	268,368	98.0
Mohnyin	673,608	375,822	297,786	126.2
Bhamo	346,520	171,077	175,443	97.5
Putao	91,257	45,366	45,891	98.9
Kayah	286,627	143,213	143,414	99.9
Loikaw	243,718	119,833	123,885	96.7
Bawlakhe	42,909	23,380	19,529	119.7
Kayah	1,504,326	739,127	765,199	96.6
Hpa-An	783,510	382,327	401,183	95.3
Pharpon	35,085	17,983	17,102	105.2
Myawady	210,540	107,607	102,933	104.5
Kawkareik	475,191	231,210	243,981	94.8
Chin	478,801	229,604	249,197	92.1
Haka	98,726	47,401	51,325	92.4
Falam	167,578	81,242	86,336	94.1
Mindat	212,497	100,961	111,536	90.5
Sagaing	5,325,347	2,516,949	2,808,398	89.6
Sagaing	520,591	240,046	280,545	85.6
Shwebo	1,433,343	661,016	772,327	85.6
Monywa	757,358	346,247	411,111	84.2
Katha	861,283	417,710	443,573	94.2
Kalay	509,368	245,444	263,924	93.0
Tamu	114,869	57,007	57,862	98.5
Mawlaik	164,008	78,924	85,084	92.8
Hkamti	422,692	219,578	203,114	108.1
Yinmarpin	541,835	250,977	290,858	86.3
Tanintharyi	1,408,401	700,619	707,782	99.0
Dawei	493,576	239,073	254,503	93.9

State/Region District	Enumerated Population			Sex Ratio
	Both Sexes	Male	Female	
Myeik	693,087	345,671	347,416	99.5
Kawthoung	221,738	115,875	105,863	109.5
Bago	4,867,373	2,322,338	2,545,035	91.2
Bago	1,770,785	846,110	924,675	91.5
Toungoo	1,123,355	534,564	588,791	90.8
Pyay	910,902	434,551	476,351	91.2
Thayawady	1,062,331	507,113	555,218	91.3
Magway	3,917,055	1,813,974	2,103,081	86.3
Magway	1,235,030	567,235	667,795	84.9
Minbu	687,575	322,140	365,435	88.2
Thayet	738,047	353,887	384,160	92.1
Pakokku	1,005,545	451,887	553,658	81.6
Gangaw	250,858	118,825	132,033	90.0
Mandalay	6,165,723	2,928,367	3,237,356	90.5
Mandalay	1,726,889	841,914	884,975	95.1
Pyin Oo Lwin	1,001,945	495,800	506,145	98.0
Kyaukse	741,071	353,126	387,945	91.0
Myingyan	1,055,957	475,403	580,554	81.9
Nyaung U	239,947	109,476	130,471	83.9
Yame'thin	518,384	244,603	273,781	89.3
Meiktila	881,530	408,045	473,485	86.2
Mon	2,054,393	987,392	1,067,001	92.5
Mawlamyine	1,232,221	587,676	644,545	91.2
Thaton	822,172	399,716	422,456	94.6
Rakhine	2,098,807	989,702	1,109,105	89.2
Sittway	535,583	248,670	286,913	86.7
Myauk U	669,131	309,949	359,182	86.3
Maungtau	96,330	48,816	47,514	102.7
Kyaukpyu	439,923	207,308	232,615	89.1
Thandwe	357,840	174,959	182,881	95.7

State/Region District	Enumerated Population			Sex Ratio
	Both Sexes	Male	Female	
Yangon	7,360,703	3,516,403	3,844,300	91.5
North Yangon	2,606,670	1,253,082	1,353,588	92.6
East Yangon	2,366,659	1,127,169	1,239,490	90.9
South Yangon	1,417,724	689,685	728,039	94.7
West Yangon	969,650	446,467	523,183	85.3
Shan	5,824,432	2,910,710	2,913,722	99.9
Taunggyi	1,701,338	842,594	858,744	98.1
Loilin	565,162	276,907	288,255	96.1
Linkhe'	139,483	70,572	68,911	102.4
Lashio	612,248	299,530	312,718	95.8
Muse	453,495	227,159	226,336	100.4
Kyaukme	770,065	376,103	393,962	95.5
Kunlon	58,774	30,900	27,874	110.9
Laukine	154,912	81,104	73,808	109.9
Hopan	228,880	116,573	112,307	103.8
Makman	241,884	124,478	117,406	106.0
Kengtung	366,861	187,993	178,868	105.1
Minesat	243,571	128,590	114,981	111.8
Tachileik	177,313	90,124	87,189	103.4
Minephyat	110,446	58,083	52,363	110.9
Ayeyawady	6,184,829	3,009,808	3,175,021	94.8
Patheingyi	1,630,716	795,256	835,460	95.2
Phyapong	1,033,053	509,353	523,700	97.3
Maubin	973,948	472,550	501,398	94.2
Myaungmya	781,844	381,299	400,545	95.2
Labutta	626,558	312,039	314,519	99.2
Hinthada	1,138,710	539,311	599,399	90.0
Nay Pyi Taw	1,160,242	565,155	595,087	95.0
Ottara (North)	526,497	257,992	268,505	96.1
Dekkhina (South)	633,745	307,163	326,582	94.1

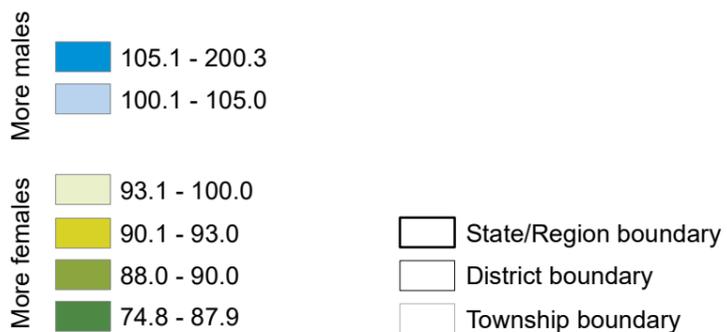
Map 2.7 Sex Ratios

a) Districts

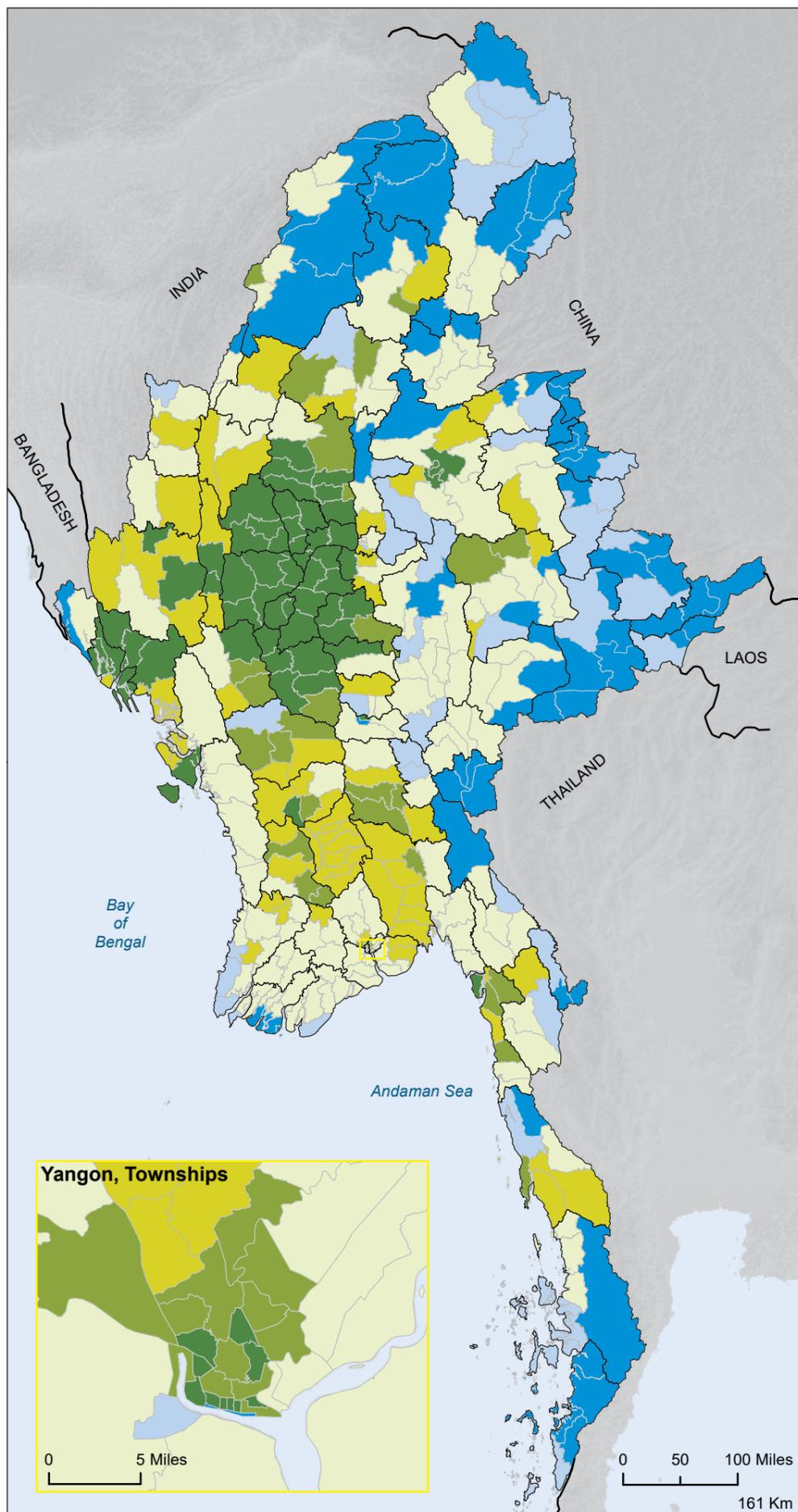


Number of males per 100 females

Average at Union level: 93.0



b) Townships



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census.

Sex ratios are calculated as the number of males living in an administrative unit, divided by the number of females living in that same unit, multiplied by 100.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

2.8 Urban and Rural Populations

The urban population is the number of people living in urban areas; conversely, the rural population is the number of people living in rural areas. This distinction sounds simple and clear, but internationally, there is no consensus on the definitions of urban and rural areas. Most countries make the distinction based on: some measure of population or housing density; consideration of the presence or absence of key infrastructure, including roads, an electricity network and water and sewage systems; and varying levels of access to services such as education, health, fire and rescue and public transportation. Exactly how these factors are measured, weighted and combined varies tremendously from country to country, in line with variations in social, economic and cultural practices.

The 2014 Myanmar Population and Housing Census adopted the definition established by the General Administration Department (GAD) of Myanmar's Ministry of Home Affairs, which divides the country's lowest level administrative areas simply into Wards (urban) and Village Tracts (rural). The distinction is based loosely on the factors mentioned above. At the time of the 2014 Census, Myanmar had 3,071 Wards and 13,620 Village Tracts (General Administration Department, 2013).

The 2014 Census data suggests that Myanmar is still a predominantly rural country, with only about 30 per cent of the population living in urban areas (Table 2.8). The dominance of rural green over urban brown is clear to see in Figure 2.8 and Map 2.8. A comparison of 30 per cent urban in 2014 with the 25 per cent reported by the 1983 census shows that the rate of urbanization

in Myanmar has remained very slow (Department of Population, 2016a). It is difficult to draw any definitive conclusions about rates of urbanization from the Census data because of the basis used for distinguishing between urban and rural areas. Further research is needed to determine whether GAD's Wards and Village Tracts accurately distinguish between areas based on the physical differences that characterize urban and rural areas, or are more arbitrary divisions of the territory delineated on some other basis purely for administrative purposes.

Almost 30 per cent of the total population of Myanmar live in urban areas, but in almost three quarters of the country's Townships (299 out of 413), the proportion of urban dwellers is less than the Union proportion. This is largely because the distribution is skewed by Myanmar's three major cities, which are home to about 50 per cent of the country's urban population - Yangon (5.21 million), Mandalay (1.22 million), and Nay Pyi Taw (1.16 million). As Map 2.8 shows, Myanmar's urban population is concentrated in a relatively small number of Townships in these three large cities, and in the capitals of States and Regions.

The city of Yangon can be defined as an 'urban agglomeration', since it includes more than one locality and their suburban fringes (UN DESA Statistics Division, 2015, p. 202). However, while East and West Yangon Districts had 99 and 100 per cent of their populations in urban areas respectively, North and South Yangon Districts only had 55 and 30 per cent urban, respectively.

Figure 2.8 Urban and Rural Share of Total Population, States/Regions

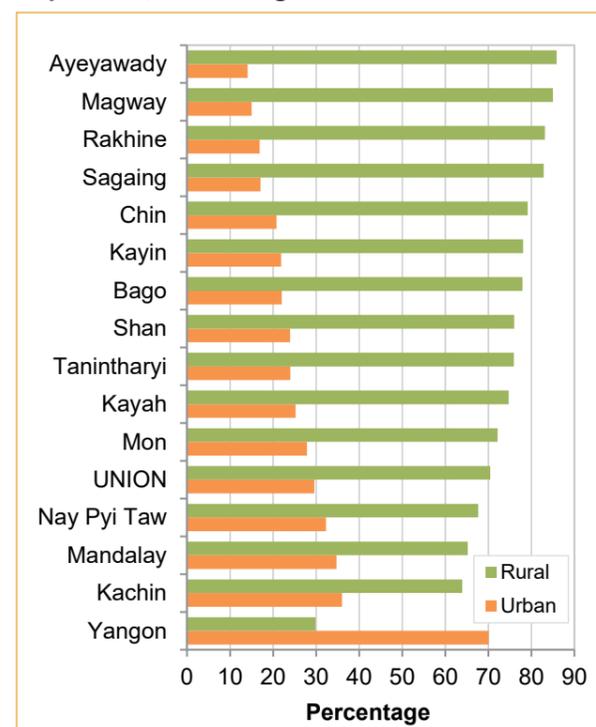


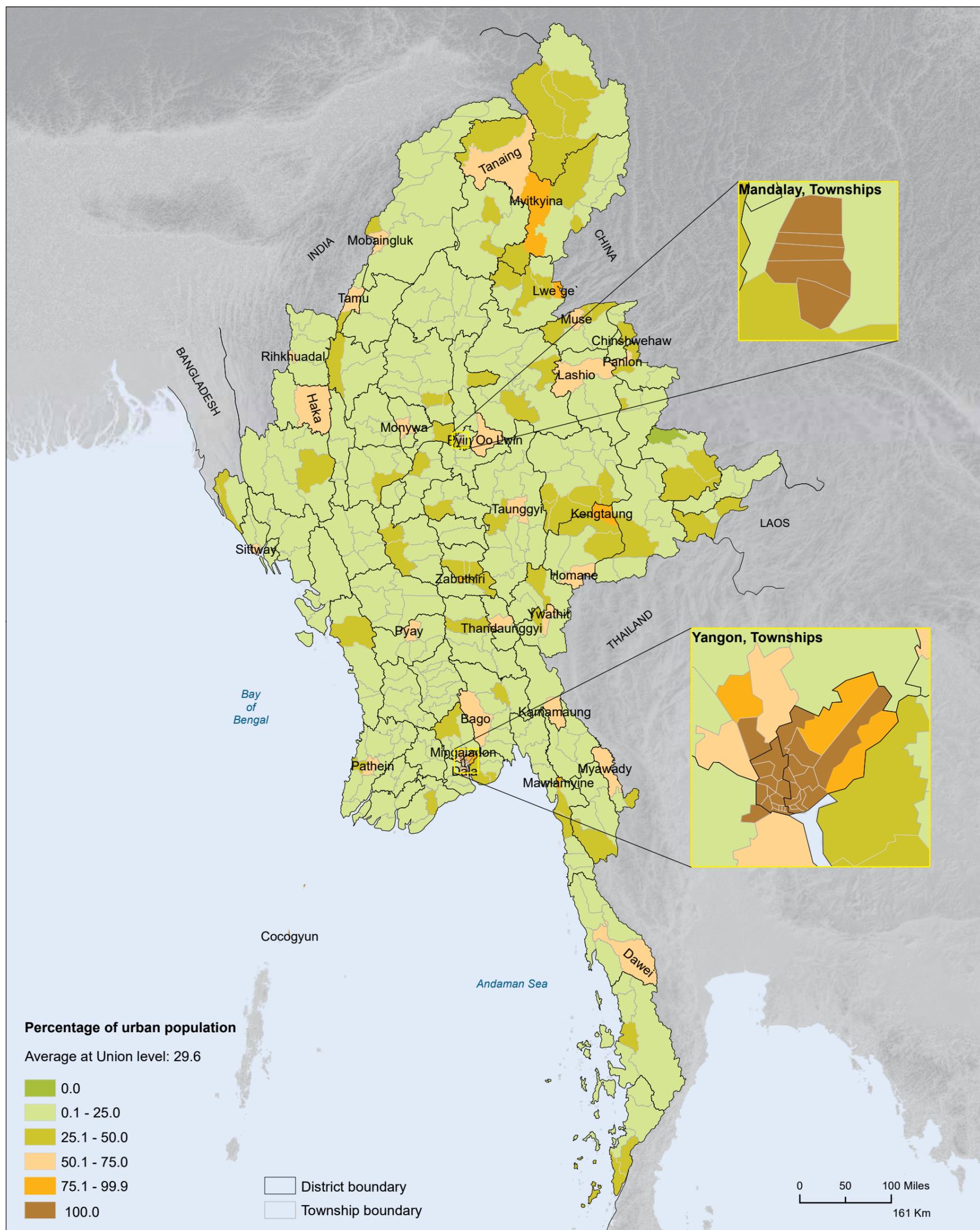
Table 2.8 Urban and Rural Share of Total Population, States/Regions and Districts

State/Region District	Enumerated Population			
	Urban and Rural	Urban	Rural	% Urban
UNION	50,279,900	14,877,943	35,401,957	29.6
Kachin	1,642,841	592,368	1,050,473	36.1
Myitkyina	531,456	314,180	217,276	59.1
Mohnyin	673,608	147,511	526,097	21.9
Bhamo	346,520	108,561	237,959	31.3
Putao	91,257	22,116	69,141	24.2
Kayah	286,627	72,418	214,209	25.3
Loikaw	243,718	62,783	180,935	25.8
Bawlaikhe	42,909	9,635	33,274	22.5
Kayin	1,504,326	329,166	1,175,160	21.9
Hpa-An	783,510	112,405	671,105	14.3
Pharpon	35,085	17,320	17,765	49.4
Myawady	210,540	116,580	93,960	55.4
Kawkareik	475,191	82,861	392,330	17.4
Chin	478,801	99,809	378,992	20.8
Haka	98,726	32,513	66,213	32.9
Falam	167,578	31,375	136,203	18.7
Mindat	212,497	35,921	176,576	16.9
Sagaing	5,325,347	911,335	4,414,012	17.1
Sagaing	520,591	105,785	414,806	20.3
Shwebo	1,433,343	178,184	1,255,159	12.4
Monywa	757,358	244,144	513,214	32.2
Katha	861,283	95,327	765,956	11.1
Kalay	509,368	142,792	366,576	28.0
Tamu	114,869	59,938	54,931	52.2
Mawlaik	164,008	18,605	145,403	11.3
Hkamti	422,692	47,219	375,473	11.2
Yinmarpin	541,835	19,341	522,494	3.6
Tanintharyi	1,408,401	338,419	1,069,982	24.0
Dawei	493,576	107,956	385,620	21.9

State/Region District	Enumerated Population			
	Urban and Rural	Urban	Rural	% Urban
Myeik	693,087	151,315	541,772	21.8
Kawthoung	221,738	79,148	142,590	35.7
Bago	4,867,373	1,072,336	3,795,037	22.0
Bago	1,770,785	464,741	1,306,044	26.2
Toungoo	1,123,355	231,736	891,619	20.6
Pyay	910,902	225,464	685,438	24.8
Thayawady	1,062,331	150,395	911,936	14.2
Magway	3,917,055	588,031	3,329,024	15.0
Magway	1,235,030	253,074	981,956	20.5
Minbu	687,575	68,646	618,929	10.0
Thayet	738,047	100,133	637,914	13.6
Pakokku	1,005,545	138,244	867,301	13.7
Gangaw	250,858	27,934	222,924	11.1
Mandalay	6,165,723	2,143,436	4,022,287	34.8
Mandalay	1,726,889	1,319,452	407,437	76.4
Pyin Oo Lwin	1,001,945	281,784	720,161	28.1
Kyaukse	741,071	81,503	659,568	11.0
Myingyan	1,055,957	167,951	888,006	15.9
Nyaung U	239,947	54,343	185,604	22.6
Yame'thin	518,384	59,912	458,472	11.6
Meiktila	881,530	178,491	703,039	20.2
Mon	2,054,393	572,189	1,482,204	27.9
Mawlamyine	1,232,221	434,092	798,129	35.2
Thaton	822,172	138,097	684,075	16.8
Rakhine	2,098,807	354,288	1,744,519	16.9
Sittway	535,583	133,664	401,919	25.0
Myauk U	669,131	90,141	578,990	13.5
Maungtau	96,330	22,181	74,149	23.0
Kyaukpyu	439,923	44,500	395,423	10.1
Thandwe	357,840	63,802	294,038	17.8

State/Region District	Enumerated Population			
	Urban and Rural	Urban	Rural	% Urban
Yangon	7,360,703	5,160,512	2,200,191	70.1
North Yangon	2,606,670	1,428,659	1,178,011	54.8
East Yangon	2,366,659	2,339,903	26,756	98.9
South Yangon	1,417,724	422,300	995,424	29.8
West Yangon	969,650	969,650	n/a	100.0
Shan	5,824,432	1,395,847	4,428,585	24.0
Taunggyi	1,701,338	463,988	1,237,350	27.3
Loilin	565,162	128,432	436,730	22.7
Linkhe`	139,483	43,882	95,601	31.5
Lashio	612,248	224,136	388,112	36.6
Muse	453,495	164,035	289,460	36.2
Kyaukme	770,065	119,469	650,596	15.5
Kunlon	58,774	5,549	53,225	9.4
Laukine	154,912	28,183	126,729	18.2
Hopan	228,880	29,553	199,327	12.9
Makman	241,884	17,617	224,267	7.3
Kengtung	366,861	72,535	294,326	19.8
Minesat	243,571	27,775	215,796	11.4
Tachileik	177,313	58,767	118,546	33.1
Minephyat	110,446	11,926	98,520	10.8
Ayeyawady	6,184,829	872,600	5,312,229	14.1
Pathein	1,630,716	303,954	1,326,762	18.6
Phyapon	1,033,053	135,509	897,544	13.1
Maubin	973,948	109,148	864,800	11.2
Myaungmya	781,844	94,433	687,411	12.1
Labutta	626,558	66,318	560,240	10.6
Hinthada	1,138,710	163,238	975,472	14.3
Nay Pyi Taw	1,160,242	375,189	785,053	32.3
Ottara (North)	526,497	145,181	381,316	27.6
Dekkhina (South)	633,745	230,008	403,737	36.3

Map 2.8 Urban and Rural Populations, Townships



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census.

The indicator gives the proportion of individuals in each District and Township that were living in urban areas. For the purposes of determining which people lived in urban areas and which people lived in rural areas, the 2014 Census adopted the Ministry of Home Affairs' General Administration Department designation of Wards as urban and Village Tracts as rural.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

2.9 Religion

The Census enumerated a total of 50,279,900 people at the place they were present on 29 March 2014 (a *de facto* enumeration). As noted in the Introduction to this atlas, some people in Kachin, Kayin and Rakhine were not enumerated in the 2014 Census (see Introduction, Enumerated and Estimated Populations, page XIII). Instead, their numbers were estimated from information collected during the enumeration mapping exercise prior to the actual enumeration. The estimated populations were 46,600 for Kachin State, 69,753 for Kayin State and 1,090,000 for Rakhine State. The total enumerated and non-enumerated population was therefore 51,486,253.

For the purpose of determining the numbers of people following each of the religions practiced in Myanmar, it was assumed that the 1,090,000 non-enumerated people in Rakhine (Table 2.9) were of the Islamic Faith. This estimated population is therefore included in the number and percentage of Muslims given for both the Union and for Rakhine State in Table 2.10. This assumption was made on the basis that: "The non-enumerated population in Rakhine belongs to a defined population group that is known to be primarily,

Table 2.9 Enumerated and Non-Enumerated Population, States/Regions

State/Region	Population (Number)		
	Enumerated	Non-Enumerated (Estimated)	Enumerated + Estimated
UNION	50,279,900	1,206,353	51,486,253
Kachin	1,642,841	46,600	1,689,441
Kayah	286,627	n/a	286,627
Kayin	1,504,326	69,753	1,574,079
Chin	478,801	n/a	478,801
Sagaing	5,325,347	n/a	5,325,347
Tanintharyi	1,408,401	n/a	1,408,401
Bago	4,867,373	n/a	4,867,373
Magway	3,917,055	n/a	3,917,055
Mandalay	6,165,723	n/a	6,165,723
Mon	2,054,393	n/a	2,054,393
Rakhine	2,098,807	1,090,000	3,188,807
Yangon	7,360,703	n/a	7,360,703
Shan	5,824,432	n/a	5,824,432
Ayeyawady	6,184,829	n/a	6,184,829
Nay Pyi Taw	1,160,242	n/a	1,160,242

if not wholly, of the Islamic faith" (Department of Population, 2016b). However, since there was less of a firm basis for similarly assuming the religion of the non-enumerated populations in Kachin and Kayin States, no assumptions were made and the religions of the estimated populations are shown as 'Not Enumerated, Religion not Assumed' in Figure 2.9 and Table 2.10.

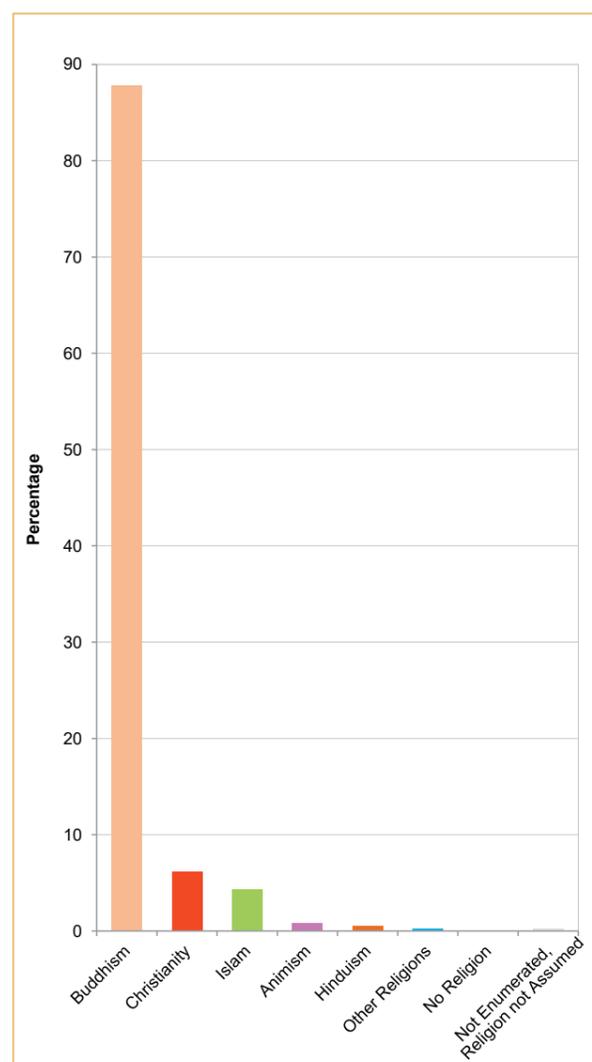
Map 2.9 shows the degree to which Myanmar is a predominantly Buddhist country. According to the 2014 Census, almost 90 per cent of the total enumerated and non-enumerated population in the Union was Buddhist. Though Magway Region (98.8 per cent) and Nay Pyi Taw Union Territory (96.8 per cent) had the largest proportions of Buddhists among their populations, Yangon, Mandalay and Ayeyawady Regions had the most Buddhists in terms of absolute numbers, each with more than 5.5 million (Table 2.10).

The extent to which Buddhism is Myanmar's most prevalent religion comes through very clearly on Map 2.9, which shows that in 2014 it had the biggest following in all but one State/Region. Chin State is the exception, where more than 85.4 per cent of the population was enumerated as Christian. Large numbers of Christians were also enumerated in Kayah (45.8 per cent of the population) and in Kachin (32.9 per cent). An approximate number is given for Kachin because the religion of the 46,000 people who were not enumerated was neither known nor assumed. Large numbers of Christians were also enumerated in Shan, but there the 570,000 Christians made up less than 10 per cent of the population. Followers of Islam were enumerated in all States and Regions, but only Rakhine has substantial numbers of Muslims. There, the 28,731 people enumerated as Muslims together with the estimated 1,090,000 assumed to be Muslims represented just over one-third of the total estimated population.

Fewer than 900,000 people were recorded as not being followers of one of these three religions. These people were either Animists, Hindus, adherents to other

unspecified faiths, of no religious persuasion or, in the cases of Kachin and Kayin, were not enumerated and so were not able to state their religion. These groups represent less than 2 per cent of the total estimated population of the Union.

Figure 2.9 Proportion of Population by Religion, Union



The percentages for 'Other Religions' (0.2 per cent), 'No Religion' (0.1 per cent) and 'Not Enumerated, Religion not Assumed' (0.2 per cent) are so small, that their bars in Figure 2.9 are barely visible.

Table 2.10 Number and Proportion of Population by Religion, States/Regions

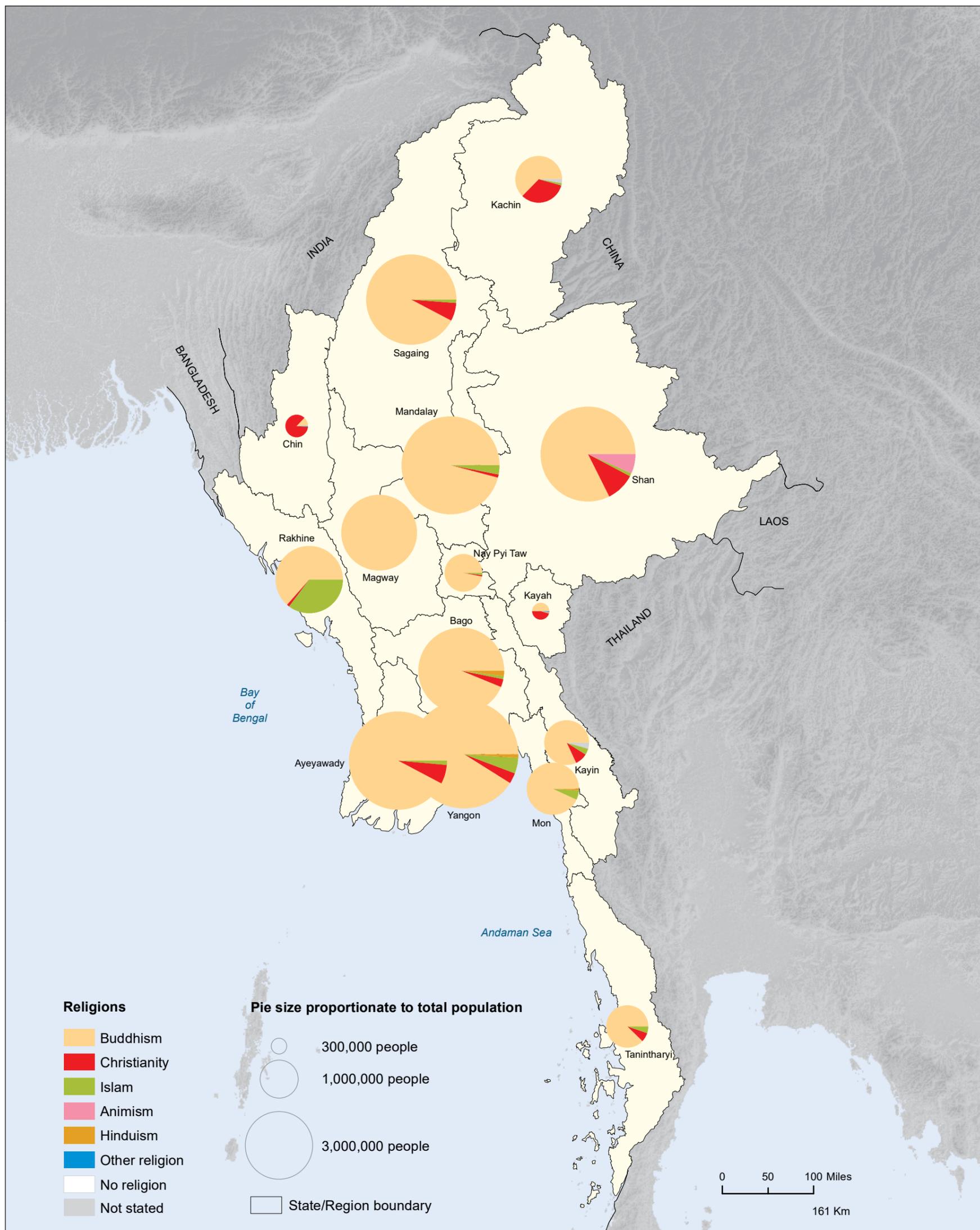
State/Region	Religion														Not Enumerated, Religion not Assumed	
	Buddhism		Christianity		Islam		Animism		Hinduism		Other Religions		No Religion		Number	%
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%		
UNION	45,185,449	87.8	3,172,479	6.2	2,237,495	4.3	408,045	0.8	252,763	0.5	82,825	0.2	30,844	0.1	116,353	0.2
Kachin	1,050,610	62.2	555,037	32.9	26,789	1.6	3,972	0.2	5,738	0.3	474	0.0	221	0.0	46,600	2.8
Kayah	142,896	49.9	131,237	45.8	3,197	1.1	5,518	1.9	269	0.1	3,451	1.2	59	0.0	0	0.0
Kayin	1,271,766	80.8	142,875	9.1	68,459	4.3	1,340	0.1	9,585	0.6	10,194	0.6	107	0.0	69,753	4.4
Chin	62,079	13.0	408,730	85.4	690	0.1	1,830	0.4	106	0.0	5,292	1.1	74	0.0	0	0.0
Sagaing	4,909,960	92.2	349,377	6.6	58,987	1.1	89	0.0	2,793	0.1	2,928	0.1	1,213	0.0	0	0.0
Tanintharyi	1,231,719	87.5	100,758	7.2	72,074	5.1	576	0.0	2,386	0.2	567	0.0	321	0.0	0	0.0
Bago	4,550,698	93.5	142,528	2.9	56,753	1.2	4,296	0.1	100,166	2.1	12,687	0.3	245	0.0	0	0.0
Magway	3,870,316	98.8	27,015	0.7	12,311	0.3	3,353	0.1	2,318	0.1	1,467	0.0	275	0.0	0	0.0
Mandalay	5,898,160	95.7	65,061	1.1	187,785	3.0	188	0.0	11,689	0.2	2,301	0.0	539	0.0	0	0.0
Mon	1,901,667	92.6	10,791	0.5	119,086	5.8	109	0.0	21,076	1.0	1,523	0.1	141	0.0	0	0.0
Rakhine	2,019,370	63.3	36,791	1.2	*1,118,731	35.1	2,711	0.1	9,791	0.3	759	0.0	654	0.0	0	0.0
Yangon	6,697,673	91.0	232,249	3.2	345,612	4.7	512	0.0	75,474	1.0	7,260	0.1	1,923	0.0	0	0.0
Shan	4,755,834	81.7	569,389	9.8	58,918	1.0	383,072	6.6	5,416	0.1	27,036	0.5	24,767	0.4	0	0.0
Ayeyawady	5,699,665	92.2	388,348	6.3	84,073	1.4	459	0.0	5,440	0.1	6,600	0.1	244	0.0	0	0.0
Nay Pyi Taw	1,123,036	96.8	12,293	1.1	24,030	2.1	20	0.0	516	0.0	286	0.0	61	0.0	0	0.0

* Total of 1,118,731 includes 28,731 individuals enumerated as Muslims and 1,090,000 individuals not enumerated but assumed to be Muslims.

Data is tabulated from left to right, starting with the largest and ending with the smallest percentage values at the Union level.

Some percentage totals may not add up to exactly 100 per cent because percentages for individual religions have been rounded to one decimal place.

Map 2.9 Religion, States/Regions



The base population for this indicator is individuals, both enumerated and estimated, that were living in conventional and institutional households at the time of the 2014 Census.

Percentages of less than 1.0 are given in Table 2.9 but they are too small to be shown as slices of the pies on the map.

The estimated population of Rakhine is assumed to be Muslim, but no assumptions are made as to the religious affiliation of the estimated population of Kachin and Kayah. See text opposite for a more detailed explanation of the Census' reporting of religion data.

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Source of statistical data: 2014 Population and Housing Census of Myanmar. Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

3

Fertility and Mortality

Knowing the rates at which people are expected to be born and die is important for a number of reasons. Most fundamentally, fertility and mortality rates to a large extent determine how fast a population will change in the future. Usually that change means growth, but in some countries, particularly those with very low fertility rates, population change attributable to natural factors can be negative. Rates of population change are also influenced by migration, so that even if fertility rates are low and mortality rates are high, a population can still grow if there are high rates of net in-migration. Being able to predict how fast populations are growing or shrinking is vital for policymakers, who need to make a wide range of decisions based on what they expect the population to be in the future. Authorities responsible for planning the provision of public health, education, housing, energy, transportation, recreation and social security services all need to base their long-term plans on predictions of how many people they will need to provide for 10, 20 and 30 years into the future. Reliable estimates of current fertility and mortality rates are crucial for population change projections to be accurate and useful.

This chapter presents a general overview of fertility and mortality estimates based on data collected from the 2014 Census. The questions used to collect the data are shown below. The chapter examines four key indicators, two for fertility and two for mortality. For the former, the analysis discusses total fertility and adolescent fertility; for the latter, it considers life expectancy and early-age mortality. In some sections, international comparisons of national-level data are made to show how rates in Myanmar differ from those in other countries. For Myanmar, Union-level estimates are useful for giving policymakers general guidance on how many more (or fewer) people to plan for in the future, but they can only give a general sense of how many more schools, teachers, hospitals, clinics, doctors, nurses, houses, power stations and new roads will be needed. It is equally important for policymakers and planning authorities to know where new infrastructure and services will be needed most, and for this they need to know how fertility rates, mortality rates and net migration rates vary in different parts of the country. For this reason, this chapter examines variations in fertility and mortality indicators in different parts of Myanmar, revealing distinct regional and local patterns and giving some indication as to where the population can be expected to grow fastest, and where slower growth or even population decline are more likely.

The analysis presented in this chapter highlights a number of key findings from the 2014 Census. The total fertility rate for the Union was slightly lower than the world average, and slightly higher than the average for the South-East Asia region. Compared with other countries in the region, Myanmar is roughly in the middle, with higher total fertility rates than Viet Nam, Malaysia, Thailand and Singapore, and lower total fertility rates than Cambodia, the Philippines, Lao PDR and Timor-Leste. Within Myanmar, there is a striking contrast between total fertility rates in the middle corridor and rates in the outer ring. For all three of the indicators presented - births, total fertility and adolescent fertility - rates were generally substantially lower for Districts and Townships in the middle corridor than they were for those areas in the outer ring.

The mortality indicators estimated from Census data are cause for serious concern. The analysis presented in Section 3.3 shows life expectancy in Myanmar, at 64.7 years, to be some six years shorter than both the world average and the average for the South-East Asia region. Life expectancy for males in Myanmar is particularly short, at just over 60 years compared with world and region averages of about 68 years. Similarly, with infant and under-five mortality, rates in Myanmar are by far the highest in the region, and compare unfavourably with the world average. The striking aspect of mortality as presented in this chapter is not so much internal geographic variability, but more that short life expectancy, especially for males, and high early-age mortality rates for both sexes, are common to all parts of the country.

Having said that, a study of how early-age mortality rates have changed in Myanmar since the 1960s offers some encouragement, showing that they have dropped from a high of almost 150 infant deaths per 1,000 live births in 1968, to the 2014 Census-based estimate of just over 60 (Department of Population, 2016c). Though current estimates of infant mortality rates are still high by international comparison, they have dropped substantially over the last 50 or 60 years.

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 <i>(If no children, write "00")</i>	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

DEATHS IN THE HOUSEHOLD DURING THE LAST 12 MONTHS						
41. Number of deaths in this household in the last 12 months (30-3-2013 to 29-3-2014) <input type="text"/>						
Serial number	Name of the deceased	Was the deceased Male or Female?	Age at death <i>If age is unknown, estimate age using local historic calendar. Record age in completed years.</i>	FEMALES AGED 15-49		
				Did the death occur during ...?		
				pregnancy?	delivery?	the first 6 weeks after delivery?

3.1 Total Fertility

This section presents data for crude birth rates and total fertility rates, both indicators of the reproductive rate of a population. Since the spatial distribution and regional patterns are similar for both (Maps 3.1a and 3.1b), the discussion here is limited only to total fertility rates. Total fertility is a summary estimate of the level of fertility in a population. Fertility can be estimated in a number of different ways, but the rates presented here give the average number of children that women in Myanmar are expected to give birth to during their reproductive age span of 15-49 years.

Based on data collected for the 2014 Census, the total fertility rate for the Union was estimated to be 2.5. This puts Myanmar towards the high end of countries in South-East Asia, in which total fertility rates mostly fall within the range from 1.2 in Singapore to 3.1 in

Lao PDR (Figure 3.1). Among the country's States and Regions, all but Chin State fell within the range 1.8 (Yangon Region) to 3.5 (Kayah State). But just as South-East Asia has Timor-Leste as an outlier, with the very high rate of 5.9, Myanmar has Chin State as its outlier, with a slightly lower rate of 5.0 (Figure 3.2).

In most countries, fertility rates are higher for rural populations than they are for urban populations. This is also the case in Myanmar, where in 2014 the rates at the Union level were 1.9 in urban areas and 2.8 in rural areas. Map 3.1b shows this pattern quite clearly. Townships in the middle corridor, where a higher proportion of the population lives in urban areas, were generally below the Union level of 2.5. Rates in the predominantly rural outer ring Townships were generally above the Union average.

What are the main reasons for this difference? Compared to women living in rural areas, those in urban areas are generally better-educated, have more opportunities for active engagement in income-earning employment, and have better access to family planning and health services (National Statistics Directorate, 2013). For all these reasons, women in urban areas are more likely to limit their childbearing by giving birth less frequently (wider spacing) and delaying childbirth until later in their lives.

For a detailed explanation of the methods used for estimating the total fertility rates presented here, see Department of Population, 2016d.

Figure 3.1 Total Fertility Rates, International Comparisons

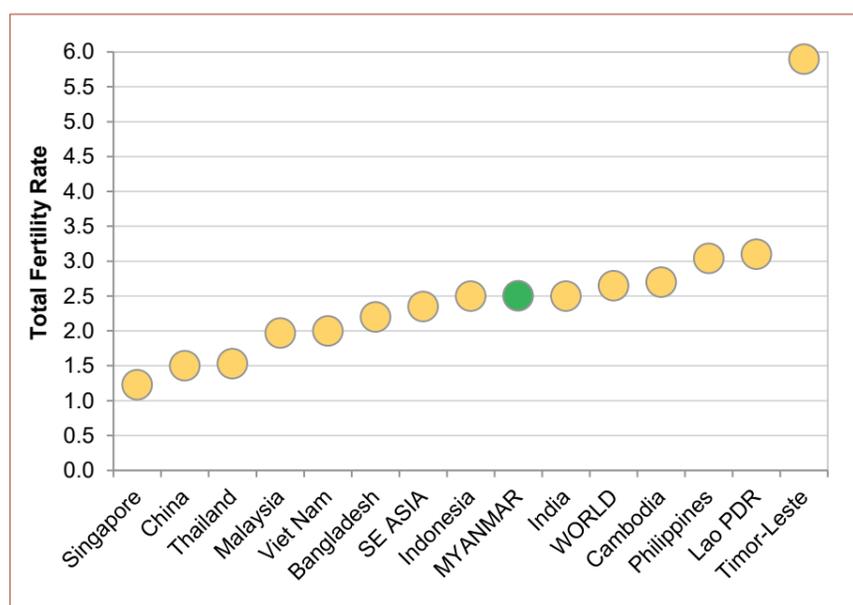


Figure 3.2 Total Fertility Rates, States/Regions

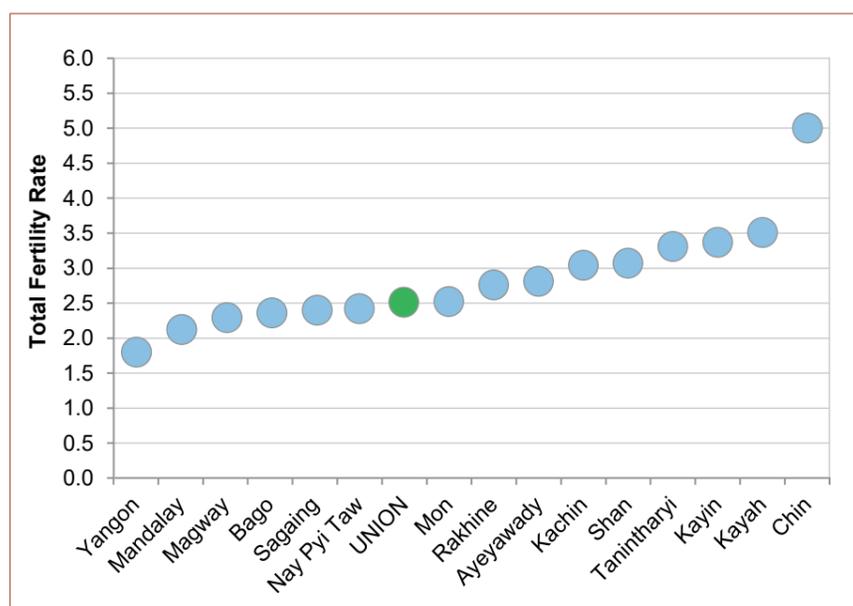


Table 3.1 Crude Birth Rates and Total Fertility Rates, States/Regions and Districts

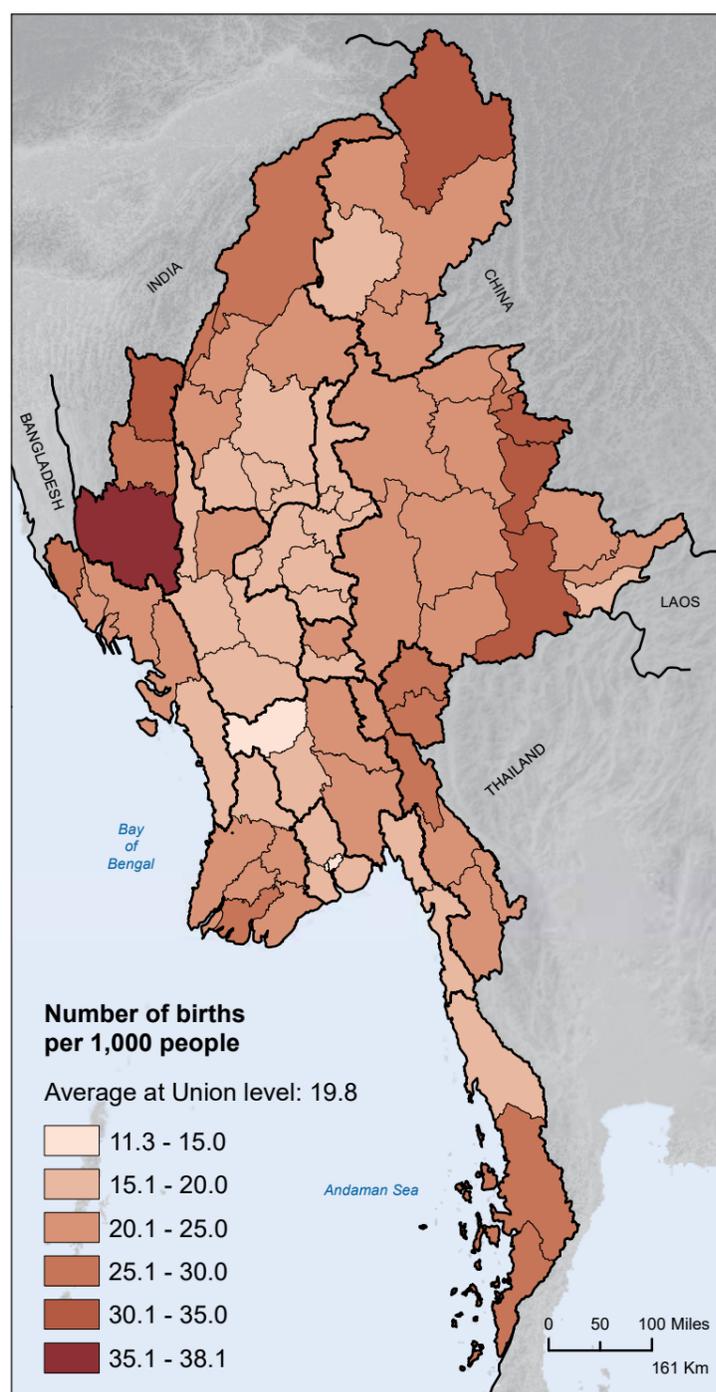
State/Region District	Crude Birth Rate	Total Fertility Rate	State/Region District	Crude Birth Rate	Total Fertility Rate	State/Region District	Crude Birth Rate	Total Fertility Rate
UNION	19.8	2.5	Myeik	25.1	3.4	Yangon	15.9	1.8
Kachin	19.9	3.0	Kawthoung	27.0	3.8	North Yangon	17.2	2.0
Myitkyina	21.8	3.1	Bago	18.6	2.4	East Yangon	14.3	1.6
Mohnyin	16.7	2.9	Bago	20.3	2.6	South Yangon	19.4	2.4
Bhamo	20.1	2.8	Toungoo	20.6	2.6	West Yangon	11.3	1.3
Putao	32.1	4.9	Pyay	14.4	1.8	Shan	23.2	3.1
Kayah	26.3	3.5	Thayawady	17.3	2.2	Taunggyi	22.0	2.7
Loikaw	26.3	3.5	Magway	18.9	2.3	Loilin	22.9	3.0
Bawlakhe	26.4	3.8	Magway	19.1	2.3	Linkhe'	20.5	2.8
Kayin	22.8	3.4	Minbu	19.0	2.3	Lashio	22.0	2.9
Hpa-An	21.6	3.4	Thayet	17.1	2.0	Muse	20.8	2.8
Pharpon	27.1	3.9	Pakokku	20.6	2.5	Kyaukme	21.2	2.8
Myawady	23.5	3.1	Gangaw	15.8	2.0	Kunlon	25.3	4.3
Kawkareik	24.1	3.5	Mandalay	17.6	2.1	Laukine	22.7	3.4
Chin	33.9	5.0	Mandalay	16.1	1.9	Hopan	34.1	4.9
Haka	28.2	4.1	Pyin Oo Lwin	19.7	2.5	Makman	34.8	5.0
Falam	31.8	4.8	Kyaukse	18.5	2.2	Kengtung	22.4	3.2
Mindat	38.1	5.6	Myingyan	17.4	2.1	Minesat	31.3	4.7
Sagaing	19.7	2.4	Nyaung U	16.2	1.9	Tachileik	19.8	2.5
Sagaing	15.3	1.9	Yame'thin	18.8	2.2	Minephyat	20.3	2.9
Shwebo	18.6	2.2	Meiktila	17.5	2.2	Ayeyawady	21.7	2.8
Monywa	16.6	1.9	Mon	17.9	2.5	Pathein	20.3	2.6
Katha	21.3	2.8	Mawlamyine	16.8	2.3	Phyapon	24.6	3.2
Kalay	21.2	2.6	Thaton	19.4	2.8	Maubin	21.4	2.8
Tamu	25.6	3.4	Rakhine	21.8	2.8	Myaungmya	23.0	3.0
Mawlaik	23.9	3.2	Sittway	21.4	2.6	Labutta	26.3	3.3
Hkamti	27.9	4.8	Myauk U	23.0	2.8	Hinthada	17.8	2.3
Yinmarpin	17.8	2.1	Maungtaw	26.1	3.4	Nay Pyi Taw	19.6	2.4
Tanintharyi	23.5	3.3	Kyaukpyu	21.8	3.0	Ottara (North)	20.5	2.5
Dawei	19.6	2.9	Thandwe	18.7	2.5	Dekkhhina (South)	18.8	2.4

Sources of Data:

Data for Myanmar: Department of Population, 2016d.

Data for all other countries: UN DESA, Population Division, 2015, Table A.22.

Map 3.1a Crude Birth Rates, Districts



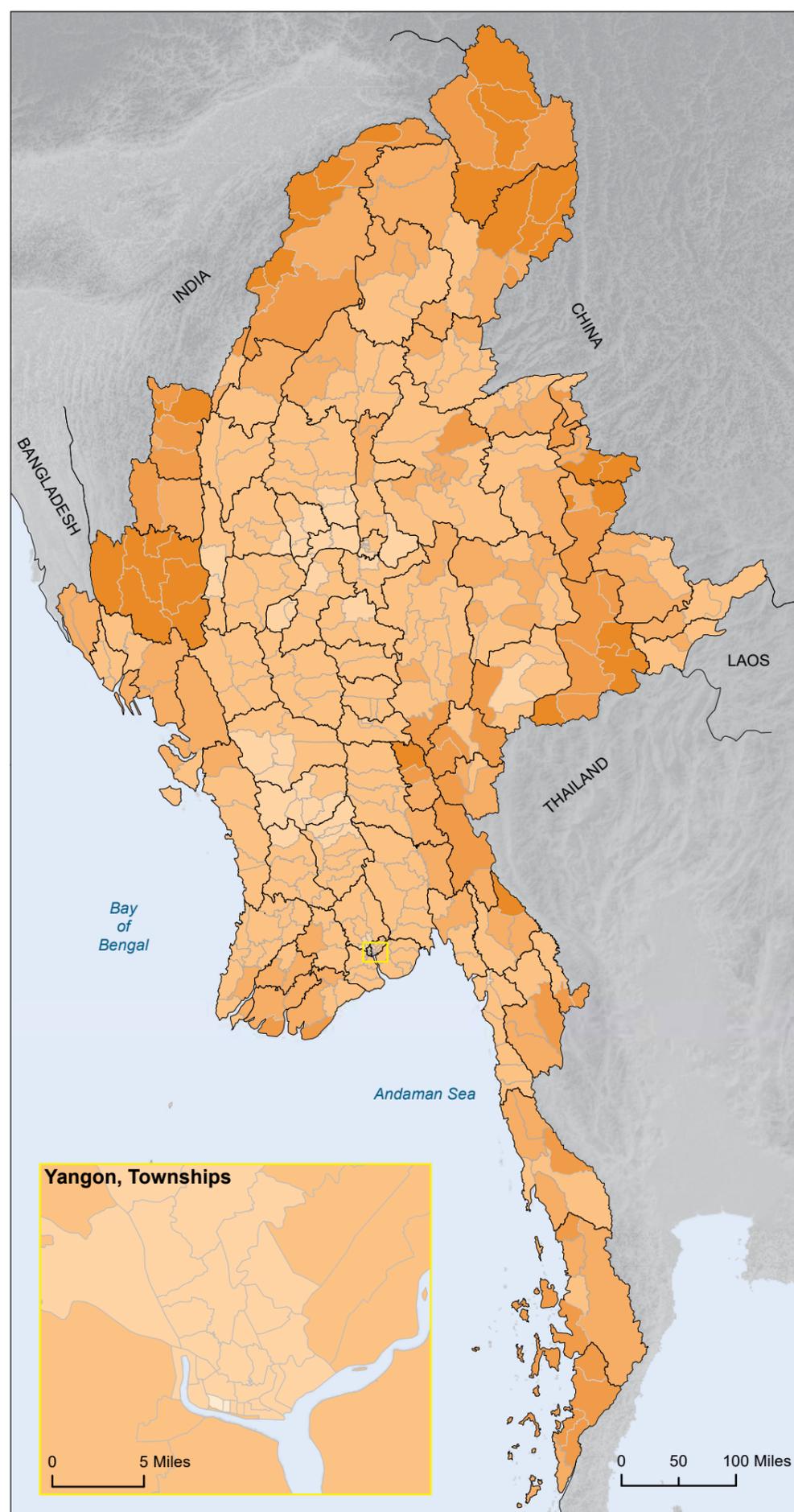
Average number of children per woman aged 15-49

Average at Union level: 2.5

- 0.9 - 1.0
- 1.1 - 2.0
- 2.1 - 3.0
- 3.1 - 4.0
- 4.1 - 5.0
- 5.1 - 7.1

- State/Region boundary
- District boundary
- Township boundary

Map 3.1b Total Fertility Rates, Townships



The base population for these indicators is all females aged 15-49 that were living in conventional and institutional households at the time of the 2014 Census.

The Crude Birth Rate is the number of births in a given year. It is calculated as the total number of live births in the 12 months prior to the Census divided by the enumerated population, multiplied by 1,000.

The Total Fertility Rate is the sum of five-year age-specific birth rates for females aged 15 to 49. It gives the average number of children that a woman would give birth to if all women lived to the end of their childbearing years (49) and bore children according to the current schedule of age-specific fertility rates.

The range of Total Fertility Rates is 1.3 to 5.6 in Table 3.1 and 0.9 to 7.1 in Map 3.1b. This difference is because Table 3.1 gives rates for the States/Regions and Districts, whereas Map 3.1b shows rates for Townships.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

3.2 Adolescent Fertility

Whereas the rates for total fertility discussed in the previous section estimated the number of children women give birth to during their entire reproductive lives, adolescent fertility gives age-specific rates for women aged 15-19 years. This section presents rates per thousand, based on the number of live births reported for women in this age group during the 12-month period prior to the Census. The data presented here aligns with Sustainable Development Goal 3 (see Box).

In 2014, the adolescent fertility rate for the Union was 33.2 births per thousand women aged 15-19 years. In urban areas, the rate was 22.3 per thousand, and in rural areas it was 38.0 per thousand (Department of Population, 2016d). At the State/Region level, Yangon Region had the lowest adolescent fertility rate at 20.8, and Shan State had the highest at 58.8 (Figure 3.3). Variability within States/Regions was substantial, ranging from lows of less than 20 births per thousand in West Yangon, East Yangon, Myingyan and Sagaing Districts, to highs of more than 90 births per thousand in Minephyat, Makman and Minesat Districts (Table 3.2).

Maps 3.2a and 3.2b show these regional and local variations very clearly. Shan State stands out as having by far the highest adolescent fertility rates in the country, though within Shan State there is a very

broad range, from 46.8 in Taunggyi District to 117.5 in Minesat District. Rates were moderately high in parts of other States/Regions, including Kawthoung District in Tanintharyi Region (63.4), Labutta District in Ayeyawady Region (56.3) and Haka District in Chin State (55.4). These Districts are all in the outer ring. Conversely, the lowest adolescent fertility rates were found in Districts in the middle corridor, particularly in those Districts noted above - West Yangon (11.0), East Yangon (17.4), Myingyan (17.8) and Sagaing (18.0) Districts.

As with total fertility rates, adolescent fertility rates were generally higher in rural areas than in urban areas, often for similar reasons. Women who bear children during their teenage years tend to be less well-educated, live in poorer households, be economically inactive and have limited access to health and family planning services than women who postpone childbirth until later in their lives. The main reason that high adolescent fertility rates are of concern to women, health professionals and policymakers is that births to young women often have adverse implications for the health of both the women and their children.

For a detailed explanation of the methods used for calculating the adolescent fertility rates presented here, see Department of Population, 2016d.



Sustainable Development Goal 3

Ensure healthy lives and promote well-being for all at all ages

Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

Indicator 3.7.2: Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group.

