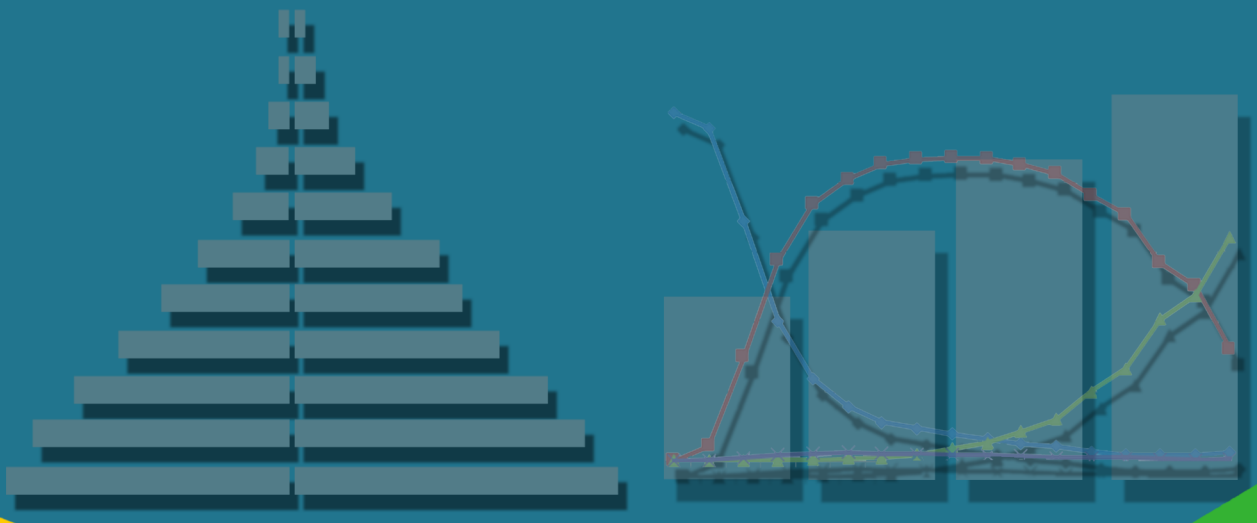
THE REPUBLIC OF THE UNION OF MYANMAR

The 2019 Inter-censal Survey

The Union Report



Department of Population
Ministry of Labour, Immigration and Population

December 2020

The 2019 Inter-censal Survey

The Union Report

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Map of Myanmar by State/Region and District

Foreword

The 2019 Inter-censal Survey (2019 ICS) was implemented by the Ministry of Labour, Immigration and Population, in collaboration with its line ministries and development partners, in four stages starting November 2019 until January 2020. It was the first in the country and was carried out to update the information collected during the 2014 Population and Housing Census. Moreover, it was aimed to provide baseline data for the National Indicator Framework (NIF) of the Myanmar Sustainable Development Plan (MSDP), assess the country's progress on the targets set for the Sustainable Development Goals (SDGs), and serve as a preparation for the 2024 Population and Housing Census.

The 2019 ICS was under the guidance of the Central Inter-censal Survey Committee which was responsible for providing policy guidelines for the planning and implementation of the project. Under the Central Committee, State/ Region/ Nay Pyi Taw, District and Township Level Committeesa were formed to supervise the implementation of the project at the different levels.

The data enumeration was carried out using the Computer-Assisted Personal Interviewing (CAPI). Young volunteers from respective townships were recruited as enumerators and supervisors.

This report provides up-to-date information on demographic and socio-economic characteristics of the population and households of Myanmar. It presents reliable estimates of key indicators at national, state/region and district levels by urban and rural areas. This report is the second in a series of publication of the 2019 ICS after the Provisional results was released earlier this year. More publications on thematic areas will follow.

I sincerely hope that the information in this report will form a critical base for planning, policy development and decision-making in various sectors including its effective use for the implementation of sectoral development plans of the Government and socio-economic reform processes. I also believe that the information can also be used for responding to, mitigating, and addressing the COVID-19 pandemic.

The contribution from several organizations and professionals made possible the successful implementation of 2019 ICS. My first gratitude goes to the Government of Myanmar for the approval and allocation of the budget for the project and to Nay Pyi Taw Council, State/Region government for their support. Furthermore, I wish to express my sincere thanks to the members of the Central Inter-censal Survey Committee and of the committee

at every administrative level who actively coordinated and cooperated in this endeavor. Likewise, to the Ward/VT administrators for their support during the field activities.

My deepest appreciation for the much needed assistance in the form of funding, technical and material support provided to the Ministry by the Development Partners, namely, the United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), World Bank, Asian Development Bank (ADB), One Map Myanmar and, VSO Myanmar.

I would also like to thank the State/Region/District/Township Immigration and Population officials who actively participated in the implementation of 2019 ICS and to the crucial role played by the technical team of the Department of Population in all the phases of the survey. My heartfelt gratitude goes to the youth volunteers who worked tirelessly as supervisors and enumerators.

My warmest gratitude is also extended to the people of Myanmar for their support and cooperation during the enumeration, without them, the project will not succeed.

H.E U Thein Swe

Union Minister

Ministry of Labour, Immigration and Population

The Republic of the Union of Myanmar

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Acronyms and Abbreviations

ADB	Asian Development Bank
AFLB	Age at Frist Live Birth
ASFR	Age-specific Fertility Rate
CAPI	Computer-Assisted Personal Interviewing
CBR	Crude Birth Rate
CDR	Crude Death Rate
CV	Coefficient of Variation
DOP	Department of Population
EA	Enumeration Area
GFR	General Fertility Rate
GIS	Geographic Information System
GTHS	Government Technical High School
ICS	Inter-censal Survey
MSDP	Myanmar Sustainable Development Plan
NIF	National Indicator Framework
PSR	Potential Support Ratio
SDGs	Sustainable Development Goals
SE	Standard Error
SMAM	Singulate Mean Age at Marriage
TFR	Total Fertility Rate
TMFR	Total Marital Fertility Rate
TVET	Technical and Vocational Education and Training
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UN DESA	United Nations Department of Economic and Social Affairs
WASH	Water, Sanitation and Hygiene

Figures at a Glance

Indicators	
Number of States/Regions	15
Number of districts (enumerated)	71
Number of districts (not enumerated)	5
Total population in conventional households only	
Both sexes	51,144,607
Male	23,916,836 (46.8%)
Female	27,227,771 (53.2%)
Percentage of urban population	28.8%
Annual population growth rate	0.88%
Sex ratio (conventional household population only)	88 males per 100 females
Median age	28.2
Total fertility rate	2.0
Total marital fertility rate	3.9
Median age at first marriage (10-49)	21.2
Median age at first live birth (10-49)	23.2
Adolescent fertility rate (births per 1,000 women aged 15-19)	20.3
Infant mortality rate (deaths per 1,000 live births)	31.0
Under five mortality rate (deaths per 1,000 live births)	37.7
Life expectancy at birth	
Both sexes	69.4
Male	66.5
Female	73.3
Number of private households	11,162,510
Percentage of female headed households	23.2%

Indicators	
Mean household size	4.6
Percentage of population by age group	
Children (0 - 14 years)	27.2%
Economically productive (15 - 59 years)	62.8%
Economically productive (15 - 64 years)	66.4%
Older population (60+ years)	10.1%
Older population (65+ years)	6.4%
Dependency ratios	
Total dependency ratio	59.4
Child dependency ratio	43.3
Older age dependency ratio	16.1
Ageing index	
60+ years	37.2
65+ years	23.7
Had a birth certificate (15 years and below)	81.7%
Had a bank account (18 years and over)	13.0%
Literacy rate (persons aged 15 years and over)	
Both sexes	89.1%
Male	92.4%
Female	86.3%
Numeracy rate (persons aged 15 years and over)	
Both sexes	89.5%
Male	92.4%
Female	87.1%
People with disability	
Any form of disability	12.8%

Indicators	
Seeing	6.3%
Hearing	2.4%
Walking/ Climbing steps	5.4%
Remembering/ Concentrating	4.4%
Self-care	1.9%
Communication	1.6%
Labour force participation	
Age 10 and over	56.7%
Age 15 and over	63.2%
Age 15 - 64	66.7%
Employment to population ratio	
Age 10 and over	55.2%
Age 15 and over	61.5%
Age 15 - 64	64.9%
International migration	
Emigration by broad aged group	
0-14	0.7%
15-24	28.7%
25-34	41.8%
35-44	22.1%
45-54	5.9%
55-64	0.7%
65+	0.1%
Main reasons for leaving country of International migrants	
Employment/ in search for employment/ Business	95.9%
Education	2.0%
Marriage	0.8%
Followed family	1.2%

Indicators			
Other	0.1%		
Type of housing unit			
Condominium/ Apartment/ Flat	5.7%		
Bungalow/ Brick house	10.6%		
Semi-pucca house	13.1%		
Wooden house	40.0%		
Bamboo house	26.6%		
Hut (2-3 years)	3.0%		
Hut (1 year)	0.6%		
Other	0.5%		
Ownership of housing unit (Tenure)			
Owner	90.3%		
Renter (Government)	0.7%		
Renter (Private)	6.1%		
Provided free (Individual)	1.6%		
Provided free (Government quarter)	0.8%		
Provided free (Private company quarter)	0.4%		
Other	0.1%		
Material for housing	Wall	Floor	Roof
Dhani/ Theke/ Palm/ In leaf	7.6%	-	12.9%
Bamboo	37.8%	13.6%	0.4%
Earth	0.1%	8.2%	*
Wood	24.2%	50.8%	0.3%
Corrugated sheet	1.6%	-	84.0%
Tile/ Brick/ Concrete	27.8%	27.4%	2.2%
Other	0.8%	*	0.1%
Number of room(s)			
One	16.5%		

Indicators	
Two	33.9%
Three	28.8%
Four and above	20.8%
Main source of energy for lighting	
Electricity (Government grid/ border country grid/ community based grid)	53.0%
Generator (Private)	3.5%
Solar system energy	29.1%
Wind and water mill	0.8%
Kerosene	0.5%
Candle	4.3%
Rechargeable battery	8.7%
Other	0.1%
Main source of energy for cooking	
Electricity (Government grid/ border country grid/ community based grid)	37.6%
Generator (Private)	0.2%
Solar system energy	0.4%
Wind and water mill	0.1%
Kerosene	*
LPG	0.5%
Biogas	1.1%
Firewood	53.3%
Charcoal	6.4%
Coal	0.2%
Straw/ Grass	*
Other	0.1%
Main sources of drinking water	
Piped water (into Dwelling/ Compound/ Yard/ Plot/ Neighbour/ Public tap/ Standpipe)	16.9%

Indicators	
Borehole or tube well	27.3%
Protected well/ Spring	14.1%
Bottled/ Home water purifier	21.7%
Rainwater	2.0%
Total improved water sources	*82.1%*
Unprotected well/ Spring	3.2%
Tanker truck/ Small cart with drum	2.0%
Surface water (Pool, River, Stream, Dam, Lake, Pond, Canal, Irrigation channel)	12.4%
Other	0.3%
Total unimproved water sources	*17.9%*
Status of drinking water services	
Safely managed drinking water service	41.4%
Basic drinking water service	40.3%
Limited drinking water service	0.4%
Unimproved drinking water	5.5%
Surface water	12.4%
Type of toilet facilities	
Flush (to piped sewer/ septic tank)	26.1%
Water seal (Improved pit latrine) or Flush to pit latrine	59.2%
Ventilated improved pit latrine	1.6%
Pit latrine with slab	4.5%
Total improved sanitation facilities	*91.4%*
Traditional pit latrine or Pit latrine without slab/ open pit	1.6%
Bucket (Surface latrine) or Container based sanitation/ Hanging toilet or latrine/ Flush to don't know where or open drain	1.9%
Other	0.2%
None or Open defecation (No facility/ Bush/ Field)	4.9%
Total unimproved sanitation	*8.6%*

Indicators	
Status of sanitation services	
Basic sanitation service (at least)	79.6%
Limited sanitation service	11.9%
Unimproved sanitation	3.6%
Open defecation	4.9%
Hygiene (Handwashing service)	
Basic handwashing service	72.3%
Limited handwashing service	22.3%
No service	4.9%
No permission to see or other	0.5%
Solid waste disposal	
Collected by formal service provider	17.5%
Collected by informal service provider	3.5%
Disposed of in designated area/ within household/ buried/ burned	56.7%
Disposed of elsewhere & others	22.3%
Availability of information and communication amenities	
Radio	19.1%
Television set	59.3%
Landline/ Fixed-line telephone	4.3%
Mobile phone	85.8%
Computer	5.4%
Internet access at home (through landline or mobile connection)	56.0%
% with none of the items	*9.4%*
% with all of the items	*0.3%*
Availability of transportation amenities	
Car/ Pickup/ Truck/ Van	7.8%

Indicators	
Motorcycle/ Moped/ Tuk tuk	59.4%
Bicycle	36.7%
Four-wheel tractor	3.3%
Canoe/ Boat	3.5%
Motor boat	3.1%
Cart (bullock)	16.2%

Note: * Less than 0.1 percent

Chapter 1

Introduction

Chapter 1 Introduction

1.1 Background of the survey

The Ministry of Labour, Immigration and Population has successfully conducted the 2019 Inter-censal Survey (ICS) in November 2019. This was the first Inter-censal Survey undertaken by the government in response to the pressing demand for up-to-date data crucial for capturing several demographic changes happening in the country.

The 2019 ICS aims to capture the transformations happening in Myanmar and incorporate them into the different socio-demographic and economic plans for the country's development. Likewise, it aims to provide baseline data for the National Indicator Framework (NIF) of the Myanmar Sustainable Development Plan (MSDP) as well as to assess the country's progress on the targets set for the Sustainable Development Goals (SDGs). The survey also served as a means to sustain the capacity built during the 2014 Census in preparation for the next Population and Housing Census in 2024.

The ICS was designed to produce district level data to provide national and local managers, policy makers, programme and project monitors/evaluators with updated information on population related indicators for evidence-based plans and policies, monitoring and evaluation. Results will also be used as inputs for generating accurate population estimates during non-census years.

1.2 Objectives of the survey

The 2019 Inter-censal Survey aims:

a. To produce updated population and socio-economic data for evidence-based policies, plans and programmes.
b. To determine population growth and changes in population structure in terms of age and sex distribution and other socio-demographic and economic characteristics of the population.
c. To provide inputs for monitoring the progress of projects, implementation of policies, programs, and plans such as the Myanmar Sustainable Development Plan, SDGs, and others.

1.3 Survey organization

Conducting the 2019 ICS requires the development of a clear supervisory, legal, institutional and management framework, which outlines the survey guiding and administration structure, key activities, responsibilities and critical dates, as well as capacity enhancement and resource mobilization.

In order to ensure smooth conduct of the survey several committees were formed. At the Union level, the Central Committee was established. Committees at each State/Region, District, Township and relevant Ward/Village Tract Committees were likewise formed. There were three levels of Inter-censal Survey operations management. Each level provided support to supervisors and enumerators in the following areas:

a. **Household Leaders**: Ten-household leaders and hundred-household leaders, in collaboration with the ICS Committee at the Ward/Village Tract, assisted in the completion of enumeration. They made appointments with the sample households for interviews and arranged security for supervisors and enumerators, whenever necessary.
b. **State/Region/District/Township Committee Members**: Management and service/ support programs at the District/Township level was provided by the District/Township members of the ICS Committee. They reported the progress of enumeration to the Officer-in-charge of State/Region ICS Committee who also monitored the distribution and retrieval of mobile tablets and accessories.
c. **DOP HQ**: The Officer-in-charge and technical staff from the Department of Population and the district-level instructor assisted the supervisors and enumerators in addressing technical issues related to the survey implementation.

Enumeration teams were formed in every township. On average, each enumeration team consisted of one supervisor and up to four enumerators. However, some teams had less than four enumerators because some townships had relatively fewer number of sample enumeration areas. Each team covered an average of eight enumeration areas.

1.4 Enumeration area mapping

The Mapping and Structure/Household Listing activity is one of the major tasks in any data collection undertaking. This guides the enumerators on the coverage of their assigned Enumeration Areas (EAs) (no duplication or missing households) and helps in the identification of the sample households. Enumeration area maps for 2019 ICS, using GIS technology, were developed based on enumeration area maps of 2014 Population and Housing Census. For the Listing of Structures/Households and mapping , there were two levels of trainings conducted: the first level training (Training of Trainers) which was held at DOP, Central Office in Nay Pyi Taw; and the second level training for the staff of Immigration and Population offices which was conducted at the respective State/Region offices.

The Mapping and Structure/Household Listing started on 1st April 2019 and completed in September 2019. Seventeen teams from DOP were sent to the field to work first on the sample EAs of Nay Pyi Taw to gain sufficient experience before they proceed to the rest of the sample EAs. A total of 4,316 EAs were selected for the 2019 ICS of which 4,028 EAs (93%) were successfully covered.

1.5 Development of questionnaire and manual

The list of indicators for 2019 ICS was developed based on the objectives of the ICS as well as on the results of consultative process (data user consultation workshop and bilateral consultations) with concerned ministries/departments. It also adhered to the guidelines stipulated in the United Nations' Principles and Recommendations for the 2020 Round of Population and Housing Censuses, and past census experiences in Myanmar and other countries. Based on the final list of indicators, the questionnaire was developed through the assistance of experts from UNFPA, UNICEF, ADB and VSO. After the draft questionnaire was developed, another consultative workshop was held where comments and suggestions from the workshop were considered as bases for the finalization of the questionnaire. Manuals for supervisors and enumerators were then developed.

The 2019 ICS collected individual information on demographic, migration, education, labour force participation, fertility, mortality, disability, older population, participation in community activities, well-being and support received by older population and people with disability, as well as housing and household information such as presence of household equipment or assets/goods in the household, sources of drinking water, sanitation, and hygiene. In total, the questionnaire contained 110 questions (Annex 3).

1.6 Preparing the CAPI systems for data collection using mobile tablets

After finalizing the questionnaires, the data processing team from DOP worked with the expert from the World Bank in developing the Computer-Assisted Personal Interviewing (CAPI) system for data collection using computer tablets, setting the equipment, installing the software, testing the data collection system, training on how to use the tablet, preparing and setting the Head Office's server for networking/storage of the collected data. A series of testing was conducted in September 2019 prior to the finalization of the census questionnaire and the CAPI system.

1.7 Recruitment and training of field staff

Young volunteers from respective townships were recruited as enumerators and supervisors through advertisements/local immigration offices. The appointment of enumerators and supervisors was done by the township Immigration and Population Officers. There were two levels of trainings held: the first level was conducted for the core trainers at the Department of Population. They served as trainers for enumerators'/supervisors' trainings. Training of field staffs for the survey was conducted in four phases during the period from 21st October 2019 to 13th January 2020. Trainees per phase were trained for 14 days each. The training consisted of a combination of classroom training and practical exercises. There were altogether 2,039 enumerators and 617 supervisors recruited and trained.

1.8 Data enumeration

The 2019 ICS was implemented on staggered basis:

a. First stage: Enumeration in Kachin State and Chin State (hard-to-reach areas) and Nay Pyi Taw (accessible) from 18th November to 1st December 2019

b. Second stage: Enumeration in Kayah State, Kayin State, Mon State, Tanintharyi Region, and Ayeyawady Region from 11th to 24th December 2019

c. Third stage: Enumeration in Bago Region, Sagaing Region and Magway Region from 2nd to 15th January 2020

d. Fourth stage: Enumeration in Yangon Region, Mandalay Region, Rakhine State, and Shan State from 16th to 29th January 2020

Mobile tablets were used in collecting responses from the Survey . On average, one supervisor was assigned to 4 enumerators. The ICS covered only Conventional Households and hence, did not cover those institutional and homeless population. Out of 4,316 sample EAs, 3,960 EAs were enumerated (92%). Due to security concern, out of 273 sample EAs in Rakhine State, only 72 EAs were covered. Nationally representative samples of 548,553 individuals in 132,092 selected households were interviewed.

1.9 Data processing

The mobile tablet devices used in the survey were running on Android 4.0 system and up. CSEntry 7.2.1 software was used in these devices to capture the responses from the interviews while CSPro 7.2 software was used to design the consolidation processat the Headquarter. CSWeb was installed on the server at the Headquarter and all communication between the field and the Headquarter was done through the CSWeb server.

Data entry application was developed with internal consistency checks and validations using CSPro software. Data synchronization process was implemented as follows; (i) In-field supervisors assigned the sample households to enumerators using Bluetooth. The enumerators conducted interviews after receiving the household assignments, then, sent the collected data to the In-field supervisors via Bluetooth. (ii) In-field supervisors received and checked the data from enumerators. To check and rectify inconsistencies in the data file, supervisors conducted re-interviews on around ten percent of the total number of households assigned to them. (iii) Subsequently, In-field supervisors transmitted the completed data by Enumeration Areas to the server via mobile network. (iv) At Headquarter, In-office supervisors were assigned to monitor the data coming from the field and produced the data collection status based on the number of EAs completed, generated quality control tables; and regularly backed-up the data.

At the Headquarter, staffs coded open responses such as occupation and industry then integrated them into the main data file. Data editing programs were developed according to the editing rules prepared by the subject matter specialists to ensure good quality of data collected. Statistical tables were generated using CSPro software while SPSS and STATA software for analysis.

1.10 Provisional results

The 2019 ICS provisional results were launched on 31st August 2020 to fulfill the need of data to measure progress of national development plans as well as to establish a baseline to assess the impact of COVID-19 and plan for response. The report presented 10 sessions including, Summary, Population Characteristics, Education, Labour Force, Migration, Fertility and Mortality, Disability, Older Population, Housing and Household Characteristics, Water, Sanitation and Hygiene. The provisional results are available online at https://www.dop.gov.mm/ and https://myanmar.unfpa.org/en/publications

1.11 Quality assurance to improve data quality

The planning and implementation of the 2019 ICS took into consideration a number of strategies and activities to ensure reliable, quality and timely data. Designing of the census questionnaires through field testing and extensive consultative processes with government ministries/departments, development partners, universities and research institutions and other data users ensured that the information collected from the survey were relevant to data users and conformed to international standards and guidelines. In addition, monitoring teams comprised of high ranking officials from DOP and UNFPA visited the fields at the beginning of the listing and enumeration phase to oversee the operations and to ensure that the field work was conducted as planned and that rules and guidelines were followed as prescribed.

Chapter 2

Sampling Design, Estimation and Evaluation

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2.1 Sampling design

The sample for the the 2019 Inter-censal Survey (ICS) is designed to provide reliable estimates of key indicators for all districts of Myanmar at the mid-point between the decennial censuses. A stratified two-stage sample design is used for selecting the sample for the ICS. The primary sampling units (PSUs) selected at the first stage are the enumeration areas (EAs) defined for the 2014 Myanmar Census of Population and Housing, which provided population counts for wards and village tracts as of 29th March 2014. The EAs are small operational areas with well-defined boundaries identified on maps that were used for the census enumeration. They have an average of about 135 households each (140 for urban EAs and 133 for rural EAs). There are a total of about 79,240 EAs in Myanmar. These EAs were stratified by urban and rural areas within each district.

Myanmar had a total of 74 districts in 2014 Census. The districts of Laukine, Hopan and Makman in Shan State were excluded from the frame for the ICS because those areas were not accessible for the enumeration. Hence, the 71 districts of the country served as primary domains of the survey and a total of 4,316 EAs were selected at the first sampling stage for the ICS, corresponding to about 5.36% of the EAs in the Census frame.

The sample EAs were first allocated to the districts in proportion to the square root of the number of households in each district from the 2014 Myanmar Census. This type of allocation increases the sample for the smaller districts and decreases the sample for the larger districts compared to a proportional allocation. The resulting allocation was then adjusted to have a minimum of 32 sample EAs in most of the smallest districts, and a maximum of 120 sample EAs in the largest districts. Then within each district, the specified number of sample EAs was allocated to the urban and rural strata proportionally to the number of households in the Census frame.

Within each stratum the sample EAs were selected systematically with probability proportional to size (PPS) based on the number of private households in each EA from the 2014 Census frame. Within each of these sample EAs a new listing of households is being conducted to provide an updated sampling frame for selecting the households at the second sampling stage. A sample of 35 households were selected from the listing for each sample EA, to be interviewed for the ICS. A CSPro program was developed by to select a systematic sample of 35 households based on the total number of households listed in each EA.

In 2019 ICS, a total of 4,316 EAs were selected at the first-stage of sampling. Of these, 4,028 were listed but the actual data collection were made in only 3,960 EAs due to operational difficulties encountered

at the time of the survey. Of the 3,960 EAs actually enumerated, a response rate of 95% among sampled households was achieved.

2.2 Sampling weights

The sampling weights in general were generated as a product of 3 components namely: (a) the base weights, (b) non-response adjustment weight, and; (c) post-stratification weights. That is, the final survey weights for household *j* in EA *i* from stratum *h,* is conceptually calculated as:

$$w_{hij} = w_1 \times w_{2.1} \times w_{3.12} \tag{1}$$

Where: w_1 is the base-weights; $w_{2.1}$ is the non-response adjustment; and, $w_{3.12}$ is the post-stratification adjustment weight.

2.2.1 Base weights

The base weights were calculated as the inverse of the selection probabilities. Thus, for the sampling design utilized for the 2019 ICS the selection probabilities can be calculated as:

$$p_{hij} = a_h \frac{M_{hi}}{\sum_{i=1}^{a_h} M_{hi}} \times \frac{n_{hi}}{N_{hi}} = a_h \frac{M_{hi}}{\sum_{i=1}^{a_h} M_{hi}} \times \frac{35}{N_{hi}} \tag{2}$$

In here, the subscript *h* refers to the stratum in a district, *i* refers to the sampled EA, and *j* refers to the sample household. In addition, a_h refers to the number of EAs selected from stratum *h*. M_{hi} refers to the total number of households enumerated in the 2014 Census in EA *i* from stratum *h*. N_{hi} is the total number of households listed in 2019. Given the selection probability, the base weights was then calculated as $1/ p_{hij}$.

2.2.2 Nonresponse adjustment weights

When all sampled EAs are enumerated, the base weights are adjusted to take into account nonresponse. However, in the case of the 2019 ICS, there were a few districts where non-enumerated EAs is quite significant. Hence, the strategy used to adjust for non-response is two-fold: (1) adjust nonresponse at the first stage of sampling, and (2) adjust for nonresponse at the second stage of sampling.

At the first stage of sampling, the first-stage sampling weight adjusted for nonresponse was calculated as

$$w_{hi}^{*} = w_{hi} \times 1 / r_{1h}, \quad w_{hi} = \frac{\sum_{i=1}^{a_h} M_{hi}}{a_h M_{hi}}, \quad r_{1h} = \frac{\sum_{i=1}^{a_h} I_{hi} w_{hi}}{\sum_{i=1}^{a_h} w_{hi}} \tag{3}$$

In here, w_{hi} is the inverse of the probability that a particular EA is selected in stratum *h*; r_{1h} is the weighted response rate at the first stage of sampling (i.e. the survey was successfully conducted in the selected EA in stratum *h*) and I_{hi} is the indicator function assuming a value of 1 if the survey was conducted in EA *i* from stratum *h* and assuming a value of 0 otherwise.

After calculating the first-stage weights, the sampling weight adjusted for nonresponse was then calculated as

$$w_{hij}^{*} = w_{hi}^{*} \times \frac{N_{hi}}{35} \times \frac{35}{n_{hi}^{*}} \tag{4}$$

Where n_{hi}^{*} is the actual number of sample households interviewed from sampled EA *i* in stratum *h*.

2.2.3 Post-stratification weights

Individual weights were first generated. Note that in the 2019 ICS, all members of the conventional household were enumerated. To ensure that the estimated population distribution will conform to the projected population by state, gender and 5-year age-group, the sampling weight as shown in (4) was then adjusted to the projected population counts in conventional households for 2019. In particular, the sampling weights were adjusted based on the projected population in conventional households by state, gender, and 5-year age-groups (0-4, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70+). Initially, the calculated sampling weight for a given household, w_{hij}^{*}, was assigned to all members of the interviewed household. That is, the initial sampling weight for individual *k*, is given by $w_{hijk}^{*} = w_{hij}^{*}$. The final weight for each individual was calculated as:

$$w_{hijk}^{**} = w_{hijk}^{*} \times \frac{P_{[G]}}{\hat{P}_{[G]}} \tag{5}$$

$P_{[G]}$ is the projected population for group G. In here, the group G refers to a specific age-group, gender in each state. $\hat{P}_{[G]}$ is the estimated population in group G and is calculated as $\hat{P}_{[G]} = \sum_{hijk \in G} w_{hijk}^{*}$.

Once the final person-weights were calculated using (5), the principal person weight approach was utilized to calculate the final household weight to ensure internal consistency with the results. In principle, the principal person is the person that is present in all sample households. For the 2019 ICS, the final person weight attached to the designated household weight will be used as the final household weight. That is, the final household weight, denoted by w_{hij}^{**}, is simply $w_{hij}^{**} = w_{hij1}^{**}$ where w_{hij1}^{**} was the final person weight of the principal person which in this case is the Household head.

2.2.4 WASH component

In addition to the socio-demographic characteristics collected from a sample of households, a sub-sample of households were selected for purposes of measuring actual drinking water quality in terms of measuring fecal coliform levels. That is, in each sampled EA, a sub-sample of household were drawn from the original sample household with equal probability at a sampling rate of about 1 in every 7 sample households. Thus, for this component, the appropriate household sampling weight, denoted by w_{hij}^{***} was generated as:

$$w_{hij}^{***} = w_{hij}^{**} \times \frac{n_{hi}^{*}}{n_{hi}^{**}} \tag{6}$$

Where n_{hi}^{**} is the number of sub-sampled households in EA *i* from stratum *h*.

The sum of weights was obtained for all sub-sampled households should give us an estimate of the total number of households. However, some small changes were observed between the estimated total number of households from the full sample and the sub-sample. Such changes may be due to random error. To achieve internal consistency between the full sample and the sub-sample (second-phase sample), the weight given in (7) were further calibrated so that such consistency can be achieved beginning at the state level. The calibrated weights would be the final household weight for this component and is given by:

$$\tilde{w}_{[S]hij}^{***} = w_{dhij}^{***} \times \frac{\sum_{d=1}^{D}\sum_{h=1}^{L_d}\sum_{i=1}^{a_{dh}^{'}}\sum_{j=1}^{n_{dhi}^{*}} w_{dhij}^{**}}{\sum_{d=1}^{D}\sum_{h=1}^{L_d}\sum_{i=1}^{a_{dh}^{'}}\sum_{j=1}^{n_{dhi}^{**}} w_{dhij}^{***}} \tag{7}$$

Note that the calibration process is done at the state level and hence the subscript [*S*] is added to denote the state while the subscript *d* is added to denote the district in state [*S*].

2.3 Estimation procedure

Most survey estimates are in the form of totals or ratios. Since one of the primary objectives of the survey is to generate estimates at the district level, then the estimator for the population totals and ratios at the district level is given by:

$$\hat{Y}_d = \sum_{h=1}^{L}\sum_{i=1}^{a_h^{'}}\sum_{j=1}^{n_{hi}^{'}} w_{hij}^{**} y_{hij} \tag{8}$$

$$\hat{R}_d = \frac{\hat{Y}_d}{\hat{X}_d} = \frac{\sum_{h=1}^{L}\sum_{i=1}^{a_h'}\sum_{j=1}^{n_{hi}'} w_{hij}^{**} y_{hij}}{\sum_{h=1}^{L}\sum_{i=1}^{a_h'}\sum_{j=1}^{n_{hi}'} w_{hij}^{**} x_{hij}} \quad (9)$$

L refers to the total number of strata in district *d*, a_h' is the total number of sample EAs in stratum *h*, n_{hi}' is the total number of sample households in EA *i* from stratum *h,* and w_{hij}^{**} is the final household weight. The quantities y_{hij} and x_{hij} are the values of the variables *y* and *x* for each sample unit. Note that (9) can be used in the case of estimating proportions by setting $x_{hij} = 1$ and y_{hij} to 1 if the sample unit possess the attribute of interest and 0 otherwise . By setting $x_{hij} = 1$, (9) can be used in estimating means.

2.4 Estimation of standard errors

Standard errors are measures of precision attached to the estimates which can give us indicators as the degree of usefulness of such estimates. Technically, the standard error of an estimate is defined as the positive square root of its variance. There are several ways of estimating the variance of an estimator. Statistical software such as SPSS, Stata, and SAS include routines for estimating them. The most common method of estimating the variance of the population total employs the primary cluster method and is calculated as:

$$s^2(\hat{Y}_d) = \sum_{h=1}^{L}(1-f_h)\left(\frac{a_h'}{a_h'-1}\right)\sum_{i=1}^{a_h'}(\hat{Y}_{dhi} - \hat{\bar{Y}}_{dh})^2$$

where , (10)

$$\hat{Y}_{dhi} = \sum_{i=1}^{a_h'}\sum_{j=1}^{n_{hi}'} w_{hij}^{**} y_{hij}, \quad \hat{\bar{Y}}_{dh} = \frac{1}{a_h'}\sum_{i=1}^{a_h'}\hat{Y}_{dhi}$$

The factor $(1-f_h)$ is the finite population correction factor for stratum *h*, f_h is the sampling rate for stratum *h*. Since f_h is small, this factor can be ignored.

In the case of a ratio, the linearized estimator is employed and is calculated as:

$$s^2(\hat{R}_d) = \frac{1}{\hat{X}_d^2}\left[s^2(\hat{Y}_d) + \hat{R}_d^2 s^2(\hat{X}_d) - 2\hat{R}_d s(\hat{Y}_d, \hat{X}_d)\right]$$

where (11)

$$s(\hat{Y}_d, \hat{X}_d) = \sum_{h=1}^{L}(1-f_h)\left(\frac{a_h'-1}{a_h'}\right)\sum_{i=1}^{a_h'}\left(\hat{Y}_{dhi} - \hat{\bar{Y}}_{dh}\right)\left(\hat{X}_{dhi} - \hat{\bar{X}}_{dh}\right)$$

For the more complex statistics such as Total Fertility Rate and under five mortality rate, the jackknife method of variance estimation was employed. In particular the delete one-psu jackknife method was employed.

Other measures of sampling error were also computed for the selected indicators for easier appreciation of the level of precision of the estimates. In addition to the standard error (SE) which is simply defined as the positive square root of the variance, the Coefficient of Variation (CV) was likewise calculated as:

$$CV(estimate) = \frac{SE(estimate)}{estimate} \times 100 \tag{12}$$

The CV were calculated for ratios, totals and means. While there is really no hard rule that sets the value of the CV to declare the estimate as precise, some rule of thumb can be used. Ideally, the desired CV values can be less than 10% but a more relaxed rule of up to 20% especially for lower levels of disaggregation such as estimates at the district levels can also be used. Estimates of standard errors of selected indicators are shown in **Annex 1**.

Chapter 3

Population Characteristics

Chapter 3 Population Characteristics

This chapter focuses on some population characteristics such as population size, distribution, density, age-sex structure, birth registration and owning a bank account.

The 2019 Inter-censal Survey (2019 ICS) covered only the conventional household population in Myanmar and, therefore, the population count in this report refers only to conventional household population (excluding those in institutions such as monasteries, prisons, orphanages, home for the aged, etc.).

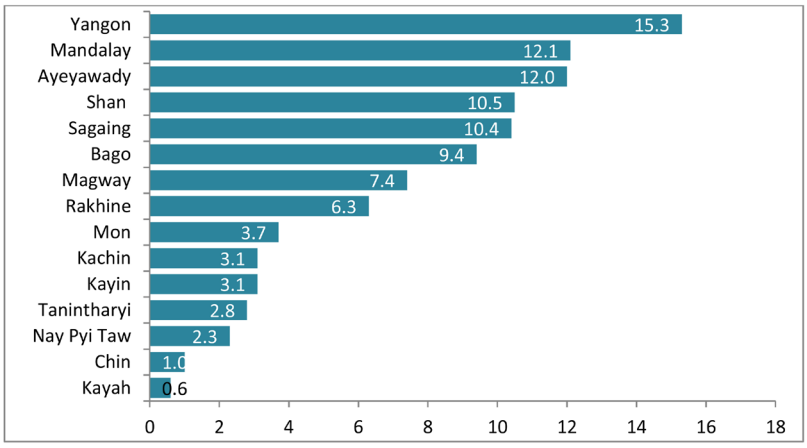
3.1 Population size

According to the 2019 ICS Myanmar's total conventional household population was estimated at 51.1 million, an increase of 3.2 million compared to the census count (conventional household population) of 47.9 million in 2014.

3.2 Population distribution

Population distribution is a term used to describe how people are spread across a specific area. In other words, population distribution shows where people live. Population distribution of Myanmar by State/ Region, presented in Figure 3.1, shows a large regional variation. Yangon Region retained its position of having the largest proportion of the population (15.3%), followed by Mandalay (12.1%), Ayeyawady (12.0%) and Shan (10.5%). About half of the conventional household population of Myanmar lived in these four states and regions. The other half of the population was distributed among the remaining 11 states and regions. The least populated states and regions were Kayah (0.6%), Chin (1.0%), Nay Pyi Taw (2.3%) and Tanintharyi (2.8%). Less than 7 percent of the total population lived in these four states and regions (Figure 3.1).

Figure 3.1: Proportion of conventional household population by State/Region



3.3 Population density

Population density, defined as the number of persons per unit of land area, usually quoted per square kilometer or square mile, is one of the measures for describing the spatial distribution of a population.

The population density of Myanmar from 2019 ICS was 76 persons per square kilometer. For states and regions it varies from a high of 762 per square kilometer for Yangon Region to a low of 14 per square kilometer for Chin State (Table 3.1).

Table 3.1: Conventional households population, population density by State/Region

Stage/Region	Total population	Density (Population/sq.km)
UNION	**51,144,607**	**76**
Kachin	1,584,375	18
Kayah	311,448	27
Kayin	1,556,552	51
Chin	509,037	14
Sagaing	5,309,914	57
Tanintharyi	1,426,426	33
Bago	4,814,582	122
Magway	3,805,211	85
Mandalay	6,168,225	200
Mon	1,889,274	154
Rakhine	3,230,175	88
Yangon	7,831,830	762
Shan	5,384,244	35
Ayeyawady	6,140,001	175
Nay Pyi Taw	1,183,314	168

3.4 Population by residence

According to 2019 ICS, the urban population constituted 28.8 percent (14,740,228) of the total population. Yangon Region had the highest proportion (69.1%) of people living in urban areas followed by Mandalay Region and Kachin State (32.1% each). The largest proportion of people living in rural areas was observed in Magway Region (86.3%) followed by Ayeyawady Region (85.7%), Rakhine State and Sagaing Region (83.3% each) (Table 3.2).

Table 3.2: Proportion of conventional households population by State/Region, urban and rural areas

Stage/Region	Total population	Urban (%)	Rural (%)
UNION	**51,144,607**	**28.8**	**71.2**
Kachin	1,584,375	32.1	67.9
Kayah	311,448	21.3	78.7
Kayin	1,556,552	18.5	81.5
Chin	509,037	20.2	79.8
Sagaing	5,309,914	16.7	83.3
Tanintharyi	1,426,426	23.7	76.3
Bago	4,814,582	18.0	82.0
Magway	3,805,211	13.7	86.3
Mandalay	6,168,225	32.1	67.9
Mon	1,889,274	25.7	74.3
Rakhine	3,230,175	16.7	83.3
Yangon	7,831,830	69.1	30.9
Shan	5,384,244	29.1	70.9
Ayeyawady	6,140,001	14.3	85.7
Nay Pyi Taw	1,183,314	26.0	74.0

3.5 Age-sex structure

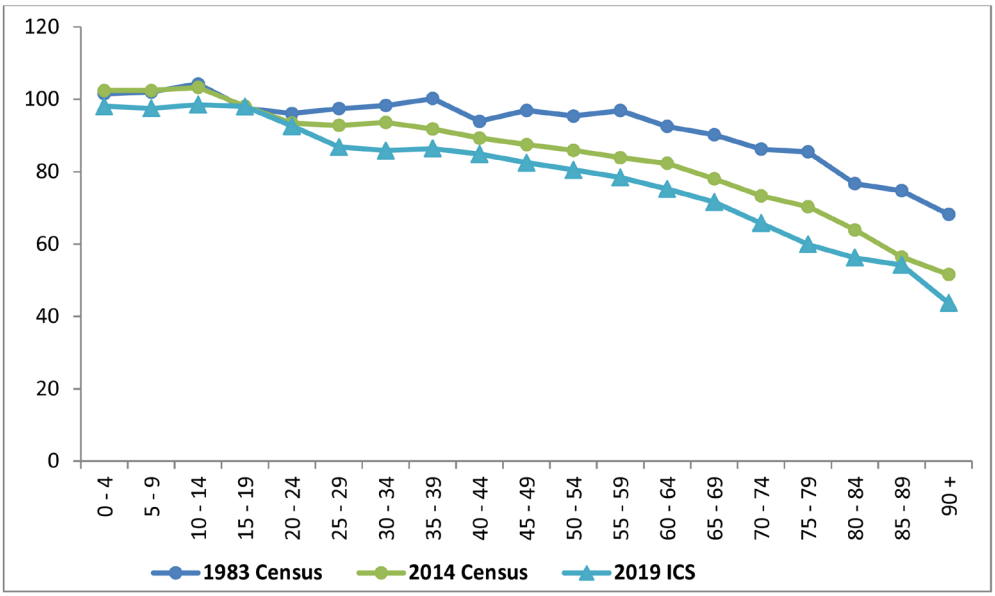
The 2019 ICS indicates that, of the total population, males made up 46.8 percent and the females, 53.2 percent. The sex ratio of the population (number of males for every 100 females) at the national level was 87.8 while for urban and rural areas, these were 86.1 and 88.5, respectively. The sex ratio at birth was 103. In 2014 Census, based on conventional household population, the sex ratio was 88.9. By five-year age group, sex ratio tended to be high at young ages, but gradually decreased in older ages (Table 3.3).