Figure 3.3 Adolescent Fertility Rates, States/Regions

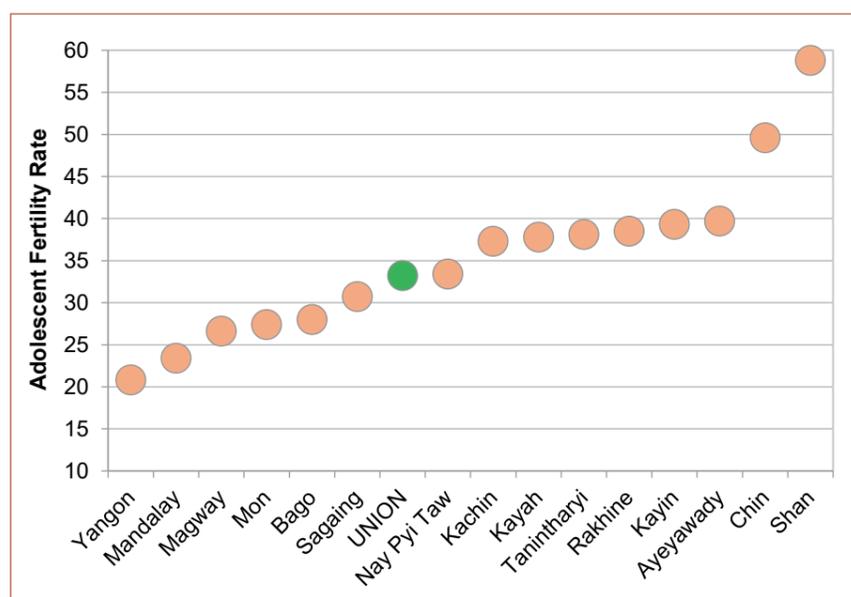
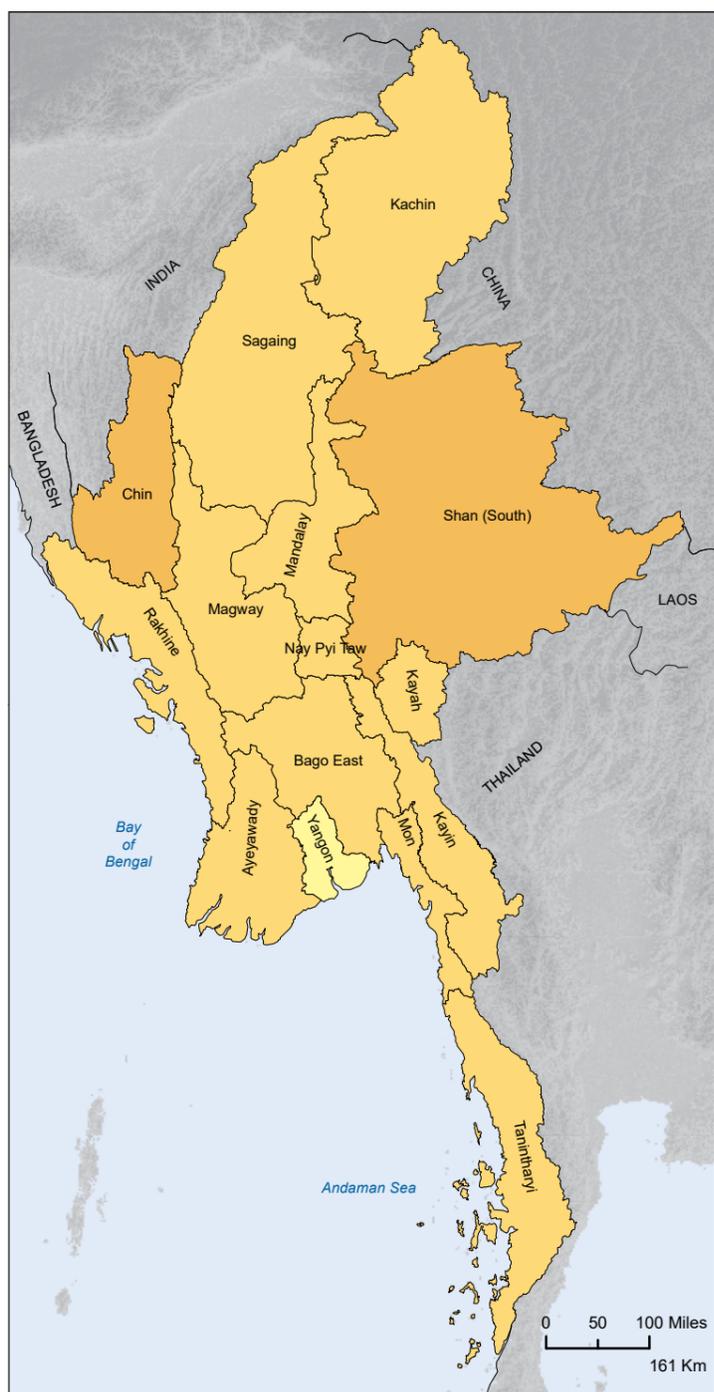


Table 3.2 Adolescent Fertility Rates, Women Aged 15-19, States/Regions and Districts

State/Region District	Adolescent Fertility Rate	State/Region District	Adolescent Fertility Rate	State/Region District	Adolescent Fertility Rate
UNION	33.2	Myeik	37.8	Yangon	20.8
Kachin	37.3	Kawthoung	63.4	North Yangon	22.8
Myitkyina	34.1	Bago	28.0	East Yangon	17.4
Mohnyin	34.1	Bago	29.0	South Yangon	29.4
Bhamo	46.0	Toungoo	28.0	West Yangon	11.0
Putao	39.6	Pyay	23.4	Shan	58.8
Kayah	37.8	Thayawady	29.8	Taunggyi	46.8
Loikaw	35.2	Magway	26.6	Loilin	66.7
Bawlakhe	55.0	Magway	23.7	Linkhe'	65.6
Kayin	39.3	Minbu	26.8	Lashio	53.7
Hpa-An	34.9	Thayet	27.4	Muse	50.8
Pharpon	40.5	Pakokku	27.2	Kyaukme	49.0
Myawady	53.9	Gangaw	36.0	Kunlon	84.2
Kawkareik	39.7	Mandalay	23.4	Laukine	56.5
Chin	49.6	Mandalay	21.1	Hopan	69.5
Haka	55.4	Pyin Oo Lwin	32.0	Makman	90.9
Falam	45.2	Kyaukse	26.5	Kengtung	72.5
Mindat	50.2	Myingyan	17.8	Minesat	117.5
Sagaing	30.7	Nyaung U	20.7	Tachileik	57.1
Sagaing	18.0	Yame'thin	23.3	Minephyat	90.3
Shwebo	26.4	Meiktila	22.5	Ayeyawady	39.7
Monywa	20.6	Mon	27.4	Pathein	38.4
Katha	40.6	Mawlamyine	25.9	Phyapon	47.2
Kalay	37.4	Thaton	29.7	Maubin	36.2
Tamu	45.6	Rakhine	38.5	Myaungmya	34.0
Mawlaik	37.1	Sittway	28.6	Labutta	56.3
Hkamti	48.9	Myauk U	37.4	Hinthada	32.3
Yinmarpin	24.6	Maungtaw	46.8	Nay Pyi Taw	33.4
Tanintharyi	38.1	Kyaukpyu	45.0	Ottara (North)	36.8
Dawei	27.5	Thandwe	48.7	Dekkhina (South)	30.7

Map 3.2 Adolescent Fertility Rates

a) States/Regions



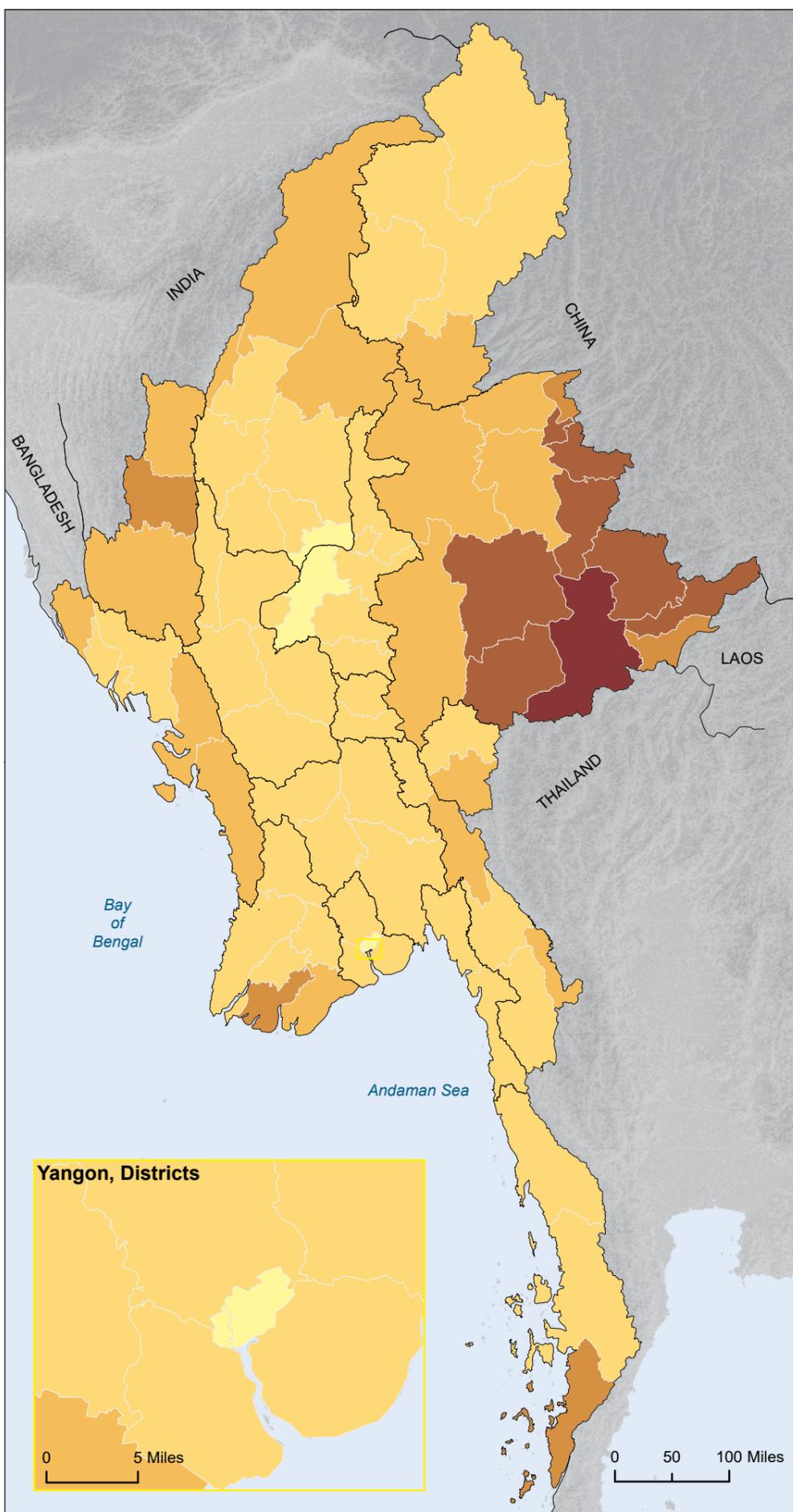
Annual number of births per 1,000 women aged 15 to 19

Average at Union level: 33.2

- 11.0 - 20.0
- 20.1 - 40.0
- 40.1 - 55.0
- 55.1 - 65.0
- 65.1 - 100.0
- 100.1 - 117.5

State/Region boundary
District boundary

b) Districts



Yangon, Districts

0 5 Miles

0 50 100 Miles

The base population for this indicator is all females aged 15-19 that were living in conventional and institutional households at the time of the 2014 Census.

The Adolescent Fertility Rate represents the age-specific fertility rate for women aged 15-19. It is calculated as the number of children born in the 12 months prior to the Census to women in this age group, multiplied by 1,000.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

3.3 Life Expectancy

Life expectancy at birth is the most widely used indicator of mortality. It estimates the average number of years a newborn baby is expected to live. Based on Census data, life expectancy in Myanmar in 2014 was 64.7 for all newborns; 60.2 for males and 69.3 for females, respectively. Table 3.3 and Figure 3.4 show how life expectancy in Myanmar compares with life expectancy in other countries in South-East Asia and with world estimates. Life expectancy in Myanmar is shortest for males and females combined and for males only; for females it was shorter than in most countries, but slightly longer than in India (68.9) and Lao PDR (66.8).

At the broadest regional level, life expectancy for Myanmar's newborn males and females together ranged from 60.5 years in Chin State to 71.6 years in Nay Pyi Taw Union Territory. For females, life expectancy was also shortest in Chin State (63.5 years) and longest in Nay Pyi Taw (71.6 years). For males, however, though Nay Pyi Taw again had the longest life expectancy at 63.7 years, expectations were shortest in Magway Region at only 57.1 years

(Table 3.4). The maps opposite clearly show the big differences between male and female life expectancy. All the administrative units in Map 3.3a are shaded light blue, illustrating that life expectancy for newborn males at this level was below the Union average of 64.7 for both sexes for all States and Regions. In contrast, Map 3.3b is shaded predominantly dark blue, showing that, for most States/Regions, life expectancy for newborn females was above the Union average. Only in Chin State, at 63.5 years, was life expectancy for females shorter than the average for the Union as a whole.

Differences in life expectancy between males and females are the norm in most countries, but as Table 3.3 shows, the gap between male and female life expectancy in Myanmar was very wide compared with the global average and for other countries in the region. Whereas females born in Myanmar could be expected to live 9.1 years longer than their male counterparts, the gap for the world population was only 4.4 years. In South-East Asia only Viet Nam, at 9.6 years, had a wider gap between male and female life expectancy

than Myanmar, and in countries such as Bangladesh, Lao PDR and India, the gaps were less than 3 years. A Census data-based analysis of life expectancy and other mortality indicators suggests that the particularly wide gap in Myanmar is likely to be explained more by behavioural differences between males and females than by biological differences (Department of Population, 2016c). Risk-prone behaviour that can lead to premature death includes alcohol abuse, smoking, motorcycle riding and working in dangerous and stressful jobs. These types of behaviour are more common among boys and men than among girls and women, a distinction which might be particularly exaggerated in Myanmar. They also tend to be more prevalent among males in urban areas than males in rural areas. Though no data for comparing urban and rural life expectancies is presented in this atlas, the report referenced above states that, in Myanmar, the probability of males dying between the ages of 15 and 59 is double that of females, which is a big difference compared with other countries in the region.

Figure 3.4 Life Expectancy at Birth, International Comparisons

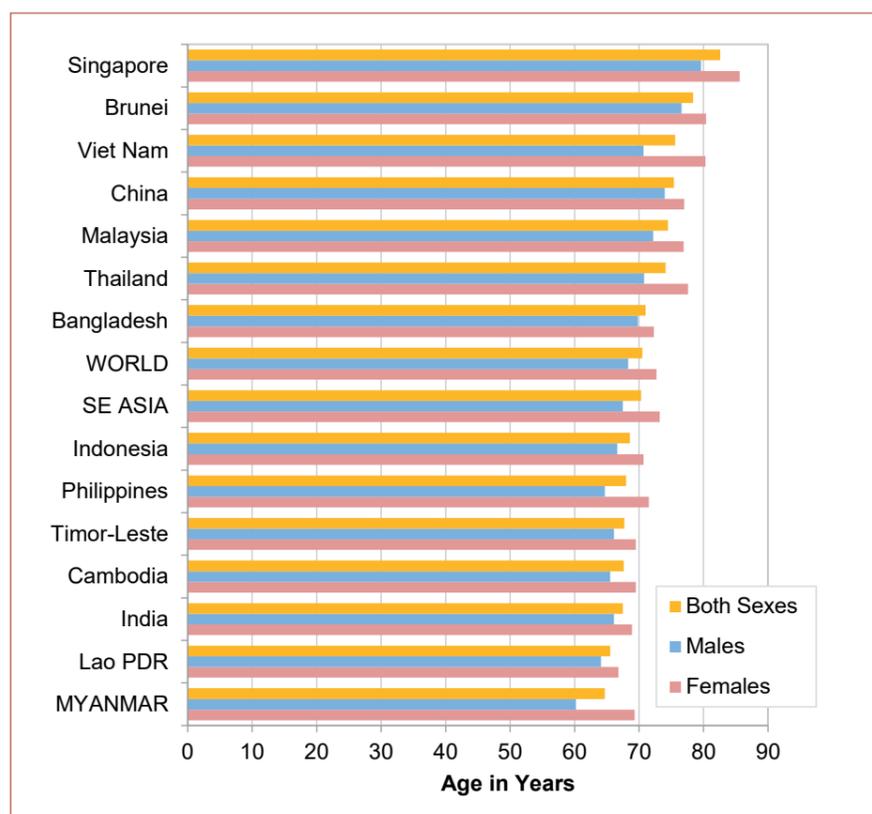


Table 3.3 Life Expectancy at Birth, International Comparisons

Region/Country	Life Expectancy at Birth		
	Both Sexes	Males	Females
WORLD	70.5	68.3	72.7
SE ASIA	70.3	67.5	73.2
Bangladesh	71.0	69.8	72.3
Brunei Darussalam	78.4	76.6	80.4
Cambodia	67.6	65.5	69.5
China	75.4	74.0	77.0
India	67.5	66.1	68.9
Indonesia	68.6	66.6	70.7
Lao PDR	65.5	64.1	66.8
Malaysia	74.5	72.2	76.9
MYANMAR	64.7	60.2	69.3
Philippines	68.0	64.7	71.5
Singapore	82.6	79.6	85.6
Thailand	74.1	70.8	77.6
Timor-Leste	67.7	66.1	69.5
Viet Nam	75.6	70.7	80.3

Table 3.4 Life Expectancy at Birth, States/Regions

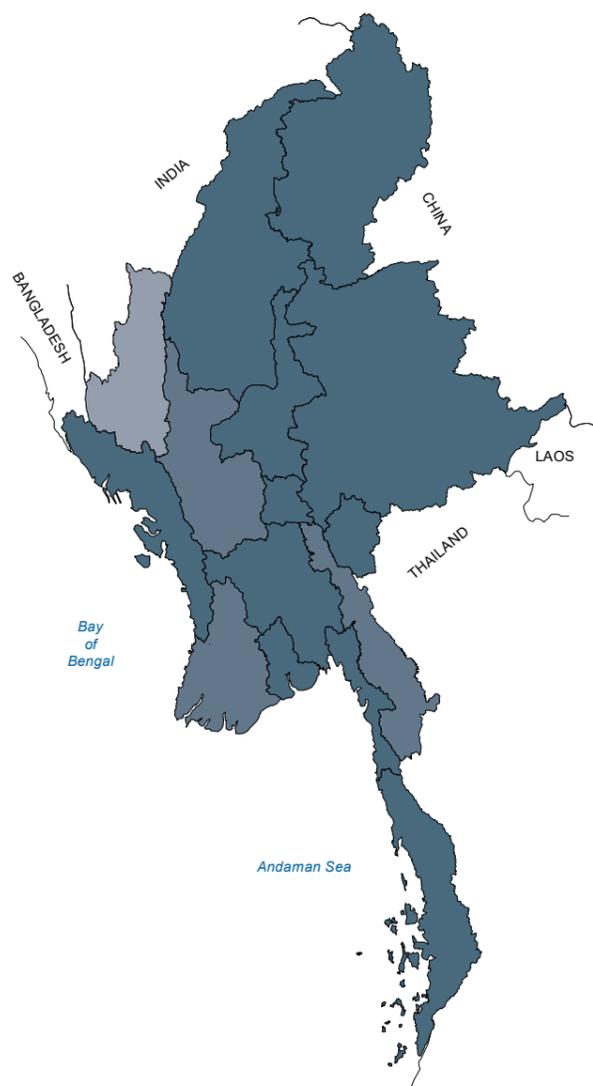
State/Region	Life Expectancy at Birth		
	Both Sexes	Males	Females
UNION	64.7	60.2	69.3
Kachin	64.2	59.4	69.3
Kayah	64.3	59.1	70.2
Kayin	62.1	57.7	66.7
Chin	60.5	57.4	63.5
Sagaing	65.8	61.0	70.4
Tanintharyi	65.5	62.2	68.9
Bago	65.2	60.7	69.8
Magway	62.3	57.1	67.5
Mandalay	64.9	59.7	70.2
Mon	63.5	58.2	69.1
Rakhine	65.5	61.6	69.3
Yangon	65.5	60.5	70.8
Shan	64.8	60.5	69.4
Ayeyawady	63.6	60.2	67.2
Nay Pyi Taw	67.7	63.7	71.6

Map 3.3 Life Expectancy at Birth, States/Regions

a) Males



b) Females



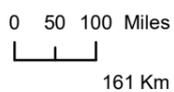
c) Both Sexes

Average number of years expected to live

Average at Union level: 60.2 males, 69.3 females, 64.7 both sexes

- 57.1 - 60.0
- 60.1 - 62.0
- 62.1 - 64.0
- 64.1 - 66.0
- 66.1 - 68.0
- 68.1 - 71.6

State/Region boundary



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The indicator gives the average number of years that a newborn baby is expected to live (see Glossary of Technical Terms and Definitions for more information).

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.

Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

3.4 Early-Age Mortality

Early-age mortality refers to the rates at which children die within five years of being born. This section presents rates that were calculated by indirect methods from the 2014 Census data. In this sense, they only serve as a proxy for the under-five mortality indicator defined for Sustainable Development Goal 3 (see Box). Other methods for calculating early-age mortality rates use direct methods applied to 'full birth history' data collected through specially designed surveys (see Department of Population, 2016c for an explanation of the different approaches and a discussion of the differences between them).

From the indirect estimates derived from the 2014 Census data, the Union infant mortality rate was 61.8 and the Union under-five mortality rate was 71.8 deaths per 1,000 live births (see indicator definition below Map 3.4). International comparisons should be treated with caution because of significant differences in the way records are kept, surveys are conducted and mortality rates are estimated by different organizations in different countries. However, since Table 3.5 presents international data from a single source, the differences are to some extent controlled and the numbers are considered valid for the purposes of making general comparisons. Nevertheless, the rates in Table 3.5 are rounded up to whole numbers to avoid giving a sense of false precision. Comparing early-age mortality rates for different countries shows that Myanmar, at 72, has a very high early-age mortality rate, much higher than

the world rate of 50 and substantially higher than the rates for under-five deaths per 1,000 live births for Lao PDR at 60 and Timor-Leste at 56.

Comparing variations in early-age mortality rates within Myanmar is sounder because they were derived by applying a standard methodology to a single dataset. Maps 3.4a and 3.4b show a distinct division of the country into two halves, with relatively high rates in the south and west and relatively low rates in the north and east. This pattern is interesting in that it does not conform to the middle corridor/outer ring distinction seen for other indicators.

Table 3.6 and Figure 3.5 show the highest early-age mortality rates were in Ayeyawady, Magway and Tanintharyi Regions and in Chin State; the lowest were in Yangon and Mandalay Regions, and in Mon, Kayin and Kachin States.

The reasons why rates vary in different parts of the country are more likely to be explained locally than regionally. Relatively low rates will almost certainly be associated with better access to quality health services, transportation and communication networks. Children born to better-educated parents with higher incomes generally have a much better chance of surviving beyond the age of five. And areas in which people live in better quality houses with amenities such as safe drinking water, a reliable electricity supply and



Sustainable Development Goal 3

Ensure healthy lives and promote well-being for all at all ages

Target 3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

Indicator 3.2.1: Under-five mortality rate (probability of dying before age five per 1,000 live births).

hygienic sanitation facilities will usually have relatively low early-age mortality rates. Conditions for raising children are generally more favourable in urban areas than they are in rural areas, which would help explain why early-age mortality rates in predominantly rural Townships are likely to be much higher than the rates in neighbouring, but predominantly urban, Townships. For a detailed explanation of the methods used for calculating the early-age mortality rates presented here, see Department of Population, 2016c.

Figure 3.5 Early-Age Mortality Rates, States/Regions

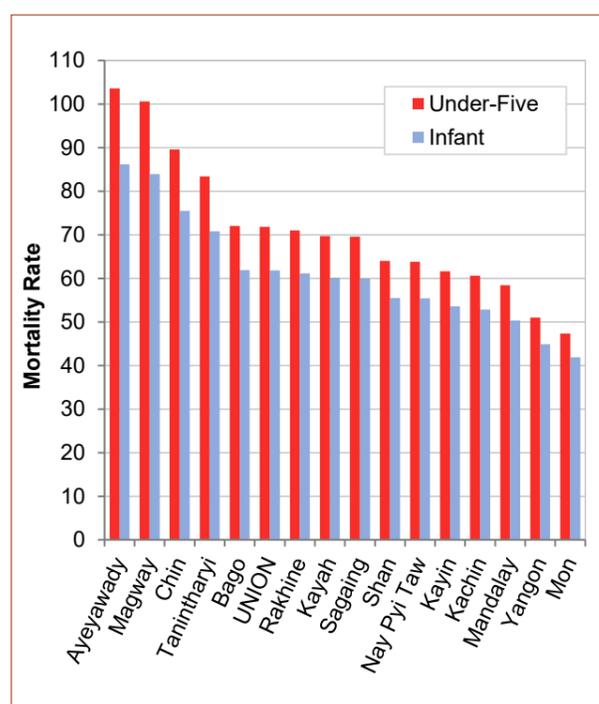


Table 3.5 Early-Age Mortality Rates, International Comparisons*

Region/Country	Early-Age Mortality Rates	
	Infant	Under-Five
WORLD	36	50
SE ASIA	24	30
Bangladesh	33	41
Brunei Darussalam	4	5
Cambodia	30	35
China	12	14
India	41	53
Indonesia	25	30
Lao PDR	47	60
Malaysia	7	8
MYANMAR	62	72
Philippines	23	30
Singapore	2	2
Thailand	11	13
Timor-Leste	44	56
Viet Nam	19	24

***Sources of Data:**

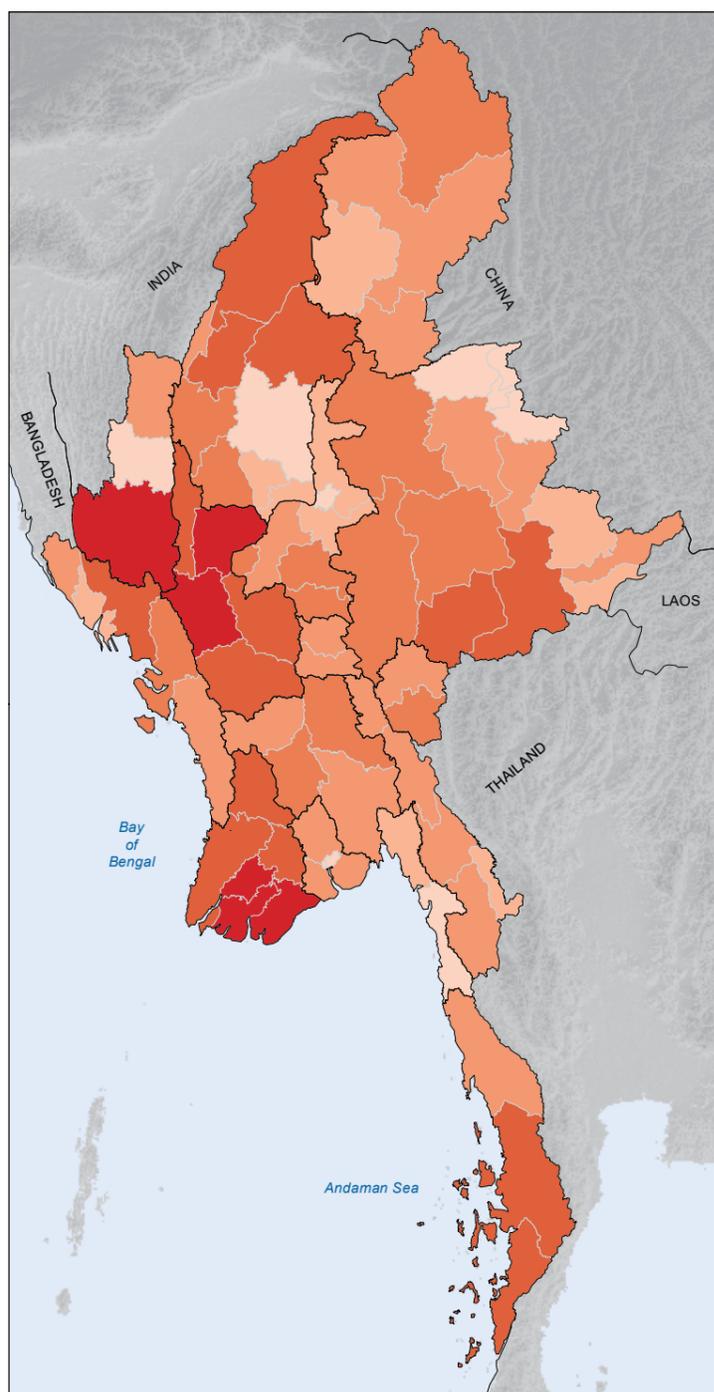
Data for Myanmar: Department of Population, 2016c.

Data for all other countries: UN DESA, 2015a, Tables A.29 and A.30.

Table 3.6 Early-Age Mortality Rates, States/Regions

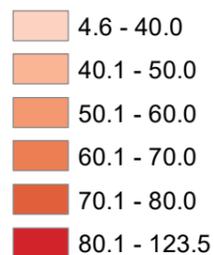
State/Region	Early-Age Mortality Rates	
	Infant	Under-Five
UNION	61.8	71.8
Kachin	52.8	60.6
Kayah	60.1	69.7
Kayin	53.6	61.6
Chin	75.5	89.6
Sagaing	60.0	69.6
Tanintharyi	70.8	83.4
Bago	61.9	72.0
Magway	83.9	100.6
Mandalay	50.3	58.4
Mon	41.9	47.3
Rakhine	61.1	71.0
Yangon	44.9	51.0
Shan	55.5	64.0
Ayeyawady	86.2	103.6
Nay Pyi Taw	55.4	63.8

Map 3.4a Infant Mortality Rates, Districts



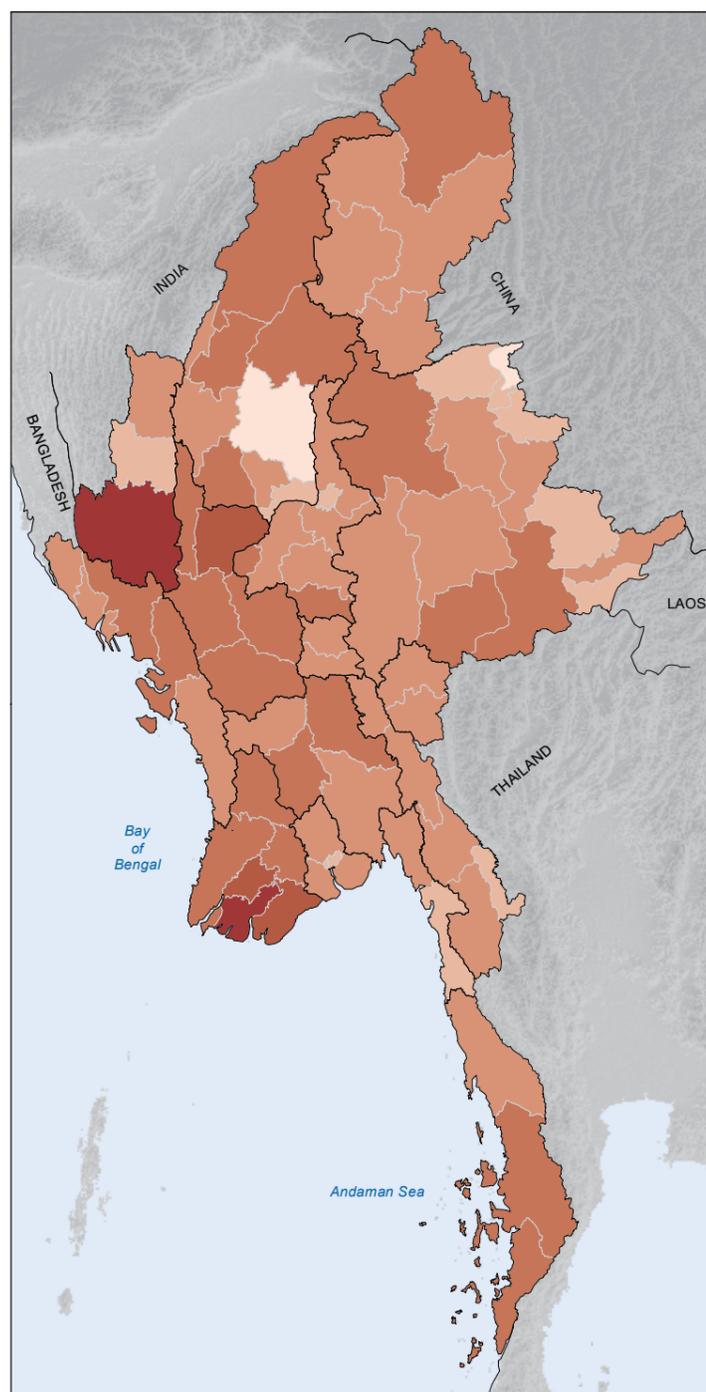
Number of children per 1,000 live births with probability of dying before reaching age 1

Average at Union level: 61.8



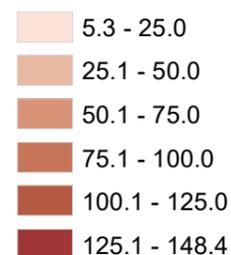
State/Region boundary
District boundary

Map 3.4b Under-Five Mortality Rates, Districts



Number of children per 1,000 live births with probability of dying before reaching age 5

Average at Union level: 71.8



The base population for this indicator is the number of live births to women living in conventional and institutional households during the 12-month period prior to the 2014 Census.

The indicator for infant mortality gives the number of infants that died before reaching one year of age per 1,000 live births during this 12-month period.

The indicator for under-five mortality gives the number of children that died before reaching five years of age per 1,000 live births during this 12-month period.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

4

Education

This chapter highlights spatial variations in some key education indicators, based on data collected for the 2014 Myanmar Population and Housing Census. The themes of the chapter are school attendance, educational attainment and adult literacy. In summary, the Census revealed that, in 2014, attendance rates were generally quite high for young children, with little difference between boys and girls, and between urban and rural children. As children get older, attendance rates declined, especially for boys, and especially in rural areas. In spite of reasonably high current attendance rates, less than half the adult population had completed any level of education beyond primary school, with something less than 20 per cent having completed upper secondary level, referred to in this report as 'high school' level. Boys were more likely than girls to have dropped out of the education system during, or after completing, primary school or high school, as evidenced by the fact that a higher proportion of female adults had completed university than male adults. Both educational attainment and adult literacy measures show that urban populations are better educated than rural populations. Data from the Census indicated that education is most problematic in Shan State, which had the lowest current attendance rates, the highest proportion of children who had never attended school, the lowest attainment rates at all educational levels, and the lowest adult literacy rates in the country. Attendance, attainment and literacy measures across the country were generally better for children and adolescents than they were for older age groups. This suggests that the quality of education is improving and its reach is extending even into remote, rural parts of the country.

The education-related questions asked in the 2014 Census are shown below. Only people in conventional households were asked the questions about literacy (Question 19) and school attendance (Question 20). But information on attainment (Question 21) was collected from people in both conventional households and institutional households. This means the base population numbers used for calculating literacy and attendance rates were lower than the base population numbers used for calculating attainment rates. The base population for all attendance rates in this chapter was for all individuals between the ages of 5 and 15 years that were living in conventional households. This age group was used because, based on government policy, all children in this age group are expected to be attending either primary school, middle school (lower secondary level) or high school. The base population for all percentages presented for educational attainment is the total number of individuals aged 25 and over that were living in both conventional and institutional households. Percentages for attainment give the proportions of the population that claimed each of the three levels identified to be the highest level completed. They are not completion rates, which would incorporate the total number of people that had completed each level, and in which university graduates would also be counted as having completed both primary school and high school, and high school graduates also counted as having completed primary school.

AGE 5 AND ABOVE EDUCATION		
19. Can (Name) read and write in any language?	20. Is (Name) currently attending, previously attended or never attended school/college?	21. What is the highest education grade/level (Name) completed?
Yes No	Currently attending Previously attended Never attended	None - 00 Grade - 01-11 College - 12 Vocational training - 13 Undergraduate diploma - 14 Graduate - 15 Postgraduate diploma - 16 Masters Degree - 17 PhD - 18 Other - 19

'Educational attainment' is defined as the highest ISCED level successfully completed by an individual (UN DESA Population Division, 2015). This atlas discusses educational attainment in terms of the highest level completed at three levels - primary school, high school (upper secondary level) and university. Numbers for each level classified in this atlas represent aggregations of the data for the maximum grades achieved within each level. Thus, the total for primary school includes all those who reported completing primary school (Grade 5) and the first three grades of middle school (Grades 6, 7 and 8) but who had not gone on to complete upper secondary level (Grade 11). Those for whom high school was reported as the highest grade completed includes all individuals who had received some higher education (college or undergraduate diploma) as well as those that had completed the last grade in high school (Grade 11). The highest level of attainment includes all individuals who had graduated with bachelor's degrees, post graduate diplomas, master's degrees or PhDs.

Department of Population 2015, 2017b and 2017c were the primary sources for this chapter. Readers are advised to refer to these reports for broader and more detailed analyses of children and youth and education, respectively.

4.1 School Attendance

The 2014 Census showed that among 5-15 year olds more than two-thirds (69.4 per cent) were currently attending school at some level (Table 4.1). However, this overall figure masks some extreme differences when looking at single years of age. Peak attendance (85 per cent) occurred at age 9 after which attendance began to drop off, quite steeply after age 12 (68 per cent) falling to 28 per cent at age 15 (Figure 4.2). For children up to the age of 12, school attendance rates were similar for both males and females, and in both urban and rural areas. For children older than 12, females were generally better attenders than males, and a higher proportion of these older children were attending school in urban areas than in rural areas (Department of Population, 2015).

Table 4.1 shows that at the State/Region level, Chin State had the highest attendance rate at 81.1 per cent, and Shan State had the lowest, at 56.6 per cent. Indeed, Maps 4.1a and 4.1b clearly show Shan State as having the poorest school attendance rates at both the District and Township levels. Rates were lower than 50 per cent in seven Districts, and lower than 40

per cent in Makman, Hopan and Minesat Districts. The eight Townships with the poorest records for school attendance at lower than 30 per cent, were all in Shan State. Of these, rates in Minekat Township and Minekoke Sub-Township were lower than 20 per cent. The difference between attendance rates in urban and rural parts of Shan State was more than 20 percentage points. This is the widest gap in the country at the State/Region level, and it is largely a function of the very low rate of only slightly more than 50 per cent attendance in rural areas (Figure 4.1).

Children in Putao District (Kachin State) were the most diligent school-goers, with almost 86 per cent of them attending school in 2014. The top four Townships in the country in terms of school attendance were Naungmoon, Khaunglanphoo, Sumprabum and Machanbaw, all of them in Putao District and all of them with attendance rates close to 90.0 per cent. Attendance rates were around 80 per cent in all three Districts in Chin State, the highest being 83.4 per cent in Haka District. Rates were higher than 60 per cent in all Districts except those in Shan State.

Table 4.1 Proportion of Children Currently Attending School, States/Regions and Districts

State/Region District	Percentage	State/Region District	Percentage	State/Region District	Percentage
UNION	69.4	Myeik	73.2	Yangon	69.0
Kachin	79.9	Kawthoung	66.4	North Yangon	68.6
Myitkyina	78.6	Bago	69.9	East Yangon	69.5
Mohnyin	80.6	Bago	72.0	South Yangon	70.1
Bhamo	78.9	Toungoo	70.3	West Yangon	66.8
Putao	86.0	Pyay	67.1	Shan	56.6
Kayah	77.9	Thayawady	67.5	Taunggyi	71.2
Loikaw	78.3	Magway	73.1	Loilin	49.0
Bawlaikhe	75.4	Magway	73.8	Linkhe`	48.1
Kayin	66.2	Minbu	71.2	Lashio	51.7
Hpa-An	67.3	Thayet	67.2	Muse	66.1
Pharpon	69.0	Pakokku	76.8	Kyaukme	64.3
Myawady	65.0	Gangaw	74.6	Kunlon	42.1
Kawkareik	64.4	Mandalay	71.1	Laukine	54.3
Chin	81.1	Mandalay	66.3	Hopan	37.4
Haka	83.4	Pyin Oo Lwin	70.7	Makman	29.2
Falam	81.8	Kyaukse	69.3	Kengtung	41.3
Mindat	79.5	Myingyan	74.1	Minesat	38.2
Sagaing	73.7	Nyaung U	76.5	Tachileik	59.5
Sagaing	68.1	Yame`Thin	74.5	Minephyat	50.7
Shwebo	73.2	Meiktila	74.2	Ayeyawady	69.1
Monywa	71.4	Mon	68.8	Pathein	69.0
Katha	73.8	Mawlamyine	69.7	Phyapon	70.5
Kalay	77.4	Thaton	67.6	Maubin	68.5
Tamu	79.8	Rakhine	71.2	Myaungmya	68.2
Mawlaik	76.8	Sittway	68.8	Labutta	67.9
Hkamti	71.3	Myauk U	71.5	Hinthada	69.7
Yinmarpin	77.4	Maungtau	60.4	Nay Pyi Taw	75.8
Tanintharyi	72.5	Kyaukpyu	75.6	Ottara (North)	77.9
Dawei	74.2	Thandwe	73.1	Dekkhina (South)	74.0

Figure 4.1 Proportion of Children Currently Attending School, States/Regions, Urban and Rural

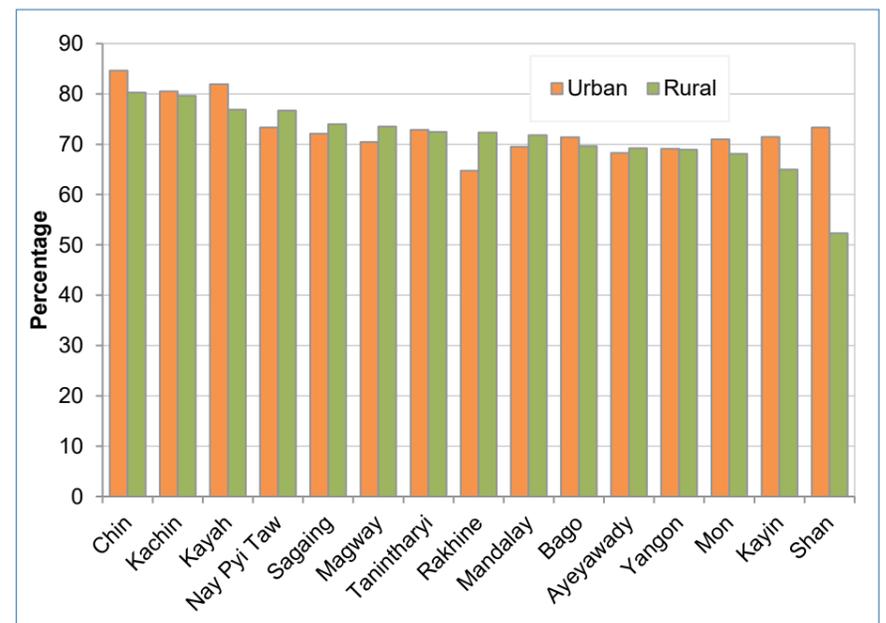
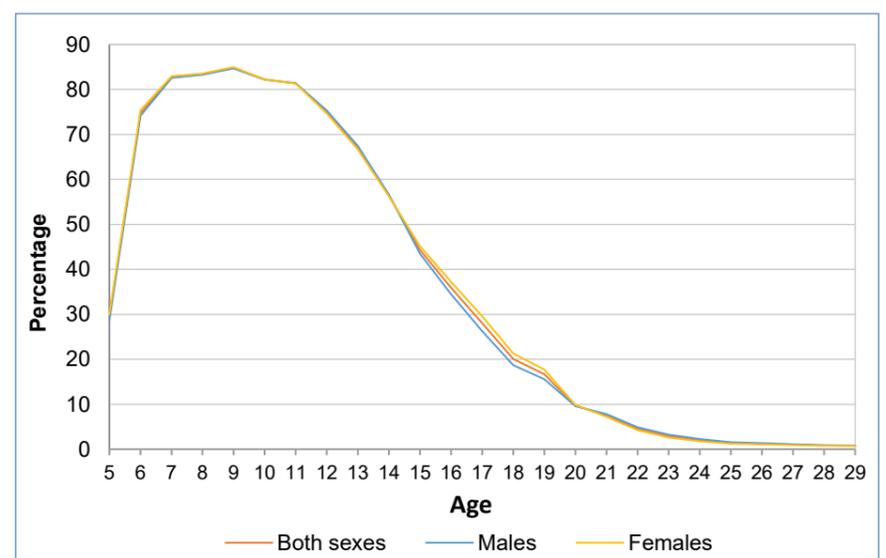
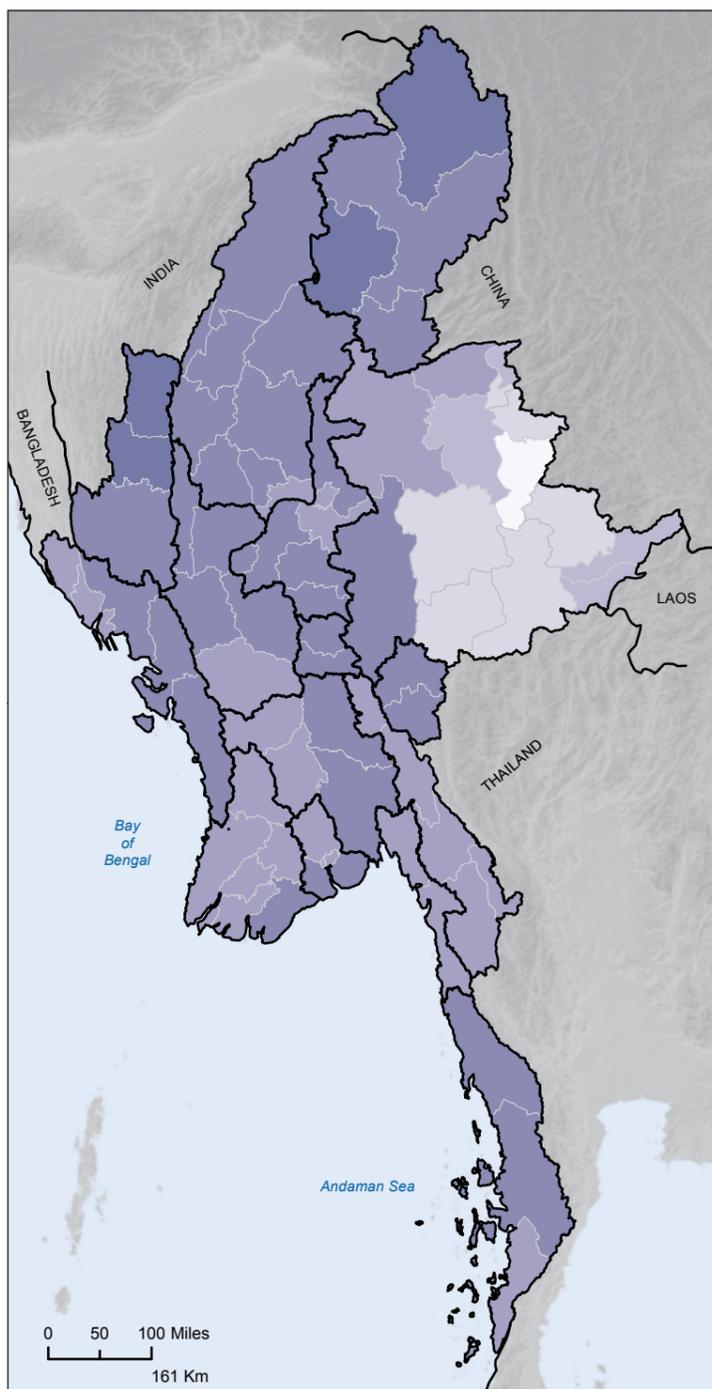


Figure 4.2 Proportion of Children Currently Attending School by Age Males, Females and Both Sexes, Union



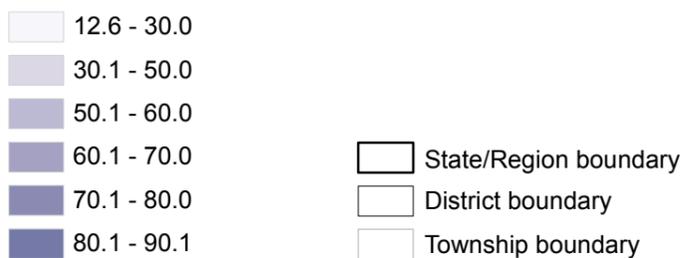
Map 4.1 School Attendance Rates, 5-15 Year Olds

a) Districts



Percentage of children attending school

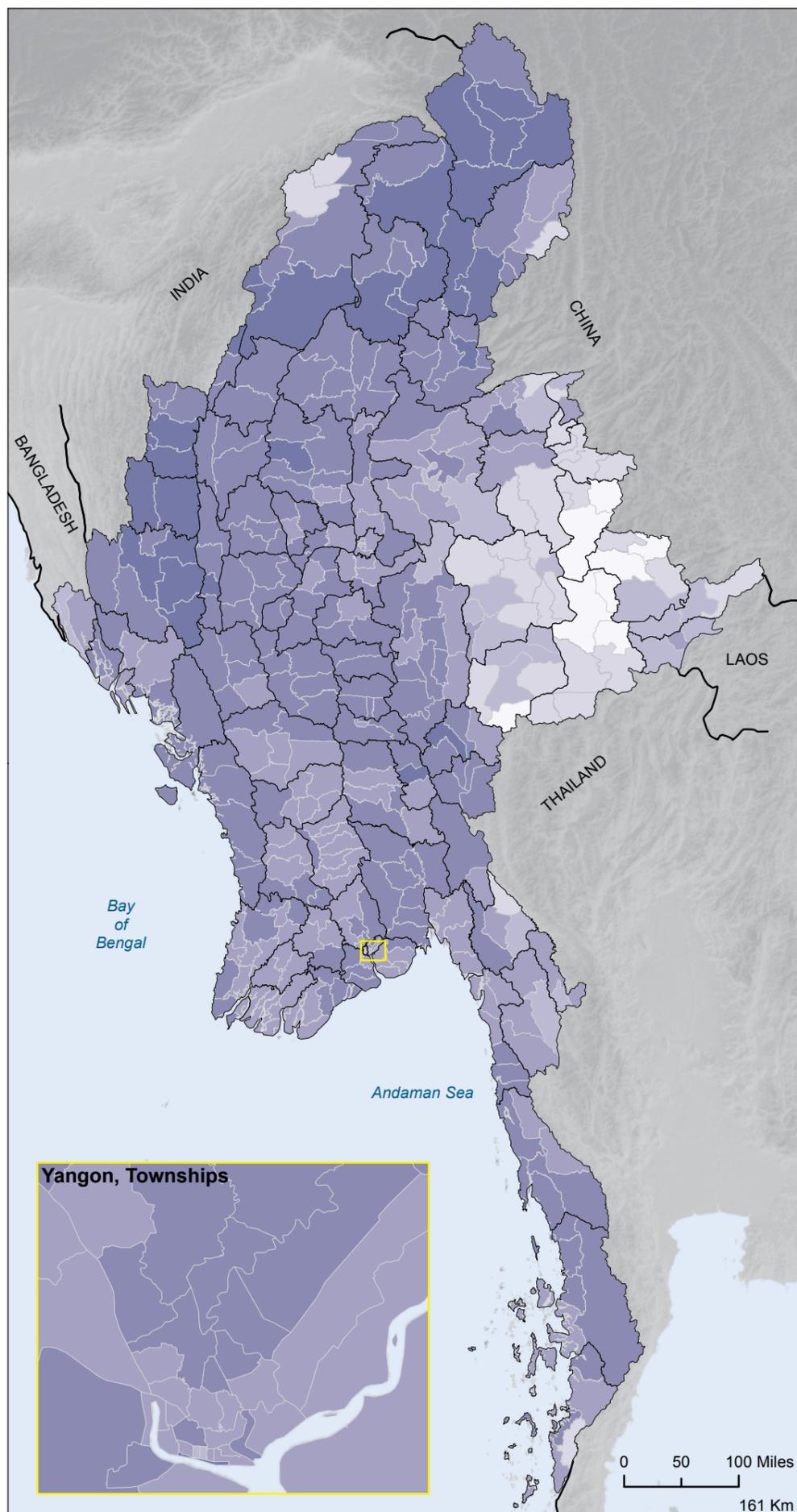
Average at Union level: 69.4



The base population for this indicator is all individuals aged 5-15 that were living in conventional households at the time of the 2014 Census.

The indicator gives the proportion of 5-15 year olds that were actively attending school in 2014.

b) Townships



© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

4.2 People who had Never Attended School

Whereas the previous section explored the geography of children actively attending school in 2014, this section presents key patterns and trends concerning sections of society that had never attended school. Figure 4.3 illustrates three clear patterns among the adult population. Firstly, younger adults were much more likely to have received some formal schooling than their parents or grandparents. While around 35 per cent of males and 50 per cent of females aged 80 and over had never attended school, among 25-39 year olds the proportions dropped to just under 10 per cent for males and just over 10 per cent for females. Secondly, a higher proportion of females than males had never attended school in all age groups. This is most notable among the elderly, where the proportion of females who had never attended school was close

to 17 percentage points higher than the proportion of males. Thirdly, the gap between males and females was narrowing, so that even though females were still more likely to have never attended school, the difference among younger adults was only about 2 percentage points.

More than 450,000 children aged 7-15 years had never attended school. This represents 5.3 per cent of the total population for this age category. Tables 4.2 and 4.3 show that, though rates for males and females who had never attended school are quite similar, they are significantly higher for children in rural areas than they are for children in urban areas. For the Union as a whole, 2.4 per cent of urban children and 6.3 per cent of rural children had never attended

school, but against these relatively low figures there are some worryingly high rates in some parts of the country. Shan State again stands out, with State-wide rates of 5.0 per cent for urban areas and 26.6 per cent for rural areas. Proportions for never having attended school also varied considerably within Shan State. In Makman, Hopan, Minesat and Kengtung Districts, more than 50 per cent of rural children had never attended school (Map 4.2b). The 10 Districts in the country with the highest never attended rates were all in Shan State, with rates as high as 60 per cent. Only five other Districts in the country had more than 10 per cent of 7-15 year olds having never attended school - Maungtau in Rakhine State, Hkamti in Sagaing Region, Kawkaik in Kayin State, and Tachileik and Muse, again in Shan State (Map 4.2c).

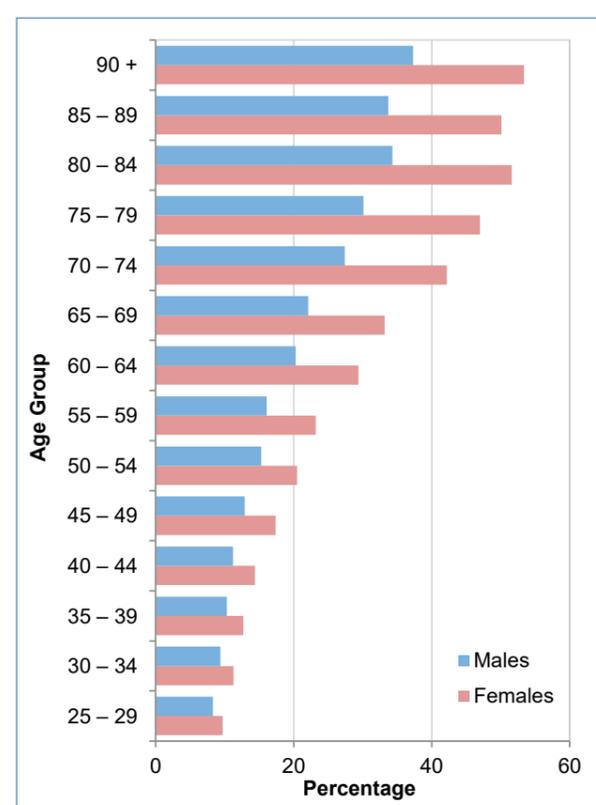
Table 4.2 Proportion of Urban Children who had Never Attended School, Males and Females, States/Regions

State/Region	Population 7 - 15 Years Old			7 - 15 Never Attended School					
	Both Sexes	Males	Females	Number			Percentage		
				Both Sexes	Males	Females	Both Sexes	Males	Females
UNION	2,190,524	1,096,468	1,094,056	52,039	26,197	25,842	2.4	2.4	2.4
Kachin	96,971	48,451	48,520	1,128	629	499	1.2	1.3	1.0
Kayah	11,946	5,920	6,026	130	59	71	1.1	1.0	1.2
Kayin	57,626	28,970	28,656	1,648	935	713	2.9	3.2	2.5
Chin	19,410	9,472	9,938	274	130	144	1.4	1.4	1.4
Sagaing	141,670	70,862	70,808	2,143	1,150	993	1.5	1.6	1.4
Tanintharyi	59,549	29,683	29,866	1,260	653	607	2.1	2.2	2.0
Bago	165,389	82,656	82,733	3,468	1,774	1,694	2.1	2.1	2.0
Magway	85,439	42,386	43,053	1,619	815	804	1.9	1.9	1.9
Mandalay	299,213	150,741	148,472	4,802	2,406	2,396	1.6	1.6	1.6
Mon	94,783	47,687	47,096	2,133	1,143	990	2.3	2.4	2.1
Rakhine	60,894	30,251	30,643	4,020	1,918	2,102	6.6	6.3	6.9
Yangon	696,725	349,934	346,791	14,018	6,852	7,166	2.0	2.0	2.1
Shan	224,503	111,383	113,120	11,267	5,692	5,575	5.0	5.1	4.9
Ayeyawady	128,349	64,062	64,287	3,307	1,666	1,641	2.6	2.6	2.6
Nay Pyi Taw	48,057	24,010	24,047	822	375	447	1.7	1.6	1.9

Table 4.3 Proportion of Rural Children who had Never Attended School, Males and Females States/Regions

State/Region	Population 7 - 15 Years Old			7 - 15 Never Attended School					
	Both Sexes	Males	Females	Number			Percentage		
				Both Sexes	Males	Females	Both Sexes	Males	Females
UNION	6,407,525	3,158,906	3,248,619	404,569	202,841	201,728	6.3	6.4	6.2
Kachin	182,027	91,034	90,993	4,194	2,061	2,133	2.3	2.3	2.3
Kayah	44,113	22,075	22,038	1,356	703	653	3.1	3.2	3.0
Kayin	253,248	126,300	126,948	29,858	17,173	12,685	11.8	13.6	10.0
Chin	88,005	44,243	43,762	3,622	1,603	2,019	4.1	3.6	4.6
Sagaing	767,374	375,195	392,179	17,893	8,795	9,098	2.3	2.3	2.3
Tanintharyi	227,814	114,078	113,736	8,743	4,828	3,915	3.8	4.2	3.4
Bago	679,576	338,393	341,183	18,756	9,600	9,156	2.8	2.8	2.7
Magway	549,671	268,663	281,008	10,661	5,588	5,073	1.9	2.1	1.8
Mandalay	657,786	320,220	337,566	13,668	7,013	6,655	2.1	2.2	2.0
Mon	290,841	144,596	146,245	12,686	7,138	5,548	4.4	4.9	3.8
Rakhine	357,458	177,932	179,526	19,436	8,670	10,766	5.4	4.9	6.0
Yangon	371,719	187,098	184,621	8,985	4,694	4,291	2.4	2.5	2.3
Shan	840,152	400,348	439,804	223,392	108,728	114,664	26.6	27.2	26.1
Ayeyawady	957,993	479,109	478,884	28,780	15,029	13,751	3.0	3.1	2.9
Nay Pyi Taw	139,748	69,622	70,126	2,539	1,218	1,321	1.8	1.7	1.9

Figure 4.3 Proportion of Adults who had Never Attended School by Age Group, Males and Females, Union

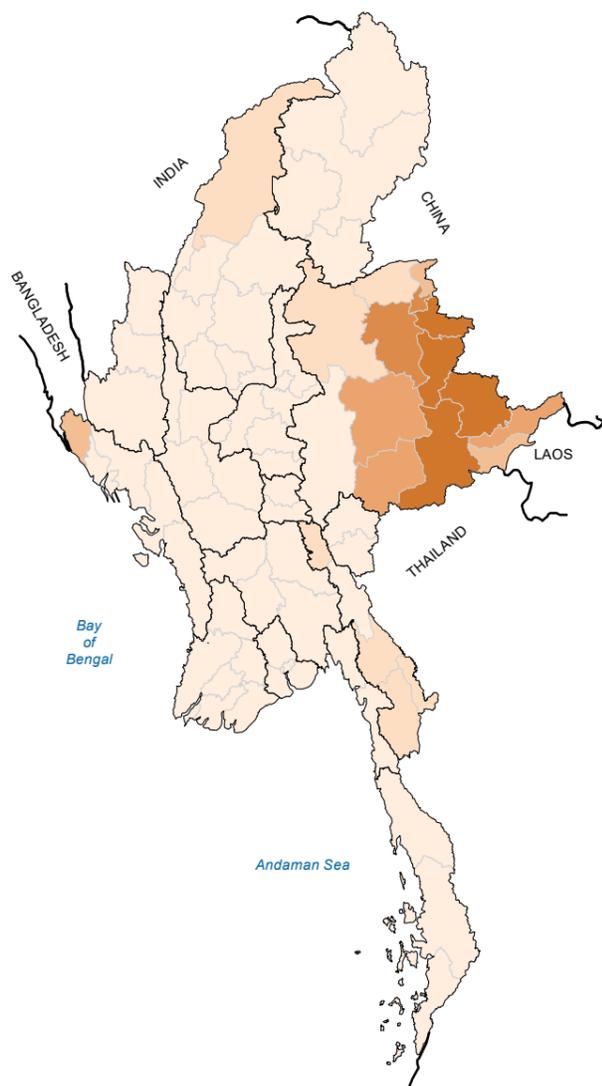


Map 4.2 Children who had Never Attended School, Districts

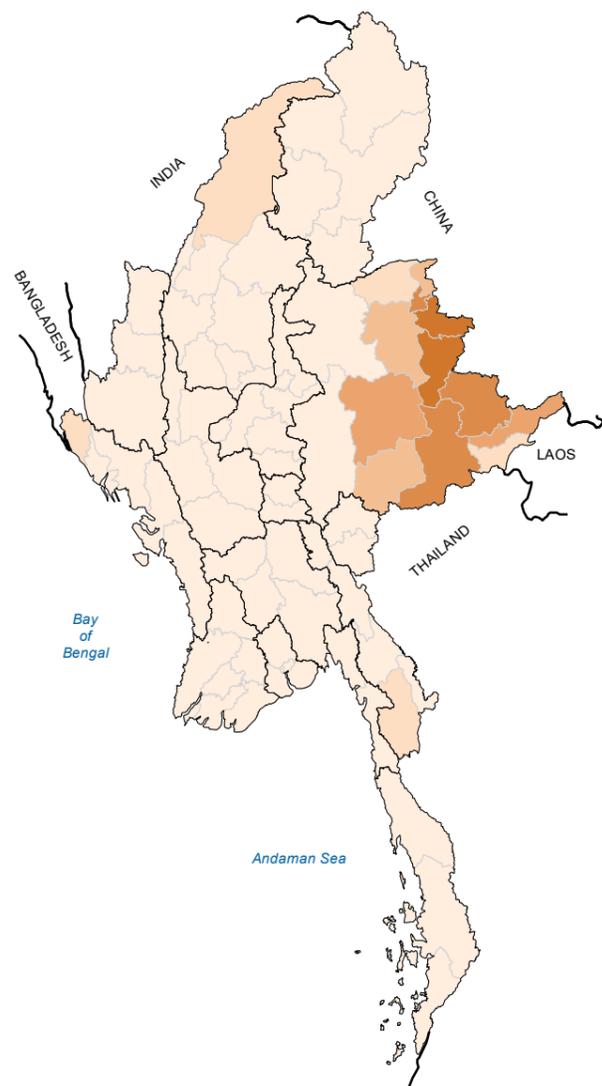
a) Urban



b) Rural



c) Urban and Rural

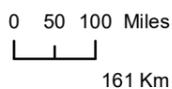


Percentage of children who have never attended school

Average at Union level: 2.4 urban, 6.3 rural, 5.3 urban and rural

- 0.0 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 61.9

- State/Region boundary
- District boundary



The base population for this indicator is individuals who were living in conventional households at the time of the 2014 Census. The indicator gives the percentage of children, 7-15 years, who have never attended school at any level.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

4.3 Educational Attainment: Males and Females



Sustainable Development Goal 4

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.1: By 2030, ensure that all boys and girls complete [...] equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

Aggregated responses to the Census question: "What is the highest education grade/level completed?" show that, for the Union as a whole, 35.8 per cent of the population aged 25 years and older reported primary school as the highest level completed; 6.9 per cent reported high school as the highest level completed; and 7.3 per cent reported university as the highest level completed. Tables 4.4, 4.5 and 4.6 break down these national aggregates by State/Region and by sex. The right hand column of the tables gives male/female comparisons and shows that, while the proportions of males reporting primary and high school as the highest completion levels were greater throughout the country, larger proportions of females claimed university as the highest completion level in 13 out of 15 States/Regions.

Highest Level Completed - Primary School: Table 4.4 and Figure 4.4 show that the proportions of over

24 year olds having completed only primary school were generally quite large, and larger for males than for females throughout the country. In Sagaing Region, the State/Region with the largest proportion, almost half the adult population had only completed primary school. As noted earlier, this does not necessarily mean that these people had not attended middle school or high school, but it does mean that, for some reason, they had not completed education at a higher level than primary school. The proportions of males with primary school as the highest level completed were more than four percentage points higher than for females in most Districts. In parts of Chin State, and Rakhine State, the difference was more than 12 percentage points (Map 4.3a).

Highest Level Completed - High School: Males had still completed in larger proportions than females, but differences between the two sexes were much smaller - generally less than four percentage points. In one District, Bawlakhe in Kayah State, the proportion of females with high school as the highest level that had been completed was slightly larger than the proportion of males (Map 4.3b).

Highest Level Completed - University: Beyond high school, a greater proportion of females than males had completed university in 57 of Myanmar's 74 Districts. Though the differences were generally

small, four Districts stand out - in West Yangon, East Yangon, Mawlamyine and Dekkhina (South), females had out-completed males in higher education by more than three percentage points. The parts of the country where larger proportions of males than females had completed university are again concentrated in Chin and Rakhine States, with another cluster of Districts in Shan State (Map 4.3c).

Analysing adult educational completion rates is looking at what has happened in the past. Few people over the age of 25 are likely to return to school to complete their education at any level. Policymakers, educators and parents should be encouraged by indicators reported by the Census for younger age groups. The trends for current attendance rates among children discussed in the previous section - increasing numbers attending school and decreasing numbers having never attended school - suggest that more people are likely to complete higher levels of education in the future. Reinforcing and expanding steps that are already being taken to meet the Sustainable Development Target 4.1 (see Box above) by keeping children in school, improving teaching standards and eliminating incentives for children to start work at very early ages, will not only give children of both sexes a better start in life, but it will generate opportunities for the social and economic advancement of Myanmar society as a whole (Department of Population, 2017b).

Table 4.4 Primary School as Highest Level Completed, Males and Females (aged 25 and over), States/Regions

State/Region	Males			Females			% Females minus % Males
	Total	Number	%	Total	Number	%	
UNION	12,549,287	4,830,987	38.5	14,373,986	4,814,090	33.5	-5.0
Kachin	418,227	173,294	41.4	394,535	142,135	36.0	-5.4
Kayah	64,997	21,066	32.4	67,982	16,291	24.0	-8.4
Kayin	345,215	94,112	27.3	380,030	89,338	23.5	-3.8
Chin	94,547	35,139	37.2	110,876	27,602	24.9	-12.3
Sagaing	1,304,766	635,229	48.7	1,568,997	674,981	43.0	-5.7
Tanintharyi	334,643	136,276	40.7	349,339	126,976	36.3	-4.4
Bago	1,231,232	499,234	40.5	1,442,146	492,928	34.2	-6.4
Magway	995,635	440,063	44.2	1,243,166	474,745	38.2	-6.0
Mandalay	1,556,051	641,145	41.2	1,869,259	661,415	35.4	-5.8
Mon	496,487	168,241	33.9	582,319	176,864	30.4	-3.5
Rakhine	494,281	198,962	40.3	595,440	163,594	27.5	-12.8
Yangon	1,910,612	608,946	31.9	2,231,981	685,287	30.7	-1.2
Shan	1,411,916	342,179	24.2	1,448,089	276,444	19.1	-5.1
Ayeyawady	1,596,002	716,408	44.9	1,763,153	694,900	39.4	-5.5
Nay Pyi Taw	294,676	120,693	41.0	326,674	110,590	33.9	-7.1

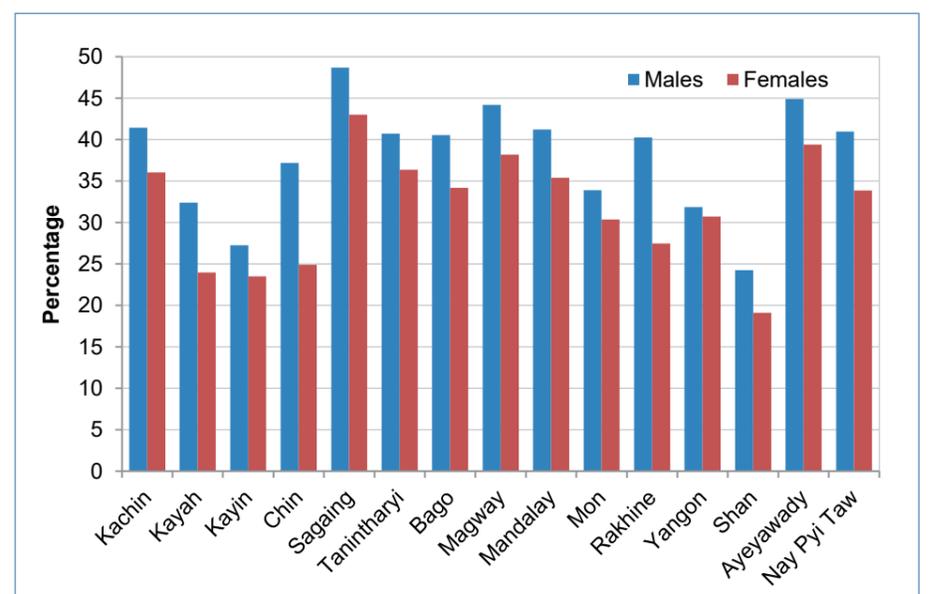
Table 4.6 University as Highest Level Completed, Males and Females (aged 25 and over), States/Regions

State/Region	Males			Females			% Females minus % Males
	Total	Number	%	Total	Number	%	
UNION	12,549,287	807,258	6.4	14,373,986	1,170,998	8.1	1.7
Kachin	418,227	24,360	5.8	394,535	30,111	7.6	1.8
Kayah	64,997	3,593	5.5	67,982	4,985	7.3	1.8
Kayin	345,215	10,722	3.1	380,030	15,189	4.0	0.9
Chin	94,547	5,962	6.3	110,876	4,428	4.0	-2.3
Sagaing	1,304,766	71,341	5.5	1,568,997	95,451	6.1	0.6
Tanintharyi	334,643	15,703	4.7	349,339	22,526	6.4	1.8
Bago	1,231,232	57,504	4.7	1,442,146	90,935	6.3	1.6
Magway	995,635	47,648	4.8	1,243,166	72,597	5.8	1.1
Mandalay	1,556,051	124,961	8.0	1,869,259	172,317	9.2	1.2
Mon	496,487	23,305	4.7	582,319	43,526	7.5	2.8
Rakhine	494,281	21,536	4.4	595,440	23,818	4.0	-0.4
Yangon	1,910,612	263,073	13.8	2,231,981	397,440	17.8	4.0
Shan	1,411,916	49,435	3.5	1,448,089	65,800	4.5	1.0
Ayeyawady	1,596,002	55,084	3.5	1,763,153	90,102	5.1	1.7
Nay Pyi Taw	294,676	33,031	11.2	326,674	41,773	12.8	1.6

Table 4.5 High School as Highest Level Completed, Males and Females (aged 25 and over), States/Regions

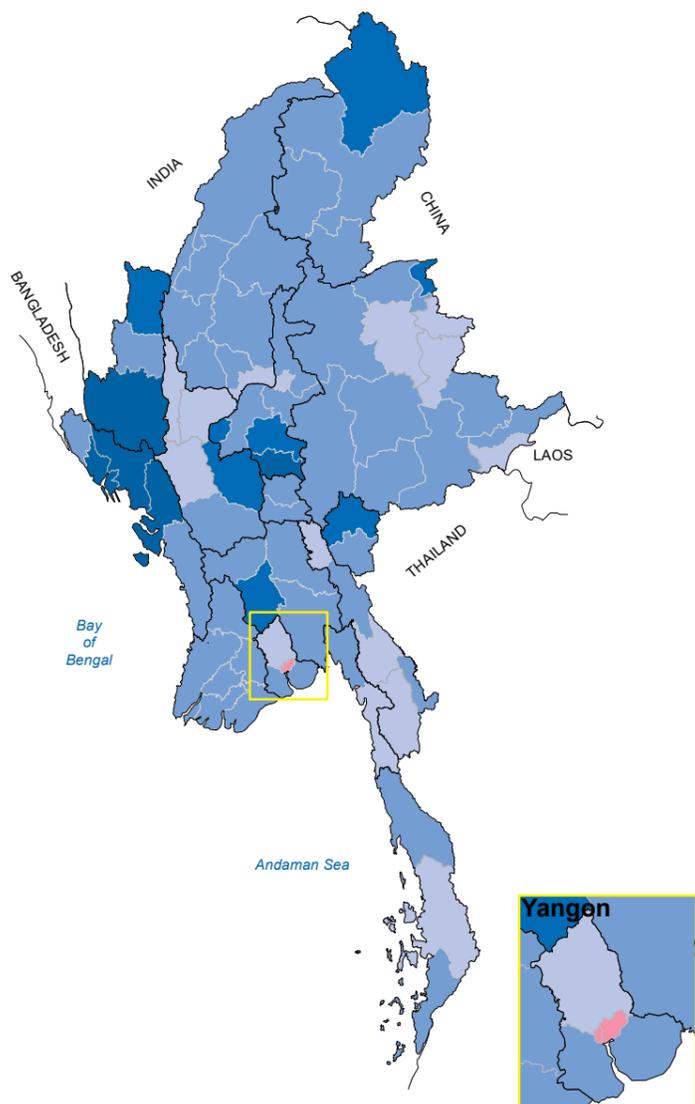
State/Region	Males			Females			% Females minus % Males
	Total	Number	%	Total	Number	%	
UNION	12,549,287	1,055,783	8.4	14,373,986	790,053	5.5	-2.9
Kachin	418,227	43,074	10.3	394,535	32,069	8.1	-2.2
Kayah	64,997	6,694	10.3	67,982	6,533	9.6	-0.7
Kayin	345,215	19,237	5.6	380,030	15,813	4.2	-1.4
Chin	94,547	10,860	11.5	110,876	8,056	7.3	-4.2
Sagaing	1,304,766	89,076	6.8	1,568,997	63,053	4.0	-2.8
Tanintharyi	334,643	26,644	8.0	349,339	20,777	5.9	-2.0
Bago	1,231,232	79,388	6.4	1,442,146	56,398	3.9	-2.5
Magway	995,635	67,302	6.8	1,243,166	49,462	4.0	-2.8
Mandalay	1,556,051	137,648	8.8	1,869,259	95,956	5.1	-3.7
Mon	496,487	37,890	7.6	582,319	30,944	5.3	-2.3
Rakhine	494,281	33,373	6.8	595,440	23,057	3.9	-2.9
Yangon	1,910,612	303,492	15.9	2,231,981	235,578	10.6	-5.3
Shan	1,411,916	74,694	5.3	1,448,089	60,188	4.2	-1.1
Ayeyawady	1,596,002	92,669	5.8	1,763,153	69,227	3.9	-1.9
Nay Pyi Taw	294,676	33,742	11.5	326,674	22,942	7.0	-4.4

Figure 4.4 Primary School as the Highest Level Completed, Males and Females (aged 25 and over), States/Regions

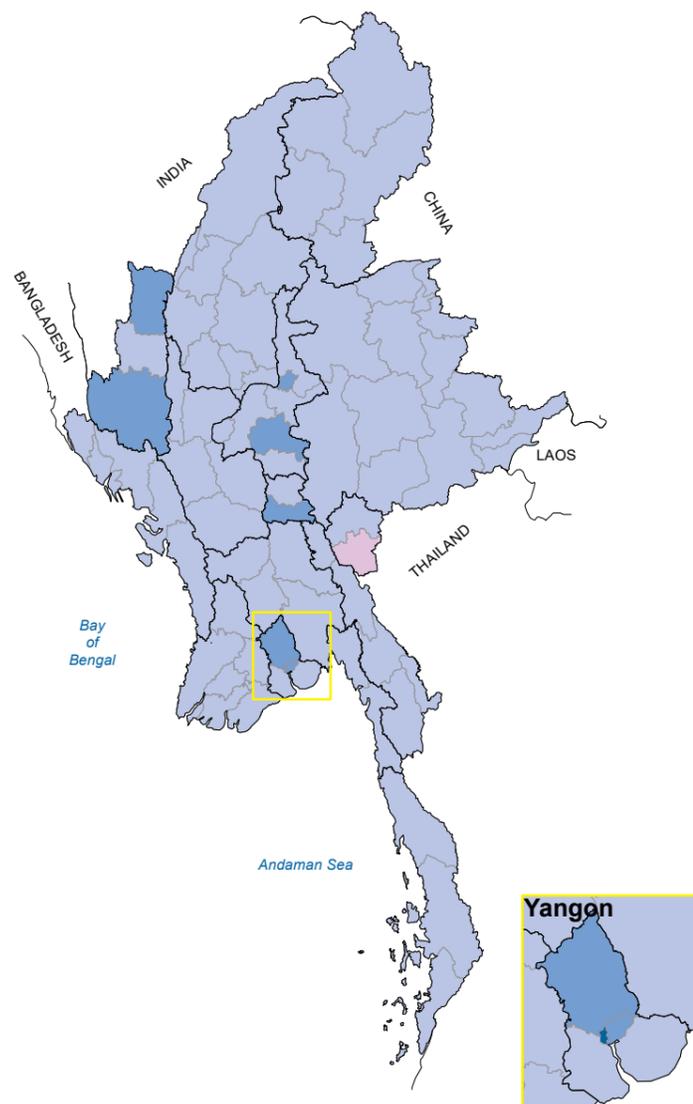


Map 4.3 Sex Differences in Education Levels Completed, Districts

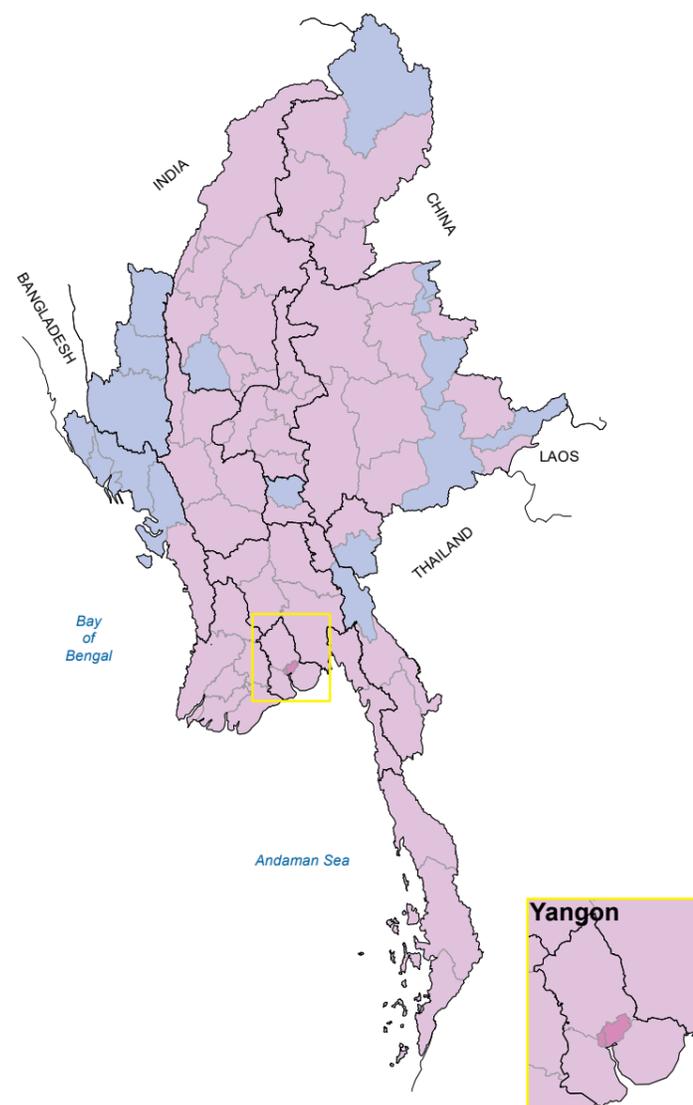
a) Primary School



b) High School



c) University

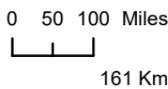


Percentage point differences between males and females

Average at Union level for primary school: 5.0 more for males than females
 Average at Union level for high school: 2.9 more for males than females
 Average at Union level for university: 1.7 more for females than males

- Male completion rates more than 12 percentage points higher
- Male completion rates 8.1 to 12.0 percentage points higher
- Male completion rates 4.1 to 8.0 percentage points higher
- Male completion rates 0.1 to 4.0 percentage points higher
- Female completion rates 0.1 to 4 percentage points higher
- Female completion rates more than 4 percentage points higher

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The indicator shows differences in the proportions of males and females, aged 25 and older, that have completed primary school, secondary school, and university levels of education. University means graduates with bachelor's degrees, postgraduate diplomas, master's degrees and PhDs.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

4.4 Educational Attainment: Urban and Rural



Sustainable Development Goal 4

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

Whereas the previous section looked at differences in educational attainment between males and females in 2014, this section focuses on differences between urban and rural populations. Urban/rural differences were generally substantially greater than male/female differences. Again, there was a shift from one attainment level to another, in this case with larger proportions of rural adults reporting primary school as the highest level they had completed, but larger proportions of urban adults reporting high school and university as the highest levels they had completed. The maps opposite clearly show this shift, with Districts on Map 4.4a predominantly coloured green (rural proportions larger) and Districts on Maps 4.4b and 4.4c all coloured orange (urban proportions larger).

Figure 4.5 shows both shifts at the Union level - those belonging to the largest groups for whom primary school was the highest level completed are rural and male, whilst those belonging to the largest groups for whom university was the highest level completed are urban and female. Underlying these general observations at the Union level were substantial variations in educational attainment at the State/Region, District and Township levels.

Highest Level Completed: Primary School - The proportion was larger for rural adults in 11 out of 15 States/Regions, but larger for urban adults in Kayah, Kayin, Mon and Shan States. The widest gaps were in Sagaing Region and Nay Pyi Taw Union Territory – more than 12 percentage points larger for rural adults than for urban adults (Table 4.7). At sub-State/Region level, the widest gaps in which the largest proportions were rural adults were in Kalay and Dekkhina (South) and Gangaw Districts, both at more than 16 percentage points. Of the 22 Districts, shown in Map 4.4a, in which larger proportions of urban adults reported primary school as the highest level completed, Makman and Laukine had the widest gaps, both, in fact, at more than 22 percentage points.

Highest Level Completed: High School - For high school as the highest level completed, the widest gaps were in Chin State and Yangon Region, where urban adults had out-completed rural adults by more than 10 percentage points (Table 4.9). Within the States/Regions, larger proportions of urban adults reported high school as the highest level completed in all 74 Districts (Map 4.4b) Falam and Mindat Districts had the biggest differences at more than 11 percentage points each.

Highest Level Completed: University - Not surprisingly, the widest rural/urban gaps were in higher education, with substantially larger proportions of university graduates among urban adults than among rural adults. Differences ranged between 9 and 14 percentage points for most States/Regions, and were biggest for Yangon Region and Nay Pyi Taw Union Territory, at 15.7 and 21.2 percentage points, respectively. Again, urban adults had out-completed rural adults in all 74 Districts (Map 4.4c), with the widest gaps, at more than 19 percentage points, in Dekkhina (South) and Yinmarpin.

Table 4.7 Primary School as Highest Level Completed, States/Regions, Urban and Rural

State/Region	Rural			Urban			% Urban minus % Rural
	Total	Number	%	Total	Number	%	
UNION	18,556,818	7,033,574	37.9	8,366,455	2,611,503	31.2	-6.7
Kachin	514,407	212,401	41.3	298,355	103,028	34.5	-6.8
Kayah	95,416	26,652	27.9	37,563	10,705	28.5	0.6
Kayin	554,241	127,201	23.0	171,004	56,249	32.9	9.9
Chin	157,579	50,486	32.0	47,844	12,255	25.6	-6.4
Sagaing	2,370,234	1,134,126	47.8	503,529	176,084	35.0	-12.9
Tanintharyi	503,761	195,868	38.9	180,221	67,384	37.4	-1.5
Bago	2,052,555	793,040	38.6	620,823	199,122	32.1	-6.6
Magway	1,893,596	803,408	42.4	345,205	111,400	32.3	-10.2
Mandalay	2,229,358	907,940	40.7	1,195,952	394,620	33.0	-7.7
Mon	757,921	236,820	31.2	320,885	108,285	33.7	2.5
Rakhine	894,016	301,733	33.8	195,705	60,823	31.1	-2.7
Yangon	1,162,810	431,779	37.1	2,979,783	862,454	28.9	-8.2
Shan	2,117,399	407,723	19.3	742,606	210,900	28.4	9.1
Ayeyawady	2,844,168	1,235,043	43.4	514,987	176,265	34.2	-9.2
Nay Pyi Taw	409,357	169,354	41.4	211,993	61,929	29.2	-12.2

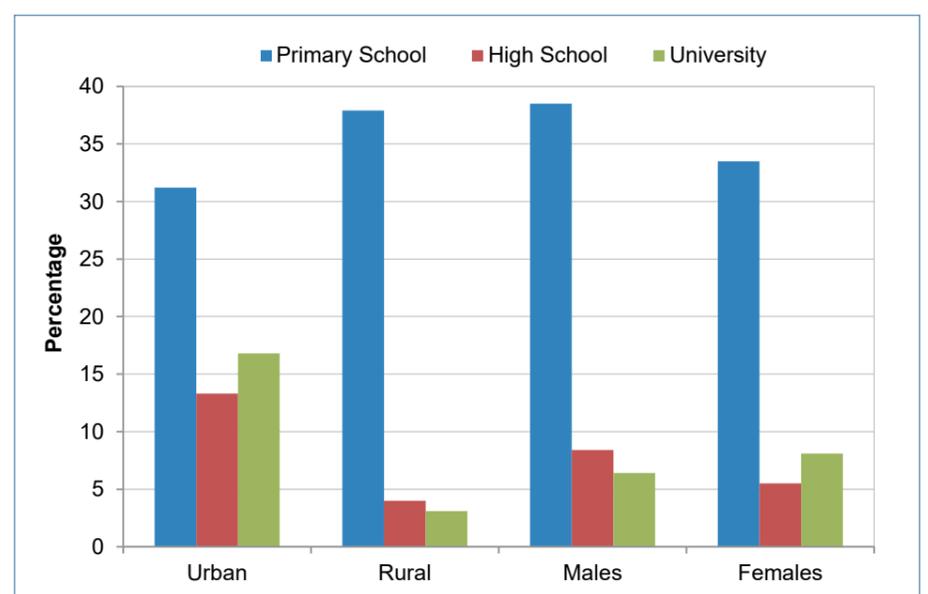
Table 4.8 High School as Highest Level Completed, States/Regions, Urban and Rural

State/Region	Rural			Urban			% Urban minus % Rural
	Total	Number	%	Total	Number	%	
UNION	18,556,818	735,955	4.0	8,366,455	1,109,881	13.3	9.3
Kachin	514,407	35,540	6.9	298,355	39,603	13.3	6.4
Kayah	95,416	6,941	7.3	37,563	6,286	16.7	9.5
Kayin	554,241	17,464	3.2	171,004	17,586	10.3	7.1
Chin	157,579	10,545	6.7	47,844	8,371	17.5	10.8
Sagaing	2,370,234	93,469	3.9	503,529	58,660	11.6	7.7
Tanintharyi	503,761	25,257	5.0	180,221	22,164	12.3	7.3
Bago	2,052,555	73,698	3.6	620,823	62,088	10.0	6.4
Magway	1,893,596	71,321	3.8	345,205	45,443	13.2	9.4
Mandalay	2,229,358	85,244	3.8	1,195,952	148,360	12.4	8.6
Mon	757,921	32,782	4.3	320,885	36,052	11.2	6.9
Rakhine	894,016	34,204	3.8	195,705	22,226	11.4	7.5
Yangon	1,162,810	65,993	5.7	2,979,783	473,077	15.9	10.2
Shan	2,117,399	49,566	2.3	742,606	85,316	11.5	9.1
Ayeyawady	2,844,168	109,141	3.8	514,987	52,755	10.2	6.4
Nay Pyi Taw	409,357	24,790	6.1	211,993	31,894	15.0	9.0

Table 4.9 University as Highest Level Completed, States/Regions, Urban and Rural

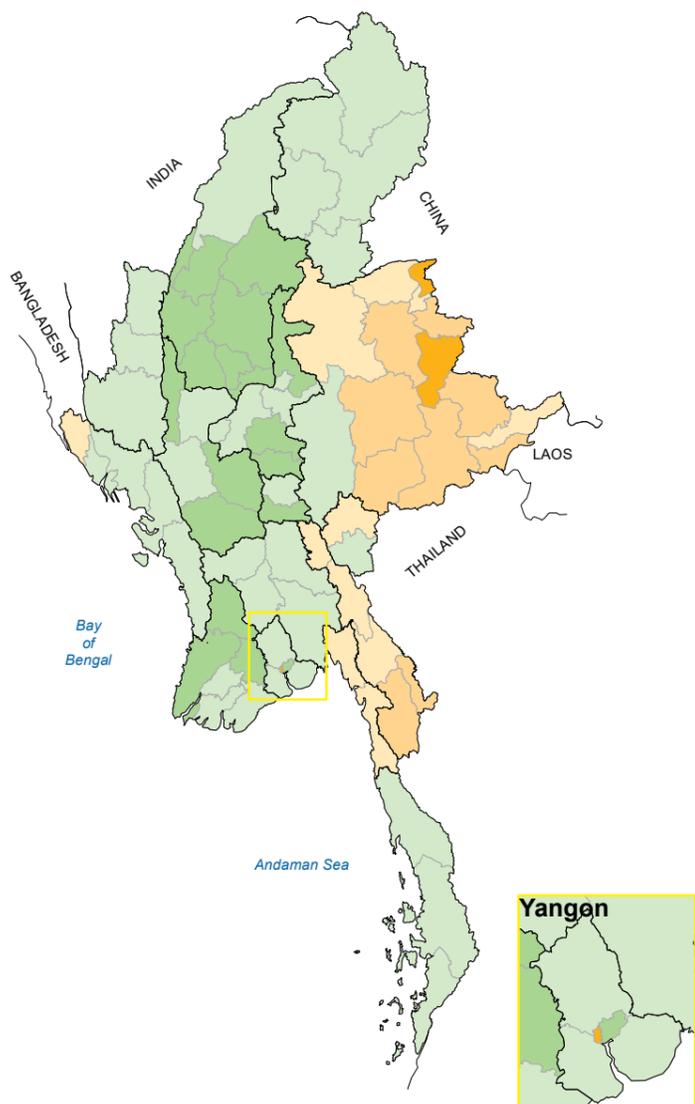
State/Region	Rural			Urban			% Urban minus % Rural
	Total	Number	%	Total	Number	%	
UNION	18,556,818	573,620	3.1	8,366,455	1,404,636	16.8	13.7
Kachin	514,407	19,453	3.8	298,355	35,018	11.7	8.0
Kayah	95,416	2,868	3.0	37,563	5,710	15.2	12.2
Kayin	554,241	9,712	1.8	171,004	16,199	9.5	7.7
Chin	157,579	3,246	2.1	47,844	7,144	14.9	12.9
Sagaing	2,370,234	84,626	3.6	503,529	82,166	16.3	12.7
Tanintharyi	503,761	16,480	3.3	180,221	21,749	12.1	8.8
Bago	2,052,555	63,772	3.1	620,823	84,667	13.6	10.5
Magway	1,893,596	62,157	3.3	345,205	58,088	16.8	13.5
Mandalay	2,229,358	87,001	3.9	1,195,952	210,277	17.6	13.7
Mon	757,921	25,730	3.4	320,885	41,101	12.8	9.4
Rakhine	894,016	19,710	2.2	195,705	25,644	13.1	10.9
Yangon	1,162,810	54,037	4.6	2,979,783	606,476	20.4	15.7
Shan	2,117,399	32,919	1.6	742,606	82,316	11.1	9.5
Ayeyawady	2,844,168	72,188	2.5	514,987	72,998	14.2	11.6
Nay Pyi Taw	409,357	19,721	4.8	211,993	55,083	26.0	21.2

Figure 4.5 Highest Education Levels Completed, Males and Females (aged 25 and over), Union, Urban and Rural

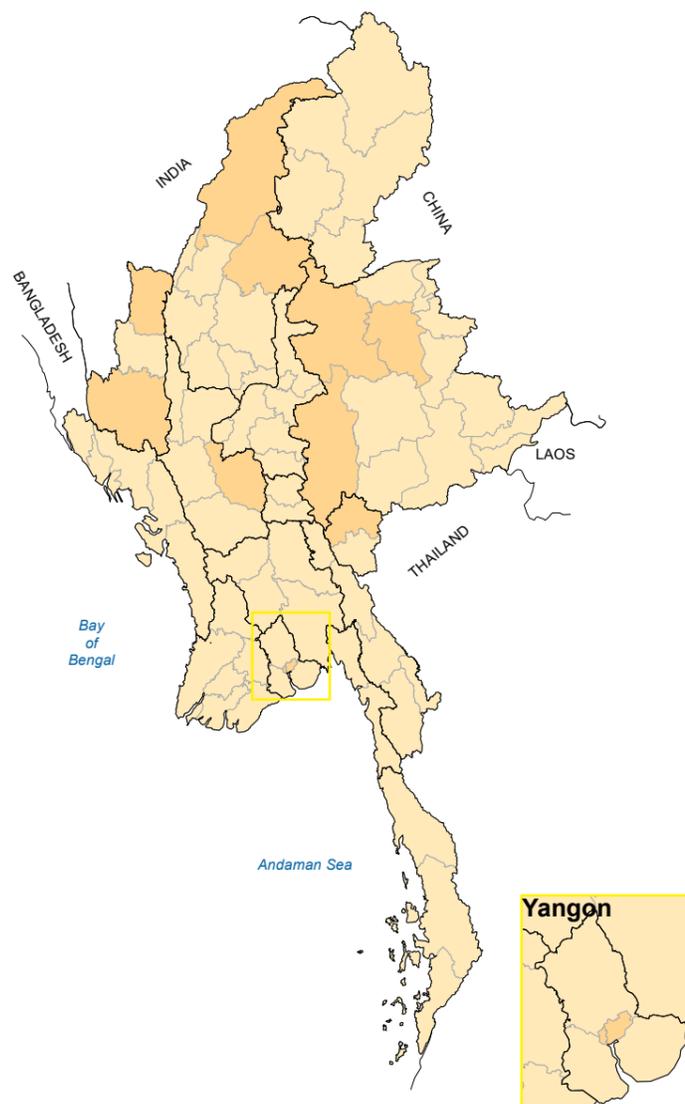


Map 4.4 Highest Education Levels Completed, Districts, Urban and Rural

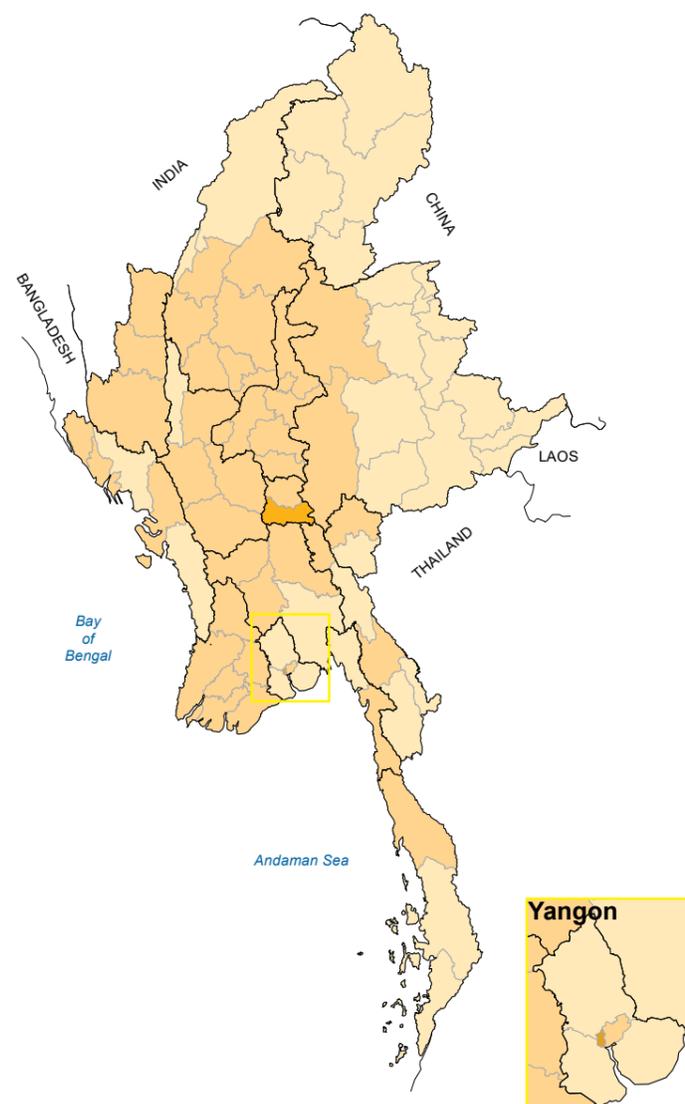
a) Primary School



b) High School



c) University

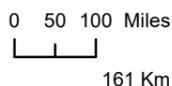


Percentage point differences between urban and rural areas

Average at Union level for primary school: 6.7 more for rural than urban
 Average at Union level for high school: 9.3 more for urban than rural
 Average at Union level for university: 13.7 more for urban than rural

- More than 10 percentage points higher for rural
- 0.1 to 10.0 percentage points higher for rural
- 0.1 to 10.0 percentage points higher for urban
- 10.1 to 20.0 percentage points higher for urban
- 20.1 to 30.0 percentage points higher for urban
- More than 30.0 percentage points higher for urban

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The indicator shows differences between urban and rural populations in the proportions of people aged 25 and older, reporting primary, high school, or university as the highest level of education completed. University means graduates with bachelor's degrees, postgraduate diplomas, master's degrees and PhDs.

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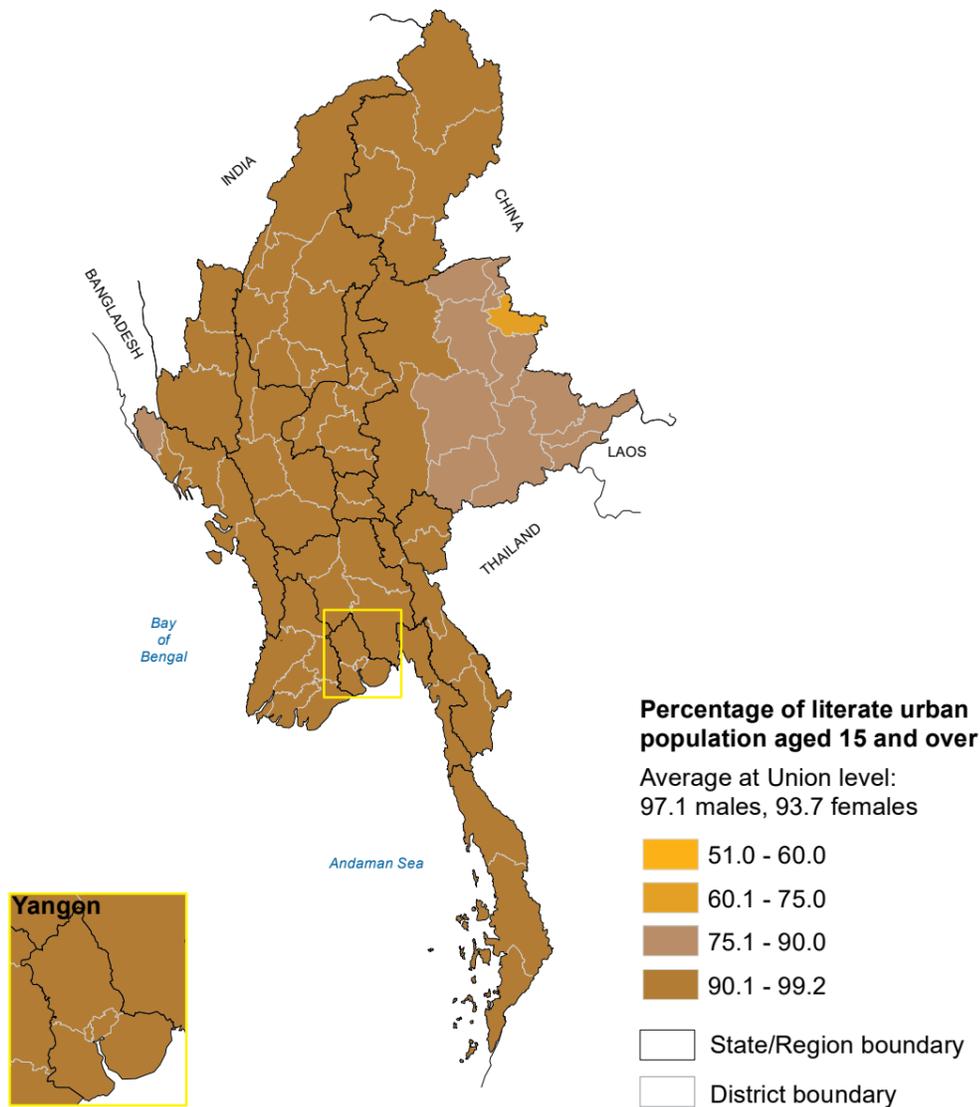
Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

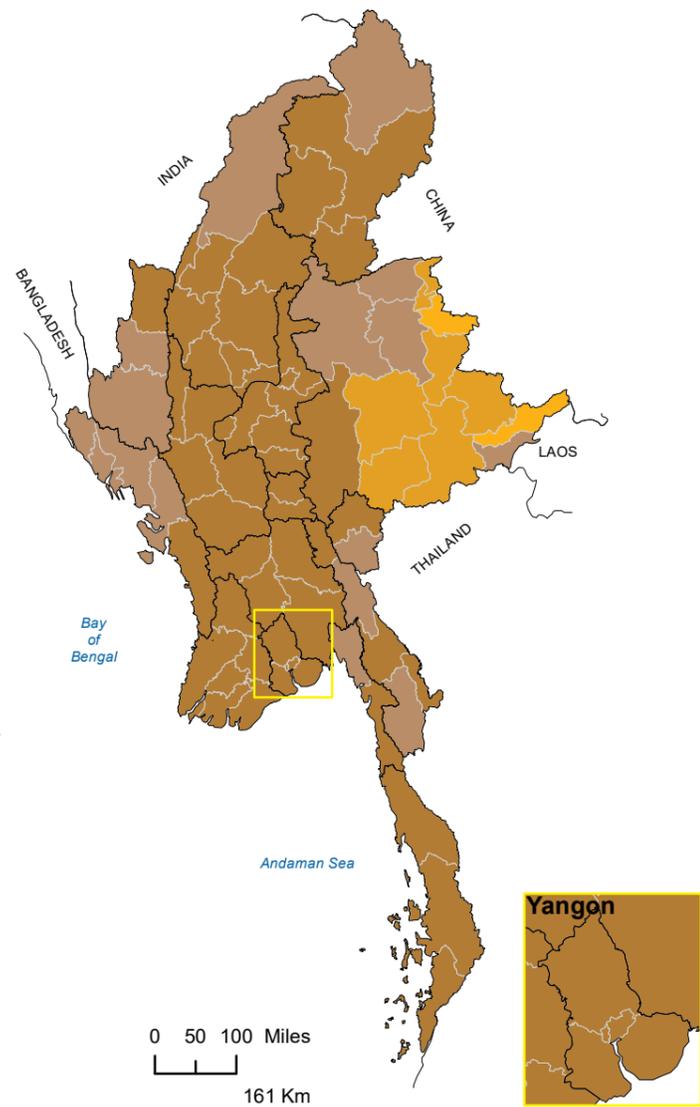
4.5 Adult Literacy

Map 4.5 Adult Literacy Rates, Districts

a) Urban Males



b) Urban Females



Sustainable Development Goal 4

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.6: By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

The base population for the indicators presented in this section is all persons aged 15 years and over that were living in conventional households at the time of the 2014 Census. The literate population includes all individuals who reported to Census enumerators that they were able to read and write in at least one language. According to this definition, the proportion of the adult population enumerated as literate in 2014 was 89.5 per cent. Though the Census did not make a detailed qualitative assessment of literacy, and did not ask any questions at all about numeracy, the high rate of almost 90 per cent adult literacy it did record suggests Myanmar is well positioned to meet Target 4.6 of the United Nations Sustainable Development Goal 4 (see Box above).

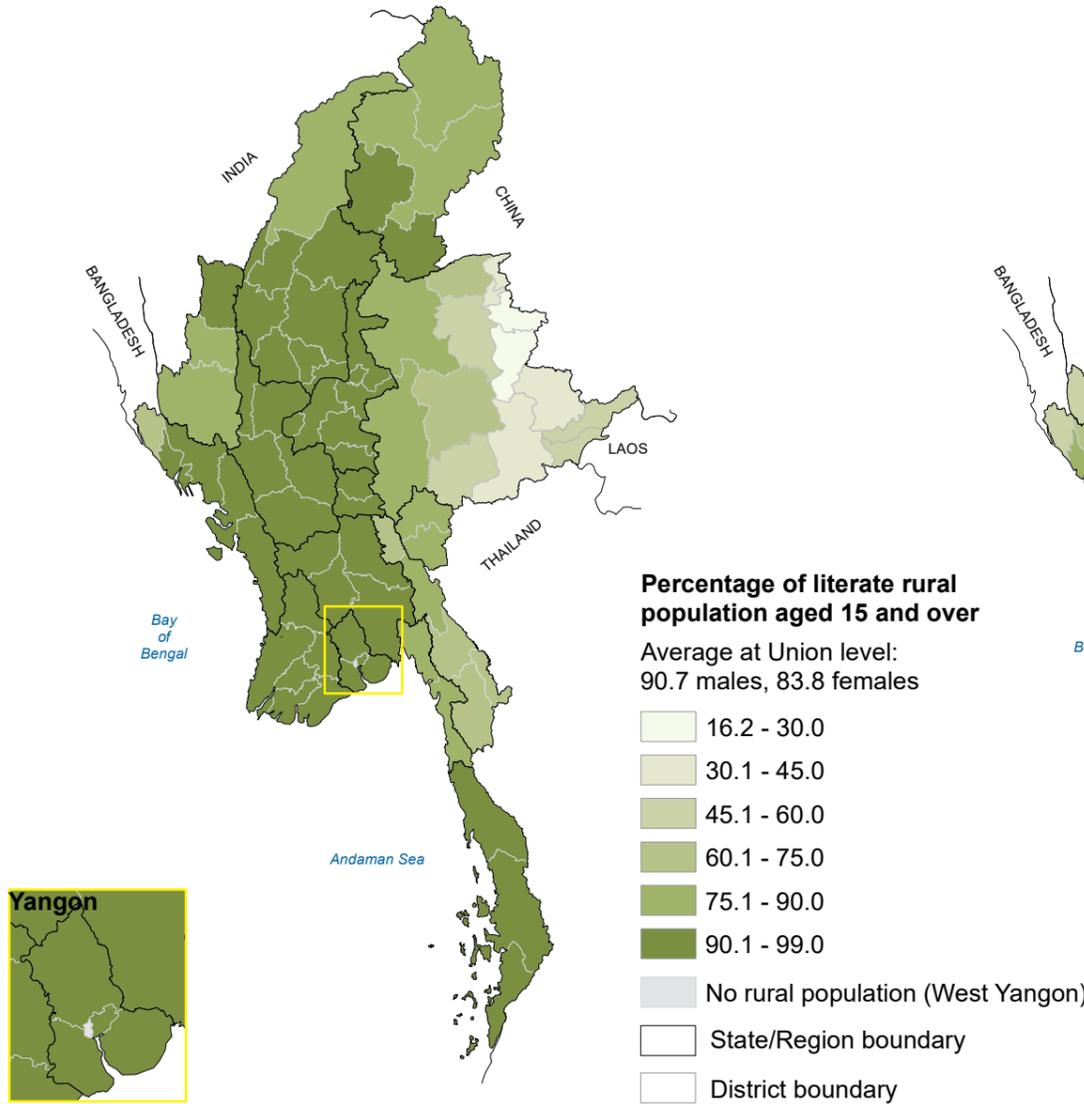
Though the differences are small, in general urban males were the most literate and rural females were the least literate. Among the States and Regions, the urban populations of Yangon Region and Nay Pyi Taw Union Territory had the highest adult literacy rates in the country at 97.2 per cent (Table 4.10). At the other end of the scale, rates were lowest among rural residents of Kayah State and Shan State, at 68.6 per cent and 57.9 per cent, respectively (Table 4.11). The four maps in this section show District-level comparisons of 2014 literacy rates between urban and rural populations and between males and females.

Table 4.10 Urban Adult Literacy Rates, Males and Females (aged 15 and over), States/Regions

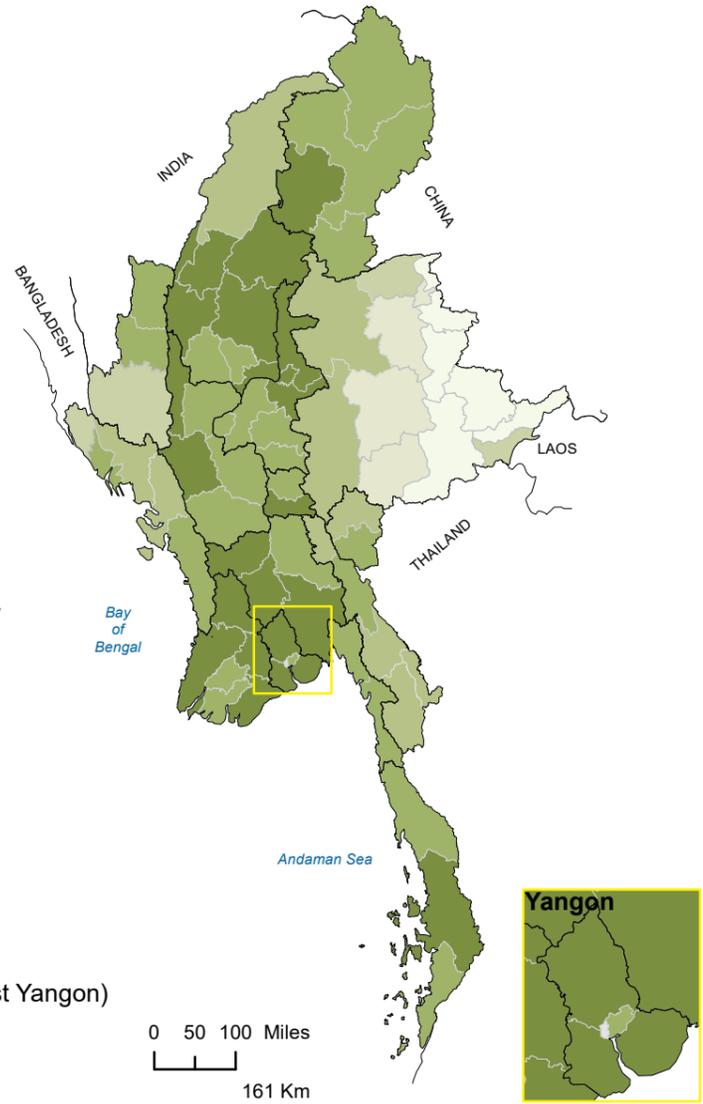
State/Region	Adult Literacy Rate		
	Both Sexes	Males	Females
UNION	95.2	97.1	93.7
Kachin	94.2	96.3	92.4
Kayah	93.1	95.9	90.8
Kayah	93.2	95.3	91.3
Chin	89.6	95.1	85.2
Sagaing	96.2	98.1	94.7
Tanintharyi	96.6	97.9	95.5
Bago	95.9	97.9	94.3
Magway	96.1	98.1	94.6
Mandalay	96.4	98.3	94.9
Mon	93.8	95.7	92.2
Rakhine	90.3	94.3	87.3
Yangon	97.2	98.5	96.2
Shan	85.2	89.4	81.6
Ayeyawady	95.9	97.7	94.4
Nay Pyi Taw	97.2	98.9	95.9

Map 4.5 Adult Literacy Rates, Districts

c) Rural Males



d) Rural Females



Adult literacy rates were generally much higher in the middle corridor than they were in the outer ring. As the four maps above illustrate, this pattern was true for males and females in both urban and rural areas. For all four populations, rates for the States and Regions were higher than the Union average in Ayeyawady, Bago, Magway, Mandalay, Sagaing, Tanintharyi, Yangon and Nay Pyi Taw. In all seven States/Regions located in the outer ring, adult literacy rates were below the Union Average, again for both males and females.

Though adult literacy rates were generally quite high, averaging more than 80 per cent across the country at the State/Region level, rates for Districts varied considerably. The highest rates were in Districts with largely urban populations. Dekkhina (South), Katha, West Yangon and Yinmarpin Districts were the top four, all with adult literacy rates at more than 99 per cent for urban males. Rates were also high for females in these four Districts, as well as in Mawlaik and Thayawady, exceeding 97 per cent in all six Districts. Rates among rural populations were generally lower, but some Districts did have high literacy rates outside their urban centres. Mawlaik and Sagaing Districts in Sagaing Region are examples, both with literacy rates higher than 98 per cent for rural males and 95 per cent for rural females.

Maps 4.5c and 4.5d clearly show the Districts with the lowest rates of literacy among rural adults in 2014. The six Districts with the lowest rates are all in Shan State; fewer than 30 per cent of rural females were literate in Hopan, Kengtung, Laukine, Makman, Minephyat and Minesat Districts. Five of these six Districts also had the lowest adult literacy rates among rural males, a little higher than for females at between 24 and 45 per cent. But illiteracy is not exclusively a rural problem.

Less than 80 per cent of the urban adult male population was literate in four Districts; less than 70 per cent of the urban adult female population was literate in seven Districts. All of these Districts are in Shan State. The lowest adult literacy rates among urban populations were reported for Hopan District, where only 51 per cent of urban females and 62 per cent of urban males were able to read and write. Against the impressively high adult literacy rate for the Union as a whole, the relatively low rates found in the outer ring of States, and predominantly in rural areas, shows clear evidence that, historically, opportunities for getting good, basic education have not been equal in all parts of the country.

Table 4.11 Rural Adult Literacy Rates, Males and Females (aged 15 and over), States/ Regions

State/Region	Adult Literacy Rate		
	Both Sexes	Males	Females
UNION	87.0	90.7	83.8
Kachin	90.1	92.8	87.5
Kayah	78.0	83.9	72.5
Kayin	68.6	73.2	64.7
Chin	76.5	86.6	67.9
Sagaing	93.2	96.3	90.7
Tanintharyi	91.4	93.3	89.6
Bago	93.8	96.4	91.5
Magway	91.6	96.3	87.9
Mandalay	92.3	96.8	88.8
Mon	83.6	86.9	80.8
Rakhine	83.5	91.8	76.9
Yangon	95.2	96.9	93.6
Shan	57.9	64.4	51.8
Ayeyawady	93.5	95.6	91.5
Nay Pyi Taw	93.2	97.5	89.3

Labour Force and Employment

The 2014 Census asked questions about whether people were working or not in the 12-month period prior to the Census (29 March 2014), that is, it collected information on what is termed 'usual activity' rather than 'current activity', for which, in other censuses, the reference period is usually the week before the census. Determining 'usual activity' is generally considered more appropriate in circumstances where the level of economic activity of people varies widely over the year – as it does particularly in agricultural communities – but has the disadvantage in that it possibly underestimates levels of unemployment. Two other questions asked what people's jobs were, and what the major products or services were provided by the organization for which they worked (in order for their industry sector to be derived). The extracts from the questionnaire below show the three questions that the Census asked that were directly related to labour force and employment. Information was collected on people aged 10 and over living in conventional households for all three questions; those living in institutional households were only asked Question 22 concerning their activity status. By combining the answers given to these questions with other information collected by the Census, it is possible to analyse and map geographic variations in labour force characteristics and employment patterns. This section presents a selection of such analyses and discusses geographic variations in the extent to which people were actively participating in the labour force, unemployment, employment in different industry sectors, levels of education among the workforce, and child labour. The analysis provides empirical and graphic evidence of some striking geographic variations in the characteristics of Myanmar's labour force. Some of them are already well known, but others are new.

Firstly, the extent to which agriculture, forestry and fishing dominated the economy and the labour market in almost all parts of the country comes through very clearly. At the same time, signs of change seem to be emerging, particularly in urban centres such as Yangon and Mandalay, where this so-called 'primary sector' was less dominant and the employment base more diverse.

Secondly, even though in 2014, urban areas seemed to offer employment opportunities in a wider variety of sectors, they also tended to have significantly higher unemployment rates than rural areas. In Myanmar, as in many developing countries, it appears that the 'big city' fails to live up to expectations of easy to find, well-paid jobs, and that people who move there in search of work are often disappointed.

Thirdly, though the labour force generally has a significantly larger proportion of male than female participants, the difference is not so marked in the agriculture, forestry and fishing sector. Women do a lot of work on the farm in many rural societies, largely because much of it is seasonal, part-time and close to home, fitting in well with the traditional female responsibilities of child-rearing and other domestic duties. Though for the Union as a whole the sector employed a slightly larger proportion of males than females, in States such as Kayah, Chin and Shan, proportions were roughly equal, or in some cases even slightly larger for females. And 'females' here does not only refer to women, since the fourth characteristic of the labour force that emerged from the 2014 Census was the extent to which children, including girls, are working rather than attending school. The low attendance and completion rates for high school and university described in Chapter 4 are clearly reflected in the large numbers of children that were actively participating in the labour force in 2014.

The fact that a very large proportion of working children were employed in the primary sector points to a fifth key finding from this analysis of the labour force - that working people in urban areas were generally better educated than working people in rural areas. Whereas about one-third of the employed population in cities like Yangon, Nay Pyi Taw and Mandalay had at least completed high school, in most Districts and Townships with predominantly rural populations, less than one fifth of the workforce had completed this level of education.

Finally, the maps presented in this chapter generally do not conform to the 'middle corridor'/'outer ring' contrast illustrated so distinctly and so consistently on the maps in other chapters. Though some general regional patterns can be identified, labour force and employment characteristics tend to be more variable, more local and even more 'random' than many of the other social and demographic indicators presented in this atlas. Difficulties in obtaining clear, accurate, consistent answers to questions involving obscure, technical terminology might explain this in part, but it could also be an indication of a quickening in the pace of change in Myanmar. The lack of sharply defined, high-contrast regional patterns can be an expression of dynamism; of communities, resources and institutions on the move; and of imminent change to traditional ways of life in a climate of political, social and economic flux. Undoubtedly Myanmar is changing rapidly in many ways, and whilst the snapshot of the 2014 Census might hint at such a transformation, it will more usefully provide benchmarks against which the nature and pace of change will be measured in the future.

AGE 10 AND ABOVE AND EMPLOYED		AGE 10 AND ABOVE
LABOUR FORCE		LABOUR FORCE
Serial Number	Occupation	Activity Status
	23. What work was (Name) mainly doing during the last 12 months? Write detailed work descriptions (for example, Primary teacher, Rice farmer, Taxi driver)	22. What was (Name's) activity status during the last 12 months? (April 2013 - March 2014) <i>If options 6 to 11 skip to Q25</i>
	24. What is the major product or service provided in the organisation/enterprise where (Name) mainly worked during the last 12 months? Write detailed descriptions (e.g. Hotel service, Building construction, Garment manufacture)	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, elderly person Ill, disabled Other

5.1 Labour Force Participation: Geographic Variations

Labour force participation rates (LFPRs) indicate the degree to which populations are economically active. They are expressed as the percentage of the total population of working age (15-64) that is economically active, with 'economically active' defined as people that are either working or unemployed but looking for work. The Census reported that the LFPR for the Union as a whole was 67.0 per cent in 2014. This section discusses regional and local variation in LFPRs. Section 5.2 considers differences in participation rates between male and female populations.

The States/Regions with the highest participation rates in 2014 were Shan, Kayah, Sagaing and Magway, where LFPRs were all higher than 70 per cent (Table 5.1). The concentration of high LFPRs in the north-

east of the country shows up very clearly on Map 5.1. It is also evident in Figure 5.1, with most of the Districts in the top half of the figure (above the Union rate of 67 per cent) located in the north and east, and most of the Districts in the bottom part of the figure (below the Union rate) located in the south and west. Kachin State was an exception to this general pattern, where low LFPRs were recorded for places such as Myitkyina Township in Myitkyina District, Kamine Sub-Township in Mohnyin District, and Putao and Khaunglanphoo Townships in Putao District. Less than 60 per cent of the working-age population was economically active in these four Townships.

In 2014, LFPRs were relatively low throughout the south and west of Myanmar. Mon, Rakhine and Kayin

States had the least economically active populations, all at around 60 per cent. At the District level, rates of less than 60 per cent were recorded for Hpa-An and Pharpon (in Kayin State), Haka (Chin), Thayawady (Bago), Thaton (Mon), Sittway (Rakhine), and Phyapon (Ayeyawady). Closer analysis of Township-level data shows that not everywhere in the south and west of the country conformed to the general pattern for the region as a whole. Exceptions included Cikha Sub-Township, (in Falam District) and Paletwa (Mindat District), both in Chin State; Mindon Township (Thayet District in Magway Region); and Thanbyuzayat Township, (Mawlamyine District in Mon State). LFPRs were higher than 75 per cent in all of these Townships.

Figure 5.1 Labour Force Participation Rates, Districts

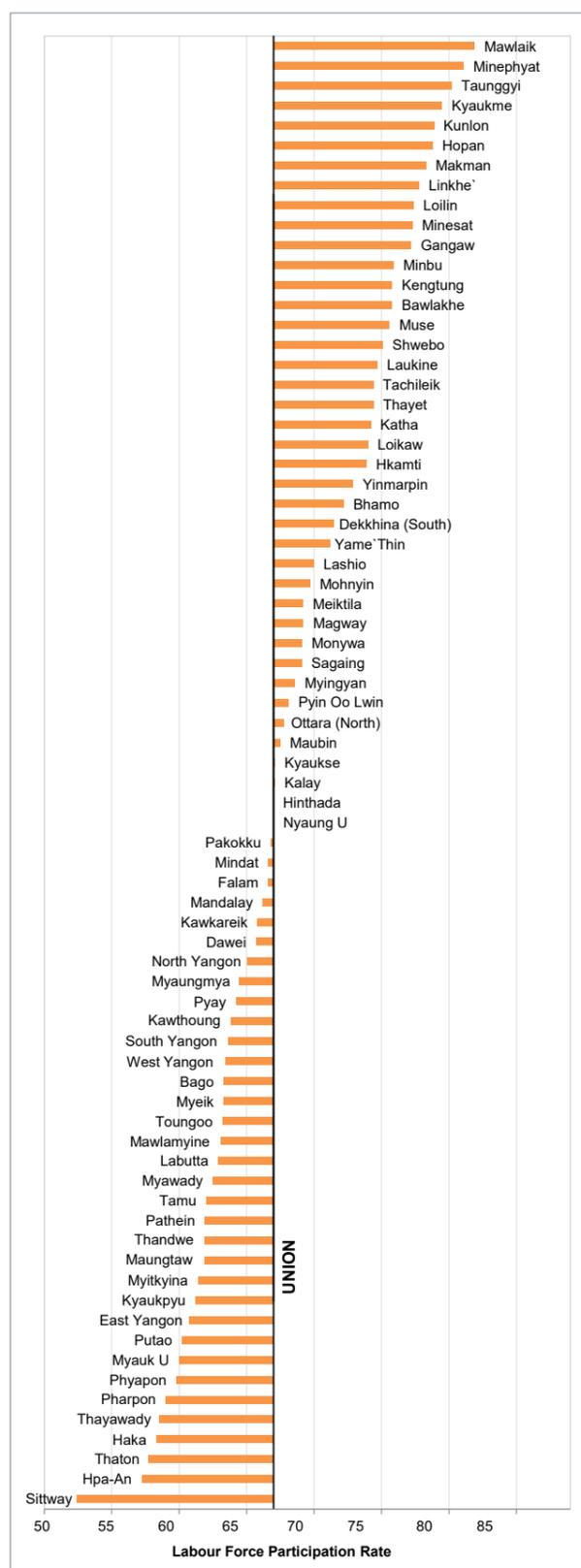
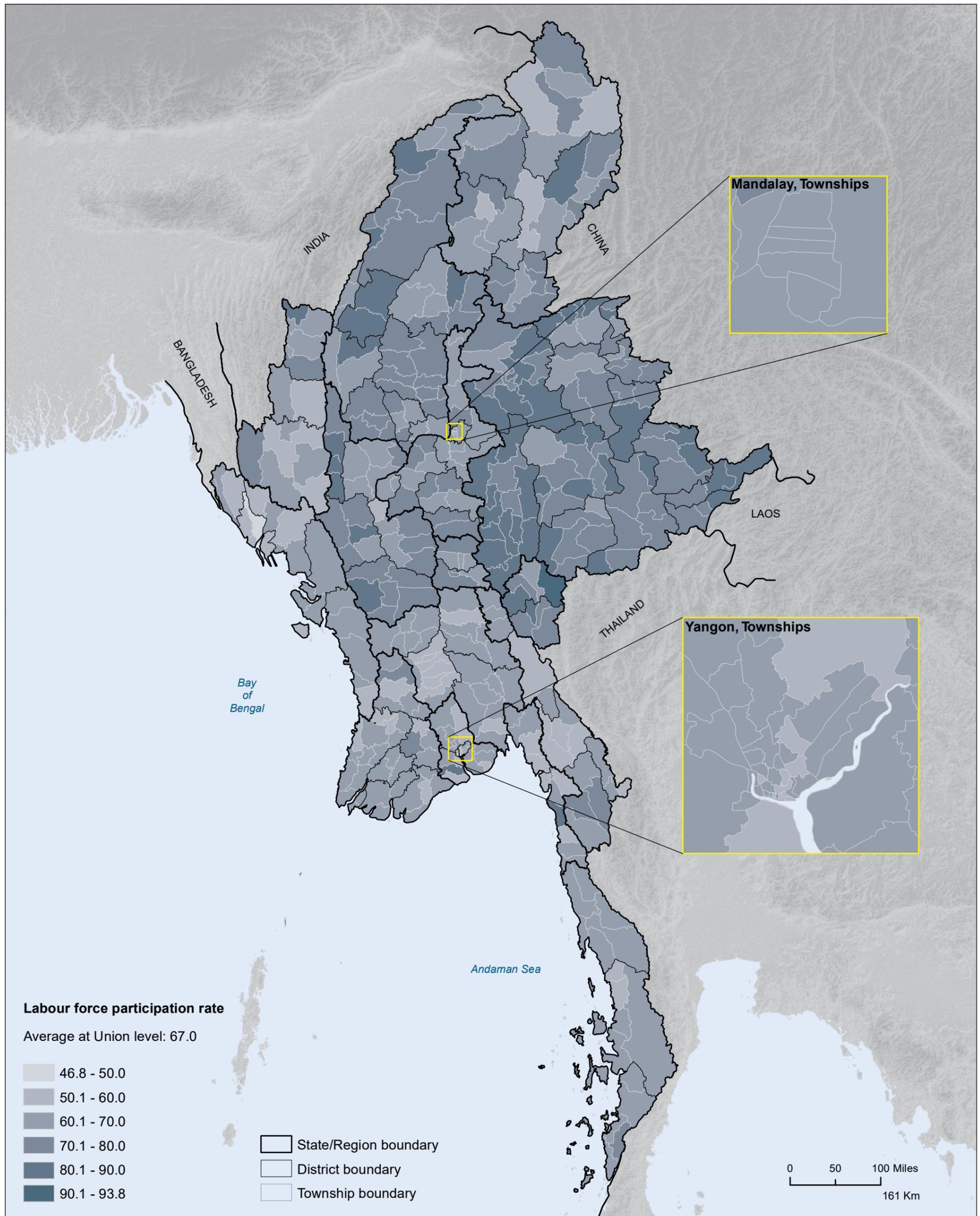


Table 5.1 Labour Force Participation Rates, States/Regions and Districts

State/Region and District	LFPR	State/Region and District	LFPR	State/Region and District	LFPR
UNION	67.0	Myeik	63.3	Yangon	63.1
Kachin	67.2	Kawthoung	63.8	North Yangon	65.0
Myitkyina	61.4	Bago	62.4	East Yangon	60.7
Mohnyin	69.7	Bago	63.3	South Yangon	63.6
Bhamo	72.2	Toungoo	63.2	West Yangon	63.4
Putao	60.2	Pyay	64.2	Shan	77.5
Kayah	74.2	Thayawady	58.5	Taunggyi	80.2
Loikaw	74.0	Magway	71.3	Loilin	77.4
Bawlakhe	75.8	Magway	69.2	Linkhe'	77.8
Kayin	60.7	Minbu	75.9	Lashio	70.0
Hpa-An	57.2	Thayet	74.4	Muse	75.6
Pharpon	59.0	Pakokku	66.8	Kyaukme	79.5
Myawady	62.5	Gangaw	77.2	Kunlon	78.9
Kawkaik	65.8	Mandalay	67.9	Laukine	74.7
Chin	64.8	Mandalay	66.2	Hopan	78.8
Haka	58.3	Pyin Oo Lwin	68.1	Makman	78.3
Falam	66.6	Kyaukse	67.1	Kengtung	75.8
Mindat	66.6	Myingyan	68.6	Minesat	77.3
Sagaing	72.3	NyaungU	67.0	Tachileik	74.4
Sagaing	69.1	Yame' thin	71.2	Minephyat	81.1
Shwebo	75.1	Meiktila	69.2	Ayeyawady	63.8
Monywa	69.1	Mon	61.0	Pathein	61.9
Katha	74.2	Mawlamyine	63.1	Phyapon	59.8
Kalay	67.1	Thaton	57.7	Maubin	67.5
Tamu	62.0	Rakhine	58.8	Myaungmya	64.4
Mawlaik	81.9	Sittway	52.4	Labutta	62.9
Hkamti	73.9	Myauk U	60.0	Hinthada	67.0
Yinmarpin	72.9	Maungtaw	61.9	Nay Pyi Taw	69.8
Tanintharyi	64.2	Kyaukpyu	61.2	Ottara (North)	67.8
Dawei	65.7	Thandwe	61.9	Dekkhina (South)	71.5

Map 5.1 Labour Force Participation Rates, Townships



The base population for this indicator is all individuals aged 15-64 that were living in conventional or institutional households at the time of the 2014 Census. The indicator gives the sum of the employed plus unemployed population, aged 15-64, as a percentage of the total population in the same age group.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

5.2 Labour Force Participation: Males and Females

In Myanmar, as in most countries, the proportion of males participating in the labour force is higher than the proportion of females. In 2014, approximately 85 per cent of males aged 15-64 were actively employed or looking for work. For females in the same age group, the proportion was just fractionally over a half (Table 5.2). There are also gender differences in the age-specific labour force participation rates. Though not shown here, the Census showed that for men, rates were consistently high at between 85 and 95 per cent for all age groups between 20 and 59 years. They then dropped sharply after 60 years of age, but still remained high relative to the rates for women. In contrast, the maximum rate at which women participated in the labour force, about 60 per cent, was at the ages of 20-24. At older ages, the female LFPR dropped steadily as more women left the formal labour market to raise children and work in the home. Whereas almost 70 per cent of men aged 60-64 were reported in the Census as still working, less than 30 per cent of women in this cohort were still actively employed (Department of Population, 2017d).

Geographically, participation rates varied more for women than for men. The maps opposite show this difference very clearly, with male LFPRs distributed fairly uniformly high throughout the country in Map

5.2a, but with female rates, shown in Map 5.2b, varying considerably from District to District. Summary statistics taken from Table 5.2 also support this observation. Looking at LFPRs for the Districts, the range for men was only about 18 percentage points, from a minimum of 74.6 per cent in Haka (in Chin State) to a maximum of 92.7 per cent in Bawlakhe (in Kayah). Rates for all 74 Districts were clustered within this relatively narrow range around a high mean LFPR for males of just over 85 per cent. In contrast, the range of female participation rates, at more than 40 percentage points, was much wider, from as low as 31.9 per cent in Sittway (Rakhine) to 72.7 per cent in Mawlaik, Sagaing.

Shan State stands out as the State/Region that had the highest LFPRs for both men and women. As will be discussed later in this chapter, this is typical of an area where most people work in agriculture and where, conversely, unemployment rates are very low. Other States/Regions with high LFPRs for both sexes include Kayah and Sagaing, which, together with Shan, were all close to 90 per cent for men and around 60 per cent or more for women. Interestingly, the lowest LFPRs were in different States/Regions for men than they were for women. For men, Chin, Mon and Kayah had the lowest rates, whereas for women,

the lowest level of participation was in Kayah, Bago and Tanintharyi, and - with by far the lowest level, at only 38 per cent - Rakhine.

Seven Districts had male LFPRs higher than 90 per cent, five of them - Minephyat, Minesat, Kunlon, Kyaukme and Loilin - located in Shan State, the others being Bawlakhe (in Kayah) and Mawlaik (Sagaing). Similarly, three of the four Districts with the highest rates for females were also in Shan State. These were Taunggyi, Hopan and Makman, with the fourth being, again, Mawlaik, all with LFPRs higher than 70 per cent. Whereas these Districts have similar socio-demographic profiles - mostly outer ring Districts with large rural populations working predominantly in the primary sector - no such similarities are found among the Districts with the lowest participation rates. For males, these included Haka, Falam and Mindat (in Chin State), Sittway (Rakhine), and the distinctly different West and East Yangon Districts, all with male LFPRs of less than 80 per cent. For females, the lowest rates were found, again, in Sittway and in Thayawady (Bago), Kawthoung (Tanintharyi), and Pharpon (Kayah), where only about one-third of women were active in the labour force.