Table 3.3: Population distribution by 5-year age group, sex , sex ratio, urban and rural areas

Age group	Union			Sex ratio	Urban			Sex ratio	Rural			Sex ratio
	Both sexes	Male	Female		Both sexes	Male	Female		Both sexes	Male	Female	
Number	**51,144,607**	**23,916,836**	**27,227,771**	**87.8**	**14,740,228**	**6,820,780**	**7,919,448**	**86.1**	**36,404,379**	**17,096,056**	**19,308,323**	**88.5**
Total	**100**	**100**	**100**		**100**	**100**	**100**		**100**	**100**	**100**	
0-4	9.2	9.7	8.7	98.1	7.9	8.6	7.3	101.1	9.7	10.1	9.3	97.1
5-9	8.8	9.2	8.3	97.5	7.3	8.0	6.8	100.5	9.3	9.8	8.9	96.6
10-14	9.2	9.8	8.7	98.5	7.7	8.3	7.1	99.9	9.9	10.4	9.4	98.1
15 - 19	9.2	9.8	8.8	98.0	9.1	9.7	8.5	99.2	9.3	9.8	8.9	97.5
20 - 24	8.5	8.7	8.2	92.6	9.4	9.7	9.2	91.0	8.1	8.3	7.9	93.4
25 - 29	7.8	7.8	7.9	86.8	9.0	9.1	8.9	88.1	7.3	7.2	7.4	86.2
30 - 34	7.5	7.4	7.6	85.8	8.1	8.1	8.0	87.6	7.3	7.1	7.4	85.0
35 - 39	7.1	7.1	7.2	86.4	7.5	7.5	7.5	85.7	7.0	6.9	7.1	86.7
40 - 44	6.5	6.4	6.6	84.9	6.7	6.7	6.8	84.0	6.4	6.3	6.6	85.3
45 - 49	6.0	5.8	6.2	82.5	6.4	6.0	6.8	76.4	5.9	5.8	6.0	85.3
50 - 54	5.4	5.1	5.6	80.5	5.6	5.2	5.9	76.0	5.3	5.1	5.5	82.5
55 - 59	4.7	4.4	4.9	78.4	4.8	4.3	5.3	70.4	4.6	4.4	4.7	82.1
60 - 64	3.6	3.3	3.9	75.2	3.8	3.4	4.2	70.0	3.6	3.3	3.8	77.5
65 - 69	2.7	2.4	2.9	71.6	2.8	2.4	3.2	66.0	2.6	2.4	2.8	74.2
70 - 74	1.7	1.4	1.9	65.8	1.7	1.5	2.0	63.2	1.7	1.4	1.9	66.9
75 - 79	1.0	0.8	1.2	59.9	1.0	0.8	1.2	56.7	1.0	0.8	1.2	61.2
80 - 84	0.6	0.5	0.7	56.2	0.6	0.5	0.7	55.2	0.6	0.5	0.7	56.6
85 - 89	0.3	0.2	0.4	54.2	0.3	0.2	0.4	47.1	0.3	0.3	0.4	57.3
90+	0.1	0.1	0.2	43.7	0.1	0.1	0.2	33.4	0.1	0.1	0.2	48.5

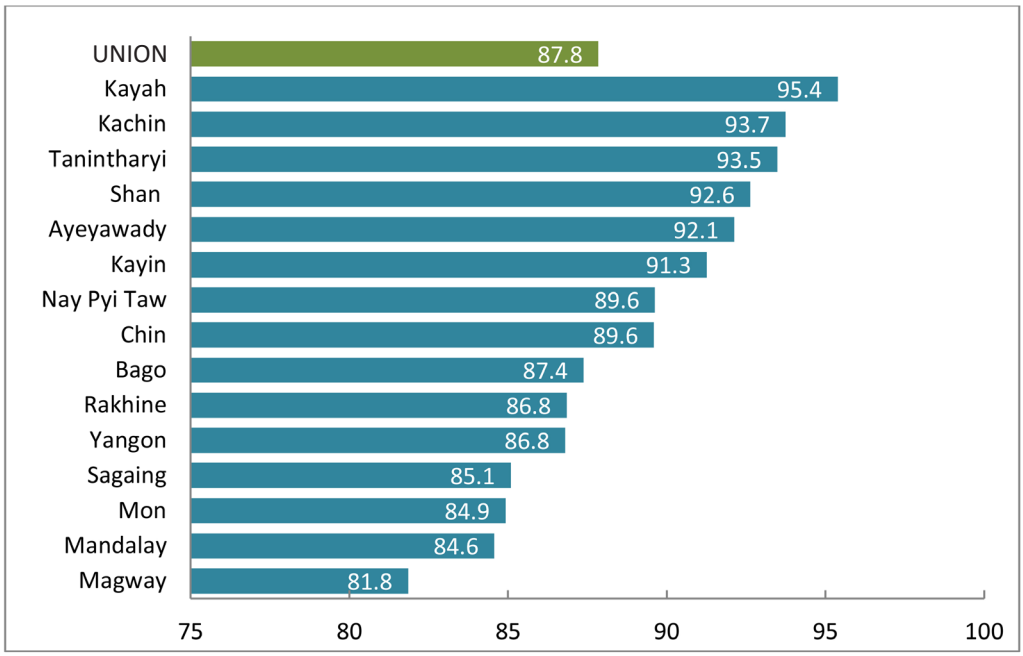
Comparison of the sex ratio in 1983, 2014 and 2019 suggests that the sex ratio of Myanmar declined substantially during the last three and a half decades (Figure 3.2). Though there may be several reasons for that, the most likely causes may be higher mortality and out-migration rates of males compared to females.

Figure 3.2: Sex ratio by age group, 1983 and 2014 Censuses, and 2019 ICS



In all states and regions, the survey recorded more females than males. The highest sex ratio was observed in Kayah State (95 males per 100 females), followed by Kachin (94), Tanintharyi (94), and Shan (93). The lowest sex ratio was in Magway Region (82) (Figure 3.3).

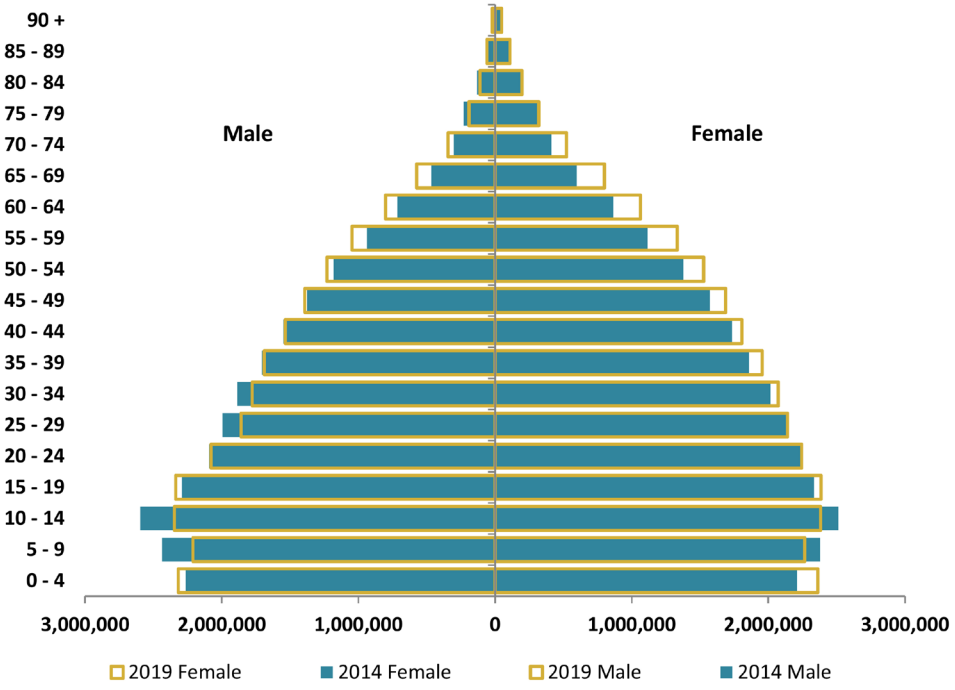
Figure 3.3: Sex ratio by State/Region



3.6 Age-sex pyramid

The age-sex pyramid of the 2014 Census and 2019 ICS are shown in Figure 3.4. It shows that the population pyramid of 2019 still retained the pot-shaped feature of 2014. However, due to fertility decline, the population in some age groups of 2019, especially for the age groups 5-9 and 10-14, decreased. On the other hand, the population of older age groups for 2019, i.e., aged 55 years and over, increased. This scenario was more noticeable for the female population indicating women in Myanmar, like everywhere else, live longer than men.

Figure 3.4: Population pyramid of Myanmar, 2014 Census and 2019 ICS



3.7 Population by broad age group

Broad age groups of Myanmar population at the national level for 1983, 2014 and 2019 are presented in Table 3.4. It indicates that although Myanmar still showed similar age pattern of 2014, some changes were observed between 2014 and 2019. The proportion of young people aged less than 15 decreased a little from 28.6 percent to 27.2 percent while the working-age population aged 15 to 64 increased from 65.6 percent to 66.4 percent. The older population (aged 65 and over) also increased from 5.8 percent to 6.4 percent during the same period.

Table 3.4: Proportion of population by broad age group, 1983 and 2014 Censuses, and 2019 ICS

Broad age group	1983			2014			2019		
	Union	Urban	Rural	Union	Urban	Rural	Union	Urban	Rural
Less than 15 years	38.6	35.7	39.5	28.6	24.1	30.6	27.2	22.9	28.9
15-59	55.1	58.2	54.1	62.5	66.7	60.7	62.8	66.6	61.2
15-64	57.5	60.5	56.5	65.6	69.9	63.8	66.4	70.4	64.8
60+	6.4	6.2	6.4	8.9	9.2	8.8	10.1	10.5	9.9
65+	3.9	3.8	4.0	5.8	6.0	5.7	6.4	6.7	6.3

3.8 Dependency ratios

In 2019, the total dependency ratio (aged 0-14 and 65 years and over per 15-64 age group) for Myanmar was 50.6 (Table 3.5 and Figure 3.5). It declined gradually from 73.9 in 1983 to 50.6 in 2019. A similar situation was observed for child dependency ratio during the same period. However, older age dependency ratio and ageing index continued to increase. In 2019, there were 10 individuals aged 65 and over for every 100 persons of working-age population (15-64) in Myanmar.

Total dependency ratio for Myanmar varied between urban and rural areas and across states and regions (Table 3.6). Total dependency ratio for urban areas was 42.0 while 54.4 for rural areas. The lowest total dependency ratio (39.8) was observed in Yangon Region and highest (84.4) in Chin State.

The ageing index (ratio of the aged population to the child population) also increased from 20.1 in 2014 to 23.7 in 2019.

The median age of the population is defined as the age that divides the population into two groups of equal size, one of which is younger and the other of which is older. The median age is often used as a basis for describing a population as “young” or “old” or as “ageing” or “younging”. Populations with medians under 20 may be described as “young,” those with medians 30 or over as “old,” and those with medians 20 to 29 as of “intermediate” age.[1] The median age in Myanmar increased from 24.1 in 1983 to 28.2 in 2019 (Table 3.5). Population of Myanmar may be categorized as “intermediate “age.

[1]The Methods and Materials of Demography (Second edition) Edited by Jacob S. Siegel David A. Swanson

Table 3.5: Dependency ratios, 1983 and 2014 Censuses, and 2019 ICS

Dependency ratio, Ageing index, and Median age	1983			2014			2019		
	Union	Urban	Rural	Union	Urban	Rural	Union	Urban	Rural
Total dependency ratio	73.9	65.3	76.9	52.4	43.0	56.8	50.6	42.0	54.4
Child dependency ratio	67.1	59.0	69.9	43.7	34.4	47.9	40.9	32.5	44.6
Older age dependency ratio	6.8	6.3	7.0	8.8	8.5	8.9	9.7	9.5	9.8
Ageing index	10.2	10.8	10.0	20.1	24.8	18.6	23.7	29.3	22.0
Median Age	24.1	25.1	26.1	27.1	28.5	26.4	28.2	29.8	27.5

Figure 3.5: Trends in dependency ratios, ageing Index, 1983 and 2014 Censuses, and 2019 ICS

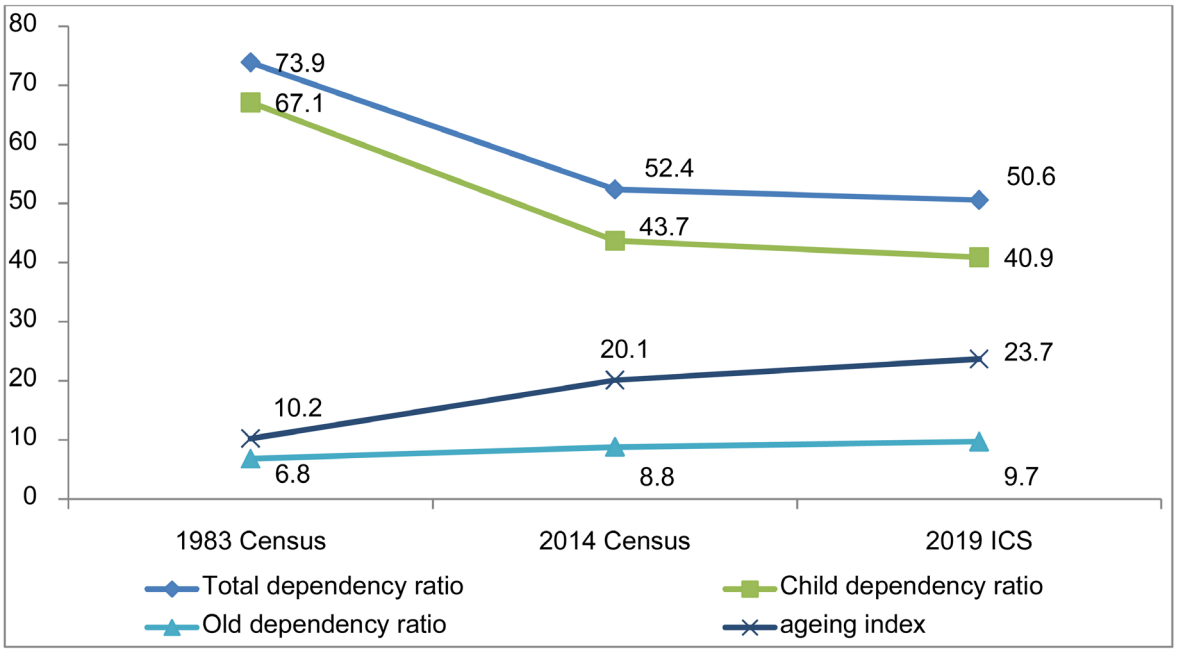


Table 3.6: Proportion of population by broad age group, dependency ratio, and ageing index, State/Region, urban and rural areas

State/ Region and Area	Total population	Proportion of broad age group			Dependency ratio			Ageing index
		0 - 14	15 - 64	65+	Total dependency ratio	Child dependency ratio	Older age dependency ratio	
UNION	**51,144,607**	**27.2**	**66.4**	**6.4**	**50.6**	**40.9**	**9.7**	**23.7**
Urban	14,740,228	22.9	70.4	6.7	42.0	32.5	9.5	29.3
Rural	36,404,379	28.9	64.8	6.3	54.4	44.6	9.8	22.0
Kachin	1,584,375	29.2	66.5	4.3	50.3	43.8	6.5	14.8
Kayah	311,448	33.4	62.5	4.1	60.1	53.5	6.6	12.3

State/ Region and Area	Total population	Proportion of broad age group			Dependency ratio			Ageing index
		0 - 14	15 - 64	65+	Total dependency ratio	Child dependency ratio	Older age dependency ratio	
Kayin	1,556,552	32.9	61.1	6.0	63.7	53.9	9.8	18.3
Chin	509,037	40.8	54.2	5.0	84.4	75.2	9.2	12.2
Sagaing	5,309,914	27.2	66.1	6.7	51.3	41.1	10.2	24.7
Tanintharyi	1,426,426	32.0	62.5	5.5	60.0	51.2	8.8	17.2
Bago	4,814,582	26.2	66.6	7.2	50.2	39.4	10.8	27.5
Magway	3,805,211	26.0	66.0	8.0	51.4	39.3	12.1	30.6
Mandalay	6,168,225	24.6	68.6	6.8	45.8	35.9	9.9	27.5
Mon	1,889,274	28.3	64.1	7.6	55.9	44.1	11.8	26.6
Rakhine	3,230,175	29.6	63.4	7.0	57.8	46.8	11.0	23.4
Yangon	7,831,830	22.4	71.5	6.1	39.8	31.2	8.6	27.4
Shan	5,384,244	30.2	64.9	4.9	54.1	46.5	7.6	16.4
Ayeyawady	6,140,001	28.4	64.8	6.8	54.3	43.8	10.5	23.9
Nay Pyi Taw	1,183,314	27.2	67.5	5.3	48.1	40.3	7.8	19.4

3.9 Marital status

In 2019 ICS, a question was asked on the marital status of people aged 10 years and over. The results showed that 54.7 percent of males and 50.8 percent of females were married, while 41.2 percent of males and 37.4 percent of females reported as single. Only 2.7 percent of males and 9.8 percent of females were recorded as widowed (Figure 3.6).

The comparison of marital status of males and females is presented in Figure 3.7. The difference between males and females was more significant in the later years, which may be due to men getting married or remarried later in life while women tend to remain widowed. It can be seen in the graph that the line for married men slopes up steadily until it reaches the peak at the age group of 55-59 and then starts to decline. However, the line for married women slopes down after it reaches the peak at the age group of 35-39 as husbands die and women become widows. This scenario is supported by the fact that the proportion of widows started to rise visibly at the age group of 45-49.

Figure 3.6: Proportion of population aged 10 years and over by sex and marital status

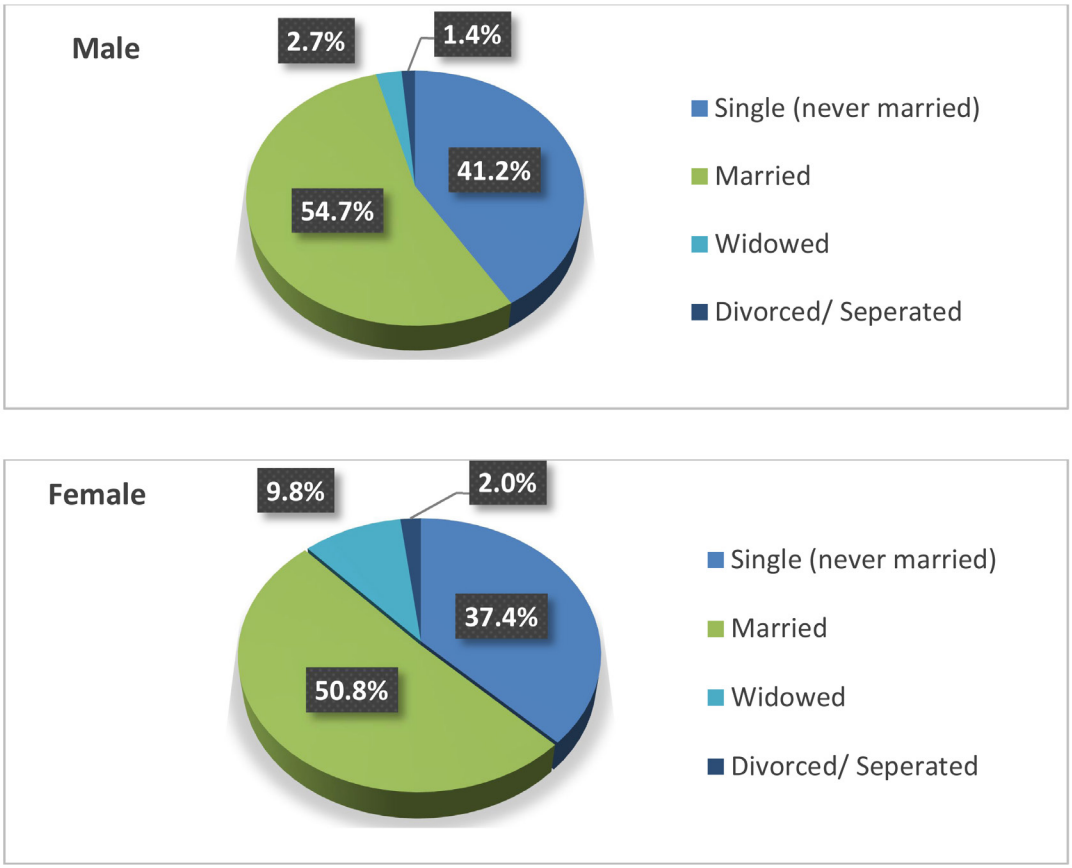
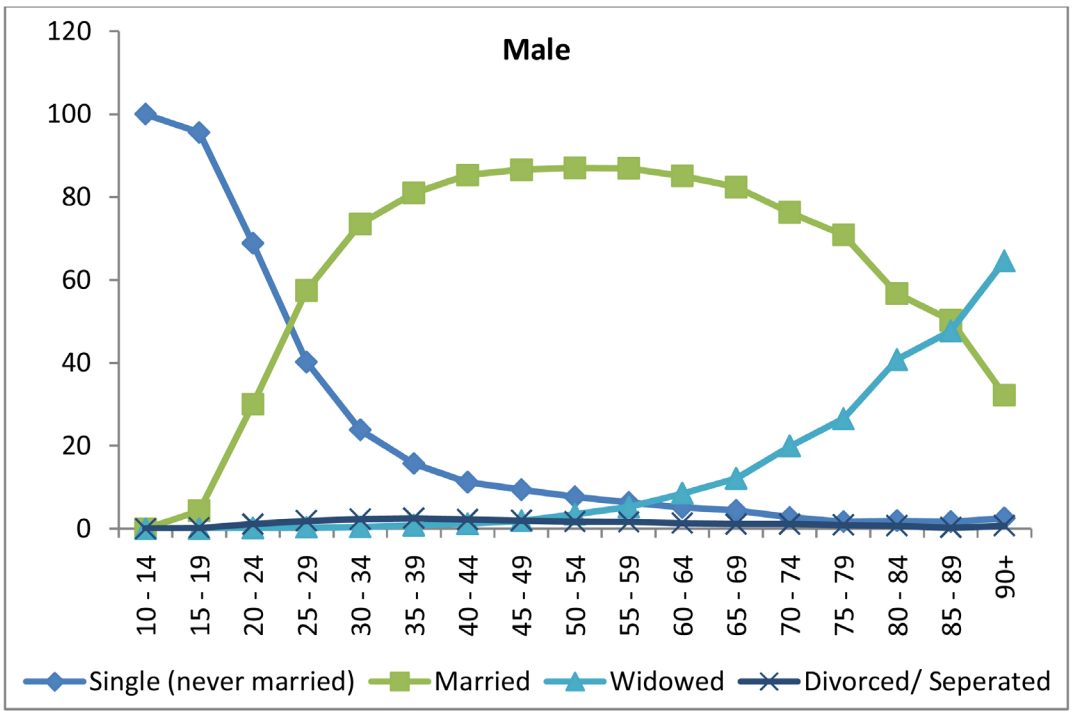
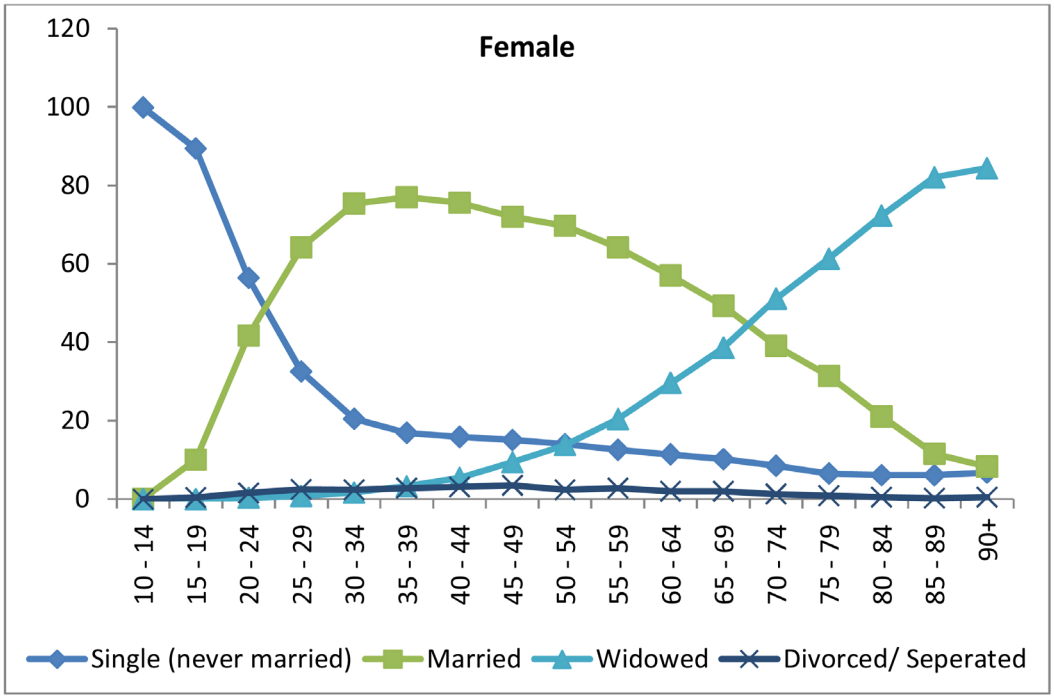


Figure 3.7: Proportion of population aged 10 years and over by sex, age and marital status





3.10 Household size

Mean household size is the ratio of the total population in households to the number of households in an area. It was 4.6 people at the national level in 2019. Figure 3.8 shows the mean size of conventional households by state and region. The mean household size was highest in Chin State with 5.5, followed by Kachin State with 5.2, and Tanintharyi Region and Rakhine State at 5.0 persons per household. The lowest household size was recorded in Bago and Ayeyawady Regions with 4.2 persons per household.

The results also showed that, in 2019, 46.0 percent of households in Myanmar comprised 3 to 4 household members which was an increase of about five percentage points compared with the 2014 Census results. The lowest proportion was the "9 and more persons" category with only 2.4 percent of the total households. It is interesting to note that the proportion of 1-person household increased from 4.6 percent in 2014 to 5.4 percent in 2019. All this information reflects the fact that people in Myanmar preferred smaller households.

Figure 3.8: Mean household size by State/Region

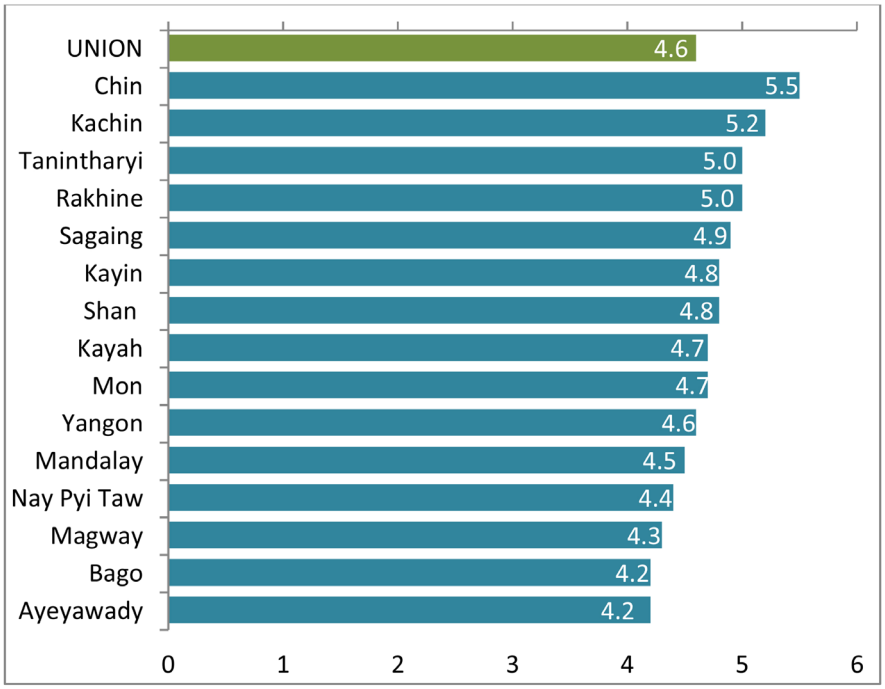


Table 3.7: Proportion of households by size of the household, urban and rural areas, 2014 Census and 2019 ICS

Household size	2014			2019		
	Union	Urban	Rural	Union	Urban	Rural
Number	**10,877,832**	**3,049,433**	**7,828,399**	**11,162,510**	**3,120,314**	**8,042,196**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1 person	4.6	4.9	4.5	5.4	5.6	5.3
2 persons	12.4	12.8	12.3	13.6	14.1	13.4
3 persons	19.9	19.1	20.2	22.1	21.2	22.4
4 persons	21.3	20.4	21.7	23.9	23.0	24.2
5 persons	16.5	15.7	16.8	16.2	15.7	16.5
6 persons	10.9	10.5	11.0	9.2	9.1	9.3
7 persons	6.5	6.6	6.4	4.8	5.1	4.6
8 persons	4.1	4.6	3.9	2.4	2.7	2.3
9 persons and more	3.7	5.3	3.1	2.4	3.5	2.0

3.11 Head of household

The head of a conventional household is the household member who makes key decisions and is recognized as the head of the household by other household members. The head of the household may be a male or female and not necessarily the main earner in the household.

In 2019, 76.8 percent of households were headed by a male and only 23.2 percent by a female. The comparison of male and female shown in Table 3.8 again illustrates the fact that women in Myanmar

outlive men in the oldest age groups. The proportion of male-headed households peaks at the age group 30-34 (90.6%) and then started to decline as older men began to migrate or die and women take over as heads of the households. Starting at age group 75-79, almost half (about 48%) of the households in Myanmar were headed by females.

Table 3.8: Number and proportion of heads of households by age group and sex

Age group of household head	Number of households	Proportion of households headed by:	
		Male	Female
Union	**11,162,510**	**76.8**	**23.2**
10 - 14	631	31.0	69.0
15 - 19	19,996	75.1	24.9
20 - 24	205,085	87.7	12.3
25 - 29	534,530	89.7	10.3
30 - 34	879,849	90.6	9.4
35 - 39	1,122,000	89.0	11.0
40 - 44	1,268,334	86.4	13.6
45 - 49	1,339,713	82.3	17.7
50 - 54	1,337,513	78.8	21.2
55 - 59	1,277,678	73.8	26.2
60 - 64	1,093,599	67.1	32.9
65 - 69	850,928	62.7	37.3
70 - 74	560,207	56.5	43.5
75 - 79	338,428	51.6	48.4
80 - 84	195,527	48.4	51.6
85 - 89	100,681	44.6	55.4
90+	37,811	40.8	59.2

3.12 Birth registration

In the 2019 ICS, information on the presence of birth certificate or if birth was registered was collected from children aged 15 years and below. Out of the 14.9 million children covered in the survey, 81.7 percent had a birth certificate while 4.1 percent had no copy of the birth certificate but reported that the birth was registered. On the other hand, the birth of some 13.4 percent of children aged 15 years and below was not registered. Birth registration varied between urban and rural areas. About 91.6 percent in urban and 78.5 percent of children in rural areas reported to have a birth certificate.

At the regional level, Kachin had the highest proportion (92.5%) of having a birth certificate, followed by Kayah (91.2%). The least proportion was in Rakhine State (59.4%).

Table 3.9: Proportion of population aged 15 years and below by birth registration status, State/Region, urban and rural areas

State/Region and Area	Had a birth certificate	No birth certificate but registered	Not registered	Don't know	Total	Number
UNION	**81.7**	**4.1**	**13.4**	**0.8**	**100.0**	**14,887,403**
Urban	91.6	2.2	5.5	0.7	100.0	3,633,857
Rural	78.5	4.8	15.9	0.8	100.0	11,253,546
Kachin	92.5	1.6	5.3	0.6	100.0	493,162
Kayah	91.2	2.5	5.3	1.0	100.0	109,850
Kayin	80.5	4.1	14.7	0.7	100.0	552,678
Chin	75.0	6.4	16.9	1.7	100.0	219,034
Sagaing	83.6	4.4	11.4	0.6	100.0	1,543,350
Tanintharyi	89.0	2.5	8.0	0.5	100.0	486,649
Bago	76.5	7.1	15.9	0.5	100.0	1,360,183
Magway	80.5	9.6	9.4	0.5	100.0	1,061,307
Mandalay	87.5	4.0	7.9	0.6	100.0	1,628,595
Mon	88.4	2.3	8.6	0.7	100.0	578,667
Rakhine	59.4	5.4	33.3	1.9	100.0	1,026,585
Yangon	89.9	2.1	7.6	0.4	100.0	1,876,443
Shan	82.1	2.3	14.3	1.3	100.0	1,735,285
Ayeyawady	76.8	2.7	19.6	0.9	100.0	1,871,403
Nay Pyi Taw	82.4	7.4	9.6	0.6	100.0	344,214

3.13 Having a bank account

Results from 2019 ICS show that the majority of people in Myanmar did not have a bank account. Only 13 percent of total population aged 18 years and over reported having a bank account. Comparing the urban to rural distribution, about 25 percent of urban population had reported having a bank account while it was only about 8 percent for rural areas (Table 3.10).

Wide regional variation of having a bank account was observed with the lowest in Kayin State at 5.8 percent and the highest in Yangon Region at 27.2 percent.

Table 3.10: Proportion of population aged 18 years and over by having a bank account, State/Region, urban and rural areas

State/Region and Area	Had a bank account	No bank account	Don't know	Total	Number
UNION	**13.0**	**86.5**	**0.5**	**100.0**	**34,355,023**
Urban	25.2	74.1	0.7	100.0	10,584,929
Rural	7.6	92.0	0.4	100.0	23,770,093
Kachin	11.6	87.7	0.7	100.0	1,031,400
Kayah	12.9	86.1	1.0	100.0	188,955
Kayin	5.8	94.0	0.2	100.0	933,133
Chin	10.4	87.8	1.8	100.0	268,918
Sagaing	7.1	92.6	0.3	100.0	3,571,142
Tanintharyi	10.8	88.7	0.5	100.0	875,916
Bago	12.6	87.2	0.2	100.0	3,271,917
Magway	10.7	89.0	0.3	100.0	2,610,791
Mandalay	13.2	86.3	0.5	100.0	4,323,945
Mon	10.4	89.2	0.4	100.0	1,226,892
Rakhine	8.7	91.1	0.2	100.0	2,062,650
Yangon	27.2	72.2	0.6	100.0	5,694,758
Shan	11.4	87.7	0.9	100.0	3,449,761
Ayeyarwady	7.3	92.3	0.4	100.0	4,046,704
Nay Pyi Taw	12.1	87.6	0.3	100.0	798,142

3.14 Reasons for not having a bank account

According to the information from the 2019 ICS, the main reason for not having a bank account was "don't have enough money to have a bank account" 53.2 percent. About 46.6 percent reported that they did not need or want a bank account.

The regional pattern conformed more or less to that of the national except for Rakhine and Shan States where the main reason was "do not need/want a bank account" (Table 3.11).

Table 3.11: Proportion of population aged 18 years and over by the reason for not having a bank account, State/Region, urban and rural areas

State/ Region and Area	Don't need/ want a bank account	Don't have enough money to have a bank account	No bank has convenient hours or location	Don't trust bank	Don't like dealing with bank	Don't understand the procedure for opening a bank account	The fees and service charges are too high	Other	Number
UNION	**46.6**	**53.2**	**3.6**	**0.3**	**0.7**	**5.2**	**0.4**	**0.1**	**34,355,023**
Urban	43.3	39.7	1.1	0.3	0.6	3.4	0.2	0.2	10,584,929
Rural	48.1	59.3	4.7	0.3	0.7	6.0	0.5	*	23,770,093
Kachin	49.8	58.1	5.3	0.3	0.3	6.8	0.1	*	1,031,400
Kayah	38.9	58.0	2.4	0.1	*	3.4	0.1	0.1	188,955
Kayin	48.6	60.5	10.9	0.6	1.2	5.5	0.1	*	933,133
Chin	21.9	74.7	4.9	*	0.1	2.8	0.2	0.1	268,918
Sagaing	51.3	53.5	3.4	0.3	0.6	5.0	0.1	*	3,571,142
Tanintharyi	47.3	52.0	3.8	0.4	0.6	3.1	0.5	*	875,916
Bago	44.1	57.7	3.4	0.4	0.7	5.1	1.1	*	3,271,917
Magway	47.9	54.6	3.0	0.2	1.1	3.9	0.8	*	2,610,791
Mandalay	47.1	53.3	2.1	0.4	0.7	3.1	0.1	0.1	4,323,945
Mon	52.2	54.8	4.1	0.2	0.2	4.6	0.1	0.1	1,226,892
Rakhine	61.2	44.2	6.1	0.1	1.3	9.8	0.7	*	2,062,650
Yangon	38.2	43.8	0.8	0.2	0.4	3.5	0.2	0.3	5,694,758
Shan	47.4	43.0	5.5	0.2	0.4	9.5	0.2	0.1	3,449,761
Ayeyawady	47.3	68.1	4.6	0.3	0.5	6.3	0.7	*	4,046,704
Nay Pyi Taw	38.4	64.4	3.2	0.1	1.9	0.6	0.2	*	798,142

Note: * Less than 0.1 percent

Chapter 4

Education

Chapter 4 Education

In the 2019 Inter-censal Survey (ICS), education information was collected from all persons aged 3 years and over which includes literacy, numeracy, highest level of education completed, current school attendance, and reasons for stopping schooling. These data can provide updates on some indicators for Sustainable Development Goal 4 (SDG 4) on 2030 Agenda and Myanmar Sustainable Development Plan (MSDP) (2018-2030).

4.1 Literacy and Numeracy

Specific information on literacy and numeracy was collected from all persons aged 5 years and over. However, the analysis in this report focuses only on those aged 15 years and over.

Literacy is defined as the ability to read and write with understanding in any language. Numeracy is defined as the ability to do simple addition and subtraction without using a calculator. According to the survey, at the national level, the literacy rate was 89.1 percent while numeracy rate was 89.5 percent.

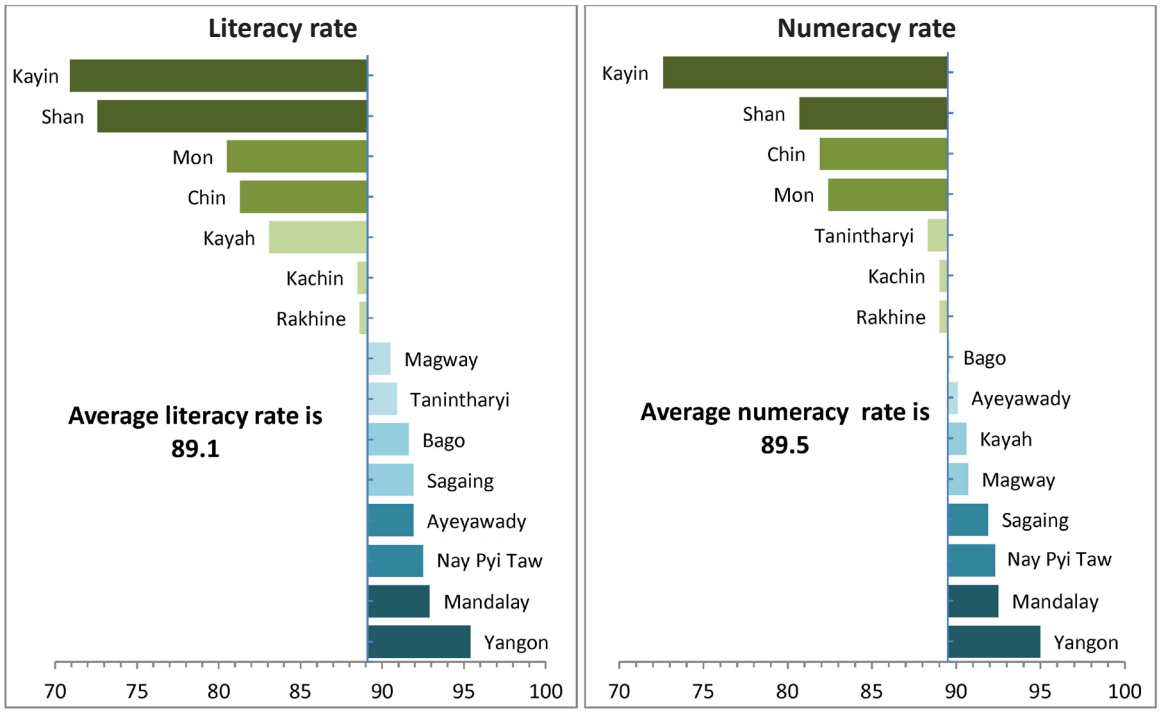
Out of 15 states and regions, literacy rates of eight regions were above the national level as shown in Table 4.1 and Figure 4.1. The regions with the highest literacy and numeracy rates were Yangon, Mandalay and Nay Pyi Taw; all reporting more than 92 percent. Among the seven states that had literacy rates below the national level, the lowest rates were found in Kayin (70.9%) and Shan State (72.6%). The numeracy rate followed a similar pattern with the lowest rates observed in Kayin State (72.6%) and Shan State (80.7%).

Table 4.1: Literacy and Numeracy rates of population aged 15 years and over by sex and State/Region

State/Region	Total population			Literacy rate			Numeracy rate		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
UNION	**37,255,566**	**17,041,262**	**20,214,304**	**89.1**	**92.4**	**86.3**	**89.5**	**92.4**	**87.1**
Kachin	1,122,330	549,591	572,739	88.5	90.7	86.3	89.0	91.0	87.0
Kayah	207,400	100,327	107,073	83.1	87.8	78.8	90.6	93.5	87.9
Kayin	1,044,075	488,372	555,703	70.9	73.6	68.5	72.6	75.0	70.5
Chin	301,476	136,341	165,135	81.3	88.3	75.5	81.9	89.3	75.8
Sagaing	3,866,874	1,727,901	2,138,973	91.9	95.2	89.2	91.9	94.8	89.6
Tanintharyi	970,046	463,624	506,422	90.9	92.1	89.8	88.3	89.3	87.3
Bago	3,552,951	1,617,098	1,935,853	91.6	94.9	88.9	89.6	92.8	86.9
Magway	2,816,390	1,223,723	1,592,667	90.5	95.6	86.7	90.7	94.4	87.8
Mandalay	4,649,600	2,077,371	2,572,229	92.9	96.8	89.8	92.5	96.0	89.7

State/Region	Total population			Literacy rate			Numeracy rate		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Mon	1,354,317	602,197	752,120	80.5	83.8	77.9	82.4	85.0	80.4
Rakhine	2,271,569	1,023,178	1,248,391	88.6	95.0	83.3	89.0	94.9	84.1
Yangon	6,081,922	2,765,085	3,316,837	95.4	97.1	94.0	95.0	96.7	93.6
Shan	3,759,869	1,791,697	1,968,172	72.6	77.5	68.1	80.7	84.2	77.6
Ayeyawady	4,395,195	2,074,153	2,321,042	91.9	94.2	89.9	90.1	92.3	88.1
Nay Pyi Taw	861,552	400,604	460,948	92.5	96.4	89.1	92.3	95.6	89.3

Figure 4.1: Literacy and Numeracy rates by State/Region



4.2 School attendance

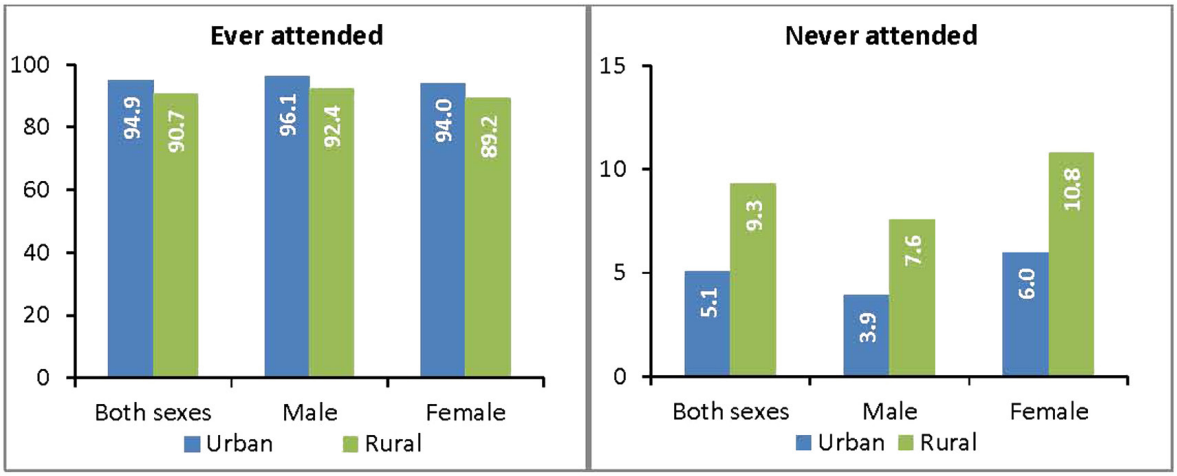
Table 4.2 shows the school attendance for population aged 5 years and over by State/Region. At the national level, 9 in 10 people aged 5 years and over reported they had attended pre-school or at least grade school. The proportion of males (93.5%) was slightly higher than that of females (90.6%). In all states and regions, school attendance rates for males were higher than that of females.