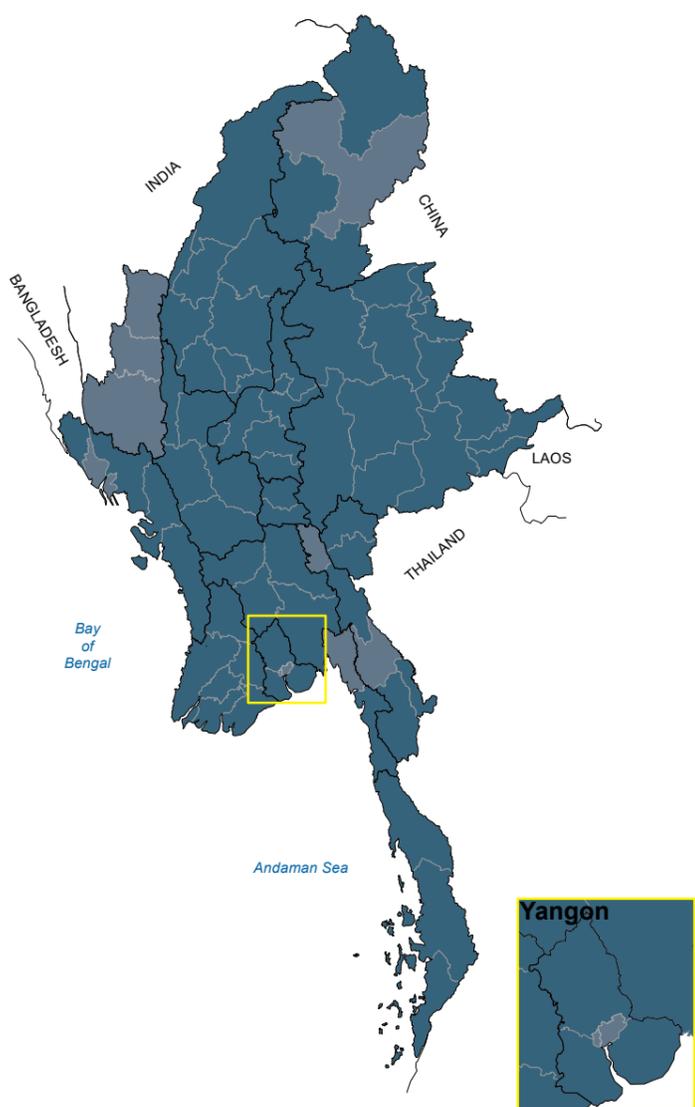
Table 5.2 Labour Force Participation, Males and Females, States/Regions and Districts

State/Region District	Total Population Aged 15 - 64		Active Population Aged 15 - 64 (Employed + Unemployed)		Labour Force Participation Rate, Percentage	
	Males	Females	Males	Females	Males	Females
UNION	15,722,510	17,260,258	13,402,101	8,708,781	85.2	50.5
Kachin	579,063	505,033	495,999	231,994	85.7	45.9
Myitkyina	168,185	171,007	134,139	74,223	79.8	43.4
Mohnyin	275,353	196,107	246,877	81,710	89.7	41.7
Bhamo	109,512	111,612	94,158	65,385	86.0	58.6
Putao	26,013	26,307	20,825	10,676	80.1	40.6
Kayah	88,335	88,599	77,820	53,550	88.1	60.4
Loikaw	72,466	76,408	63,111	47,003	87.1	61.5
Bawlakhe	15,869	12,191	14,709	6,547	92.7	53.7
Kayah	431,388	457,254	351,361	188,476	81.4	41.2
Hpa-An	217,338	235,429	170,812	87,978	78.6	37.4
Pharpon	10,912	10,116	8,795	3,611	80.6	35.7
Myawady	69,090	65,773	58,806	25,483	85.1	38.7
Kawkareik	134,048	145,936	112,948	71,404	84.3	48.9
Chin	122,635	141,970	95,126	76,443	77.6	53.8
Haka	26,154	29,960	19,508	13,225	74.6	44.1
Falam	44,274	48,861	34,669	27,366	78.3	56.0
Mindat	52,207	63,149	40,949	35,852	78.4	56.8
Sagaing	1,615,885	1,852,980	1,413,223	1,096,004	87.5	59.1
Sagaing	160,395	193,660	136,809	107,756	85.3	55.6
Shwebo	424,333	515,280	374,636	331,391	88.3	64.3
Monywa	229,860	284,343	195,966	159,535	85.3	56.1
Katha	266,135	285,107	239,170	170,124	89.9	59.7
Kalay	155,870	172,859	132,192	88,403	84.8	51.1
Tamu	34,488	35,414	29,243	14,081	84.8	39.8
Mawlaik	46,512	51,951	42,876	37,778	92.2	72.7
Hkamti	137,781	120,362	122,099	68,605	88.6	57.0
Yinmarpin	160,511	194,004	140,232	118,331	87.4	61.0
Tanintharyi	426,938	431,481	368,646	182,620	86.3	42.3
Dawei	142,792	156,004	122,677	73,751	85.9	47.3
Myeik	209,572	210,817	179,737	86,328	85.8	40.9
Kawthoung	74,574	64,660	66,232	22,541	88.8	34.9
Bago	1,492,733	1,682,452	1,274,841	705,876	85.4	42.0
Bago	520,650	591,631	446,557	256,975	85.8	43.4
Toungoo	332,114	378,703	279,732	169,730	84.2	44.8
Pyay	304,585	338,002	258,139	154,715	84.8	45.8
Thayawady	335,384	374,116	290,413	124,456	86.6	33.3
Magway	1,170,691	1,408,105	1,016,012	823,256	86.8	58.5
Magway	359,554	443,008	306,539	248,582	85.3	56.1
Minbu	210,536	245,825	187,342	158,986	89.0	64.7
Thayet	241,857	264,686	214,467	162,154	88.7	61.3
Pakokku	279,198	364,778	236,190	194,285	84.6	53.3
Gangaw	79,546	89,808	71,474	59,249	89.9	66.0
Mandalay	1,963,525	2,222,860	1,677,520	1,163,681	85.4	52.4
Mandalay	598,184	637,721	491,825	326,437	82.2	51.2

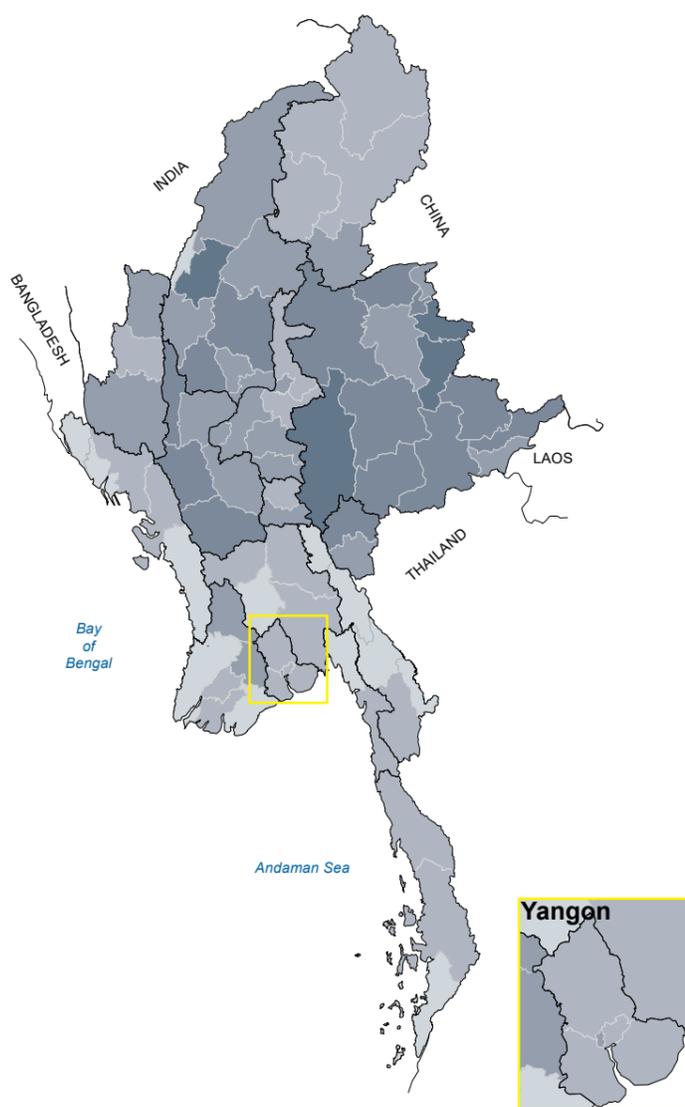
State/Region District	Total Population Aged 15 - 64		Active Population Aged 15 - 64 (Employed + Unemployed)		Labour Force Participation Rate, Percentage	
	Males	Females	Males	Females	Males	Females
Pyin Oo Lwin	331,885	338,124	289,723	166,599	87.3	49.3
Kyaukse	236,694	265,709	208,903	128,025	88.3	48.2
Myingyan	301,631	390,113	256,880	217,432	85.2	55.7
Nyaung U	71,690	90,120	60,246	48,181	84.0	53.5
Yame`thin	159,866	183,769	142,241	102,591	89.0	55.8
Meiktila	263,575	317,304	227,702	174,416	86.4	55.0
Mon	601,640	677,355	488,369	291,441	81.2	43.0
Mawlamyine	361,936	414,942	297,966	192,151	82.3	46.3
Thaton	239,704	262,413	190,403	99,290	79.4	37.8
Rakhine	598,624	706,937	497,810	269,309	83.2	38.1
Sittway	147,979	183,772	115,269	58,711	77.9	31.9
Myauk U	179,584	226,821	151,266	92,454	84.2	40.8
Maungtaw	30,654	29,637	25,667	11,659	83.7	39.3
Kyaukpyu	125,350	146,552	106,486	59,943	85.0	40.9
Thandwe	115,057	120,155	99,122	46,542	86.2	38.7
Yangon	2,463,600	2,756,341	2,015,620	1,278,756	81.8	46.4
North Yangon	867,282	959,094	722,702	463,719	83.3	48.3
East Yangon	805,617	904,894	643,121	395,704	79.8	43.7
South Yangon	456,651	490,463	387,835	214,857	84.9	43.8
West Yangon	334,050	401,890	261,962	204,476	78.4	50.9
Shan	1,858,154	1,854,042	1,646,830	1,230,202	88.6	66.4
Taunggyi	547,913	559,860	489,084	399,251	89.3	71.3
Loilin	173,761	183,837	156,477	120,456	90.1	65.5
Linkhe`	46,643	45,239	41,948	29,501	89.9	65.2
Lashio	188,684	200,015	162,448	109,451	86.1	54.7
Muse	145,230	142,306	126,322	91,104	87.0	64.0
Kyaukme	243,019	256,393	219,744	177,097	90.4	69.1
Kunlon	18,235	15,495	16,480	10,123	90.4	65.3
Laukine	51,429	43,883	45,101	26,099	87.7	59.5
Hopan	67,042	64,607	58,006	45,711	86.5	70.8
Makman	74,039	69,657	63,664	48,804	86.0	70.1
Kengtung	122,745	113,955	106,395	73,017	86.7	64.1
Minesat	78,428	66,811	70,944	41,348	90.5	61.9
Tachileik	61,711	58,662	54,479	35,094	88.3	59.8
Minephyat	39,275	33,322	35,738	23,146	91.0	69.5
Ayeyawady	1,931,506	2,072,844	1,653,933	901,482	85.6	43.5
Patheingyi	518,003	553,997	445,029	219,026	85.9	39.5
Phyappon	320,539	332,805	269,339	121,504	84.0	36.5
Maubin	301,873	326,105	259,563	164,030	86.0	50.3
Myaungmya	242,559	259,525	209,017	114,292	86.2	44.0
Labutta	198,984	200,736	169,241	82,328	85.1	41.0
Hinthada	349,548	399,676	301,744	200,302	86.3	50.1
Nay Pyi Taw	377,793	402,005	328,991	215,691	87.1	53.7
Ottara (North)	171,889	179,734	148,842	89,560	86.6	49.8
Dekkhina (South)	205,904	222,271	180,149	126,131	87.5	56.7

Map 5.2 Labour Force Participation Rates, Districts

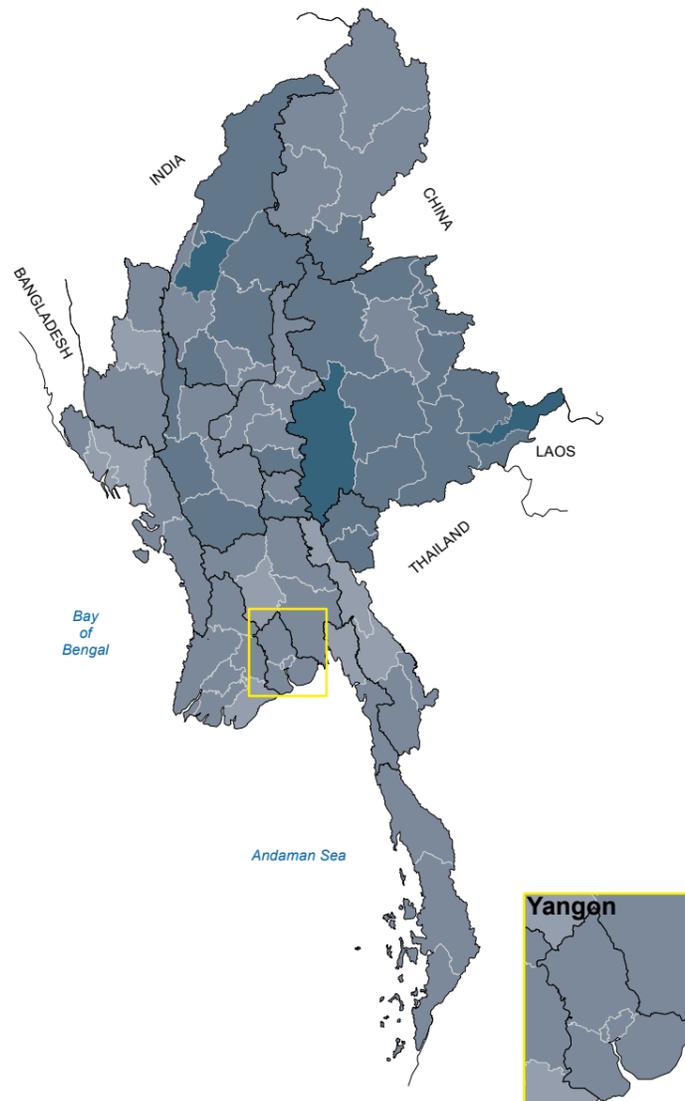
a) Males



b) Females



c) Both Sexes

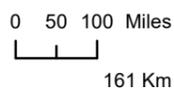


Labour force participation rate

Average at Union level: 85.2 males, 50.5 females, 67.0 males & females

- 31.9 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 92.7

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The indicator gives the percentage of the employed and unemployed population aged 15 to 64 divided by the total population in the same age group.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

5.3 Unemployment

Unemployment rates are widely used as indicators of the efficiency, productivity and overall 'health' of labour markets. They are, however, notoriously difficult to collect data for and to calculate. The main problem lies in making a clear distinction between what is meant by the terms 'employed' and 'unemployed'. The difficulty is particularly acute in developing countries, and especially among rural populations, where most working people undertake several different kinds of work at different times of the year, some of it paid and some of it unpaid, some of it full-time and some of it for just a few hours per week. Very few people are fully employed or fully unemployed all the time, meaning that for many people, the less precise classification of 'underemployed' is more appropriate. These qualifications limit the usefulness of Census-derived unemployment rates to providing only a very general picture of employment levels in the workforce. They should not be taken as precise measures of the extent to which productive capacity is being utilized. Specialized labour force and employment surveys provide better indicators for this.

Though Table 5.3 presents data for male and female unemployment rates, the differences are small, so they are not discussed here. Instead, this section focuses on geographic variations in total rates, and the differences between unemployment rates among urban and rural populations. According to the 2014 Census, Union level unemployment rates were 4 per cent of the total working-age population, 4.8 per cent of the urban population and 3.6 per cent of the rural population. Even with the limitations discussed above, Maps 5.3a, b and c show that some interesting regional and local variations underlie the generally low Union rates. Rakhine, Kayin and Mon States had the highest total unemployment rates, Rakhine, at more

than 10 per cent, standing out by far as the highest at the State/Region level. Interestingly, as Figure 5.2 shows, these are the only three States/Regions in the country in which the rural unemployment rates exceed the urban rates. Shan State, with most of its large workforce employed in the primary sector (agriculture, forestry and fishing) had the lowest total rate at 2 per cent. Interestingly, Shan State had the lowest unemployment rates for all five indicators shown in Table 5.3 - total, male, female, urban and rural.

Map 5.3a shows that urban unemployment rate variations in the Districts generally aligned with those for the States/Regions. Rates were relatively low in Districts in Shan State and relatively high in Districts in Rakhine, Mon and Chin. The lowest urban unemployment rates in Shan State were in Minesat, Linkhe` and Tachileik Districts, all at around 3 per cent. Bawlake District in Kayah State had the lowest urban unemployment rate in the country, at 1.9 per cent. At the other end of the scale, the largest proportions of unemployed among urban populations were in Falam and Mindat Districts (in Chin State), and Sittway and Myauk U Districts (in Rakhine). More than 10 per cent of the active urban population was unemployed in all four of these Districts.

Apart from Rakhine, Kayin and Mon States, unemployment rates were generally lower in rural areas than in urban areas. Districts in Shan State had the lowest rural unemployment rates, with rates in Taunggyi, Linkhe`, Kunlon, Minesat and Minephyat being at, or just above, 1 per cent. In contrast, rural unemployment rates were higher than 10 per cent in Sittway and Myauk U (in Rakhine), and in Hpa-An and Pharpon (in Kayin).

The most striking feature of Figure 5.2 is the extremely high unemployment rate for urban workers in Chin State. This stands out in relation to both the rural unemployment rate for that State, and the urban unemployment rate for the other 14 States/Regions in the Union. It suggests that, in 2014, getting work in Chin was not a State- or even District-wide problem, but more specifically, it was a problem faced by those people living in the Townships of Haka, Falam and Mindat, and in urban centres in other parts of the State.

Figure 5.2 Unemployment Rates, States/Regions, Urban and Rural

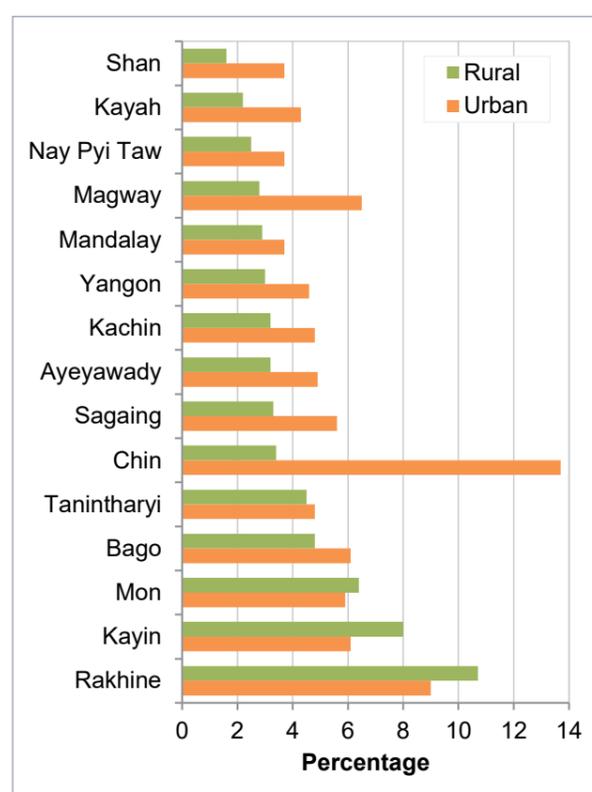


Table 5.3 Unemployment Rates, Males and Females, States/Regions and Districts, Urban and Rural

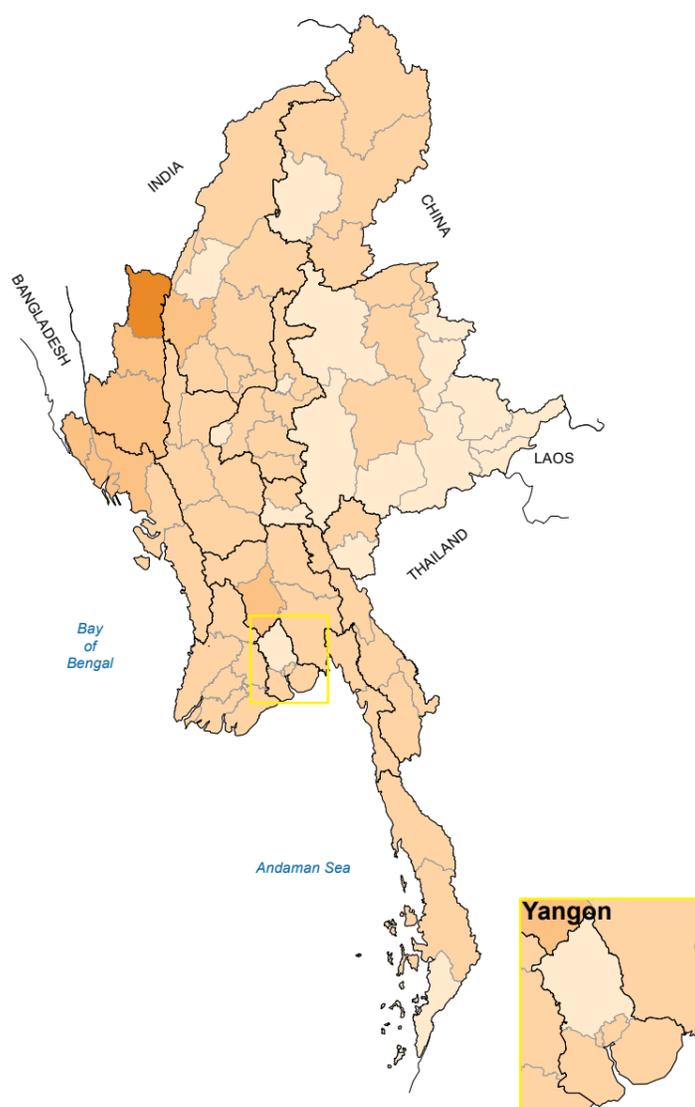
State/Region District	Unemployment Rate				
	Total	Male	Female	Urban	Rural
UNION	4.0	3.9	4.1	4.8	3.6
Kachin	3.7	3.5	4.3	4.8	3.2
Myitkyina	5.2	5.2	5.1	5.8	4.3
Mohnyin	3.0	2.6	4.3	3.3	3.0
Bhamo	3.0	3.0	3.1	4.4	2.5
Putao	5.0	4.9	5.2	6.3	4.5
Kayah	2.7	2.7	2.6	4.3	2.2
Loikaw	2.9	3.1	2.8	4.7	2.4
Bawlakhe	1.3	1.2	1.6	1.9	1.1
Kayin	7.5	7.8	7.1	6.1	8.0
Hpa-An	9.6	9.8	9.2	7.0	10.1
Pharpon	9.6	9.1	10.7	6.3	12.7
Myawady	4.9	4.8	5.1	5.4	4.2
Kawkareik	5.7	6.1	5.0	6.1	5.6
Chin	5.4	5.9	4.7	13.7	3.4
Haka	4.1	3.9	4.3	8.7	2.2
Falam	7.6	8.6	6.4	20.6	4.9
Mindat	4.1	4.6	3.5	11.4	2.7
Sagaing	3.6	3.4	3.9	5.6	3.3
Sagaing	5.8	5.4	6.3	5.0	6.0
Shwebo	2.8	2.5	3.0	5.4	2.4
Monywa	3.5	3.3	3.7	5.1	2.8
Katha	3.0	2.8	3.3	4.4	2.9
Kalay	5.7	5.4	6.3	9.3	4.6
Tamu	5.1	4.6	6.0	4.1	6.1
Mawlaik	2.8	2.5	3.2	3.6	2.7
Hkamti	3.3	3.2	3.4	5.2	3.0
Yinmarpin	3.6	3.3	3.9	8.0	3.4
Tanintharyi	4.6	4.3	5.2	4.8	4.5
Dawei	5.7	5.7	5.6	5.3	5.7

State/Region District	Unemployment Rate				
	Total	Male	Female	Urban	Rural
Myeik	4.4	4.0	5.4	5.0	4.2
Kawthoung	2.5	2.4	2.9	3.7	1.9
Bago	5.1	4.7	5.8	6.1	4.8
Bago	5.2	4.8	5.8	5.6	5.0
Toungoo	4.0	3.9	4.3	5.9	3.5
Pyay	3.4	2.9	4.2	5.5	2.8
Thayawady	7.8	6.9	9.9	9.4	7.5
Magway	3.3	3.1	3.6	6.5	2.8
Magway	3.2	3.1	3.3	7.3	2.3
Minbu	2.1	2.0	2.2	4.3	1.9
Thayet	2.4	2.3	2.6	5.9	2.0
Pakokku	5.0	4.6	5.6	7.3	4.7
Gangaw	3.5	2.8	4.4	4.6	3.4
Mandalay	3.1	3.1	3.2	3.7	2.9
Mandalay	2.7	2.6	2.7	3.0	1.6
Pyin Oo Lwin	3.3	3.2	3.4	4.2	2.9
Kyaukse	3.1	2.8	3.4	4.3	2.9
Myingyan	3.9	4.0	3.7	5.3	3.6
Nyaung U	3.0	3.0	3.1	2.6	3.2
Yame`thin	2.9	2.8	2.9	5.4	2.6
Meiktila	3.4	3.3	3.5	6.0	2.8
Mon	6.2	6.1	6.4	5.9	6.4
Mawlamyine	6.6	6.7	6.5	5.5	7.3
Thaton	5.5	5.2	6.1	7.1	5.2
Rakhine	10.4	9.1	12.8	9.0	10.7
Sittway	14.4	12.4	18.3	10.4	16.0
Myauk U	12.5	10.9	15.1	11.5	12.6
Maungtau	7.5	6.4	9.8	9.1	7.0
Kyaukpyu	8.0	7.4	9.2	5.8	8.3
Thandwe	5.8	5.3	6.9	5.5	5.9

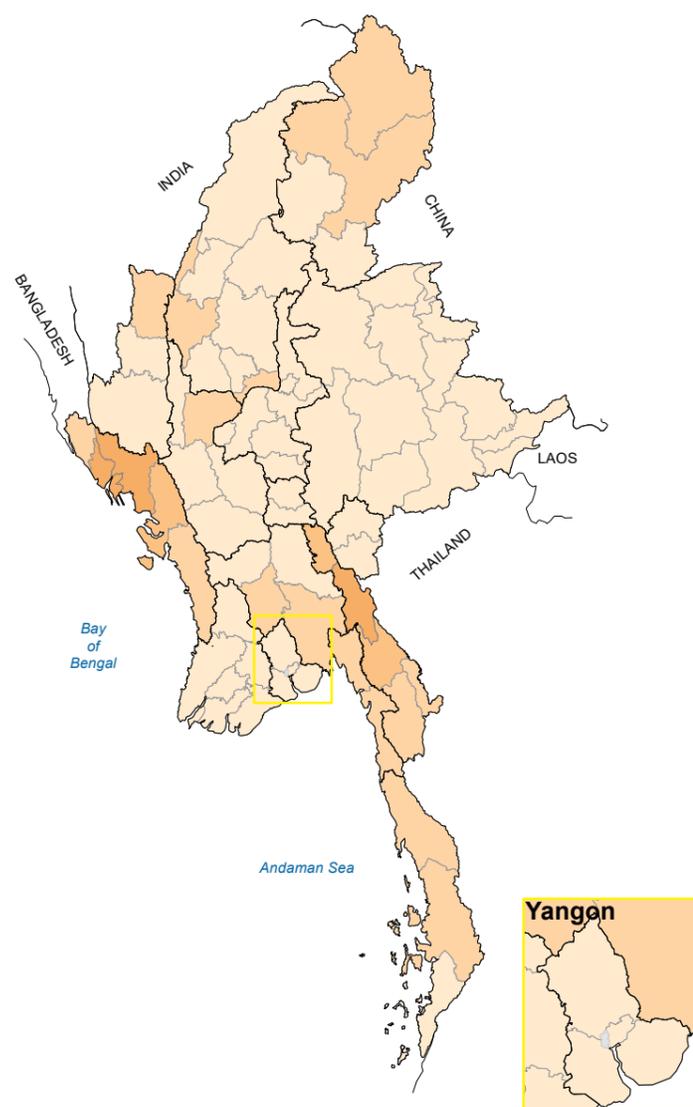
State/Region District	Unemployment Rate				
	Total	Male	Female	Urban	Rural
Yangon	4.1	4.3	3.9	4.6	3.0
North Yangon	3.2	3.4	3.0	3.6	2.8
East Yangon	4.8	5.1	4.4	4.9	2.1
South Yangon	3.9	3.8	4.2	5.7	3.2
West Yangon	4.9	5.2	4.6	4.9	n/a
Shan	2.0	2.1	1.9	3.7	1.6
Taunggyi	1.5	1.5	1.5	3.2	1.0
Loilin	1.7	1.8	1.5	4.7	0.9
Linkhe`	1.7	1.8	1.7	3.0	1.2
Lashio	2.4	2.5	2.3	4.3	1.5
Muse	3.7	3.8	3.5	4.6	3.2
Kyaukme	1.7	2.0	1.5	3.6	1.5
Kunlon	1.6	1.7	1.4	5.7	1.2
Laukine	3.4	3.3	3.6	4.1	3.2
Hopan	2.8	3.0	2.5	3.7	2.6
Makman	2.8	2.9	2.6	3.4	2.7
Kengtung	2.1	2.0	2.1	3.4	1.7
Minesat	1.4	1.5	1.3	2.9	1.2
Tachileik	2.9	2.8	3.1	3.1	2.8
Minephyat	1.5	1.4	1.7	3.9	1.2
Ayeyawady	3.4	3.2	3.8	4.9	3.2
Patheingyi	3.8	3.4	4.6	4.9	3.6
Phyayon	3.3	3.1	4.0	5.1	3.1
Maubin	2.9	2.9	3.0	4.6	2.7
Myaungmya	3.4	3.2	3.8	4.9	3.2
Labutta	3.2	3.1	3.5	4.6	3.1
Hinthada	3.6	3.5	3.8	5.4	3.3
Nay Pyi Taw	2.9	2.9	2.9	3.7	2.5
Ottara (North)	3.4	3.2	3.7	4.9	2.9
Dekkhina (South)	2.5	2.6	2.4	3.0	2.2

Map 5.3 Unemployment Rates, Districts

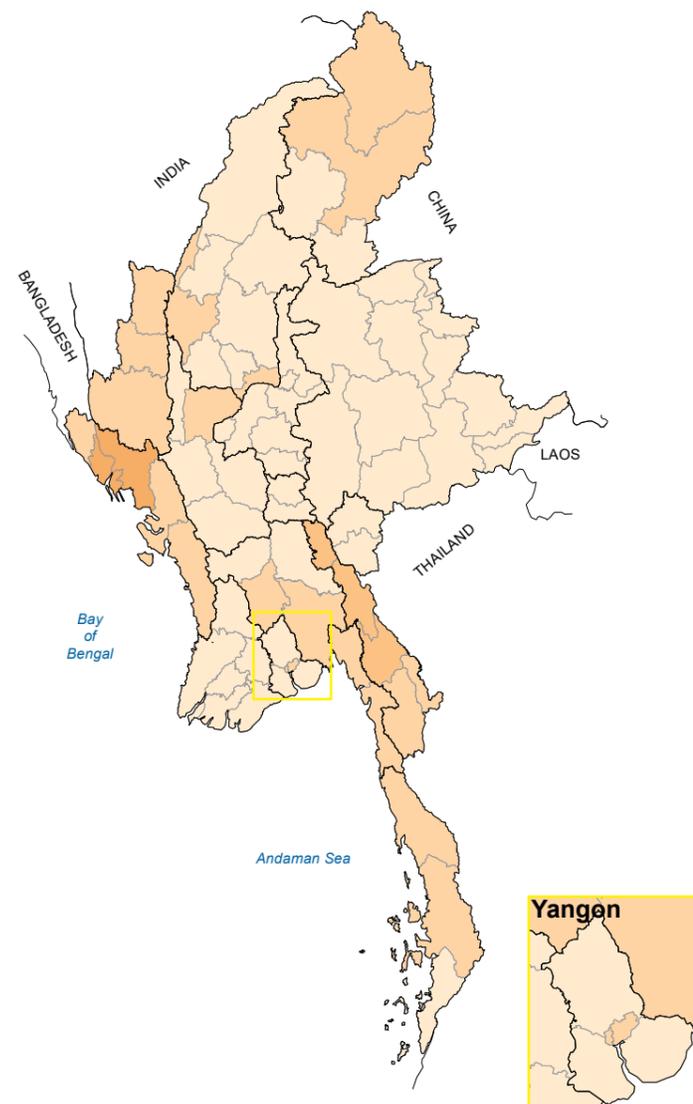
a) Urban



b) Rural



c) Urban and Rural



Unemployment rate

Average at Union level: 4.8 urban, 3.6 rural, 4.0 urban and rural

- 0.9 - 4.0
- 4.1 - 8.0
- 8.1 - 12.0
- 12.1 - 16.0
- 16.1 - 20.0
- 20.1 - 20.6
- No rural population (West Yangon)

- State/Region boundary
- District boundary

0 50 100 Miles
161 Km

The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The indicator gives the percentage of the unemployed population aged 15 to 64.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

5.4 Employment by Industry Sector

The pie charts on Map 5.4 show two things. Firstly, the size of the pie charts show the relative share each State/Region has of Myanmar's total employed population living in conventional households. Secondly, the size of the slices in the pie charts show the relative share of the workforce employed in each of the six largest industry sectors for each State/Region. The varying size of the pie charts on the map clearly reflects Myanmar's uneven population distribution, and is another example of the recurring contrast between the middle corridor (large numbers of workers) and the outer ring (relatively few workers). The dominance of agriculture, forestry and fishing (the primary sector) is also consistent with the fact that Myanmar is still predominantly a rural country. As described in Chapter 2, less than one-third of the population lived in urban areas in 2014.

Figure 5.3 shows that agriculture, forestry and fishing was by far the most important industry sector in Myanmar. More than 50 per cent of the country's employed population aged 10 and over worked in this sector. This proportion provides further evidence that Myanmar is still largely a rural society. Wholesale and retail trade was a distant second containing just under 10 per cent of the employed population, followed by

manufacturing with just under 7 per cent. No other sector had more than 5 per cent of the employed population, although for a substantial number of people (more than 6 per cent), responses given to Census enumerators were not clear enough to determine which sector they worked in, so they were reported as 'not stated'.

Geographic comparisons show that the agriculture, forestry and fishing sector was particularly important in Chin and Shan States, employing more than 70 per cent of the working population in both States (Table 5.4). Yangon stood out as having by far the lowest proportion of primary sector workers at less than 15 per cent, reflecting the predominantly urban nature of the Region. In contrast, Mandalay Region and Nay Pyi Taw Union Territory, home to the nation's second and third largest cities, both still had relatively large numbers of workers in the primary sector, at about 40 per cent. (More detail about the distribution of the population in this sector is given in Section 5.5.) Mining and quarrying is an extremely important revenue-generating sector, but it did not employ large numbers of people. It accounted for less than 1 per cent of the working population nationwide at the time of the Census, and was among the top six sectors in

only two States, Kachin and Kayah. Even in these two States, the absolute numbers employed in mining and quarrying were small, as evidenced by the small size of their pie charts on Map 5.4.

Not surprisingly, Yangon Region is the only State/Region in the country where the primary sector was not the largest employer. It was joint second with manufacturing at 14.8 per cent, both marginally overshadowed, by one percentage point, by wholesale and retail trade. Another interesting difference between Yangon Region and the rest of the country is the diversity of employment there. This can be clearly seen in the multi-coloured pie chart for Yangon on Map 5.4, which contrasts markedly with the green-dominated pie charts for all other States/Regions. The relatively uniform size of the pie slices for Yangon shows that other sectors, such as manufacturing, wholesale, retail and motor vehicle repair, transportation and storage, and accommodation and food services shared, with the primary sector, roughly equal proportions of the total employed, all at between 9 and 16 per cent. These numbers confirm Yangon Region as the home of Myanmar's industrial, commercial and transportation hub.

Figure 5.3 Sex Differences in Proportions Working in Top Ten Industry Sectors, Union

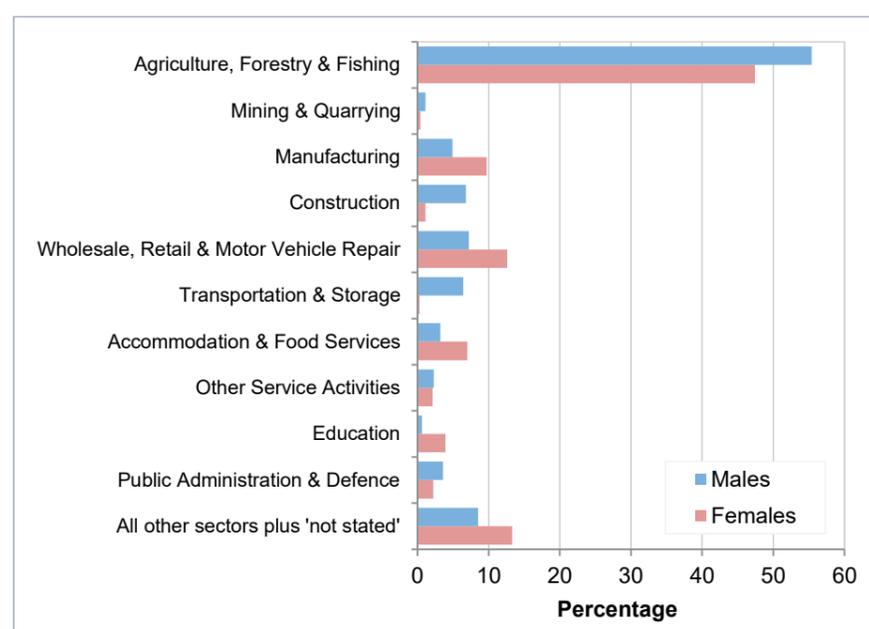
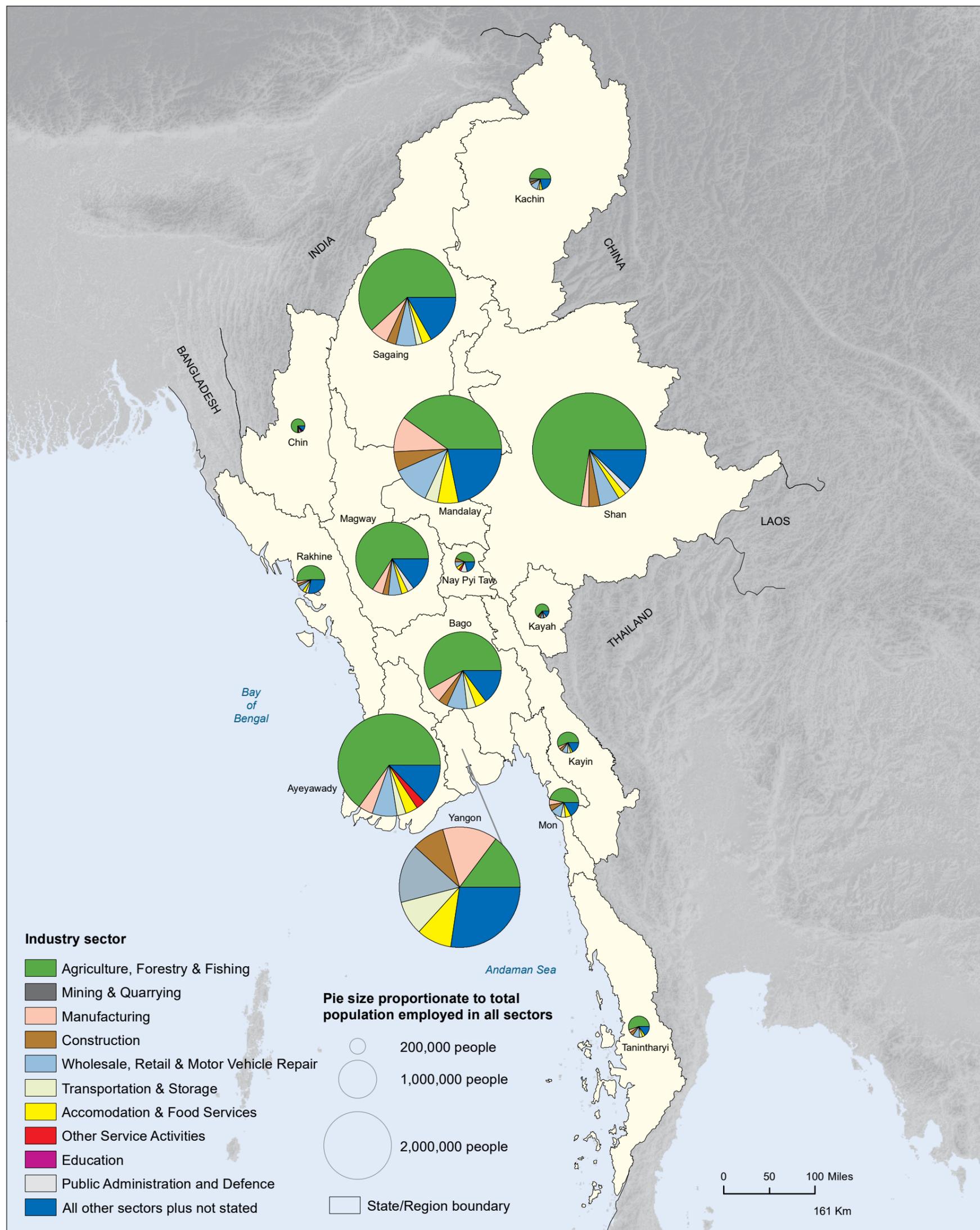


Table 5.4 Proportion of Employed Population* in Top Ten Industry Sectors, States/Regions

State/Region	Agriculture, Forestry & Fishing	Wholesale & Retail Trade; Repair of Motor Vehicles	Manufacturing	Accommodation & Food Services	Construction	Transportation & storage	Public Administration & Defence	Other Service Activities	Education	Mining & Quarrying	Other 11 Sectors & Sector 'Not Stated'
UNION	52.4	9.2	6.8	4.7	4.5	3.9	2.9	2.3	1.9	0.8	10.7
Kachin	49.3	12.1	3.1	4.1	3.9	3.1	3.1	1.7	2.4	5.7	11.4
Kayah	63.6	6.2	2.2	2.0	4.9	2.6	4.9	1.5	2.3	3.0	6.8
Kayah	56.5	8.8	4.3	3.0	4.5	4.6	2.6	1.4	1.8	0.2	12.4
Chin	74.0	1.9	1.0	0.4	1.9	0.7	4.3	1.7	3.2	0.1	11.0
Sagaing	61.9	6.8	6.2	3.2	3.1	2.1	1.8	1.4	1.8	1.6	10.2
Tanintharyi	54.7	11.1	4.7	4.0	5.6	4.7	2.7	1.0	2.2	0.3	9.0
Bago	58.2	8.4	6.3	4.7	3.9	3.7	3.0	1.4	2.0	0.5	7.8
Magway	66.1	6.0	4.7	2.8	2.5	2.0	2.9	1.6	1.8	0.7	8.8
Mandalay	40.0	11.5	10.7	6.2	5.9	3.9	2.8	3.1	1.9	1.6	12.5
Mon	46.5	11.9	6.4	6.4	6.6	5.2	2.7	2.3	2.4	0.3	9.4
Rakhine	51.6	7.0	3.3	3.6	3.2	3.1	3.3	3.2	2.6	0.2	18.8
Yangon	14.8	15.8	14.8	9.4	8.8	9.1	4.6	3.2	2.1	0.1	17.3
Shan	72.7	5.7	2.1	2.2	3.2	1.9	2.0	1.5	1.1	0.4	7.3
Ayeyawady	65.0	7.8	4.7	3.8	2.4	2.8	1.6	3.0	1.8	0.2	6.9
Nay Pyi Taw	43.3	9.7	4.0	4.7	6.3	4.0	10.9	4.1	1.5	0.6	11.0

* This table (and indeed Section 5.4 in general) examines employment data for the age group aged 10 and over, whereas other sections in this chapter look at 15-64 year olds or, in the case of Section 5.7, the age group aged 10-17 for whom child labour is an issue of particular concern in Myanmar. Thus, the proportions shown as working in agriculture, forestry and fishing will not be the same as those shown in Table 5.5 in the next section.

Map 5.4 Employment by Industry Sector, States/Regions



The base population for this indicator is all employed individuals aged 10 years and older that were living in conventional households at the time of the 2014 Census. The sizes of pie slices are proportionate to the total number of people aged 10 years and older working in each sector, as a percentage of the total employed population in the same age group. The industry sectors shown in each pie chart are the six that employed the largest proportion of the working population in each State/Region, plus a seventh for 'other sectors' and 'not stated'. This means that they are not the same six sectors for all States/Regions.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

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5.5 Employment in Agriculture, Forestry and Fishing

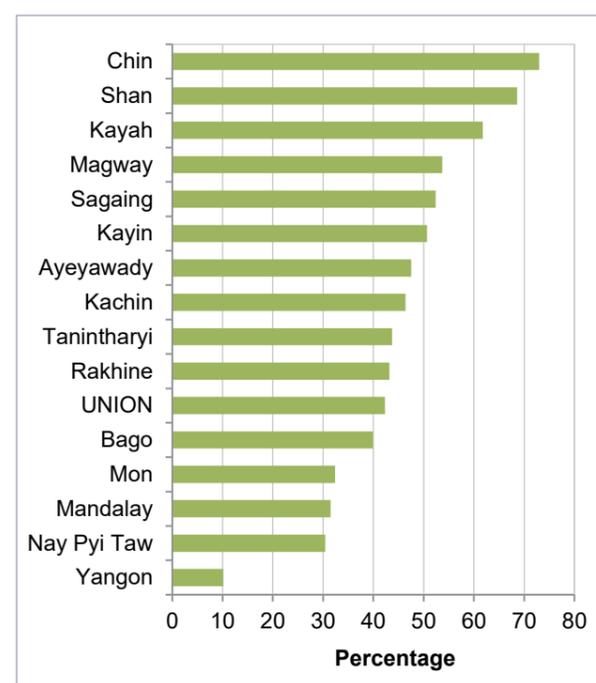
Of the 21.2 million people aged 15-64 reported as 'employed' by the 2014 Census, almost half worked in either agriculture, forestry or fishing. Chin State had the largest proportion of its workforce employed in this sector (referred to as the primary sector) at 73 per cent, but this was less than 120,000 people. In absolute terms, the largest numbers of 15-64 year olds working in the sector were in Shan State (1.9 million), Sagaing Region (1.3 million) and Ayeyawady Region (1.2 million). The 4.4 million primary sector workers in these three States/Regions represent almost half the total of the 9 million 15-64 year olds that were working in Myanmar's agriculture, forestry and fishing sector in 2014.

As earlier sections of this atlas have shown, people live in larger numbers and at higher densities in Myanmar's middle corridor than in its outer ring. This is partly explained by the greater agricultural productivity of the fertile lowlands. However, in terms of employment, in 2014 the agriculture, forestry and fishing sector was more important in the outer ring - it employed larger proportions of the working population in Districts in, for example, Shan, Kayah and Rakhine States than it did in Mandalay, Magway, Bago and Yangon Regions. The maps opposite show this distinction very clearly. They also show other interesting aspects of the distribution of employment in the primary sector. Firstly (as has already been noted) with the exception of Yangon Region, agriculture, forestry and fishing was generally the dominant sector throughout the country in terms of the proportion of workers it employed. Secondly, even with this general overall dominance, agriculture and forestry (and less so fishing) were particularly important in the north-west and north-east. Thirdly, generally, a larger proportion of men than women worked in the sector, but the gender differences were small and the relationship was consistent for all parts of the country.

Though agriculture, forestry and fishing was by far the largest employer nationwide, there are significant differences in the extent to which it dominates the labour market locally. Figure 5.4 shows this variation at the State/Region level, and the Maps opposite show it broken down by sex at the District level. Among the States and Regions, the percentage ranges from about 10 per cent in Yangon Region to 73 per cent in Chin State. The range at the District level is, of course, much greater from slightly more than 1 per cent in West Yangon to more than 85 per cent in Makman (in Shan State). The five Districts with the largest proportions of employed people working in the primary sector at the time of the 2014 Census were all in Shan State. In addition to Makman they included Minephyat, Minesat, Hopan and Loilin, in all of which more than three quarters of the employed population worked in the primary sector. The least agricultural Districts, in terms of the percentage employed in the sector, have predominantly urban populations. In addition to West Yangon they included East Yangon, North Yangon and Mandalay Districts, all with less than 11 per cent employed in agriculture, forestry or fishing.

In 2014, not only did the numbers employed in agriculture, forestry and fishing vary geographically, but so too did the nature of the work within the sector. In the lowlands of the central basin, coastal plains and deltas, most of the people employed in the sector were probably working on large-scale, often highly mechanized commercial farms, or in the fishing industry. In upland areas, farming generally was smaller scale and less productive, and options for employment more limited, hence the large percentages of the employed population working in the sector in the hills of Chin, Rakhine, Sagaing and Shan States. Most of the employment in forestry would also have been in upland areas, the forests of the lowlands having been cleared for agriculture long ago (though the Census

Figure 5.4 Proportion of Employed Population Working in Agriculture, Forestry and Fishing, States/Regions



did not collect information that could specifically confirm this).

This section has used 2014 Census data to illustrate broad geographic patterns of employment in the agriculture, forestry and fishing sector, patterns which are deeply embedded in the physical, cultural and economic landscapes of Myanmar. Those patterns have evolved slowly over decades, centuries and millennia. In spite of the rapid pace of change that the country is currently experiencing in some spheres of activity, the rural economy and landscapes of Myanmar will most probably look much the same for many years to come.

Table 5.5 Proportion of Employed Population Working in Agriculture, Forestry and Fishing, States/Regions and Districts

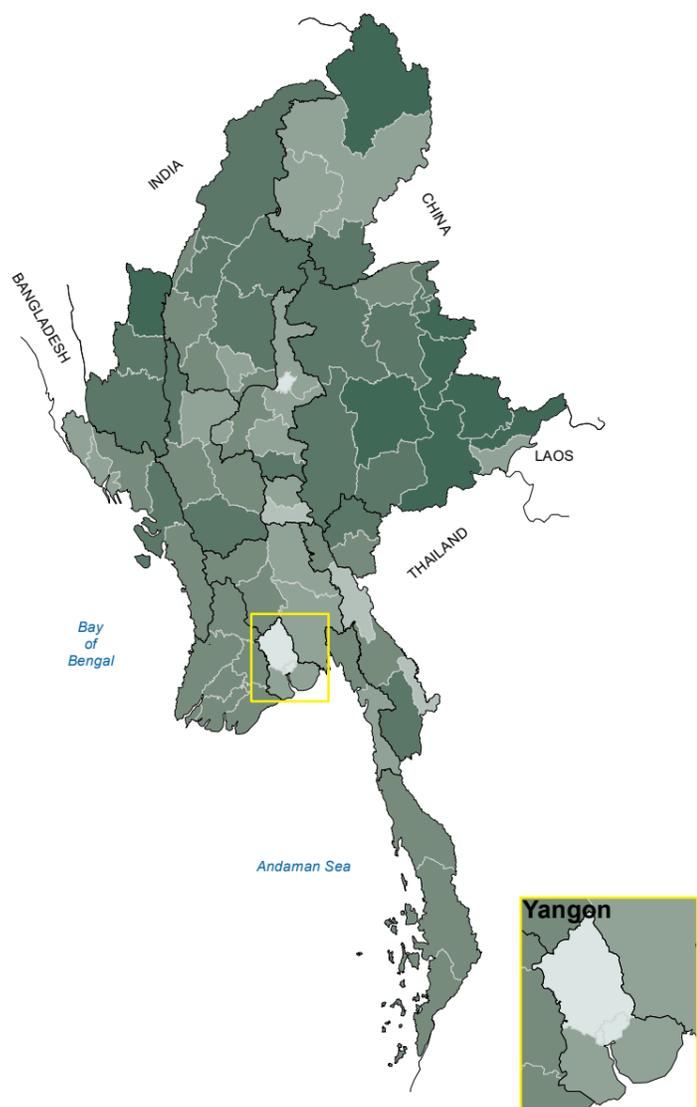
State/Region District	Percentage		
	Both Sexes	Males	Females
UNION	42.3	45.3	37.9
Kachin	46.4	48.4	42.8
Myitkyina	40.5	43.3	35.6
Mohnyin	37.1	40.1	30.4
Bhamo	60.1	61.7	57.9
Putao	74.9	77.3	70.5
Kayah	61.8	59.8	64.5
Loikaw	63.6	61.4	66.3
Bawlaikhe	50.6	51.1	49.7
Kayin	50.7	54.5	43.9
Hpa-An	54.2	59.3	44.6
Pharpon	27.8	28.9	25.4
Myawady	27.9	28.4	27.0
Kawkareik	57.3	62.4	49.6
Chin	73.0	73.1	72.8
Haka	66.8	67.3	66.0
Falam	77.4	76.4	78.7
Mindat	72.1	73.2	71.0
Sagaing	52.4	56.5	47.3
Sagaing	39.2	45.2	31.5
Shwebo	58.4	62.1	54.2
Monywa	33.7	37.2	29.4
Katha	61.5	66.0	55.4
Kalay	46.8	52.9	37.9
Tamu	47.5	53.1	35.9
Mawlaik	64.0	67.4	60.2
Hkamti	65.9	66.7	64.9
Yinmarpin	53.8	58.2	48.6
Tanintharyi	43.7	52.2	27.4
Dawei	41.2	48.7	29.7

State/Region District	Percentage		
	Both Sexes	Males	Females
Myeik	45.7	55.4	26.0
Kawthoung	43.0	49.6	25.5
Bago	39.9	45.4	30.1
Bago	32.3	38.6	21.4
Toungoo	38.7	43.6	30.7
Pyay	46.5	51.1	38.8
Thayawady	47.6	52.4	36.2
Magway	53.7	56.1	50.9
Magway	53.9	56.1	51.2
Minbu	50.6	54.5	46.2
Thayet	65.6	65.9	65.3
Pakokku	41.3	44.3	37.6
Gangaw	68.3	70.3	65.9
Mandalay	31.5	34.0	27.9
Mandalay	5.9	6.1	5.6
Pyin Oo Lwin	36.5	37.9	34.3
Kyaukse	35.7	40.5	28.0
Myingyan	44.9	49.8	39.2
Nyaung U	31.7	33.8	29.1
Yame'thin	57.6	62.2	51.7
Meiktila	39.4	44.8	32.5
Mon	32.4	40.0	20.1
Mawlamyine	29.4	36.4	18.9
Thaton	37.4	45.4	22.3
Rakhine	43.2	51.1	28.7
Sittway	32.8	41.1	16.1
Myauk U	37.2	46.0	22.3
Maungtaw	36.5	43.2	23.9
Kyaukpyu	57.6	64.1	46.3
Thandwe	50.3	58.1	34.1

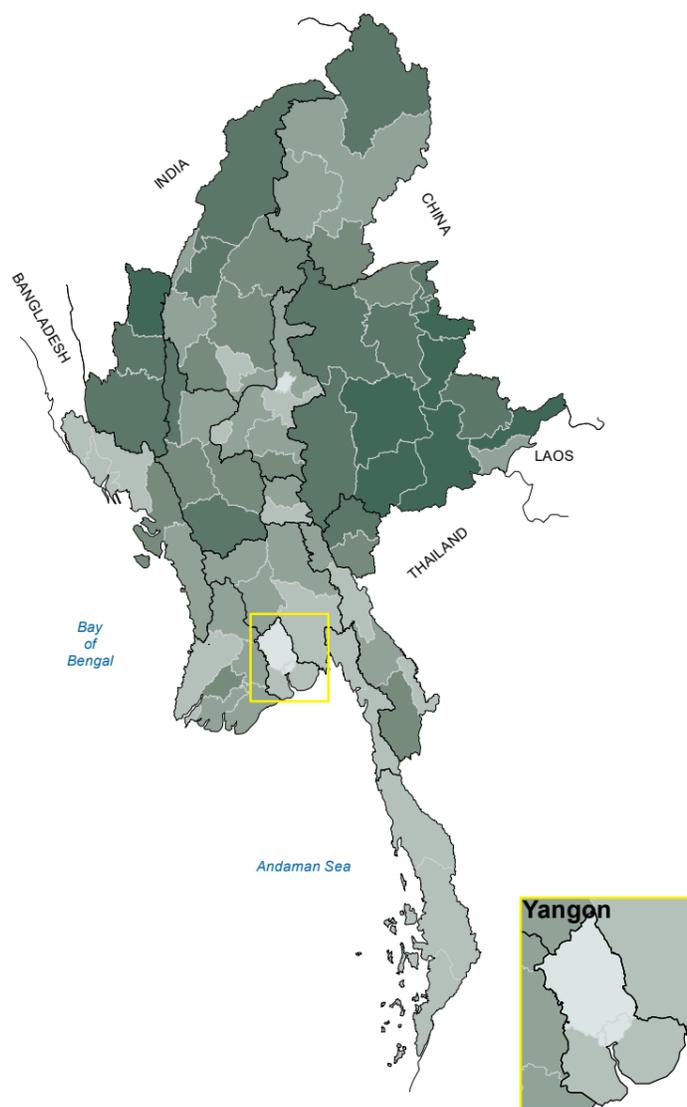
State/Region District	Percentage		
	Both Sexes	Males	Females
Yangon	10.1	12.2	6.7
North Yangon	10.7	13.1	7.0
East Yangon	1.4	1.8	0.9
South Yangon	29.0	33.6	20.9
West Yangon	1.1	1.5	0.6
Shan	68.6	68.5	68.6
Taunggyi	64.5	63.0	66.3
Loilin	78.3	76.9	80.1
Linkhe'	74.8	74.4	75.2
Lashio	61.0	61.3	60.4
Muse	54.7	60.0	47.8
Kyaukme	70.9	70.9	70.9
Kunlon	72.8	72.9	72.7
Laukine	68.2	71.7	62.3
Hopan	83.8	84.0	83.6
Makman	85.3	84.4	86.3
Kengtung	74.9	75.6	74.0
Minesat	81.9	82.3	81.5
Tachileik	42.7	43.3	41.8
Minephyat	82.7	82.3	83.2
Ayeyawady	47.5	52.8	37.9
Patheingyi	41.4	47.3	29.2
Phyappon	49.1	55.7	34.3
Maubin	51.3	55.7	44.4
Myaungmya	53.7	57.9	45.9
Labutta	51.5	58.3	37.5
Hinthada	45.2	49.2	39.4
Nay Pyi Taw	30.4	32.1	27.8
Ottara (North)	34.6	35.9	32.5
Dekkhina (South)	26.9	28.8	24.2

Map 5.5 Employment in Agricultural, Forestry and Fishing, Districts

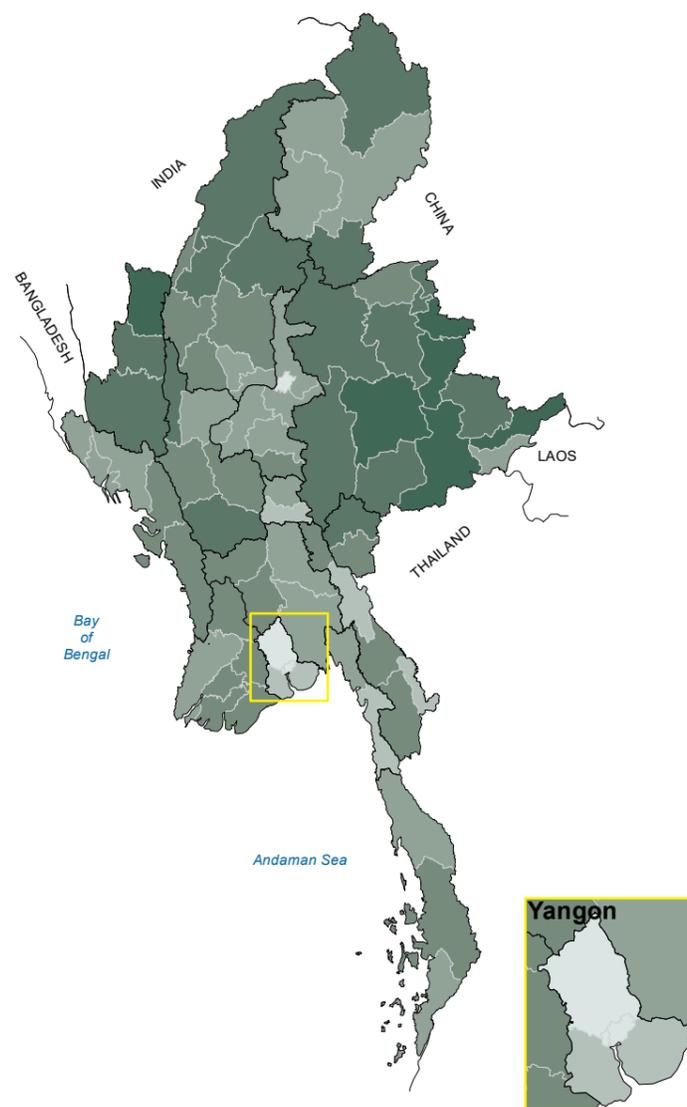
a) Males



b) Females



c) Both Sexes



Percentage of employed population working in agriculture, forestry and fishing sector

Average at Union level: 45.3 males, 37.9 females, 42.3 both sexes

- 0.6 - 15.0
- 15.1 - 30.0
- 30.1 - 45.0
- 45.1 - 60.0
- 60.1 - 75.0
- 75.1 - 86.3

- State/Region boundary
- District boundary

0 50 100 Miles
161 Km

The base population for this indicator is individuals that were living in conventional households at the time of the 2014 Census. The indicator gives the proportion of the employed population aged 15 to 64 working in the agriculture, forestry and fishing sector.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

5.6 Employment and Education

This section describes geographic variations in the distribution of working people, aged 15-64, according to relative levels of educational attainment. The focus is on the numbers in the fourth column of Table 5.6, which shows where relatively better educated workers lived in terms of the proportion of the working population that had at least graduated from high school (upper secondary level).

At the State/Region level, such proportions ranged from only 9 per cent in Shan State up to about 31 per cent in Yangon Region. In addition to Yangon Region, Nay Pyi Taw Union Territory and Mandalay Region also had relatively highly-educated workforces, at around 24 per cent and 17 per cent, respectively. In contrast, education levels were relatively low among the employed populations of Shan, Kayin, Ayeyawady and Magway, where less than 12 per cent had at least graduated from high school. A most striking feature of Figure 5.5 are the relatively high proportions of workers in Chin, Kayah and Kachin States that had completed high school but had not gone on to complete a university education.

The Districts with the more highly-educated workforces include West Yangon, the only District where more than

half the employed population had at least completed high school, and East Yangon, Dekkhina (South) and Mandalay, where between one quarter and one half of workers were relatively well-educated. The lowest rates were in Districts in predominantly rural areas. Table 5.6 shows that in 18 Districts, the proportion of the population with at least a high school diploma was less than 10 per cent. Ten of these Districts are in Shan State, two are in Ayeyawady Region, and the other six are Yame'thin (in Mandalay Region), Kawkareik (Kayin), Myauk U (Rakhine), Thayayawady (Bago), Mawlaik (Sagaing) and Thayet (Magway).

Maps 5.6a and 5.6b show that, with a few exceptions, the most highly educated workers lived in the more predominantly urban Districts. Reference to Section 5.4 shows that it was in Myanmar's main urban centres in which the largest proportions of the workforce were employed in wholesale and retail, manufacturing, accommodation and food services, and public administration – those sectors that require people with literacy, numeracy and technical skills. Conversely, in rural areas, where education levels among the working population were relatively low, agriculture, forestry and fishing was by far the dominant industry sector.