Table 4.2: Population aged 5 years and over by school attendance, sex and State/Region

Age group	Total population			Ever attended (%)			Never attended (%)		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
UNION	**46,463,288**	**21,599,086**	**24,864,202**	**91.9**	**93.5**	**90.6**	**8.1**	**6.5**	**9.4**
Kachin	1,421,334	689,768	731,566	93.6	95.2	92.2	6.4	4.8	7.8
Kayah	274,457	133,603	140,854	90.3	93.1	87.6	9.7	6.9	12.4
Kayin	1,394,544	662,338	732,206	80.5	80.9	80.1	19.5	19.1	19.9
Chin	434,771	203,148	231,623	89.5	94.3	85.3	10.5	5.7	14.7
Sagaing	4,825,520	2,201,129	2,624,391	92.8	94.2	91.5	7.2	5.8	8.5
Tanintharyi	1,274,648	614,117	660,531	95.5	95.5	95.5	4.5	4.5	4.5
Bago	4,405,382	2,041,553	2,363,829	94.4	96.1	92.9	5.6	3.9	7.1
Magway	3,482,646	1,552,684	1,929,962	91.2	93.5	89.3	8.8	6.5	10.7
Mandalay	5,651,056	2,571,124	3,079,932	94.3	96.6	92.5	5.7	3.4	7.5
Mon	1,725,612	786,566	939,046	90.6	92.0	89.4	9.4	8.0	10.6
Rakhine	2,914,274	1,344,292	1,569,982	93.4	95.6	91.6	6.6	4.4	8.4
Yangon	7,210,589	3,329,940	3,880,649	96.8	97.6	96.1	3.2	2.4	3.9
Shan	4,814,943	2,308,861	2,506,082	77.0	79.3	74.9	23.0	20.7	25.1
Ayeyawady	5,561,255	2,655,437	2,905,818	95.0	95.9	94.2	5.0	4.1	5.8
Nay Pyi Taw	1,072,257	504,526	567,731	94.1	96.8	91.7	5.9	3.2	8.3

Figure 4.2 indicates that the gap between urban and rural areas in terms of school attendance is quite wide. Only about 5 out of 100 people aged 5 years and over in urban areas reported that they had never attended school while it was about 9 out of 100 people in rural areas. Both males and females had a similar pattern for this indicator.

Figure 4.2: School attendance by urban and rural areas



The absolute numbers and proportion of population aged 3 years and over by school attendance are presented in Table 4.3. The data from the table shows that among children between age 10 and 14, 98 percent reported they had attended school. The results also revealed that school attendance has improved over time. About 83 percent of those aged 50 years and over reported they had been to school while younger groups (between aged 5 and 49) had higher proportions (all above 90%). The proportion of population who had never been to school increased with age. Only 1.6 percent of the population aged 10-14 had never been to school but it increased to 16.8 percent for population aged 50 years and over.

Table 4.3: Population aged 3 years and over by school attendance and sex

Age group	Total population			Ever attended (%)			Never attended (%)		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
3 - 4	1,978,072	983,874	994,198	20.3	19.4	21.1	79.7	80.6	78.9
5 - 9	4,479,179	2,211,422	2,267,757	92.3	91.8	92.7	7.7	8.2	7.3
10 - 14	4,728,542	2,346,403	2,382,139	98.4	98.3	98.6	1.6	1.7	1.4
15 - 19	4,722,780	2,337,488	2,385,292	97.4	97.1	97.7	2.6	2.9	2.3
20 - 24	4,322,313	2,078,068	2,244,245	96.2	96.1	96.3	3.8	3.9	3.7
25 - 29	3,998,053	1,857,872	2,140,181	94.7	94.6	94.8	5.3	5.4	5.2
30 - 34	3,849,013	1,777,178	2,071,835	93.7	94.2	93.4	6.3	5.8	6.6
35 - 39	3,643,948	1,688,816	1,955,132	92.4	93.3	91.7	7.6	6.7	8.3
40 - 44	3,341,665	1,534,783	1,806,882	91.3	92.6	90.2	8.7	7.4	9.8
45 - 49	3,079,287	1,391,862	1,687,425	90.6	92.4	89.2	9.4	7.6	10.8
50+	10,298,507	4,375,193	5,923,314	83.2	88.6	79.2	16.8	11.4	20.8

4.3 Currently attending school by level of education

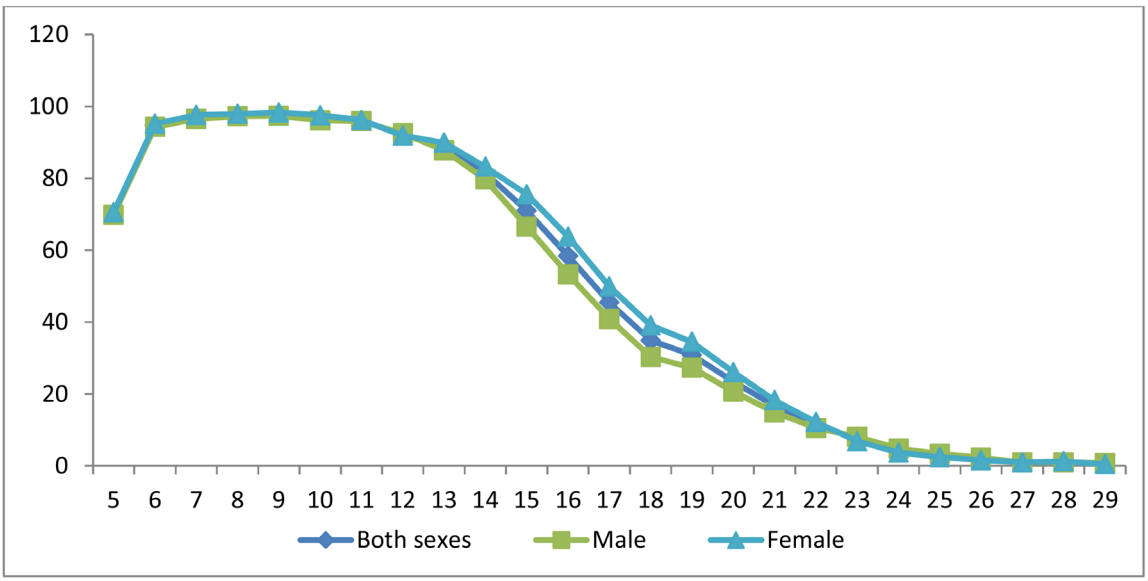
The survey result shows that, only 18 percent of children aged 3-4 years were attending nursery/ pre-school at the time of the survey. Nine out of 10 children aged 5-9 years were at primary school and seven out of 10 children aged 10-15 years were currently attending secondary school. It clearly shows that many children dropped out of school after they have attained the primary education. Gender differences were small in terms of current school attendance for all age groups mentioned above (Table 4.4).

Table 4.4: Population aged 3 - 29 by current school attendance

Level of education/Age	Total population			Current school attendance (%)		
	Both sexes	Male	Female	Both sexes	Male	Female
Children of nursery age at nursery/pre-school age (3-4)	1,978,073	983,875	994,198	18.1	17.9	18.4
Children of primary age at primary school age (5-9)	4,479,179	2,211,422	2,267,757	91.7	92.9	90.4
Children of secondary age at secondary school age (10-15)	5,726,901	2,848,734	2,878,167	72.9	72.5	73.2
Post-secondary age group at (16-29)	12,044,782	5,771,094	6,273,688	10.5	9.6	11.4

Figure 4.3 shows the proportion of males and females currently attending school by age. Generally, there was a small gender difference in all ages. The proportions of school attendance for both boys and girls were high between ages 6 and 11 years (more than 95%). However, starting from the age of 12, the proportions started to decline slowly with a sharp decline starting from age 14 when more and more students dropped out of school. As a result, by the age of 18, only 3 out of 10 were attending school. Sex disparity was noticeable between the ages of 14 and 21, with the girls having higher attendance rates than boys.

Figure 4.3: Proportion of population aged 5 years and over by current school attendance, sex and age



The population currently attending school by special age groups and sex is presented in Table 4.5. The purpose of this table is to show some of the indicators of MSDP-NIF. For instance, indicators for children aged 3 to 8 years are for NIF indicator 4.3.11, “access to early childhood care and

development services". Out of 5.5 million children aged 3 to 8 years, about 65 percent were currently attending school or pre-school. Sex difference for this indicator was minimal; 64 percent for boys and 66 percent for girls.

Table 4.5: Population aged 3 years and over by current school attendance, special age groups and sex

Age group	Total population			Current school attendance (%)		
	Both sexes	Male	Female	Both sexes	Male	Female
3-8	5,500,468	2,733,359	2,767,109	64.8	64.1	65.5
6-9	3,610,160	1,771,157	1,839,003	96.9	96.4	97.3
10-13	3,825,246	1,892,816	1,932,430	93.4	93.0	93.9
14-15	1,901,658	955,921	945,737	76.0	72.8	79.2
15-24	9,045,093	4,415,556	4,629,537	31.6	29.2	33.9
25+	28,210,473	12,625,704	15,584,769	0.3	0.4	0.3

4.4 Highest level of education completed

Table 4.6 shows that almost half (47%) of the population aged 25 years and over had completed only primary level of education while 22 percent for middle school level and 13 percent for high school level. Only 11 out of 100 persons reported they had graduated or completed some years in the university.

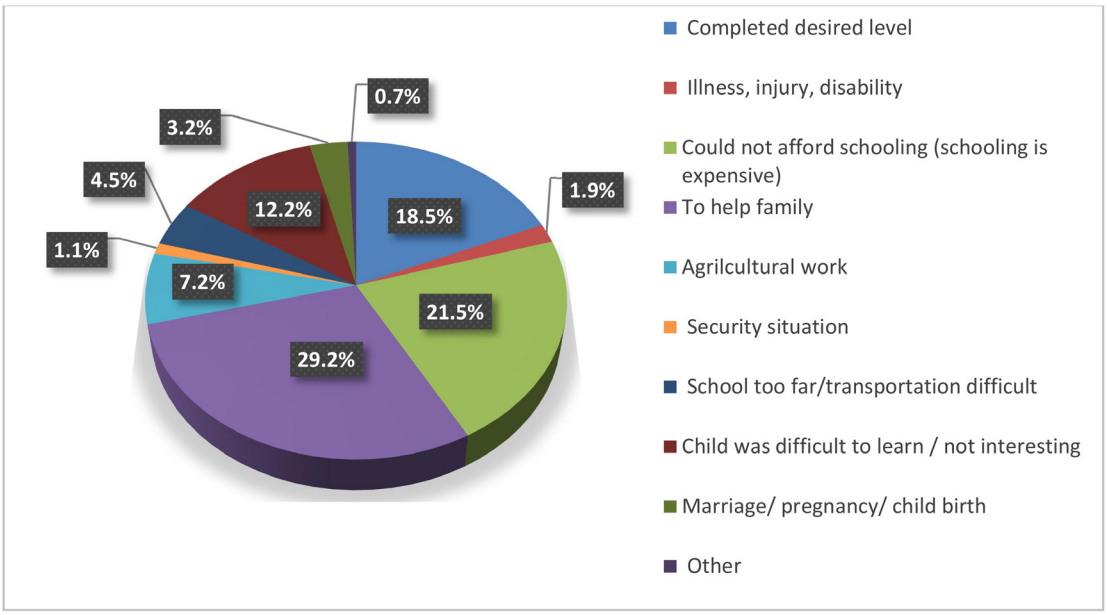
Table 4.6: Population aged 25 years and over by highest level of education completed and sex

Level of education	Total population			Percentage		
	Both sexes	Male	Female	Both sexes	Male	Female
Total population	**25,169,127**	**11,589,504**	**13,579,623**	**100.0**	**100.0**	**100.0**
Not completed	961,554	448,681	512,873	3.8	3.9	3.8
Primary	11,833,141	4,902,655	6,930,486	47.0	42.3	51.0
Middle school	5,468,910	2,918,100	2,550,810	21.7	25.2	18.8
High school	3,348,926	1,761,503	1,587,423	13.3	15.2	11.7
GTHS	42,678	26,708	15,970	0.2	0.2	0.1
TVET	50,947	38,157	12,790	0.2	0.3	0.1
University	2,867,290	1,119,239	1,748,051	11.4	9.7	12.9
Other	595,681	374,461	221,220	2.4	3.2	1.6

4.5 Main reasons for stopping schooling

Information on the main reasons for stopping school, presented in Figure 4.4, was based on the question why a person stopped schooling. The figure shows that 3 out of 10 people reported that they dropped out of school to help the family while 2 out of 10 people responded that they could not afford schooling. About 19 percent of the population aged 3 to 50 years reported they stopped schooling because they already completed the desired level of education.

Figure 4.4: Population aged 3 to 50 years who stopped schooling by main reasons for stopping



Chapter 5

Labour Force Participation

Chapter 5 Labour Force Participation

Economic activity is crucial to all societies. A society's fundamental characteristics are how individuals organize themselves through economic activity and the processes of stratification that are associated with labour division. Analysis in this chapter focuses on various aspects of the economic activity status of the population based on information from 2019 ICS which collected the labour force information from persons aged 5 years and over. However, the analysis in this chapter focused only on the population aged 15 years and over.

The reference period on labour force used in the 2019 ICS was seven days preceding the survey enumeration date. *The economically active* or *labour force* refers to people who are either working or unemployed. A person was regarded as having worked or in employment if he/she had engaged in any activity even for only one hour to produce goods or provide services for pay or profit during the reference period. Persons in unemployment are defined as all those who were not in employment, carried out activities to seek employment during the reference period and were currently available to take up a job when it becomes available.

5.1 Economically active population or labour force

It is possible to measure the extent of a population's participation in the labour force by activity rates. An activity rate is defined as the number of economically active persons in a population of 15 years and over per hundred persons in that particular population.

According to the survey, 63.2 percent of the population aged 15 years and over were economically active or in the labour force. Gender difference in labour force participation was quite large. About 76 percent of the male population aged 15 years and over were economically active compared to only 53 percent of their counterparts.

People in rural areas were more economically active than those in urban areas; with the participation rates of 65.1 percent and 58.9 percent, respectively. There was wide regional variation in the country with the highest labour force participation rates in Kayah State (70.7%) and Shan State (70.0%) while the lowest ones were in Mon State (55.4%) and Kayin State (52.8%).

The unemployment rate among persons aged 15 years and over was 2.7 percent at the national level. The difference in the unemployment rates between urban (2.6%) and rural (2.7%) areas was minimal, though it was quite large among states and regions. Rakhine State, with an unemployment rate close to 20 percent, was the highest while the lowest rates were observed in Kayah State and Magway Region with only about 1 percent each.

The employment to population ratio is defined as the proportion of a country's working-age population that is employed. The employment to population ratio provides information on the ability of an economy to provide employment for those who want to work. The ratio typically falls between 50 and 75 percent with a high ratio indicating that a large proportion of the working-age population is employed. A low ratio indicates that a large share of the population is not involved directly in market-related activities.

According to 2019 ICS, the employment to population ratio was 61.5 percent. This means among persons who were in the working-age group (15+), 61.5 percent were gainfully employed. The remaining 38.5 percent were either unemployed or were out of the labour force.

Table 5.1: Labour force participation rate, unemployment rate and employment to population ratio by sex, State/Region and urban and rural areas

State/Region and Area	Labour force participation rate (15+)			Unemployment rate (15+)			Employment to Population Ratio (15+)		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
UNION	**63.2**	**75.7**	**52.7**	**2.7**	**2.1**	**3.4**	**61.5**	**74.1**	**50.9**
Urban	58.9	70.8	49.1	2.6	2.4	2.8	57.3	69.0	47.7
Rural	65.1	77.8	54.2	2.7	1.9	3.6	63.3	76.3	52.3
Kachin	60.6	72.6	49.0	1.7	1.3	2.3	59.5	71.7	47.9
Kayah	70.7	81.0	61.0	0.7	0.7	0.6	70.2	80.4	60.7
Kayin	52.8	66.7	40.5	2.7	2.2	3.4	51.3	65.2	39.2
Chin	60.1	66.2	55.2	3.1	3.1	3.1	58.3	64.1	53.5
Sagaing	65.7	75.8	57.5	1.3	1.2	1.4	64.9	74.9	56.7
Tanintharyi	58.3	76.3	41.8	1.3	1.1	1.7	57.6	75.5	41.1
Bago	59.4	75.4	46.0	1.5	1.2	1.9	58.5	74.5	45.2
Magway	66.1	76.1	58.4	1.0	1.1	1.0	65.4	75.3	57.8
Mandalay	68.9	79.6	60.3	1.3	1.0	1.7	68.0	78.8	59.3
Mon	55.4	71.8	42.3	2.1	1.5	2.9	54.3	70.7	41.1
Rakhine	56.6	68.4	47.0	19.8	12.6	28.5	45.4	59.8	33.6
Yangon	61.6	74.4	51.0	2.8	2.6	3.1	59.9	72.4	49.4
Shan	70.0	78.4	62.3	1.1	1.1	1.2	69.2	77.5	61.6
Ayeyawady	61.9	78.3	47.3	1.6	1.2	2.1	60.9	77.3	46.3
Nay Pyi Taw	65.1	77.8	54.0	2.0	1.7	2.5	63.8	76.5	52.7

The distribution of labour force participation rate by sex and age in Figure 5.1 illustrates that the proportions of males in the labour force were much higher than that of females for all age groups. The rates for both men and women were almost linear/flat from ages 25 to 49 years and started to decline after age 49. The rates fell rapidly after the age of 60 years for both men and women.

Figure 5.1: Labour force participation rate of the population aged 15 years and over by age group and sex

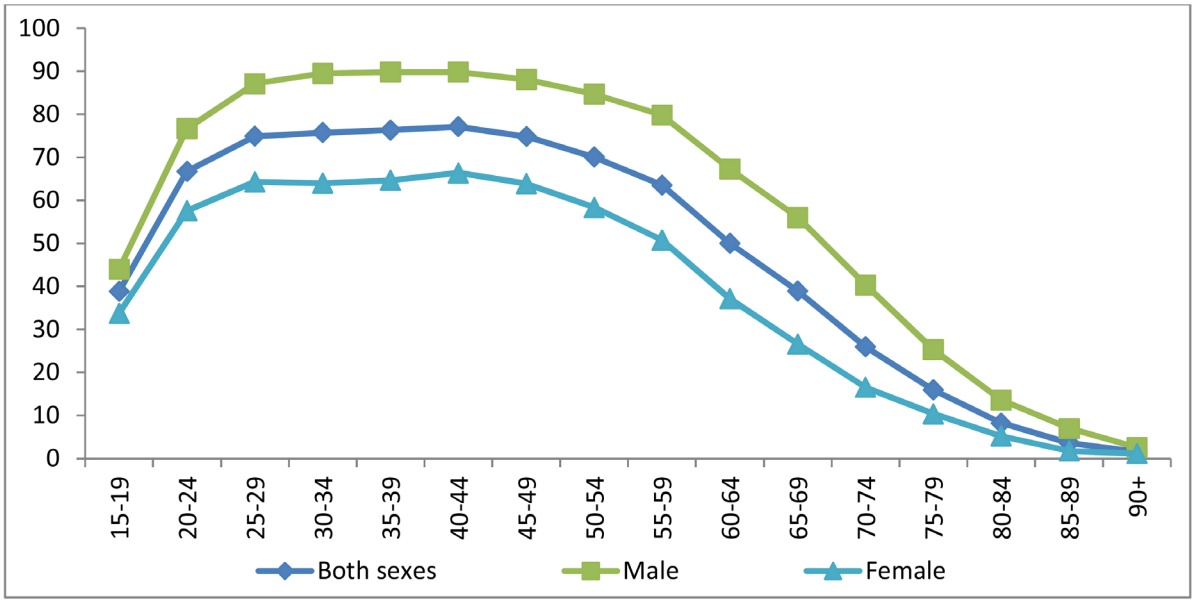
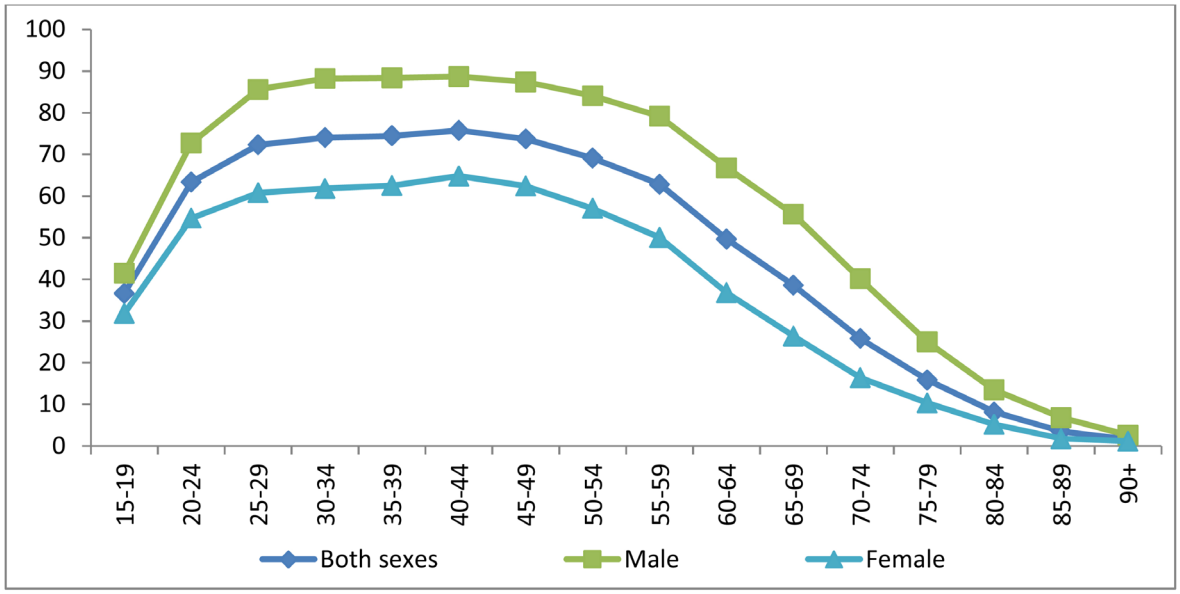


Figure 5.2 shows that the employment to population ratio was much higher for males (74.1%) than that of females (50.9%). This pattern was more or less similar to that of the labour force participation rate as shown in Figure 5.1.

Figure 5.2: Employment to population ratio of the population aged 15 years and over by age group and sex



5.2 Status in employment

Status in employment refers to the type of explicit or implicit contract of employment with other persons or organizations that the employed person has in his or her job.[2] This indicator provides information on the distribution of the workforce according to those: (a) working for wages or salaries; (b) running their own enterprises, with or without hired labour; or (c) working without pay within the family/household business.[3]

Data presented in Table 5.2 shows that among employed persons aged 15 years and over, almost half (45%) were own account workers, and 27.7 percent were employees who worked in the private sector. About 4 percent reported they were employees of the Government. It is worth noting that about 13 percent were working without any pay in a household or family business.

Table 5.2: Employed population aged 15 years and over by status of employment

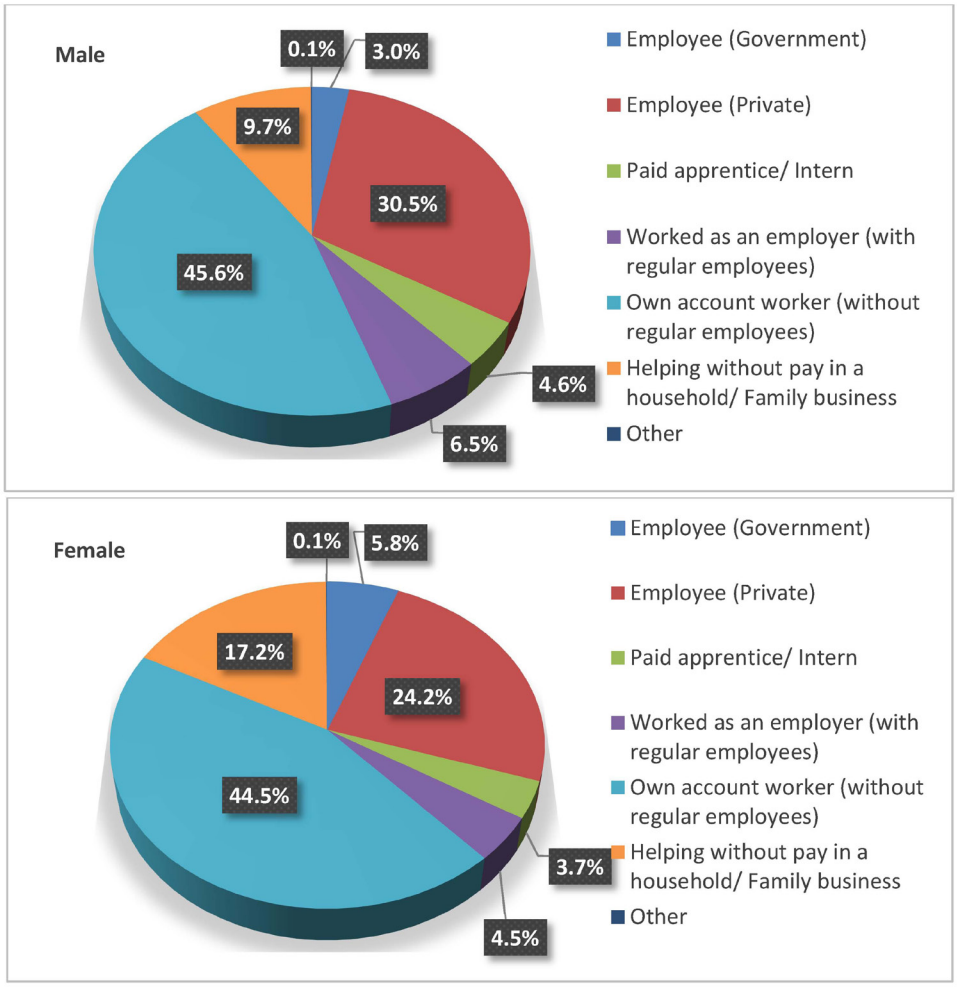
Employment status	Percentage
Total	**100.0**
Employee (Government)	4.3
Employee (Private)	27.7
Paid apprentice/ intern	4.2
Worked as an employer (with regular employees)	5.6
Own account worker (without regular employees)	45.1
Helping without pay in a household/ family business	13.1
Others	0.1

Analysis by sex shows that both for male and female, own account worker forms the biggest group. The second largest group were employees in private organization comprising 30.5 percent and 24.2 percent for male and female, respectively**.** A large group of people in Myanmar were economically active but helping without pay in a household or family business (9.7% for male and 17.2% for female).

[2]Principles and Recommendations for Population and Housing Censuses, Revision 3, United Nations, 2018, Para 4.339, Page 233

[3]Employment by status in employment, ILO

Figure 5.3: Population aged 15 years and over by status of employment and sex



5.3 Occupation

Occupation refers to the type of work done in a job by the person employed, irrespective of the industry or the status in employment in which the person's job should be classified. Type of work is considered in terms of the main tasks and duties performed in the job.[4]

Table 5.3 illustrates that "Skilled Agricultural Forestry and Fishery Workers" is the largest occupational category in Myanmar. Among those employed persons aged 15 years and over, about 41 percent were employed in that category. "Service and Sales Workers" was the second-largest occupational group (18.4%) followed by "Craft and Related Trade Workers" (13.7%) and Elementary Occupations (11.6%). The rest of the groups were relatively small and made up only about 15 percent of all persons employed.

[4]Principles and Recommendation for Population and Housing Censuses, Revision 3, United Nations, 2018, Para 4.352, Page 235

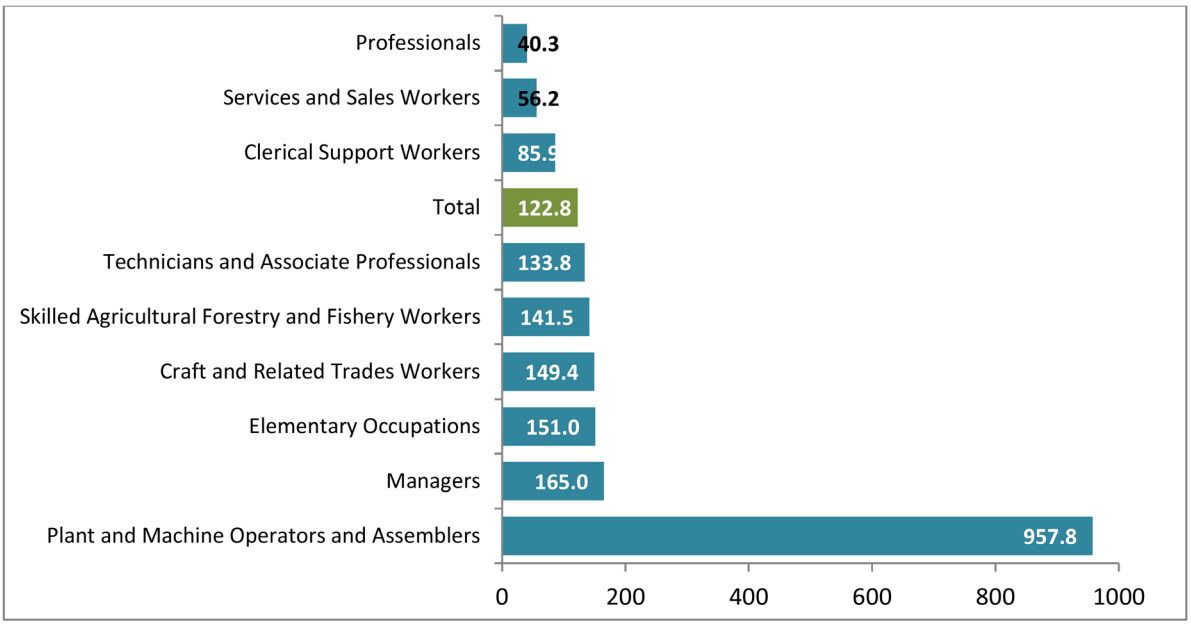
Table 5.3: Main occupational category of employed persons aged 15 years and over by sex

Major occupational category	Number	Percentage			Sex Ratio
		Both sexes	Male	Female	
Total	**22,911,215**	**100.0**	**100.0**	**100.0**	**122.8**
Managers	108,197	0.5	0.5	0.4	165.0
Professionals	727,723	3.2	1.7	5.0	40.3
Technicians and Associate Professionals	504,211	2.2	2.3	2.1	133.8
Clerical Support Workers	860,396	3.8	3.1	4.5	85.9
Services and Sales Workers	4,220,262	18.4	12.0	26.3	56.2
Skilled Agricultural Forestry and Fishery Workers	9,448,823	41.2	43.9	38.1	141.5
Craft and Related Trades Workers	3,141,403	13.7	14.9	12.2	149.4
Plant and Machine Operators and Assemblers	1,227,562	5.3	8.8	1.1	957.8
Elementary Occupations	2,649,800	11.6	12.6	10.3	151.0
Other	22,838	0.1	0.2	*	2596.3

Note: * Less than 0.1 percent

Sex ratio by major occupational categories in Table 5.3 and Figure 5.4 shows that males dominated in six occupational categories. “Plant and Machine Operators and Assemblers” is the most male-dominated profession with 958 males per 100 females working in that field. Women dominated in three occupational categories such as “Services and Sales Workers”, “Clerical Support Workers” and “Professional”.

Figure 5.4: Sex ratios for employed persons aged 15 years and over by major occupational category



5.4 Industry

Industry (branch of economic activity) refers to the kind of production or activity of the establishment or similar unit in which the job(s) of the employed or unemployed person was located during the time reference period established for data collection on economic characteristics.[5] For purposes of international comparison, information on industry was compiled according to the fourth edition of International Standard Industrial Classification of All Economic Activities (ISIC).

Among those employed persons aged 15 years and over, nearly half (45.3%) were working in the "Agriculture, Forestry and Fishing" industry. It was followed by "Wholesale and retail trade; repair of motor vehicles and motorcycles" (15.7%) and "Manufacturing" (9.5%).

The main industry in which both men and women worked was "Agriculture, forestry and fishing", with 47.9 percent and 42.0 percent, respectively. "Wholesale and retail trade: repair of motor vehicles and motorcycle" industry was the second most popular industry for men (about 11%) followed by "Construction" (about 9%). The second and the third most common industries for females were "Wholesale, retail trade and repair of motor vehicles and motorcycles" (20.9%) and "Manufacturing" (13.4%) which was twice higher than that of males (6.3%).

[5]Principles and Recommendations for Population and Housing Censuses, Revision 3, United Nations, 2018, Para 4.356, Page 235

Table 5.4: Proportion of employed persons aged 15 years and over by major industrial category by sex

Major industrial cotegory	Both sexes	Male	Female
Total	**100.0**	**100.0**	**100.0**
Agriculture, forestry and fishing	45.3	47.9	42.0
Mining and quarrying	0.6	1.0	0.2
Manufacturing	9.5	6.3	13.4
Electricity gas steam and air conditioning supply	0.2	0.3	*
Water supply; sewerage waste management and remediation activities	0.1	0.2	0.1
Construction	5.3	8.9	1.0
Wholesale and retail trade; repair of motor vehicles and motorcycles	15.7	11.4	20.9
Transportation and storage	4.5	7.9	0.3
Accommodation and food service activities	4.0	2.7	5.6
Information and communication	0.3	0.3	0.3
Financial and insurance activities	0.3	0.3	0.5
Real estate activities	*	*	*
Professional scientific and technical activities	0.1	0.1	0.1
Administrative and support service activities	3.0	3.0	3.1
Public administration and defense; compulsory social security	0.3	0.5	0.1
Education	2.6	1.0	4.5
Human health and social work activities	0.8	0.5	1.1
Arts entertainment and recreation	0.4	0.4	0.3
Other service activities	5.1	5.6	4.5
Activities of households as employers; undifferentiated goods and services	1.7	1.6	1.7
Activities of extraterritorial organizations and bodies	*	*	*
Not stated	0.2	0.1	0.3

Note: * Less than 0.1 percent

Chapter 6

Fertility and Mortality

Chapter 6 Fertility and Mortality

In the 2019 ICS, data on births and deaths of children were collected from ever-married women aged 10 years and over. These were used to estimate fertility levels, trends, and differentials according to selected background characteristics. This was also used to estimate crude death rate, early age mortality and life expectancy at birth.

6.1 Crude birth rate (CBR)

Crude birth rate (CBR) indicates the number of live births per 1,000 population in a given year. It is obtained by dividing the number of live births born to ever-married women aged 10 years and over in the last 12 months by the total population, multiplied by 1,000. Using this definition, the CBR for Myanmar was 16.6 births per 1,000 population. It was higher in rural areas (17.2) than in urban areas (15.0). Regional variation exists with relatively highest CBR observed in Chin State (26.2), Kayah State (20.6) and Kachin State (20.2), and lowest in Tanintharyi Region (14.4) and Magway Region (14.6).

Figure 6.1: Crude birth rate by State/Region, urban and rural areas, 2014 Census and 2019 ICS

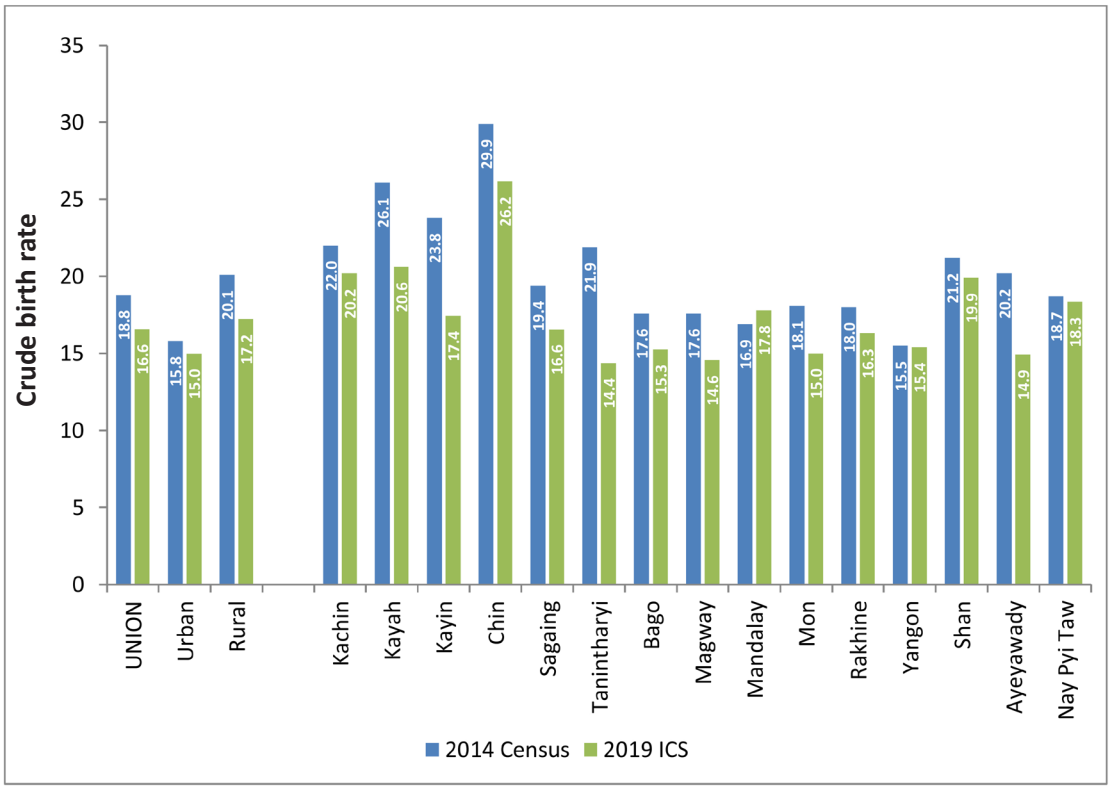
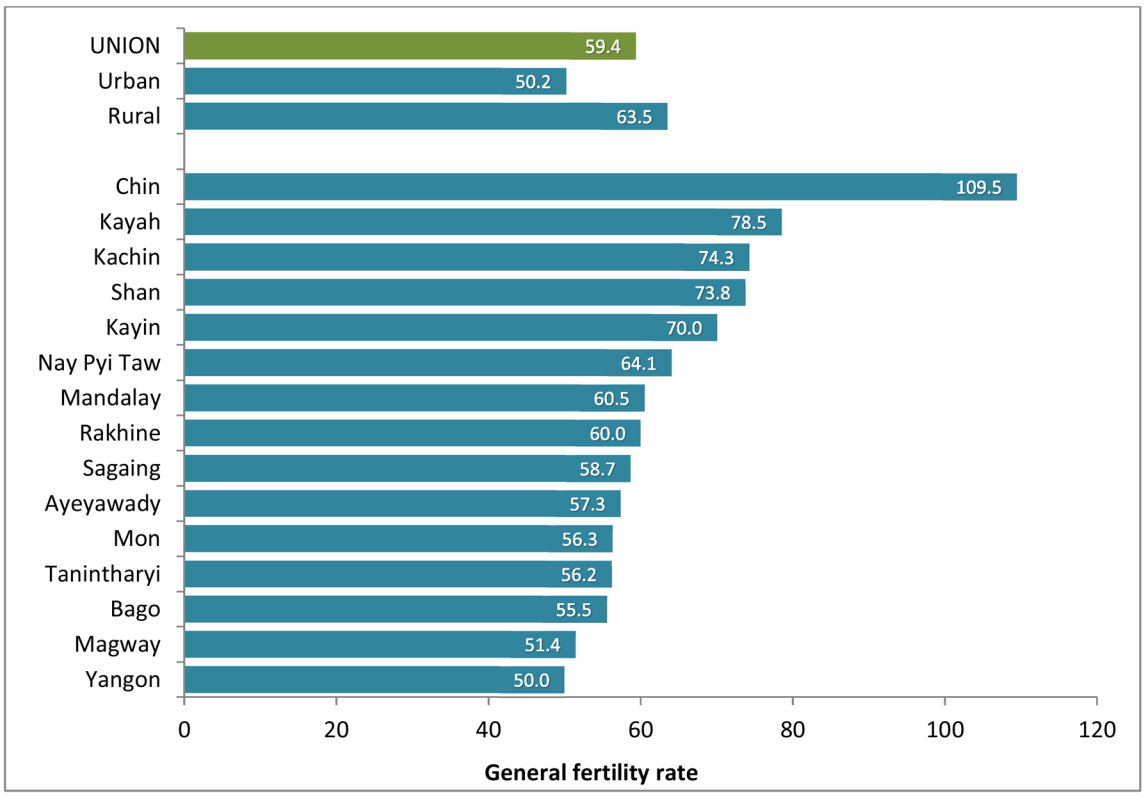


Figure 6.1 that illustrates the comparison of regional CBR between 2014 Census and 2019 ICS, indicates that CBR has decreased in all states and regions except in Mandalay Region where it increased by 0.9 percentage point.

6.2 General fertility rate (GFR)

General Fertility Rate (GFR), a refined measure of fertility, is defined as the number of live births per 1,000 women aged 15-49 in a given year. As shown in Figure 6.2, the GFR for Myanmar is 59.4 births per 1,000 women of reproductive ages. The GFRs at regional level varied with a range of 50.0 for Yangon Region and 109.5 for Chin State.

Figure 6.2: General fertility rate by State/Region, urban and rural areas



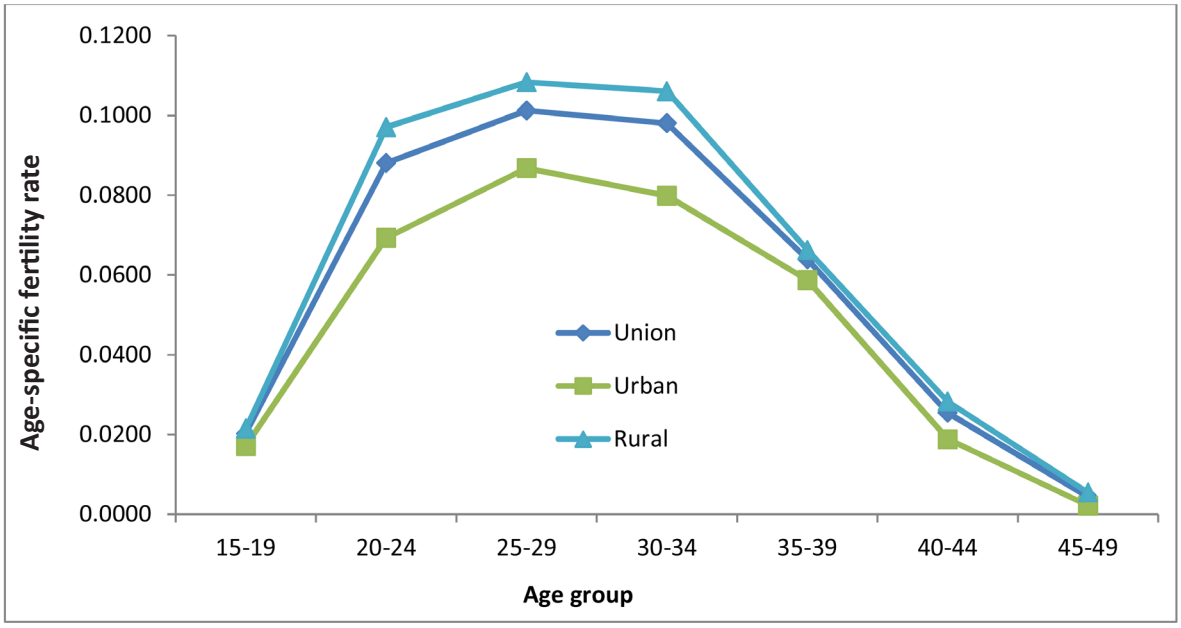
6.3 Age-specific fertility rate (ASFR)

The age-specific fertility rate measures the annual number of live births to women of a specified age or age group per 1,000 women in that age group. An age-specific fertility rate is generally computed as a ratio. The numerator is the number of live births to women in a particular age group during a period of time, and the denominator is an estimate of the number of person-years lived by women in that same age group during the same period of time. It is expressed as births per 1,000 women.[6]

In 2019, ASFR in Myanmar increased slowly from age group 15-19 years, reached its peak at 25-29 years, and then started to decline sharply with the lowest at 45-49 years. This pattern is true for both urban and rural areas, although, as expected, the ASFRs were higher in rural areas compared to urban areas. (Figure 6.3)

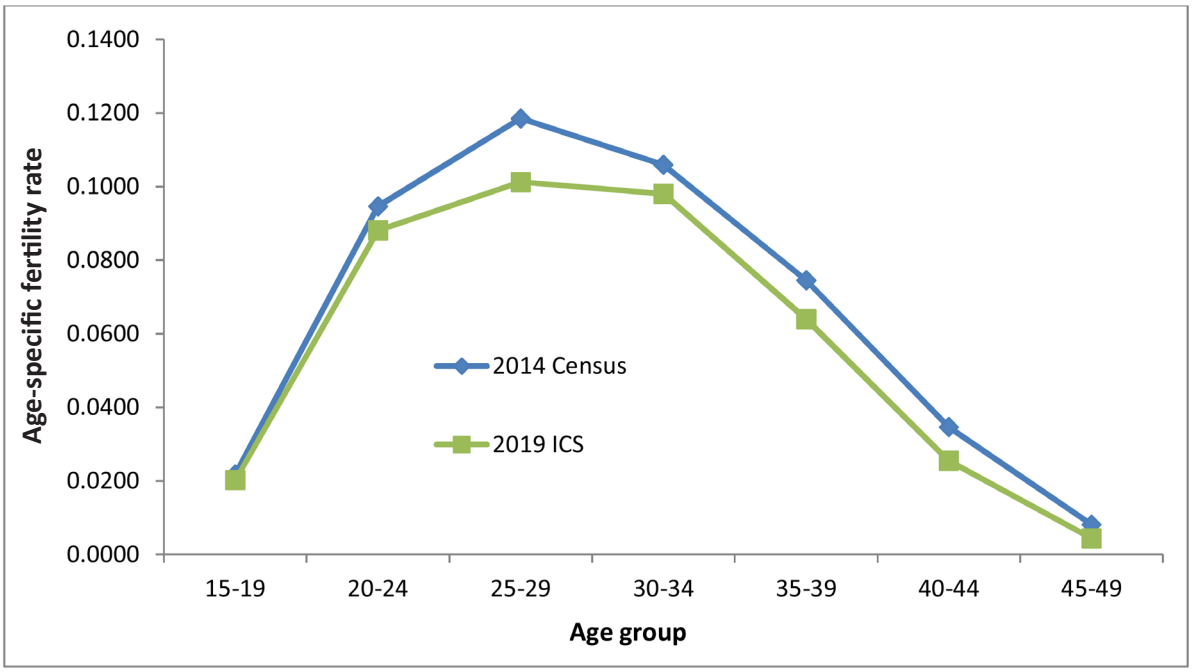
[6]Population Division, Department of Economic and Social Affairs, United Nations; accessed on 4 July 2020 https://www.un.org/en/development/desa/population/publications/dataset/fertility/age-fertility.asp

Figure 6.3: Age-specific fertility rate by urban and rural areas



As shown in Figure 6.4, Myanmar experienced a fertility decline between 2014 and 2019 where the ASFRs of women of all age groups were lower in 2019. It also indicates that, for both 2014 and 2019, fertility was highest in women aged 25-29 and 30-34. It clearly shows that Myanmar women rarely give birth at young ages and also after age 35.

Figure 6.4: Age-specific fertility rate, 2014 Census and 2019 ICS



6.4 Total fertility rate (TFR)

The total fertility rate, in simple terms, refers to the total number of children born or likely to be born to a woman in her lifetime if she were subject to the prevailing rate of age-specific fertility in the population.

TFR from 2019 ICS also supported the fact that fertility of Myanmar has declined during the period 2014 and 2019. As shown in Figure 6.5 and Table 6.1, TFR at the national level has decreased from a level of 2.3 to 2.0. It can also be seen that the decline was more pronounced in rural than in urban areas. Regional differential of TFR for 2019 followed a more or less similar pattern of 2014. Chin State still had the highest TFR of 3.9 while the lowest (1.6) was still for Yangon Region.

Figure 6.5: Total fertility rate by State/Region, urban and rural areas, 2014 Census and 2019 ICS

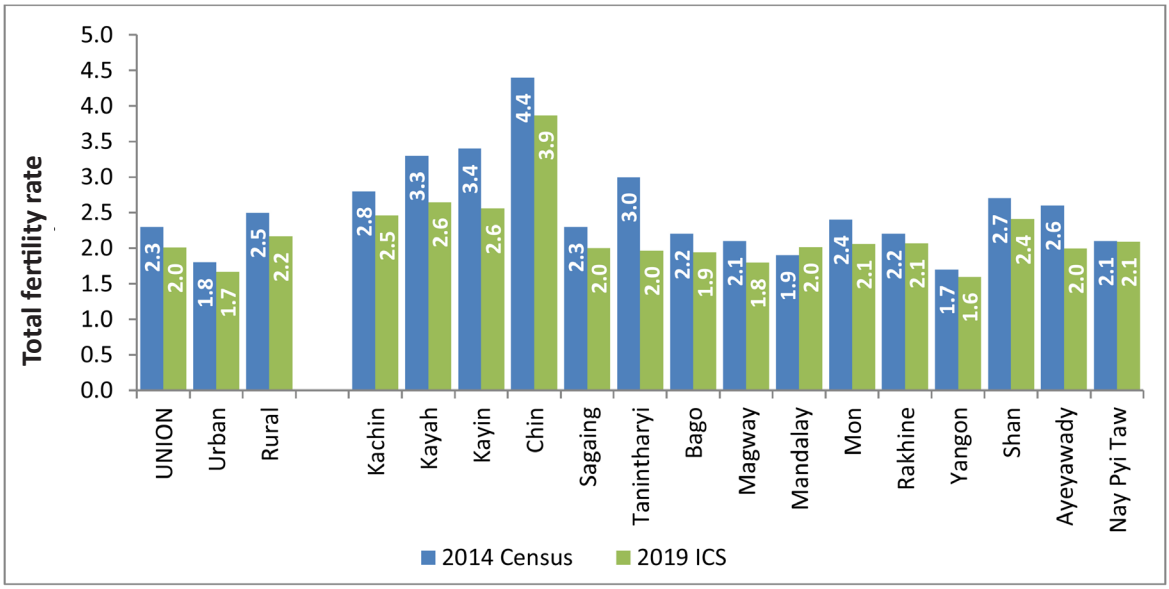


Table 6.1: Crude birth rate, age-specific and total fertility rates by age of women, urban and rural areas, 2014 Census and 2019 ICS

Age of women	2014			2019		
	Union	Urban	Rural	Union	Urban	Rural
15-19	0.0218	0.0152	0.0246	0.0203	0.0171	0.0215
20-24	0.0946	0.0682	0.1070	0.0881	0.0693	0.0970
25-29	0.1185	0.0958	0.1286	0.1012	0.0868	0.1083
30-34	0.1059	0.0910	0.1125	0.0980	0.0799	0.1060
35-39	0.0745	0.0593	0.0812	0.0640	0.0587	0.0662
40-44	0.0346	0.0231	0.0399	0.0255	0.0189	0.0283

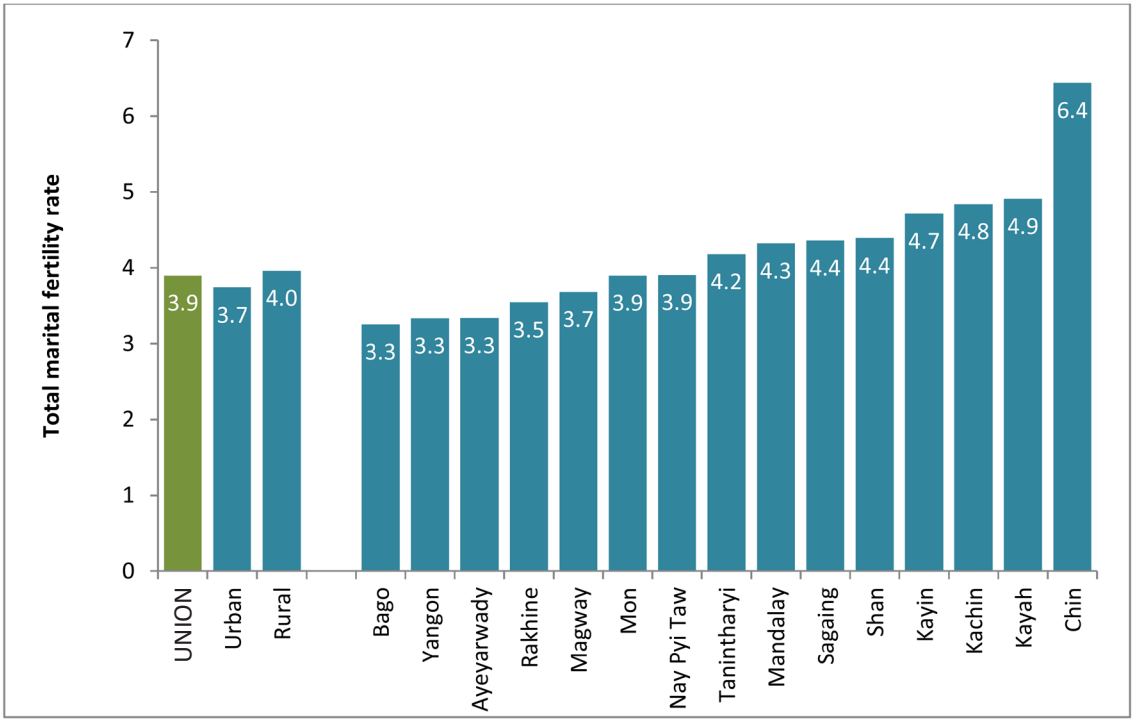
Age of women	2014			2019		
	Union	Urban	Rural	Union	Urban	Rural
45-49	0.0081	0.0050	0.0096	0.0044	0.0022	0.0054
TFR	2.3	1.8	2.5	2.0	1.7	2.2
CBR	18.8	15.8	20.1	16.6	15.0	17.2

6.5 Total marital fertility rate (TMFR)

Total marital fertility is defined as five times the sum of the age-specific marital fertility rates. It is interpreted as the mean number of children that a woman would eventually have if she got married at age 15, survived to the end of the childbearing period, and experienced the observed age-specific marital fertility rates.

The total marital fertility rate at the national level was 3.9. The rates in urban and rural areas were, respectively, 3.7 and 4.0 children per woman. The highest TMFR (6.4 children per woman) was observed in Chin State while the lowest rates (3.3 children per woman) were in Bago Region, Yangon Region and Ayeyawady Region (Figure 6.6).

Figure 6.6: Total marital fertility rate by State/Region, urban and rural areas



6.6 Age at first marriage

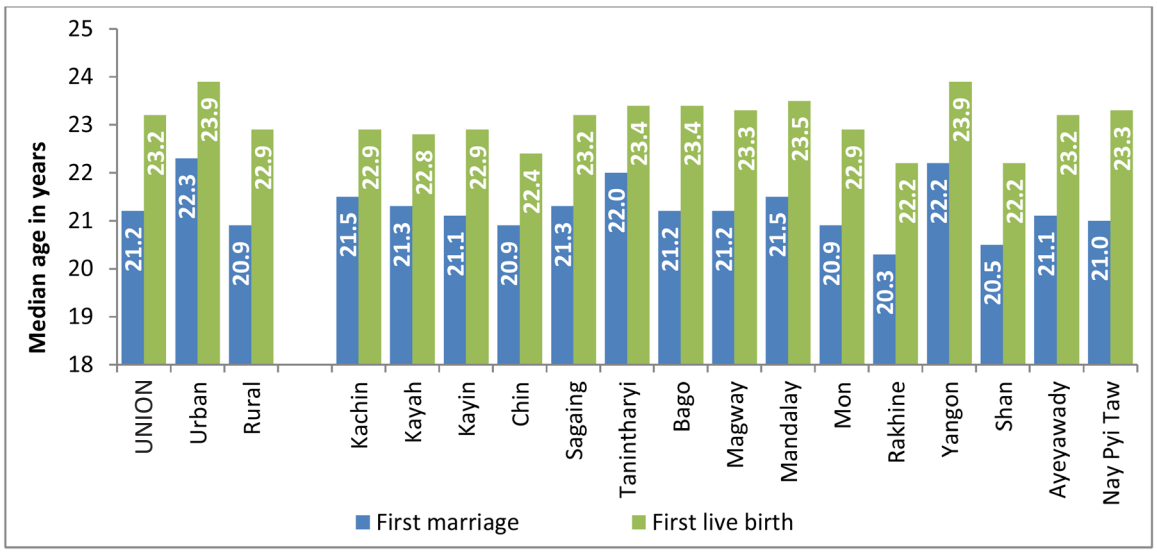
This indicator can provide information on current status at which age young women are entering into marriage and consensual unions. Like other Asian countries, Myanmar has also been experiencing a

transition of the marriage pattern during the last decades. Delayed marriage of both men and women and permanent celibacy, particularly by women, are the main characteristics of the marriage transition in Myanmar.[7]

The 2019 ICS included a question for ever-married women aged 10 years and over on what age they get married for the first time. As shown in Figure 6.7, the median age at first marriage of Myanmar women was 21.2 years at the national level; it was higher in urban areas (22.3 years) than in rural areas (20.9 years). At the regional level, median age at first marriage for women in Yangon Region was the highest (22.2 years) compared to other states and regions. For example, women in Rakhine State and Shan State marry relatively earlier with median age at first marriage of 20.3 years and 20.5 years, respectively.

The comparison of median age at first marriage and age at first live birth is presented in Figure 6.7. The results indicated that, on average, women in Myanmar have their first child about two years after they get married. Surprisingly, the difference in years was higher for women in rural areas (2.0 years) than women in urban areas (1.6 years). Slight regional variation was observed. Women in Nay Pyi Taw, on average, delayed about 2.3 years to have their first child after they get married while women in Kachin State and Tanintharyi delayed their first birth about 1.4 years.

Figure 6.7: Median age at first marriage and first live birth by State/Region, urban and rural areas



Child marriage refers to any formal marriage or informal union between a child under the age of 18 and an adult or another child. It is measured as the percentage of women 20–24 years old who were first married or in union before they reached the age of 18 years. The United Nations Sustainable Development Goal (Goal 5.3) call for global action to end this human rights violation by 2030.

[7]Detailed Analysis on Fertility and Reproductive Health Survey, Department of Population, 2001.

The prevalence of child marriage in Myanmar as presented in Table 6.2, shows that about 16 percent of ever married women aged 20-24 were in a union before the age of 18. As expected, the proportion was higher in rural areas (17.0%) than in urban areas (14.7%). Wide regional variation was observed in terms of early marriage in Myanmar. The proportion of women aged 20-24 who were in a union before the age of 18 ranges from a low of 9 percent for women in Kayah State to a high of 21 percent in Nay Pyi Taw and 20 percent in Shan State.

Table 6.2: Proportion of ever married women aged 20-24 years by age at first marriage, State/Region, urban and rural areas

State/Region and Area	Total no. of ever married women aged 20-24 years	Age at first marriage	
		Under 18	18-24
UNION	**1,624,902**	**16.4**	**83.6**
Urban	414,401	14.7	85.3
Rural	1,210,501	17.0	83.0
Kachin	49,901	12.3	87.7
Kayah	9,600	9.1	90.9
Kayin	44,087	16.4	83.6
Chin	15,182	16.0	84.0
Sagaing	156,177	14.3	85.7
Tanintharyi	34,005	13.3	86.7
Bago	167,364	18.1	81.9
Magway	97,110	16.1	83.9
Mandalay	199,550	15.2	84.8
Mon	53,750	18.3	81.7
Rakhine	101,770	15.7	84.3
Yangon	244,135	15.7	84.3
Shan	210,875	20.0	80.0
Ayeyawady	201,017	16.0	84.0
Nay Pyi Taw	40,380	21.0	79.0

6.7 Age at first live birth (AFLB)

In this section, the age at first birth of women in Myanmar was examined. In 2019 ICS, information on age of mother when she had her first live birth was asked for every ever married woman aged 10 years and over. This information is useful for many family planning programs because of the negative

consequences of early birth on maternal and child health as well as women's status and empowerment.[8]

The distribution of women by median age at first live birth is presented in Table 6.3. The median age at first live birth was 23.1 years among women aged 15-49 indicating that childbearing in Myanmar is relatively occurring at a later age. The median age at first live birth for urban women (24.0 years) was slightly higher than that of rural women (22.9 years).

Table 6.3: Median age at first live birth by current age of women

Current age group	Median age at first live birth (AFLB)		
	Union	Urban	Rural
15-49	**23.1**	**24.0**	**22.9**
15-19	17.9	17.9	18.0
20-24	20.6	20.7	20.6
25-29	22.8	23.3	22.7
30-34	23.9	25.0	23.6
35-39	24.1	25.2	23.7
40-44	23.7	25.0	23.4
45-49	23.9	25.0	23.6

6.8 Singulate mean age at marriage (SMAM)

Singulate mean age at marriage is the average length of single life expressed in years among those who marry before age 50.[9]

Results from the survey show that, on average, men get married about 2 to 3 years later than women. The SMAM of urban areas (25.6) is higher than that of rural areas (24.4). It is true for both males and females. The SMAM differential among states and regions was marginal; it varied with a range of 23.8 (Ayeyawady Region and Nay Pyi Taw) and 26.4 (Tanintharyi Region) (Table 6.4).

Table 6.4: Singulate mean age at marriage by sex, State/Region, urban and rural areas

State/Region and Area	Both sexes	Male	Female
UNION	**24.8**	**26.2**	**23.5**
Urban	25.6	26.9	24.4
Rural	24.4	25.9	23.1

[8]Family Planning and Reproductive Health Database, Measure Evaluation, accessed on 19 August 2020 https://www.measureevaluation.org/prh/rh_indicators/family-planning/fertility/age-at-first-birth

[9]Methods and Materials of Demography, 2004

State/Region and Area	Both sexes	Male	Female
Kachin	25.9	27.5	24.1
Kayah	25.2	27.0	23.4
Kayin	24.9	26.5	23.5
Chin	24.5	26.7	22.6
Sagaing	25.3	26.4	24.3
Tanintharyi	26.4	28.2	24.6
Bago	23.9	25.4	22.4
Magway	25.2	26.5	24.0
Mandalay	24.6	25.6	23.6
Mon	25.1	26.9	23.5
Rakhine	24.7	26.3	23.4
Yangon	25.5	26.7	24.5
Shan	24.3	26.0	22.6
Ayeyawady	23.8	25.2	22.4
Nay Pyi Taw	23.8	25.4	22.4

6.9 Adolescent fertility

Adolescent fertility rate is defined as the number of births per 1,000 women aged 15 to 19. Having children this early in life exposes adolescent women to unnecessary risks. Their chance of dying is twice as high as that of a woman who waited until her 20s to begin childbearing.[10]

The adolescent fertility rate for Myanmar during the year before 2019 was 20.3 births per thousand women aged 15-19 years. The rate increased with the increase in age. The rate varied substantially between urban and rural areas (17 and 22 per thousand, respectively). At the regional level, the rates differed from a low of 13 births per thousand for Bago Region to a high of 43 births per thousand for Chin State (Table 6.5).

Table 6.5: Age-specific fertility rates for women aged 15-19 by State/Region, urban and rural areas

State/Region and Area	Adolescent fertility rates					
	15-19	15	16	17	18	19
UNION	**20.3**	**2.6**	**4.5**	**14.7**	**32.5**	**48.3**
Urban	17.1	2.1	5.6	14.2	24.3	36.4
Rural	21.5	2.8	4.2	15.0	36.0	53.5
Kachin	20.2	3.8	7.8	16.3	19.9	50.8
Kayah	20.1	4.1	4.0	4.4	20.0	60.7

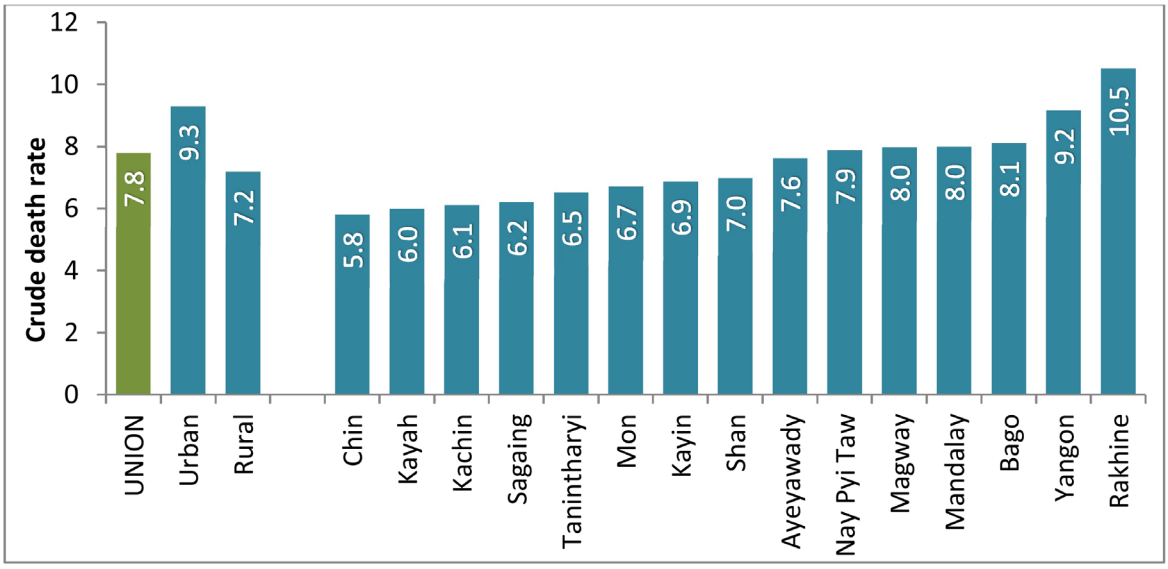
[10]Trends in Adolescent Fertility- A mixed picture, Population Reference Bureau, 2013 https://www.prb.org/adolescent-fertility/#:~:text=The%20adolescent%20fertility%20rate%20is,her%2020s%20to%20begin%20childbearing.

State/Region and Area	Adolescent fertility rates					
	15-19	15	16	17	18	19
Kayin	22.4	4.2	2.3	10.5	40.7	67.9
Chin	43.1	9.9	-	28.5	64.1	103.2
Sagaing	22.6	4.0	5.4	23.4	37.4	44.0
Tanintharyi	23.3	-	8.8	6.7	34.9	65.8
Bago	12.7	1.8	-	13.8	14.1	37.9
Magway	14.0	5.5	4.9	-	28.6	34.8
Mandalay	23.4	1.1	5.2	13.5	34.1	59.5
Mon	18.9	-	5.2	13.2	20.6	62.5
Rakhine	20.5	10.1	-	35.0	17.7	46.3
Yangon	13.6	1.8	-	5.5	31.7	25.3
Shan	34.6	1.9	14.3	25.1	62.9	68.6
Ayeyawady	14.3	-	5.9	10.6	26.8	33.0
Nay Pyi Taw	29.2	-	-	7.6	37.5	99.8

6.10 Crude death rate (CDR)

The crude death rate is simply the number of deaths occurring during the year per 1,000 population in a given period. In 2019, the crude death rate for Myanmar was estimated at 7.8 per thousand population. The result from 2019 ICS shows that the CDR was higher in urban areas (9.3) than in rural areas (7.2). The state and region CDR indicates that it was the highest in Rakhine State (10.5), followed by Yangon Region (9.2); the lowest was in Chin State (5.8), followed by Kayah State (6.0) (Figure 6.8).

Figure 6.8: Crude death rate by State/Region, urban and rural areas



6.11 Early-age mortality

Table 6.6 shows the early-age, infant, child and under-five mortality rates based on the 2019 ICS. The most recent estimate of under-five mortality twelve months before 2019 was 37.7 deaths per 1,000 live births; infant mortality at 30.9 and child mortality at 7.0.[11]

6.12 Life expectancy at birth

Life expectancy at birth shows the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups - children and adolescents, adults and the elderly. As shown in Table 6.6, the life expectancy at birth was 69.4 years for both sexes. It is worth noting that life expectancy at birth of females (73.3 years) is much higher than that of males (66.5 years). The life expectancy at birth for people in rural areas was 68.5 years compared to 71.9 years for people in urban areas.

Table 6.6: Early-age mortality rates and life expectancy at birth by sex, urban and rural areas

Area and Sex	Early-age mortality rate			Life expectancy at birth
	Infant	Child	Under five	
UNION	**30.9**	**7.0**	**37.7**	**69.4**
Urban	22.3	4.1	26.3	71.9
Rural	34.1	8.2	42.1	68.5
Male	39.4	9.1	48.2	66.5
Female	21.1	4.4	25.4	73.3

[11]To estimate early-age mortality indirectly, the West Model from the United Nations Life Tables (MORTPAK Software) was used.

Chapter 7

Migration

Chapter 7 Migration

Migration is one of the three factors besides fertility and mortality that determine the population dynamic of an area or a country. This chapter aims to present information on both internal migration and international migration.

7.1 Internal migration

Findings from some studies had shown that internal migration in Myanmar had increased during the last few decades and the pattern of migration has changed over time.[12] This section focuses on the current level and pattern of internal migration in Myanmar using the data from the 2019 ICS.

7.1.1 Lifetime levels of internal migration

A person whose area of residence at the survey date differs from his area of birth is a lifetime migrant. In this report, lifetime migrants are defined as those who moved from one township to another at least once at any time in their life. According to 2019 ICS, nearly 17 percent of the population in Myanmar were found to be lifetime migrants. Table 7.1 shows lifetime internal migration rates (in-migration, out-migration and net migration) for movements between State/ Region, by sex.

In-migration rate is calculated as the number of in-migrants arriving at a destination per 1,000 population of that destination in a given year.[13]

The results show that Yangon Region, former capital and commercial hub of Myanmar, had the highest level of in-migration rate of 265 per 1,000 population. Nay Pyi Taw, the new capital of Myanmar, followed Yangon with in-migration rate of 145 per 1,000 population. The lowest in-migration rate (14 per 1,000 population) was found in Ayeyawady, a delta region in the south-west of the country.

Out-migration rate is calculated as the number of emigrants departing an area of origin per 1,000 population of that area of origin in a given year.

The findings from 2019 ICS indicate that the highest out-migration (159 per 1,000 population) was observed in Ayeyawady Region. The second highest out-migration rate (138 per 1,000 population) was seen in Chin State.

Net migration is defined as the difference between in-migration and out-migration. If the in-migration exceeds out-migration, the term net in-migration is used, which takes a positive sign. Similarly, net

[12] Level, Trends and Patterns of Internal Migration in Myanmar, Department of Population, 2013.
[13] Population Handbook 5th Edition, Population Reference Bureau

out-migration is applied when out-migration exceeds in-migration and it takes a negative sign.[14]

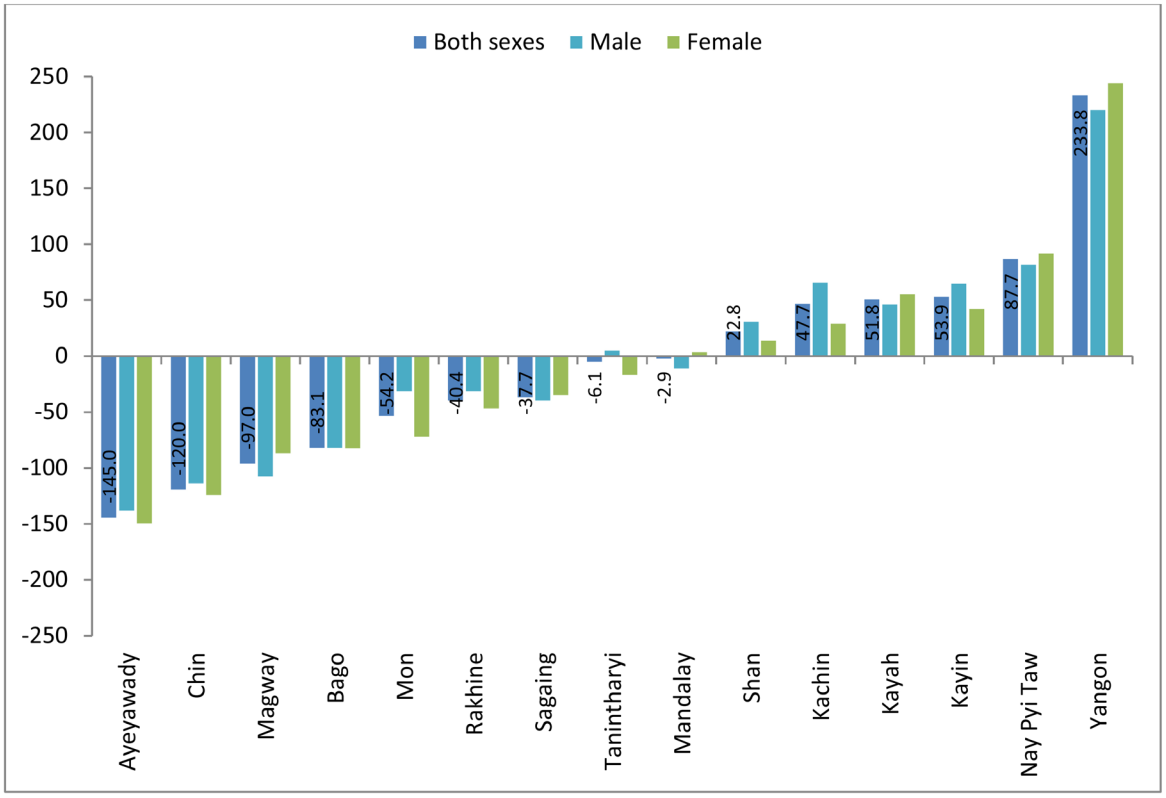
As shown in Table 7.1 and Figure 7.1, out of 15 states and regions, only 2 regions (Yangon and Nay Pyi Taw) and 4 states (Kayah, Kayin, Kachin and Shan) had gained population through migrationvn. Other states and regions showed a negative net migration rate that is, lost population from migration. Yangon Region had the highest level of positive net migration rate (234 per 1,000 population) followed by Nay Pyi Taw with a net migration rate of 88 per 1,000 population. Ayeyawady Region had shown the biggest negative net migration rate (-145 per 1,000 population) followed by Chin State (-120 per 1,000 population).

Table 7.1: Lifetime internal migration rates for movements between State/Region by sex

State/Region of current residence	In-migration rate per 1,000 population			Out-migration rate per 1,000 population			Net migration rate per 1,000 population		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Kachin	102.0	115.2	89.5	54.2	48.6	59.6	47.7	66.7	29.9
Kayah	116.8	113.8	119.7	65.0	66.7	63.4	51.8	47.2	56.2
Kayin	93.5	100.1	87.4	39.5	34.3	44.3	53.9	65.8	43.1
Chin	17.6	17.7	17.4	137.6	132.2	142.4	-120.0	-114.5	-125.0
Sagaing	31.3	32.4	30.4	69.0	72.9	65.8	-37.7	-40.4	-35.4
Tanintharyi	33.7	42.6	25.3	39.8	36.5	42.9	-6.1	6.0	-17.5
Bago	33.8	33.1	34.5	116.9	115.8	117.9	-83.1	-82.7	-83.4
Magway	19.2	20.0	18.5	116.2	128.3	106.4	-97.0	-108.3	-87.8
Mandalay	70.2	68.3	71.8	73.1	80.0	67.3	-2.9	-11.8	4.5
Mon	60.6	70.9	51.9	114.9	103.2	124.8	-54.2	-32.3	-72.8
Rakhine	14.4	19.3	10.2	54.8	51.5	57.7	-40.4	-32.2	-47.5
Yangon	265.1	253.1	275.5	31.2	32.0	30.6	233.8	221.1	244.9
Shan	58.2	62.9	53.8	35.3	31.2	39.2	22.8	31.6	14.7
Ayeyawady	14.4	15.0	13.8	159.4	154.2	164.2	-145.0	-139.1	-150.5
Nay Pyi Taw	145.0	144.7	145.4	57.3	62.2	52.9	87.7	82.5	92.4

[14]Manual VI. Methods of Measuring Internal Migration, United Nations, 1970.

Figure 7.1: Lifetime internal net migration rates for movements between State/Region by sex



7.1.2 Migration streams

Strictly defined, a migration stream is the total number of moves made during a given migration interval that have a common area of origin and a common area of destination. In practice, it is usually a body of migrants having a common area of origin and a common area of destination.[15]

Findings from surveys and 2014 Census have consistently shown that the direction of flow of migration in Myanmar is unusual when viewed from a regional or international perspective. For example, the result from the 2014 Census indicated that almost half of lifetime migration (46.9%) occurred among urban areas and less than 10 percent of movement was from rural to urban areas. Meanwhile, migration from rural areas was directed primarily towards other rural areas.

Information from the 2019 ICS allows for updated information on the pattern of migration streams in Myanmar. In this report, four types of migration streams (urban to urban, urban to rural, rural to urban and rural to rural) are presented.

Information from Table 7.2 indicates that the pattern of migration streams in 2019 was consistent with the findings from previous surveys and 2014 Census. Movement from urban to urban areas, though decreased significantly between 2014 and 2019, was still the largest (37%) among the four types of

[15]Manual VI. Methods of Measuring Internal Migration, United Nations, 1970

migration streams. Movement from rural to urban areas had increased slightly from 10 percent to 14 percent between 2014 and 2019; however, it was still the smallest.

Migration streams, when looking from the gender perspective, showed only a slight difference and followed the national pattern.

Table 7.2: Migration stream for lifetime migrants by sex

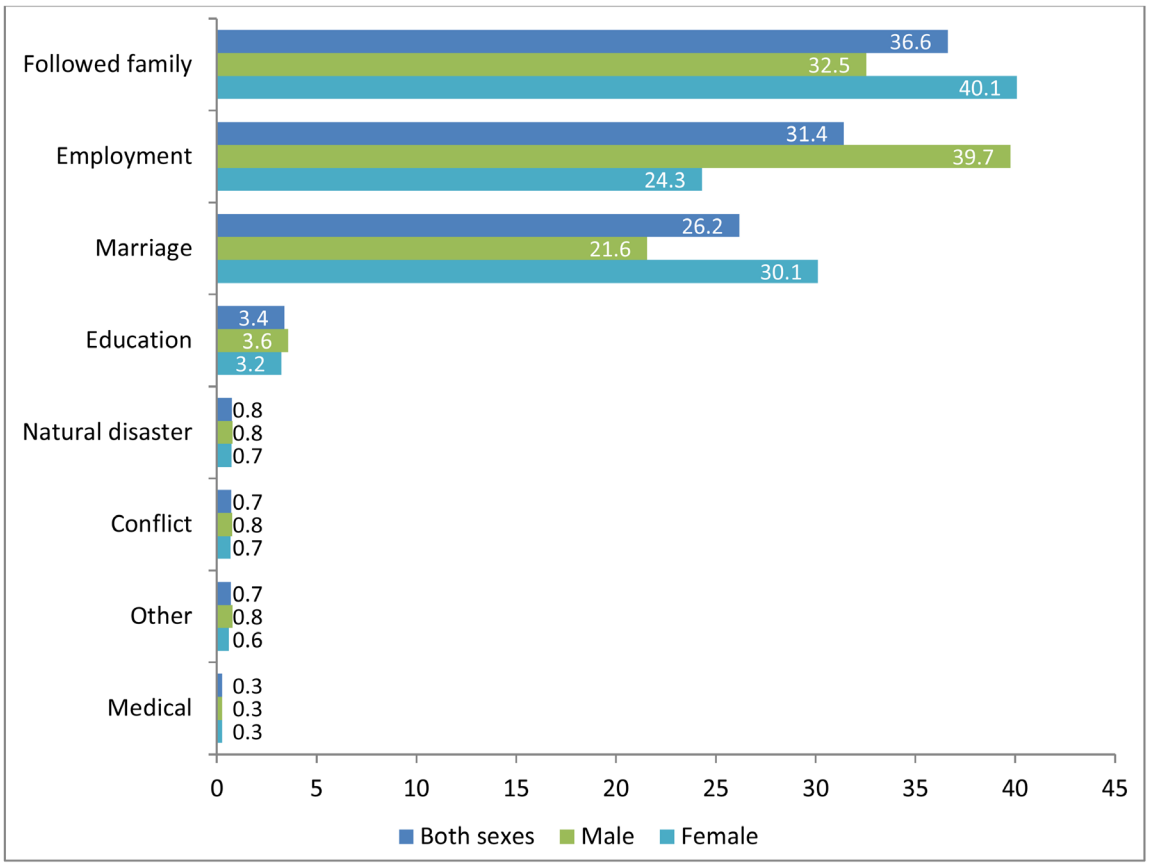
Sex	Migration stream				Total migrant population
	Urban-urban	Urban-rural	Rural-urban	Rural-rural	
Both sexes	**3,094,282**	**1,946,366**	**1,142,628**	**2,156,291**	**8,339,567**
(Percent)	**37.1**	**23.3**	**13.7**	**25.9**	**100.0**
Male	1,393,094	877,650	551,083	1,015,431	3,837,258
(Percent)	36.3	22.9	14.4	26.5	100.0
Female	1,701,188	1,068,716	591,545	1,140,860	4,502,309
(Percent)	37.8	23.7	13.1	25.3	100.0

7.1.3 Main reasons for movement

People migrate for many different reasons. In 2019 ICS, reasons for movement were categorized into eight such as employment, education, marriage, followed family, conflict, medical/health services, natural disaster, and others.

Figure 7.2 shows that the main reason for migration, for both male and female, was to follow family (36.6%), followed by employment (31.4%) and marriage (26.2%). However, the main reasons for movement were different between male and female. For example, the most common reason for male was for employment (39.7%) while it was to follow the family for female (40.1%). Marriage was the third most common reason for male (21.6%) while second for female (30.1%).

Figure 7.2: Percentage of internal migrants by main reason of movement and sex



The main reason for movement within the country varied across states and regions. Seven states and regions followed the national norm of having "to follow family" as the most common reason. However, for Kachin, Kayin, Shan and Nay Pyi Taw, the main reason was for employment. It is interesting to note that in Kachin State, situated in the far north of the country where job opportunities in jade and gold mines attract people from all over the country, almost half of the migrants (44.6%) reported they moved to work or to look for a job. Moreover, more than one third of the migrants in Kayin, Nay Pyi Taw and Shan also reported that they moved for economic reasons. This may be the perfect example of how better job opportunities can pull people to in-migrate. In Yangon Region, the commercial hub of the country, 34 percent of migrants moved in for employment; however, about 42 percent have reported they moved in to follow their families. Another interesting finding was that at least two in five migrants in Bago, Magway and Ayeyawady Regions indicated they moved because of marriage (46.6%, 45.2% and 50.5%, respectively) (Table 7.3).

Table 7.3: Internal migrant population by main reasons of movement from prior residence and State/Region

State/Region of current residence	Reasons for movement (%)								
	Employment/ in search for employment/ business	Education	Marriage	Followed family	Conflict	Medical/ Health services	Natural disaster	Other	Total
UNION	**31.4**	**3.4**	**26.2**	**36.6**	**0.7**	**0.3**	**0.8**	**0.6**	**100.0**
Kachin	44.6	5.0	20.8	26.5	2.4	0.1	0.4	0.2	100.0
Kayah	32.6	5.2	23.3	36.4	1.7	0.6	0.2	*	100.0
Kayin	38.0	2.6	18.3	37.1	3.3	0.2	0.4	0.1	100.0
Chin	21.0	10.9	27.8	38.7	0.2	1.0	0.3	0.1	100.0
Sagaing	25.4	3.7	39.6	29.5	0.3	0.3	0.8	0.4	100.0
Tanintharyi	34.4	2.8	24.6	37.1	0.5	0.1	0.1	0.4	100.0
Bago	18.4	2.6	46.6	31.2	0.3	0.2	0.5	0.2	100.0
Magway	21.0	4.1	45.2	28.3	0.4	0.3	0.5	0.2	100.0
Mandalay	32.7	3.3	29.4	33.5	0.3	0.2	0.4	0.2	100.0
Mon	27.1	5.1	27.4	37.9	0.9	0.3	1.1	0.2	100.0
Rakhine	21.4	6.8	30.8	40.2	0.2	0.1	*	0.5	100.0
Yangon	33.8	3.2	17.9	42.2	0.4	0.3	1.0	1.2	100.0
Shan	36.7	2.3	22.5	35.0	2.7	0.2	0.4	0.2	100.0
Ayeyawady	20.1	3.3	50.5	23.8	0.4	0.2	1.4	0.4	100.0
Nay Pyi Taw	35.8	1.1	25.8	35.0	*	0.3	0.5	1.5	100.0

Note: * Less than 0.1 percent

7.2 International migration

The 2019 ICS identified two types of international migrants: persons who have moved to another country and persons who have moved into Myanmar. Information of Myanmar nationals who were currently residing in other countries was obtained by asking respondents, primarily the household head, whether or not there were former household members who were living abroad. The information collected about them includes their relationship to head of household, sex, date of birth, year of departure from the country, name of the destination country, main reason for leaving the country, type of channel used to leave the country, migrant's education and marital status before departure, current activity abroad, remittance during the last twelve months and main channel used for remittance.

The two populations (those living abroad and the resident population) cannot be combined because these were defined differently. This section will focus only on the analysis of those who were living outside Myanmar at the time of the survey.

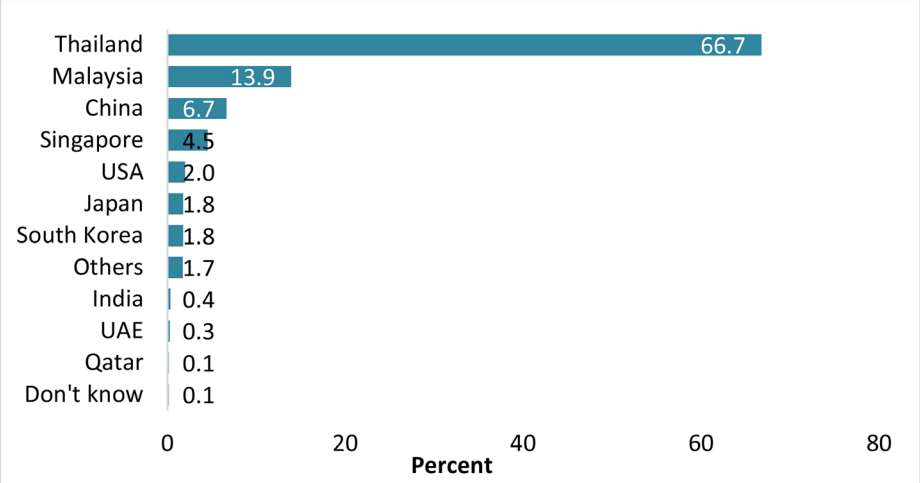
7.2.1 Former household members living abroad

Information from the 2019 ICS shows that approximately 1.6 million former household members were living outside of Myanmar. Of these, 61 percent were males and 39 percent were females.

7.2.2 Current country of residence

About 67 percent of those living outside of Myanmar were living in Thailand. Malaysia hosted about 14 percent of the reported total, followed by China (6.7%) and Singapore (4.5%) (Figure 7.3). This pattern was consistent with the findings from the 2014 Census.

Figure 7.3: Former household members living abroad by country of residence



7.2.3 Reasons for leaving the country

Majority of emigrants (about 96%) migrated due to economic reasons, for both males and females. Education was the second main reason although the proportion was extremely low (2%), with a higher proportion of females than males (2.5% versus 1.6%) (Table 7.4).