Figure 5.5 Proportion of Employed Population by Highest Level of Education Attained, States/Regions

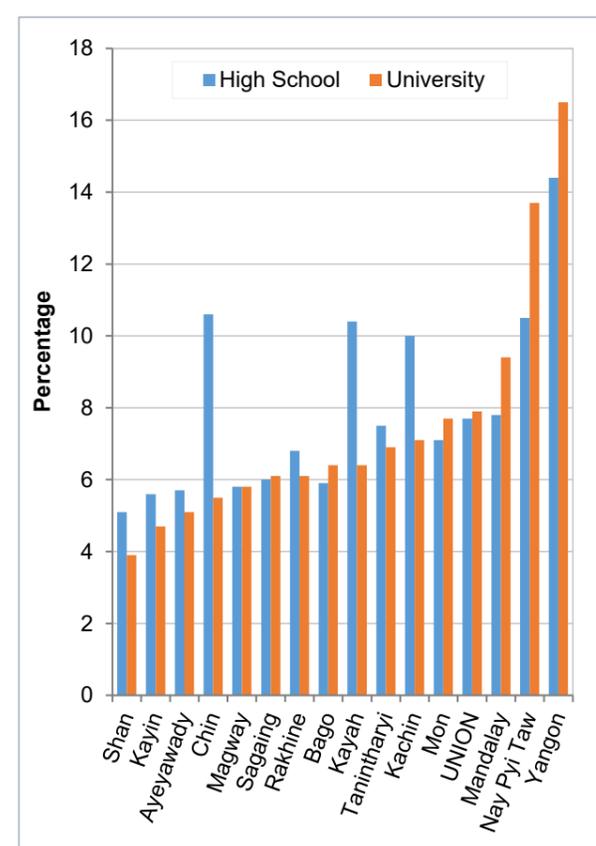


Table 5.6 Proportion of Employed Population by Highest Level of Education Attained, States/Regions and Districts

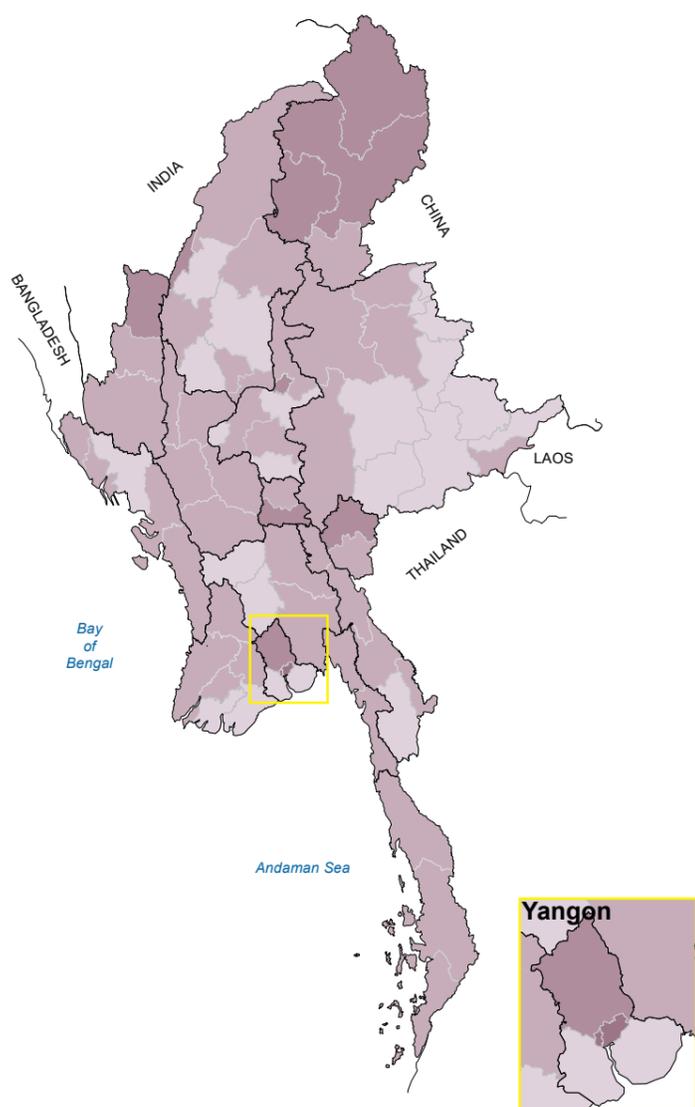
State/Region District	Percentage Employed with Highest Education Level Completed as ...		
	High School	University	High School or University
UNION	7.7	7.9	15.6
Kachin	10.0	7.1	17.1
Myitkyina	10.7	9.6	20.3
Mohnyin	10.7	6.2	16.9
Bhamo	7.4	5.9	13.3
Putao	11.8	5.2	17.0
Kayah	10.4	6.4	16.8
Loikaw	10.7	6.9	17.6
Bawlakhe	8.8	4.2	13.0
Kayin	5.6	4.7	10.3
Hpa-An	6.3	5.8	12.1
Pharpon	6.3	6.0	12.3
Myawady	5.9	4.9	10.8
Kawkaireik	4.5	3.1	7.6
Chin	10.6	5.5	16.1
Haka	8.0	7.9	15.9
Falam	14.1	5.9	20.0
Mindat	8.9	4.2	13.1
Sagaing	6.0	6.1	12.1
Sagaing	6.9	8.4	15.3
Shwebo	5.0	5.2	10.2
Monywa	6.4	9.2	15.6
Katha	5.7	4.8	10.5
Kalay	7.6	7.1	14.7
Tamu	14.0	6.9	20.9
Mawlaik	4.5	3.9	8.4
Hkamti	7.5	3.4	10.9
Yinmarpin	4.5	5.6	10.1
Tanintharyi	7.5	6.9	14.4
Dawei	7.1	8.0	15.1

State/Region District	Percentage Employed with Highest Education Level Completed as ...		
	High School	University	High School or University
Myeik	7.3	6.7	14.0
Kawthoung	8.9	5.2	14.1
Bago	5.9	6.4	12.3
Bago	7.9	6.3	14.2
Toungoo	7.9	6.6	14.5
Pyay	3.1	7.4	10.5
Thayawady	2.9	5.3	8.2
Magway	5.8	5.8	11.6
Magway	5.7	6.5	12.2
Minbu	6.2	5.3	11.5
Thayet	5.4	4.4	9.8
Pakokku	6.1	6.6	12.7
Gangaw	5.8	6.0	11.8
Mandalay	7.8	9.4	17.2
Mandalay	12.2	16.6	28.8
Pyin Oo Lwin	9.4	7.3	16.7
Kyaukse	3.5	6.9	10.4
Myingyan	5.3	6.0	11.3
Nyaung U	3.5	7.7	11.2
Yame'thin	3.2	3.9	7.1
Meiktila	7.6	7.1	14.7
Mon	7.1	7.7	14.8
Mawlamyine	7.2	8.5	15.7
Thaton	7.0	6.4	13.4
Rakhine	6.8	6.1	12.9
Sittway	6.1	9.0	15.1
Myauk U	4.5	3.7	8.2
Maungtaw	9.6	10.6	20.2
Kyaukpyu	7.0	5.2	12.2
Thandwe	9.9	6.3	16.2

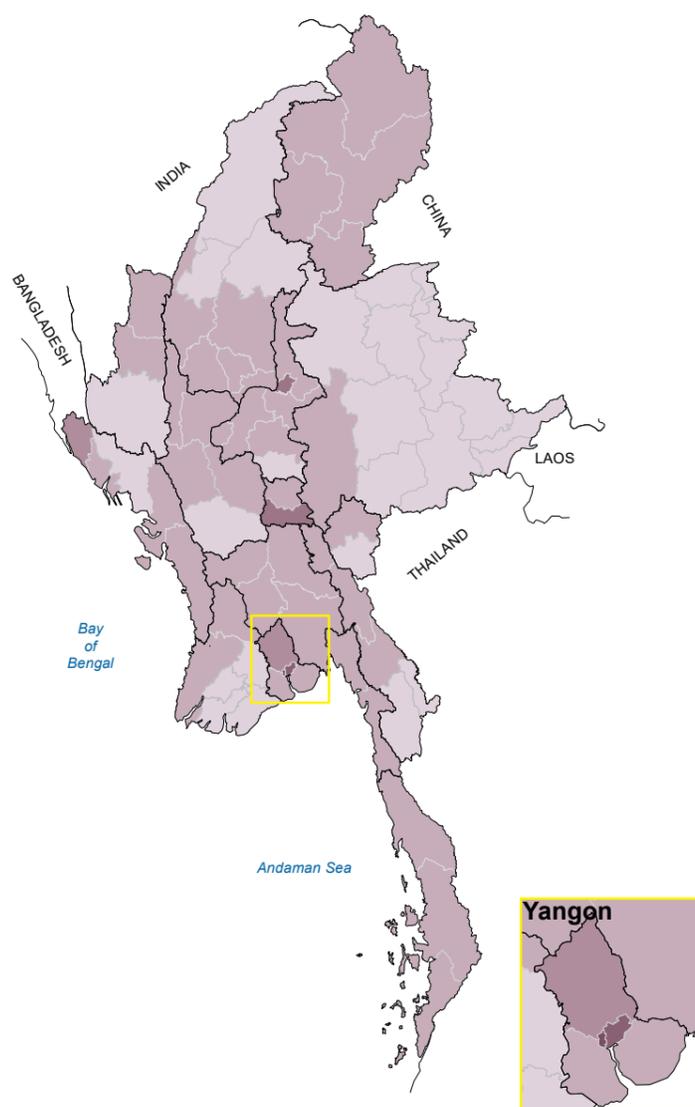
State/Region District	Percentage Employed with Highest Education Level Completed as ...		
	High School	University	High School or University
Yangon	14.4	16.5	30.9
North Yangon	14.1	10.4	24.5
East Yangon	19.4	21.3	40.7
South Yangon	4.2	6.4	10.6
West Yangon	17.7	34.6	52.3
Shan	5.1	3.9	9.0
Taunggyi	6.9	5.7	12.6
Loilin	3.0	2.7	5.7
Linkhe'	3.2	3.6	6.8
Lashio	5.2	4.9	10.1
Muse	8.1	4.6	12.7
Kyaukme	5.2	3.5	8.7
Kunlon	1.4	2.3	3.7
Laukine	1.9	1.8	3.7
Hopan	0.9	0.6	1.5
Makman	1.6	0.4	2.0
Kengtung	3.7	2.9	6.6
Minesat	1.5	1.8	3.3
Tachileik	8.3	4.6	12.9
Minephyat	2.8	1.8	4.6
Ayeyawady	5.7	5.1	10.8
Pathein	6.0	6.5	12.5
Phyapon	3.5	4.4	7.9
Maubin	6.2	4.3	10.5
Myaungmya	6.0	4.5	10.5
Labutta	4.8	3.8	8.6
Hinthada	6.8	5.5	12.3
Nay Pyi Taw	10.5	13.7	24.2
Ottara (North)	9.2	9.6	18.8
Dekkhina (South)	11.4	16.9	28.3

Map 5.6 Employment by Educational Attainment, Districts

a) High School



b) University

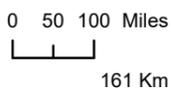


Percentage of employed population who reported either high school or university as the highest education level completed

Average at Union level: 7.7 high school, 7.9 university

- 0.4 - 5.0
- 5.1 - 10.0
- 10.1 - 15.0
- 15.1 - 20.0
- 20.1 - 25.0
- 25.1 - 34.6

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The indicator gives the proportion of the employed population aged 15 to 64 that has completed high school or university education.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

5.7 Child Work and Child Labour

As discussed in Chapter 4, children entering the labour force at young ages is a significant problem in Myanmar. Early school dropout rates are very high, with large numbers of children failing to complete primary school, middle school (lower secondary) and, particularly, high school (upper secondary). Table 5.7 shows that more than one fifth of children aged 10-17 were working in 2014. This includes both child labour and child work, defined by the International Labour Organization as including both paid employment below the minimum age, which in Myanmar is 16 years, and children engaged in unpaid, often hazardous, household services. Of all the industry sectors, agriculture, forestry and fishing employed by far the largest number of children. Within the sector, agriculture was the biggest draw, with most working children leaving school early most likely to help out on the family farm.

The proportion of children working in all sectors was larger than the Union level average of 21 per cent in four States/Regions - Sagaing, Mandalay, Magway and Shan. Whereas for the first three of these the proportions were only marginally higher than the national average, all at less than a quarter, in Shan State almost a third of all children aged 10-17 were working. Map 5.7a shows the geographic concentration of high child labour rates in these four States/Regions very clearly, but it is Figure 5.6 that shows the extent to which Shan State stands out as having particularly large proportions of working children, both in total and in the primary sector. In the other 14 States/Regions, rates are generally less than 25 per cent, and in none of them does it exceed 30 per cent. In Shan State, however, more than one-third of children in most

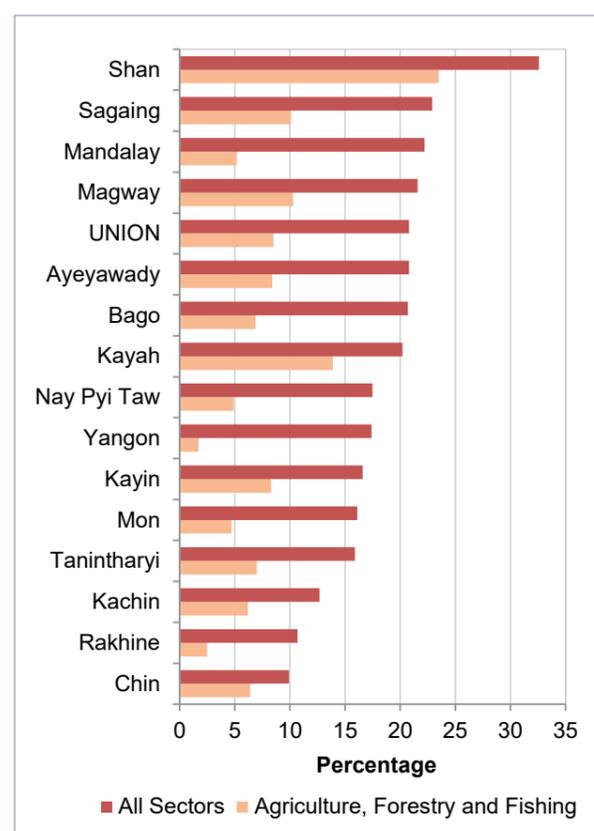
Districts are working, with rates exceeding 40 per cent in Makman and Linkhe`.

In 2014, more than 8 per cent of children in the Union were undertaking skilled work in the agriculture, forestry and fishing sector; the proportion rises to more than 11 per cent if children doing unskilled work are included. Rates were highest in Shan, Kayah, Magway and Ayeyawady, and, as was the case for all sectors, Shan also had the highest rates for child labour in the primary sector. The 11 Districts with the largest proportions of children working in this sector were all in Shan State, ranging from approximately 19 per cent in Lashio District to 36 per cent in Makman District. As would be expected, Districts where most people lived in urban areas had the lowest rates for child labour in agriculture, forestry and fishing, with West Yangon, East Yangon, Mandalay, Sittway and North Yangon all at less than 2 per cent.

Comparing the geographic variations in child labour presented in this section with patterns for some of the education indicators discussed in Chapter 4 reveals some interesting, though not surprising, relationships. Those parts of the country with the highest current attendance rates and high school completion rates generally reported relatively small proportions of working children, and the States/Regions and Districts with the lowest current attendance rates and high school completion rates tended to have relatively large proportions of working children.

Chin State is something of an anomaly in that, though almost three quarters of the working population there were employed in agriculture, forestry or fishing (see

Figure 5.6 Proportion of Children Aged 10-17 Working in all Sectors and in Agriculture, Forestry and Fishing, States/Regions



Section 5.4), it had one of the lowest child labour rates for the sector at just over 6 per cent. This reflects the State's very strong performance in keeping children in school. As discussed in Chapter 4, children in Chin State had the highest current school attendance rate (81.1 per cent) and among the lowest never attended school rates (1.4 per cent) in the country.

Table 5.7 Children Aged 10-17 Working in all Sectors and in Agriculture, Forestry and Fishing, States/Regions and Districts

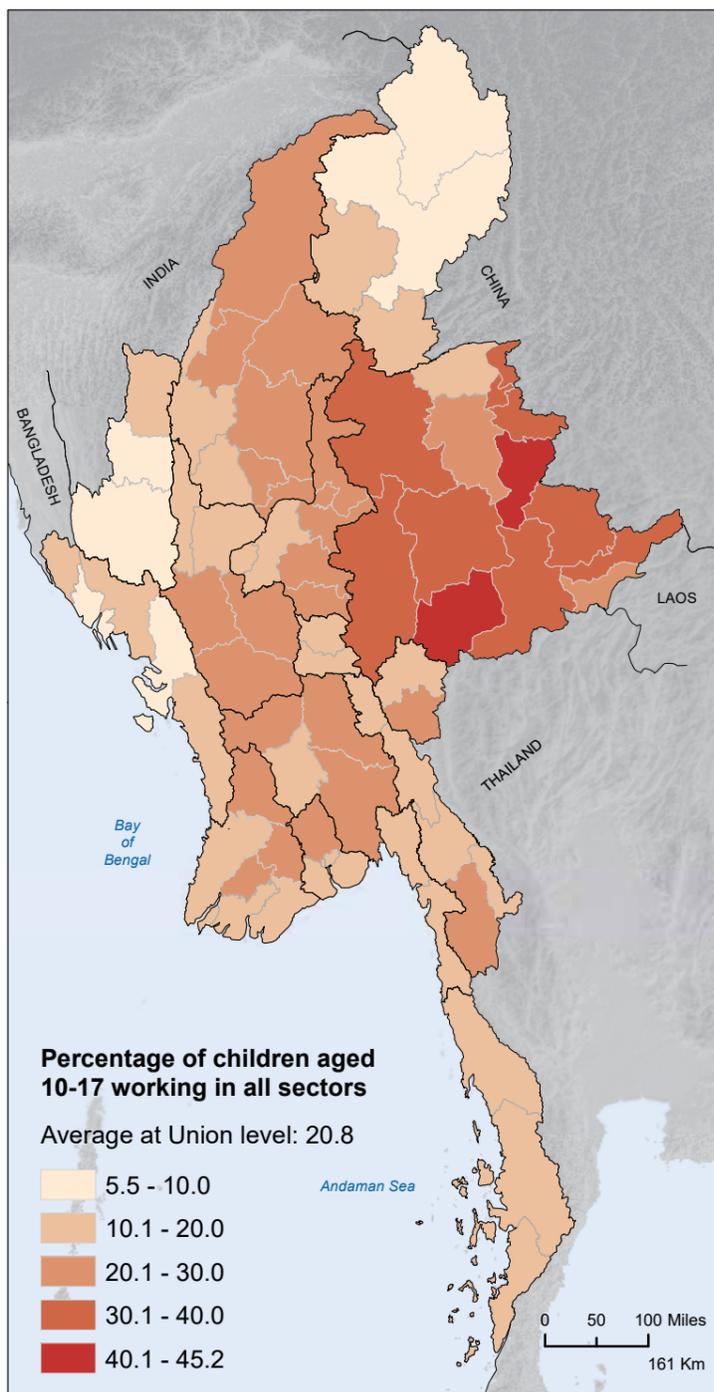
State/Region District	Percentage Population Aged 10 - 17	
	Working in All Sectors	Working in Agriculture, Forestry and Fishing
UNION	20.8	8.5
Kachin	12.7	6.2
Myitkyina	10.0	4.0
Mohnyin	12.5	5.0
Bhamo	19.4	12.1
Putao	5.5	4.0
Kayah	20.2	13.9
Loikaw	19.9	14.1
Bawlakhe	21.7	12.3
Kayin	16.6	8.3
Hpa-An	14.1	7.4
Pharpon	10.8	2.8
Myawady	17.8	6.1
Kawkareik	20.8	11.3
Chin	9.9	6.4
Haka	8.6	5.7
Falam	11.0	9.0
Mindat	9.5	4.6
Sagaing	22.9	10.1
Sagaing	23.2	4.5
Shwebo	25.1	11.8
Monywa	21.8	4.6
Katha	26.4	14.9
Kalay	17.3	6.3
Tamu	13.6	7.0
Mawlaik	27.1	15.7
Hkamti	21.9	14.0
Yinmarpin	19.9	8.6
Tanintharyi	15.9	7.0
Dawei	14.2	5.3

State/Region District	Percentage Population Aged 10 - 17	
	Working in All Sectors	Working in Agriculture, Forestry and Fishing
Myeik	16.5	7.8
Kawthoung	18.1	8.1
Bago	20.7	6.9
Bago	20.4	5.4
Toungoo	21.8	7.3
Pyay	22.5	9.6
Thayawady	18.5	7.2
Magway	21.6	10.3
Magway	20.6	10.1
Minbu	26.0	11.2
Thayet	28.1	17.8
Pakokku	16.4	4.8
Gangaw	19.2	11.2
Mandalay	22.2	5.2
Mandalay	22.9	0.9
Pyin Oo Lwin	23.2	7.0
Kyaukse	23.9	5.2
Myingyan	19.7	5.7
Nyaung U	16.9	3.8
Yame`thin	23.8	11.1
Meiktila	22.0	7.0
Mon	16.1	4.7
Mawlamyine	16.1	3.8
Thaton	16.2	5.9
Rakhine	10.7	2.5
Sittway	9.3	1.5
Myauk U	11.4	2.2
Maungtau	16.4	3.3
Kyaukpyu	8.6	3.0
Thandwe	13.0	4.7

State/Region District	Percentage Population Aged 10 - 17	
	Working in All Sectors	Working in Agriculture, Forestry and Fishing
Yangon	17.4	1.7
North Yangon	20.1	1.8
East Yangon	14.7	0.2
South Yangon	18.7	4.2
West Yangon	13.7	0.1
Shan	32.6	23.5
Taunggyi	32.1	22.5
Loilin	38.3	32.3
Linkhe`	41.4	32.7
Lashio	28.9	18.9
Muse	18.8	10.5
Kyaukme	31.6	23.5
Kunlon	38.7	26.2
Laukine	30.2	16.2
Hopan	38.9	27.4
Makman	45.2	36.0
Kengtung	35.1	25.7
Minesat	37.7	31.8
Tachileik	23.1	11.2
Minephyat	35.7	29.0
Ayeyawady	20.8	8.4
Pathein	19.6	6.6
Phyapon	17.0	7.2
Maubin	23.9	10.6
Myaungmya	22.0	11.2
Labutta	19.8	8.6
Hinthada	22.9	8.1
Nay Pyi Taw	17.5	4.9
Ottara (North)	16.5	4.8
Dekkhina (South)	18.4	5.0

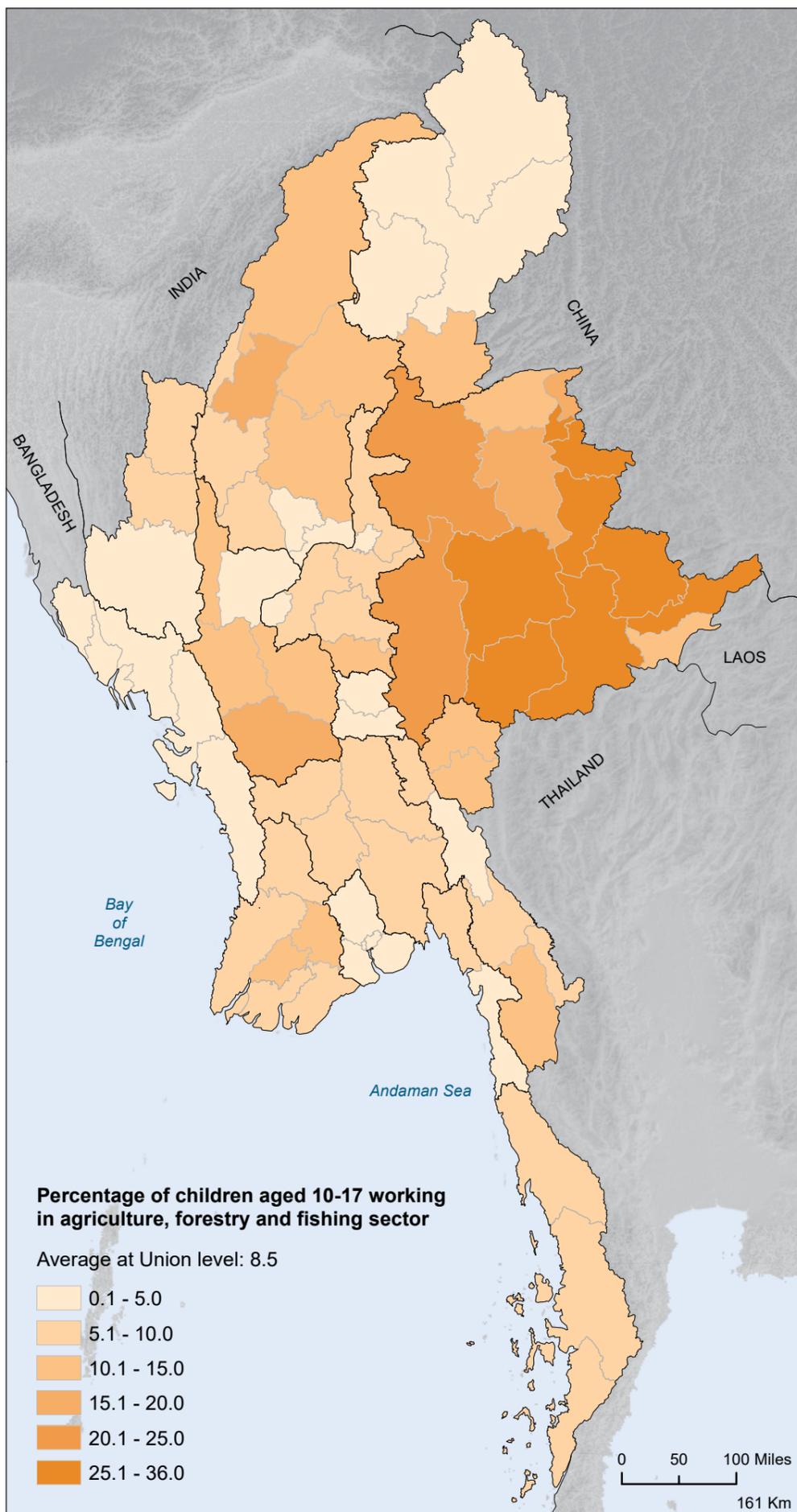
Map 5.7 Working Children, Districts

a) All Industry Sectors



State/Region boundary
District boundary

b) Agriculture, Forestry and Fishing Sector



The base population for this indicator is all employed individuals aged 10-17 that were living in conventional households at the time of the 2014 Census. The indicator for Map 5.7a gives the number of children aged 10-17 working in all sectors as a percentage of the total number of children in the same age group. The indicator for Map 5.7b gives the number of children aged 10-17 working in skilled jobs in the agriculture, forestry and fishing sector as a percentage of the total number of children in the same age group.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

6

Migration

This chapter examines two different aspects of migration, namely migration flows and net migration rates. The analyses of both lifetime and recent migration flows reported in the 2014 Census share some common patterns. Yangon Region was, and continued to be, the most popular destination for people who left their place of birth to live in another location in Myanmar. Urban centres in Nay Pyi Taw Union Territory and Mandalay Region also attracted relatively large numbers of in-migrants. Kachin, Kayah and Kayin States were also net recipients of migrants in relatively large numbers. Here, however, the draw was not the attraction of large urban centres, but more the perceived opportunities for work in the primary sector, mining, and engagement in activities related to international trade.

The spatial analysis underlying the maps presented in this chapter reveal a number of other patterns which are likely to be of interest to policymakers, social scientists and the development community in general. For example, more than half of the people who migrated between 2009 and 2014 were female. Whilst large numbers of male migrants had moved to remote areas and border Districts - attracted by economic opportunities there - females were more likely to have moved to urban centres to pursue academic interests or seek employment in the manufacturing sector, government agencies, private service industries or public services such as schools, hospitals and clinics. Rates of rural-to-urban migration remain relatively low, with the largest numbers of migrants moving either from urban to urban areas or from rural to rural areas.

This chapter only discusses internal migration. The data and analysis presented here do not include people who have immigrated to Myanmar from other countries, nor does it include people who have left Myanmar to live abroad. However, the reader will want to be aware that the Census did collect some limited data on international migration from Myanmar (as part of the inquiry on former household members living abroad), that suggested that large numbers of working-age people, and especially males, were leaving to seek work overseas. The most popular destinations were Thailand and Malaysia. Collecting reliable information in a census on people who have left the country is always difficult, and the numbers of emigrants recorded by the 2014 Census - for example the 1.4 million people reported to be living in Thailand and more than 300,000 in Malaysia - are likely to be significant undercounts (Department of Population, 2016a). Even so, these numbers represent the loss of substantial productive capacity which could be contributing to economic growth in Myanmar if it could be gainfully employed in this country. Mass-emigration is another demographic process academics and social scientists are diligently monitoring and analyzing, and policymakers will most likely be seeking to stem.

The questions asked for obtaining information about migration are shown here in the extract from the main questionnaire. The base population used for the analysis of migration presented in this chapter includes all individuals whose usual place of residence was in conventional households in Myanmar at the time of the Census. It does not include people who were living in institutional households at the time of the Census for whom information on movement was not collected, nor does it include people whose usual place of residence was overseas.

The 2014 Census Thematic Report on Migration and Urbanization (Department of Population, 2016a) was the primary source for the material presented in this chapter.

MIGRATION							
Place of Birth		Place of Usual Residence		15. Duration in place of usual residence (in years) <i>If less than 1 year write "00"</i>	16. Reason for movement to this township (usual residence) Employment/in search for employment Education Marriage Followed family Conflict Did not move Other	Place of Previous Usual Residence	
11. Township <i>If born here write "000", if not write Township code</i>	12. Urban or Rural	13. Township <i>If here write "000", if not write Township code</i>	14. Urban or Rural				
Enter code from manual	Urban Rural	Enter code from manual	Urban Rural			Enter code from manual	Urban Rural

6.1 Lifetime Internal Migration Flows

The 2014 Myanmar Census defined lifetime migrants as those people who, at some time in their lives, lived in a Township different to the one in which they were born. This includes people who moved to live in a different Township for a period of time, but who later returned and were living in their Township of birth at the time of the Census (so called 'return migrants'). Out of the total number of people living in conventional households of 47,918,525 for the Union as a whole, 9,231,619 (19.3 per cent) were lifetime migrants (had moved between Townships) and of these, 4,561,588 (9.5 per cent) had moved to Townships in different States/Regions (Department of Population, 2016a). Maps 6.1a and 6.1b show the most significant flows of lifetime internal migrants between States/Regions. Explanations of the use of the term 'most significant flow' in this chapter are given in footnotes below the tables and maps.

For inter-State/Region migration, by far the most significant movement was from Ayeyawady to Yangon, with 784,919 lifetime migrants, or 8.5 per cent of the total number of 9,231,619. Table 6.1 shows that large numbers of people also moved from Bago to Yangon (372,068), Sagaing to Mandalay (209,217) and Magway to Yangon (199,483) during their lifetimes.

Clearly, the predominant pattern for inter-State/Region lifetime migration in Myanmar was towards Yangon (Map 6.1b), with movements to and from Mandalay showing a similar trend, but involving substantially fewer people (Map 6.1a). Of the lifetime migrations not to or from Yangon Region, the largest flows were from Sagaing to Mandalay (209,217 people), from Mandalay to Shan (159,757), and from Magway to Mandalay (128,487).

Most of the lifetime migrants to the country's two largest cities originated in other urban areas. This can be seen in the relatively high rates of urban-urban migration of almost half of all lifetime moves, and the surprisingly low rates of rural-urban migration of less than 10 per cent. Figure 6.1 shows the relative contribution of the four lifetime migration streams between urban and rural areas.

The States/Regions with the largest total numbers of lifetime outmigrants were Ayeyawady (1,018,461), Bago (680,370), Mandalay (577,846) and Magway (564,060). Recipients of the largest total numbers of in-migrants included Yangon (2,048,643) and Mandalay (604,415), Shan (398,749), and Bago (240,075).

Some of the largest flows of people in Myanmar have been internal migrations within Yangon Region – that is, large numbers of people moving from one of Yangon's four Districts to another. According to the 2014 Census, 773,414 people moved internally within Yangon during their lifetime. Some Districts in other parts of the country also contributed large numbers of lifetime migrants to Yangon, with more than 100,000 moving from Maubin, Hinthada, Patheingyi and Phayapong Districts in Ayeyawady Region, and from Bago and Thayayawady Districts in Bago Region.

Subtracting the number of outmigrants from the number of in-migrants provides a measure of net gains or losses in lifetime migration, expressed as rates per 1,000 population. At the State/Region level, Yangon (246.3), Nay Pyi Taw Union (142.1) and Kachin (100.2) showed the highest levels of net in-migration, whilst Chin (-167.7), Ayeyawady (-147.0) and Magway (-121.1) showed the highest levels of net outmigration.

Figure 6.1 Proportion of Lifetime Internal Migration by Type of Move, Union

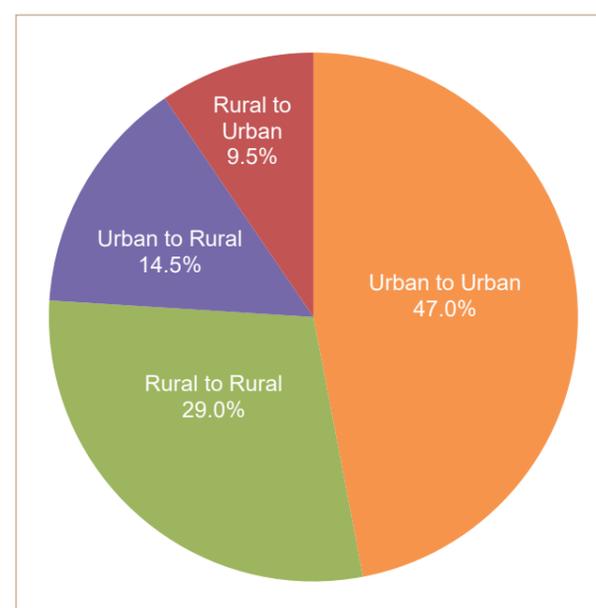


Table 6.1 Lifetime Migration Flows between States/Regions

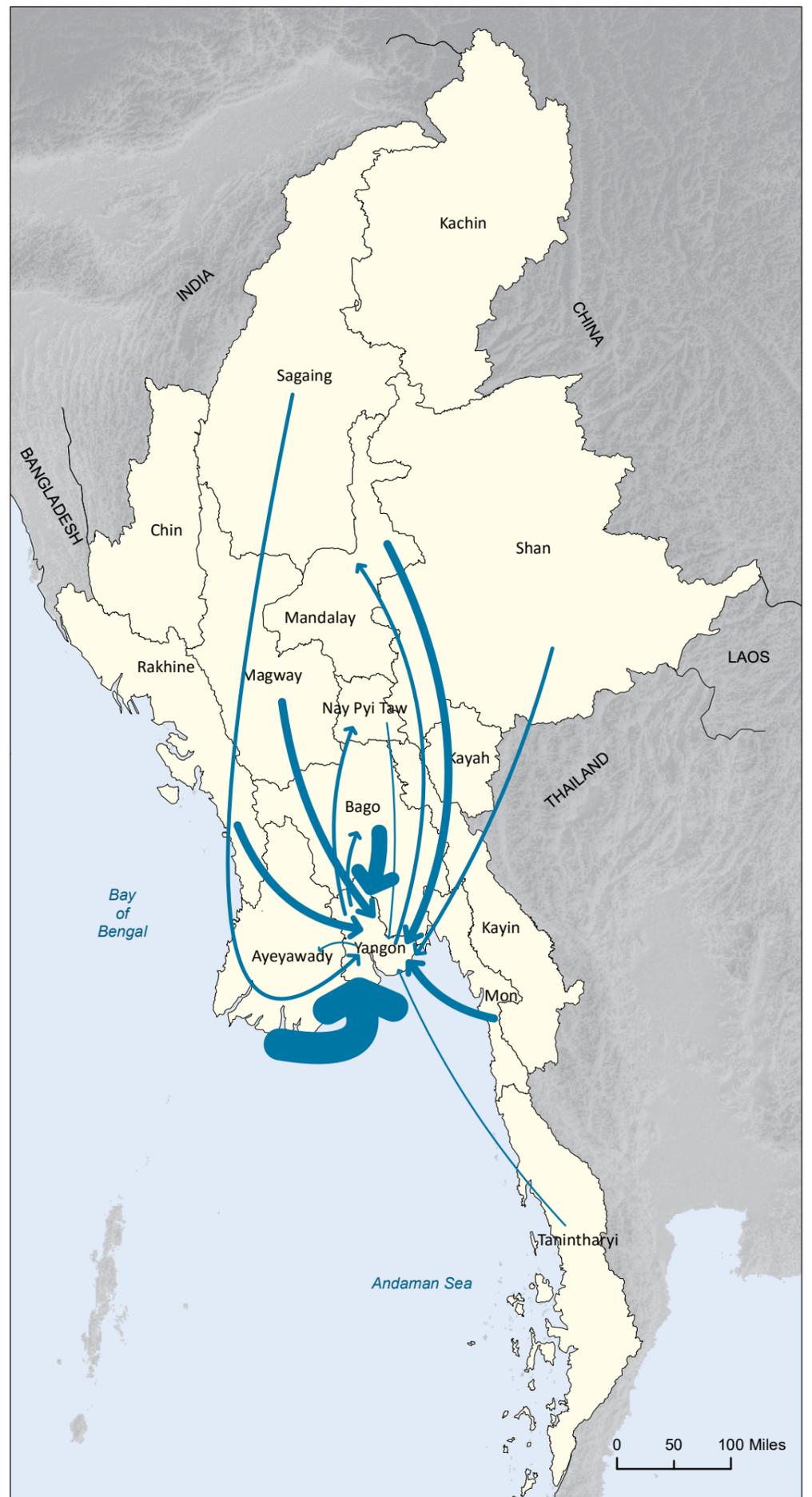
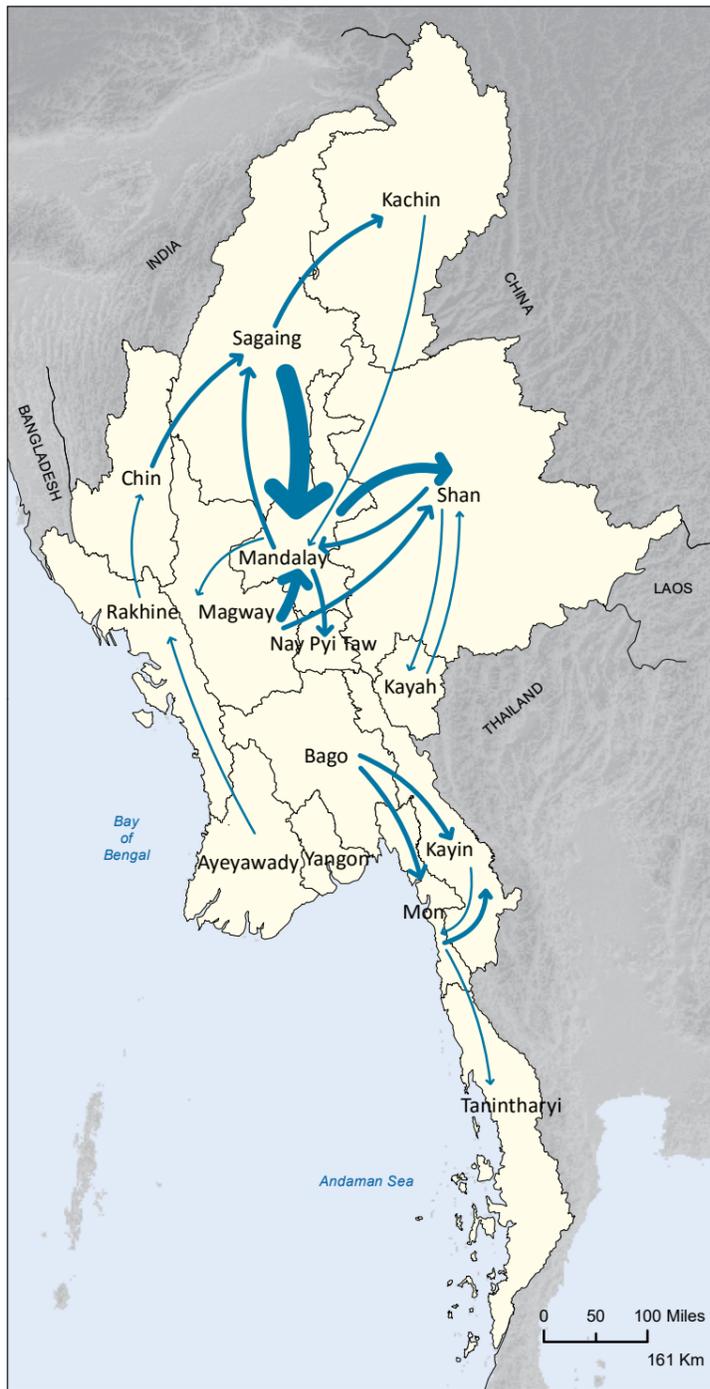
		State/Region of Birth														
		Kachin	Kayah	Kayin	Chin	Sagaing	Tanintharyi	Bago	Magway	Mandalay	Mon	Rakhine	Yangon	Shan	Ayeyawady	Nay Pyi Taw
State/Region of Usual Current Residence	Kachin	1,140,581	551	1,212	2,930	91,406	837	10,794	19,795	37,582	3,529	10,933	12,020	33,037	10,173	2,463
	Kayah	381	232,126	1,275	144	1,043	134	3,318	3,175	9,590	559	514	2,213	13,645	1,862	834
	Kayin	1,212	779	1,240,407	400	2,292	2,676	55,587	6,111	6,376	73,635	3,586	21,780	3,580	20,423	1,570
	Chin	477	60	143	456,788	3,271	58	419	2,076	758	176	3,451	615	549	518	95
	Sagaing	20,409	622	1,230	56,532	4,848,349	1,038	10,020	47,968	57,283	2,716	2,981	12,709	11,023	8,323	2,359
	Tanintharyi	825	143	2,541	235	1,703	1,232,236	18,361	5,243	4,477	24,076	5,638	21,246	1,745	23,599	812
	Bago	3,370	1,354	8,910	990	7,573	2,681	4,514,511	38,874	32,474	16,337	8,695	53,977	9,204	45,543	10,093
	Magway	3,158	474	681	6,485	12,778	937	18,851	3,690,132	23,945	2,222	3,266	13,718	5,139	9,690	2,936
	Mandalay	26,801	2,215	2,755	3,588	209,217	2,730	38,873	128,487	5,249,298	9,952	7,030	50,054	81,253	26,175	15,285
	Mon	1,341	320	19,926	331	2,363	6,723	52,142	5,847	7,578	1,778,201	3,335	27,041	3,155	33,149	1,288
	Rakhine	1,179	206	552	2,038	1,341	830	5,140	3,896	2,699	1,576	1,993,649	7,729	1,632	10,619	453
	Yangon	21,557	3,965	19,456	13,566	70,879	36,516	372,068	199,483	176,615	133,376	128,623	4,868,845	65,883	784,919	21,737
	Shan	13,906	9,852	2,572	2,974	36,897	1,497	33,270	55,375	159,757	6,940	7,775	31,369	5,066,811	23,496	13,069
	Ayeyawady	3,025	402	1,790	645	4,403	2,127	25,190	13,273	8,632	4,725	10,851	43,957	6,003	5,939,688	1,318
Nay Pyi Taw	2,598	946	1,416	908	9,297	1,393	36,337	34,457	50,080	4,780	4,098	50,631	8,839	19,972	841,677	

The lifetime migration flows considered 'most significant' are highlighted in blue in Table 6.1 and are shown as arrows on Maps 6.1a and 6.1b. These include all flows involving more than 50,000 people, plus flows involving fewer than 50,000 people, but significant to individual States and Regions because they represent the largest flow of lifetime migrants to each State/Region and the largest flow of lifetime migrants from each State/Region.

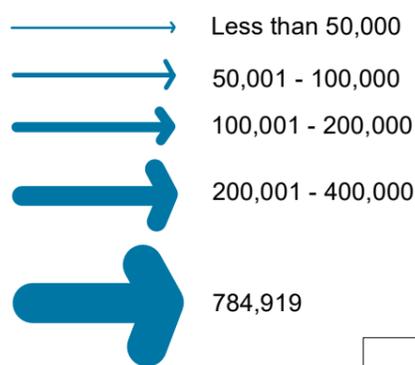
Map 6.1 Lifetime Internal Migration Flows

a) Between States/Regions other than Yangon Region

b) To and From Yangon Region



Number of migrants



The base population for this indicator is all individuals that were living in conventional households at the time of the 2014 Census.

Arrows show the direction of the most significant lifetime flows. The width of each arrow is proportionate to the number of migrants.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

'Most significant migration flows' - As used in this chapter, the term 'most significant' is used to describe migration flows that have had the most impact at both the national level and for individual States and Regions. At the national level, the most significant flows are those of large numbers of people in absolute terms. On Map 6.1 for lifetime migrants, all flows of more than 50,000 people are shown. For States/Regions with small populations, even migrations of small numbers of people in absolute terms can have a big impact on the source or receiving populations. For this reason, the largest flow to each State/Region and the largest flow from each State/Region are also shown on the map, even if these flows involved fewer than 50,000 migrants.

6.2 Recent Internal Migration Flows

The 2014 Census defined recent migrants as those people who moved from one Township to live in another Township during the five years prior to the Census. The 3,359,342 recent migrants recorded by the Census represent 7.0 per cent of the total enumerated population in conventional households (Department of Population, 2016a). Comparing this number with the 9,231,619 lifetime migrants shows that more than one-third of all internal migrations occurred between 2009 and 2014. These numbers include all migrants - both those who moved from one Township to another in the same State/Region, and those who moved from one Township to another in a different State/Region.

Table 6.2 and Map 6.2b however, only show inter-State/Region migration flows. Yangon Region was the major recipient of recent internal migrants. In addition to the large numbers from Ayeyawady, Yangon also received large numbers from Bago, Magway, Mandalay and Rakhine. Employment opportunities in the industrial zone in North and East Yangon Districts are the main draw. Mandalay Region attracted moderate numbers of recent in-migrants, especially from neighbouring Sagaing, Magway, and Shan.

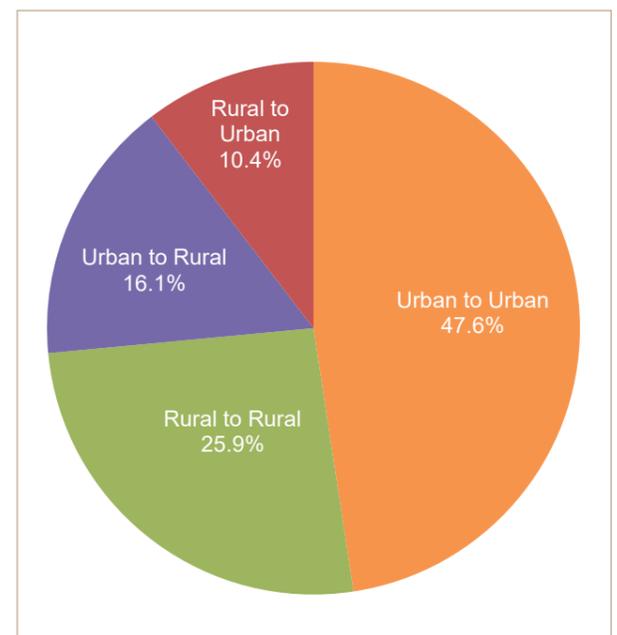
Figure 6.2 shows that rural-urban migration accounted for a relatively small proportion of total recent internal

migration (10.4 per cent), with most migrants having moved either from one urban centre to another (47.6 per cent) or from rural to rural areas (25.9 per cent). Table 4.9 in the Thematic Report on Migration and Urbanization (Department of Population, 2016a) presents details of the four types of recent internal migration flows at the State/Region level.

The large number of people moving from Ayeyawady Region to Yangon Region stands out even more for recent migrants than it does for lifetime migrants (Figure 6.3). The 350,463 people that moved between these two Regions represent 10.4 per cent of the 3,359,342 total recent migrants, and 44.6 per cent of the 784,919 people who had migrated from Ayeyawady Region to Yangon Region during their lifetimes. That almost half the lifetime flow took place between 2009 and 2014 reflects the impact of Cyclone Nargis in May 2008, with increasing numbers of people moving away from the vulnerable Ayeyawady Delta as they attempted to recover from the disaster and rebuild their lives.

States bordering Thailand and China received large numbers of migrants during the five-year period leading up to the 2014 Census. There were substantial flows to Shan State from Mandalay and Magway Regions, to Kayin State from Bago Region and Mon State, and

Figure 6.2 Proportion of Recent Internal Migration by Type of Move, Union



to Kachin State from Sagaing Region. People are moving to these areas in search of work in the mining and forestry sectors and to benefit from the economic opportunities provided by international trade.

Figure 6.3 Ten Largest Recent Internal Migration Flows, States/Regions

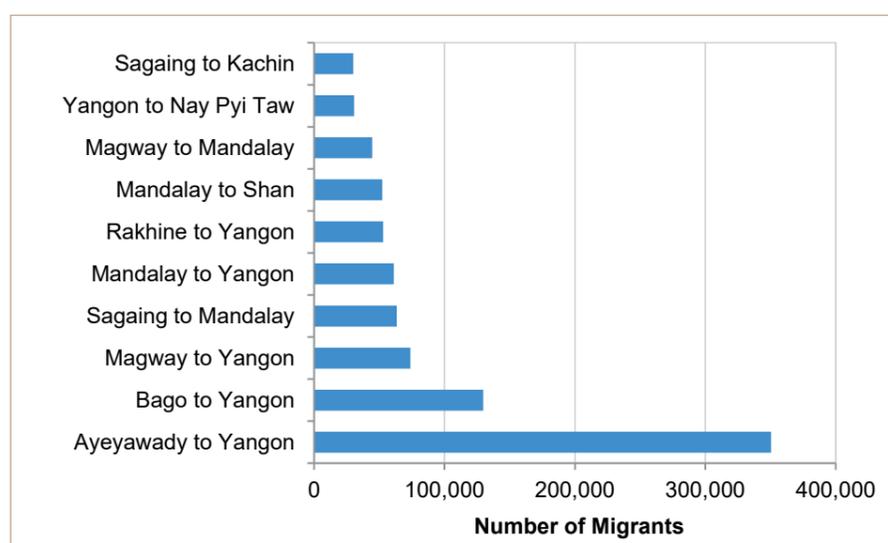


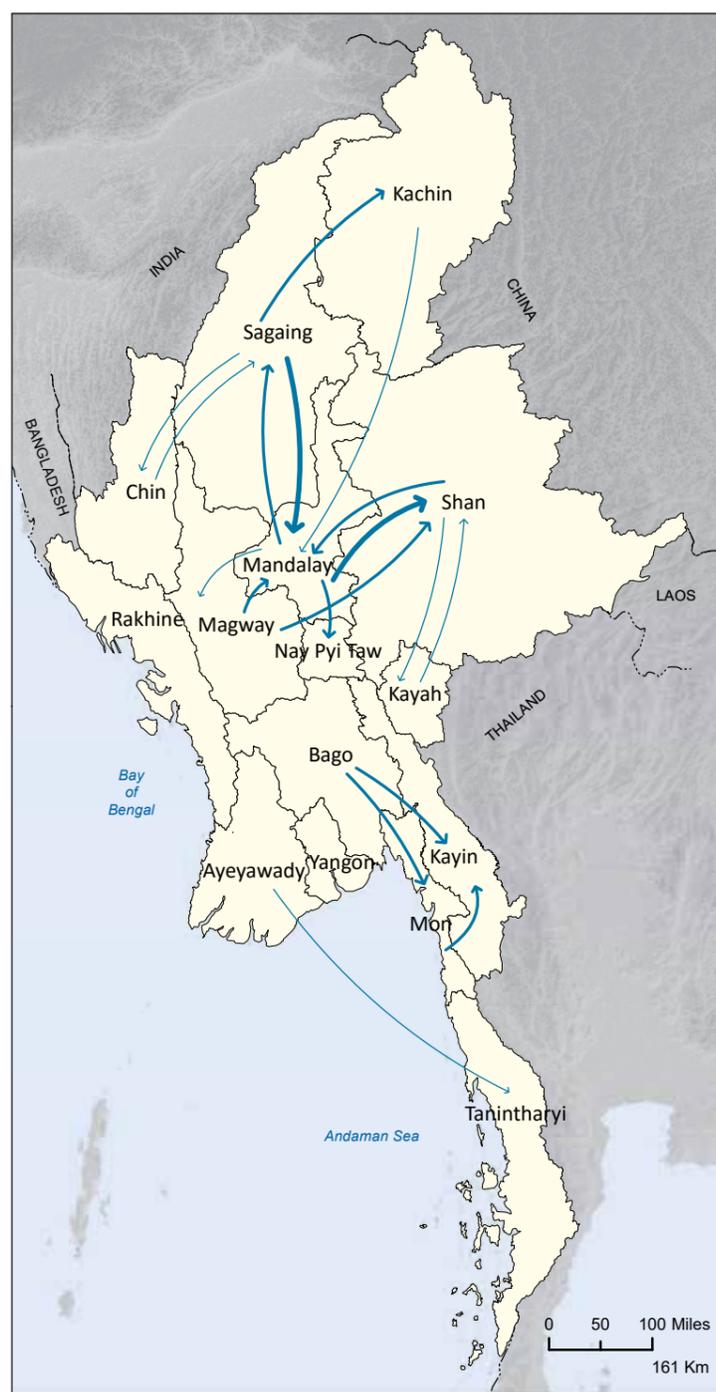
Table 6.2 Recent Migration Flows between States/Regions

	State/Region of Previous Residence															
	Kachin	Kayah	Kayin	Chin	Sagaing	Tanintharyi	Bago	Magway	Mandalay	Mon	Rakhine	Yangon	Shan	Ayeyawady	Nay Pyi Taw	
Kachin	1,303,269	164	369	900	29,914	307	3,121	6,184	12,514	853	5,289	4,606	7,113	3,077	1,024	
Kayah	163	257,406	320	44	400	46	1,301	1,102	3,231	106	155	1,118	4,246	721	438	
Kayin	516	284	1,359,883	108	936	965	25,182	2,345	2,522	22,820	1,531	10,451	1,396	10,304	915	
Chin	287	22	66	463,621	1,829	35	171	944	385	59	1,090	401	331	149	110	
Sagaing	8,574	255	502	11,043	5,013,023	475	2,996	10,770	20,591	755	1,195	5,510	4,252	2,600	1,460	
Tanintharyi	388	73	684	76	599	1,299,386	9,153	1,777	1,607	5,457	2,217	8,385	742	11,109	607	
Bago	1,521	528	3,073	360	2,969	1,733	4,669,769	10,227	9,064	4,474	2,917	22,845	4,251	15,558	5,030	
Magway	1,630	188	332	1,868	4,816	621	7,082	3,752,513	8,209	716	1,322	6,558	2,969	3,299	2,227	
Mandalay	12,145	974	1,181	1,184	63,364	1,504	13,950	44,604	5,640,518	2,699	2,930	22,895	26,870	9,914	9,050	
Mon	601	129	5,604	69	884	2,467	20,442	2,144	2,788	1,877,447	1,213	11,707	1,331	15,422	854	
Rakhine	588	111	300	744	680	931	1,780	1,361	1,208	563	2,017,605	3,777	849	2,947	425	
Yangon	9,127	1,481	6,655	4,746	26,335	13,249	129,621	73,776	61,029	29,541	52,949	6,117,208	24,774	350,463	17,492	
Shan	5,744	3,092	976	783	14,050	841	12,893	21,058	52,322	1,985	2,955	13,351	5,329,395	8,442	6,286	
Ayeyawady	1,160	207	923	195	1,467	1,623	7,350	3,461	2,858	1,623	2,918	20,221	2,635	6,018,176	1,188	
Nay Pyi Taw	1,891	450	1,011	375	4,808	1,057	16,758	14,940	20,352	1,647	2,257	30,711	5,810	8,601	956,674	

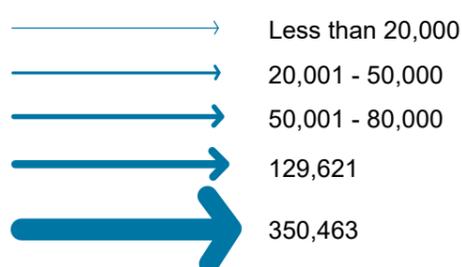
The recent internal migration flows considered 'most significant' are highlighted in blue in Table 6.2 and are shown as arrows on Maps 6.2a and 6.2b. These include all flows involving more than 20,000 people, plus flows involving fewer than 20,000 people, but significant to individual States and Regions because they represent the largest flow of recent migrants to each State/Region and the largest flow of recent migrants from each State/Region.

Map 6.2 Recent Internal Migration Flows

a) Between States/Regions other than Yangon Region



Number of migrants



 State/Region boundary

b) To and From Yangon Region



The base population for this indicator is all individuals that were living in conventional households at the time of the 2014 Census.

Arrows show the direction of the most significant flows of migrants that occurred during the five-year period prior to the 2014 Census. The width of each arrow is proportionate to the number of migrants.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

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'Most significant migration flows' - As used in this chapter, the term 'most significant' is used to describe migration flows that have had the most impact at both the national level and for individual States and Regions. At the national level, the most significant flows are those of large numbers of people in absolute terms. On Map 6.2 for recent migrations, all flows of more than 20,000 people are shown. For States/Regions with small populations, even migrations of small numbers of people in absolute terms can have a big impact on the source or receiving populations. For this reason, the largest flow to each State/Region and the largest flow from each State/Region are also shown on the map, even if these flows involved fewer than 20,000 migrants.

6.3 Recent Internal Migration Rates

As in the previous section, Sections 6.3 and 6.4 present spatial analysis of 'recent' migration, meaning population movements that occurred during the five-year period prior to the Census. Here, net migration rates rather than migration flows are discussed. Net internal migration rates measure the degree to which different geographic areas are either gaining or losing people through internal migration. And whereas the previous sections focused on population flows between States/Regions, the main geographic focus of the net migration rate analysis is on the Districts.

Districts where the number of people that had moved in was higher than the number of people that had

moved out had positive net migration rates and are coloured blue in Figure 6.4 and on Map 6.3. Those with higher outmigration than in-migration had negative net migration rates, shown in brown in the graphics. In the five-year period leading up to the 2014 Census, three clear patterns are evident – the west of the country generally lost population to migration, the east generally gained population, and the movement of large numbers of people from most parts of the country to Yangon Region continued.

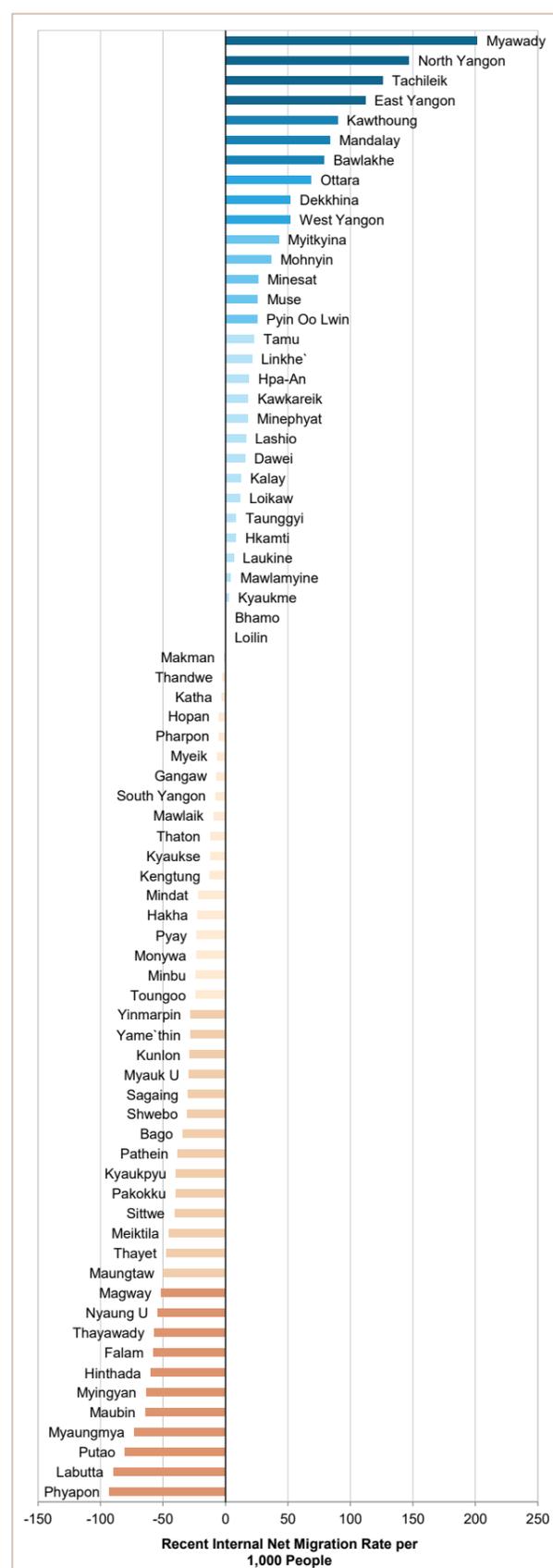
The State/Region-level flow analysis gave some hints of these broad patterns, but a closer look at District rates gives further insights into migration patterns and

the possible reasons behind them. For example, Table 6.3 reveals that, in addition to Districts in Yangon, those close to the other major urban centres of Mandalay and Nay Pyi Taw were also major net recipients of migrants. Furthermore, large urban centres are not the only magnets to migrants; economic opportunities offered by international borders also drew large numbers of migrants to Districts such as Myawady (in Kayin), Tachileik (in Shan), Kawthoung (in Tanintharyi) and Bawlakhe (in Kayah).

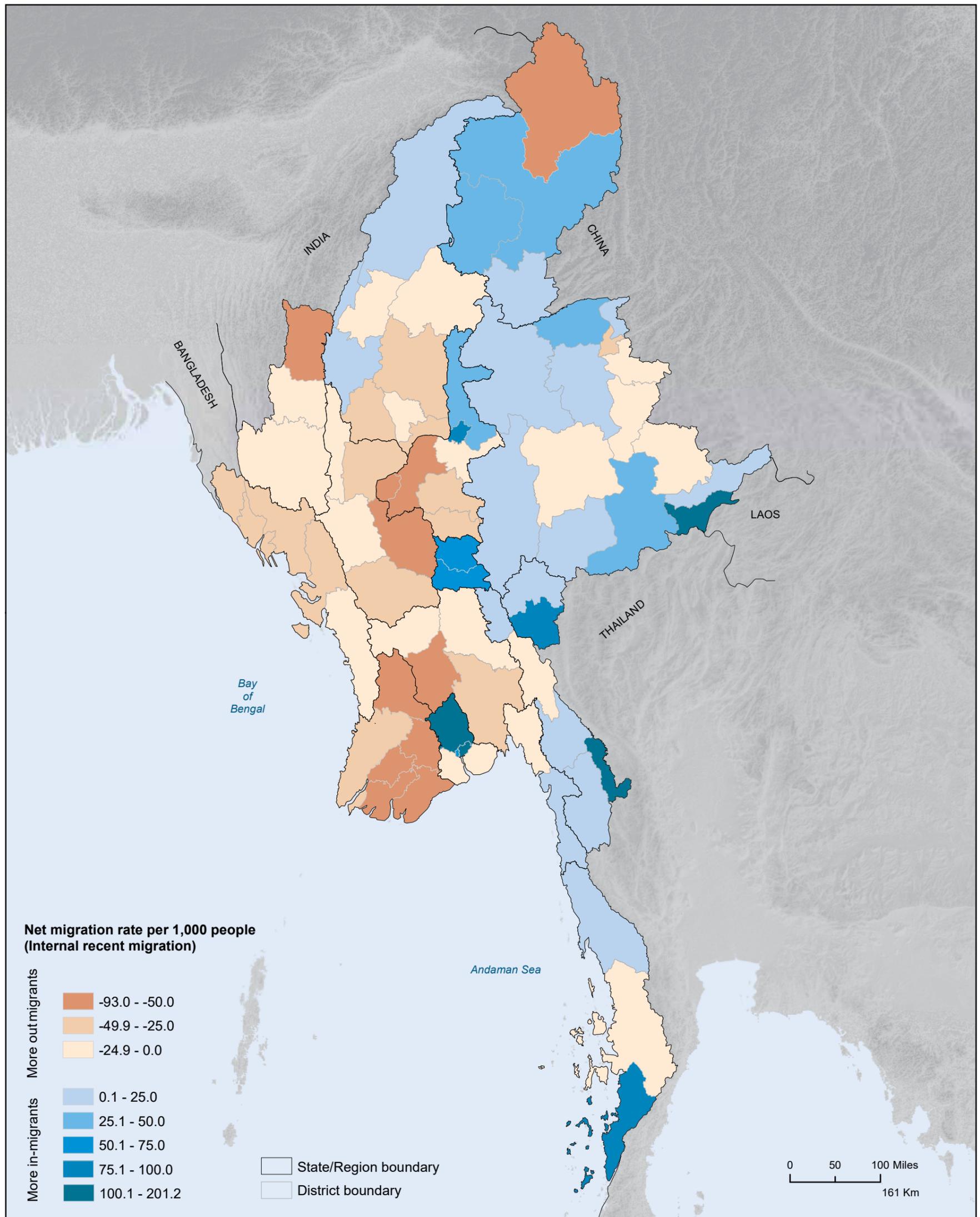
Table 6.3 Recent Internal Net Migration Rates, States/Regions and Districts

State/Region/District	Rate	State/Region/District	Rate	State/Region/District	Rate
Kachin	22.8	Kawthoung	89.8	Yangon	93.0
Myitkyina	42.6	Bago	-34.9	North Yangon	146.8
Mohnyin	36.4	Bago	-34.3	East Yangon	111.9
Bhamo	0.1	Toungoo	-24.0	South Yangon	-7.8
Putao	-80.4	Pyay	-23.2	West Yangon	51.8
Kayah	20.6	Thayawady	-57.0	Shan	11.3
Loikaw	11.7	Magway	-40.2	Taunggyi	8.6
Bawlakhe	79.0	Magway	-51.7	Loilin	0.0
Kayin	43.1	Minbu	-23.7	Linkhe'	21.3
Hpa-An	18.9	Thayet	-47.4	Lashio	16.3
Pharpon	-5.4	Pakokku	-39.9	Muse	25.8
Myawady	201.2	Gangaw	-7.3	Kyaukme	2.7
Kawkareik	18.3	Mandalay	2.6	Kunlon	-28.4
Chin	-34.7	Mandalay	83.5	Laukine	6.6
Haka	-22.3	Pyin Oo Lwin	25.3	Hopan	-4.9
Falam	-57.8	Kyaukse	-12.3	Makman	-0.7
Mindat	-22.1	Myingyan	-63.3	Kengtung	-12.5
Sagaing	-16.0	Nyaung U	-54.1	Minesat	26.1
Sagaing	-30.0	Yame'thin	-28.2	Tachileik	125.9
Shwebo	-30.5	Meiktila	-45.3	Minephyat	18.0
Monywa	-23.5	Mon	-2.2	Ayeyawady	-65.0
Katha	-3.1	Mawlamyine	4.5	Patheingyi	-38.1
Kalay	12.4	Thaton	-12.3	Phyappon	-93.0
Tamu	23.1	Rakhine	-30.6	Maubin	-64.1
Mawlaik	-9.4	Sittway	-40.8	Myaungmya	-72.7
Hkamti	8.6	Myauk U	-29.1	Labutta	-89.9
Yinmarpin	-27.9	Maungtaw	-49.3	Hinthada	-59.8
Tanintharyi	15.7	Kyaukpyu	-39.5	Nay Pyi Taw	59.9
Dawei	15.6	Thandwe	-2.4	Ottara (North)	68.7
Myeik	-6.8			Dekkhina (South)	52.2

Figure 6.4 Recent Internal Net Migration Rates, Districts



Map 6.3 Recent Internal Net Migration Rates, Districts



The base population for this indicator is all individuals that were living in conventional households at the time of the 2014 Census.