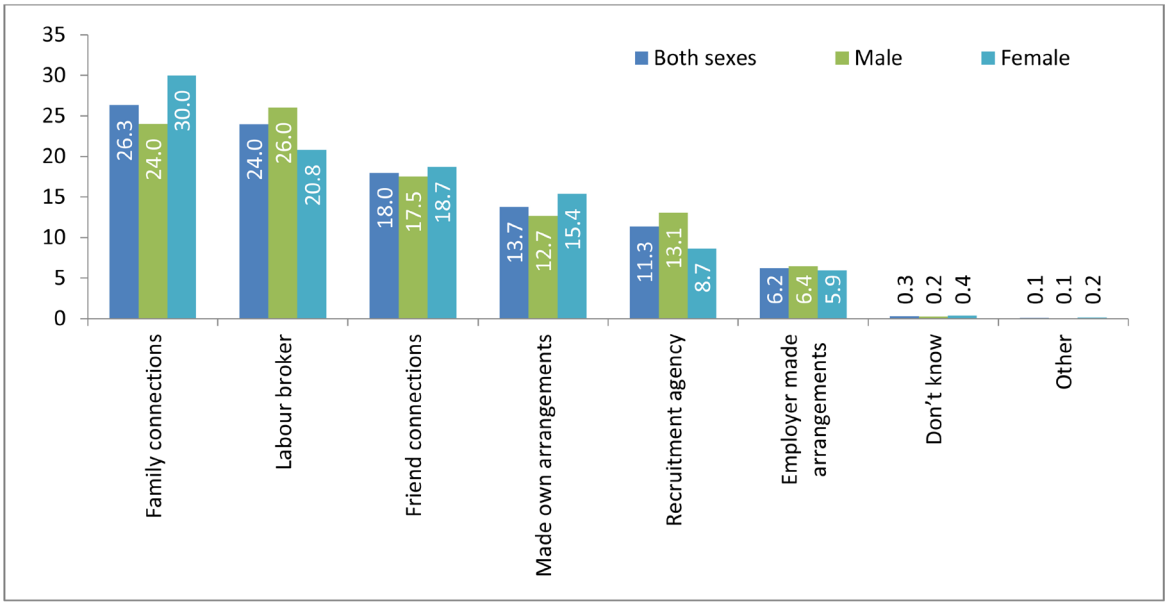
Table 7.4: Reasons for leaving the country of international migrants by sex

Reasons for leaving the country	Both sexes	Male	Female
Total	**100.0**	**100.0**	**100.0**
Employment/ in search for employment/ business	95.8	97.3	93.4
Education	1.9	1.6	2.5
Followed family	1.2	0.3	1.8
Marriage	0.8	0.7	2.1
Others	0.2	0.2	0.2

7.2.4 Type of channels used for leaving the country

About 26 percent of those living outside Myanmar reported that the channel they used to leave the country was “family connections”. The second most common channel was “labour broker” (24%) followed by “friend connections” (18%). However, the most common channel for male emigrants was “labour broker” while it was “family connections” for female emigrants (Figure 7.4)

Figure 7.4: Type of channels used for leaving the country by sex

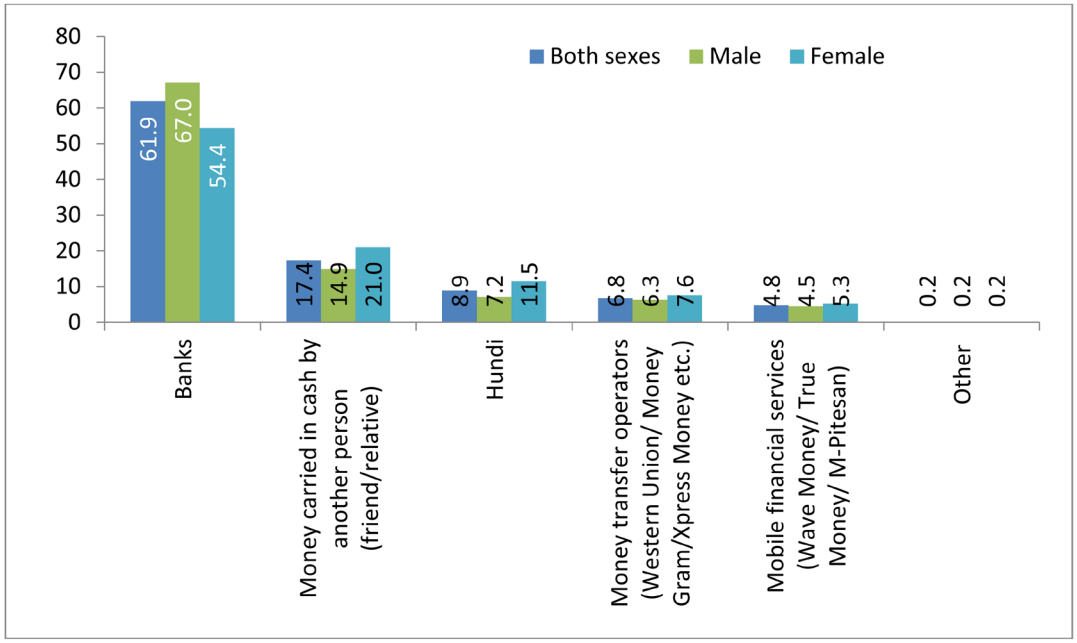


7.2.5 Main channels used in sending remittance

Figure 7.5, which presents the main channels used in sending remittance, shows that 6 in 10 emigrants sent remittances through banks. About 17 percent relied on friends or relatives to carry the money for them. About 9 percent were still using the ‘Hundi’. Only a few migrants used money transfer operators such as Western Union, Money Gram or Xepress Money etc. (6.8%) or Mobile financial services such as Wave Money, True Money or M-Pitesan etc. (4.8%).

A higher proportion of men than women used banks to send remittances to the country (67% versus 54%) while higher proportions of women than men for the remaining channels.

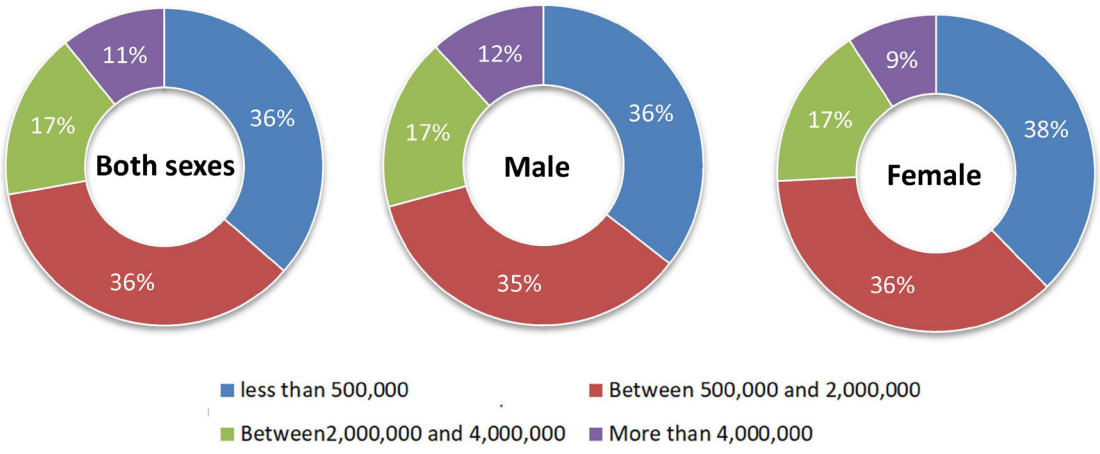
Figure 7.5: Main channels used by international migrants in sending money by sex



7.2.6 Remittances

Remittances covered under this section refer to cash sent back to their households by the emigrants. During the twelve months before the survey, nearly 69 percent of the emigrants had sent remittances to their households in Myanmar. About 36 percent of emigrants sent between 500,000 and 2,000,000 kyats while another 36 percent remitted less than 500,000 kyats. About 17 percent had remitted between 2,000,000 and 4,000,000 kyats and only 11 percent sent more than 4,000,000 kyats (Figure 7.6). There was a little gender difference in the amount sent; 29 percent of males sent more than 2,000,000 kyats while it was only 26 percent for females.

Figure 7.6: Amount of money sent by international migrants by sex



7.2.7 Current activity status

Results from the survey found that most of the emigrants (92.0%) were working as "Employee", clearly supporting the fact that the majority of them left the country for economic reasons. There was relatively higher proportion for males (95.7%) than females (86.2%). Moreover, about 7 percent of female emigrants were working in a "household work" compared to only 0.2 percent for males (Table 7.5).

Table 7.5: Current activity status of international migrants by sex

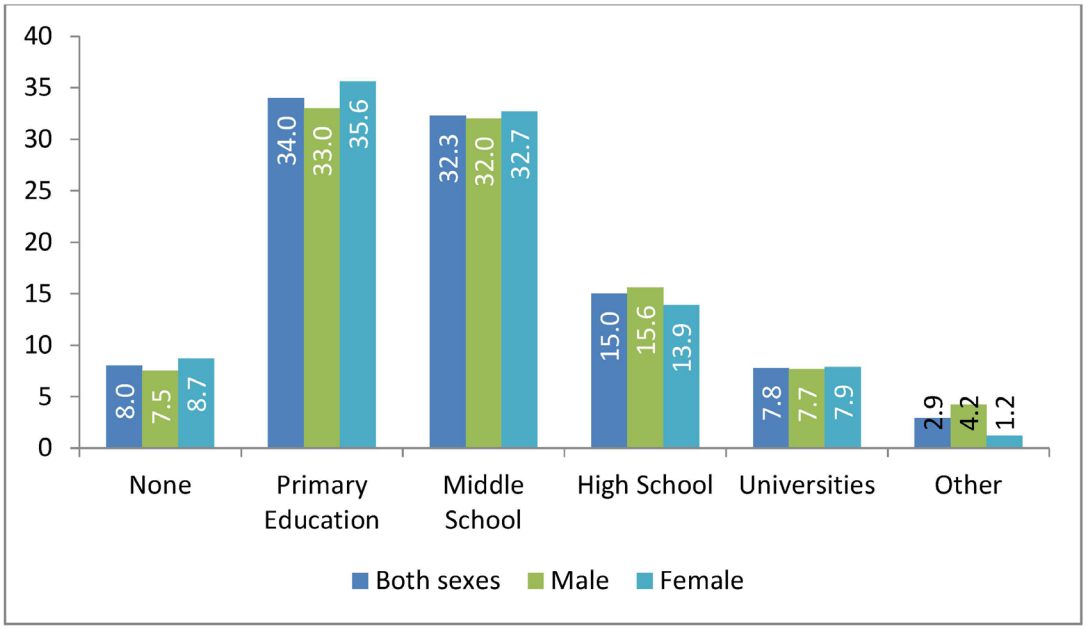
Current activity status	Both sexes	Male	Female
Total	**100.0**	**100.0**	**100.0**
Employee	92.0	95.7	86.2
Household work	2.9	0.2	7.1
Full-time student/ attending training	1.4	1.2	1.7
Don't know	1.1	1.2	0.9
Own Account Worker	1.0	0.9	1.3
Contributing family worker	0.5	0.2	1.0
Idle	0.4	0.2	0.7
Employer	0.4	0.3	0.4
Seeking work	0.2	0.1	0.2
Pensioner, retired, older person	0.2	*	0.3
Illness, injury or disability	0.1	*	0.1
Other	0.1	0.1	*

Note: * Less than 0.1 percent

7.2.8 Highest education completed prior to departure

Results from 2019 ICS revealed that the majority of emigrants were not well educated before their departure to foreign countries. About 66 percent of the emigrants had completed only below high school (primary: 34% and middle school: 32.3%), with 8 percent with no education at all. Although the education level of both males and females conform to the national norm, female emigrants tend to be lower educated than their counterparts (Figure 7.7).

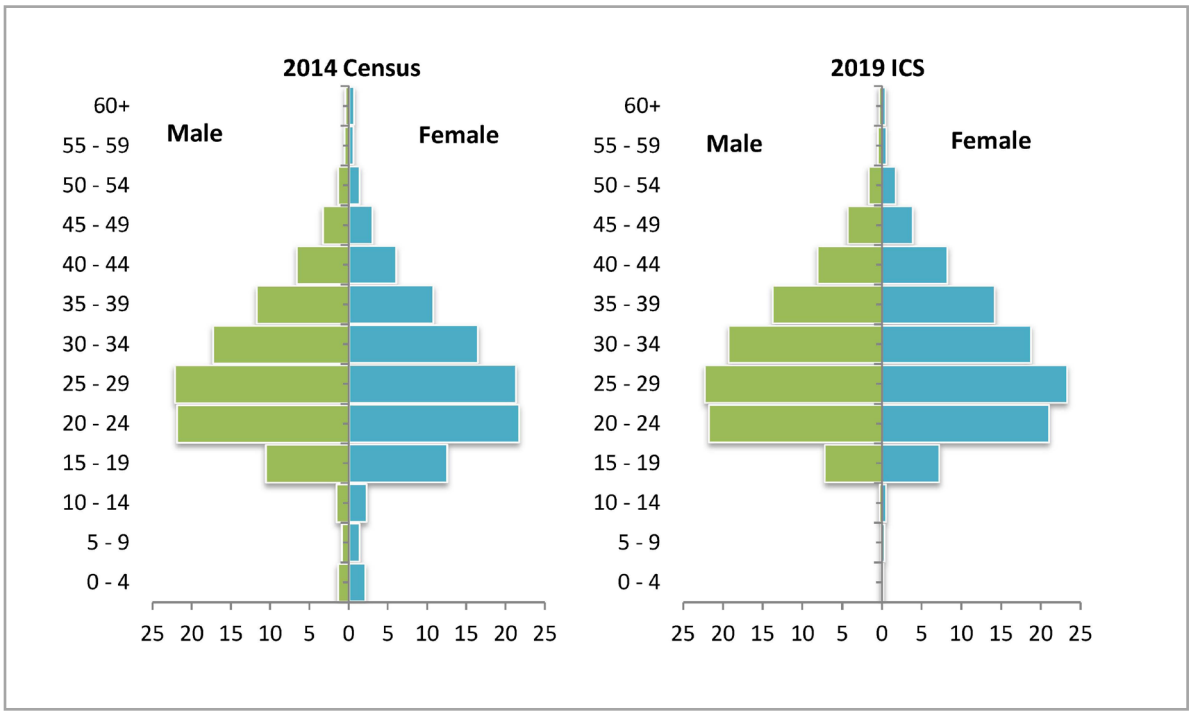
Figure 7.7: Highest grade completed of international migrants by sex



7.2.9 Age-sex pyramid of emigrants

Age-sex pyramids of emigrants for the 2014 Census and 2019 ICS are presented in Figure 7.8. The shapes of both pyramids are more or less the same suggesting the age structure of emigrants did not change much during 2014 and 2019. As can be seen in these age-sex pyramids, the majority of emigrants in 2014 and 2019 were adults in the economically active ages between 20 and 44 years.

Figure 7.8: Age-sex pyramids of former household members living abroad, 2014 Census and 2019 ICS



Chapter 8

Disability

Chapter 8 Disability

In the 2019 Inter-censal Survey, the information on disability was collected using The Washington Group Short Set of Questions that comprises questions on six core functional domains: seeing, hearing, walking/climbing steps, remembering/concentrating, self-care and communication and the degree of difficulty a respondent experienced for each domain. The questions that were asked to every person aged 5 years and over were about difficulties the person may have had doing certain activities due to health or other problems such as a disease or chronic condition, a missing limb or organ, mental illness or any type of impairment including disorders not always thought of as health-related such as senility, depression, retardation, drug dependency, accidental injuries, etc.

8.1 Disability prevalence rate

According to the 2019 ICS, a total of close to six million people aged 5 years and over out of fourty six million of the same age group had reported having at least one type of disability (Table 8.1). This translates to a disability prevalence rate of Myanmar at 12.8 percent. Among the six types of disabilities, the most common type was difficulty in seeing (6.3%), followed by walking/climbing steps (5.4%), remembering/concentrating (4.4%), hearing (2.4%), self-care (1.9%) and lastly, communication (1.6%).

People living in rural areas had higher levels of disability, both in absolute and relative terms, compared to their urban counterparts. Among the population who reported having a disability in at least one of the six domains, 4.3 million lived in rural areas and 1.7 million lived in urban areas. The disability prevalence was 13.1 percent in rural areas and 12.3 percent in urban areas. The prevalence of disability was higher among females (13.9%) than males (11.6%).

The disability prevalence varies across states and regions where relatively higher rates were reported in Chin (20.6%), Rakhine and Ayeyawady (17.3% each) and Magway (17.0%) while the lowest was observed in Shan (8.6%).

Table 8.1: Population aged 5 years and over by disability status, disability prevalence rate, type of disability, sex, State/Region, urban and rural areas

State/Region, Area and Sex	Total population	With any of the six disabilities	Disability prevalence rate (%)	Percent of population who have disability in…					
				Seeing	Hearing	Walking/ Climbing steps	Remembering/ Concentrating	Self-care	Communication
UNION	**46,463,285**	**5,968,986**	**12.8**	**6.3**	**2.4**	**5.4**	**4.4**	**1.9**	**1.6**
Urban	13,578,988	1,674,059	12.3	6.4	1.9	5.4	3.4	1.6	1.3
Rural	32,884,298	4,294,927	13.1	6.2	2.5	5.4	4.9	2.1	1.7

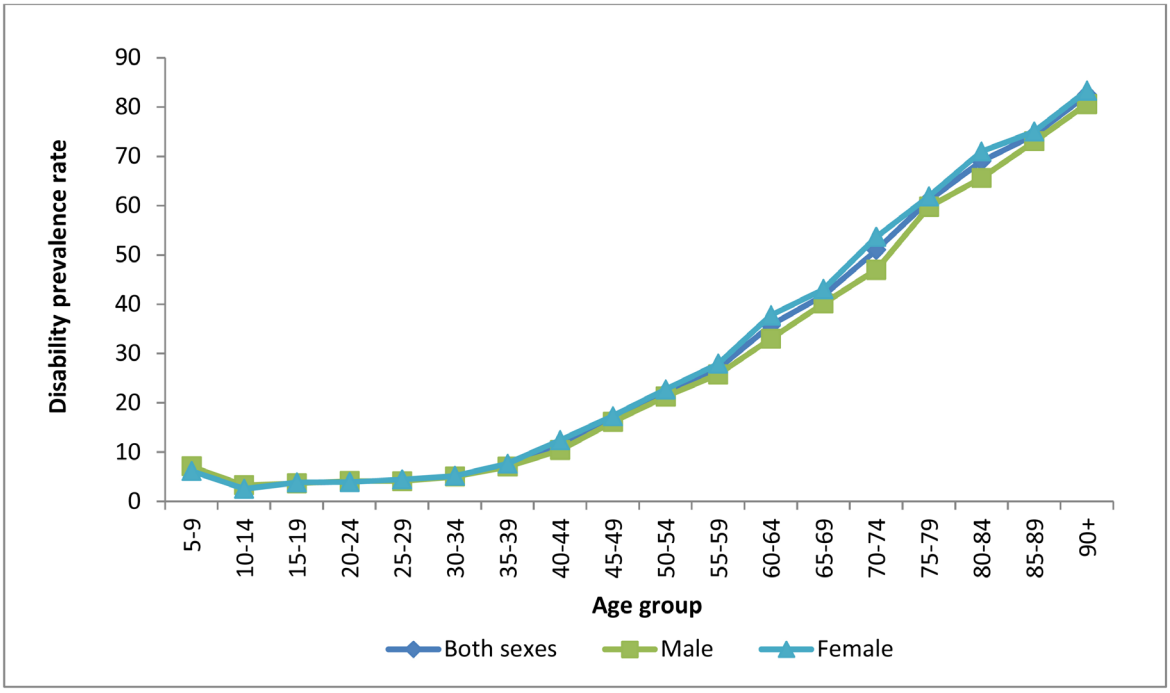
State/Region, Area and Sex	Total population	With any of the six disabilities	Disability prevalence rate (%)	Percent of population who have disability in…					
				Seeing	Hearing	Walking/ Climbing steps	Remembering/ Concentrating	Self-care	Communication
Male	21,599,083	2,510,548	11.6	5.5	2.0	4.4	3.9	1.9	1.5
Female	24,864,202	3,458,439	13.9	6.9	2.6	6.3	4.9	2.0	1.6
Kachin	1,421,335	126,467	8.9	4.9	2.3	3.0	3.4	1.3	1.7
Kayah	274,458	29,729	10.8	3.8	2.3	3.9	4.9	2.3	1.6
Kayin	1,394,545	231,931	16.6	8.6	3.0	8.1	6.4	2.1	1.7
Chin	434,771	89,692	20.6	10.5	6.2	8.7	8.5	2.6	4.3
Sagaing	4,825,519	463,913	9.6	4.8	1.8	3.9	3.3	1.6	1.3
Tanintharyi	1,274,646	147,753	11.6	5.3	2.3	5.1	4.4	1.8	1.9
Bago	4,405,382	553,243	12.6	6.2	2.2	5.5	4.4	1.6	1.4
Magway	3,482,645	593,010	17.0	7.9	2.7	6.5	7.1	2.5	1.8
Mandalay	5,651,062	574,486	10.2	5.0	2.0	4.5	2.4	1.3	1.0
Mon	1,725,611	262,771	15.2	6.9	2.3	5.8	5.6	2.7	2.0
Rakhine	2,914,271	505,503	17.3	7.1	3.8	6.8	7.8	4.3	2.6
Yangon	7,210,592	896,242	12.4	6.5	1.8	5.6	3.1	1.3	1.2
Shan	4,814,943	415,135	8.6	3.6	2.0	3.6	2.9	1.2	1.4
Ayeyawady	5,561,248	963,663	17.3	8.8	3.0	7.5	6.7	2.8	2.1
Nay Pyi Taw	1,072,257	115,449	10.8	6.6	1.9	3.8	2.7	1.2	1.0

8.2 Age-specific disability

Although people can have a disability at any point in their life, the empirical evidence has shown that the prevalence of disability increases with age. The findings from the 2019 ICS also indicated that disability is closely related to age as shown in Figure 8.1. Disability prevalence rates were low (less than 5%) in the younger age groups 10 to 29 years. The rate was about 11 percent among those aged 40 and 44 years; then started to increase sharply until it reached over 80 percent for people aged 90 years and over.

At younger ages, only a small difference in the age-specific disability prevalence rates was observed between males and females. Between the ages of 55 and 59 years, the prevalence rates for males and females were still close; 25.8 and 28 percent, respectively. After the age of 59, the prevalence rate for females increased at a faster pace than that of males.

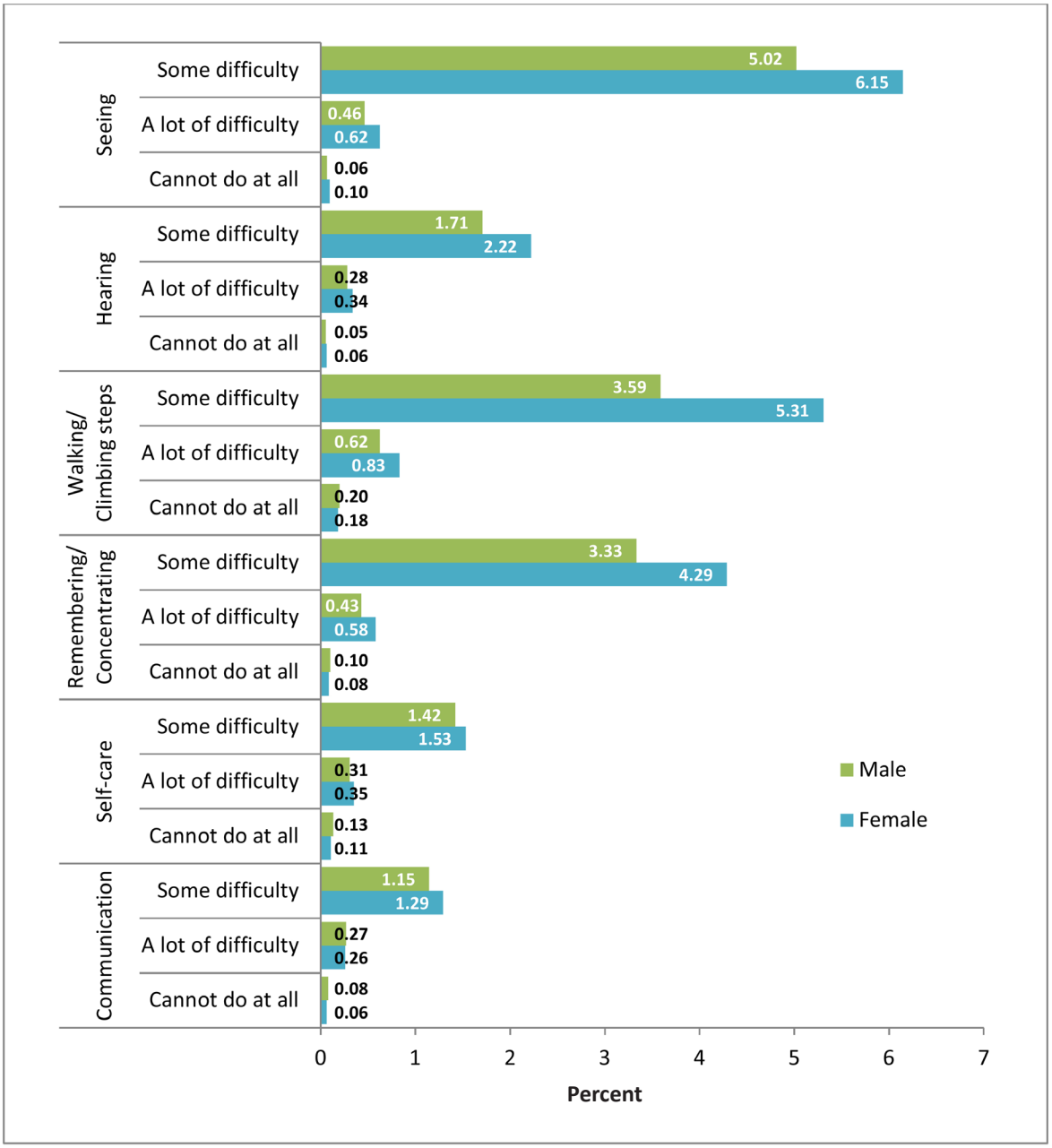
Figure 8.1: Proportion of population aged 5 years and over with disability by age group and sex



8.3 Prevalence of disability by degree of difficulty and domain

To measure the severity of the disability, interviewers asked each household member aged 5 years and over about their disability status and the degree of difficulty. Respondents were to choose from the following responses: "no-no difficulty", "yes – some difficulty", "yes – a lot of difficulty" and "cannot do at all". Figure 8.2 shows that among population aged 5 years and over, very few people (less than 1%) reported that they have "a lot of difficulty" and "cannot do at all". For example, only 0.06 percent of males and 0.10 percent of females reported severe degree of difficulty (cannot do at all) in seeing; only 0.46 percent of males and 0.62 percent of females reported a moderate degree of difficulty (a lot of difficulty) in seeing. Similar rates of prevalence were reported for the other five functional domains.

Figure 8.2: Proportion of population aged 5 years and over with disability by domain, degree of difficulty, and sex

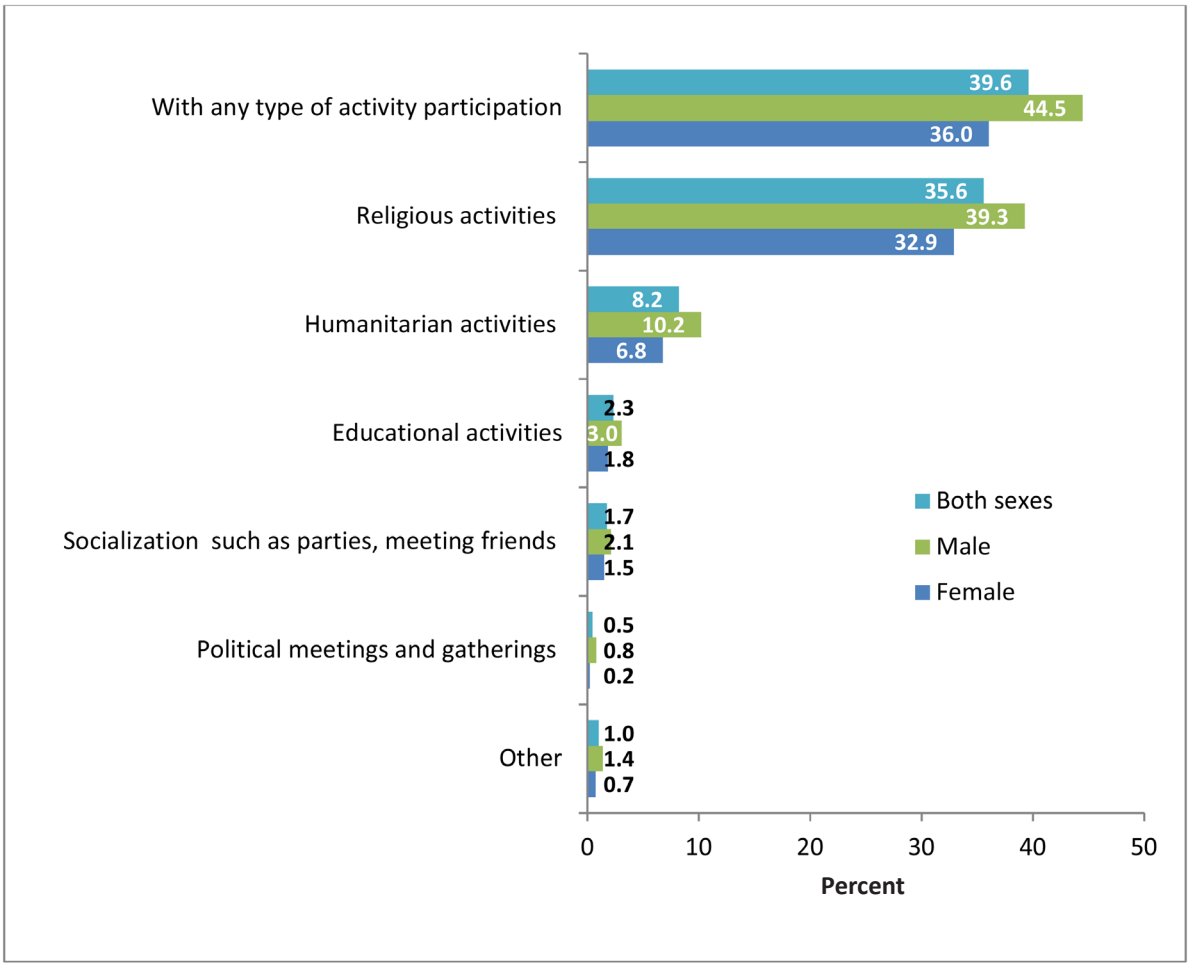


8.4 Community participation/activities

Figure 8.3 shows the proportion of population aged 5 years and over with disability and had participated in community/social/religious activity in the last 12 months by sex and type of activity. Among those with disability, 39.6 percent had participated in at least one of the activities listed. Clearly, among those activities, religious activities was the most common. Almost 36 percent of people with disability reported that they participated in such activities. The percent difference between men and women was quite modest, 39 percent and 33 percent, respectively. Participating in humanitarian

activities was the second most common activity (8.2%). Participating in political meetings and gatherings was quite uncommon, with only 0.5 percent. In all activities, men with disability had higher rates of participation compared to their counterparts (Figure 8.3).

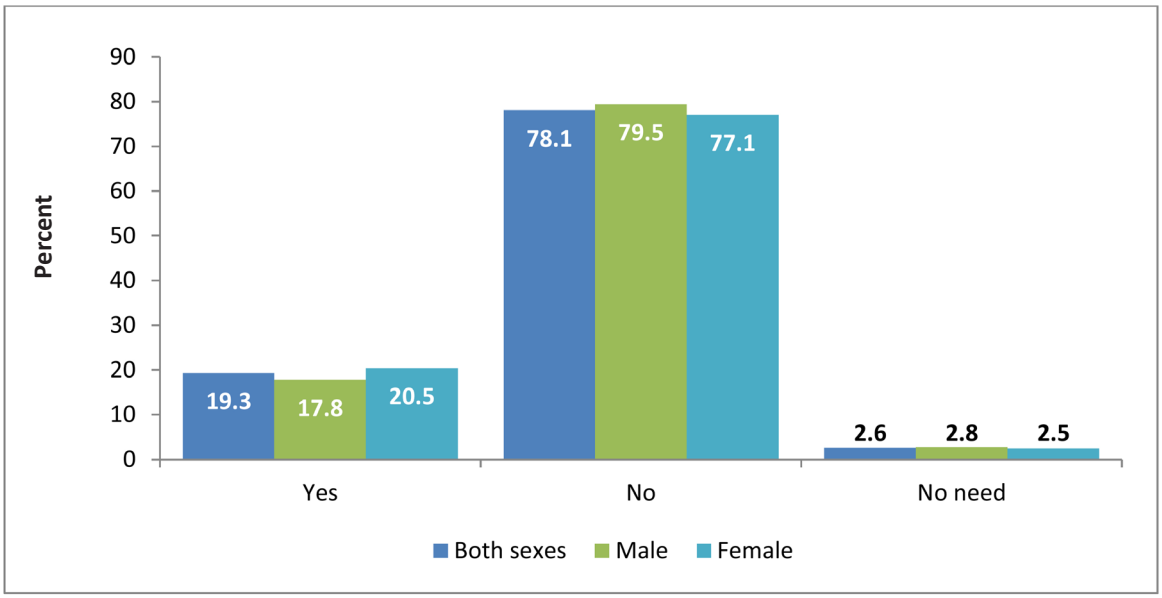
Figure 8.3: Proportion of population aged 5 years and over with disability who participated in any community/social/religious activity in the last 12 months by sex and type of activity



8.5 Support received

Among the population aged 5 years and over with disability, one in five reported he/she had received at least one kind of support in the last 12 months. About 78.1 percent received no support at all and 2.6 percent reported they did not need any support in the last 12 months. There was not much difference in the proportion of support received by men and women (Figure 8.4).

Figure 8.4: Proportion of population aged 5 years and over with disability who received support in the last 12 months by sex



Findings from 2019 ICS show that support to people with disability mostly came from other members of the same households (Table 8.2). About 12 percent of the people with disability reported this source against only about 7 percent from non-household members/organization. The most common type of support that people with disability received was financial (17%). Meal (5.5%) was the second most common support. Medical support (2.7%) comes as the third common support. Male and female difference in the proportion of people with disability who received support was minimal.

Table 8.2: Proportion of population aged 5 years and over with disability who received support in the last 12 months by sex, type and source of support

Type of support	Population with disability who received support			Source of support					
				From household members			From non-household members/organization		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Population with any of the six disabilities	**5,968,986**	**2,510,548**	**3,458,439**						
With any kind of support	**19.3**	**17.8**	**20.5**	**12.0**	**10.8**	**12.9**	**7.3**	**7.0**	**7.6**
Financial	17.0	15.4	18.2	10.7	9.5	11.6	6.3	5.9	6.5
Assistance on daily activities inside the house	1.0	0.9	1.1	0.9	0.8	1.0	0.1	0.1	0.1
Assistance on activities outside the house	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

Type of support	Population with disability who received support			Source of support					
				From household members			From non-household members/organization		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Medical support	2.7	2.5	2.8	1.9	1.7	2.0	0.8	0.8	0.9
Home care	0.4	0.3	0.4	0.3	0.2	0.3	0.1	0.1	0.1
Day care	0.1	0.1	0.2	0.1	0.1	0.1	*	*	*
Transportation	0.1	0.1	0.1	0.1	0.1	0.1	*	*	*
Meal	5.5	4.9	5.9	3.8	3.3	4.1	1.7	1.7	1.8
Other	0.1	0.1	0.1	*	*	*	0.1	0.1	0.1

Note: * Less than 0.1 percent

Chapter 9

The Older Population

Chapter 9 The Older Population

The United Nations has consistently defined older population as those aged 60 years and over.[16] In Myanmar, the mandatory retirement age in the public sector is 60 years. Therefore, in this chapter, those aged 60 years and over are considered as the older population.

9.1 Size of the older population

The increase in the absolute number and relative proportion of the older population are presented in Table 9.1 where the results from two Myanmar censuses (1983 and 2014), and 2019 ICS were compared. The 1983 census enumerated about 2.2 million people aged 60 years and over, comprising 6.4 percent of the total population. In 2014, the enumerated older population was about 4.5 million which is equivalent to 8.9 percent of the total population. According to 2019 ICS, the older population was about 5.2 million comprising 10.1 percent of the total conventional household population. During the last four decades, the proportion of older population and working-age population aged 15-59 had increased while the proportion of the children aged 0-14 had decreased significantly. During 1983 and 2019, the median age of Myanmar's population rose from 20.2 years to 28.2 years and, thus, Myanmar's population in 2019 was older.

Table 9.1: Population by broad age groups, 1983 and 2014 Censuses, and 2019 ICS

Broad age group	1983 Census*	2014 Census*	2019 ICS**
Total population	**34,124,908**	**50,279,900**	**51,144,607**
0-14	13,159,645	14,399,569	13,889,042
15-59	18,794,731	31,405,923	32,094,397
60 and over	2,170,532	4,474,408	5,161,168
Total	**100.0**	**100.0**	**100.0**
0-14	38.6	28.6	27.2
15-59	55.1	62.5	62.8
60 years and over	6.4	8.9	10.1
Median age	**20.2**	**27.1**	**28.2**

Note: * Total enumerated population
** Population in conventional households only

[16]United Nations. 1983. Vienna International Plan of Action on Aging. United Nations, New York; United Nations 2002. Report of the Second World Assembly on Ageing. Madrid. 8-12 April 2002. Population A/CONF. 197/9. United Nations, New York; United Nations Department of Economic and Social Affairs (UN DESA). 2015. World Population Ageing 2015. ST/ESA/SER.A/390. United Nations, New York.

9.2 Measures of age dependency

The demographic indicators of ageing presented in this section are the index of ageing, older age dependency ratio, potential support ratio and parent support ratio. Each indicator captures some aspects of the population-wide implications of ageing by comparing the numbers of children and older people who may be dependent on the support of working-aged adults (15-59).

Children still outnumbered the older population by a wide margin, but the index of ageing has increased from 16.5 in 1983 to 37.2 in 2019 (Table 9.2). In 1983, there were about 17 older people per 100 children while there were 37 older people per 100 children in 2019.

Table 9.2: Indicators of population ageing, 1983 and 2014 Censuses, and 2019 ICS

Indicator of population ageing	1983 Census*	2014 Census*	2019 ICS**
Ageing index	16.5	31.1	37.2
Total dependency ratio	81.6	60.1	59.4
Child dependency ratio	70.0	45.8	43.3
Older age dependency ratio	11.5	14.2	16.1
Potential support ratio	8.7	7.0	6.2
Parent support ratio	1.7	3.7	3.4

Note: * Total enumerated population

** Population in conventional households only

The older age dependency ratio (number of persons aged 60 years and over per 100 persons aged 15-59 years) in Myanmar was 16.1 in 2019 and 11.5 in 1983. On the other hand, the total dependency ratio (population aged under 15 plus the population aged 60 year and over per 100 people aged 15-59) was 59.4 in 2019 and 81.6 in 1983. This decrease was mainly due to significant decline in the proportion of children. During the same period, the child dependency ratio (population under 15 per 100 persons aged 15-59 years) declined from 70.0 to 43.3.

The potential support ratio is the number of people aged 15-59 per one older person. The potential support ratio is an alternative way of expressing the numerical relationship between those more likely to be economically productive and those more likely to be dependents. It is the inverse of the old-age dependency ratio, that is, the number of persons of working age (i.e., aged 15 to 59) per person aged 60 years or over.[17] Between 1983 and 2019, this ratio declined from 9 to 6 potential workers per person aged 60 years or over.

The parent support ratio, that is, the ratio of the population aged 85 years or over to that aged 50 to 64, provides an indication of the level of support families may be able to provide to their oldest

[17] World Population Ageing 2007, United Nations

members.[18] This ratio increased from 1.7 in 1983 to 3.4 in 2019 indicating persons well past middle age are two times more likely than they were in 1983 to be responsible for the care of older relatives.

9.3 Type of pension, allowance and benefit

Table 9.3 shows the proportion of older people who received pension, allowance and benefits. Only 14 percent of older people reported they received at least one kind of pension, allowance or benefits. Work pension was the most availed type of pension with 6.5 percent, followed by family pension (2.4%).

Table 9.3: Proportion of older population who had pension, received allowance, benefits by type of pension, allowance, benefits and sex

Type of pension, allowance, benefits	Both sexes	Male	Female
Older population	**5,161,168**	**2,099,398**	**3,061,770**
With any type of pension, allowance, benefits	**14.2**	**16.0**	**13.0**
Work pension	6.5	8.8	4.9
Veteran's pension, war widow's pension	2.1	2.8	1.7
Family pension	2.4	1.2	3.2
Social pension	1.6	1.6	1.6
Invalid or Disability allowance pension	0.4	0.4	0.4
Sickness allowance	0.9	0.7	1.0
Other	1.1	1.0	1.1
Don't know	0.1	0.1	0.1

9.4 Type of health care

Out of the 5 million older people, close to 2 million persons (38%) reported they had visited a health care facility during the last 12 months. Majority of the older people who visited a health care facility tend to rely on government hospitals (37%) and private hospitals or clinics (38.4%) for their health care (Table 9.4). "Got sick and needed consultations and medicines (out-patient)" was the most common reason for visiting a health care facility with 37.6 percent, followed by "medicine for maintenance" (26.4%) (Table 9.5).