The indicator reflects the difference between rates of in-migration and rates of outmigration. Positive values mean more migrants arrived than left during the five-year period; negative values mean more migrants left than arrived.

The net migration rate is calculated as the number of in-migrants during the five-year period minus the number of outmigrants during the same period, divided by the total enumerated population of the District as counted by the 2014 Census.

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Source of statistical data: 2014 Population and Housing Census of Myanmar. Source of geographic data: Department of Population GIS Unit.

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6.4 Male and Female Migration Patterns

Picking up on the net migration rates shown in Table 6.3 in the previous section, Figure 6.5 shows that, among the States and Regions, Yangon (93.0) had the highest recent net in-migration rate, whilst Nay Pyi Taw (59.9) and Kayin State (43.1) also had substantially more recent in-migrants than outmigrants. Ayeyawady (-65.0), Magway (-40.2) and Bago (-34.9) had lost the most people to migration in recent years.

At the District level, Myawady (201.2), North Yangon (146.8), Tachileik (125.9), East Yangon (111.9), Kawthoung (89.8) and Mandalay (83.5) had the highest positive rates. Those Districts that had lost people to migration at the highest rates include Phyapong (-93.0), Labutta (-89.9), Putao (-80.4), Myaungmya (-72.7), Maubin (-64.1) and Myingyan (-63.3). Four of these six Districts are in Ayeyawady Region.

Of the total 3,359,342 recent migrants reported in the 2014 Census, 53 per cent were female and 47 per cent were male. The age profiles of migrants were similar for both sexes, with the largest numbers in the 20-24 age group and numbers getting progressively smaller among older cohorts. In other respects, however, there are some interesting differences. The main reason given for moving is one example.

Among recent inter-State/Region migrants, the largest proportion of males (55.8 per cent) reported they had migrated to take up or search for new employment

opportunities. The second most widely cited reason for moving to another State/Region among male migrants (27.8 per cent) was to join other members of their families. In contrast, following the family was the reason given by the largest proportion of recent female migrants, (44.5 per cent), followed by the search for employment (32.4 per cent). Reasons related to marriage were third for both sexes, cited as the main reason for moving to another State/Region by 5.7 per cent of recent male migrants and 11.1 per cent of recent female migrants, respectively.

There were also notable differences in the employment characteristics of recent male and female migrants. The largest numbers of male migrants were working (or seeking work) in semi-skilled manual jobs in construction, mining, transportation and agriculture, forestry or fishing. Females, on the other hand, were more likely to be pursuing opportunities in clerical, administrative or production line positions in the manufacturing, public administration, hospitality or wholesale and retail sectors.

Maps 6.4a and 6.4b show that net recent migration rates for males and females were similar for most Districts. However, a closer examination reveals some striking gender differences. For 10 of Myanmar's 74 Districts, rates varied by more than 10 points, suggesting that the numbers of males and females in those Districts might be becoming increasingly out of balance.

Some Districts, such as West Yangon, were becoming 'more female' in the sense that, though they were gaining both sexes, they were gaining females at a much higher rate than males. In contrast, Nyaung U and Myingyan (in Mandalay Region) were becoming 'more female' because of substantially higher net outmigration rates for males than females.

Conversely, some Districts were becoming 'more male'. Mohnyin (in Kachin), Dawei (in Tanintharyi) and Bawlakhe (in Kayah) were all gaining both sexes through migration, but the net gains for males far outweighed the net gains for females. Putao (in Kachin) was also getting 'more male', but here it was because it was losing males at a slower rate than it was losing females.

Policymakers in fields such as education, employment, family planning and housing will have special issues to address in parts of the country where numbers of males and females are becoming increasingly out of balance.

The analysis presented here is based on information taken from the 2014 Census Thematic Report on Migration and Urbanization, which explores differences in migration rates and the characteristics of male and female migrants in more detail (Department of Population, 2016a).

Figure 6.5 Gainers and Losers in Recent Internal Migration, States/Regions

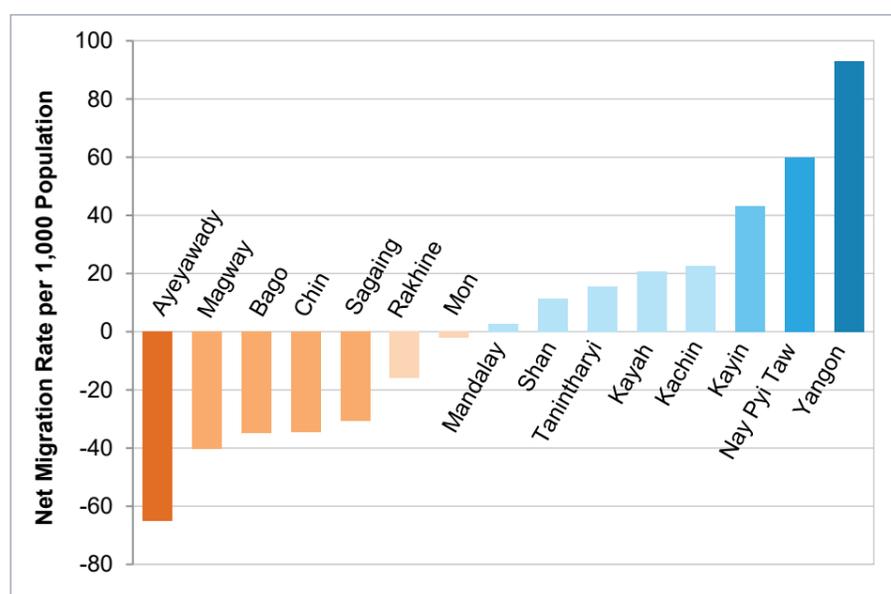


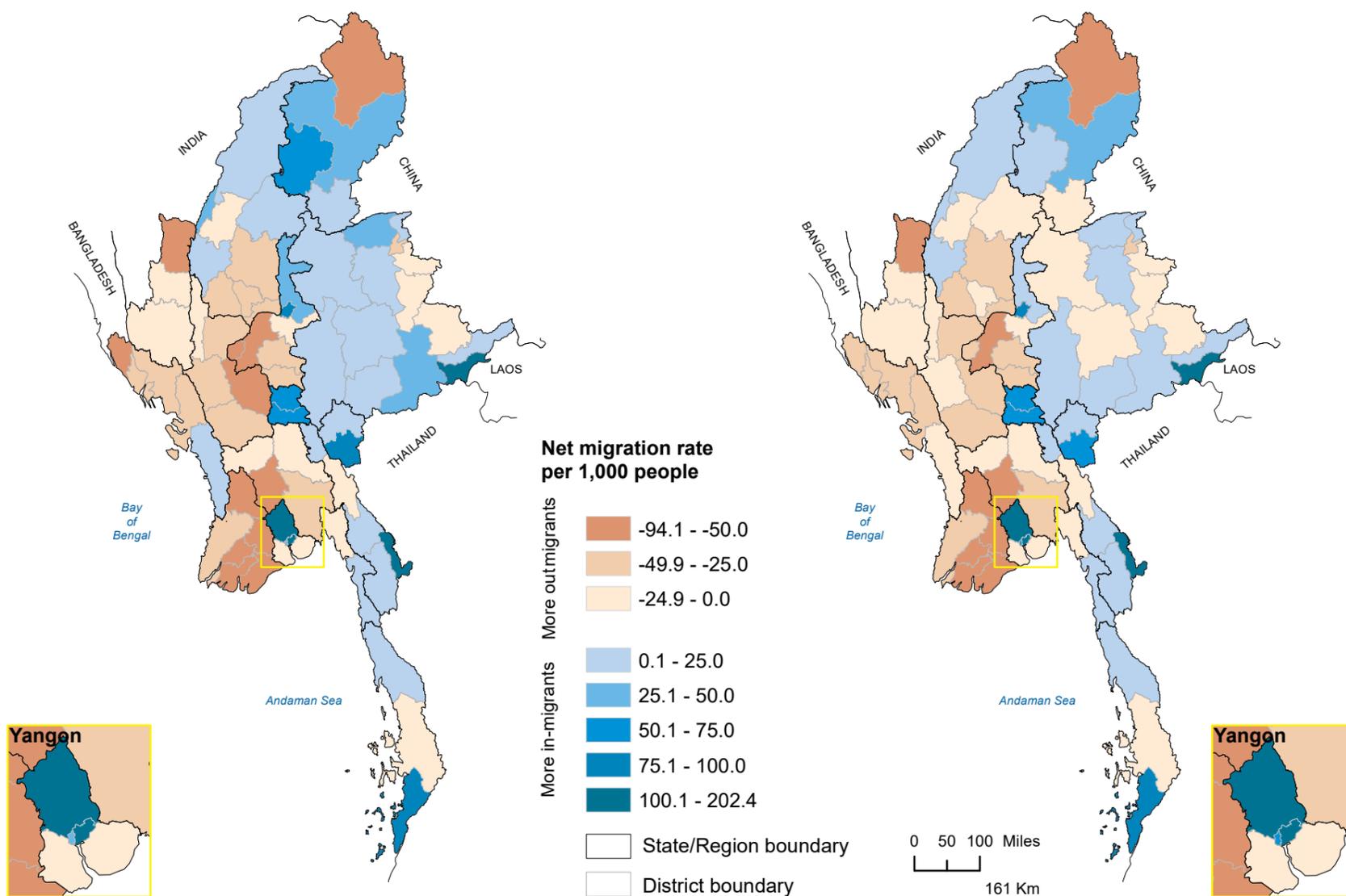
Table 6.4 Recent Internal Net Migration Rates, Males and Females, States/Regions

State/Region	Recent Internal Migration Rates per 1,000 Population								
	In			Out			Net		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Kachin	54.9	61.8	48.5	32.1	30.5	33.7	22.8	31.4	14.8
Kayah	49.9	51.3	48.6	29.4	28.1	30.5	20.6	23.2	18.1
Kayin	58.3	61.4	55.5	15.2	14.9	15.6	43.1	46.6	40.0
Chin	13.1	13.8	12.5	47.9	46.4	49.2	-34.7	-32.6	-36.7
Sagaing	14.1	15.2	13.1	30.1	32.7	27.9	-16.0	-17.6	-14.7
Tanintharyi	34.9	39.1	31.0	19.2	18.3	20.1	15.7	20.8	10.9
Bago	18.1	18.7	17.5	52.9	53.6	52.4	-34.9	-34.8	-34.9
Magway	11.1	11.9	10.4	51.3	54.8	48.4	-40.2	-42.9	-37.9
Mandalay	36.5	37.5	35.7	33.9	37.1	31.3	2.6	0.4	4.5
Mon	35.4	39.1	32.2	37.7	37.1	38.2	-2.2	2.0	-6.0
Rakhine	9.1	10.3	8.1	39.8	38.4	40.9	-30.6	-28.1	-32.8
Yangon	116.4	113.6	119.0	23.5	24.4	22.6	93.0	89.1	96.4
Shan	27.3	29.3	25.5	16.0	15.4	16.5	11.3	13.9	9.0
Ayeyawady	7.9	8.0	7.9	73.0	72.1	73.7	-65.0	-64.1	-65.8
Nay Pyi Taw	103.9	105.4	102.7	44.2	45.8	42.6	59.9	59.6	60.1

Map 6.4 Recent Internal Net Migration, Districts

a) Males

b) Females



The base population for this indicator is all individuals that were living in conventional households at the time of the 2014 Census.

The indicator reflects the difference between rates of in-migration and rates of outmigration. Positive values mean more migrants arrived than left during the five-year period prior to the Census; negative values mean more migrants left than arrived.

The net migration rate is calculated as the number of in-migrants during the five-year period minus the number of outmigrants during the same period, divided by the total enumerated population of the District as counted by the 2014 Census.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

7

Disability

It is understandably very difficult to collect clear, objective information about the nature and magnitude of the many different physical and mental conditions that limit people's abilities to function optimally in society. Nevertheless, from the modest efforts of the 2014 Census to gather some information concerning disability, there is now a general, but extremely valuable, national dataset which will help deepen the level of understanding about people who are living with disabilities, how those people are affected by their disabilities, and how the prevalence of different kinds of disabilities varies both according to where people live and to their socio-economic characteristics.

The Census adopted a question developed by the Washington Group on Disability Statistics to determine disability status. This asked about the degree of difficulty people experienced in four basic human functions. The functions, also referred to as 'domains', were seeing, hearing, walking and remembering. The extent to which people were able or unable to perform each function was recorded as either 'some difficulty', (classified as 'mild'), 'a lot of difficulty' (classified as 'moderate') or 'cannot do at all' (classified as 'severe') (Department of Population, 2017e). The question is shown below, and was asked of all persons living either in conventional households or in institutions.

From the data collected from this question, the Census generated empirical evidence that disability was more prevalent among rural populations than it was among urban populations. The areas of the country that had the lowest prevalence of disability were centred around the cities of Mandalay, Nay Pyi Taw and Yangon. These same areas also had the most services available to support people with disabilities. As expected, the prevalence of disability was highest in the country's outer ring, especially in Districts and Townships in the middle-west, south and north.

The geographic distribution of people living with disabilities was similar for males and females, though a slightly higher proportion of females were living with disabilities in Districts and Townships throughout the country. At the State/Region level, the prevalence among both males and females was highest in Chin, Kayin, Taninthryi and Ayeyawady, and lowest in Nay Pyi Taw, Mandalay, Sagaing and Yangon.

DISABILITY			
9. Does (Name) have any difficulty...?			
i. Seeing, even if wearing glasses		Codes	
ii. Hearing, even if using hearing aid		No - no difficulty = 1	
iii. Walking, climbing steps, carrying items		Yes - some difficulty = 2	
iv. Remembering or concentrating		Yes a lot of difficulty = 3	
		Cannot do at all = 4	
Seeing	Hearing	Walking	Remembering

7.1 Disability among Individuals

The 2014 Census considered people to be living with a disability if they reported having any difficulty at all performing basic functions in at least one of four domains - seeing, hearing, walking or remembering. In other words, people who responded 'some difficulty', 'a lot of difficulty' or 'cannot do at all' in at least one domain were classified as persons living with a disability. People who responded 'no difficulty' were considered not to be living with a disability. Based on this definition, the Census enumerated 2,311,250 people, or 4.6 per cent of the enumerated population, as living with some form of disability in 2014. Of this total, 1,751,370, (three quarters) reported only a mild level of disability, 323,818 (14.9 per cent) reported a moderate level, and 216,062 (9.3 per cent) reported a severe disability. Table 7.1 shows that having any level of disability was slightly more prevalent among females than among males. The totals were 1,254,495 females, or 4.8 per cent of the enumerated female population, and 1,056,755 males, or 4.4 per cent of the enumerated male population (Department of Population, 2017e).

Geographically, Figure 7.1 shows that the distribution of people living with a disability varies both regionally and locally. At the State/Region level, the highest proportions of both males and females living with a disability were in Ayeyawady, at 7.3 and 7.9 per cent, respectively. In addition, Chin, Tanintharyi, Kayin,

Kayah, Rakhine, Mon, and Magway also had a higher than national average prevalence of disability among both males and females. As might be expected, States/Regions with large urban populations reported the lowest prevalence of disability. Between 3.0 and 3.5 per cent of both males and females were living with a disability in Yangon and Mandalay, while Nay Pyi Taw recorded the lowest prevalence at 3.0 per cent for males and 3.3 per cent for females.

Some Districts had strikingly high rates of disability. Map 7.1 shows the Districts with the highest rates clustered in Kayin and Chin States and in Tanintharyi and Ayeyawady Regions. In Kayin, the Districts where disability was most prevalent were Pharpon, Kawkareik and Hpa-An; in Chin, rates were highest in Falam and Mindat Districts; and in Tanintharyi Region, Myeik District is particularly noticeable because the high prevalence of disability there contrasted markedly with the relatively low rates reported for all other Districts in the Region. Disability affected more than 6.5 per cent of males and more than 7.5 per cent of females in all these Districts. It is Ayeyawady Region, however, that really stands out. Prevalence was generally high across the Region, but particularly high in the Districts of Myaungmya (7.2 per cent for males and 8.0 per cent for females), Hinthada (7.9 and 8.7 per cent) and, most strikingly, in Labutta (10.8 and 11.5 per cent).

Figure 7.1 Prevalence of Disability, Males and Females, States/Region

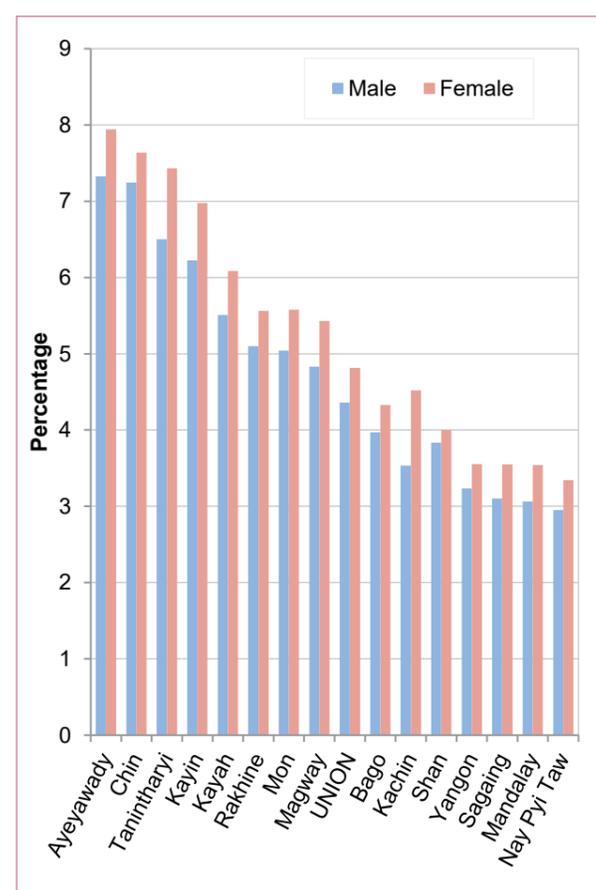


Table 7.1 Proportion of Males and Females Living with Some Form of Disability, States/Regions and Districts

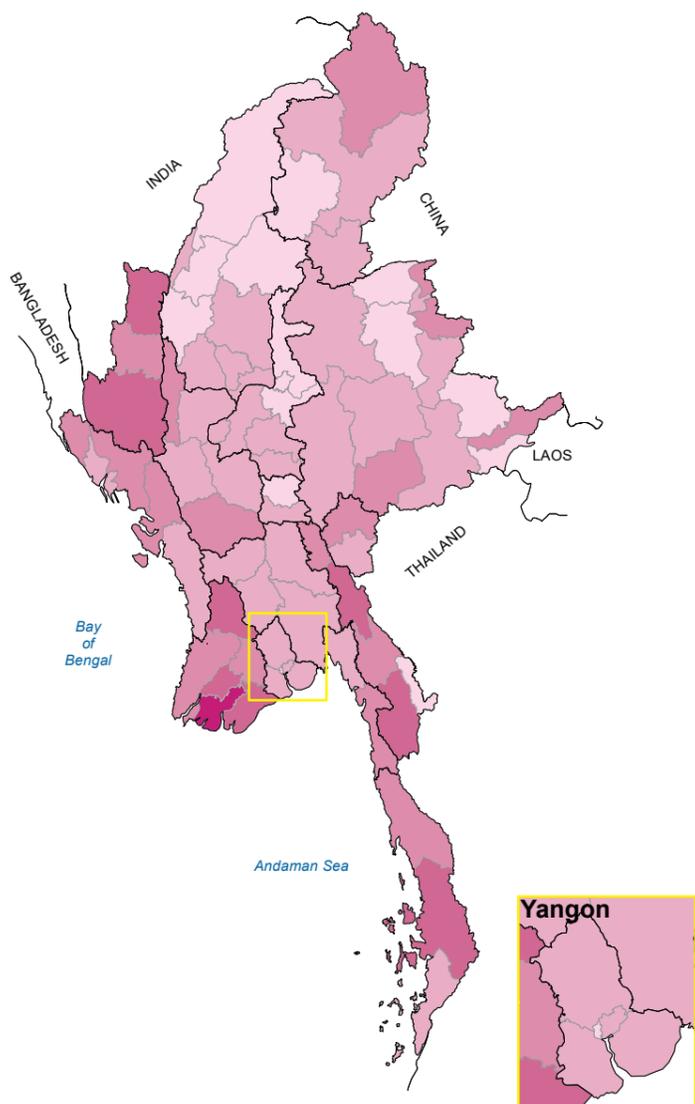
State/Region District	Percentage		
	Both Sexes	Males	Females
UNION	4.6	4.4	4.8
Kachin	4.0	3.5	4.5
Myitkyina	4.5	4.3	4.8
Mohnyin	2.7	2.2	3.3
Bhamo	5.0	4.5	5.5
Putao	6.6	6.3	6.9
Kayah	5.8	5.5	6.1
Loikaw	6.3	6.0	6.6
Bawlakhe	3.2	3.2	3.1
Kayin	6.6	6.2	7.0
Hpa-An	7.1	6.6	7.5
Pharpon	8.0	7.4	8.6
Myawady	3.0	2.9	3.1
Kawkareik	7.3	7.0	7.6
Chin	7.4	7.2	7.6
Haka	6.3	6.0	6.5
Falam	7.8	7.5	8.2
Mindat	7.7	7.6	7.7
Sagaing	3.3	3.1	3.6
Sagaing	3.4	3.2	3.7
Shwebo	3.4	3.1	3.6
Monywa	3.9	3.6	4.1
Katha	2.9	2.6	3.1
Kalay	3.0	3.0	3.1
Tamu	4.0	3.8	4.1
Mawlaik	3.0	2.8	3.1
Hkamti	3.1	2.9	3.4
Yinmarpin	3.6	3.4	3.7
Tanintharyi	7.0	6.5	7.4
Dawei	6.5	5.9	7.0

State/Region District	Percentage		
	Both Sexes	Males	Females
Myeik	8.0	7.5	8.5
Kawthoung	4.7	4.6	4.9
Bago	4.2	4.0	4.3
Bago	3.2	3.1	3.3
Toungoo	4.7	4.5	4.9
Pyay	4.9	4.7	5.2
Thayawady	4.5	4.3	4.8
Magway	5.2	4.8	5.4
Magway	4.5	4.2	4.7
Minbu	4.3	4.0	4.6
Thayet	6.8	6.2	7.2
Pakokku	5.3	4.9	5.5
Gangaw	5.7	5.6	5.8
Mandalay	3.3	3.1	3.5
Mandalay	2.4	2.2	2.6
Pyin Oo Lwin	2.6	2.5	2.8
Kyaukse	2.8	2.5	3.0
Myingyan	4.5	4.3	4.7
Nyaung U	4.8	4.4	5.2
Yame'thin	5.0	4.6	5.3
Meiktila	3.4	3.2	3.6
Mon	5.3	5.0	5.6
Mawlamyine	5.5	5.2	5.8
Thaton	5.1	4.8	5.3
Rakhine	5.3	5.1	5.6
Sittway	3.8	3.6	3.9
Myauk U	6.2	6.1	6.4
Maungtaw	5.8	5.6	6.0
Kyaukpyu	6.3	5.9	6.7
Thandwe	4.7	4.5	4.9

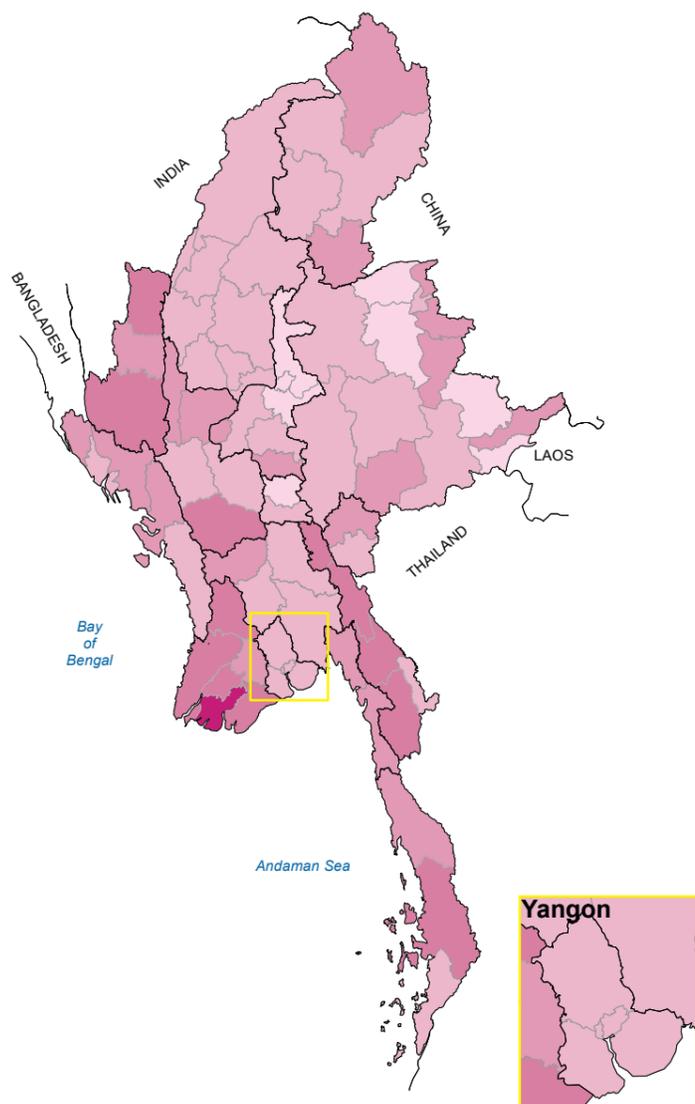
State/Region District	Percentage		
	Both Sexes	Males	Females
Yangon	3.4	3.2	3.6
North Yangon	3.2	3.1	3.3
East Yangon	3.4	3.2	3.7
South Yangon	4.0	3.8	4.2
West Yangon	3.0	2.8	3.1
Shan	3.9	3.8	4.0
Taunggyi	4.2	4.0	4.3
Loilin	3.6	3.6	3.6
Linkhe'	5.6	5.9	5.4
Lashio	2.5	2.4	2.5
Muse	2.6	2.5	2.7
Kyaukme	4.0	3.9	4.2
Kunlon	4.8	4.7	5.0
Laukine	6.3	6.0	6.7
Hopan	6.3	6.3	6.3
Makman	5.0	5.0	5.1
Kengtung	2.6	2.5	2.6
Minesat	4.3	4.5	4.2
Tachileik	2.5	2.4	2.5
Minephyat	6.5	6.3	6.8
Ayeyawady	7.6	7.3	7.9
Pathein	7.0	6.8	7.3
Phyapon	7.4	7.1	7.7
Maubin	5.9	5.7	6.2
Myaungmya	7.6	7.2	8.0
Labutta	11.2	10.8	11.5
Hinthada	8.3	7.9	8.7
Nay Pyi Taw	3.2	3.0	3.3
Ottara (North)	2.8	2.7	3.0
Dekkhina (South)	3.4	3.2	3.6

Map 7.1 Disability among Individuals, Districts

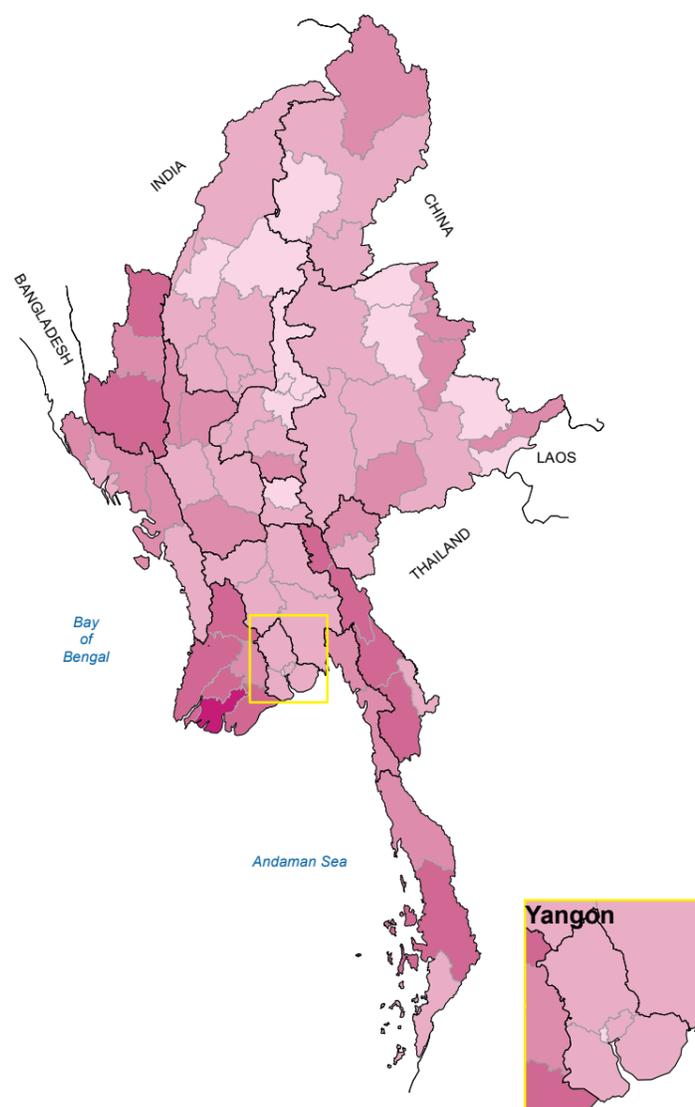
a) Males



b) Females



c) Both Sexes

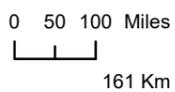


Percentage of population living with disability

Average at Union level: 4.4 males, 4.8 females, 4.6 both sexes

- 2.2 - 3.0
- 3.1 - 5.0
- 5.1 - 7.0
- 7.1 - 9.0
- 9.1 - 11.0
- 11.1 - 11.5

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census. The indicator gives the proportion of individuals that were living with at least one form of disability.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

7.2 Disability within Households

It is not always only the individuals concerned that are affected by their limited abilities to see, hear, walk or remember - often reductions in the quality of life and productive capacity extend to other members of the household to which people with disabilities belong. This is why it is important for policymakers - especially those in areas such as health, employment, social services, education and transportation - to know about geographic variations in the proportion of households with at least one member living with a disability. Maps 7.2a and 7.2b show that this indicator varied considerably across the country.

According to the 2014 Census, 15.8 per cent of households in Myanmar had at least one member living with a disability. In general, disability was more likely to be found in rural households than in urban households. Regionally, larger proportions of households in the north, west and south had one or more members living with a disability than households

in the middle corridor or in Shan State in the east. At the State/Region level, the highest proportions were in Chin, Kayin, Ayeyawady and Tanintharyi, while Nay Pyi Taw, Mandalay, Yangon, Sagaing, Bago, and Shan had the lowest proportions, reflecting to some degree the prevalence of disability at the individual level.

Tables 7.2 and 7.3 show that, in general, local variations in the proportions of households with members living with disabilities conformed to broader regional patterns. The 10 Districts with the highest proportions are all in Chin, Kayin, Ayeyawady or Tanintharyi. Chin State's three Districts all had very high proportions of households with members living with disabilities, with Falam and Mindat in the top 10, and Haka, with 22.4 per cent, only just outside the top 10. Districts in Kayin State had similarly high incidence rates for disabilities within households, with Pharpon, Kawkareik and Hpa-An among the 10 Districts with the highest proportions. Interestingly in Myawady, the fourth of Kayin's four

Districts, the proportion was only 11.1 per cent, placing it joint ninth with West Yangon among the 10 Districts with the lowest incidences of households with at least one member living with a disability.

Considering that for most socio-economic indicators Shan State scored relatively poorly in the 2014 Census, disability was not found to be as big a problem here as it was in most other parts of the country. Table 7.3 shows that 4 of the 10 Districts and 4 of the 10 Townships with the lowest proportions of households with members living with a disability were in Shan State.

However, though Shan State is notable for having generally low rates of disability within households, it also had a few Townships at the other end of the scale. For example, in Panlon, Kongyan and Mawhtike, at least one member of approximately one-third of households was living with some form of disability.

Table 7.2 Districts with Lowest and Highest Proportions of Households with One or More Members Living with a Disability

District	State/Region	Percentage
Lowest		
Tachileik	Shan State	8.4
Ottara (North)	Nay Pyi Taw Union Territory	9.4
Pyin Oo Lwin	Mandalay Region	9.6
Mandalay	Mandalay Region	9.8
Lashio	Shan State	9.8
Kyaukse	Mandalay Region	9.9
Muse	Shan State	10.7
Kengtung	Shan State	10.8
Myawady	Kayin State	11.1
West Yangon	Yangon Region	11.1
Highest		
Myaungmya	Ayeyawady Region	23.6
Hpa-An	Kayin State	24.2
Kawkareik	Kayin State	25.0
Laukine	Shan State	25.6
Mindat	Chin State	26.0
Putao	Kachin State	27.0
Myeik	Tanintharyi Region	27.5
Falam	Chin State	29.1
Pharpon	Kayin State	29.9
Labutta	Ayeyawady Region	31.7

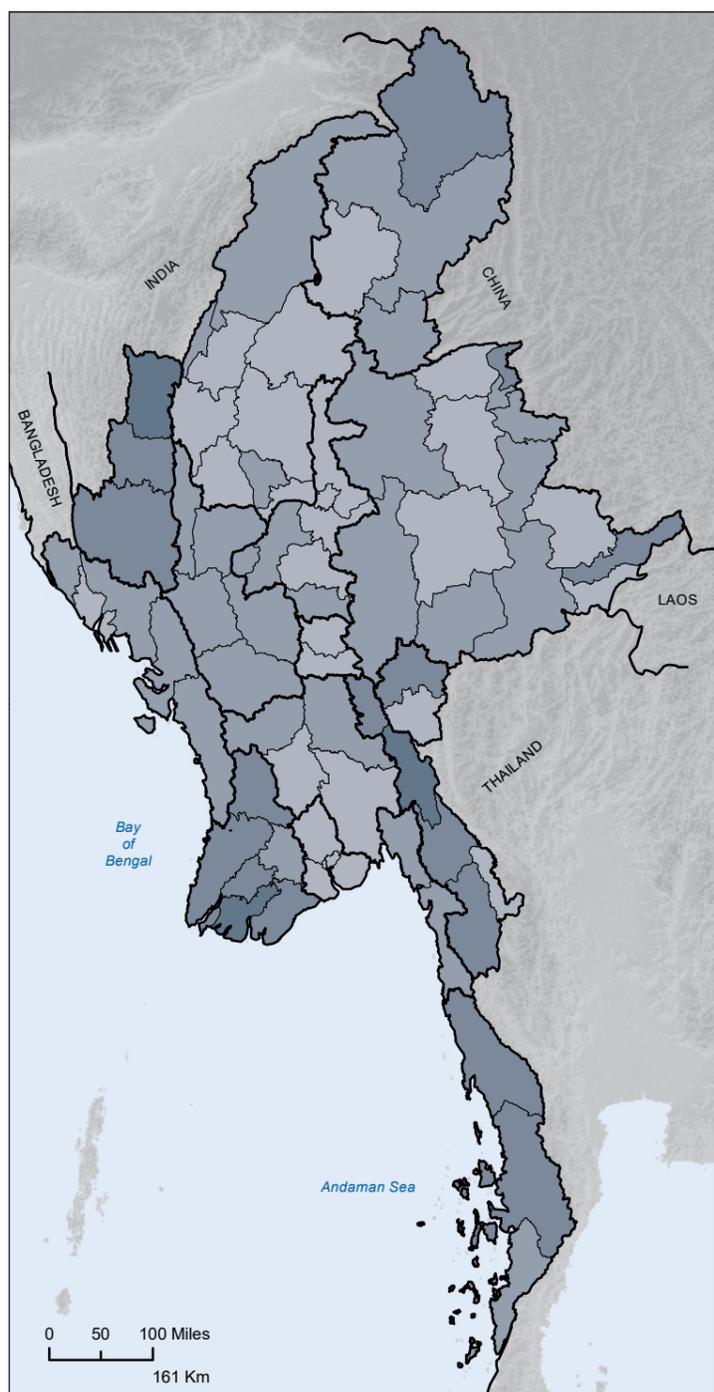
Table 7.3 Townships with Lowest and Highest Proportions of Households with One or More Members Living with a Disability

Township	District	State/Region	Percentage
Lowest			
Manhero (S-T)	Muse	Shan State	3.7
Tontar (S-T)	Minesat	Shan State	4.1
Muse	Muse	Shan State	5.3
Dekkhinathiri	Dekkhina (South)	Nay Pyi Taw Union Territory	5.9
Meisi	Bawlakhe	Kayah State	6.1
Thabeikkyin	Pyin Oo Lwin	Mandalay Region	6.1
Tachileik	Tachileik	Shan State	6.7
Pyigyidagun	Mandalay	Mandalay Region	6.8
Seikkan	West Yangon	Yangon Region	6.8
Donhee (S-T)	Hkamti	Sagaing Region	6.9
Highest			
Reazu (S-T)	Mindat	Chin State	35.3
Falam	Falam	Chin State	35.4
Panlon (S-T)	Hopan	Shan State	35.7
Tanintharyi	Myeik	Tanintharyi Region	36.4
Machanbaw	Putao	Kachin State	37.1
Shardaw	Loikaw	Kayah State	38.1
Pannandin (S-T)	Putao	Kachin State	38.3
Leiktho (S-T)	Hpa-An	Kayin State	38.5
Lwe`ge` (S-T)	Bhamo	Kachin State	38.8
Mawlamyinegyun	Labutta	Ayeyawady Region	39.0

Administrative units in Table 7.3 with (S-T) after their names were Sub-Townships at the time of the 2014 Census. Following administrative restructuring in November 2014, they no longer exist as separate administrative units. In this atlas, and in all other Department of Population publications based on the 2014 Census database, Sub-Townships are reported at the same level as Townships.

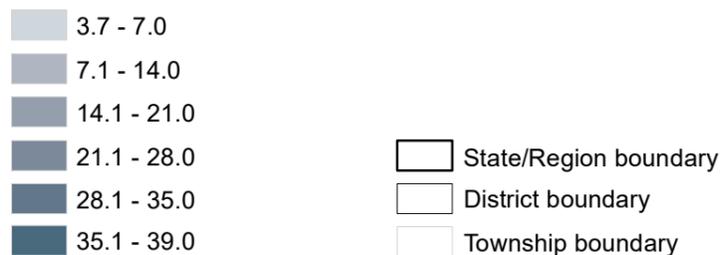
Map 7.2 Disability within Households

a) Districts



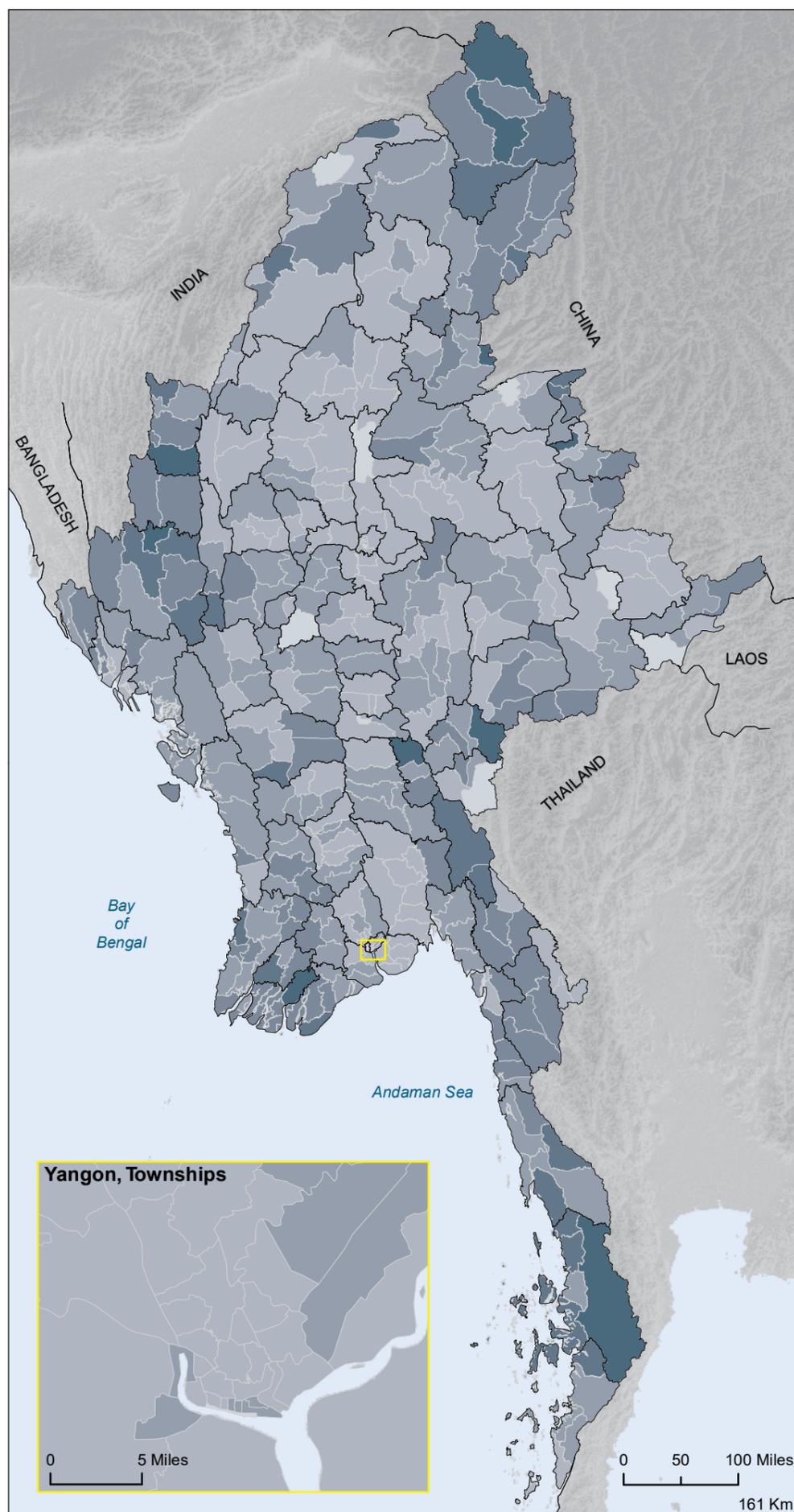
Percentage of conventional households with at least one member living with a disability

Average at Union level: 15.8



The base for this indicator was the total number of conventional households. The indicator gives the proportion of those households in which at least one member reported 'some difficulty', 'a lot of difficulty' or 'cannot do at all' in at least one of the four disability domains - seeing, hearing, walking and remembering - at the time of the 2014 Census.

b) Townships



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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

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7.3 Type of Disability: Urban and Rural

Of the total population of 50,279,900 enumerated in the 2014 Census, 2.5 per cent had at least some difficulty seeing, 1.3 per cent had at least some difficulty hearing, 1.9 per cent had at least some difficulty walking, and 1.7 per cent had at least some difficulty remembering (Department of Population, 2017e). However, as noted earlier, disability rates were not the same in all parts of the country. They were higher in rural areas than in urban areas, and they varied considerably among different States, Regions, Districts and Townships.

Table 7.4 shows that the percentage of the population living with disabilities of all four types is higher in rural areas than in urban areas in almost all States/Regions. The only exceptions are in Kayah, where the proportion of the population with at least some level of difficulty seeing is higher in urban areas (3.3 per cent) than in rural areas (3.1 per cent), and in Nay Pyi Taw, where the proportions with seeing disabilities among urban and rural populations are the same (1.6

per cent). Maps 7.3 a to d illustrate the urban/rural differences more graphically. This general pattern is not uncommon internationally, especially in developing countries, where urban populations are generally younger and fitter than rural populations, and where access to medical and social support services in rural areas is often very limited (Department of Population, 2017e). The advantages of urban areas over rural areas in this regard reveal themselves very clearly in the numbers for the three States/Regions with the largest urban centres - Nay Pyi Taw Union Territory, Yangon Region and Mandalay Region - where rates for all four domains of disability are the lowest in the country. A look at the more detailed breakdown presented in Table 7.4 reveals substantial regional and local variability behind the broad urban-rural relationship.

The prevalence of all four kinds of disability was highest in the middle-west and southern parts of the country. Difficulties seeing were a particular problem in Ayeyawady Region (4.4 per cent in urban areas, and 4.7 per cent in rural areas) and especially so in one District, Labutta, affecting more than 7 per cent of the rural population, and in another District, Myaungmya, affecting 6 per cent of the urban population. Large numbers of people in Ayeyawady also reported varying degrees of difficulty walking, with rates exceeding 4 per cent in Labutta. Chin State had by far the highest proportion of its rural population living with cognitive disabilities, which limit people's ability to remember and think clearly. In all three of Chin State's Districts, more than 4 per cent of the rural population reported at least some level of difficulty remembering.

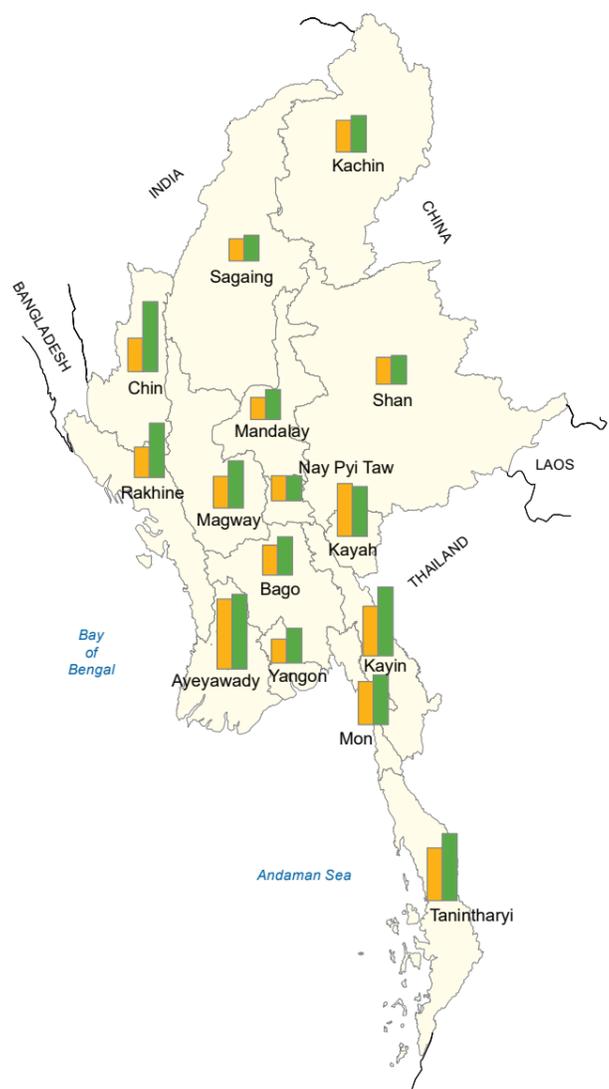
Table 7.4 Prevalence of Different Kinds of Disability, States/Regions and Districts, Urban and Rural Populations

State/Region District	Percentage Population Disabled							
	Seeing		Hearing		Walking		Remembering	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
UNION	1.9	2.7	0.9	1.5	1.5	2.1	1.1	1.9
Kachin	2.0	2.3	1.2	1.4	1.3	1.5	1.1	1.5
Myitkyina	1.9	3.2	1.2	2.3	1.2	2.3	0.9	2.1
Mohnyin	0.9	1.6	0.6	0.8	0.8	0.9	0.6	0.9
Bhamo	3.0	2.5	1.6	1.5	2.3	1.8	1.9	1.8
Putao	5.3	3.7	2.9	3.3	1.9	2.5	2.2	2.7
Kayah	3.3	3.1	1.5	2.2	1.9	2.4	1.5	2.7
Loikaw	3.4	3.4	1.5	2.4	2.0	2.7	1.5	3.1
Bawlakhe	2.6	1.2	1.4	1.0	1.5	1.2	1.2	1.0
Kayin	3.1	4.3	1.2	2.1	1.8	2.8	1.5	2.9
Hpa-An	2.1	4.8	1.0	2.2	1.5	2.9	1.2	3.1
Pharpon	5.1	3.3	2.6	2.1	3.8	2.8	3.3	2.7
Myawady	1.8	1.6	0.6	0.8	1.0	1.2	0.7	0.9
Kawkareik	5.9	4.2	2.1	2.1	3.0	3.0	2.6	3.0
Chin	2.1	4.4	1.6	3.7	1.6	3.6	1.7	4.1
Haka	1.9	3.6	1.7	3.6	1.6	3.4	2.0	4.4
Falam	2.1	4.6	1.4	4.0	1.2	3.5	1.1	4.1
Mindat	2.4	4.5	1.7	3.6	1.9	3.8	1.9	4.1
Sagaing	1.4	1.6	0.8	1.0	1.2	1.4	0.9	1.2
Sagaing	1.5	1.8	0.7	0.9	1.2	1.6	0.7	1.2
Shwebo	1.1	1.7	0.7	1.0	1.1	1.5	0.7	1.2
Monywa	2.0	2.0	0.8	1.1	1.5	1.7	0.8	1.3
Katha	1.0	1.2	0.6	0.9	1.0	1.1	0.7	1.1
Kalay	1.0	1.3	0.9	1.1	1.0	1.2	0.9	1.2
Tamu	2.4	1.6	1.4	1.2	1.5	1.0	1.6	1.0
Mawlaik	0.9	1.4	0.7	0.9	1.0	1.1	0.6	1.1
Hkamti	1.5	1.3	1.1	1.2	1.4	1.2	1.3	1.3
Yinmarpin	0.6	1.8	0.5	1.0	1.1	1.6	0.8	1.2
Tanintharyi	3.3	4.2	1.4	2.2	2.1	2.9	1.5	2.9
Dawei	3.6	3.6	1.6	2.1	2.3	2.7	1.8	2.7
Myeik	3.9	5.0	1.5	2.4	2.3	3.3	1.7	3.4
Kawthoung	1.9	3.1	0.8	1.4	1.2	1.9	0.9	1.9
Bago	1.9	2.4	1.0	1.3	1.6	1.7	1.1	1.5
Bago	1.4	1.6	0.8	0.9	1.4	1.4	1.0	1.2
Toungoo	1.9	2.6	1.1	1.4	1.7	1.9	1.2	1.7
Pyay	2.3	3.1	1.1	1.7	1.7	2.1	1.2	1.8
Thayawady	2.8	2.6	1.4	1.5	1.9	1.8	1.3	1.5
Magway	2.0	3.0	1.0	1.6	1.6	2.3	1.1	1.8
Magway	1.4	2.6	0.9	1.4	1.4	2.0	1.0	1.5
Minbu	1.2	2.4	0.8	1.3	1.3	1.9	0.8	1.3
Thayet	4.1	4.2	1.4	2.1	2.2	3.1	1.5	2.5
Pakokku	1.7	3.0	0.9	1.5	1.4	2.2	0.9	1.7
Gangaw	2.5	2.3	1.7	1.9	2.8	2.6	2.0	2.3
Mandalay	1.4	1.9	0.6	1.0	1.0	1.6	0.7	1.2
Mandalay	1.1	1.8	0.5	0.7	0.9	1.3	0.6	1.0

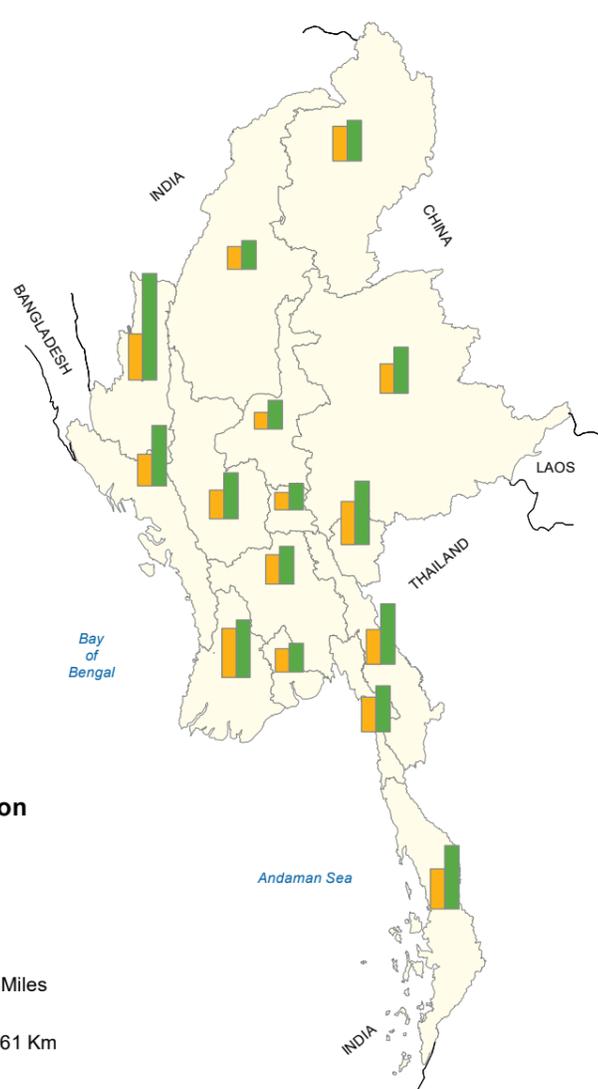
State/Region District	Percentage Population Disabled							
	Seeing		Hearing		Walking		Remembering	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Pyin Oo Lwin	1.3	1.3	0.6	0.7	1.0	1.1	0.7	0.9
Kyaukse	0.7	1.5	0.4	0.7	0.8	1.1	0.5	0.9
Myingyan	3.7	2.4	1.0	1.3	1.6	2.0	1.3	1.4
Nyaung U	1.8	2.8	0.8	1.6	1.2	1.8	0.8	1.6
Yame Thin	1.3	2.5	0.8	1.3	2.1	2.6	1.5	1.9
Meiktila	1.7	1.5	0.9	1.0	1.6	1.5	0.9	1.2
Mon	2.7	3.1	1.2	1.6	1.8	2.2	1.3	1.9
Mawlamyine	2.8	3.3	1.2	1.6	1.8	2.4	1.3	1.9
Thaton	2.6	2.7	1.3	1.5	1.9	2.0	1.3	1.9
Rakhine	1.9	3.4	1.1	2.1	1.7	2.5	1.5	2.8
Sittway	1.0	2.3	0.7	1.5	1.1	2.1	0.8	2.3
Myauk U	3.1	3.9	1.7	2.4	2.5	2.7	2.4	2.9
Maungtau	2.5	3.2	1.3	2.1	1.8	2.7	1.9	3.3
Kyaukpyu	2.2	4.0	1.5	2.5	2.0	3.1	1.7	3.6
Thandwe	1.7	3.0	1.1	1.8	1.7	2.0	1.6	2.1
Yangon	1.5	2.2	0.8	1.0	1.4	1.6	1.0	1.3
North Yangon	1.3	2.1	0.7	1.0	1.2	1.4	0.9	1.2
East Yangon	1.7	1.6	0.9	0.8	1.5	1.7	1.0	1.6
South Yangon	1.9	2.2	0.9	1.0	1.6	1.8	1.1	1.5
West Yangon	1.3	n/a	0.8	n/a	1.5	n/a	0.9	n/a
Shan	1.7	1.8	1.0	1.6	1.2	1.7	1.0	1.9
Taunggyi	2.2	2.0	0.9	1.4	1.4	1.6	0.9	1.6
Loilin	1.5	1.5	1.0	1.4	1.3	1.4	0.9	1.7
Linkhe'	2.3	2.6	1.6	2.3	1.8	2.3	1.5	2.9
Lashio	1.2	0.9	0.8	1.0	1.0	0.9	0.8	1.0
Muse	0.9	1.2	0.8	1.2	0.9	1.2	0.8	1.2
Kyaukme	2.2	1.8	1.1	1.4	1.5	1.5	1.2	1.6
Kunlon	1.9	2.5	1.1	1.9	1.5	1.9	1.0	2.2
Laukine	0.9	3.2	1.3	3.4	1.2	3.9	0.9	3.9
Hopan	1.8	3.0	1.4	3.2	2.1	3.8	3.1	5.4
Makman	0.7	2.3	0.5	2.3	0.6	2.3	0.6	3.8
Kengtung	1.3	1.3	0.9	1.3	1.0	1.3	0.9	1.1
Minesat	2.1	1.9	1.3	1.7	1.5	1.7	1.5	1.9
Tachileik	0.7	1.0	0.5	1.0	0.7	1.0	0.5	1.5
Minephyat	2.9	2.9	1.9	2.8	2.0	3.4	1.7	3.1
Ayeyawady	4.4	4.7	1.7	2.0	2.9	3.2	2.1	3.0
Patheingyi	4.3	4.1	1.6	1.9	2.7	2.9	1.9	2.5
Phyappon	3.4	4.4	1.5	1.8	2.8	3.2	2.0	3.1
Maubin	1.9	3.7	1.0	1.7	1.7	2.8	1.2	2.5
Myaungmya	6.0	4.6	2.1	1.9	3.2	3.0	2.3	2.7
Labutta	5.9	7.2	2.2	2.6	4.1	4.6	3.3	4.7
Hinthada	5.5	5.1	2.2	2.5	3.6	3.4	2.7	3.1
Nay Pyi Taw	1.6	1.6	0.6	0.9	1.1	1.4	0.7	1.2
Ottara (North)	1.2	1.3	0.6	0.7	1.0	1.3	0.7	1.1
Dekkhina (South)	1.9	1.8	0.7	1.1	1.1	1.4	0.7	1.2

Map 7.3 Prevalence of Disabilities by Domain, States/Regions, Urban and Rural

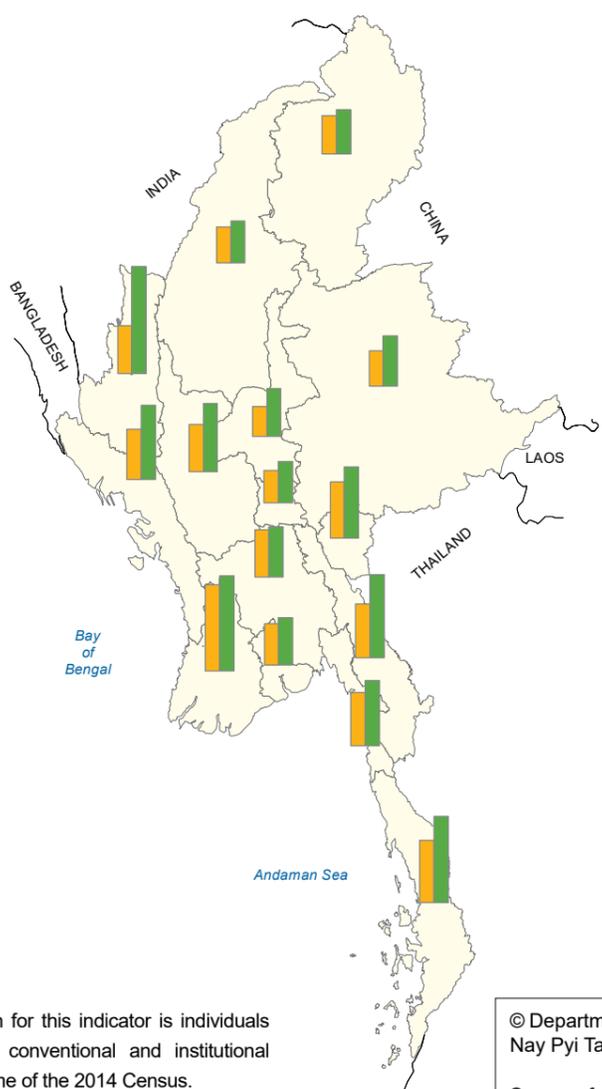
a) Seeing



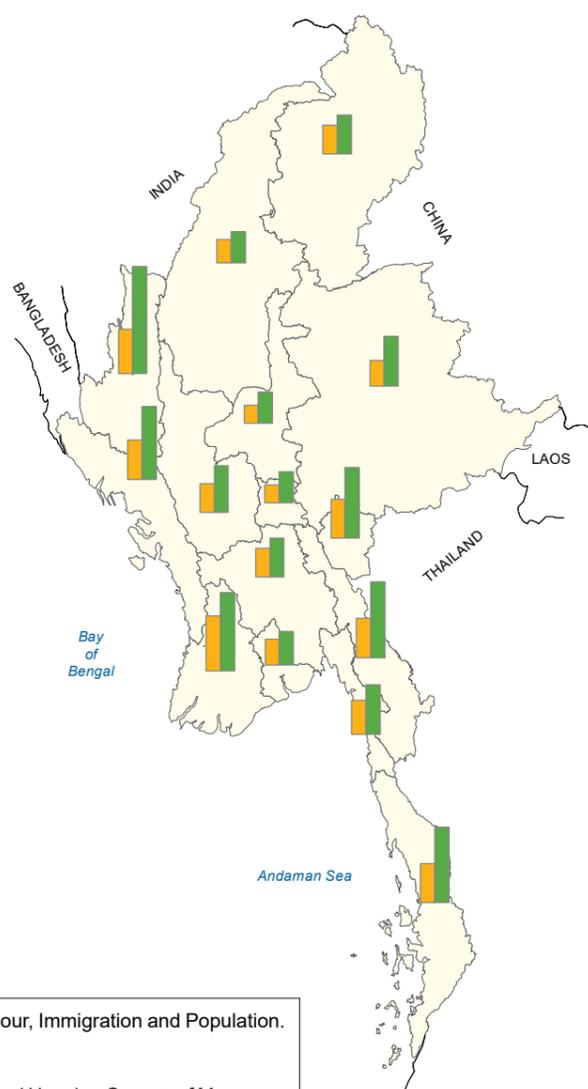
b) Hearing



c) Walking



d) Remembering



The base population for this indicator is individuals that were living in conventional and institutional households at the time of the 2014 Census.