[18] World Population Ageing 2007, United Nations

Table 9.4: Proportion of older population who visited a health care facility in the last 12 months by type of health care facility and sex

Type of health care facility	Both sexes	Male	Female
Older population	**5,161,168**	**2,099,398**	**3,061,770**
Older population who visited any health care facility	**1,971,964**	**744,421**	**1,227,543**
PUBLIC SECTOR			
Government Hospital	37.0	40.0	35.2
Traditional Medicine Hospital/Clinic	3.9	4.0	3.9
Urban Health Center	3.1	2.9	3.3
Disease Control Clinic	0.3	0.2	0.4
Maternal and Child Health Center	0.1	0.1	0.1
Rural Health Center (RHC)	6.6	6.6	6.5
Sub-rural Health Center (SRHC)	3.7	3.5	3.8
Mobile Clinic	0.7	0.6	0.7
Health Volunteer	0.9	0.8	1.0
Other public	*	*	*
PRIVATE SECTOR			
Private Hospital/ Clinic	38.4	36.5	39.5
Private Traditional Medicine Clinic	1.1	1.0	1.2
Private Doctor	2.8	2.5	2.9
Stand-alone VCT Center	*	*	-
Pharmacy	0.7	0.7	0.8
Mobile Clinic	0.4	0.4	0.4
Diagnostic Laboratory	*	0.1	*
NGO/INGO	0.1	0.1	0.1
Other private	0.2	0.2	0.2

Note: * Less than 0.1 percent

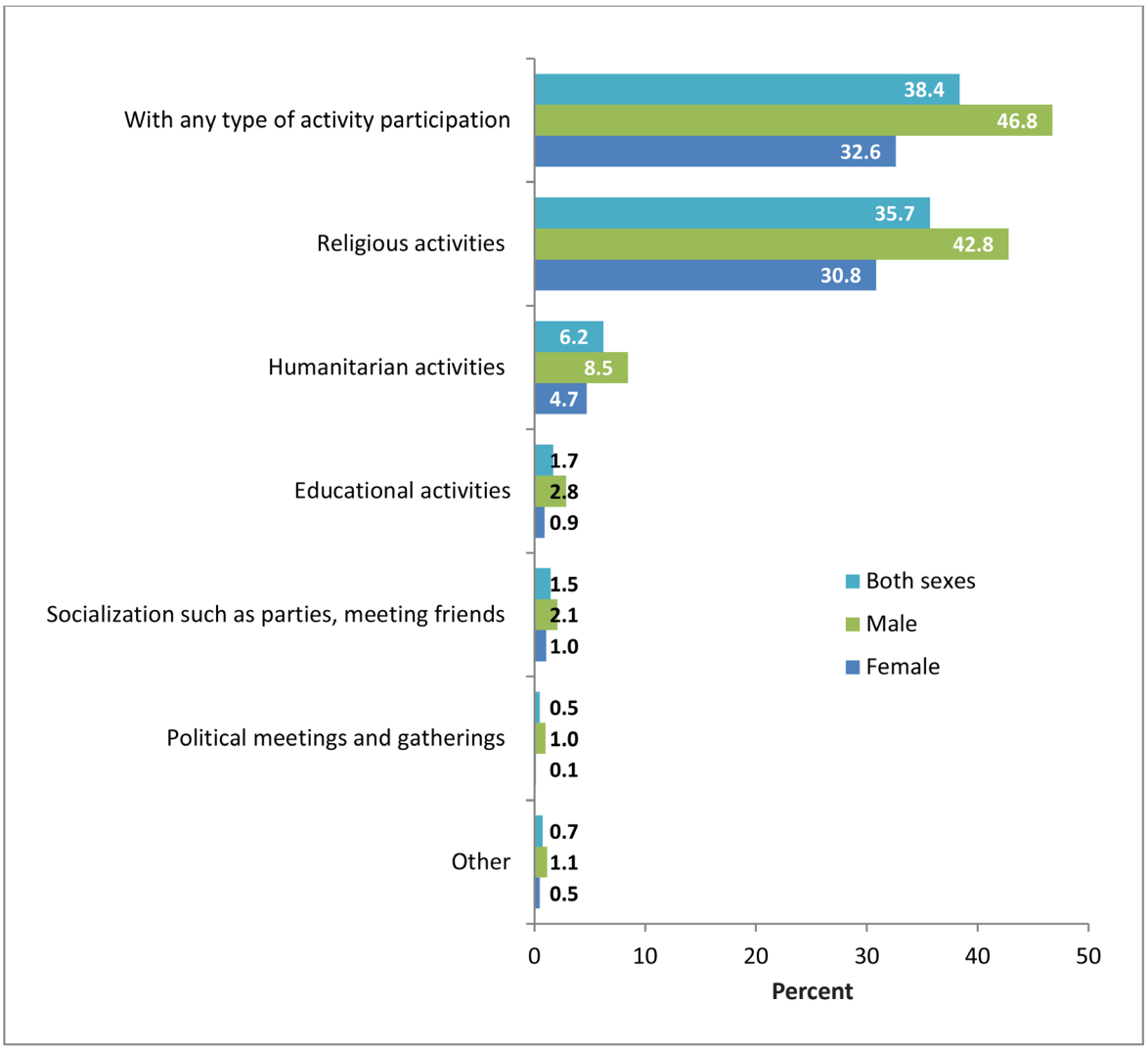
Table 9.5: Proportion of older population who visited a health care facility in the last 12 months by reason for visiting a health care facility, sex and age group

Sex and Age Group	Older popu-lation	Older population who visited any health care facility	Reason for visiting a health care facility						
			Emer-gency Care	Routine/ regular consultation /follow up	Regular laboratory tests	Medicine for maintenance	Got sick and needed consultations and medicines (out-patient)	Got sick and admitted to the health care facility	Other
Both sexes	**5,161,168**	**1,971,964**	**11.6**	**13.4**	**1.9**	**26.4**	**37.6**	**8.5**	**0.6**
60 - 64	1,864,573	648,938	12.0	13.6	1.6	25.9	38.4	7.9	0.6
65 - 69	1,372,534	516,337	11.4	13.4	2.1	25.9	37.8	8.7	0.8
70 - 74	868,129	356,435	11.1	13.3	2.0	26.7	36.8	9.4	0.7
75 - 79	510,929	223,671	12.4	13.8	2.0	25.7	37.0	8.6	0.6
80 - 84	308,170	132,070	10.2	12.6	2.1	27.8	37.9	9.0	0.4
85 - 89	167,695	69,238	11.2	12.4	1.6	33.1	33.9	7.2	0.5
90 +	69,138	25,275	12.9	10.8	0.5	28.1	40.2	6.9	0.6
Male	**2,099,398**	**744,421**	**14.0**	**12.2**	**1.8**	**24.8**	**36.8**	**9.7**	**0.8**
60 - 64	800,074	257,726	14.7	11.6	1.6	23.5	38.8	8.8	0.9
65 - 69	572,627	196,615	14.2	12.3	1.8	24.2	37.0	9.1	1.3
70 - 74	344,565	131,400	12.9	12.9	2.1	24.4	35.1	12.1	0.4
75 - 79	191,346	77,396	13.6	13.6	1.7	24.5	37.1	8.9	0.7
80 - 84	110,862	47,055	13.4	11.5	2.9	27.9	33.0	10.8	0.4
85 - 89	58,914	27,080	12.8	9.6	1.8	36.7	29.7	9.2	0.2
90 +	21,010	7,148	12.0	11.5	0.5	27.9	37.1	11.1	-
Female	**3,061,770**	**1,227,543**	**10.2**	**14.1**	**1.9**	**27.4**	**38.1**	**7.8**	**0.5**
60 - 64	1,064,499	391,212	10.2	14.8	1.6	27.5	38.2	7.3	0.4
65 - 69	799,907	319,722	9.7	14.0	2.3	26.9	38.2	8.4	0.5
70 - 74	523,564	225,035	10.1	13.5	2.0	28.1	37.7	7.8	0.8
75 - 79	319,583	146,275	11.7	14.0	2.1	26.3	36.9	8.4	0.5
80 - 84	197,308	85,014	8.4	13.1	1.7	27.7	40.6	8.0	0.3
85 - 89	108,781	42,158	10.2	14.1	1.5	30.8	36.6	6.0	0.7
90 +	48,127	18,127	13.3	10.5	0.6	28.2	41.5	5.2	0.8

9.5 Community participation/activities

Figure 9.1 shows the proportion of older population who participated in community/social/religious activity in the last 12 months by sex and type of activity. Some 40 percent of older people indicated they had participated in at least one activity. Clearly among those shown, “religious activities” was the most popular. Almost 36 percent of older people indicated they participated in such activities, with 12 percentage point difference between males’ and females’ participation (43%, and 31%, respectively). Participating in humanitarian activities was the second most common activity. On the other hand, participating in political meetings and gatherings was quite uncommon, with only 0.5 percent. In every activity, older men had higher participation rates compared to their counterparts.

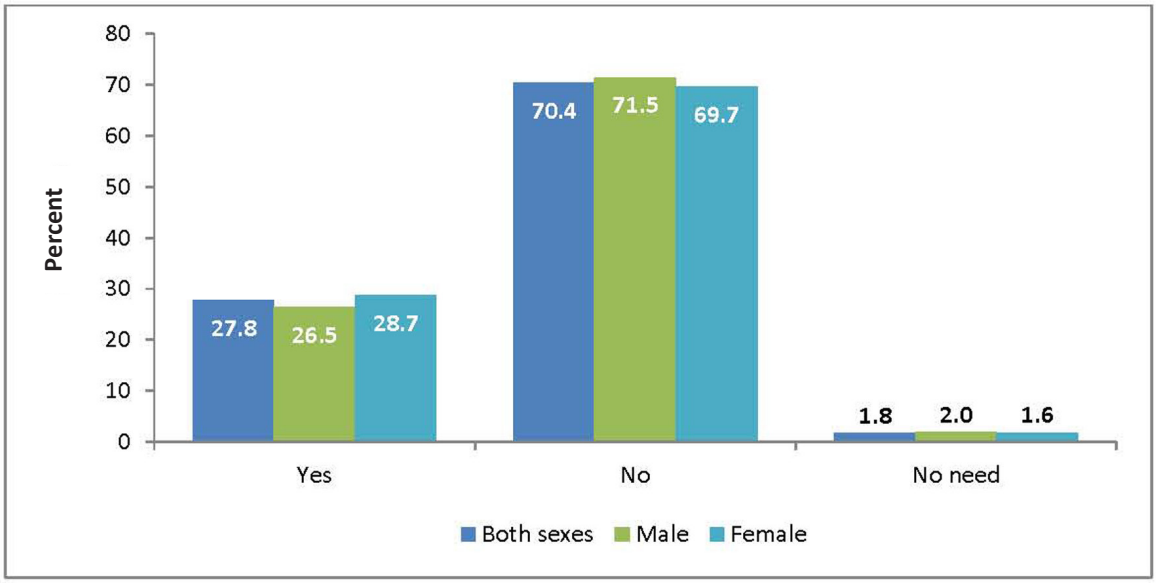
Figure 9.1: Proportion of older population who participated in any community/social/religious activities in the last 12 months by sex and type of activity



9.6 Support received

Among 5 million older people, 27.8 percent received at least one kind of support in the last 12 months, 70.4 percent did not receive any, and just 1.8 percent reported they did not need at all. There was not much difference in the proportion of support received by men and women (Figure 9.2).

Figure 9.2: Proportion of older population who received support in the last 12 months by sex



People living in same households were important sources of support to older persons particularly in providing money, food and medical supports (Table 9.6). About 18 percent of the older persons reported that the support they received came from people in same households while only about 10 percent from non-household members/organization.

Table 9.6: Proportion of older population who received support in the last 12 months by sex, type and source of support

Type of support	Older population who received support			Source of support					
				From household members			From non-household members/organization		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Older population	**5,161,168**	**2,099,398**	**3,061,770**						
With any kind of support	**27.8**	**26.5**	**28.7**	**18.2**	**17.2**	**18.9**	**9.6**	**9.3**	**9.8**
Financial	24.7	23.4	25.5	16.2	15.3	16.9	8.4	8.1	8.7
Assistance on daily activities inside the house	1.7	1.4	1.9	1.5	1.2	1.8	0.2	0.2	0.2

Type of support	Older population who received support			Source of support					
				From household members			From non-household members/organization		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Assistance on activities outside the house	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Medical support	3.9	3.6	4.0	2.8	2.6	3.0	1.0	1.0	1.0
Home care	0.5	0.4	0.5	0.3	0.3	0.4	0.1	0.1	0.1
Day care	0.2	0.1	0.2	0.2	0.1	0.2	*	*	*
Transportation	0.1	*	0.1	0.1	*	0.1	*	*	*
Meal	8.2	7.9	8.4	5.7	5.5	5.9	2.5	2.4	2.5
Other	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1

Note: * Less than 0.1 percent

Chapter 10

Housing Characteristics

Chapter 10 Housing Characteristics

Housing characteristics are important determinants of socio-economic and health status of a household. This chapter presents information on this topic focusing on the type of housing units, tenure status of the household, construction materials of housing units, location of cooking facility, number of rooms, housing amenities, and household income.

10.1 Type of housing units

The types of housing units included in the survey are condominium, apartment/ flat, bungalow/ brick house, semi-pucca house, wooden house, bamboo house, 2 to 3-year-old hut, and 1-year old hut.

Table 10.1 shows that the predominant housing unit type in Myanmar is the wooden house which made up the highest proportion of households (40%) living in it, followed by a bamboo house (26.6%) and semi-pucca house (13.1%). The popularity of the wooden house among the households in the country is seen both in urban and in rural areas. However, relatively, the proportion is higher in rural areas (42.8%) than in urban areas (32.7%). It is worth noting that 3 in 10 households in rural areas live in houses made from bamboo which is the second most common housing unit type in rural areas.

Table 10.1: Percentage of households by type of housing unit, urban and rural areas

Type of housing unit	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Total	**100.0**	**100.0**	**100.0**
Condominium/ Apartment/ Flat	5.7	16.8	1.4
Bungalow/ Brick house	10.5	16.4	8.3
Semi-pucca house	13.1	17.8	11.3
Wooden house	40.0	32.7	42.8
Bamboo house	26.6	13.8	31.5
Hut (2-3 years)	3.0	1.2	3.7
Hut (1 year)	0.6	0.4	0.7
Other	0.5	0.8	0.3

10.2 Tenure status of the households

The information on the tenure status of the households is presented in Table 10.2. About 90 percent of households in Myanmar were owners of the dwellings they were living in. This proportion is 74.6 percent in urban areas and 96.5 percent in rural areas. Only about 6 percent were tenants in private housing units with higher proportion observed in urban areas (17.4%) than in rural areas (1.7%).

Table 10.2: Percentage of households by tenure status, urban and rural areas

Tenure status	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Total	**100.0**	**100.0**	**100.0**
Owned	90.3	74.6	96.5
Rented (Government)	0.7	2.0	0.2
Rented (Private)	6.1	17.4	1.7
Provided free (Individual)	1.6	2.7	1.2
Provided free (Government quarter)	0.8	2.5	0.2
Provided free (Private company quarter)	0.4	0.7	0.2
Other	0.1	0.1	0.1

10.3 Construction materials of housing units

The construction materials of housing units are important characteristics that indicate the socio-economic status of the household. In this report, this was assessed based on three indicators, namely, construction materials of walls, roofs, and floors.

10.3.1 Outer wall materials

Table 10.3 shows that, at the national level, 37.8 percent of households were living in housing units with walls made of bamboo while 27.8 percent in housing units with walls made of tile/brick/concrete and 24.2 percent in wooden walls. Significant urban-rural differences are found in the two types of walls. The most popular construction material for walls in urban areas was tile, brick, or concrete whereas it was bamboo for the rural areas. About half of the households in urban areas (49.4%) used tile, brick, or concrete as materials for the walls while the proportion for rural areas was only about 19 percent.

10.3.2 Roofing materials

The most common roofing material used by households in Myanmar was corrugated sheet (84%). The urban-rural difference in using this type of roofing materials was small (89.6 percent for urban versus 81.8 percent for rural). However, about 13 percent of the households were still using “Dani/Theke/ Palm/ In leaf” as their roofing materials; with higher proportion observed in rural areas (16.6%) than in urban areas (3.4%). Only about 2 percent of the households used tile, brick, or concrete as the materials for their roof.

10.3.3 Floor materials

Survey results show that about half of the households in Myanmar used wood as the flooring material. "Tile/ brick/ concrete" was the second most used material. However, 8.2 percent of the households in Myanmar were still using "Earth" as the flooring material. That proportion was two-fold higher in rural areas (9.4%) than in urban areas (5.2%).

Table 10.3: Percentage of households by type of construction materials of walls, roofs and floors of the housing units, urban and rural areas

Type of construction materials	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Wall			
Total	**100.0**	**100.0**	**100.0**
Dhani/ Theke/ Palm/ In leaf	7.6	2.9	9.4
Bamboo	37.8	22.1	44.0
Earth	0.1	0.2	0.1
Wood	24.2	21.2	25.4
Corrugated sheet	1.6	3.0	1.1
Tile/ Brick/ Concrete	27.8	49.4	19.4
Other	0.8	1.2	0.6
Roof			
Total	**100.0**	**100.0**	**100.0**
Dhani/ Theke/ Palm/ In leaf	12.9	3.4	16.6
Bamboo	0.4	0.2	0.5
Earth	*	*	*
Wood	0.3	0.5	0.3
Corrugated sheet	84.0	89.6	81.8
Tile/ Brick/ Concrete	2.2	6.1	0.7
Other	0.1	0.2	0.1
Floor			
Total	**100.0**	**100.0**	**100.0**
Bamboo	13.6	4.6	17.0
Earth	8.2	5.2	9.4
Wood	50.8	38.8	55.5
Tile/ Brick/ Concrete	27.4	51.4	18.0
Other	*	*	*

Note: * Less than 0.1 percent

10.4 Location of cooking facility

The results presented in Table 10.4 show that more than two-thirds of the households (68.7%) had their cooking facilities located inside their houses. Only 22 percent of the households cooked in a separate building and about 10 percent, outdoors. For these two most common locations, the urban-rural difference is large. The proportion of households that had cooking facilities inside their houses was higher in urban areas (80.3%) by 16.2 percentage points as compared to rural areas (64.1%). However, the proportion of households that had a separate building for cooking was higher in rural areas (25.6%) by 14.5 percentage points as compared to their urban counterparts (11.1%).

Table 10.4: Percentage of households by location of cooking facility, urban and rural areas

Location of cooking facility	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Total	**100.0**	**100.0**	**100.0**
In the house	68.7	80.3	64.1
Separate building	21.5	11.1	25.6
Outdoors	9.6	8.2	10.2
Other	0.2	0.4	0.1

10.5 Number of room(s)

The number of rooms household members occupy is one of the indicators used to evaluate the condition of overcrowding in the household. Crowding is calculated as the number of persons living in the household per number of rooms or bedrooms available in the house. Overcrowding is defined as being above a specific threshold (1.5 persons per room and 2 persons per bedroom).[19] In this report, overcrowding is defined as above 1.5 persons per room because the information on the number of bedrooms was not collected in the survey. The rooms included in the survey were altar room, bedroom, dining room, and living room. Kitchen, toilet or bathroom, balcony or terrace and rooms used for business purposes were excluded.

Households that lived in one-roomed and two-roomed dwelling units made up about half of the total households in Myanmar. Overall, the proportion of households decreases as the number of rooms increases (Table 10.5).

[19] Measuring Overcrowding in Housing, 2007, US Department of Housing and Urban Development

Table 10.5: Percentage of households by number of rooms in the dwelling units, urban and rural areas

Number of room(s)	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Total	**100.0**	**100.0**	**100.0**
1 room	16.5	20.4	15.0
2 rooms	33.9	30.4	35.3
3 rooms	28.8	25.1	30.2
4 rooms	13.1	13.2	13.0
5 rooms	4.9	6.5	4.3
6 rooms	1.8	2.5	1.5
7 rooms	0.4	0.9	0.2
8 rooms	0.3	0.5	0.2
9 rooms	0.1	0.2	0.1
10 rooms and more	0.1	0.3	0.1

Table 10.6 shows that almost half of the total households in Myanmar were living in overcrowded housing units. The same proportion (about slightly less than 50%) of households in both urban and rural areas can be considered to be living in overcrowded homes. However, overcrowding seems to be more severe in urban areas than in rural areas. For example, 29 percent of households in urban areas were living with more than 2 persons per room while this proportion in rural areas was about 26 percent.

All regions and states had overcrowded issues (living more than 1.5 persons in a room) with variation in the degree of severity. Overcrowding rates were relatively higher in Tanintharyi (69.5%), Yangon (61.7%), Mon (60.2%), Kayin (54.1%) and Chin (53.9%). Kachin, Nay Pyi Taw, Shan and Rakhine had relatively lower proportion of about 40 percent.

Table 10.6: Average number of persons per room by State/ Region, urban and rural areas

State/Region and Area	Number of persons per room				
	1.5 and below	1.51 to 2	More than 2	Total	Number of households
UNION	**53.1**	**20.5**	**26.3**	**100.0**	**11,162,510**
Urban	51.6	19.8	28.6	100.0	3,120,314
Rural	53.7	20.8	25.5	100.0	8,042,196
Kachin	60.7	20.6	18.7	100.0	302,429

State/Region and Area	Number of persons per room				
	1.5 and below	1.51 to 2	More than 2	Total	Number of households
Kayah	53.6	23.8	22.6	100.0	66,836
Kayin	46.0	21.4	32.7	100.0	321,985
Chin	46.1	18.9	35.0	100.0	92,286
Sagaing	57.6	21.5	20.9	100.0	1,083,014
Tanintharyi	30.5	18.3	51.2	100.0	287,034
Bago	58.1	18.9	23.0	100.0	1,157,857
Magway	57.6	18.1	24.4	100.0	877,802
Mandalay	54.1	21.8	24.1	100.0	1,369,559
Mon	39.8	20.5	39.7	100.0	399,556
Rakhine	61.8	21.8	16.4	100.0	647,767
Yangon	38.4	22.1	39.6	100.0	1,711,561
Shan	60.7	20.8	18.5	100.0	1,123,111
Ayeyawady	56.9	19.3	23.7	100.0	1,455,636
Nay Pyi Taw	61.0	19.4	19.6	100.0	266,076

Table 10.7 shows the level of overcrowding according to type of housing unit and tenure status of households. The percentage of households that stayed in overcrowded housing units was relatively low for households living in condominium (27.7%) when compared to households living in huts (over 60%).

Overcrowding was most common among households that were privately renting their housing units, with 67 percent of households compared to 46 percent among those that owned their housing units. Households living in government rented housing units or government quarters which were provided free seem to be better off in terms of crowding (37% and 35%, respectively, were considered “crowded” households) as compared with households in non-government owned or provided housing units.

Table 10.7: Average number of persons per room by type of housing unit and tenure status of households

Type of housing unit and tenure status	Number of persons per room				
	1.5 and below	1.51 to 2	More than 2	Total	Number of households
Type of housing unit					
Condominium	72.3	15.3	12.4	100.0	9,433
Apartment/ Flat	49.0	20.1	30.8	100.0	624,861
Bungalow/ Brick house	65.9	17.8	16.3	100.0	1,178,267
Semi-pacca house	62.7	18.6	18.8	100.0	1,465,042
Wooden house	51.7	21.0	27.3	100.0	4,465,754
Bamboo	48.4	22.0	29.6	100.0	2,966,227
Hut 2-3 years	39.6	21.2	39.2	100.0	332,159
Hut 1 year	37.6	18.7	43.7	100.0	67,568
Other	41.4	21.0	37.6	100.0	53,199
Tenure status					
Owned	54.3	20.5	25.2	100.0	10,084,747
Rented (Government)	62.9	17.7	19.4	100.0	79,273
Rented (Private)	33.5	22.6	43.9	100.0	679,450
Provided free (Individual)	50.9	19.2	29.8	100.0	180,226
Provided free (Government quarter)	65.1	14.1	20.8	100.0	93,114
Provided free (Private company quarter)	51.4	16.1	32.5	100.0	39,421
Other	19.5	22.6	58.0	100.0	6,280

10.6 Housing amenities

10.6.1 Sources of energy for lighting

A large proportion of households in Myanmar used grid electricity as the main source of energy for lighting. Table 10.8 reveals that, at the national level, slightly more than half (53%) of the households used grid electricity, while about 29 percent used solar powered electricity. However, there were substantial urban-rural differences; 9 out of 10 households in urban areas used grid electricity whereas it was only about 4 out of 10 households in rural areas. That may be the reason why more households in rural areas relied on the solar system (39.3%) than in urban areas (only 2.8%).

Table 10.8: Percentage of households by energy sources for lighting, urban and rural areas

Source of energy for lighting	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Total	**100.0**	**100.0**	**100.0**
Grid electricity (Government grid/ border country grid/ community based grid)	53.0	90.9	38.4
Generator (Private)	3.5	2.1	4.0
Solar system energy	29.1	2.8	39.3
Wind and water mill	0.8	0.6	0.9
Kerosene	0.5	0.1	0.6
Candle	4.3	1.6	5.3
Rechargeable battery	8.7	2.0	11.3
Other	0.1	*	0.2

Note: * Less than 0.1 percent

10.6.2 Type of cooking fuel

Table 10.9 suggests that a sizeable proportion of households in Myanmar were still using firewood for cooking (53.3%), while 37.6 percent used grid electricity. The urban-rural difference for these two types was quite large. About 73 percent of households in urban areas used grid electricity for cooking, while it was only about 24 percent in rural areas. About 70 percent of the households in rural areas used firewood for cooking while it was only about 13 percent in urban areas. It is interesting to note that about 6 percent of the households in Myanmar used charcoal; this proportion was higher in urban areas (about 10%) than in rural areas (about 5%).

Table 10.9: Percentage of households by type of cooking fuel, urban and rural areas

Type of cooking fuel	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Total	**100.0**	**100.0**	**100.0**
Grid electricity (Government grid/ border country grid/ community based grid)	37.6	72.5	24.1
Generator (Private)	0.2	0.2	0.2
Solar system energy	0.4	0.1	0.5
Wind and water mill	0.1	0.2	0.1
Kerosene	*	*	*
LPG	0.5	1.4	0.2
Biogas	1.1	2.2	0.6

Type of cooking fuel	Union	Urban	Rural
Firewood	53.3	12.5	69.1
Charcoal	6.4	10.3	4.9
Coal	0.2	0.3	0.2
Straw/ Grass	*	*	*
Other	0.1	0.2	0.1

Note: * Less than 0.1 percent

10.7 Household assets

2019 ICS collected information on communication and transportation-related amenities at the household level. These items include radio, television set, mobile phone, landline telephone, computer, internet at home, bicycles, motorcycles, cars/trucks/vans, etc.

10.7.1 Information and communication devices

About 86 percent of households in Myanmar owned at least one mobile phone, 59.3 percent television set, and 19.1 percent radio. As expected, there were some differences between urban and rural areas in terms of the presence of such devices in the households. Presence of mobile phones in the urban areas was 94.9 percent while 82.2 percent in rural areas. Presence of television sets in urban areas was 83.3 percent against 50 percent in rural areas. Regarding internet access, at the national level, 56 percent of households reported that they had access to the internet at home. This proportion was 74.7 percent in the urban areas and 48.8 percent in rural areas. About 9 percent of the households in Myanmar reported that they did not have any of the devices while only 0.3 percent reported that they had all the devices listed. The proportion of households not having any of the items was higher in rural areas (12%) than in urban areas (2.6%) (Table 10.10).

10.7.2 Transportation amenities

Table 10.10 highlights that 59.4 percent of total households in Myanmar owned a motorcycle/moped/ tuk-tuk while 36.7 percent owned a bicycle. However, only 7.8 percent of households owned a motor vehicle such as car/pickup/truck/van. A large proportion of households in Myanmar were still using bullock or horse cart (16.2%). This proportion was more pronounced in rural areas (21.9%) than in urban areas (1.6%).

Table 10.10: Percentage of households by availability of information and communication devices, and transportation amenities, urban and rural areas

Household assets	Union	Urban	Rural
Number	**11,162,510**	**3,120,314**	**8,042,196**
Availability of information and communication devices			
Radio	19.1	13.9	21.2
Television set	59.3	83.3	50.0
Landline/ Fixed-line telephone	4.3	6.9	3.3
Mobile phone	85.8	94.9	82.2
Computer	5.4	15.1	1.7
Internet access at home (through landline or mobile connection)	56.0	74.7	48.8
% with none of the devices	*9.4*	*2.6*	*12.0*
% with all of the devices	*0.3*	*0.8*	*0.1*
Availability of transportation amenities			
Car/ Pickup/ Truck/ Van	7.8	16.6	4.5
Motorcycle/ Moped/ Tuk tuk	59.4	58.0	60.0
Bicycle	36.7	43.5	34.1
Four-wheel tractor	3.3	1.5	4.0
Canoe/ Boat	3.5	0.5	4.7
Motored boat	3.1	0.6	4.1
Cart (bullock/ horse)	16.2	1.6	21.9

10.8 Household income

The 2019 ICS included a question on average annual income (in Lakhs) of all household members from all sources. Responses showed that, at the national level, about 27 percent of the households reported that their annual average household income was between 1.5 million and 3.0 million Kyats while about 26 percent between 0.5 million and 1.5 million Kyats. On the other hand, more than one-third of the households had an annual income of at least 3.0 million Kyats. Only a little less than 10 percent of the households belonged to the lowest income group (500,000 Kyats and below).

As expected, households in urban areas earned more than those in rural areas. Most of the households in urban areas (37.1%) earned between 3.0 million and 6.0 million Kyats while those in rural areas had only between 0.5 million and 1.5 million Kyats (31.4%).

At the regional level, although the average annual income of households varies widely, there were some noticeable similarities among some states and regions. For example, the highest proportion of

households in Yangon and Mandalay fell in the group that earned between 3.0 million and 6.0 million Kyats. However, for some states and regions such as Kachin, Mon, Tanintharyi and Nay Pyi Taw, the highest proportion of households was found in the group that earned between 1.5 million and 3.0 million Kyats. For the rest of the States/Regions, the highest was in the group that earned between 0.5 million and 1.5 million Kyats. It is also worth noting that about one-fourth of the households in Kayah and Chin State earned only 500,000 kyats and below annually.

Table 10.11: Percent distribution of household's annual average earnings (Kyats), State/Region, urban and rural areas

State/ Region and Area	500,000 and below	Between 500,000 and 1,500,000	Between 1,500,000 and 3,000,000	Between 3,000,000 and 6,000,000	More than 6,000,000	Total	Number of households
UNION	**9.8**	**26.1**	**27.0**	**24.5**	**12.6**	**100.0**	**11,162,510**
Urban	3.4	12.4	24.2	37.1	22.9	100.0	3,120,314
Rural	12.3	31.4	28.1	19.6	8.7	100.0	8,042,196
Kachin	7.9	24.0	31.6	23.2	13.3	100.0	302,429
Kayah	25.2	29.1	23.4	15.5	6.8	100.0	66,836
Kayin	16.4	29.7	26.2	18.3	9.4	100.0	321,985
Chin	25.9	27.4	20.7	15.7	10.3	100.0	92,286
Sagaing	13.8	32.5	27.5	18.1	8.1	100.0	1,083,014
Tanintharyi	9.9	25.5	26.5	23.4	14.8	100.0	287,034
Bago	9.4	30.5	29.4	21.4	9.4	100.0	1,157,857
Magway	12.4	33.0	27.8	18.8	8.0	100.0	877,802
Mandalay	4.6	19.6	30.4	31.2	14.2	100.0	1,369,559
Mon	4.3	20.7	32.4	29.9	12.7	100.0	399,556
Rakhine	12.2	41.2	21.7	14.3	10.6	100.0	647,767
Yangon	2.0	9.9	22.5	42.1	23.6	100.0	1,711,561
Shan	10.7	28.7	28.5	21.2	10.9	100.0	1,123,111
Ayeyawady	17.6	32.5	25.8	15.6	8.6	100.0	1,455,636
Nay Pyi Taw	4.4	17.9	30.1	28.3	19.3	100.0	266,076

Chapter 11

Water, Sanitation and Hygiene (WASH)

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Access to safe drinking water, sanitation and hygiene (WASH) is essential for good health, welfare and productivity and is recognized as a human right. Inadequate WASH is among the leading causes for the transmission of diseases such as diarrhoea, cholera, dysentery, hepatitis A, typhoid and polio. Diarrhoeal diseases contribute to undernutrition and stunting and it remains a leading global cause of child deaths.

11.1 Drinking water

11.1.1 Accessibility

Drinking water may be contaminated with human or animal faeces containing pathogens, or with chemical and physical contaminants with harmful effects on people's health especially on child's health and development. While improving water quality is critical to prevent disease, improving the accessibility and availability of drinking water is equally important, particularly for women and girls who usually bear the primary responsibility for carrying water, often for long distances.

The distribution of households by main source of drinking water is shown in Table 11.1. Households using improved sources of drinking water are those using any of the following types of supply: piped water (into dwelling, compound, yard or plot, to neighbour, public tap/standpipe), tube well/borehole, protected dug well, protected spring, rainwater collection, and packaged or bottled water or home water purifier.

Table 11.1: Proportion of households with access to improved/unimproved sources of drinking water, by urban and rural areas

Area	Total no. of households	Improved drinking water source (%)							Unimproved drinking water source (%)			
		Piped water Into dwelling/compound/ plot/ neighbour	Public tap/ standpipe	Borehole or tube well	Protected well/ spring	Rainwater	Bottled water/ Home water purifier	Total	Unprotected well/ spring	Tanker-tanker/ Cart with tank/ drum & Others	Surface water	Total
UNION	**11,162,510**	**10.9**	**6.0**	**27.3**	**14.1**	**2.0**	**21.7**	**82.1**	**3.2**	**2.3**	**12.4**	**17.9**
Urban	3,120,314	11.1	2.2	14.9	6.1	1.1	57.1	92.4	0.8	3.1	3.7	7.6
Rural	8,042,196	10.9	7.5	32.1	17.2	2.4	8.0	78.1	4.1	2.0	15.8	21.9

In Myanmar, 82.1 percent of households had access to an improved drinking water source. The proportion of households in the urban areas with access to an improved drinking water source was

higher (92.4%) than in the rural areas (78.1%). Only 10.9 percent of households have access to piped water. The most common source was borehole or tubewell (27.3%) with 32.1 percent of households in the rural areas having this type of water source. On the other hand, the most common source in the urban areas was packed or bottled water or home water purifier (57.1%). Among the unimproved water sources, surface water (river, stream, dam, lake, pond, canal and irrigation) was the common among the households (12.4%) especially in the rural areas (15.8%).

11.1.2 Availability and quality

<table>
<tr><th>Drinking water services</th><th>Service ladder</th><th colspan="2">Progressive realization</th></tr>
<tr><td rowspan="2">SDG 6.1</td><td>Safely managed drinking water services</td><td rowspan="2">At least basic drinking water services refers to either safely managed or basic drinking water services</td><td>Drinking water from an improved source which is located inside the user’s dwelling, plot or yard, available when needed and free of faecal & priority chemical contamination, such as arsenic & fluoride. Only faecal coliforms test was conducted for this survey.</td></tr>
<tr><td rowspan="4">Improved water sources: Piped water into dwelling/ yard/compound, public taps or standpipes, tube wells/ boreholes, protected dug wells, protected springs, rainwater collection and water purifier/ bottled water</td><td>Basic service</td><td>Drinking water from an improved source and collection time is not more than 30 minutes for a roundtrip including queuing</td></tr>
<tr><td>Limited service</td><td colspan="2">Drinking water from an improved source and collection time is over 30 minutes for a roundtrip including queuing</td></tr>
<tr><td>Unimproved</td><td colspan="2">Drinking water from unprotected dug wells or unprotected springs or any other source where water is not protected from the outside environment</td></tr>
<tr><td>Surface water</td><td colspan="2">Drinking water from a river, dam, lake, pond, stream, canal or irrigation channel/ditches</td></tr>
</table>

The distribution of households by drinking water services is shown in Figure 11.1. It is found that 81.7 percent of households in Myanmar have access to **at-least basic drinking water services**[20] with 41.4 percent of the households using a **safely managed** drinking water service; that is, one located on premises, available when needed and free from *E-Coli* contamination[21] and 40.3 percent using only **a basic drinking water** which is accessing an improved water source only within 30 minutes of water collection time. Some 63.8 percent and 32.7 percent of households that used **safely managed** drinking water services lived in urban and rural areas**,** respectively. Only 0.4 percent of households in Myanmar spent over 30 minutes per round trip to collect water from an improved source (constituting

[20] At least basic drinking water services refers to either safely managed or basic drinking water service
[21] Only **E-Coli** test was conducted for drinking water at point of use in this 2019 Inter-censal Survey.

a **limited**[22] drinking water service). However, 5.5 percent of households use **unimproved water sources** and 12.4 percent of households (3.7% in urban and 15.8% in rural) still collected drinking water directly from **surface water**.

Figure 11.1: Proportion of household by status of drinking water services, urban and rural areas

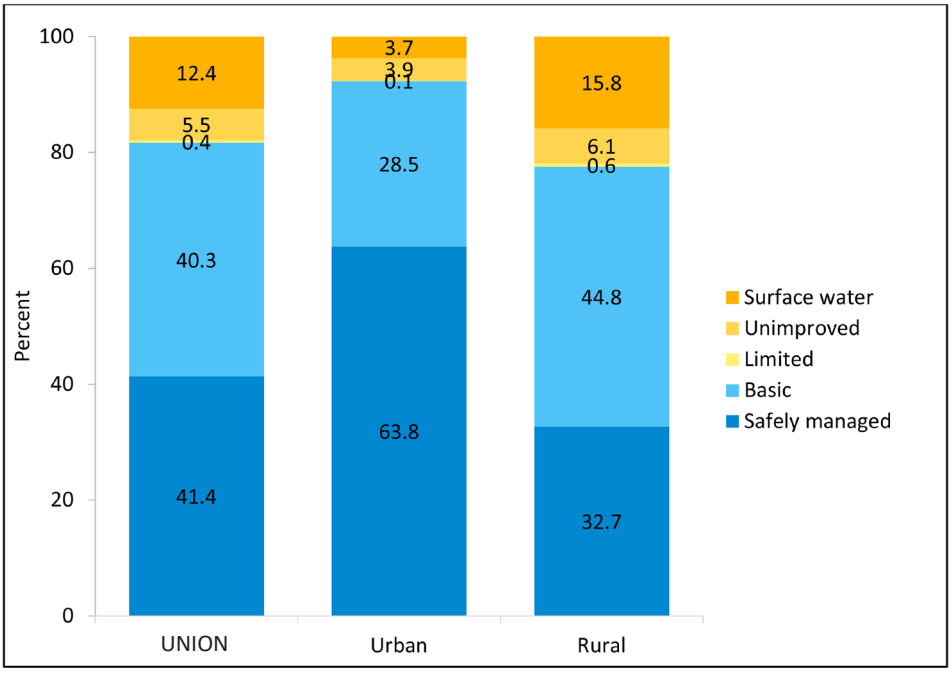
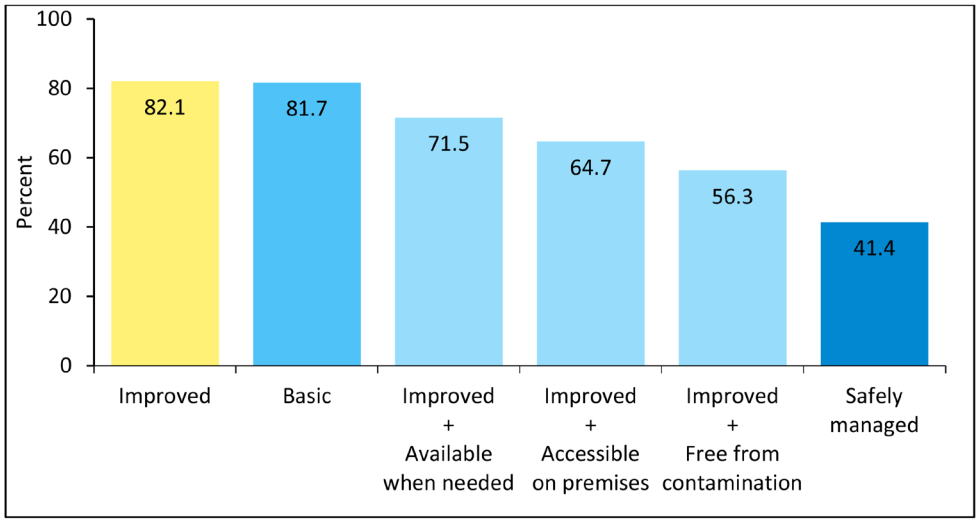


Figure 11.2 shows that 71.5 percent of households in Myanmar got drinking water from **improved sources and were available when needed**. About 65.3 percent of households got water from (87.0% in urban and 56.9% in rural) **improved sources located on premises,** while 4.6 percent of households in Myanmar got water from **unimproved sources located on premises**. In addition, 56.3 percent of households got drinking water from **improved sources which were free from *E-coli* contamination**.

[22]Drinking water from an improved source and collection time is over 30 minutes for a round trip including queuing

Figure 11.2: Proportion of households with improved, basic and safely managed drinking water



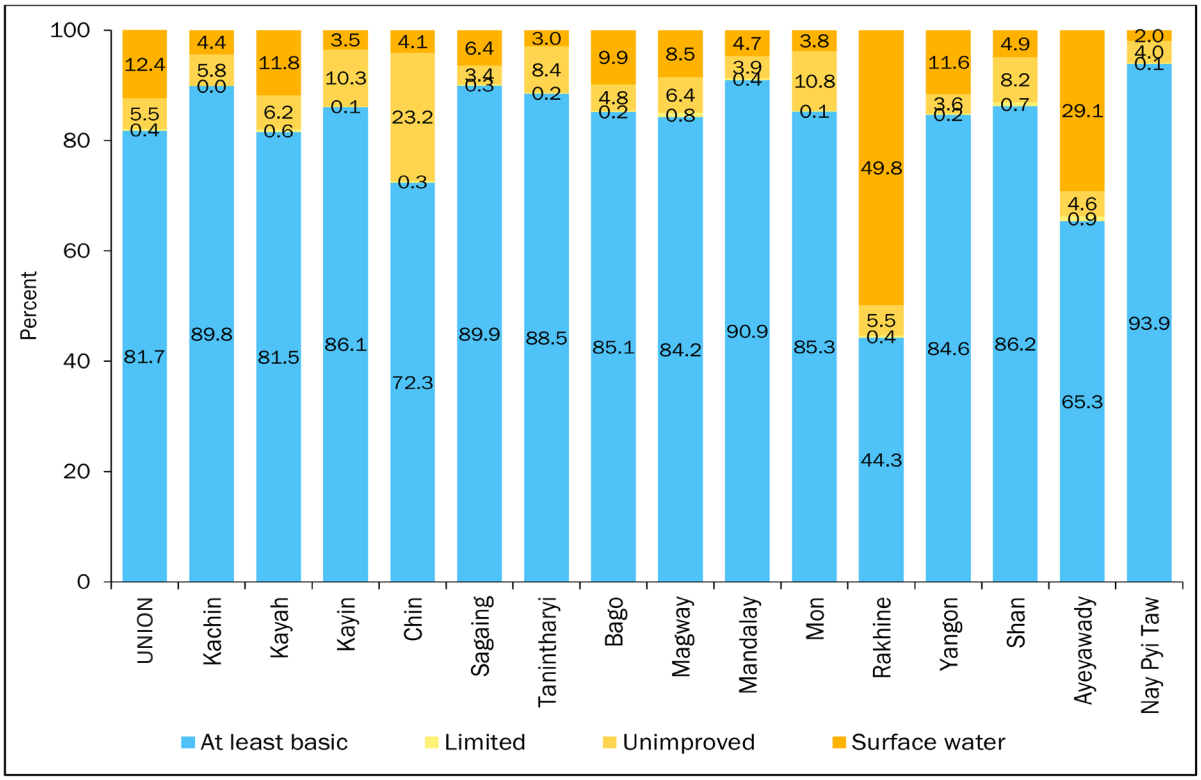
In Myanmar, 30.1 percent of households got their **drinking water outside of their premises.** This was more common among the households in the rural areas (37.9%) than in the urban areas (9.8%). Among households without access to drinking water on premises, two in five households reported that both the male and female member of the households collected water from the source. However, in three out of ten households, it was the female member who collected water. About 83 percent of households (90% in urban and 80% in rural) in Myanmar had **drinking water available** in sufficient quantities.

The survey also revealed that about 65 percent of households in Myanmar were drinking water **free from *E-Coli* contamination**. Area wise, ***E-coli*** was detected in drinking water of 39.5 percent of households in rural areas compared to 24.7 percent of households in urban areas. By State/Region level, Kachin State reported by far, the lowest proportion of households (42.3%) using water ***free from E-Coli***. Rakhine State followed with 44.0 percent, while Kayah, Magway and Sagaing reported the highest proportion of at least 75 percent.

Nine in ten households (92.3%) in urban areas had access to basic drinking water services while only eight in ten households (77.5%) in rural areas (Figure 11.3)

By State/Region level, Rakhine State reported by far the lowest proportion of households (44.3%) using a basic service (71.2% in the urban areas and 39.2% in the rural areas). The second lowest State was Ayeyawady Region with 65.3 percent (77.9% in urban and 63.4% in rural), while Nay Pyi Taw, Mandalay, Sagaing, and Kachin reported the highest proportions with at least 90 percent. In addition, one in two households in Rakhine State (23.8% in urban and 54.7% in rural) and three in ten households in Ayeyawady Region (8.4% in urban and 32.4% in rural) drew water from surface water such as river, stream, dam, lake, pond, canal and irrigation for drinking. The distribution of the households by type of drinking water services is shown in Figure 11.3.

Figure 11.3: Proportion of households with access to at least basic drinking water services by State/Region



11.2 Sanitation

11.2.1 Accessibility

Unsafe management of human excreta and poor personal hygiene are closely associated with diarrhoea as well as parasitic infections, such as soil transmitted helminths (worms). Improved sanitation and hygiene can reduce diarrhoeal disease by more than a third and can substantially reduce the health impact of soil-transmitted helminth infection and a range of other neglected tropical diseases which affect over 1 billion people worldwide.

An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation facilities include flush or pour flush to piped sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with slabs and composting toilets. Table 11.2 shows the proportion of households by type of toilet facilities and whether they are classified as improved or unimproved.

Table 11.2: Proportion of households by type of toilet facilities, urban and rural areas

Area	Total no. of households	Improved toilet facilities (%)					Unimproved toilet facilities (%)					
		Flush to piped sewer/ septic tank	Flush to pit latrine	Ventilated improved pit latrine	Pit latrine with slab	Total	Flush to open drain	Pit latrine without slab/ Open pit	Container based sanitation and others	Hanging toilet/ latrine	No facility/ Bush/ Field (Open Defecation)	Total
UNION	**11,162,510**	**26.1**	**59.2**	**1.6**	**4.5**	**91.4**	**1.0**	**1.6**	**0.3**	**0.8**	**4.9**	**8.6**
Urban	3,120,314	51.9	42.0	1.1	2.8	97.9	0.5	0.4	0.2	0.3	0.6	2.1
Rural	8,042,196	16.1	65.9	1.8	5.2	88.9	1.2	2.1	0.3	1.0	6.5	11.1

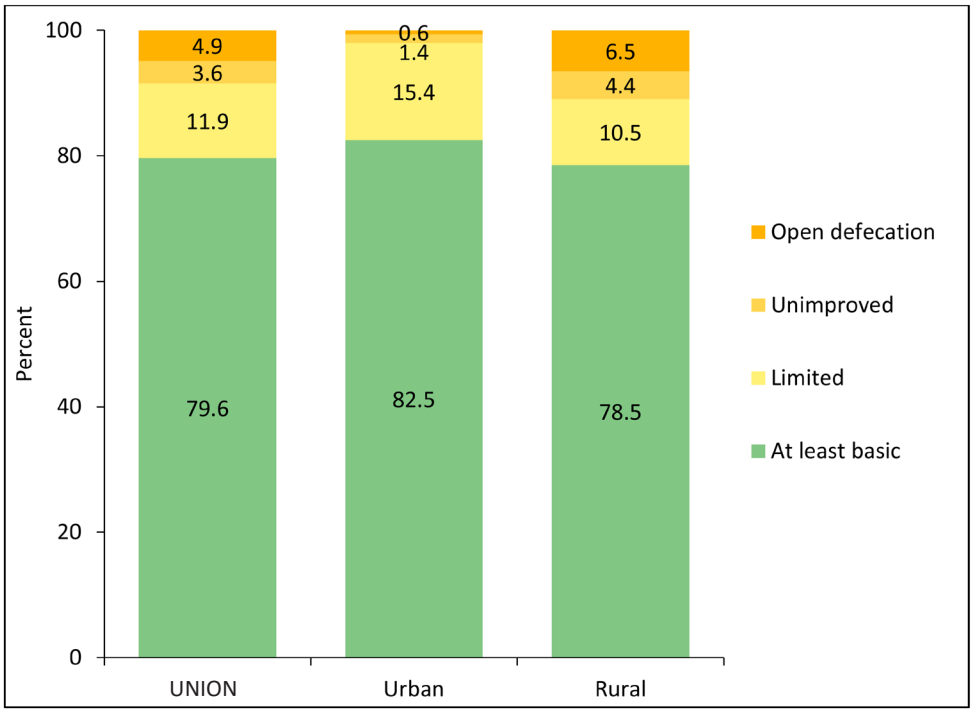
In Myanmar, 91.4 percent of households have access to **an improved sanitation facility** (97.9% of urban households and 88.9% of rural households). However, only 26.1 percent of households have a flush toilet linked to a sewer system or septic tank. On the other hand, 8.6 percent of households used **an unimproved sanitation facility** (2.1% of urban households and 11.1% of rural households). About 5 percent of all households still practiced **open defecation** (dispose of faeces in fields, forests, bushes, open bodies of water, beaches or other open spaces), with higher proportion in the rural areas (6.5%).

11.2.2 Treatment and Disposal

<table>
<tr><th>Sanitation services</th><th>Service ladder</th><th colspan="2">Progressive realization</th></tr>
<tr><td rowspan="2">SDG 6.2</td><td>Safely managed sanitation services</td><td rowspan="2">At least Basic sanitation services refers to either safely managed or basic sanitation services</td><td>Use of improved sanitation facilities which are not shared on premises with other households and where excreta are safely disposed in situ or transported and treated off-site or pit latrines that are sealed when they become full and new pits dug</td></tr>
<tr><td rowspan="4">Improved sanitation facilities: Flush/pour flush to: piped sewer system; septic tank; pit latrine, ventilated improved pit (VIP) Latrine, pit latrine with slab</td><td>Basic service</td><td>Use of improved sanitation facilities which are not shared on premises with other households</td></tr>
<tr><td>Limited service</td><td colspan="2">Use of improved sanitation facilities which are shared with two or more households</td></tr>
<tr><td>Unimproved</td><td colspan="2">Use of pit latrines without a slab or platform and pits are not covered properly to protect fly entering, hanging latrines and bucket latrines</td></tr>
<tr><td>Open defecation</td><td colspan="2">Disposal of human faeces in fields, forest, bushes, open bodies of water, beaches or other open spaces or with solid waste</td></tr>
</table>

The distribution of households by different sanitation services is shown in Figure 11.4. About 79.6 percent of households in Myanmar used **at least basic sanitation service** (an improved sanitation facility which is not shared on premises with other households), with higher proportion among urban households (82.5%) than rural households (78.5%). In Myanmar, 11.9 percent of households used **limited sanitation service** (improved sanitation facilities that are shared with other households). The proportion was higher among urban households (15.4%) than rural households (10.5%).

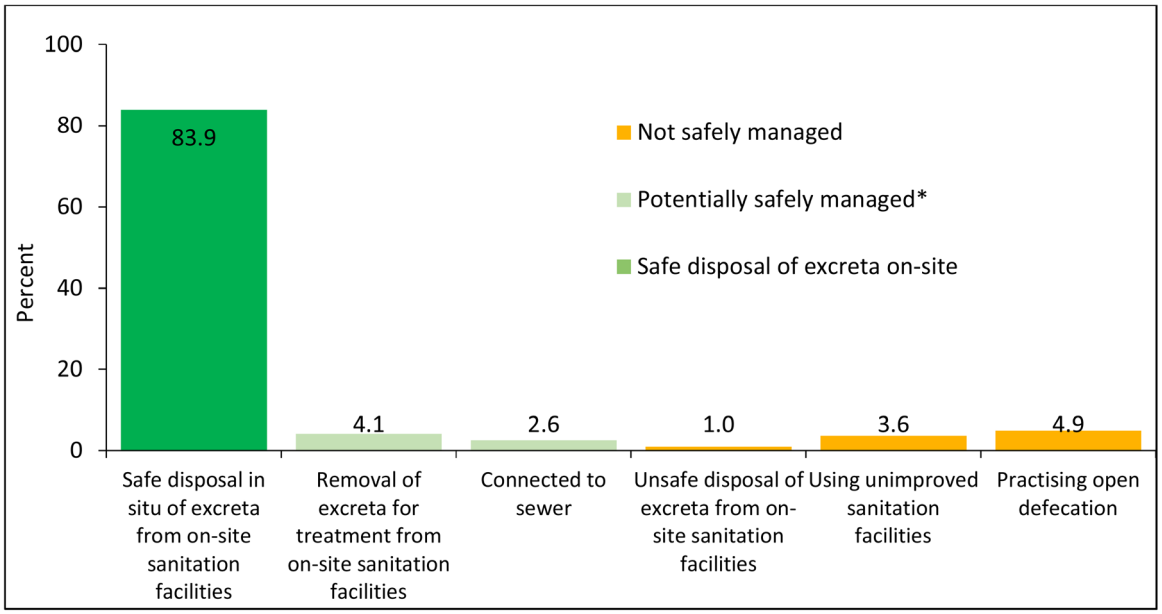
Figure 11.4: Proportion of households by status of sanitation services, urban and rural areas



Only 2.4 percent of households (7.6% in urban and 0.3% in rural) used **a service provider for emptying and removal of excreta from septic tanks** to treatment site while 16.8 percent of households never emptied the septic tanks. Less than one percent of households used a service provider to empty and remove excreta from other improved sanitation facilities (latrines and container based sanitation) and about 17.8 percent buried in a covered pit. About 45 percent of households never emptied the on-site sanitation facilities.

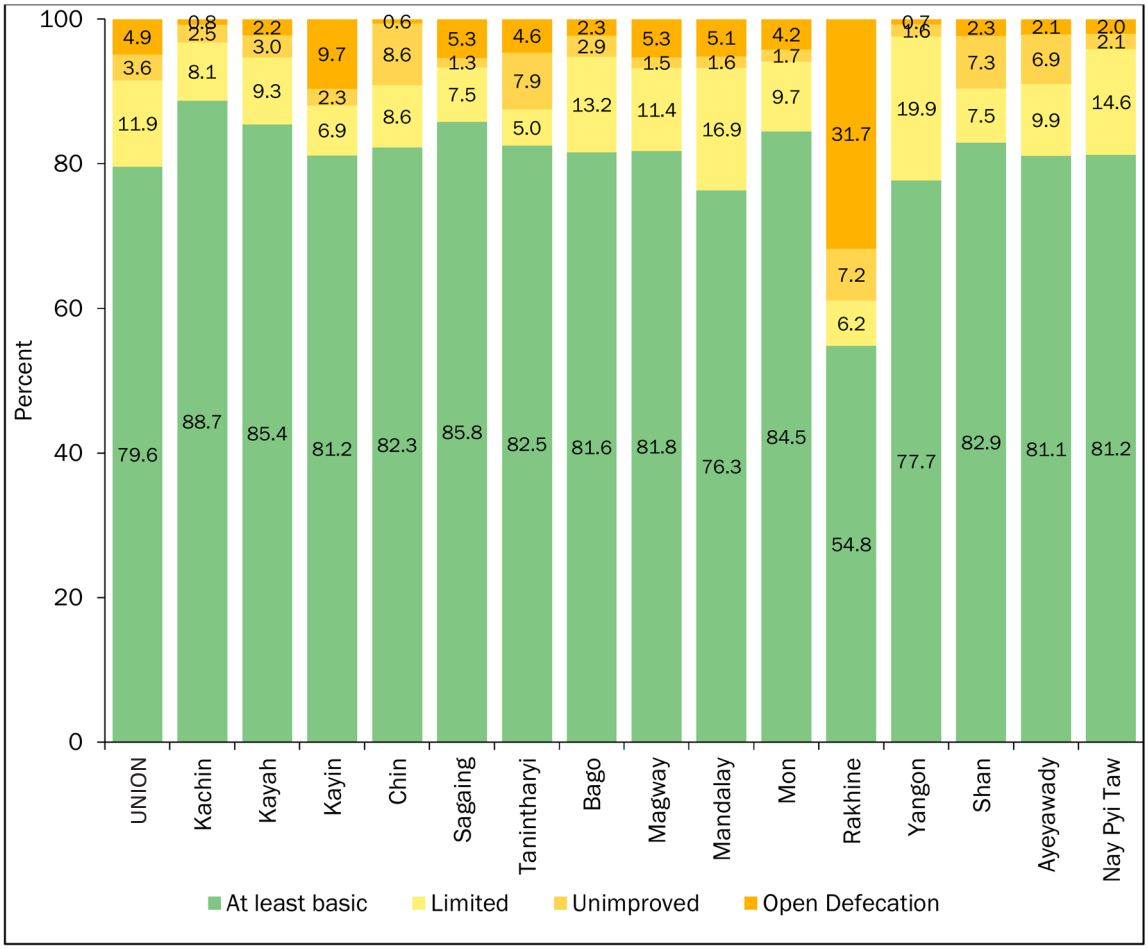
About 84 percent of households using improved on-site sanitation systems (including shared) practiced safe disposal in situ of excreta and 4.1 percent of households removed excreta for treatment off-site (Figure 11.5).

Figure 11.5: Proportion of households by management of excreta from household sanitation facilities



The distribution of the households by at-least basic sanitation services by State/Region is shown in Figure 11.6. By State/Region level, Rakhine State reported by far the lowest proportion of households (54.8%) that used a basic sanitation service (87.7% among urban households and 48.6% among rural households). The second lowest State/Region were Mandalay (76.3%) and Yangon (77.7%). In addition, Rakhine reported the highest proportion of households (31.7%) that practiced open defecation. Kayin State followed with 9.7 percent of households.

Figure 11.6: Proportion of households with access to at least basic sanitation services by State/Region



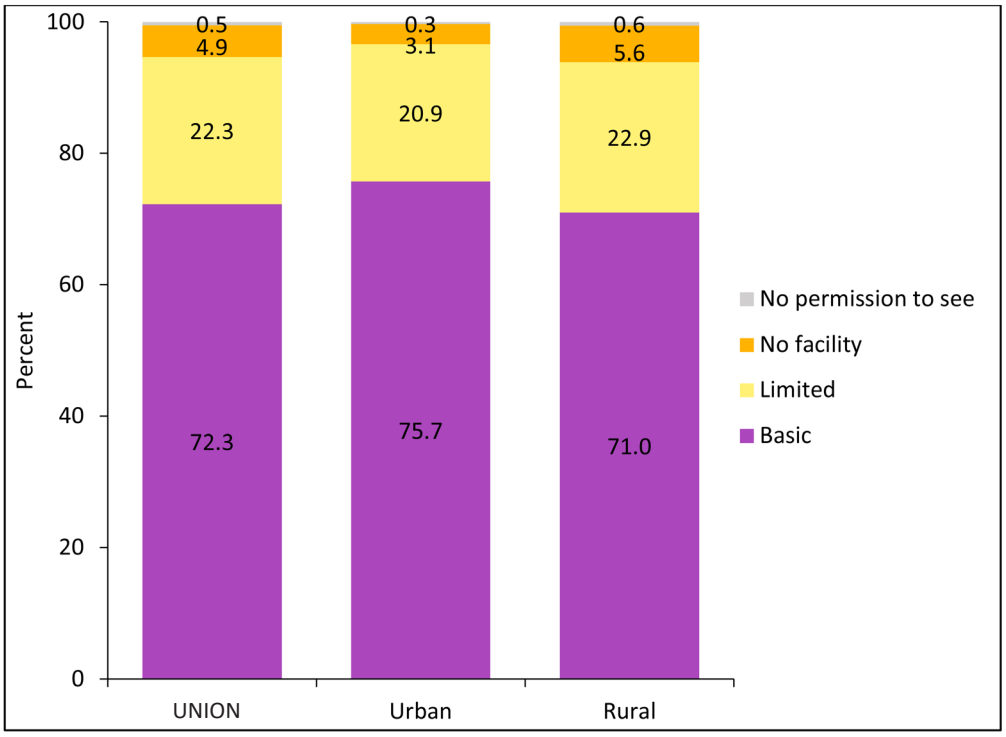
11.3 Hygiene

11.3.1 Accessibility

Handwashing with water and soap is the most cost-effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under five. It is most effective when done using water and soap after visiting a toilet or cleaning a child, before eating or handling food and before feeding a child. Direct observation of hand washing behaviour was not done during the ICS as it will consume much time for interviewer to complete the interview. Instead, interviewers were asked to see the place where people wash their hands and observe whether water and soap (or other local cleansing materials) were available at this place.

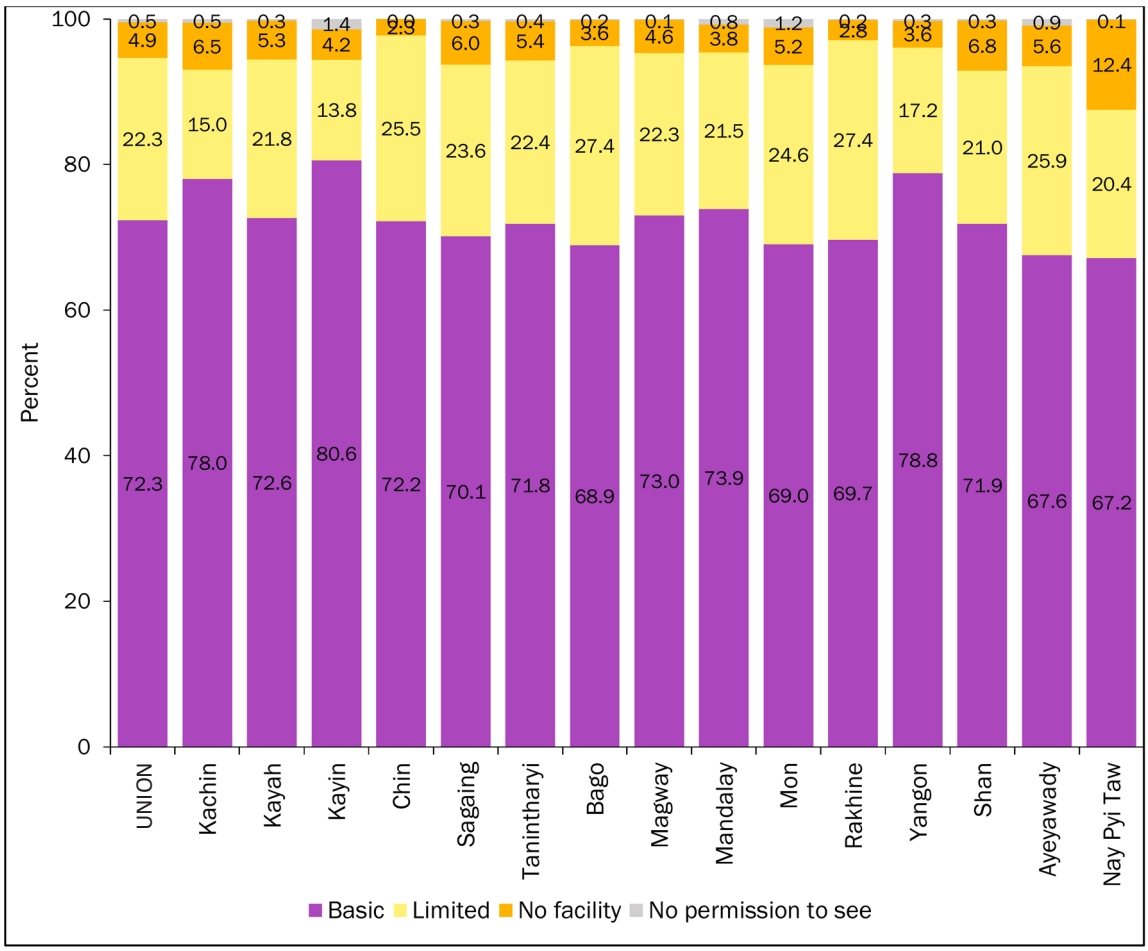
Hygiene services	Service ladder	Progressive realization
SDG 6.2	**Basic service**	**A hand washing facility is available (having a specific place for hand washing) where water and soap or other cleansing agent are present (observed during survey).**
Handwashing facility with soap and water available at home:	**Limited service**	A handwashing facility is available (having a specific place for hand washing), but lacking water and/or soap.
	No Service	No handwashing facility observed.

Figure 11.7: Proportion of households by status of basic hygiene services, urban and rural areas



In Myanmar, 72.3 percent of households use **a basic handwashing service** with a handwashing facility on premises with soap and water including 75.7 percent of urban households and 71.0 percent of rural households while 22.3 percent of households use **a limited service** meaning a handwashing facility is available (having a specific place for hand washing), but lacking water and/or soap. In addition, **no handwashing** was observed in 4.9 percent of households (3.1% in urban and 5.6% in rural). The distribution of the household by basic hygiene services by State/Region is shown in Figure 11.8.

Figure 11.8: Proportion of household by basic hygiene services, State/Region



By the State/Region level, Nay Pyi Taw reported the lowest proportion of households (67.2%) with handwashing facility with soap and water followed by Ayeyawady (67.6%) and Bago (68.9%). On the other hand, the highest proportion was recorded in Kayin (80.6%).

11.4 Solid waste management

11.4.1 Accessibility

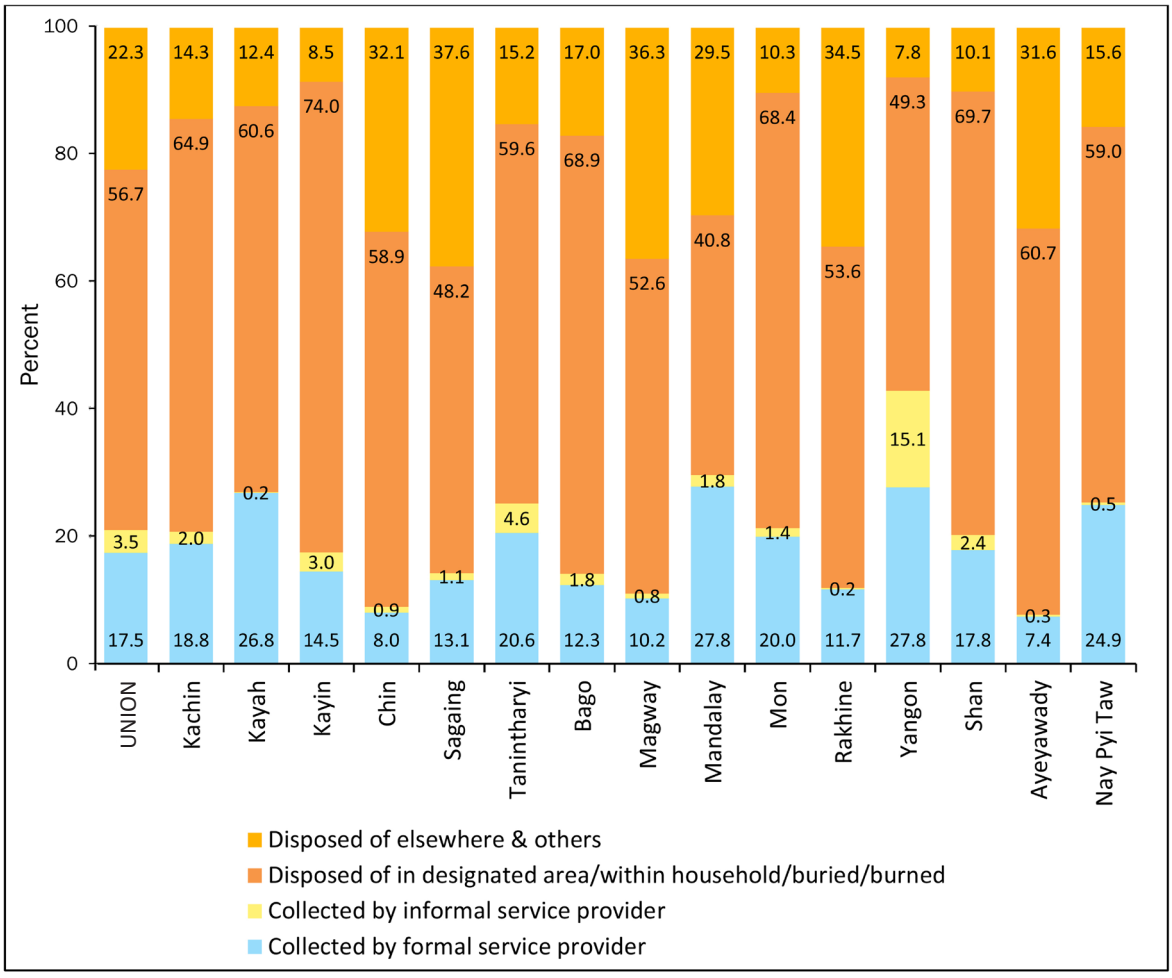
Only 17.5 percent of households had **access to formal service provider** for solid waste collection (53.1 percent in urban areas and 3.6 percent in rural areas) while 56.7 percent of households **disposed their solid waste in designated area or within household premises or buried/burned them**. Moreover, 22.3 percent of households **disposed their solid waste elsewhere and other** (6.9% of urban households and 28.3% of rural households). The distribution of households by type of solid waste disposal services and methods is shown in Table 11.3.

Table 11.3: Proportion of households with access to service providers for waste disposal, urban and rural areas

Area	Total no. of households	Solid waste disposal (%)			
		Collected by formal service provider	Collected by informal service provider	Disposed of in designated area/ within household/ buried/ burned	Disposed of elsewhere & others
UNION	**11,162,510**	**17.5**	**3.5**	**56.7**	**22.3**
Urban	3,120,314	53.1	7.7	32.3	6.9
Rural	8,042,196	3.6	1.9	66.1	28.3

By State/Region level, Ayeyawady Region reported the lowest proportion of households (7.4%) that had access to formal service provider for solid waste disposal followed by Chin State (8.0% of households). The highest proportion were in Yangon and Mandalay (both had 27.8%) (Figure 11.9).

Figure 11.9: Proportion of households by type of solid waste disposal services and methods, State/Region



Glossary of terms and definitions

Adolescent fertility rate: is defined as the number of births per 1,000 women aged 15 to 19.

Age: Number of years a person has lived at their last birthday in reference to the conducting date and time of enumeration for 2019 ICS. When the age was not known, interviewers were trained to use other ways of establishing the age of the respondent, including calendars of events, conversion tables, etc. The interpretation of age information is given below: a) The 0 (less than 1) year olds are those whose age is less than one year. b) The 1 year olds are those aged 1 year or more but less than 2 years. c) The 0-4 year age group are those aged less than 5 years. d. The 5-9 year age group are those aged 5 years and more but less than 10 years. e. The group 90+ included those aged 90 years or older.

Ageing Index: refers to the number of elders per 100 persons younger than 15 years old in a specific population.

Age-specific fertility rate (ASFR): measures the annual number of live births to women of a specified age or age group per 1,000 women in that age group. An age-specific fertility rate is generally computed as a ratio. The numerator is the number of live births to women in a particular age group during a period of time, and the denominator is an estimate of the number of person-years lived by women in that same age group during the same period of time. It is expressed as births per 1,000 women.

Child marriage: refers to any formal marriage or informal union between a child under the age of 18 and an adult or another child. It is measured as the percentage of women 20–24 years old who were first married or in union before they reached the age of 18 years.

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

Crude birth rate (CBR): indicates the number of live births per 1,000 population in a given year.

Crude death rate (CDR): is simply the number of deaths occurring during the year per 1,000 population in a given period.

Dependency ratio: The total dependency ratio is the ratio of dependents (people younger than 15 years and older than 64) to the population of working-age (age 15-64).

Disability: is a situation where a person is at a 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 2019 ICS included:

a. **Seeing** (vision difficulties or problems of any kind even when wearing glasses);
b. **Hearing** (hearing limitations or problems of any kind even when using a hearing aid);
c. **Walking or climbing** (limitations or problems of any kind getting around on foot or lifting items by hand, problems of climbing steps or lifting objects or gripping);
d. **Remembering or concentrating** (difficulties in doing their daily activities, slow learning development making it hard to compete with their counterparts at school or other mental conditions);
e. **Self-care** (problems with taking care of themselves independently such as washing all over or dressing);
f. **Communication** (problems with talking, listening or understanding speech such that it contributes to difficulty in making themselves understood to others or understanding others).

Employee: A person who performs work for somebody else in return of payment in cash or in kind. Included in this group are wage/salary-earners, paid apprentices, casual workers, persons who are working on a piece rate, etc.

Employer (His/her own business with employees): Persons who run business on their own work or with one or more partners, including a farm, etc. and who hire paid employees on regular basis while doing so, are considered to be employers.

Employment: Persons in employment are defined as all those of working age who, during a reference period of seven days, were engaged in any activity to produce goods or services for pay or profit at least one hour.

General fertility rate (GFR): a refined measure of fertility, is defined as the number of live births per 1,000 women aged 15-49 in a given year.

Handwashing facilities: can consist of a sink with tap water but can also include other devices such as buckets with taps, tippy-taps and portable basins that contain, transport or regulate the flow of water. Water and soap such as bar soap, liquid soap, powder detergent and soapy water are available at home.

Head of household: The head of a conventional household is the household member who makes key decisions and is recognized as head of the household by others. The head of household may be male or female. The person is not necessarily mainly responsible for earning the livelihood for the household.

Helping without pay in a household/family business: Persons who work without receiving a wage or a salary in the market-oriented establishment/farm operated by a related person (usually a person living in the same household). Such persons cannot be regarded as a business paretner.

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

Housing unit/Dwelling unit: A housing unit is a place of abode or a residence occupied by one or more households. A housing unit must have a private entrance. As mentioned above, there can be one or several housing units within a structure.

Improved sources of drinking water: include piped water into dwelling, piped water into compound/yard or plot, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, rainwater, and packaged or bottled water/home water purifier.

Improved toilet facilities: include any toilet of the following types: flush/pour flush toilets to piped sewer systems, septic tanks, and pit latrines; ventilated improved pit (VIP) latrines and pit latrines with slabs.

Infant mortality rate (IMR): The number of deaths to infants before they reach one year of age, per 1,000 live births in the same period.

In-migrant (or immigrant): is a migrant who has moved into a migration defining area.

In-migrantion rate: is the number of in-migrants arriving at a destination per 1,000 population of that destination in a given year.

Internal migration: is a movement involving a change of usual residence between Townships/Districts/States/Regions.

International migration: is a movement involving a change of country of usual residence.

Labour force: comprises all persons of working age who furnish the supply of labour for the production of goods and services during a specified time-reference period. It refers to the sum of all persons of working age who are employed and those who are unemployed.

Life expectancy at birth: shows the overall mortality level of a population. It summarizes the mortality pattern that prevails across all age groups - children and adolescents, adults and the elderly.

Lifetime migrants: in this survey are defined as those persons who have moved between Townships at any time since their birth (including those who returned to their Township of birth in the interval from birth to the date of the Survey).

Literacy: The ability to read and write a simple sentence in any language with understanding.

Marital status: Status of the enumerated person in relation to the institution of marriage. The marital status was described by four categories: Single/never married, married, widowed and divorced/separated.

Mean household size: Mean household size is the ratio of the total population in households to the number of households in an area.

Median age: The age that divides a given population numerically in half. Fifty percent of the population is younger than the median age and 50 percent of the population is older than the median age.

Net migration rate (net out-migration/In-migration rate): is for any place and time interval, the in-migration rate minus the out-migration rate. A positive (negative) net migration rate signifies an increase (decrease) in population as a result of migration. If a net migration rate is negative, its absolute value (the number less the sign) is a net out-migration rate.

Numeracy: The ability to do simple addition and subtraction calculation without using calculator or phone.

Out-migrant (or emigrant): is a migrant who has moved out of a migration defining area.

Out-migrantion Rate: is the number of emigrants departing an area of origin per 1,000 population of that area of origin in a given year.

Out of labour force: Persons outside the labour force are those of working age who were neither in employment nor in unemployment in the short reference period.

Overcrowding: is defined as being above a specific threshold (1.5 persons per room and 2 persons per bedroom). Crowding is calculated as the number of persons living in the household per number of rooms or bedrooms available in the house.

Own account worker: This refers to a self-employed person who does not hire paid employees on a regular basis. Own account worker may work on their own, or with one or more partners, and engage unpaid family workers to run a business or farm, etc. A person working for commission should also be categorized as an own account worker.

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

Place of birth: is the administrative township which was the usual place of residence of the mother at the time of the person's birth. In the case of person born outside Myanmar, the place of birth is the country where the person was born.

Place of previous residence: is administrative township where a person usually lived before moving to the current residence. In cases where a person has not moved, the place of current residence and previous residence are the same.

Place of usual residence: is the administrative township where a person has lived for more than 6 months or she/he intends to live for more than 6 months.

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

Population density: is the number of persons per unit of land area, usually quoted per square kilometer or square mile.

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

Relationship to the head of household: Household members are defined by their relationship to the head of household (e.g. spouse, child, sister, brother).

Rural area: Areas classified by the General Administration Department (GAD) as village tracts. Generally these are areas with low population density and a land use which is predominantly agricultural.

School attendance: is defined as regular attendance at any regular accredited educational institution or programme, public or private, for organized learning at any level of education at the time of the survey.

Sex ratio: The number of males for every 100 females in a population.

Singulate mean age at marriage (SMAM): is the average length of single life expressed in years among those who marry before age 50.

Structure: is a building used for the purposes of residential, business, religious or any other activity. Only structures used for residential purposes were included in the 2019 Inter-censal Survey (2019 ICS). A structure can contain one or several housing units.

Total fertility rate (TFR): in simple terms, refers to the total number of children born or likely to be born to a woman in her lifetime if she were subject to the prevailing rate of age-specific fertility in the population.

Total marital fertility rate (TMFR): is defined as five times the sum of the age-specific marital fertility rates. It is interpreted as the mean number of children that a woman would eventually have if she got married at age 15, survived to the end of the childbearing period.

Under-five mortality rate (U5MR): The number of children who died before reaching five years of age, per 1,000 live births in the same time period.

Unemployment: Persons in unemployment are defined as all those of working age who were not in employment, carried out activities to seek employment during a specified recent period and were currently available to take up employment given a job opportunity.

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

Whipple's index

Whipple's index is calculated by adding the number of all persons in the age range 23-62, who have reported their age as ending in 0 and 5, and dividing this sum by the total population aged 23-62, and multiplying this result by 5. The result is expressed as a percentage which ranges between 100 (indicating no preference for age reporting ending in 0 and 5) and 500 (all persons report their age ending in 0 and 5). If the Whipple's Index score is less than 105, the data are described as being very accurate; between 105 and 110, fairly accurate; between 110 and 125, approximate; between 125 and 175, rough; and over 175, very rough.[23]

Myer's blended method

The Myer's Blended Index is similar to the Whipple's Index, except that it considers preference (or avoidance) for ages ending in any number from 0 to 9. The theoretical range of the index is from 0 to 90, where 0 indicates no age heaping and 90 indicates every age reported ending in the same digit.[24]

[23] & [24] United Nations (1955). Manual II: Methods of appraisal of quality of basic data for population estimates. United Nations Population Studies No. 23. New York

United Nations age-sex accuracy index

The United Natons Age-Sex Accuracy Index is to evaluate the quality of reported age-sex distribution in five-year age groups. This index is calculated as three times the average of sex-ratio differences plus the average of the deviations from 100 of male and female ageratios. Census age-sex data are described by the United Nations as “accurate,” “inaccurate,” or “highly inaccurate” depending on whether the UN index is under 20, 20 to 40, or over 40.[25]

[25]The Methods and Materials of Demography (Second edition) Edited by Jacob S. Siegel David A. Swanson

Annex

Annex 1: Sampling errors of selected indicators

Table SE1: Estimated total population in conventional households and its standard errors by District.

District	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
KACHIN					
Myitkyina	608,198	29,993	4.9	549,396	667,001
Mohnyin	529,375	23,178	4.4	483,933	574,816
Bhamo	345,561	11,563	3.3	322,890	368,232
Putao	101,241	2,991	3.0	95,376	107,106
KAYAH					
Loikaw	274,681	10,666	3.9	253,768	295,593
Bawlakhe	36,768	2,331	6.3	32,197	41,338
KAYIN					
Hipa-an	843,083	42,761	5.1	759,247	926,918
Pharpon	38,798	4,119	10.6	30,722	46,873
Myawady	191,194	11,937	6.2	167,792	214,597
Kawkareik	483,477	27,479	5.7	429,603	537,352
CHIN					
Haka	100,392	4,630	4.6	91,314	109,471
Falam	158,689	11,005	6.9	137,113	180,265
Mindat	151,611	38,378	25.3	76,367	226,854
Matupi	98,345	27,763	28.2	43,913	152,777
SAGAING					
Sagaing	507,308	16,085	3.2	475,773	538,844
Shwebo	1,060,889	71,250	6.7	921,197	1,200,581
Monywa	735,164	24,715	3.4	686,708	783,620
Katha	530,093	59,203	11.2	414,020	646,166
Kalay	500,649	14,977	3.0	471,284	530,013
Tamu	121,462	6,108	5.0	109,487	133,438
Mawlaik	169,252	4,843	2.9	159,758	178,746
Hkamti	406,378	15,809	3.9	375,383	437,374
Yinmarpin	534,150	13,805	2.6	507,085	561,216
Kawlin	351,753	52,527	14.9	248,770	454,736
Kambalu	392,815	74,657	19.0	246,443	539,187
TANINTHARYI					
Dawei	541,897	15,186	2.8	512,125	571,670
Myeik	681,003	24,169	3.5	633,619	728,388

District	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
Kawthoung	203,526	14,225	7.0	175,637	231,415
BAGO					
Bago	1,750,285	58,002	3.3	1,636,567	1,864,003
Toungoo	1,142,369	33,235	2.9	1,077,209	1,207,529
Pyay	886,230	25,496	2.9	836,243	936,216
Thayawady	1,035,699	24,557	2.4	987,552	1,083,846
MAGWAY					
Magway	1,243,064	38,261	3.1	1,168,050	1,318,079
Minbu	623,064	20,599	3.3	582,677	663,451
Thayet	715,251	24,395	3.4	667,422	763,080
Pakokku	987,186	27,190	2.8	933,877	1,040,495
Gangaw	236,646	6,566	2.8	223,773	249,518
MANDALAY					
Mandalay	1,569,198	51,264	3.3	1,468,691	1,669,706
Pyin Oo Lwin	967,763	32,074	3.3	904,879	1,030,647
Kyaukse	781,672	21,448	2.7	739,621	823,722
Myingyan	856,153	62,997	7.4	732,642	979,663
Nyaung U	498,594	49,008	9.8	402,510	594,678
Yame` Thin	533,448	19,133	3.6	495,937	570,959
Meiktila	961,397	37,734	3.9	887,417	1,035,378
MON					
Mawlamyine	1,150,763	35,970	3.1	1,080,241	1,221,285
Thaton	738,511	24,307	3.3	690,854	786,167
RAKHINE					
Sittway	1,563,653	156,874	10.0	1,256,088	1,871,217
Kyaukpyu	917,814	68,694	7.5	783,133	1,052,496
Thandwe	748,708	23,108	3.1	703,402	794,013
YANGON					
North Yangon	3,037,764	103,813	3.4	2,834,230	3,241,299
East Yangon	2,510,234	57,698	2.3	2,397,112	2,623,356
South Yangon	1,427,501	47,445	3.3	1,334,482	1,520,521
West Yangon	856,330	35,495	4.1	786,739	925,922
SHAN					
Taunggyi	1,860,283	49,548	2.7	1,763,140	1,957,426
Loilin	559,554	30,685	5.5	499,392	619,715
Linkhe`	135,424	5,828	4.3	123,998	146,851

District	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
Lashio	686,509	25,443	3.7	636,626	736,392
Muse	477,088	26,174	5.5	425,772	528,403
Kyaukme	664,008	48,311	7.3	569,290	758,725
Kengtung	380,409	26,316	6.9	328,814	432,003
Minesat	206,804	13,346	6.5	180,638	232,970
Tachileik	289,567	15,139	5.2	259,886	319,248
Momeik	124,600	43,602	35.0	39,114	210,086
AYEYAWADY					
Pathein	1,549,121	49,618	3.2	1,451,842	1,646,401
Phyapon	917,758	27,940	3.0	862,978	972,537
Maubin	1,042,593	41,012	3.9	962,185	1,123,002
Myaungmya	835,211	31,016	3.7	774,401	896,020
Labutta	644,750	30,347	4.7	585,253	704,247
Hinthada	1,150,568	18,962	1.6	1,113,391	1,187,744
NAY PYI TAW					
Ottara	576,485	21,256	3.7	534,811	618,159
Dekkhina	606,829	17,030	2.8	573,441	640,217

Table SE2: Estimated total population in conventional households and its standard errors by State/Region

State/Region	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
UNION	**51,144,607**	**298,945**	**0.6**	**50,558,675**	**51,730,539**
Kachin	1,584,375	39,742	2.5	1,506,457	1,662,292
Kayah	311,448	10,918	3.5	290,042	332,854
Kayin	1,556,552	52,374	3.4	1,453,869	1,659,235
Chin	509,037	23,331	4.6	463,294	554,779
Sagaing	5,309,914	59,524	1.1	5,193,212	5,426,615
Tanintharyi	1,426,426	31,892	2.2	1,363,900	1,488,953
Bago	4,814,582	75,643	1.6	4,666,277	4,962,887
Magway	3,805,211	57,147	1.5	3,693,169	3,917,253
Mandalay	6,168,225	84,058	1.4	6,003,423	6,333,027
Mon	1,889,274	43,413	2.3	1,804,159	1,974,389
Rakhine	3,230,175	172,807	5.3	2,891,372	3,568,978
Yangon	7,831,830	132,730	1.7	7,571,603	8,092,058
Shan	5,384,244	80,595	1.5	5,226,231	5,542,256
Ayeyawady	6,140,001	84,658	1.4	5,974,020	6,305,981
Nay Pyi Taw	1,183,314	27,236	2.3	1,129,915	1,236,713

Table SE3: Estimated total number of life-time migrants and its standard errors by State/Region

State/Region	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
UNION	**8,392,475**	**146,127**	**1.7**	**8,105,980**	**8,678,970**
Kachin	303,937	23,213	7.6	258,425	349,448
Kayah	50,253	6,769	13.5	36,982	63,524
Kayin	247,540	18,594	7.5	211,085	283,994
Chin	52,672	6,505	12.3	39,919	65,426
Sagaing	460,357	19,720	4.3	421,694	499,020
Tanintharyi	162,134	9,541	5.9	143,428	180,841
Bago	421,854	20,899	5.0	380,880	462,828
Magway	273,783	13,013	4.8	248,271	299,296
Mandalay	987,919	49,513	5.0	890,845	1,084,993
Mon	220,133	15,810	7.2	189,137	251,129
Rakhine	300,267	29,404	9.8	242,617	357,916
Yangon	3,502,268	116,995	3.3	3,272,888	3,731,647
Shan	723,958	35,832	4.9	653,706	794,210
Ayeyawady	442,829	18,668	4.2	406,229	479,429
Nay Pyi Taw	242,573	20,200	8.3	202,968	282,177

Table SE4: Estimated total number of international migrants and its standard errors by State/Region

State/Region	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
UNION	**1,632,342**	**34,616**	**2.1**	**1,564,474**	**1,700,210**
Kachin	20,006	2,469	12.3	15,166	24,847
Kayah	8,231	1,614	19.6	5,066	11,396
Kayin	211,305	12,680	6.0	186,444	236,166
Chin	36,120	3,167	8.8	29,911	42,330
Sagaing	66,297	4,953	7.5	56,586	76,008
Tanintharyi	91,409	6,298	6.9	79,062	103,757
Bago	195,038	12,159	6.2	171,200	218,875
Magway	123,938	8,148	6.6	107,963	139,912
Mandalay	107,541	6,890	6.4	94,033	121,049
Mon	293,293	15,235	5.2	263,423	323,163
Rakhine	62,829	15,991	25.5	31,477	94,181
Yangon	120,872	6,022	5.0	109,064	132,679
Shan	193,535	11,762	6.1	170,476	216,595
Ayeyawady	74,152	4,734	6.4	64,872	83,433
Nay Pyi Taw	27,775	2,831	10.2	22,224	33,326

Table SE5: Estimated total fertility rate and its standard errors by State/Region

State/Region	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
UNION	**2.044**	**0.026**	**1.3**	**1.994**	**2.095**
Kachin	2.247	0.121	5.4	2.009	2.484
Kayah	2.648	0.292	11.0	2.077	3.220
Kayin	2.556	0.172	6.7	2.218	2.894
Chin	3.427	0.274	8.0	2.890	3.965
Sagaing	2.187	0.067	3.1	2.056	2.319
Tanintharyi	1.966	0.114	5.8	1.743	2.188
Bago	2.128	0.085	4.0	1.962	2.293
Magway	1.929	0.082	4.3	1.768	2.090
Mandalay	2.036	0.065	3.2	1.908	2.164
Mon	2.059	0.109	5.3	1.845	2.273
Rakhine	1.882	0.189	10.0	1.512	2.252
Yangon	1.674	0.065	3.9	1.547	1.802
Shan	2.407	0.090	3.8	2.230	2.584
Ayeyawady	1.997	0.072	3.6	1.856	2.137
Nay Pyi Taw	1.923	0.123	6.4	1.681	2.164

Table SE6: Estimated crude birth rate and its standard errors by State/Region

State/Region	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
UNION	**0.017**	**0.000**	**1.2**	**0.016**	**0.017**
Kachin	0.018	0.001	4.9	0.016	0.019
Kayah	0.021	0.002	10.0	0.017	0.025
Kayin	0.017	0.001	6.4	0.015	0.019
Chin	0.024	0.002	9.2	0.020	0.028
Sagaing	0.018	0.001	3.0	0.017	0.019
Tanintharyi	0.014	0.001	5.8	0.013	0.016
Bago	0.016	0.001	3.9	0.015	0.018
Magway	0.016	0.001	4.2	0.015	0.017
Mandalay	0.018	0.001	3.2	0.017	0.019
Mon	0.015	0.001	5.3	0.013	0.016
Rakhine	0.015	0.001	6.7	0.013	0.016
Yangon	0.016	0.001	4.0	0.014	0.017
Shan	0.020	0.001	3.7	0.018	0.021
Ayeyawady	0.015	0.001	3.7	0.014	0.016
Nay Pyi Taw	0.017	0.001	6.3	0.015	0.019

Table SE7: Estimated crude death rate and its standard errors by State/Region

State/Region	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
UNION	**0.008**	**0.000**	**3.8**	**0.007**	**0.008**
Kachin	0.006	0.000	8.0	0.005	0.007
Kayah	0.006	0.001	13.9	0.004	0.008
Kayin	0.007	0.001	10.0	0.006	0.008
Chin	0.006	0.001	13.7	0.004	0.007
Sagaing	0.006	0.000	4.9	0.006	0.007
Tanintharyi	0.007	0.001	10.1	0.005	0.008
Bago	0.008	0.000	5.6	0.007	0.009
Magway	0.008	0.000	6.2	0.007	0.009
Mandalay	0.008	0.000	4.8	0.007	0.009
Mon	0.007	0.001	9.4	0.005	0.008
Rakhine	0.011	0.003	25.8	0.005	0.016
Yangon	0.009	0.000	5.0	0.008	0.010
Shan	0.007	0.000	5.4	0.006	0.008
Ayeyawady	0.008	0.000	4.8	0.007	0.008
Nay Pyi Taw	0.008	0.001	10.0	0.006	0.009

Table SE8: Estimated under five mortality rate and its standard errors by State/Region

State/Region	Estimate	SE	CV(%)	95% Confidence Interval	
				Lower Limit	Upper Limit
UNION	**0.0491**	**0.0023**	**4.7**	**0.0446**	**0.0536**
Kachin	0.0435	0.0069	15.9	0.0299	0.0571
Kayah	0.0417	0.0088	21.0	0.0246	0.0589
Kayin	0.0316	0.0077	24.4	0.0165	0.0467
Chin	0.0377	0.0091	24.2	0.0198	0.0555
Sagaing	0.0469	0.0050	10.6	0.0372	0.0566
Tanintharyi	0.0382	0.0090	23.6	0.0205	0.0558
Bago	0.0521	0.0061	11.7	0.0401	0.0640
Magway	0.0711	0.0069	9.8	0.0575	0.0847
Mandalay	0.0502	0.0051	10.1	0.0402	0.0601
Mon	0.0421	0.0070	16.6	0.0284	0.0558
Rakhine	0.0474	0.0268	56.5	-0.0051	0.0999
Yangon	0.0334	0.0053	15.8	0.0231	0.0438
Shan	0.0443	0.0046	10.4	0.0353	0.0532
Ayeyawady	0.0677	0.0058	8.5	0.0564	0.0790
Nay Pyi Taw	0.0591	0.0101	17.2	0.0392	0.0789

Annex 2: Accuracy and evaluation of age and sex

The quality of 2019 ICS age data was evaluated by using the United Nations Age-sex Accuracy Index, Whipple's Index, and Myer's Blended Index. Age heaping and digit preference was measured by calculating Whipple's Index and Myer's Blended index.