The indicator gives the proportion of individuals that were living with at least one form of disability in urban and rural areas.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.
 Source of statistical data: 2014 Population and Housing Census of Myanmar. Source of geographic data: Department of Population GIS Unit.
 Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

7.4 Prevalence of Multiple Disabilities

This section looks at the distribution of people living with multiple disabilities, defined as those reporting either 'some difficulty', 'a lot of difficulty' or 'cannot do at all' for two or more of the disability domains - seeing, hearing, walking and remembering. Out of the total number of 50,279,900 enumerated in the 2014 Census, 841,612 (1.7 per cent) were reported to be living with multiple disabilities. The distribution among urban and rural populations, were 165,710 out of 14,877,943 (1.1 per cent) in urban areas and 675,902 out of 35,401,957 (1.9 per cent) in rural areas (Table 7.5).

Though the prevalence was much lower, the geographic distribution of individuals living with multiple disabilities was very similar to that for the proportion of households with at least one member living with a disability. Among the States and Regions, the highest rates for urban and rural populations combined were again in Chin, Ayeyawady, Kayin and Tanintharyi (Figure 7.2). Here, between 2.6 and 3.6 per cent of the population were reported to be living with multiple disabilities. At local levels, rates were particularly high in the poorer, primarily rural Districts and Townships (illustrated in Maps 7.4a and 7.4b). Table 7.5 shows that Falam and Mindat Districts (in Chin), Hopan District (in Shan) and Labutta District (in Ayeyawady) recorded the highest

proportions of people living with multiple disabilities among rural populations, all at more than 4 per cent. Multiple disability was most prevalent among urban populations in Pharpon and Kawkareik Districts (in Kayin), and in Myaungmya, Labutta and Hinthada Districts (in Ayeyawady), all at more than 3 per cent.

Multiple disability rates were lower in States/Regions in the middle corridor than they were in those in the outer ring, with particularly low rates of around 1 per cent in and around the major urban centres of Yangon, Nay Pyi Taw and Mandalay. Interestingly, Sagaing Region, where 83 per cent of the population live in rural areas (Department of Population, 2015), also had a relatively low rate of people living with multiple disabilities, at only 1.1 per cent. At the District level, the urban populations with the lowest multiple disability rates were in Mohnyin (in Kachin), Mandalay and Kyaukse (in Mandalay Region), and Makman (in Shan), all at between 0.4 and 0.6 per cent. For rural populations, the lowest rates were again in Mohnyin and Kyaukse, but also in Myawady (in Kayin), Katha, Tamu and Mawlaik (in Sagaing), Pyin Oo Lwin (in Mandalay), Lashio and Tachileik (in Shan), and Ottara (in Nay Pyi Taw). The proportion of people in rural areas living with disabilities was less than 1 per cent in all of these Districts.

Figure 7.2 Proportion of Urban and Rural Population with Multiple Disabilities, States/Regions

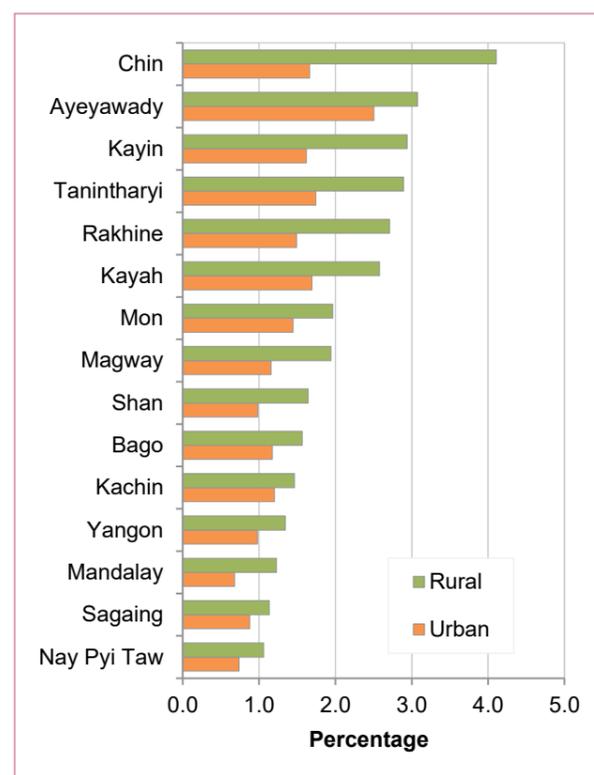


Table 7.5 Proportion of Urban and Rural Population with Multiple Disabilities, States/Regions and Districts

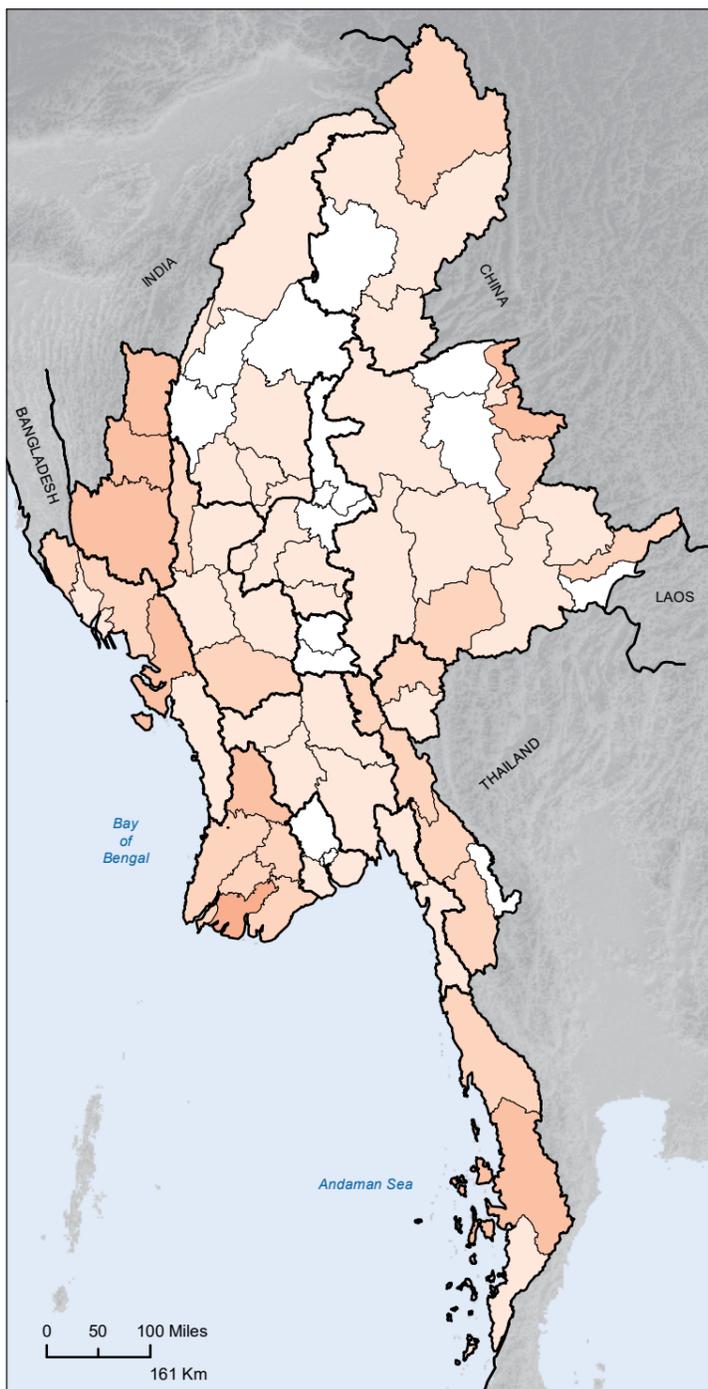
State/Region District	Percentages		
	Urban & Rural	Urban	Rural
UNION	1.7	1.1	1.9
Kachin	1.4	1.2	1.5
Myitkyina	1.5	1.1	2.2
Mohnyin	0.8	0.6	0.8
Bhamo	1.8	2.1	1.7
Putao	3.0	2.8	3.0
Kayah	2.4	1.7	2.6
Loikaw	2.6	1.8	2.9
Bawlakhe	1.1	1.3	1.0
Kayin	2.7	1.6	2.9
Hpa-An	2.9	1.3	3.2
Pharpon	2.9	3.4	2.5
Myawady	0.8	0.8	0.9
Kawkareik	3.0	3.0	3.0
Chin	3.6	1.7	4.1
Haka	3.2	1.7	3.9
Falam	3.6	1.3	4.2
Mindat	3.8	2.0	4.1
Sagaing	1.1	0.9	1.1
Sagaing	1.1	0.8	1.2
Shwebo	1.2	0.7	1.2
Monywa	1.2	0.9	1.3
Katha	0.8	0.7	0.9
Kalay	1.0	0.8	1.0
Tamu	1.3	1.6	0.8
Mawlaik	0.9	0.6	0.9
Hkamti	1.2	1.1	1.2
Yinmarpin	1.2	0.7	1.2
Tanintharyi	2.6	1.7	2.9
Dawei	2.5	2.0	2.6

State/Region District	Percentages		
	Urban & Rural	Urban	Rural
Myeik	3.1	2.0	3.4
Kawthoung	1.5	0.9	1.7
Bago	1.5	1.2	1.6
Bago	1.1	1.0	1.2
Toungoo	1.6	1.2	1.7
Pyay	1.8	1.3	2.0
Thayawady	1.7	1.6	1.7
Magway	1.8	1.2	1.9
Magway	1.5	1.0	1.7
Minbu	1.4	0.8	1.5
Thayet	2.7	1.8	2.8
Pakokku	1.7	1.0	1.8
Gangaw	2.1	2.1	2.1
Mandalay	1.0	0.7	1.2
Mandalay	0.6	0.5	1.0
Pyin Oo Lwin	0.8	0.7	0.8
Kyaukse	0.8	0.4	0.8
Myingyan	1.6	1.3	1.6
Nyaung U	1.4	0.9	1.6
Yame Thin	1.9	1.3	2.0
Meiktila	1.1	1.0	1.1
Mon	1.8	1.4	2.0
Mawlamyine	1.8	1.4	2.1
Thaton	1.8	1.5	1.9
Rakhine	2.5	1.5	2.7
Sittway	1.8	0.8	2.1
Myauk U	2.9	2.4	3.0
Maungtau	2.6	1.7	2.8
Kyaukpyu	3.3	1.7	3.4
Thandwe	1.9	1.4	2.1

State/Region District	Percentages		
	Urban & Rural	Urban	Rural
Yangon	1.1	1.0	1.3
North Yangon	1.0	0.9	1.2
East Yangon	1.0	1.0	1.3
South Yangon	1.4	1.2	1.5
West Yangon	0.9	0.9	n/a
Shan	1.5	1.0	1.6
Taunggyi	1.3	1.0	1.5
Loilin	1.2	1.0	1.3
Linkhe	2.1	1.4	2.4
Lashio	0.8	0.8	0.9
Muse	1.0	0.8	1.1
Kyaukme	1.4	1.2	1.5
Kunlon	1.9	1.1	2.0
Laukine	3.3	0.9	3.9
Hopan	3.9	2.2	4.2
Makman	2.5	0.6	2.7
Kengtung	1.1	0.9	1.1
Minesat	1.5	1.4	1.5
Tachileik	0.7	0.4	0.9
Minephyat	2.8	2.0	2.9
Ayeyawady	3.0	2.5	3.1
Patheingyi	2.6	2.3	2.6
Phyayon	2.9	2.2	3.0
Maubin	2.4	1.3	2.6
Myaungmya	2.9	3.0	2.9
Labutta	4.6	3.7	4.7
Hinthada	3.4	3.2	3.4
Nay Pyi Taw	1.0	0.7	1.1
Ottara (North)	0.9	0.7	0.9
Dekkhhina (South)	1.0	0.8	1.2

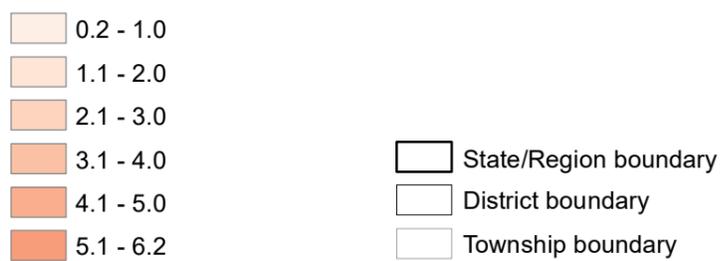
Map 7.4 Prevalence of Multiple Disabilities

a) Districts



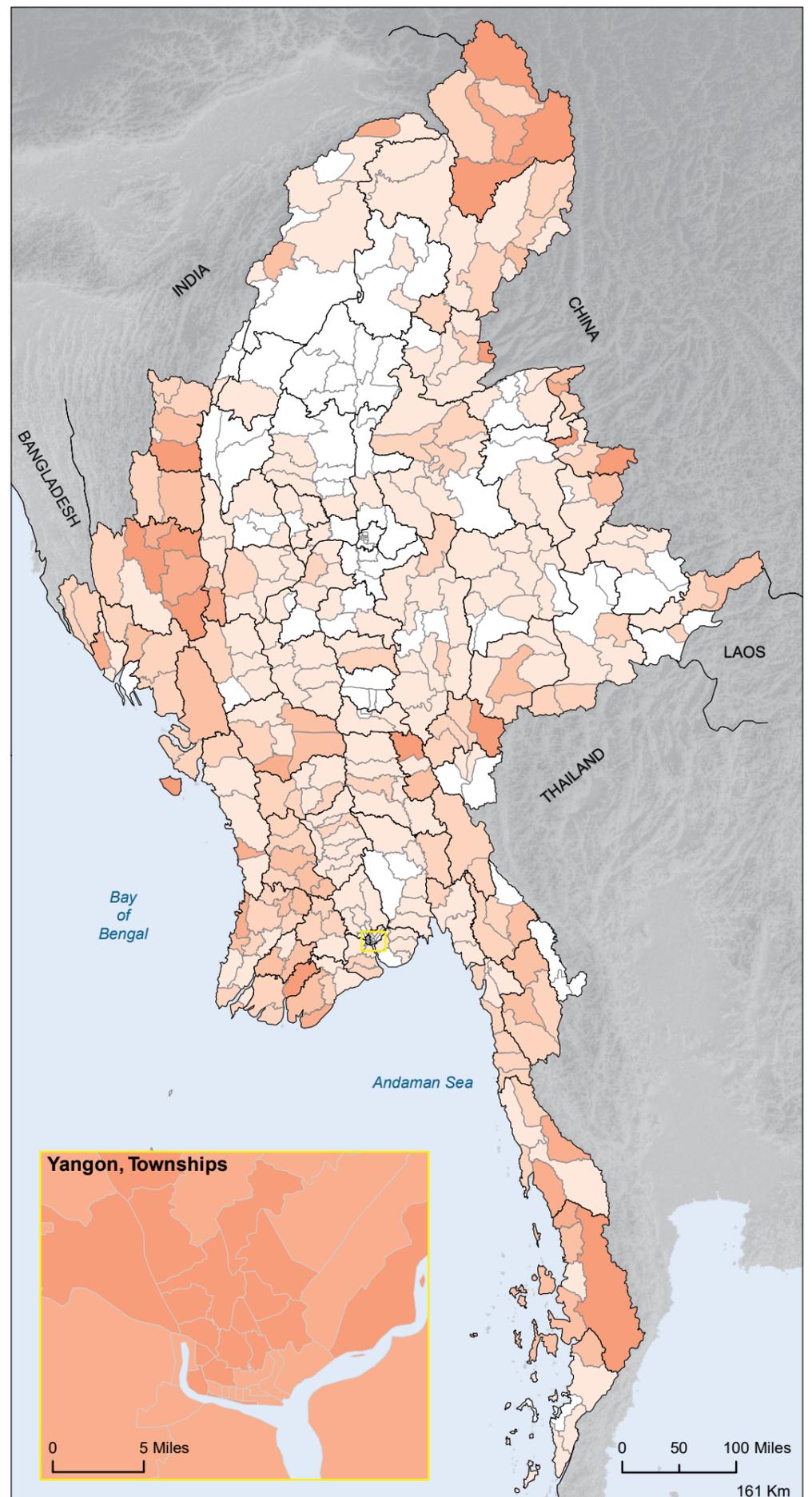
Percentage of population with multiple disabilities

Average at Union level: 1.7



The base population for this indicator was individuals living in conventional households and institutions at the time of the 2014 Census. The indicator gives the proportion of those individuals who reported 'some difficulty', 'a lot of difficulty' or 'cannot do at all' in two or more of the four disability domains - seeing, hearing, walking and remembering.

b) Townships



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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

Household and Housing

Household and housing indicators provide a keen insight into the ways members of societies live together in groups, and the conditions in which they live. From the eight questions shown below (relating only to conventional households), the 2014 Census gleaned a wealth of detailed information about: the types of houses people live in; their access to amenities such as clean water, hygienic sanitation facilities and electricity; the durability of their houses; and the availability of a wide range of communication and transportation assets. Data collected from other sections of the questionnaire enabled the size and composition of households, and the relationships between household members, to be derived.

The analysis of household and housing data presented in this chapter revealed some interesting and strikingly consistent regional patterns. Almost without exception, household and housing characteristics in areas in the middle corridor are markedly different to those in the outer ring. In general, people in the middle corridor live in smaller households, in more durable houses, and with better access to safe drinking water, improved sanitation facilities and electricity than people living in the outer ring. Analyses comparing the household and housing characteristics of urban populations with those of rural populations also revealed distinct differences. Though the average size of households is about the same for both groups, housing quality is generally much better in urban areas than it is in rural areas. People in towns and cities are more likely to be living in more durable houses, have higher quality water and sanitation facilities and be connected to the electricity grid than people living in rural areas. On the other hand, a much larger proportion of rural households own the house they live in, with rented accommodation being more common in urban areas.

Regional and local differences in household and housing characteristics show up clearly in the data presented in this chapter and on the maps derived from that data. By showing where housing quality (as determined from the information available from the 2014 Census) is poorest and in which parts of the country people are least able to access household amenities, the chapter is intended to serve as a guide to policymakers, local authorities and communities working towards achieving the United Nations Sustainable Development Goals. Understanding the geography of housing quality is vital as Myanmar works towards, 'ensuring the availability and sustainable management of water and sanitation for all' (SDG 6), 'ensuring access to affordable reliable and modern energy for all' (SDG 7), and 'making cities and human settlements inclusive, safe, resilient and sustainable' (SDG 11).

HOUSING CHARACTERISTICS																																																																																																																								
32. Type of housing unit occupied by this household Condominium [1] [2] Apartment/Flat [3] [4] Bungalow/Brick house [5] [6] Semi-pacca house [7] [8] Wooden House [9] [10] Bamboo [11] [12] Hut 2-3 years [13] [14] Hut 1 year [15] [16] Other [17] [18]	33. Type of ownership of housing unit Owner [1] [2] Renter [3] [4] Provided free (individual) [5] [6] Government Quarter [7] [8] Private Company Quarter [9] [10] Other [11] [12]	34. Main source of lighting in the household Electricity [1] [2] Kerosene [3] [4] Candle [5] [6] Battery [7] [8] Generator (Private) [9] [10] Water mill (Private) [11] [12] Solar System/energy [13] [14] Other [15] [16]	35. Main source of water for drinking and non-drinking in this household <table border="1"> <thead> <tr> <th></th> <th>Drinking</th> <th>Non-Drinking</th> </tr> </thead> <tbody> <tr> <td>Tap water/Piped</td> <td>[1] [2]</td> <td>[3] [4]</td> </tr> <tr> <td>Tube well, borehole</td> <td>[5] [6]</td> <td>[7] [8]</td> </tr> <tr> <td>Protected well/Spring</td> <td>[9] [10]</td> <td>[11] [12]</td> </tr> <tr> <td>Unprotected well/Spring</td> <td>[13] [14]</td> <td>[15] [16]</td> </tr> <tr> <td>Pool/Pond/Lake</td> <td>[17] [18]</td> <td>[19] [20]</td> </tr> <tr> <td>River/Stream/Canal</td> <td>[21] [22]</td> <td>[23] [24]</td> </tr> <tr> <td>Waterfall/Rain water</td> <td>[25] [26]</td> <td>[27] [28]</td> </tr> <tr> <td>Bottled water/water from vending machine</td> <td>[29] [30]</td> <td>[31] [32]</td> </tr> <tr> <td>Tanker/Truck</td> <td>[33] [34]</td> <td>[35] [36]</td> </tr> <tr> <td>Other</td> <td>[37] [38]</td> <td>[39] [40]</td> </tr> </tbody> </table>		Drinking	Non-Drinking	Tap water/Piped	[1] [2]	[3] [4]	Tube well, borehole	[5] [6]	[7] [8]	Protected well/Spring	[9] [10]	[11] [12]	Unprotected well/Spring	[13] [14]	[15] [16]	Pool/Pond/Lake	[17] [18]	[19] [20]	River/Stream/Canal	[21] [22]	[23] [24]	Waterfall/Rain water	[25] [26]	[27] [28]	Bottled water/water from vending machine	[29] [30]	[31] [32]	Tanker/Truck	[33] [34]	[35] [36]	Other	[37] [38]	[39] [40]	36. 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Main construction material of the housing unit <table border="1"> <thead> <tr> <th></th> <th>Roof</th> <th>Wall</th> <th>Floor</th> </tr> </thead> <tbody> <tr> <td>Dhani/Theke/In leaf</td> <td>[1] [2]</td> <td>[3] [4]</td> <td>[5] [6]</td> </tr> <tr> <td>Bamboo</td> <td>[7] [8]</td> <td>[9] [10]</td> <td>[11] [12]</td> </tr> <tr> <td>Earth</td> <td>[13] [14]</td> <td>[15] [16]</td> <td>[17] [18]</td> </tr> <tr> <td>Wood</td> <td>[19] [20]</td> <td>[21] [22]</td> <td>[23] [24]</td> </tr> <tr> <td>Corrugated Sheet</td> <td>[25] [26]</td> <td>[27] [28]</td> <td>[29] [30]</td> </tr> <tr> <td>Tile/Brick/Concrete</td> <td>[31] [32]</td> <td>[33] [34]</td> <td>[35] [36]</td> </tr> <tr> <td>Other</td> <td>[37] [38]</td> <td>[39] [40]</td> <td>[41] [42]</td> </tr> </tbody> </table>		Roof	Wall	Floor	Dhani/Theke/In leaf	[1] [2]	[3] [4]	[5] [6]	Bamboo	[7] [8]	[9] [10]	[11] [12]	Earth	[13] [14]	[15] [16]	[17] [18]	Wood	[19] [20]	[21] [22]	[23] [24]	Corrugated Sheet	[25] [26]	[27] [28]	[29] [30]	Tile/Brick/Concrete	[31] [32]	[33] [34]	[35] [36]	Other	[37] [38]	[39] [40]	[41] [42]	39. 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8.1 Average Size of Households

The average size of conventional households in Myanmar at the time of the 2014 Census was 4.4 persons. This is slightly larger than the average household size in all countries in South-East Asia except for Malaysia (Department of Population, 2017f). In 2014 there was, at the Union level, very little difference in the average sizes of urban households (4.5 persons) and rural households (4.4 persons), but Table 8.1 shows that there were substantial regional and local variations. Among the 15 States and Regions, Kachin and Chin had the largest households. Here the average household size as reported in the Census was 5.1 persons. Households tend to be smaller in the middle corridor, averaging 4.1 persons in Magway, Ayeyawady and Nay Pyi Taw, and 4.2 in Bago. The general distinction between larger households in the outer ring and smaller households in the middle corridor can be seen very clearly on Maps 8.1a and 8.1b. Within this general pattern, however, there was substantial variability in average household size at the local level.

Though average household sizes were, at the State/Region level, largest in Kachin and Chin, at the District level they were largest among rural communities in

Shan State, in Districts such as Hopan (6.5), Makman (6.2) and Laukine (5.9). At the other end of the scale, the average size of rural households in several Districts was less than four persons, including Pyay (3.6) and Thayawady (3.8) (in Bago), Hinthada (in Ayeyawady) (3.7), and Thayet (in Magway) (3.9). The urban parts of Gangaw (also in Magway), also had an atypically low average household size of 3.9 persons, though not as low as the 3.8 reported in urban Hinthada (in Ayeyawady).

In some parts of the country, household size is quite uniform. In Mandalay Region, for example, the average size in all seven Districts is either slightly above or slightly below the national average, ranging from 4.2 persons in Kyaukse, Meiktila and Yame`thin, to 4.9 in Mandalay itself. In contrast, other parts of the country show great variability in average household sizes among neighbouring Districts and Townships. Shan State provides a good example of both the wide range of household sizes and local variability. The range in average household size among Shan's Townships is 3.2 persons, from 7.0 in Naphang down to 3.8 in Linkhe`. This means that in some parts of Shan State, households were, on average, more than double

the size of those in other parts of the State. And the distance between Townships with large households and those with small households is not necessarily very great. Mankan Sub-Township, for example, where the average household size was 4.3, contrasts sharply with neighbouring Townships with much larger households, such as Makman (5.7), Minemaw (6.6) and Naphang (7.0). Such localized variability in demographic characteristics is often found where populations are fluid and dynamic. Parts of Shan State near the borders with Thailand, Lao PDR and China have young, ethnically diverse, highly mobile populations that are typically characterized by high degrees of variability in demographic characteristics and social practices. Conversely, the more stable, longer-established populations, such as those in the middle corridor Regions of Bago, Magway and Mandalay, are generally more socially, economically and demographically homogeneous.

While this section has discussed geographic variations in the distribution of average household size, the following section looks at variations in distributions of the extremes – the very smallest households with only one person and the largest with six or more persons.

Table 8.1 Average Size of Conventional Households, States/Regions and Districts, Urban and Rural

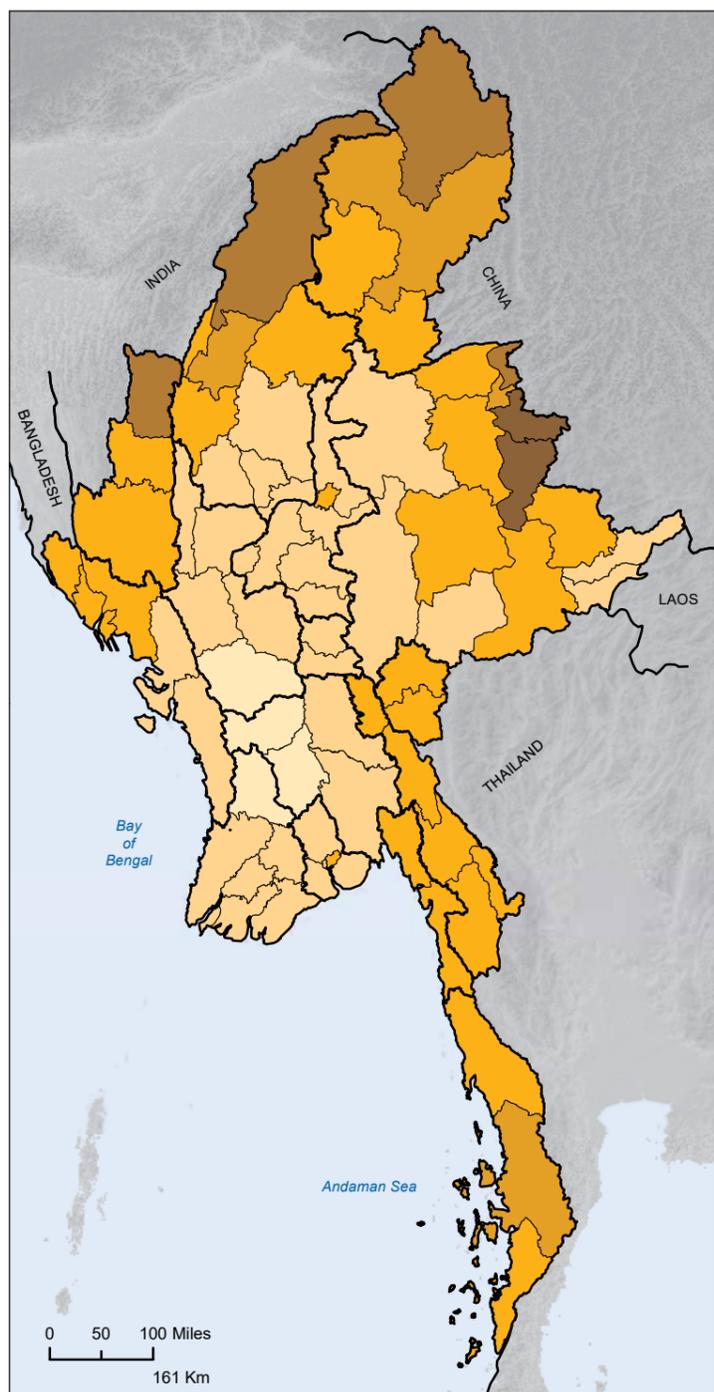
State/Region District	Average No. of Persons in Household		
	Urban & Rural	Urban	Rural
UNION	4.4	4.5	4.4
Kachin	5.1	5.3	5.0
Myitkyina	5.4	5.5	5.2
Mohnyin	4.9	4.9	4.8
Bhamo	4.9	5.0	4.9
Putao	5.6	5.2	5.7
Kayah	4.8	4.5	4.8
Loikaw	4.8	4.6	4.8
Bawlakhe	4.6	4.2	4.8
Kayin	4.7	4.7	4.7
Hpa-An	4.7	4.8	4.7
Pharpon	5.0	5.0	5.1
Myawady	4.6	4.5	4.7
Kawkareik	4.8	4.7	4.8
Chin	5.1	4.8	5.2
Haka	4.9	4.6	5.1
Falam	5.6	5.2	5.7
Mindat	4.9	4.7	5.0
Sagaing	4.6	4.6	4.6
Sagaing	4.2	4.4	4.2
Shwebo	4.5	4.6	4.5
Monywa	4.4	4.7	4.3
Katha	4.9	4.5	4.9
Kalay	4.7	4.8	4.6
Tamu	5.0	4.8	5.1
Mawlaik	5.2	4.6	5.3
Hkamti	5.6	5.1	5.7
Yinmarpin	4.5	4.1	4.5
Tanintharyi	4.8	4.8	4.8
Dawei	4.5	4.7	4.5

State/Region District	Average No. of Persons in Household		
	Urban & Rural	Urban	Rural
Myeik	5.1	5.1	5.1
Kawthoung	4.5	4.4	4.6
Bago	4.2	4.3	4.1
Bago	4.5	4.4	4.5
Toungoo	4.4	4.4	4.4
Pyay	3.7	4.1	3.6
Thayawady	3.9	4.0	3.8
Magway	4.1	4.2	4.1
Magway	4.1	4.2	4.1
Minbu	4.1	4.1	4.1
Thayet	3.9	4.1	3.9
Pakokku	4.3	4.5	4.2
Gangaw	4.3	3.9	4.4
Mandalay	4.4	4.7	4.3
Mandalay	4.9	5.0	4.6
Pyin Oo Lwin	4.4	4.4	4.4
Kyaukse	4.2	4.5	4.2
Myingyan	4.3	4.4	4.2
Nyaung U	4.3	4.6	4.2
Yame`thin	4.2	4.5	4.2
Meiktila	4.2	4.3	4.2
Mon	4.6	4.7	4.6
Mawlamyine	4.6	4.7	4.5
Thaton	4.6	4.7	4.6
Rakhine	4.4	4.6	4.4
Sittway	4.8	5.0	4.7
Myauk U	4.5	4.8	4.5
Maungdaw	4.7	4.6	4.7
Kyaukpyu	4.2	4.3	4.1
Thandwe	4.1	4.2	4.1

State/Region District	Average No. of Persons in Household		
	Urban & Rural	Urban	Rural
Yangon	4.4	4.5	4.1
North Yangon	4.3	4.5	4.2
East Yangon	4.6	4.6	4.5
South Yangon	4.1	4.3	4.0
West Yangon	4.5	4.5	n/a
Shan	4.7	4.5	4.8
Taunggyi	4.4	4.4	4.4
Loilin	4.7	4.7	4.6
Linkhe`	4.3	4.1	4.3
Lashio	4.7	4.7	4.6
Muse	5.0	4.9	5.0
Kyaukme	4.4	4.3	4.4
Kunlon	5.3	4.6	5.4
Laukine	5.8	5.0	5.9
Hopan	6.3	5.2	6.5
Makman	6.1	5.2	6.2
Kengtung	5.0	4.6	5.1
Minesat	5.0	4.4	5.1
Tachileik	4.4	4.3	4.5
Minephyat	4.4	4.0	4.5
Ayeyawady	4.1	4.1	4.1
Pathein	4.0	4.1	4.0
Phyapon	4.2	4.3	4.2
Maubin	4.2	4.2	4.2
Myaungmya	4.3	4.3	4.3
Labutta	4.1	4.2	4.1
Hinthada	3.7	3.8	3.7
Nay Pyi Taw	4.1	4.0	4.1
Ottara (North)	4.0	4.1	4.0
Dekkhina (South)	4.1	4.0	4.2

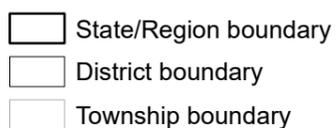
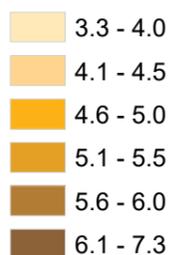
Map 8.1 Average Size of Conventional Households

a) Districts

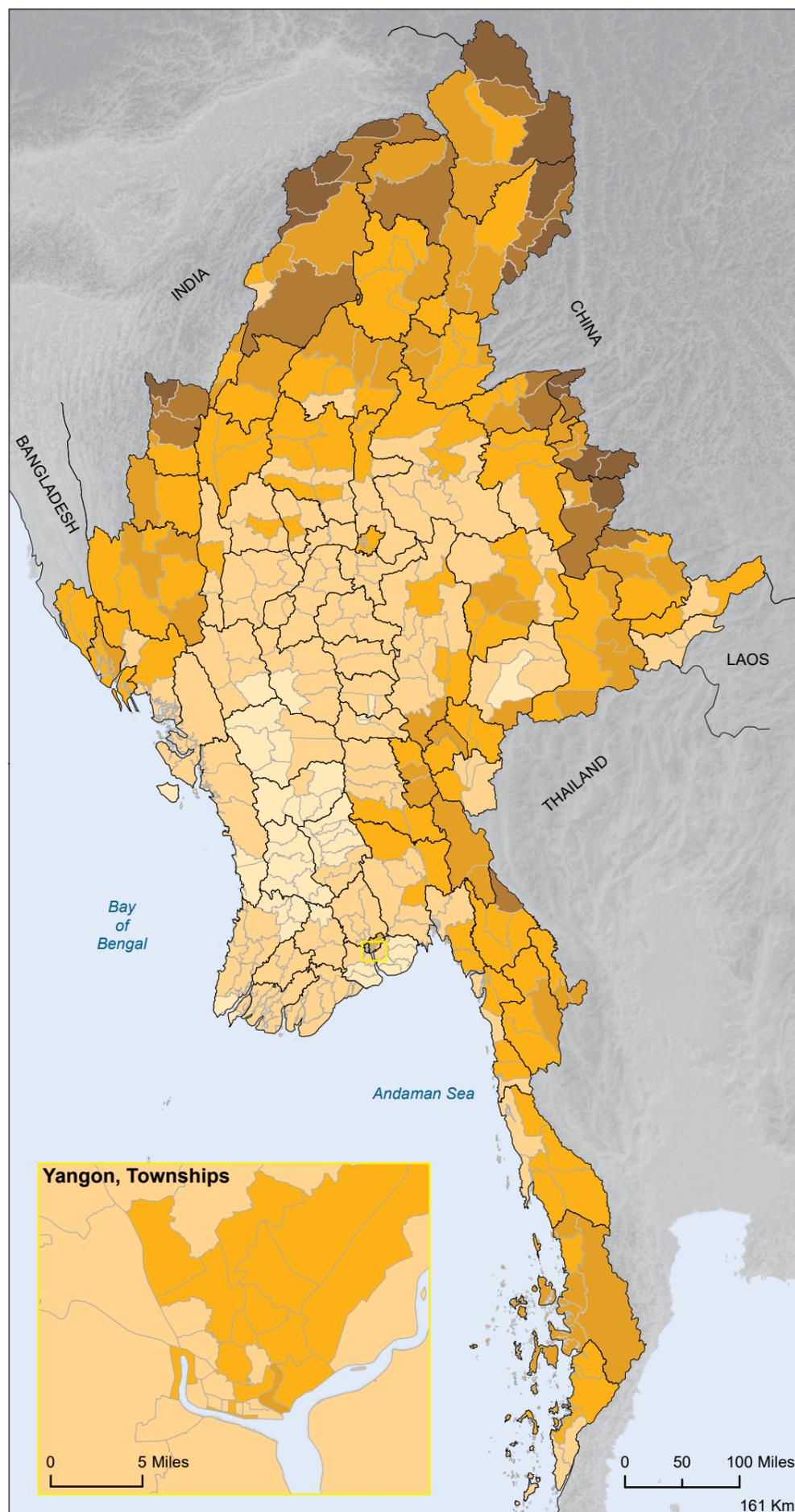


Average number of persons in conventional households

Average at Union level: 4.4



b) Townships



The 2014 Census defined 'conventional households' as households that are comprised of one or more persons who are either related or unrelated and share living quarters in either a stand-alone unit or a compound. Members of a conventional household eat meals together, usually prepared from the same cooking pot. In most cases, one person is acknowledged by household members to be the head of the household.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.

Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

8.2 Small and Large Households

Figure 8.1 and Maps 8.2a and b show that large households with six or more persons were, in 2014, much more common than households comprised of just one person. They also show clear regional patterns, with one-person households being relatively more prevalent in the south and west, and households with six or more persons being much more clearly in evidence in the north and east. Map 8.2b shows a particularly striking distribution of low prevalence of large households - comprising less than 25 per cent of households - in the middle corridor Townships, and of high prevalence - of more than 40 per cent - in many outer ring Townships.

What might explain these differences? Migration patterns offer some clues. Places with large numbers of in-migrants arriving in search of work often have high proportions of one-person households. Many job-seeking migrants are single and tend to live alone. Dekkhina and West Yangon Districts are typical examples of the kinds of places where economic opportunities are attractive enough to entice young, single people to come and live on their own. One-person households make up 6.8 per cent of the households in Dekkhina and 5.7 per cent in West Yangon (Table 8.2) compared with the national average of 4.6 per cent.

The circumstances that are more likely to be associated with large households are found in rural areas with high birth rates, low incomes and large numbers of people employed in the agriculture, forestry and fishing sector. This might help explain the very high proportion of large households in Townships such as Naphang, Minemaw and Panwine in Shan State, and Khaunglanphoo in Kachin State, where around 70 per

cent of households had six or more persons at the time of the 2014 Census (compared with the State average of around 30 per cent). Though less prevalent than in rural areas, large households were also found in some urban areas, particularly those where housing costs are relatively high and death rates are relatively low. Examples include Mingala Taungnyunt, Dawbon and North Okkalapa Townships in East Yangon District, Pyigyidagun, Chanmyatharzi and Mahaaungmye Townships in Mandalay District, and Mawlamyine Township in Mon State, in all of which the proportion of households with six or more persons was between 30 and 35 per cent.

Interestingly, some areas with relatively high proportions of one-person households also tend to have high proportions of very large households. Though these are not specifically identifiable from Maps 8.2a and b, examples include Falam, Kanpalet and Mindat Townships in Chin State, and Ingyanyan Township in Kachin State, each with more than 7 per cent one-person households and more than 36 per cent six or more person households. An explanation for this apparent paradox might be that living in very small or very large households can address the same set of socio-economic challenges, but in different ways. On the one hand, living alone or in small households reduces demand for scarce household resources such as food, space and energy. On the other, families with large numbers create an economic safety net by assembling a large group of potential bread-winners in one household. Both social arrangements have merit as rational coping strategies for living in difficult socio-economic circumstances.

Figure 8.1 Proportion of One-Person and Six or More Person Households, States/Regions

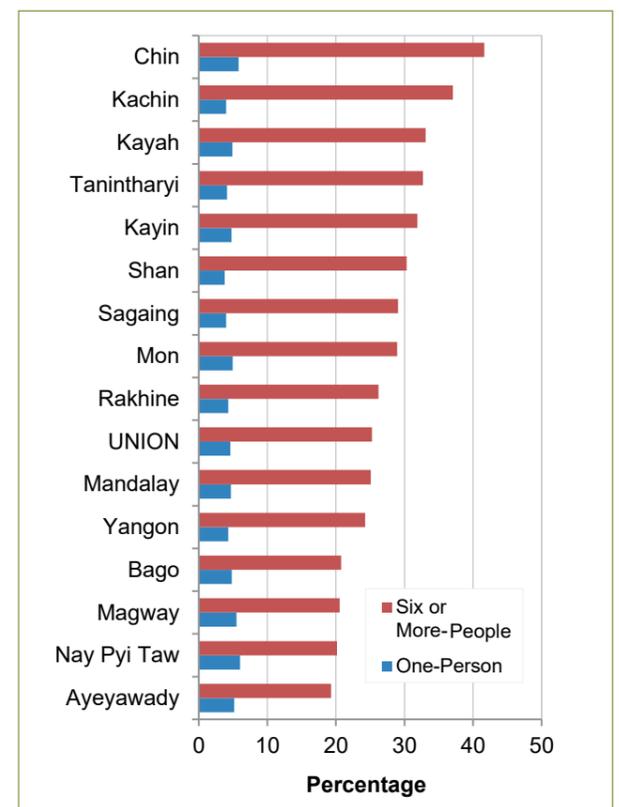


Table 8.2 One-Person and Six or More Person Households, States/Regions and Districts

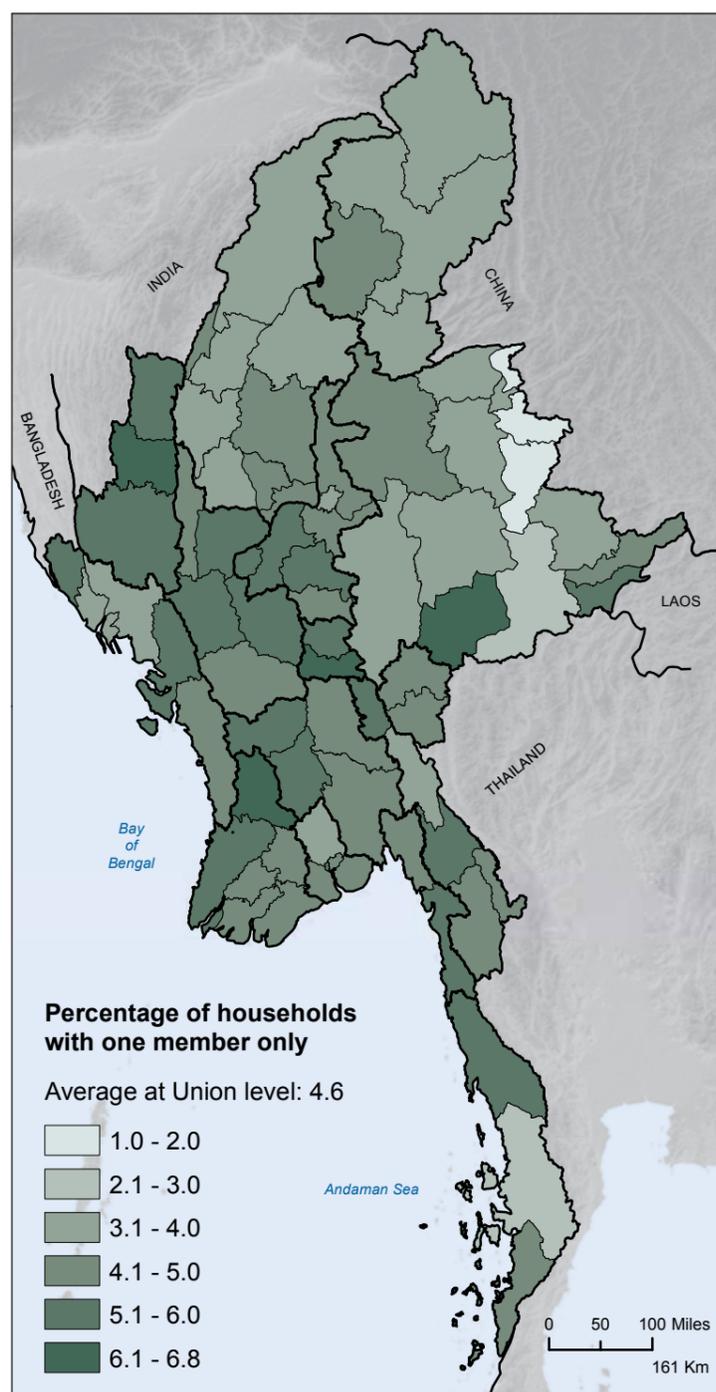
State/Region District	Percentage of Households Comprised of ...	
	One Person	Six or More Persons
UNION	4.6	25.2
Kachin	4.0	37.0
Myitkyina	3.5	41.4
Mohnyin	4.7	33.5
Bhamo	3.7	33.8
Putao	3.4	48.3
Kayah	4.9	33.1
Loikaw	4.9	33.5
Bawlakhe	4.8	30.7
Kayin	4.8	31.9
Hpa-An	5.3	32.0
Pharpon	3.9	38.7
Myawady	4.2	28.3
Kawkareik	4.2	32.7
Chin	5.8	41.6
Haka	6.0	38.3
Falam	5.8	48.4
Mindat	5.7	38.5
Sagaing	4.0	29.1
Sagaing	5.0	22.3
Shwebo	4.0	26.3
Monywa	4.7	25.4
Katha	3.2	34.0
Kalay	3.8	28.9
Tamu	4.2	35.4
Mawlaik	3.0	41.2
Hkamti	3.0	47.9
Yinmarpin	3.8	26.9
Tanintharyi	4.1	32.7
Dawei	5.4	28.0

State/Region District	Percentage of Households Comprised of ...	
	One Person	Six or More Persons
Myeik	3.0	37.8
Kawthoung	4.4	28.4
Bago	4.8	20.7
Bago	4.1	26.1
Toungoo	4.8	24.9
Pyay	5.6	13.4
Thayawady	5.2	15.6
Magway	5.5	20.5
Magway	5.7	20.7
Minbu	5.7	19.9
Thayet	4.9	15.9
Pakokku	6.0	23.8
Gangaw	4.1	23.1
Mandalay	4.7	25.1
Mandalay	3.6	31.6
Pyin Oo Lwin	4.5	24.4
Kyaukse	4.2	21.2
Myingyan	5.8	23.4
Nyaung U	5.6	23.2
Yame'thin	4.4	22.2
Meiktila	5.6	22.7
Mon	4.9	28.9
Mawlamyine	5.1	28.8
Thaton	4.7	29.2
Rakhine	4.3	26.2
Sittway	3.8	32.4
Myauk U	3.7	27.6
Maungtau	5.0	31.2
Kyaukpyu	5.2	21.8
Thandwe	4.6	19.9

State/Region District	Percentage of Households Comprised of ...	
	One Person	Six or More Persons
Yangon	4.3	24.2
North Yangon	3.8	23.7
East Yangon	4.0	28.0
South Yangon	4.8	18.9
West Yangon	5.7	25.8
Shan	3.8	30.3
Taunggyi	3.9	24.2
Loilin	3.9	29.2
Linkhe'	6.6	24.2
Lashio	3.9	29.2
Muse	3.7	35.8
Kyaukme	4.2	24.7
Kunlon	3.4	43.4
Laukine	1.6	50.3
Hopan	1.3	62.1
Makman	1.1	54.9
Kengtung	3.5	36.6
Minesat	2.7	36.6
Tachileik	5.5	26.9
Minephyat	4.1	26.0
Ayeyawady	5.1	19.3
Pathein	5.0	18.5
Phyapon	4.4	22.1
Maubin	4.8	21.5
Myaungmya	4.7	22.7
Labutta	4.7	19.7
Hinthada	6.6	14.2
Nay Pyi Taw	6.0	20.2
Ottara (North)	5.1	18.3
Dekkhina (South)	6.8	21.8

Map 8.2 Small and Large Households

a) One-Person Households, Districts



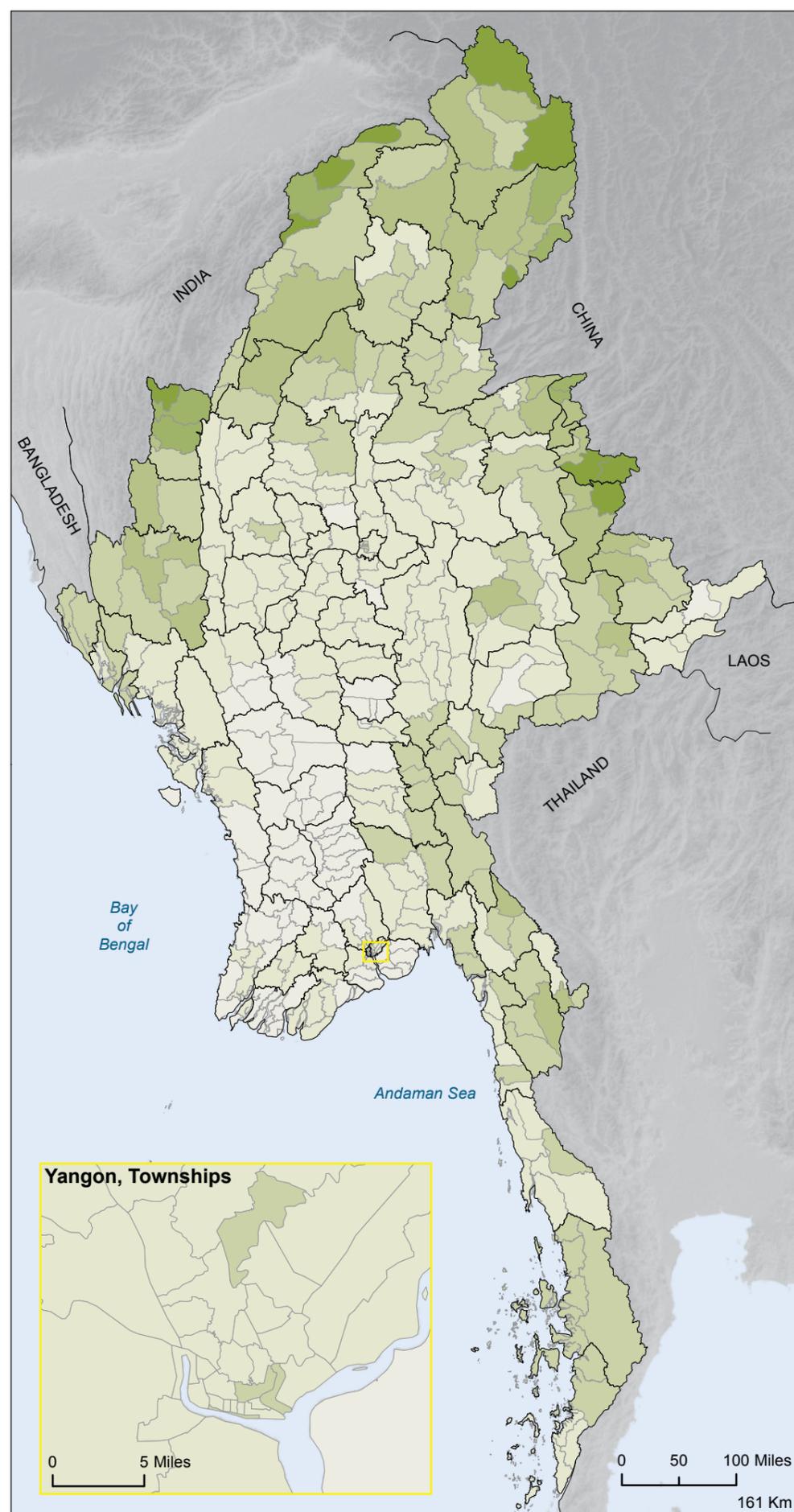
Percentage of households with six or more members

Average at Union level: 25.2

- 7.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- 60.1 - 74.4

- State/Region boundary
- District boundary
- Township boundary

b) Six or More Person Households, Townships



The base for this indicator is the total number of conventional households. The indicator for Map 8.2a gives the number of conventional households with just one person as a percentage of the total number of conventional households in each District. The indicator for Map 8.2b gives the number of conventional households with six or more persons as a percentage of the total number of conventional households in each Township.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

8.3 Home Ownership

At 85.5 per cent of the total number of conventional households that were enumerated in the Census, the proportion of home ownership in Myanmar is very high. A larger proportion of rural households own their own homes (93 per cent) compared with urban households (66 per cent). This difference is common throughout the world because much higher land and property prices in urban areas often make home ownership prohibitively expensive for many people.

Figure 8.2 shows urban/rural differences at the State/Region level very clearly. Nay Pyi Taw had the largest differential at this level, with ownership among the rural population more than 45 percentage points higher than in urban areas. Chin and Kayin also reported large differences in urban/rural home ownership, both at more than 30 percentage points. The differentials were narrowest in Mon, Rakhine, Ayeyawady and Bago, where the proportion of rural home ownership was less than 16 percentage points higher than the proportion of urban ownership.

Given this general pattern of lower ownership rates among urban populations compared with those for rural populations (clearly illustrated in the Maps opposite),

many of the Districts with low rates were, as would be expected, predominantly urban Districts such as North, East and West Yangon and Mandalay. Here, only between 50 and 60 per cent of households lived in houses that they owned (Table 8.3). People living in urban Yangon and Mandalay typically do not work on the land or own the houses they live in. Instead, many of them work in offices, shops, hotels and factories, and live at high densities in small, rented apartments and houses built on extremely high-value land.

The lowest ownership rates, however, were found among urban populations in Districts spread elsewhere across the country, where the reasons might be less obvious. Map 8.3a shows these to include Makman and Tachileik (in Shan), Myawady (in Kayin), and Kawthoung (in Tanintharyi), all with less than 50 per cent home ownership. Ottara and Dekkhina Districts in Nay Pyi Taw were reported among those having the lowest rates of all, at 46.5 per cent and 42.4 per cent, respectively. This reflects the fact that a high proportion of the population in these two Districts live in accommodation provided by the government (Department of Population 2017f).

Figure 8.2 Proportion of Households Owning their Homes, States/Regions, Urban and Rural

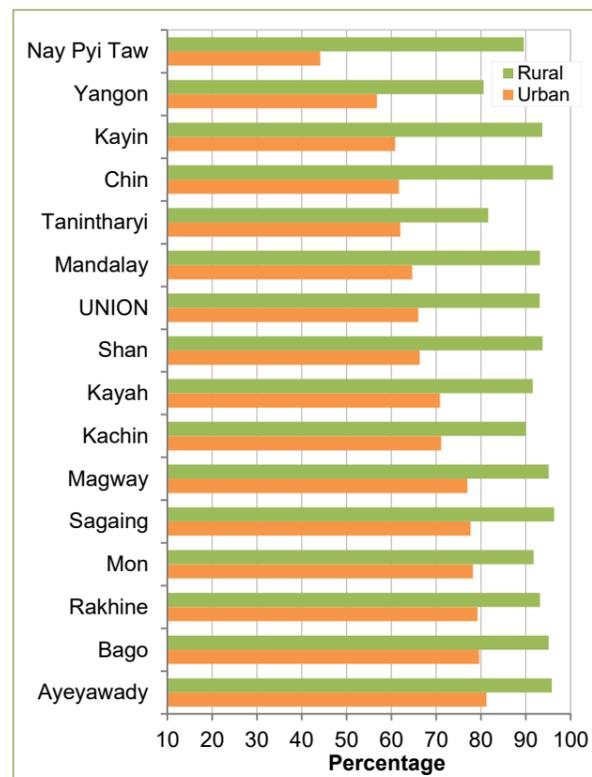


Table 8.3 Proportion of Households Owning their Homes, States/Regions and Districts, Urban and Rural

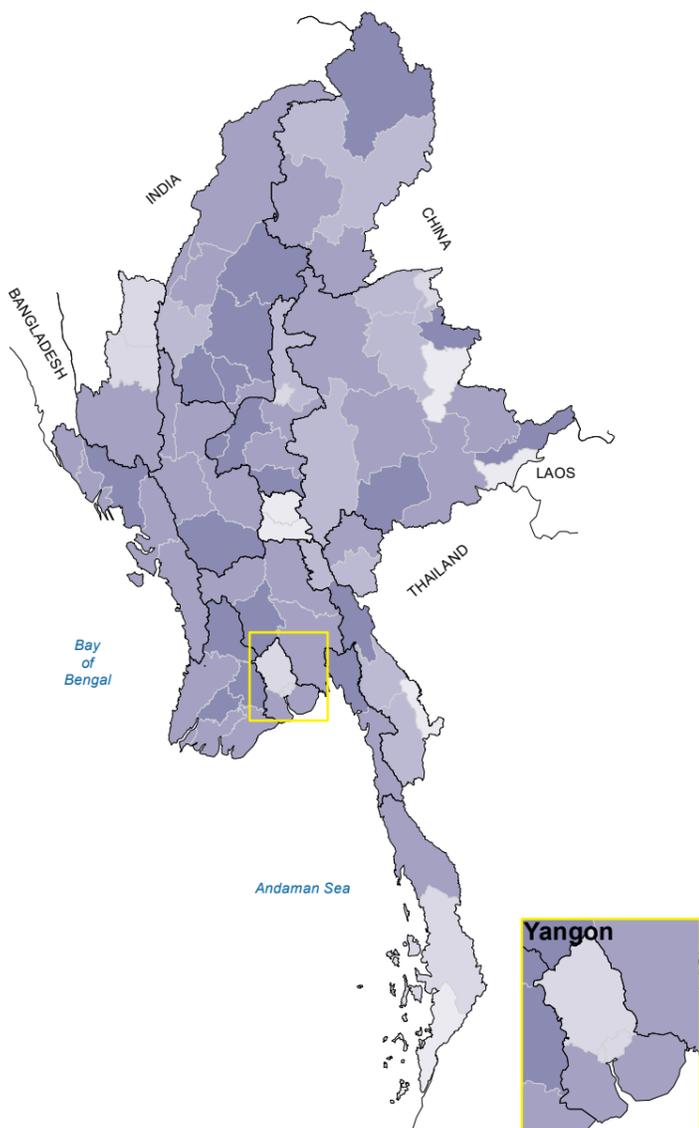
State/Region District	Proportion of Households Owning their Homes		
	Urban & Rural	Urban	Rural
UNION	85.5	66.0	93.1
Kachin	83.3	71.1	90.0
Myitkyina	75.6	65.6	88.6
Mohnyin	86.6	78.8	88.9
Bhamo	86.6	74.5	91.6
Putao	91.8	80.1	95.6
Kayah	86.3	70.9	91.6
Loikaw	86.2	71.0	91.6
Bawlakhe	86.4	69.7	91.5
Kayin	86.5	60.8	93.7
Hpa-An	90.6	68.3	94.1
Pharpon	81.4	80.3	82.7
Myawady	62.1	45.9	82.6
Kawkareik	91.1	68.7	95.9
Chin	88.6	61.7	96.1
Haka	82.1	54.5	96.4
Falam	86.9	59.2	93.7
Mindat	92.9	70.3	97.6
Sagaing	93.2	77.7	96.3
Sagaing	90.7	74.9	94.5
Shwebo	95.4	82.5	97.1
Monywa	91.1	80.0	95.8
Katha	94.7	80.4	96.6
Kalay	87.4	69.6	93.9
Tamu	82.6	74.2	92.2
Mawlaik	94.9	74.8	97.7
Hkamti	94.2	75.1	97.0
Yinmarpin	96.7	82.5	97.3
Tanintharyi	77.0	62.0	81.6
Dawei	86.7	75.5	89.5

State/Region District	Proportion of Households Owning their Homes		
	Urban & Rural	Urban	Rural
Myeik	75.3	59.9	79.5
Kawthoung	60.0	48.7	66.6
Bago	91.9	79.6	95.1
Bago	90.9	79.3	95.1
Toungoo	90.1	76.4	93.5
Pyay	90.1	78.4	93.4
Thayawady	96.4	86.8	97.8
Magway	92.5	77.0	95.1
Magway	92.3	74.6	96.5
Minbu	93.7	79.3	95.3
Thayet	91.9	80.3	93.5
Pakokku	92.1	77.5	94.2
Gangaw	93.6	77.8	95.8
Mandalay	84.2	64.7	93.2
Mandalay	64.0	58.0	81.2
Pyin Oo Lwin	82.7	65.3	89.3
Kyaukse	90.8	78.5	92.2
Myingyan	95.1	82.8	97.3
Nyaung U	93.8	84.3	96.1
Yame'thin	95.5	80.5	97.2
Meiktila	90.6	71.0	95.4
Mon	88.1	78.2	91.8
Mawlamyine	86.4	76.4	91.5
Thaton	90.6	83.6	92.0
Rakhine	91.0	79.2	93.2
Sittway	90.8	79.4	94.2
Myauk U	92.4	84.8	93.5
Maungtaw	83.4	77.6	85.1
Kyaukpyu	92.3	76.9	93.9
Thandwe	88.9	74.1	92.0

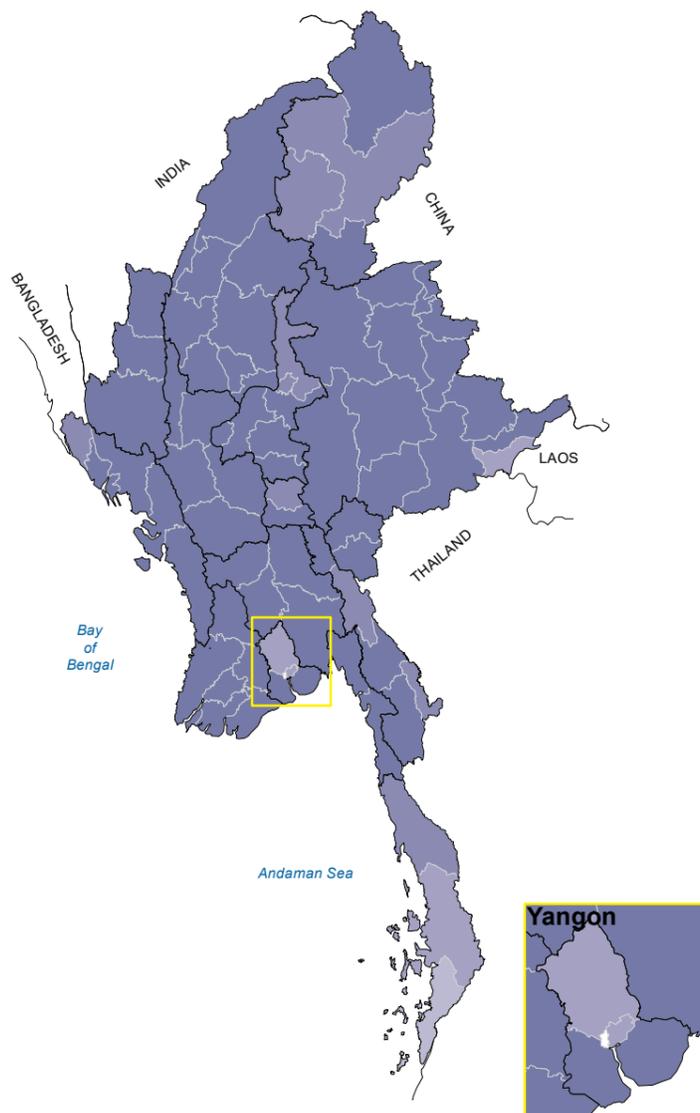
State/Region District	Proportion of Households Owning their Homes		
	Urban & Rural	Urban	Rural
Yangon	64.5	56.7	80.6
North Yangon	60.9	52.5	70.6
East Yangon	55.8	55.6	76.3
South Yangon	86.7	74.2	91.5
West Yangon	57.7	57.7	n/a
Shan	87.2	66.3	93.7
Taunggyi	85.8	63.4	94.0
Loilin	91.4	77.2	95.4
Linkhe`	90.2	82.7	93.8
Lashio	84.0	64.0	95.0
Muse	82.9	62.5	93.9
Kyaukme	89.4	72.1	92.6
Kunlon	89.8	69.9	92.3
Laukine	88.9	55.6	95.0
Hopan	96.8	86.8	98.6
Makman	91.0	41.3	94.4
Kengtung	90.4	73.4	94.2
Minesat	89.6	70.1	92.3
Tachileik	68.4	46.3	79.7
Minephyat	93.0	84.4	94.2
Ayeyawady	93.8	81.3	95.8
Pathein	92.4	79.7	95.2
Phyapon	91.1	74.2	93.5
Maubin	96.8	87.5	97.9
Myaungmya	95.6	82.2	97.3
Labutta	90.3	74.6	92.1
Hinthada	96.3	87.3	97.7
Nay Pyi Taw	75.9	44.1	89.5
Ottara (North)	77.4	46.5	88.3
Dekkhina (South)	74.6	42.4	90.8

Map 8.3 Proportion of Home Owners, Districts

a) Urban



b) Rural



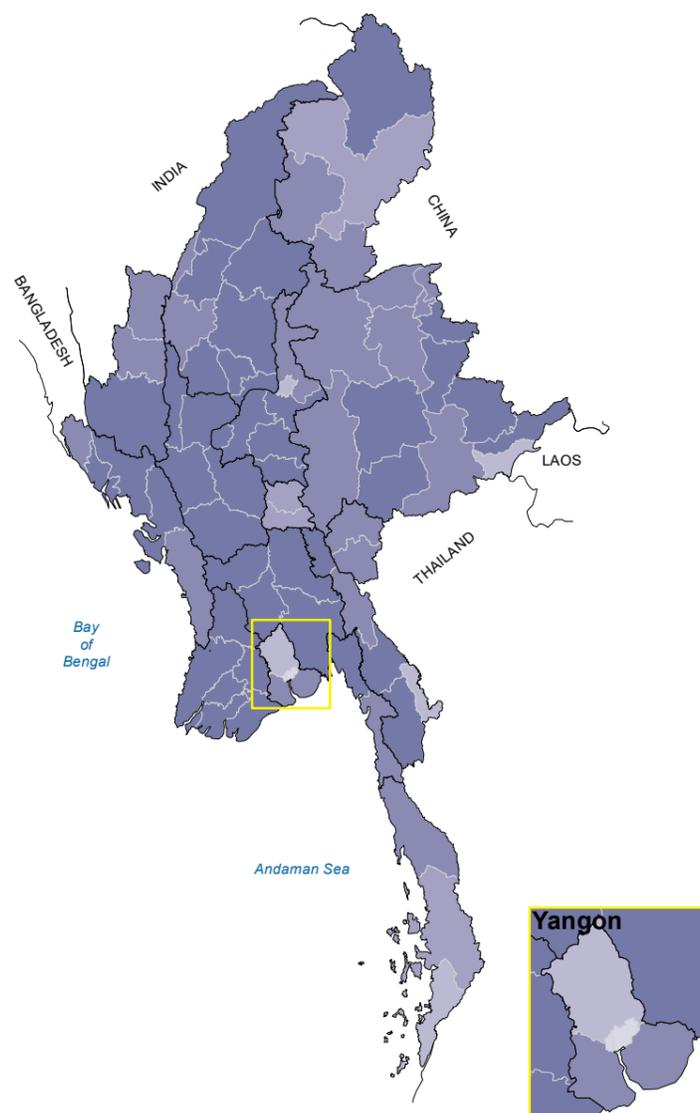
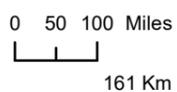
c) Urban and Rural

Percentage of households owning the housing unit they live in

Average at Union level: 66.0 urban, 93.1 rural, 85.5 urban and rural

- 41.3 - 50.0
- 50.1 - 60.0
- 60.1 - 70.0
- 70.1 - 80.0
- 80.1 - 90.0
- 90.1 - 98.6
- No rural population (West Yangon)

- State/Region boundary
- District boundary



The base for this indicator is the total number of conventional households. The indicator gives the proportion of households owning the housing unit in which they were living at the time of the 2014 Census.

© Department of Population, Ministry of Labour, Immigration and Population. Nay Pyi Taw, Myanmar, 2017.
 Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.
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8.4 Housing Quality

As a means of providing a broad measure of housing quality, the 2014 Census recorded the main materials used to build the walls, roof and floors of every enumerated housing unit in the country. Table 8.4 classifies housing units by their durability as determined by the main construction materials used. By mapping and analyzing the distribution of households living in housing units that are at least partially built with non-durable materials, this section gives a broad overview of where in the country people are living in solid, permanent houses and where they are living in flimsy, non-durable houses which, in terms of Sustainable Development Goal 11 (see Box), may be more likely to be considered to be inadequate, especially when taking into account the heightened risks of climate hazards, and the basic conditions required for health and hygiene.

Map 8.4 shows the distribution of households living in housing constructed in part from non-durable materials (hereafter referred to as 'non-durable housing') at the Township level. A clear regional pattern shows a broad swathe across the upper-middle part of the country where a relatively small proportion of houses were built with non-durable materials. In general terms, the better-quality housing was found in Mandalay Region and in Kayah and Shan States, where somewhat less than one fifth of households occupied housing units that were made, at least partially, of non-durable materials

(Table 8.5). Nay Pyi Taw, northern Townships in Magway Region, and southern Townships in Sagaing Region and Kachin State also lie in this belt.

The parts of the country with the least durable housing were in the far north, the far south, and all along the coast of the country. At the State/Region level, Rakhine reported the largest proportion of households in non-durable housing, at more than 70 per cent. Non-durable housing was also prevalent in Tanintharyi (68 per cent of houses) and Ayeyawady (a little less than 64 per cent).

Large proportions of poorly-housed households were also found in northern parts of Kachin State and Sagaing Region. In Kachin, poor quality housing was common throughout Putao District, where more than three quarters of households lived in non-durable housing. In Sagaing Region, the prevalence of non-durable housing materials was more localized, with significant differences being more notable between Townships than between Districts. For example, in Hkamti District, more than 75 per cent of households lived in non-durable housing in Lahe, Nanyun, Htanparkway, Pansaung and Donhee. In contrast, the proportions for Homalin and Sonemara were only about 23 and 36 per cent, respectively. Map 8.4 clearly shows this localized variability in housing quality along the northern border between Sagaing Region and India.

Sustainable Development Goal 11

Make cities and human settlements inclusive, safe, resilient and sustainable

Target 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

Indicator 11.1.1: Proportion of population living in slums, informal settlements or inadequate housing.

Table 8.4 Type and Durability of House-Construction Materials

	Durable	Semi-Permanent	Non-Durable
Roof	Tiles Concrete Bricks Corrugated sheeting	Wood Bamboo	Non-woody vegetation including dhani, theke and in phet leaves
Walls	Tiles Concrete Bricks Wood	Bamboo Corrugated sheeting Earth	Non-woody vegetation, including dhani, theke and in phet leaves
Floors	Tiles Concrete Bricks Wood	Bamboo Earth	Non-woody vegetation, including dhani, theke and in phet leaves

Source: Department of Population, 2017f.

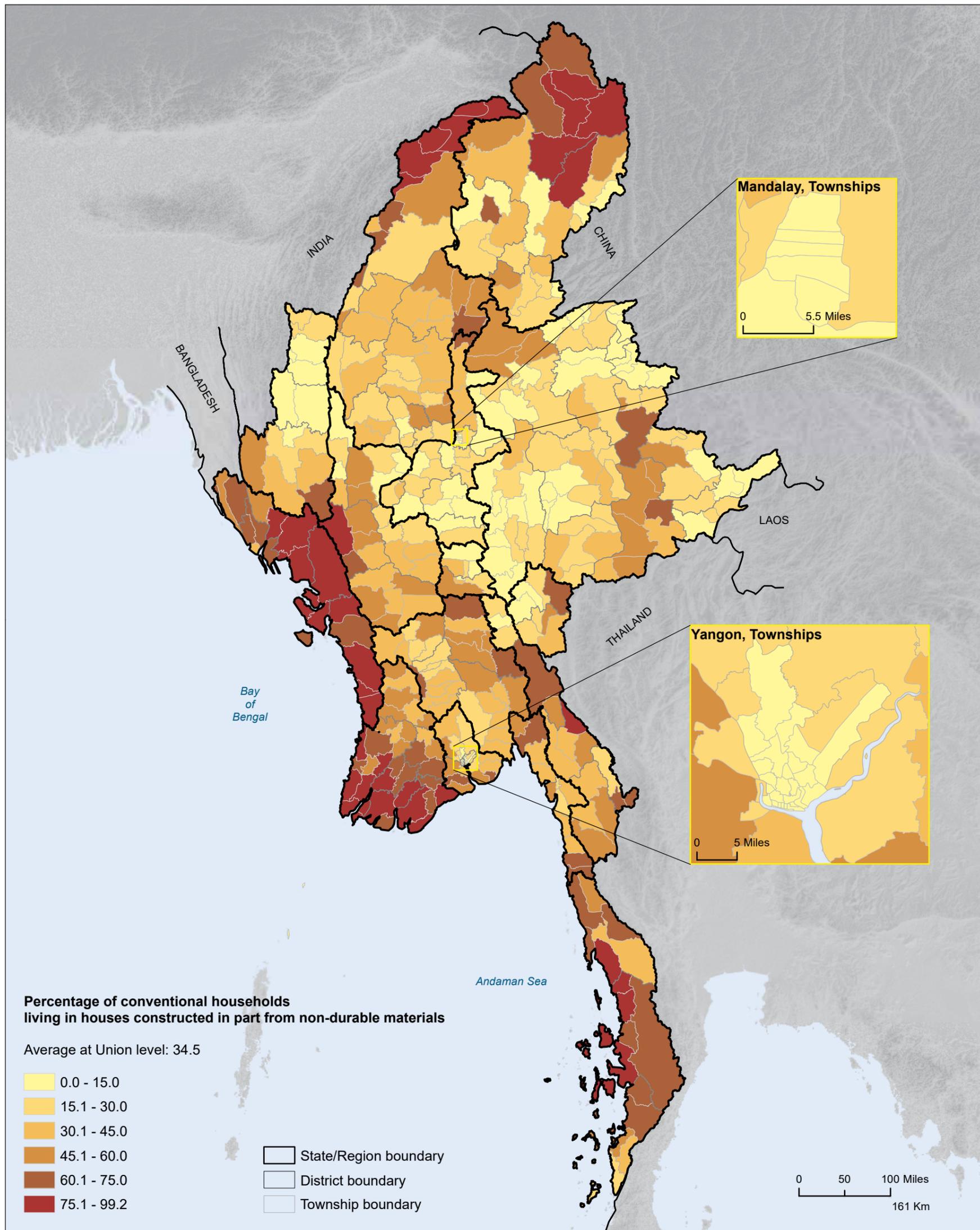
Table 8.5 Proportion of Households living in Non-Durable Housing Units, States/Regions and Districts

State/Region District	Total Number of Conventional Households	Households living in Houses Constructed in part from Non-Durable Materials	
		Number	Per Cent
UNION	10,877,832	3,751,133	34.5
Kachin	269,365	72,223	26.8
Myitkyina	88,643	17,416	19.6
Mohnyin	101,152	25,251	25.0
Bhamo	63,706	17,462	27.4
Putao	15,864	12,094	76.2
Kayah	57,274	9,199	16.1
Loikaw	49,158	7,282	14.8
Bawlakhe	8,116	1,917	23.6
Kayin	308,041	110,227	35.8
Hpa-An	161,457	52,825	32.7
Pharpon	6,502	3,688	56.7
Myawady	44,016	12,779	29.0
Kawkareik	96,066	40,935	42.6
Chin	91,121	19,667	21.6
Haka	19,699	1,334	6.8
Falam	29,250	2,509	8.6
Mindat	42,172	15,824	37.5
Sagaing	1,096,857	349,118	31.8
Sagaing	114,709	23,190	20.2
Shwebo	311,477	106,823	34.3
Monywa	163,545	32,097	19.6
Katha	167,956	76,788	45.7
Kalay	106,562	25,286	23.7
Tamu	22,591	9,503	42.1
Mawlaik	30,591	11,325	37.0
Hkamti	61,842	27,759	44.9
Yinmarpin	117,584	36,347	30.9
Tanintharyi	283,099	192,093	67.9
Dawei	104,092	68,012	65.3

State/Region District	Total Number of Conventional Housing Units	Households living in Houses Constructed in part from Non-Durable Materials	
		Number	Per Cent
Myeik	132,919	106,817	80.4
Kawthoung	46,088	17,264	37.5
Bago	1,142,974	456,895	40.0
Bago	386,762	156,306	40.4
Toungoo	249,452	125,219	50.2
Pyay	236,010	67,409	28.6
Thayawady	270,750	107,961	39.9
Magway	919,777	312,706	34.0
Magway	291,432	86,791	29.8
Minbu	162,423	87,722	54.0
Thayet	179,839	77,198	42.9
Pakokku	229,705	52,189	22.7
Gangaw	56,378	8,806	15.6
Mandalay	1,323,191	194,161	14.7
Mandalay	324,477	17,689	5.5
Pyin Oo Lwin	214,948	50,008	23.3
Kyaukse	169,988	32,237	19.0
Myingyan	242,956	39,907	16.4
Nyaung U	54,473	17,135	31.5
Yame'thin	116,122	16,488	14.2
Meiktila	200,227	20,697	10.3
Mon	422,612	168,448	39.9
Mawlamyine	253,283	88,521	34.9
Thaton	169,329	79,927	47.2
Rakhine	459,772	331,857	72.2
Sittway	109,256	69,579	63.7
Myauk U	145,987	107,501	73.6
Maungtau	19,160	11,620	60.6
Kyaukpyu	101,776	76,776	75.4
Thandwe	83,593	66,381	79.4

State/Region District	Total Number of Conventional Housing Units	Households living in Houses Constructed in part from Non-Durable Materials	
		Number	Per Cent
Yangon	1,582,944	322,677	20.4
North Yangon	566,167	127,436	22.5
East Yangon	486,790	35,561	7.3
South Yangon	339,205	152,447	44.9
West Yangon	190,782	7,233	3.8
Shan	1,169,569	197,871	16.9
Taunggyi	368,509	39,131	10.6
Loilin	115,482	22,028	19.1
Linkhe	30,648	8,589	28.0
Lashio	125,181	20,843	16.7
Muse	86,255	9,402	10.9
Kyaukme	163,679	37,683	23.0
Kunlon	10,392	1,040	10.0
Laukine	24,846	1,301	5.2
Hopan	35,630	4,128	11.6
Makman	36,249	10,497	29.0
Kengtung	66,733	13,119	19.7
Minesat	44,931	21,862	48.7
Tachileik	37,673	5,137	13.6
Minephyat	23,361	3,111	13.3
Ayeyawady	1,488,983	946,866	63.6
Patheingyi	394,147	241,498	61.3
Phyappon	237,761	181,682	76.4
Maubin	228,079	134,021	58.8
Myaungmya	180,075	136,294	75.7
Labutta	150,469	121,354	80.7
Hinthada	298,452	132,017	44.2
Nay Pyi Taw	262,253	67,125	25.6
Ottara (North)	124,099	22,761	18.3
Dekkhina (South)	138,154	44,364	32.1

Map 8.4 Houses Constructed in part from Non-Durable Materials, Townships



The base population for this indicator is the total number of conventional households. The indicator gives the proportion of households living in housing that was constructed, at least in part, from non-durable materials, as a percentage of the total number of conventional households in each Township. 'Non-durable materials' are defined here to mean non-woody vegetation including dhani, theke, in phet and other leaves. Houses were classified as 'non-durable' if the walls, roof or floors were mainly constructed from such materials.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.

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8.5 Access to Safe Drinking Water



Sustainable Development Goal 6

Ensure availability and sustainable management of water and sanitation for all

Target 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

Indicator 6.1.1: Proportion of population using safely managed drinking water services.

Ensuring universal access to clean, safe drinking water is a Sustainable Development Goal (see Box). Though the United Nations definition of what constitutes safe sources of drinking water differs slightly from that used by the 2014 Census (see explanatory note below Map 8.5), the two are generally in line, and the Census data presented in this section can contribute to Myanmar's ongoing efforts to set the baseline, and develop the locally meaningful indicators, it will use to monitor progress towards achieving SDG 6 between now and 2030.

The general United Nations indicator for SDG 6 is the proportion of the population with access to safely managed water services, and, in broad terms, that is what the maps, table and figure in this section of the atlas attempt to show. At the time of the 2014 Census, slightly less than 70 per cent of the Union population was considered to be using safe drinking water. Level of use was higher among urban residents (87 per cent) but much lower among rural residents (62 per cent) (Table 8.6). Figure 8.3 confirms that use of safe drinking water was better in urban areas in all States and Regions. The largest urban/rural differentials were in Yangon Region and Shan State, at more than 40

percentage points, and in Kayin State, at more than 30 percentage points. People for whom safe drinking water was most readily available generally live in middle corridor Districts. These include Mandalay, East, West and North Yangon, and Hinthada Districts, all with around or better than 95 per cent access. As a District with an overall level of use of safe drinking water also at around the 95 per cent mark, Haka in Chin State was an exception to this general pattern.

Hinthada District was also an interesting anomaly because it is in the State/Region with generally the lowest proportions of residents using safe drinking water. Less than half (49 per cent) of all residents in conventional households in Ayeyawady used safe drinking water, and such use in some Districts was extremely limited, with Labutta District at just over 11 per cent and Phyapon a very low 4 per cent. Districts in Yangon Region showed the largest disparities in urban and rural access. Safe drinking water was used by more than 95 per cent of people in highly urbanized East and West Yangon Districts, whereas it was used by less than 30 per cent of the residents of South Yangon, which has a much larger rural population. Map 8.5 suggests that difficulty accessing safe drinking water is related to the location of the poorly-served Districts on the coastal edges of the delta in both Ayeyawady and Yangon Regions. Here people face similar difficulties to those communities living in Districts such as Sittway and Myauk U, on or near the Rakhine coast. Here, less than 20 per cent of the rural population and, in Myauk U less than a quarter of the urban population, reported using safe drinking water at the time of the 2014 Census.

Figure 8.3 Proportion of Population in Conventional Households with Access to Safe Drinking Water, States/Regions, Urban and Rural

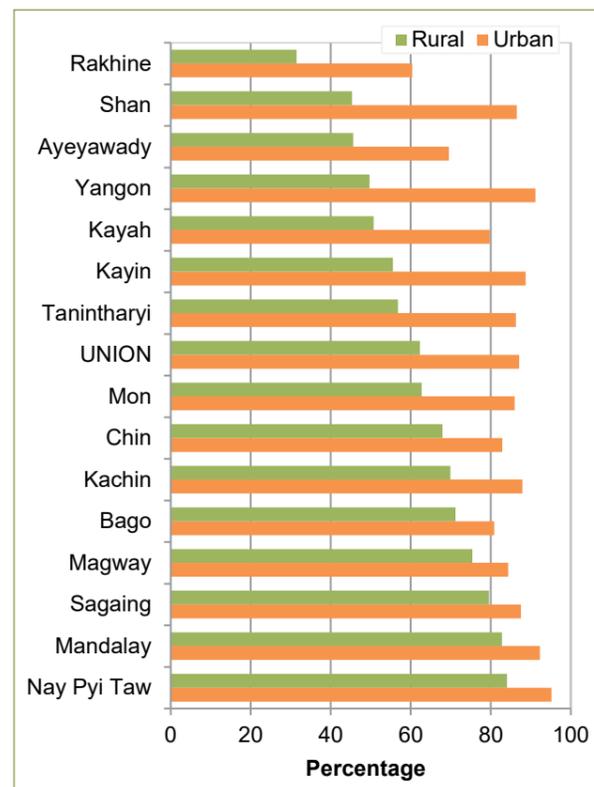


Table 8.6 Proportion of the Population in Conventional Households Using Safe Drinking Water, States/Regions and Districts, Urban and Rural

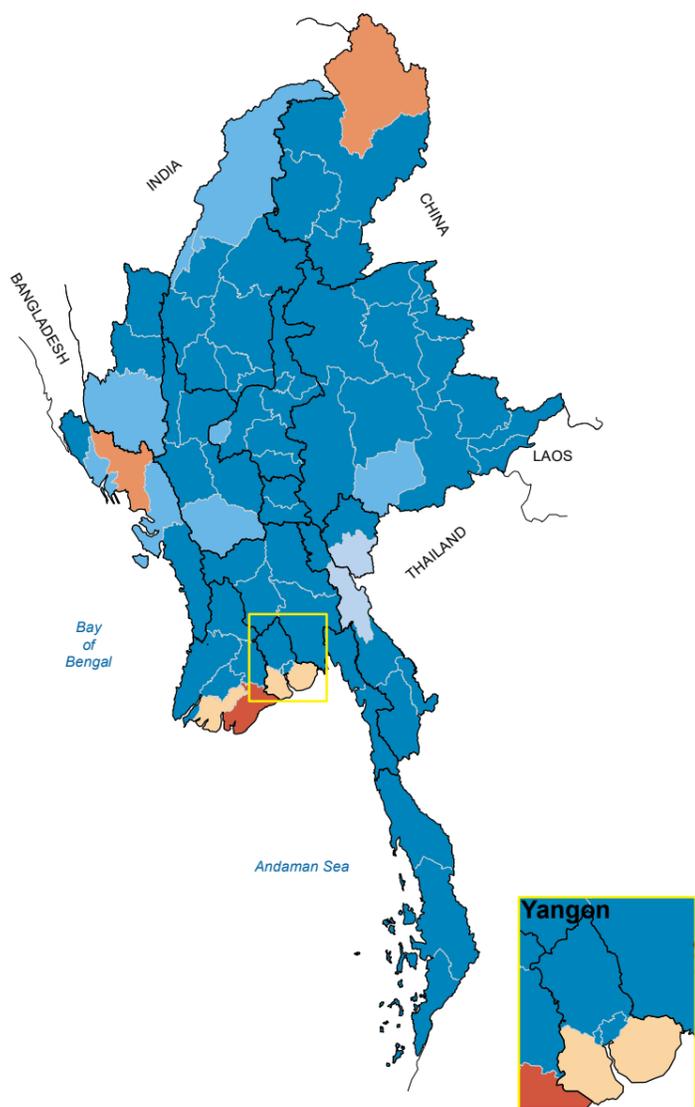
State/Region District	Proportion of Population in Households Using Safe Drinking Water		
	Urban & Rural	Urban	Rural
UNION	69.4	87.1	62.3
Kachin	76.5	87.9	69.9
Myitkyina	77.4	91.4	58.0
Mohnyin	79.6	88.0	77.0
Bhamo	83.8	90.0	81.2
Putao	29.1	29.9	28.8
Kayah	57.8	79.8	50.7
Loikaw	60.8	82.6	53.5
Bawlaikhe	39.2	58.9	33.8
Kayin	62.7	88.7	55.6
Hpa-An	64.2	87.9	60.4
Pharpon	42.7	49.1	36.0
Myawady	80.3	95.9	61.3
Kawkareik	54.0	88.2	46.8
Chin	70.9	82.9	67.9
Haka	94.2	94.7	94.0
Falam	88.1	92.3	87.2
Mindat	46.4	63.7	43.1
Sagaing	80.9	87.5	79.5
Sagaing	73.0	75.7	72.3
Shwebo	83.0	90.9	81.9
Monywa	89.8	94.4	87.7
Katha	86.9	90.9	86.4
Kalay	78.4	90.2	73.9
Tamu	71.5	72.8	70.1
Mawlaik	82.7	88.6	82.0
Hkamti	51.5	63.3	49.9
Yinmarpin	84.0	98.4	83.5
Tanintharyi	63.8	86.3	56.8
Dawei	54.5	81.4	47.3

State/Region District	Proportion of Population in Households Using Safe Drinking Water		
	Urban & Rural	Urban	Rural
Myeik	67.8	91.3	61.3
Kawthoung	71.6	82.9	65.3
Bago	73.3	80.8	71.2
Bago	58.0	76.8	51.6
Toungoo	83.6	90.2	81.9
Pyay	80.5	83.2	79.7
Thayawady	81.5	75.7	82.4
Magway	76.7	84.4	75.4
Magway	77.4	91.1	74.1
Minbu	86.3	80.7	86.9
Thayet	61.9	64.8	61.4
Pakokku	80.5	90.1	79.0
Gangaw	74.0	75.6	73.8
Mandalay	85.9	92.3	82.8
Mandalay	95.5	96.9	91.3
Pyin Oo Lwin	74.5	86.4	70.0
Kyaukse	89.6	96.9	88.7
Myingyan	77.5	75.7	77.9
Nyaung U	77.8	74.0	78.8
Yame'thin	88.9	91.4	88.5
Meiktila	88.7	87.9	88.9
Mon	69.1	86.0	62.7
Mawlamyine	75.1	86.8	68.9
Thaton	60.2	83.5	55.5
Rakhine	36.3	60.4	31.5
Sittway	27.0	60.3	16.4
Myauk U	16.1	24.5	14.8
Maungtau	44.6	90.6	30.4
Kyaukpyu	43.8	73.9	40.5
Thandwe	77.7	92.2	74.6

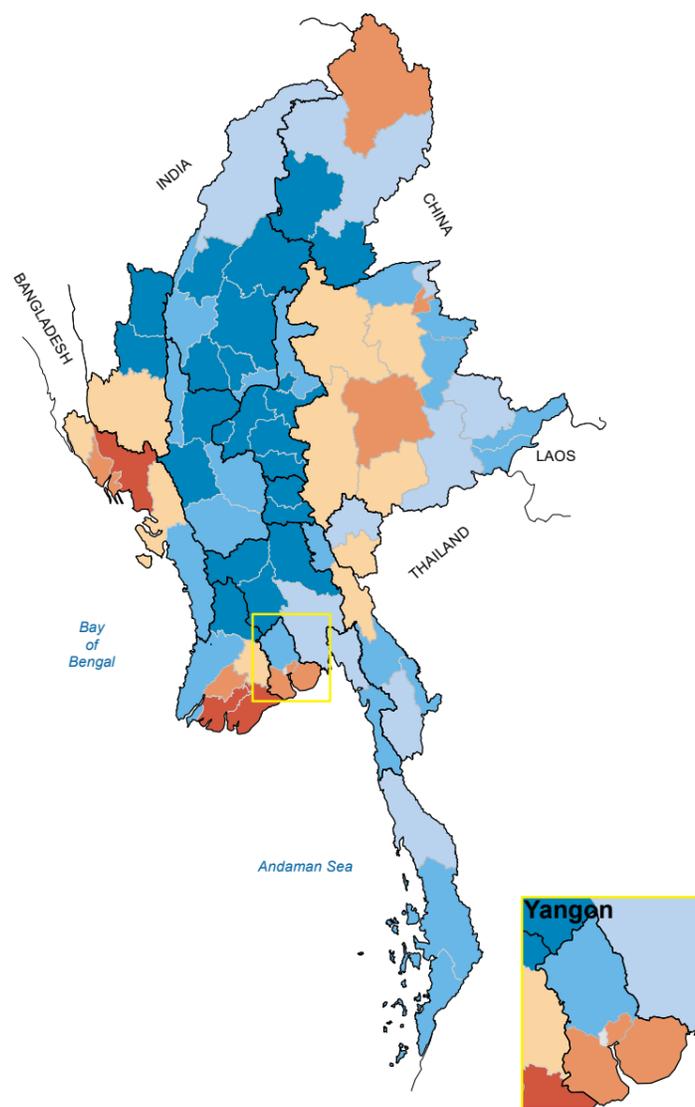
State/Region District	Proportion of Population in Households Using Safe Drinking Water		
	Urban & Rural	Urban	Rural
Yangon	78.7	91.1	49.7
North Yangon	85.3	95.7	72.3
East Yangon	95.1	95.9	20.7
South Yangon	29.4	39.8	25.1
West Yangon	95.7	95.7	n/a
Shan	54.8	86.5	45.3
Taunggyi	50.7	82.2	39.4
Loilin	39.7	78.4	28.6
Linkhe'	48.8	70.0	39.3
Lashio	56.6	88.8	38.6
Muse	74.6	97.5	62.5
Kyaukme	48.6	90.9	40.8
Kunlon	30.6	95.5	23.8
Laukine	53.6	94.8	47.2
Hopan	69.0	78.2	67.7
Makman	69.2	96.7	67.6
Kengtung	53.9	95.4	45.6
Minesat	60.6	75.4	58.8
Tachileik	72.2	93.6	61.6
Minephyat	69.8	97.8	66.4
Ayeyawady	48.9	69.5	45.6
Pathein	69.9	88.1	65.9
Phyapon	3.9	4.3	3.9
Maubin	47.6	77.7	43.9
Myaungmya	33.7	78.7	27.7
Labutta	11.2	31.4	8.9
Hinthada	91.9	94.7	91.5
Nay Pyi Taw	87.3	95.2	84.0
Ottara (North)	86.6	95.9	83.3
Dekkhina (South)	88.0	94.7	84.8

Map 8.5 Use of Safe Drinking Water, Districts

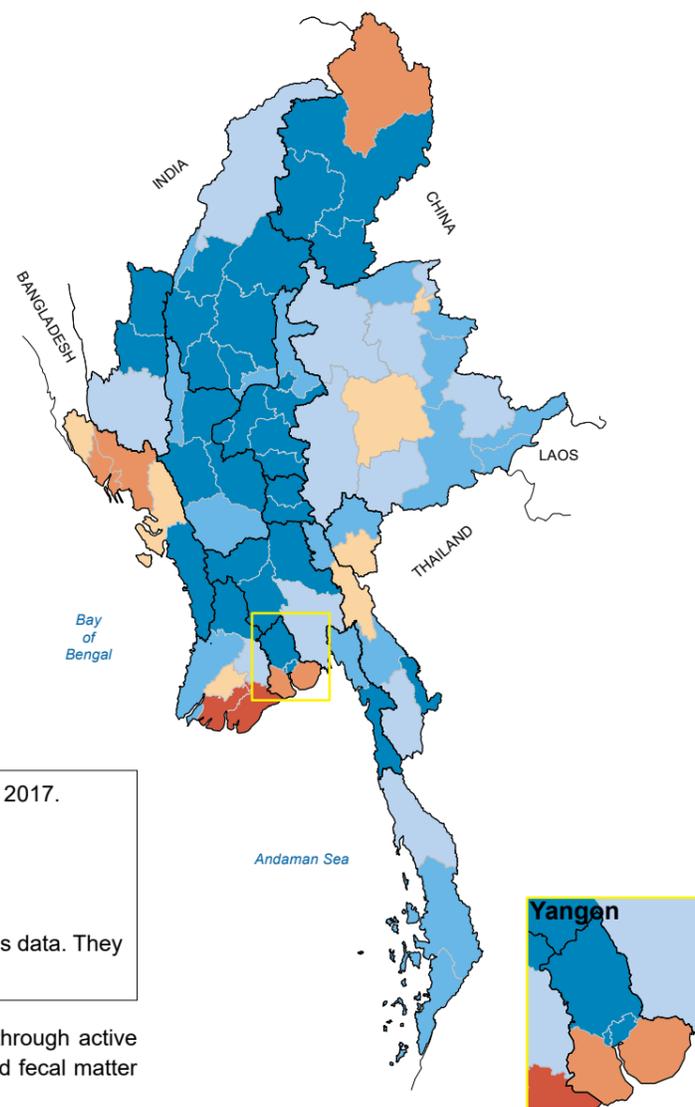
a) Urban



b) Rural



c) Urban and Rural

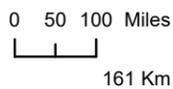


Percentage of population using safe drinking water

Average at Union level: 87.1 urban, 62.3 rural, 69.4 urban and rural

- 3.9 - 15.0
- 15.1 - 30.0
- 30.1 - 45.0
- 45.1 - 60.0
- 60.1 - 75.0
- 75.1 - 98.4
- No rural population (West Yangon)

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional households. The indicator gives the percentage of the population that was using drinking water from taps or pipes, boreholes, tubewells, other protected wells, springs, bottles or other purified sources at the time of the 2014 Census.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

Safe drinking water - a water source is considered to be 'safe' if, by nature of its construction or through active intervention, it is likely to be protected from outside contamination from, amongst other, pollutants and fecal matter (Department of Population, 2017f). For the 2014 Census:

- Sources of drinking water considered to be 'improved' and therefore safe included: piped water delivered via a tap; tube wells and bore holes; protected wells and springs; and bottled water and water obtained from a vending machine.
- Sources of drinking water considered 'unimproved' and therefore potentially unsafe included: pools, ponds and lakes; rivers, streams and canals; rainfall; and unprotected wells and springs.

8.6 Access to Improved Sanitation



Sustainable Development Goal 6

Ensure availability and sustainable management of water and sanitation for all

Target 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

Indicator 6.2.1: Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water.

For access to 'improved sanitation', as with access to safe drinking water, the indicators for monitoring progress towards Sustainable Development Goals are not directly obtainable from the data collected by the 2014 Census. For example, while the targets and indicators presented in the Box above are concerned with the extent to which households share latrines, are able to wash with soap and water and have alternatives to open defecation, the questions asked in the Census did not directly address these issues (see explanatory note below Map 8.6). Nevertheless, the data presented here, which, again, only refers to persons in conventional households, does provide some insight into the varying quality of sanitation facilities to which people have access around the country, and can be used as a proxy in lieu of the more detailed information that could only be generated from specialized surveys.

The Census revealed that, for the country as a whole, almost three quarters of the population had

access to improved sanitation facilities. In Yangon Region, Kayah and Kachin States and Nay Pyi Taw, improved sanitation was accessible to more than 85 per cent of the population (Table 8.7). However, as with safe drinking water described in the previous section, hygienic sanitation was generally more readily available in urban areas (Map 8.6a) than it was in rural areas (Map 8.6b).

Among urban communities, around, or more than, 90 per cent of the population in all States and Regions except for Rakhine and Magway had access to improved sanitation facilities. Figure 8.4 shows the urban/rural contrast in general terms, but the disparity is more clearly evident when seen at the District level. Table 8.7 shows that, while more than 80 per cent of the urban population had access to improved sanitation in 70 out of the 74 Districts, the same level of access among rural communities was only found in 17 Districts.

Maps 8.6b and 8.6c clearly show that improved sanitation facilities were least accessible in Rakhine and Shan States, with the rural-dominated Districts in Rakhine State standing out as facing by far the biggest challenges in this regard. State-wide access in Rakhine was only just over 30 per cent, and in Districts such as Sittway and Myauk U, this dropped to only about 13 per cent for those living in rural areas. Though improved sanitation was somewhat more accessible in Shan State, rates were still low in many places. For example, less than a third of the household population of rural communities in Minesat, Kunlon, Laukine, and Makman Districts, and less than one in five in Hopan had access to improved sanitation facilities.

Figure 8.4 Proportion of Population in Conventional Households with Access to Improved Sanitation, States/Regions, Urban and Rural

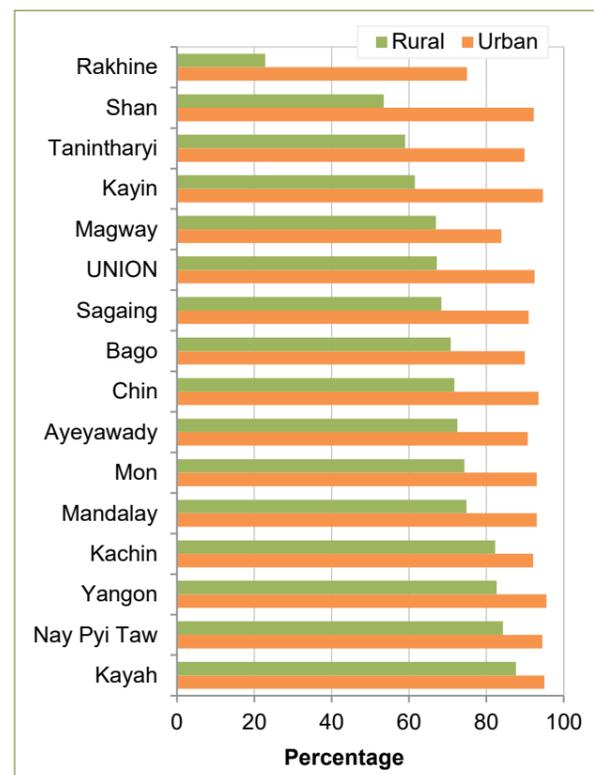


Table 8.7 Proportion of Population in Conventional Households with Access to Improved Sanitation, States/Regions and Districts, Urban and Rural

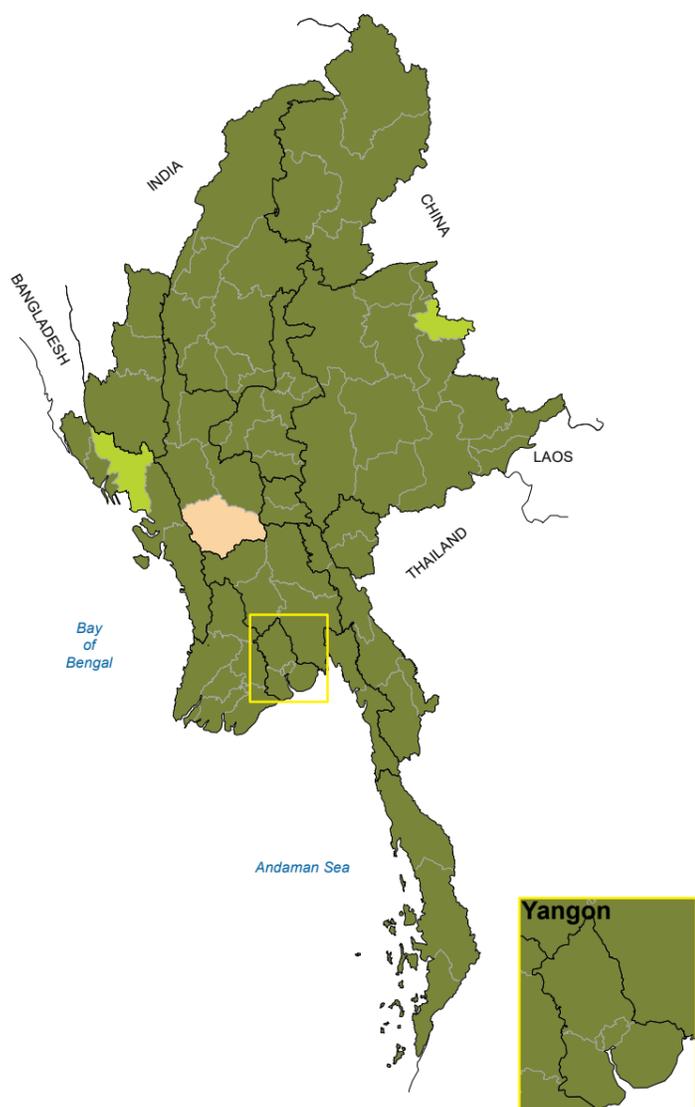
State/Region District	Proportion of Population in Households with Access to Improved Sanitation		
	Urban & Rural	Urban	Rural
UNION	74.5	92.5	67.2
Kachin	85.9	92.1	82.3
Myitkyina	81.6	91.6	67.7
Mohnyin	91.6	92.2	91.4
Bhamo	87.7	93.8	85.1
Putao	71.2	90.1	65.6
Kayah	89.4	95.0	87.6
Loikaw	91.1	95.2	89.7
Bawlakhe	79.2	93.6	75.2
Kayin	68.7	94.7	61.6
Hpa-An	67.7	92.4	63.7
Pharpon	76.9	83.7	69.7
Myawady	84.1	98.0	67.1
Kawkareik	63.1	95.4	56.3
Chin	76.1	93.5	71.7
Haka	93.7	99.2	91.1
Falam	93.0	99.2	91.6
Mindat	54.6	83.3	49.0
Sagaing	72.1	90.9	68.3
Sagaing	74.6	91.4	70.4
Shwebo	72.2	92.9	69.4
Monywa	77.9	91.8	71.4
Katha	60.9	84.4	58.0
Kalay	80.8	87.5	78.2
Tamu	95.1	97.6	92.3
Mawlaik	81.4	93.2	80.0
Hkamti	59.4	90.8	55.3
Yinmarpin	72.0	94.0	71.3
Tanintharyi	66.3	89.9	59.0
Dawei	75.0	96.0	69.3

State/Region District	Proportion of Population in Households with Access to Improved Sanitation		
	Urban & Rural	Urban	Rural
Myeik	62.0	89.1	54.5
Kawthoung	60.9	83.3	48.3
Bago	74.9	90.0	70.8
Bago	70.8	89.5	64.4
Toungoo	77.7	88.5	75.1
Pyay	82.8	92.3	79.8
Thayawady	72.1	90.3	69.2
Magway	69.5	83.9	67.0
Magway	79.2	92.5	76.0
Minbu	81.8	94.8	80.4
Thayet	34.8	40.7	33.9
Pakokku	68.2	91.5	64.6
Gangaw	92.7	97.4	92.1
Mandalay	80.9	93.0	74.8
Mandalay	89.4	93.1	77.7
Pyin Oo Lwin	78.9	94.7	72.9
Kyaukse	81.1	95.2	79.4
Myingyan	70.1	91.2	66.3
Nyaung U	66.1	87.9	60.1
Yame'thin	81.8	84.2	81.4
Meiktila	84.2	95.2	81.5
Mon	79.5	93.0	74.3
Mawlamyine	82.7	94.2	76.6
Thaton	74.6	89.5	71.6
Rakhine	31.5	75.0	22.8
Sittway	28.6	76.5	13.3
Myauk U	19.0	62.2	12.4
Maungtaw	46.0	81.5	35.1
Kyaukpyu	29.1	76.0	24.0
Thandwe	58.7	87.4	52.5

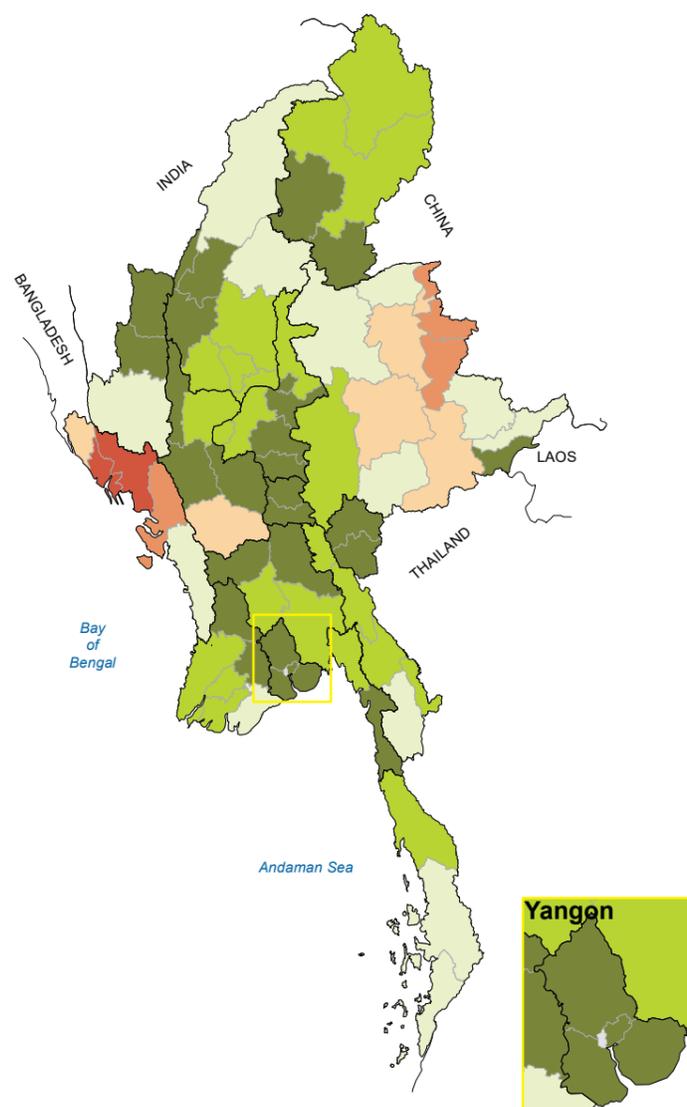
State/Region District	Proportion of Population in Households with Access to Improved Sanitation		
	Urban & Rural	Urban	Rural
Yangon	91.7	95.5	82.7
North Yangon	91.8	95.2	87.7
East Yangon	96.6	96.7	86.8
South Yangon	80.7	89.4	77.0
West Yangon	96.1	96.1	n/a
Shan	62.4	92.3	53.5
Taunggyi	79.9	94.8	74.6
Loilin	49.8	87.1	39.0
Linkhe'	66.9	88.7	57.2
Lashio	61.5	92.4	44.1
Muse	66.0	89.3	53.6
Kyaukme	64.0	93.2	58.7
Kunlon	36.7	89.6	31.1
Laukine	36.5	91.5	27.9
Hopan	25.0	65.4	19.2
Makman	30.9	94.2	27.3
Kengtung	54.3	98.7	45.5
Minesat	39.0	90.2	32.8
Tachileik	90.2	99.6	85.6
Minephyat	60.9	97.2	56.6
Ayeyawady	75.0	90.7	72.5
Pathein	75.8	92.3	72.3
Phyapon	63.2	85.4	60.0
Maubin	79.8	88.6	78.7
Myaungmya	74.9	91.8	72.7
Labutta	68.0	85.3	66.0
Hinthada	84.0	95.3	82.2
Nay Pyi Taw	87.3	94.5	84.3
Ottara (North)	88.8	95.0	86.6
Dekkhina (South)	86.0	94.1	82.2

Map 8.6 Access to Improved Sanitation, Districts

a) Urban



b) Rural



c) Urban and Rural

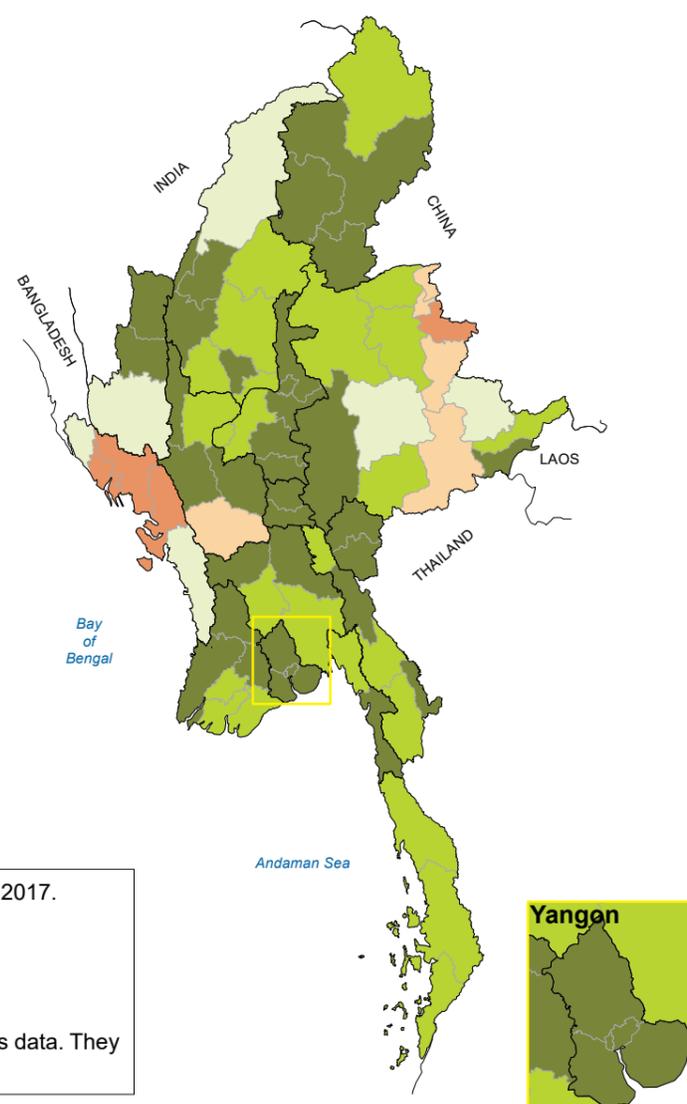
Proportion of population with access to improved sanitation

Average at Union level: 95.2 urban, 67.2 rural, 74.5 urban and rural

- 12.4 - 15.0
- 15.1 - 30.0
- 30.1 - 45.0
- 45.1 - 60.0
- 60.1 - 75.0
- 75.1 - 99.6
- No rural population (West Yangon)

- State/Region boundary
- District boundary

0 50 100 Miles
161 Km



The base population for this indicator is individuals that were living in conventional households. The indicator gives the percentage of the population that was using improved sanitation facilities, defined as flush toilets or improved pit latrines at the time of the 2014 Census.

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 Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.
 Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

- Improved sanitation** - a sanitation facility is considered to be improved if it allows for the hygienic disposal of human excreta without it coming into contact with humans (Department of Population, 2017f). For the 2014 Census:
- Improved sanitation facilities included flush toilets and water-sealed pit latrines.
 - Unimproved sanitation facilities included traditional pit latrines, buckets and no toilet (open defecation).

8.7 Access to Electricity



Sustainable Development Goal 7

Ensure access to affordable, sustainable and modern energy for all

Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services.

Indicator 7.1.1: Proportion of population with access to electricity.

This final section describes geographic and urban/rural differences in the proportion of the population living in conventional households that, as reported in the 2014 Census, had access to electricity. Of all the household amenities, it is electricity to which access was most scarce and unequal. For the Union as a whole, only one-third of the population had access to electricity for lighting and cooking purposes, and among the populations of States and Regions, access ranged from more than 70 per cent in Yangon to less than 10 per cent in Tanintharyi. In all States/Regions except for Yangon, less than 50 per cent of the population had access to electricity (Table 8.8).

The difference between access in urban areas (78.1 per cent) and access in rural areas (15.2 per cent) is striking. Figure 8.5 shows that these particularly large urban/rural differentials in levels of access were in evidence in all but one State/Region. The widest gap was in Magway, where the proportion for urban residents was 78 percentage points higher than for rural residents. Differentials in Mandalay, Nay Pyi Taw and Shan were also notable, at more than 60 percentage points. Only in Tanintharyi were access

rates for its urban and rural populations similar, but at 12.4 per cent and 7.6 per cent respectively, the very limited availability of electricity is a problem throughout the Region, in urban and rural communities alike. Indeed, Tanintharyi's urban level of access was, by a long way, the lowest of all the States/Regions.

Less than 35 per cent of the rural population in all 15 States/Regions had access to electricity. Even in Kayah, the State with the second highest overall score (48 per cent), only a third of its rural population had access to electricity. In Chin, Tanintharyi and Rakhine, electricity was available to less than 10 per cent of the rural population, and in Ayeyawady, the level of access was as low as 4.2 per cent.

The maps opposite show three striking aspects of access to electricity in Myanmar. Firstly, Map 8.7c shows the generally low access rates in Districts throughout the country. Secondly, comparing Maps 8.7a and b reveals the even greater magnitude of the urban/rural differential at the District level. Thirdly, the three maps together reflect the fact that Myanmar is, as has been noted elsewhere in this atlas, still a predominantly rural country. The low proportion of the total population with access to electricity shown in Map 8.7c is influenced much more strongly by access rates in rural areas (Map 8.7b) than by access rates in urban areas (Map 8.7a). This is also true of the pattern of access to safe drinking water and improved sanitation mapped in the previous sections.

That electricity only reached a third of the population in 2014 means that attaining Sustainable Development Goal 7 (see Box above) will require Myanmar to invest

very heavily in electricity generation and distribution infrastructure. This will pose major financial and engineering challenges, but it also represents a great opportunity for Myanmar to modernize its energy sector in ways that are innovative, efficient and sustainable.

Figure 8.5 Proportion of Population in Conventional Households with Access to Electricity, States/Regions, Urban and Rural

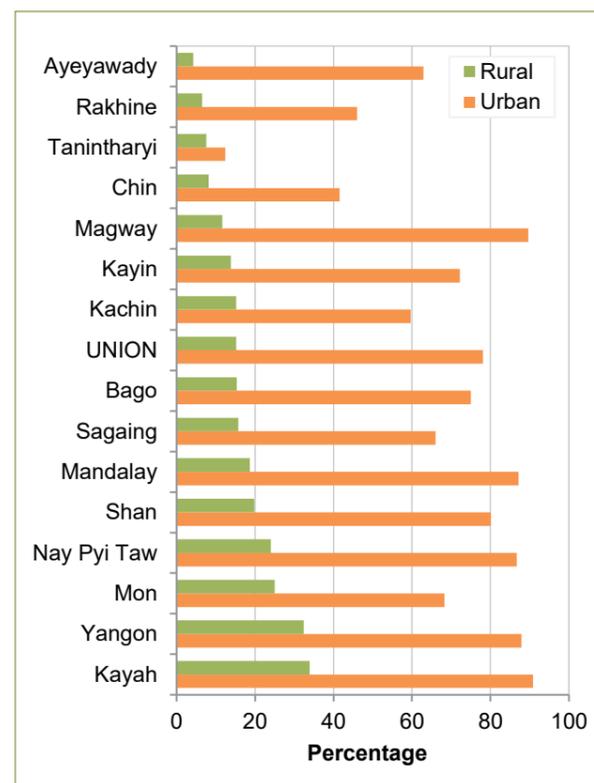


Table 8.8 Proportion of the Population in Conventional Households with Access to Electricity, States/Regions and Districts, Urban and Rural

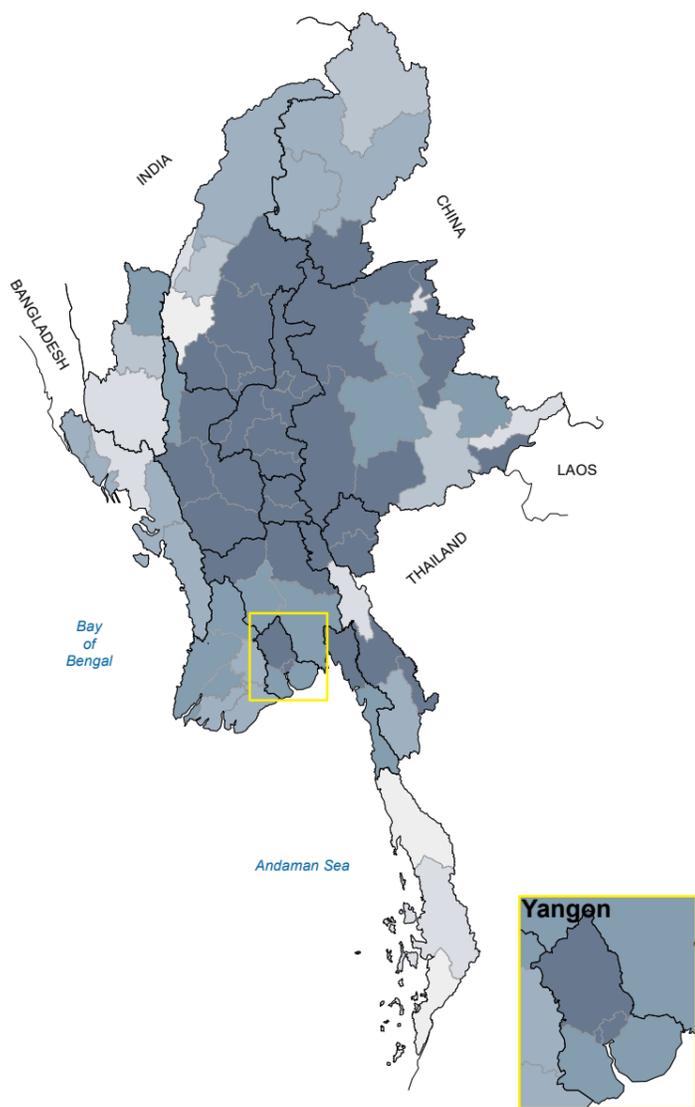
State/Region District	Proportion of Population in Households with Access to Electricity		
	Urban & Rural	Urban	Rural
UNION	33.4	78.1	15.2
Kachin	31.6	59.6	15.2
Myitkyina	38.1	58.0	10.4
Mohnyin	29.0	53.4	21.6
Bhamo	31.6	77.3	12.3
Putao	10.6	36.3	3.0
Kayah	47.9	90.9	33.9
Loikaw	51.0	92.3	37.3
Bawlakhe	27.9	80.1	13.7
Kayin	26.4	72.2	13.8
Hpa-An	26.1	83.6	16.8
Pharpon	10.0	16.1	3.6
Myawady	59.2	86.8	25.4
Kawkareik	13.8	48.6	6.5
Chin	14.9	41.5	8.2
Haka	20.8	35.9	13.7
Falam	21.1	61.5	12.1
Mindat	7.3	29.0	3.1
Sagaing	24.2	66.0	15.7
Sagaing	41.8	87.6	30.4
Shwebo	21.5	80.2	13.5
Monywa	42.7	85.4	23.0
Katha	25.3	92.5	17.0
Kalay	6.8	11.6	5.0
Tamu	15.9	18.7	12.8
Mawlaik	9.6	39.8	5.9
Hkamti	9.5	46.4	4.6
Yinmarpin	20.3	79.1	18.2
Tanintharyi	8.7	12.4	7.6
Dawei	5.0	7.0	4.5

State/Region District	Proportion of Population in Households with Access to Electricity		
	Urban & Rural	Urban	Rural
Myeik	11.8	18.2	10.1
Kawthoung	7.0	8.5	6.2
Bago	28.2	75.0	15.4
Bago	29.2	69.9	15.0
Toungoo	30.5	78.8	18.3
Pyay	37.2	85.0	22.0
Thayawady	16.5	69.9	8.0
Magway	23.1	89.6	11.6
Magway	25.3	93.8	8.5
Minbu	23.4	89.2	16.3
Thayet	19.3	86.5	8.7
Pakokku	25.7	90.4	15.6
Gangaw	11.7	60.9	5.6
Mandalay	41.7	87.2	18.7
Mandalay	78.7	89.0	46.7
Pyin Oo Lwin	37.4	77.8	22.1
Kyaukse	29.2	87.4	22.2
Myingyan	23.9	87.7	12.2
Nyaung U	30.0	87.8	14.1
Yame'thin	14.3	83.0	5.8
Meiktila	28.8	89.0	13.9
Mon	37.0	68.3	25.0
Mawlamyine	37.3	65.9	22.0
Thaton	36.5	75.6	28.6
Rakhine	13.1	46.0	6.5
Sittway	17.8	55.6	5.7
Myauk U	7.6	24.9	5.0
Maungtau	28.3	51.3	21.3
Kyaukpyu	10.6	51.8	6.1
Thandwe	15.4	50.4	7.8

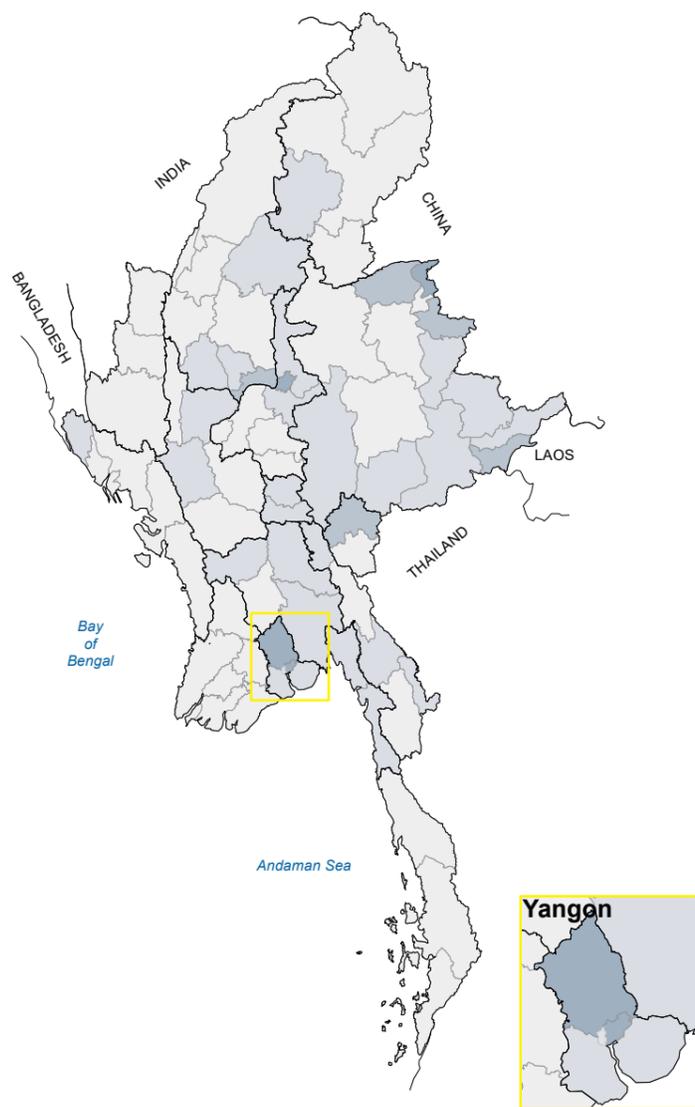
State/Region District	Proportion of Population in Households with Access to Electricity		
	Urban & Rural	Urban	Rural
Yangon	71.2	87.9	32.4
North Yangon	67.3	83.5	47.3
East Yangon	90.0	90.5	46.2
South Yangon	31.0	68.4	15.3
West Yangon	97.5	97.5	n/a
Shan	33.7	80.1	19.8
Taunggyi	35.7	87.9	17.0
Loilin	21.6	70.3	7.6
Linkhe'	40.4	83.5	21.2
Lashio	32.3	73.9	9.0
Muse	52.6	86.2	34.7
Kyaukme	23.8	75.9	14.3
Kunlon	6.6	21.4	5.1
Laukine	58.8	95.4	53.1
Hopan	42.8	87.7	36.4
Makman	30.8	96.9	27.0
Kengtung	29.1	65.0	22.0
Minesat	20.9	39.9	18.6
Tachileik	59.6	89.8	44.7
Minephyat	23.2	28.8	22.6
Ayeyawady	12.3	62.9	4.2
Pathein	15.0	63.4	4.4
Phyappon	10.4	58.0	3.4
Maubin	9.4	59.7	3.3
Myaungmya	11.2	68.0	3.7
Labutta	6.9	46.4	2.3
Hinthada	16.2	72.0	7.1
Nay Pyi Taw	42.5	86.7	24.0
Ottara (North)	35.7	81.7	19.1
Dekkhina (South)	48.5	90.2	28.7

Map 8.7 Access to Electricity, Districts

a) Urban



b) Rural

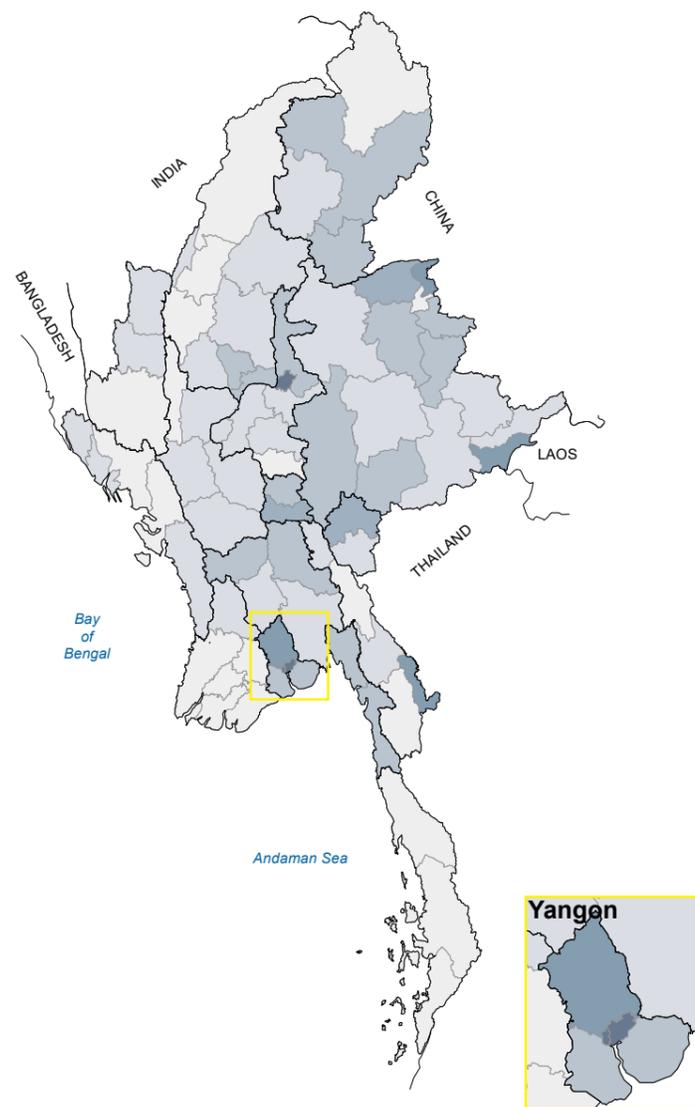
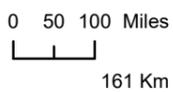


c) Urban and Rural

Percentage of population with access to electricity
 Average at Union level: 78.1 urban, 15.2 rural, 33.4 urban and rural

- 2.3 - 15.0
- 15.1 - 30.0
- 30.1 - 45.0
- 45.1 - 60.0
- 60.1 - 75.0
- 75.1 - 97.5
- No rural population (West Yangon)

- State/Region boundary
- District boundary



The base population for this indicator is individuals that were living in conventional households. The indicator gives the percentage of the population that was using electricity as its main source for lighting or cooking at the time of the 2014 Census.

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Source of statistical data: 2014 Population and Housing Census of Myanmar.
 Source of geographic data: Department of Population GIS Unit.

Administrative boundaries are shown on maps in this atlas purely for the purpose of presenting census data. They may not reflect the true location of administrative boundaries on the ground.

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