According to the United Nations Age-Sex Accuracy Index, the accuracy of 2019 ICS age data was 11.2 which can be considered as "accurate". The Whipple's Index shows that 2019 ICS can be defined as "very accurate"(102.1). Again, Myer's index indicated that the Age-Sex accuracy of 2019 ICS was 0.87 for the Union, in which 0.88 for males and 0.94 for females. Those indices indicate that the age heaping and accuracy of age data collected for 2019 ICS was within the standardized limit.

Table A.1: Whipple's, Myer's, and UN age-sex accuracy indices

	Whipples's Index	Myer's Index	UN Age-Sex Accuracy Index
Total	102.1	0.87	11.2
Male	101.9	0.88	
Female	102.3	0.94	

Annex 3: Questionnaires

THE REPUBLIC OF THE UNION OF MYANMAR
MINISTRY OF LABOUR, IMMIGRATION AND POPULATION
DEPARTMENT OF POPULATION
2019 INTER-CENSAL SURVEY
QUESTIONNAIRE

Mingalabar, My name is …… I am working with the Ministry of Labour, Immigration and Population. We are conducting the 2019 Inter-Censal Survey all over Myanmar.Your household was selected for the survey, along with other households in other townships. I would like to ask you some questions about your household. The household questions usually take about 45 minutes. All answers you give will be confidential and will not be shared with anyone other than members of the survey team.

IDENTIFICATION

1. STATE / REGION _____ ☐☐
2. DISTRICT _____ ☐☐
3. TOWNSHIP _____ ☐☐
4. WARD / VILLAGE TRACT _____ ☐☐☐
5. URBAN----1 RURAL------2 ---------- ☐
6. ENUMERATION AREA ---------- ☐☐☐
7. HOUSEHOLD NUMBER ---------- ☐☐☐

INTERVIEWER VISIT

	1		2		3		FINAL VISIT
DATE							DAY MONTH
TIME	START	END	START	END	START	END	☐☐ ☐☐
RESULT							☐ Code
							START TIME
TOTAL NUMBER OF VISIT ☐							END TIME

RESULT CODES:

1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTIALY COMPLETED
6 OTHER _____ (SPECIFY)

NAME OF INTERVIEWER _____ SIGNATURE _____ Date: _____
NAME OF SUPERVISOR _____ SIGNATURE _____ Date: _____

CONFIDENTIALITY:

WE ASSURE YOU THAT THE PERSONAL INFORMATION COLLECTED IN THIS INTERVIEW IS STRICTLY CONFIDENTIAL AND WILL NOT BE DISCLOSED IN ANY WAY.

CONTENT

DEMOGRAPHIC CHARACTERISTICS							
FOR ALL MEMBERS OF THE HOUSEHOLD							
1	2	3	4	5	6		
Serial number of household member	**Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.**	**What is the relationship of (NAME) to the head of the household?** 01 - Head 02 - Spouse 03 - Son 04 - Daughter 05 - Son-in-law 06 - Daughter-in-law 07 - Grandchild/Great grandchild 08 - Parent 09 - Parent-in-law 10 - Brother or Sister 11 - Grandparent 12 - Adopted/Foster/ Step child 13 - Other relative 14 - Domestic worker 15 - Not related	**Is (NAME) a male or a female?** 1 - Male 2 - Female	**How old was (NAME) at his/her last birthday?** IF LESS THAN ONE YEAR, WRITE, "000"	**In what day, month, and year was (NAME) born? (dd/mm/yyyy)** WRITE THE DATE IN GREGORIAN YEAR, e.g., 15-03-1985 WRITE "99" FOR DON'T KNOW DAY WRITE "99" FOR DON'T KNOW MONTH		
					Day	Month	Year
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

ASK THE RESPONDENT: In total, there are ---------- members of this household. Is that correct?
1 - YES, PROCEED TO Q7
2 - NO, ASK THE REMAINING MEMBERS OF THE HOUSEHOLD

DEMOGRAPHIC CHARACTERISTICS						
FOR ALL MEMBERS OF THE HOUSEHOLD					FOR 10 YEARS OLD AND OVER	
	7		8		9	For ever-married household member (if Q9 = "2", "3", or"4")
	7.a	7.b	8.a	8.b		10
Serial number of household member	**Is (NAME)'s natural mother alive?** 1 - Yes 2 - No, skip to Q8.a 9 - Don't know, skip to Q8.a	**Does (NAME)'s natural mother usually live in this household?** **If yes, what is her name?** RECORD MOTHER'S LINE NUMBER. IF NOT A HOUSEHOLD MEMBER, WRITE "00"	**Is (NAME)'s natural father alive?** 1 - Yes 2 - No, skip to Q9 9 - Don't know, skip to Q9	**Does (NAME)'s natural father usually live in this household?** **If yes, what is his name?** RECORD FATHER'S LINE NUMBER. IF NOT A HOUSEHOLD MEMBER, WRITE "00"	**What is (NAME)'s current marital status?** 1 - Single (never married) 2 - Married 3 - Widowed 4 - Divorced/separated	**How old was (NAME) when he/she (first) got married (or in a union)?**
1	☐	☐☐	☐	☐☐	☐	☐☐☐
2	☐	☐☐	☐	☐☐	☐	☐☐☐
3	☐	☐☐	☐	☐☐	☐	☐☐☐
4	☐	☐☐	☐	☐☐	☐	☐☐☐
5	☐	☐☐	☐	☐☐	☐	☐☐☐
6	☐	☐☐	☐	☐☐	☐	☐☐☐
7	☐	☐☐	☐	☐☐	☐	☐☐☐
8	☐	☐☐	☐	☐☐	☐	☐☐☐
9	☐	☐☐	☐	☐☐	☐	☐☐☐
10	☐	☐☐	☐	☐☐	☐	☐☐☐

DEMOGRAPHIC CHARACTERISTICS											
	FOR 15 YEARS OLD AND BELOW	FOR 18 YEARS OLD AND OVER									
	11	12	13								
Serial number of household member	**Does (NAME) have a birth certificate?** If no, probe: Has (NAME)'s birth ever been registered with the civil authority? 1 - Has certificate 2 - Registered 3 - Neither 9 - Don't know	**Does (NAME) currently have a bank account?** 1 - Yes, skip to Q14 2 - No 9 - Don't know, skip to Q14	**Why does not (NAME) have a bank account?** PLEASE SELECT UP TO THREE MAJOR REASONS A - Don't need/want a bank account B - Don't have enough money to have a bank account C - No bank has convenient hours or location D - Don't trust bank E - Don't like dealing with bank F - Don't understand the procedure for opening a bank account G - The fees and service charges are too high H - Other, specify								
1	☐	☐	A	B	C	D	E	F	G	H _____	
2	☐	☐	A	B	C	D	E	F	G	H _____	
3	☐	☐	A	B	C	D	E	F	G	H _____	
4	☐	☐	A	B	C	D	E	F	G	H _____	
5	☐	☐	A	B	C	D	E	F	G	H _____	
6	☐	☐	A	B	C	D	E	F	G	H _____	
7	☐	☐	A	B	C	D	E	F	G	H _____	
8	☐	☐	A	B	C	D	E	F	G	H _____	
9	☐	☐	A	B	C	D	E	F	G	H _____	
10	☐	☐	A	B	C	D	E	F	G	H _____	

INTERNAL MIGRATION				
FOR ALL MEMBERS OF THE HOUSEHOLD				
	Current residence	Place of birth		Reason for movement
	14	15	16	17
Serial number of household member	**How many years has (NAME) been staying in this township where (NAME) is currently residing?** IF LESS THAN 1 YEAR, WRITE "000" IF (NAME) HAS LIVED IN THIS TOWNSHIP FOR HIS/HER ENTIRE LIFE, WRITE "999" AND SKIP TO Q21	**In what township was (NAME) born?** 1 - Same township where enumerated 2 - Other township, specify 3 - Other country, specify and skip to Q17	**Specify if the place of birth was URBAN or RURAL** 1 - Urban 2 - Rural	**What was the main reason for moving to this township?** 1 - Employment/in search for employment/business 2 - Education 3 - Marriage 4 - Followed family 5 - Conflict 6 - Medical/Health services 7 - Natural Disaster 8 - Other, specify
1	☐☐☐	☐ _____	☐	☐ _____
2	☐☐☐	☐ _____	☐	☐ _____
3	☐☐☐	☐ _____	☐	☐ _____
4	☐☐☐	☐ _____	☐	☐ _____
5	☐☐☐	☐ _____	☐	☐ _____
6	☐☐☐	☐ _____	☐	☐ _____
7	☐☐☐	☐ _____	☐	☐ _____
8	☐☐☐	☐ _____	☐	☐ _____
9	☐☐☐	☐ _____	☐	☐ _____
10	☐☐☐	☐ _____	☐	☐ _____

INTERNAL MIGRATION			
FOR ALL MEMBERS OF THE HOUSEHOLD			
	Previous residence		If response in Q14 is 0 to 4 years
	18	19	20
Serial number of household member	**Where was (NAME)'s previous residence?** 1. Township, specify 2. Other country, specify and skip to Q20	**Specify if the previous residence was URBAN or RURAL** 1 - Urban 2 - Rural	**Where was (NAME)'s usual residence five years ago?** 1 - Same township where enumerated 2 - Other township, specify 3 - Other country, specify 4 - Not yet born (age is 0 to 4)
1	☐ _____	☐	☐ _____
2	☐ _____	☐	☐ _____
3	☐ _____	☐	☐ _____
4	☐ _____	☐	☐ _____
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7	☐ _____	☐	☐ _____
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9	☐ _____	☐	☐ _____
10	☐ _____	☐	☐ _____

EDUCATION

FOR MEMBERS 3 YEARS OLD AND OVER

Serial number of household member	School attendance		Highest grade/level completed
	21	22	23
	Has (NAME) ever attended pre-school or school? 1 - Yes, skip to Q23 2 - No	**What is the main reason that (NAME) never attended school?** 01 - Too young (If the age of the respondent is less than 10 years old) 02 - Illness, injury, disability 03 - Could not afford schooling (Schooling is expensive) 04 - To help at home with household tasks (including taking care of siblings/ parents/relatives) 05 - To help in family farm 06 - To help in family business (non-farm) 07 – Agricultural work other than family farm 08 – Non-agricultural work other than family business 09 - Security situation 10 - School too far/ transportation difficult 11 - Parents do not think sending children to school is important 12 - Child not interested in schooling 13 - Language barrier 14 - Other, specify Skip to Q29	**What is the highest grade/level of education (INCLUDING public and private schools, nonformal, monastic, and non-state education) (NAME) successfully completed?** 00 - Attended, but did not complete any grade/standard 01 - Nursery school/preschool 02 - "KG" or "Kindergarten" Completed in or after 2016-17 (new system) 11 - Primary school "Grade 1" completed in or after 2017-18 (new system) 12 - Primary school "Grade 2" completed in 2018-19 (new system) 21 - Primary school "KG" completed in or before 2015-16 (old system) 22 - Primary school "1st standard" completed in or before 2016-17 (old system) 23 - Primary school "2nd standard" completed in or before 2017-18 (old system) 24 - Primary school "3rd standard" (old system) 25 - Primary school "4th standard" (old system) 26 - Nonformal primary education 31-34 - Middle school "5th standard" – "8th standard" (old system) 35 - Nonformal middle education 41-42 - High school "9th standard" – "10th standard" (old system) 48-49 - GTHS (after middle school completion) 50 - Completed 1 or more years of college/university but not yet received any diploma, certificate, or degree 51 - Teacher's certificate less than Bachelor Degree (including undergraduate diploma in teacher education) 52 - Technical and Vocational Education and Training Diploma Course (e.g., GTC, GTI) 53 - Bachelor Degree 54 - Postgraduate Diploma 55 - Master's Degree 56 - PhD or other doctoral-level degree 61 - 1 or more years of post-high school vocational education and training (e.g., ITC etc.) but not yet successfully completed 62 - Successfully completed post-high school vocational education and training qualification (e.g., ITC etc.) 63 - Short term technical and vocational training course (e.g., SMVTI, SITE, NVTI etc.) 70 - Other, specify
1	☐	☐☐ _____	☐☐ _____
2	☐	☐☐ _____	☐☐ _____
3	☐	☐☐ _____	☐☐ _____
4	☐	☐☐ _____	☐☐ _____
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EDUCATION			
FOR MEMBERS 3 YEARS OLD AND OVER			
	Matriculation Exam	Currently attending school	
	24	25	26
Serial number of household member	**Has (NAME) ever taken the matriculation exam and/or plans to take it in March 2020?** 1 - Not ever taken but plans to take it in March 2020 2 - Not ever taken and does not plan to take it in March 2020 3 - Not ever taken and not sure yet 4 - Taken and successfully passed 5 - Taken, failed and will re-take in March 2020 6 - Taken, failed and will not re-take in March 2020 7 - Taken, failed and not sure yet ASK: IF CODE "41", "42", "48", "49", "61", "62" OR "63" IN Q23	**Is (NAME) attending school in the current school year (2019/2020)?** 1 - Yes, skip to Q27 2 - No	**What is the main reason that (NAME) stopped schooling?** 01 - Completed desired level 02 - Illness, injury, disability 03 - Could not afford schooling (schooling is expensive) 04 - To help at home with household tasks (including taking care of siblings/ parents/relatives) 05 - To help in family farm 06 - To help in family business (non-farm) 07 - Agricultural work other than family farm 08 - Non-agricultural work other than family business 09 - Security situation 10 - School too far/transportation difficult 11 - Language barrier 12 - Child was failing, falling behind 13 - Child was difficult relations with peers, teachers, bullying 14 - School content not relevant to everyday life or future employment/ not interesting 15 - Marriage/ pregnancy/ child birth 16 - Other, specify Skip to Q29
1	☐	☐	☐☐ _____
2	☐	☐	☐☐ _____
3	☐	☐	☐☐ _____
4	☐	☐	☐☐ _____
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10	☐	☐	☐☐ _____

EDUCATION		
FOR MEMBERS 3 YEARS OLD AND OVER		
	Currently attending school	
	27	28
Serial number of household member	**What grade/level of education/ training (INCLUDING public and private schools, monastic, and non-state education) is (NAME) attending in the current school year (2019/2020)?** 01 - Nursery school/preschool 02 - "KG" or "Kindergarten" (new system) 11 - Primary school "Grade 1" (new system) 12 - Primary school "Grade 2" (new system) 13 - Primary school "Grade 3" (new system) 14 - Non-State school primary "Grade 4" (in schools where non-MOE curriculum is taught, e.g., ethnic school, international school, etc.) 25 - Primary school "4th standard" (old system) 26 - Nonformal primary education 31 - Middle school "Grade 6" (new system) 32-34 - Middle school "6th standard" – "8th standard" (old system) 35 - Nonformal middle education 41-42 - High school "9th standard" – "10th standard" (old system) 48-49 - GTHS (after middle school completion) 51-55 - 1st – 5th year of post-high school teacher education certificate, diploma, or degree program 56-59 - 1st – 4th year of post-high school TVET program (e.g., Industrial Training Center-ITC) 61-63 - 1st – 3rd year of other undergraduate diploma program 71-77 - 1st – 7th year of bachelor degree program 81- Any year of postgraduate or master degree program 82 - Any year of PhD or other advanced degree programs 90 - Other, specify	**What type of school is (NAME) attending in the current school year (2019/2020)?** 01 - Nursery school/ Pre-school (public or private) 02 - Basic education primary school (BEPS) 03 - Branch or affiliated primary school (BPS or APS) 04 - Basic education post-primary school (BEPPS) 05 - Basic Education Middle School (BEMS) 06 - Branch or affiliated Middle school (BMS or AMS) 07 - Basic Education High School (BEHS) 08 - Branch or affiliated High School (BHS or AHS) 09 - Government Technical High School (GTHS) 10 - Technical and vocational education and training and Institute/school (e.g., GTC, GTI, SMVTI, SITE, NVTI, etc.) 11 - ITC 12 - Other public TVET at post-high school level 13 - Other public full-time/on-campus college or university 14 - Public college or university via distance education 15 - Monastic school 16 - Other religious school 17 - Private school excluding nursery/pre-school 18 - Non-state/ethnic school 19 - NGO-run school 20 - Nonformal/alternative education 21 - School outside Myanmar 22 - Private TVET School 23 - Other, specify
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

EDUCATION				
FOR MEMBERS 5 YEARS OLD AND OVER				
	Literacy and numeracy (If highest grade completed in Q23 is lower than "31" or Q21 = "2")		Attended training in the last 12 months	
	29	30	31	32
Serial number of household member	**Can (NAME) read and write a simple sentence in any language with understanding?** 1 - Yes 2 - No	**Can (NAME) do simple addition and subtraction calculations (WITHOUT USING CALCULATOR OR PHONE)?** 1 - Yes 2 - No	**In the last 12 months has (NAME) attended any training programs lasting AT LEAST FIVE FULL DAYS OR 35 HOURS? Include language, IT, agriculture, industry, clerical, construction, hospitality, and other types.** 1 - Yes 2 - No, skip to Q33/ Next household member	**What was the main focus of the most recent training lasting AT LEAST FIVE FULL DAYS OR 35 HOURS attended by (NAME)?** 01 - Foreign language 02 - IT/computer 03 - Agriculture 04 - Construction 05 - Machinery Repair 06 -Other industry-related 07 - Handicrafts 08 - Teacher training 09 - Medical/health-related training 10 - Clerical 11 - Hospitality-related (e.g., hotel, restaurant etc.) 12 - Other service sector jobs 13 - Literacy or numeracy 14 - Electrical 15 - Technical and vocational education and training short term courses 16 - Other, specify
1	☐	☐	☐	☐☐ _____
2	☐	☐	☐	☐☐ _____
3	☐	☐	☐	☐☐ _____
4	☐	☐	☐	☐☐ _____
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9	☐	☐	☐	☐☐ _____
10	☐	☐	☐	☐☐ _____

LABOUR FORCE					
FOR MEMBERS 5 YEARS OLD AND OVER					
	Current activities and employment			Current activities and employment (If 'Yes' to any in Q33 – Q35:)	
	33	34	35	36	37
Serial number of household member	**In the last 7 days, did (NAME) do any work for a wage, salary, commission, tips or any other pay even for only one hour?** 1 - Yes, skip to Q36 2 - No	**In the last 7 days, did (NAME) do any kind of business (farm or non-farm) to generate income even for only one hour?** 1 - Yes, skip to Q36 2 - No	**In the last 7 days, did (NAME) help unpaid in a business (farm or non-farm) owned by a household member, even for only one hour?** 1 - Yes 2 - No, skip to 40	**What is (NAME)'s main occupation in the last 7 days?** Specify the details	**What is the main activity of (NAME)'s establishment or business where (NAME) worked?** Specify the details
1	☐	☐	☐	_____	_____
2	☐	☐	☐	_____	_____
3	☐	☐	☐	_____	_____
4	☐	☐	☐	_____	_____
5	☐	☐	☐	_____	_____
6	☐	☐	☐	_____	_____
7	☐	☐	☐	_____	_____
8	☐	☐	☐	_____	_____
9	☐	☐	☐	_____	_____
10	☐	☐	☐	_____	_____

LABOUR FORCE					
FOR MEMBERS 5 YEARS OLD AND OVER					
	Current activities and employment (If 'Yes' to any in Q33 – Q35:)		Job search (If all 'No' to Q33 – Q35)		
	38	39	40	41	42
Serial number of household member	**In this job, is (NAME) …** 1 - Employee (government) 2 - Employee (private) 3 - Paid apprentice/intern 4 - Worked as an employer (with regular employees) 5 - Own account worker (without regular employees) 6 - Helping without pay in a household/family business 7 - Other, specify	**How many hours does (NAME) usually work in a week in ALL jobs or businesses?** Skip to Q43	**During the last 30 days did (NAME) look for a job or try to start a business?** 1 - Yes, skip to Q42 2 - No	**Even though (NAME) did not look for work in the last 30 days does (NAME) want to work for pay or profit?** 1 - Yes 2 - No, skip to Q43	**If an opportunity to work for pay or to start a business becomes available could (NAME) start working within the next two weeks?** 1 - Yes 2 - No
1	☐ _____	☐☐☐	☐	☐	☐
2	☐ _____	☐☐☐	☐	☐	☐
3	☐ _____	☐☐☐	☐	☐	☐
4	☐ _____	☐☐☐	☐	☐	☐
5	☐ _____	☐☐☐	☐	☐	☐
6	☐ _____	☐☐☐	☐	☐	☐
7	☐ _____	☐☐☐	☐	☐	☐
8	☐ _____	☐☐☐	☐	☐	☐
9	☐ _____	☐☐☐	☐	☐	☐
10	☐ _____	☐☐☐	☐	☐	☐

FERTILITY

FOR EVER-MARRIED WOMEN 10 YEARS OLD AND OVER

Serial number of household member	Number of children ever born alive								First and last child birth (If Q43.a and Q43.b = "00", skip to Q51)				
	43		44		45		46		47	48		49	50
	How many total children (both sons and daughters) have (NAME) given live birth? (IF NO CHILDREN, WRITE "00")		How many of those children are living in this household?		How many of those children are living elsewhere (not in this household)?		How many of those children are no longer alive (dead)?		How old were (NAME) when (NAME) gave birth to (NAME)'s FIRST child born alive?	What was the date of LAST live birth? WRITE "99" FOR DON'T KNOW		Is the last live birth a boy or a girl? 1 - Boy 2 - Girl	Is the child still alive? 1 - Yes 2 - No
	43.a Male	43.b Female	44.a Male	44.b Female	45.a Male	45.b Female	46.a Male	46.b Female		Month	Year		
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													

FUNCTIONAL DIFFICULTY (DISABILITY)

FOR MEMBERS 5 YEARS OLD AND OVER

51

Does (NAME) have any difficulty?

i. Seeing, even if wearing glasses
ii. Hearing, even if using hearing aid
iii. Walking or climbing steps
iv. Remembering or concentrating
v. Self-care, such as washing all over or dressing
vi. Communicating, for example understanding or being understood

Codes
No, no difficulty = 1
Yes, some difficulty = 2
Yes, a lot of difficulty = 3
Cannot do at all = 4

Serial number of household member	Seeing	Hearing	Walking/climbing steps	Remembering/ Concentrating	Self-care	Communication
1	☐	☐	☐	☐	☐	☐
2	☐	☐	☐	☐	☐	☐
3	☐	☐	☐	☐	☐	☐
4	☐	☐	☐	☐	☐	☐
5	☐	☐	☐	☐	☐	☐
6	☐	☐	☐	☐	☐	☐
7	☐	☐	☐	☐	☐	☐
8	☐	☐	☐	☐	☐	☐
9	☐	☐	☐	☐	☐	☐
10	☐	☐	☐	☐	☐	☐

OLDER POPULATION											
FOR MEMBERS 60 YEARS OLD AND OVER											
	Pension, allowances, benefits										Medical conditions
	52	53									54
Serial number of household member	**Is (NAME) currently receiving a pension, allowance, or benefit?** 1 - Yes 2 - No, skip to Q54	**What kind of pension, allowance, benefit?** (MARK ALL THAT APPLY) A - Work pension B - Veteran's pension, war widow's pension C - Family pension D - Social pension E - Invalid or Disability allowance pension F - Sickness allowance G - Other, specify H - Don't know									**Did (NAME) visit any health care facility during the past 12 months?** 1 - Yes 2 - No, skip to Q57
1	☐	A	B	C	D	E	F	G_____	H		☐
2	☐	A	B	C	D	E	F	G_____	H		☐
3	☐	A	B	C	D	E	F	G_____	H		☐
4	☐	A	B	C	D	E	F	G_____	H		☐
5	☐	A	B	C	D	E	F	G_____	H		☐
6	☐	A	B	C	D	E	F	G_____	H		☐
7	☐	A	B	C	D	E	F	G_____	H		☐
8	☐	A	B	C	D	E	F	G_____	H		☐
9	☐	A	B	C	D	E	F	G_____	H		☐
10	☐	A	B	C	D	E	F	G_____	H		☐

OLDER POPULATION		
FOR MEMBERS 60 YEARS OLD AND OVER		
	Medical conditions	
	55	56
Serial number of household member	**What type of health care facility did (NAME) visit the last time?** ***PUBLIC SECTOR*** 01 - Government Hospital 02 - Traditional Medicine Hospital/Clinic 03 - Urban Health Center 04 - Disease control Clinic 05 - Maternal and Child Health Center 06 - Rural Health Center (RHC) 07 - Sub-Rural Health Center (SRHC) 08 - Mobile Clinic 09 - Health Volunteer 10 - Other public, specify ***PRIVATE SECTOR*** 11 - Private Hospital/ Clinic 12 - Private Traditional Medicine Clinic 13 - Private Doctor 14- Stand-alone VCT Center 15 - Pharmacy 16 - Mobile Clinic 17 - Diagnostic Laboratory 18 - NGO/INGO 19 - Other private, specify	**What was the main reason (NAME) visited the health care facility the last time?** 1 - Emergency Care 2 - Routine/regular consultations/follow up 3 - Regular laboratory tests 4 - Medicine for maintenance 5 - Got sick and needed consultations and medicines (out-patient) 6 - Got sick and admitted to the health care facility 7 - Other, specify
1	☐☐ _____	☐ _____
2	☐☐ _____	☐ _____
3	☐☐ _____	☐ _____
4	☐☐ _____	☐ _____
5	☐☐ _____	☐ _____
6	☐☐ _____	☐ _____
7	☐☐ _____	☐ _____
8	☐☐ _____	☐ _____
9	☐☐ _____	☐ _____
10	☐☐ _____	☐ _____

PARTICIPATION, SUPPORT AND WELL-BEING				
PERSONS WHO ANSWERED CODE "2", "3" OR "4" IN Q51 OR FOR OLDER POPULATION				
	Community participation/activity		Support received during the past 12 months	
	57	58	59	60
Serial number of household member	**During the past 12 months did (NAME) participate in any community/ social/ religious activity?** 1 - Yes 2 - No, skip to Q59	**What types of community/ social/ religious activities did (NAME) participate?** (MARK ALL THAT APPLY) A - Recreation and sports B - Socialization such as parties, meeting friends C - Political meetings and gatherings D - Art or cultural activities E - Educational activities F - Religious activities G - Humanitarian activities H - Other, specify	**Did (NAME) get any support during the past 12 months?** 1 - Yes 2 - No, skip to Q62 3 - No need, skip to Q62	**What are these supports?** (MARK ALL THAT APPLY) A - Financial B - Assistance on daily activities inside the house C - Assistance on activities outside the house D - Medical support E - Home care services F - Day care services G- Transportation services H - Meal delivery service I - Other, specify
1	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
2	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
3	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
4	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
5	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
6	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
7	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
8	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
9	☐	A B C D E F G H_____	☐	A B C D E F G H I _____
10	☐	A B C D E F G H_____	☐	A B C D E F G H I _____

PARTICIPATION, SUPPORT AND WELL-BEING																				
PERSONS WHO ANSWERED CODE "2", "3" OR "4" IN Q51 OR FOR OLDER POPULATION																				
	Support received during the past 12 months																		Health status and well-being (Repondent should be him/herself)	
	61																		62	63
Serial number of household member	**Who/which organization provided (NAME) support?** (MARK ALL THAT APPLY) ***LIVING IN THIS HOUSEHOLD*** A - Spouse/ partner B - Son/ daughter C - Parent D - Grandparent E - Grandchild F - Other family/ HH member (not hh help) G - HH help/ caretaker/ caregiver ***LIVING ELSEWHERE (NOT IN THIS HOUSEHOLD)*** H - Spouse/partner I - Son/daughter J - Parent K - Grandparent L - Grandchild M - Other relatives N - HH help/caretaker/ caregiver O - Neighbours or friends P - An organised government/I/NGO/ community service (e.g. volunteer-based home-care services) Q - Private services (not a government or voluntary agency) R - Other, specify																		**In a scale of 1 to 5, generally, how do you rate your health?** 1 - Very good 2 - Good 3 - Fair 4 - Poor 5 - Very poor 6 - Refused 7 - Persons who answered code "2", "3" or "4" in Q51/ older person not available/ not possible to answer ► Q64 9 - Don't know	**Are you basically satisfied with your life?** 1 - All of the time 2 - Most of the time 3 - Some of the time 4 - A little of the time 5 - None of the time 6 - Refused 7 - Persons who answered code "2", "3" or "4" in Q51/ older person not available/not possible to answer 9 - Don't know
1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
2	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
3	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
4	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
5	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
6	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
7	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
8	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
9	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐
10	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R_____	☐	☐

INTERNATIONAL MIGRATION

FORMER HOUSEHOLD MEMBERS LIVING ABROAD

64 **Is there any former member of this household who is now currently living abroad?**

1 - Yes, how many? ☐☐

2 - No, skip to Q79

Serial number	65	66	67	68	69	70
	What is the name of the former household member now living abroad?	**What is (NAME)'s relationship to the head of this household?** 02 - Spouse 03 - Son 04 - Daughter 05 - Son-in-law 06 - Daughter-in-law 07 - Grandchild/Great grandchild 08 - Parent 09 - Parent-in-law 10 - Brother or Sister 11 - Grandparent 12 - Adopted/Foster/Step child 13 - Other relative 14 - Not related	**Is (NAME) a male or a female?** 1 - Male 2 - Female	**What is (NAME)'s age as of his/her last birthday?**	**Which year did (NAME) leave Myanmar?** STATE IN GREGORIAN YEAR	**What country is (NAME) currently residing?** 01 - Thailand 02 - Malaysia 03 - Singapore 04 - China 05 - Japan 06 - South Korea 07 - India 08 - USA 09 - UAE 10 - Qatar 11 - Other, specify 99 - Don't know
1		☐☐	☐	☐☐☐	☐☐☐☐	☐☐ _____
2		☐☐	☐	☐☐☐	☐☐☐☐	☐☐ _____
3		☐☐	☐	☐☐☐	☐☐☐☐	☐☐ _____
4		☐☐	☐	☐☐☐	☐☐☐☐	☐☐ _____
5		☐☐	☐	☐☐☐	☐☐☐☐	☐☐ _____
6		☐☐	☐	☐☐☐	☐☐☐☐	☐☐ _____

INTERNATIONAL MIGRATION					
FORMER HOUSEHOLD MEMBERS LIVING ABROAD					
Serial number	71	72	For 5 years old and over	For 10 years old and over	
			73	74	75
	What is (NAME)'s main reason for leaving the country? 1 - Employment/ in search for employment/ business 2 - Education 3 - Marriage 4 - Followed family 5 - Conflict 6 - Medical/Health services 7 - Natural Disaster 8 - Other, specify 9 - Don't know	**What type of channel did (NAME) leave the country?** 1 - Family connections 2 - Employer made arrangements 3 - Recruitment agency 4 - Labour broker 5 - Friend connections 6 - Made own arrangements 7 - Other, specify 9 - Don't know	**What is (NAME)'s highest grade completed prior to departure?** 01 - None 02 - Primary 03 - Middle school 04 - High school 05 - TVET diploma (GTI, GTC etc.) 06 - Undergraduate (University/ College) 07 - Undergraduate Diploma 08 - Bachelor's Degree 09 - Postgraduate Diploma 10 - Master's Degree/PhD 11 - Monastic/ Religious 12 - Other, specify 99 - Don't know	**What is (NAME)'s marital status prior to departure?** 1 - Single (never married) 2 - Married 3 - Widowed 4 - Divorced/ separated 9 - Don't know	**What is (NAME)'s current activity abroad?** 01 - Employee 02 - Employer 03 - Own-account worker 04 - Contributing family worker 05 - Seeking work 06 - Full-time student/ attending training 07 - Household work 08 - Pensioner, retired, older person 09 - Illness, injury or disability 10 - Idle 11 - Other, specify 99 - Don't know
1	☐ _____	☐ _____	☐☐ _____	☐	☐☐ _____
2	☐ _____	☐ _____	☐☐ _____	☐	☐☐ _____
3	☐ _____	☐ _____	☐☐ _____	☐	☐☐ _____
4	☐ _____	☐ _____	☐☐ _____	☐	☐☐ _____
5	☐ _____	☐ _____	☐☐ _____	☐	☐☐ _____
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INTERNATIONAL MIGRATION			
FORMER HOUSEHOLD MEMBERS LIVING ABROAD			
Serial number	For 10 years old and over		
	76	77	78
	Has (NAME) sent money from abroad during the last 12 months? 1 - Yes 2 - No, skip to next household member or Q79	**How much cash in total did (NAME) send in the last 12 months (in MMK)?**	**What was the main channel used for sending/ bringing money to your household?** 1 - Banks 2 - Money transfer operators (Western Union/Money Gram/Xpress Money etc.) 3 - Mobile financial services (Wave Money/True Money/ M-Pitesan) 4 - Hundi 5 - Money carried in cash by another person (friend/relative) 6 - Other, specify
1	☐	_____	☐ _____
2	☐	_____	☐ _____
3	☐	_____	☐ _____
4	☐	_____	☐ _____
5	☐	_____	☐ _____
6	☐	_____	☐ _____

HOUSING CHARACTERISTICS			
No.	**Questions**	**Coding categories**	**Skip**
79	**What type of housing unit does this household occupy?**	Condominium ..... 1 Apartment/flat ..... 2 Bungalow/brick house ..... 3 Semi-pucca house ..... 4 Wooden house ..... 5 Bamboo ..... 6 Hut 2-3 years ..... 7 Hut 1 year ..... 8 Other 9 _____ (specify)	
80	**Do you own, rent or provided for free this housing unit occupied by your household?**	Owned ..... 1 Rented (government) ..... 2 Rented (private) ..... 3 Provided free (individual) ..... 4 Provided free (government quarter)..... 5 Provided free (private company quarter)..... 6 Other 7 _____ (specify)	
81	**What is the main source of energy for lighting in the household?**	**Grid electricity** (Gov't grid, border country grid, community based grid)..... 1 ***Off-grid electricity*** Generator (private) ..... 2 Solar system energy ..... 3 Wind and water mill ..... 4 ***Others*** Kerosene ..... 5 Candle ..... 6 Rechargeable battery ..... 7 Other 8 _____ (specify)	
82	**What is the main fuel used for cooking in this household?**	**Grid electricity** (Gov't grid, border country grid, community based grid) ..... 01 ***Off-grid electricity*** Generator (private) ..... 02 Solar system energy ..... 03 Wind and water mill ..... 04 ***Others*** Kerosene ..... 05 LPG ..... 06 Bio gas ..... 07 Firewood ..... 08 Charcoal ..... 09 Coal ..... 10 Straw/grass 11	

HOUSING CHARACTERISTICS			
No.	**Questions**	**Coding categories**	**Skip**
		Other _____ 12 (specify)	
83	**Is the cooking usually done in the house, in a separate building or outdoors?**	In the house ..... 1 In a separate building ..... 2 Outdoors ..... 3 Other _____ 4 (specify)	
84	**How many rooms do the members of your household occupy, including prayer room, bedrooms, dining and living rooms?** (EXCLUDE TOILETS, KITCHENS, BALCONIES, CORRIDORS AND ROOMS USED ONLY FOR BUSINESS)	Number of rooms ..... ☐☐	
85	**MAIN CONSTRUCTION MATERIALS OF THE OUTER WALLS** (DO NOT ASK, OBSERVE AND ENTER THE CODE. IF IN DOUBT, ASK THE RESPONDENT)	Dhani/Theke/Palm/In leaf ..... 1 Bamboo ..... 2 Earth ..... 3 Wood ..... 4 Corrugated sheet ..... 5 Tile/brick/concrete ..... 6 Other _____ 7 (specify)	
86	**MAIN CONSTRUCTION MATERIALS OF THE ROOF** (DO NOT ASK, OBSERVE AND ENTER THE CODE. IF IN DOUBT, ASK THE RESPONDENT)	Dhani/Theke/Palm/In leaf ..... 1 Bamboo ..... 2 Earth ..... 3 Wood ..... 4 Corrugated sheet ..... 5 Tile/brick/concrete ..... 6 Other _____ 7 (specify)	
87	**MAIN CONSTRUCTION MATERIALS OF THE FLOOR** (DO NOT ASK, OBSERVE AND ENTER THE CODE. IF IN DOUBT, ASK THE RESPONDENT)	Bamboo ..... 1 Earth ..... 2 Wood ..... 3 Tile/brick/concrete ..... 4 Other _____ 5 (specify)	

HOUSING CHARACTERISTICS					
No.	**Questions**	**Coding categories**			**Skip**
88	**Which of the items does your household have?**	(MARK ALL THAT APPLY)	**Yes**	**No**	
		A - Radio ……..…	1	2	
		B - Television set ……..……	1	2	
		C - Landline/fixed-line telephone ……..…….	1	2	
		D - Mobile phone ……..……	1	2	
		E - Computer ……..……..……	1	2	
		F - Internet access at home (through landline or mobile connection)……..……....	1	2	
		G - Car/pick-up/truck/van ……..…….	1	2	
		H - Motorcycle/moped/tuk tuk ……..……..	1	2	
		I - Bicycle ……..……	1	2	
		J - Four-wheel tractor ……..……	1	2	
		K - Canoe/boat ……..…….	1	2	
		L - Motor boat ……..……..…….	1	2	
		M - Cart (bullock) …….....	1	2	
89	**What is your household annual income from all sources of income?** **Please include income of all household members as well.** **(If you can't remember the exact number, please give us your best estimate)**	Annual income (Lakhs)……			

WATER, SANITATION AND HYGIENE			
No.	**Questions**	**Coding categories**	**Skip**
Water source			
90	**What is the main source of drinking water for members of your household?**	**Piped water** Piped into dwelling ..... 11 Piped into compound, yard or plot ..... 12 Piped to neighbour ..... 13 Public tap / standpipe ..... 14 **Borehole or tubewell** ..... 21 **Dug well** Protected well ..... 31 Unprotected well ..... 32 **Water from spring** Protected spring ..... 41 Unprotected spring ..... 42 **Rainwater collection** ..... 51 **Delivered water** Tanker-truck ..... 61 Cart with small tank / drum ..... 62 **Home water purifier/filter/Bottled water** ..... 71 **Surface water (river, stream, dam, lake, pond, canal, irrigation channel)** ..... 81 **Other** 91 _____ (specify)	Skip to Q94 Skip to Q95
91	**Where is the drinking water collected from?**	In own dwelling ..... 1 In own yard / plot ..... 2 Elsewhere 3	Skip to Q94
92	**How long does it take to go there, get water, queue and come back?**	Number of minutes ..... ☐☐☐ IF DON'T KNOW MINUTES, ENTER "999"	
93	**Who oftenly collects water? Is (NAME) a male or a female?**	Male ..... 1 Female ..... 2 Both male and female collect water..... 3	
94	**In the last summer, has there been any time when your household did not have sufficient quantities of drinking water when needed?**	Yes, at least once ..... 1 No, always sufficient ..... 2 Don't know 9	
Sanitation facility			
95	**What kind of toilet facility do members of your household usually use?** If 'Flush' or 'Pour flush', probe: Where does it flush to?	**Flush / pour flush** Flush to piped sewer system ..... 11 Flush to septic tank ..... 12 Flush to pit latrine ..... 13 Flush to open drain ..... 14 Flush to don't know where 15	

WATER, SANITATION AND HYGIENE			
No.	**Questions**	**Coding categories**	**Skip**
		Dry pit latrines Ventilated improved pit latrine ..... 21 Pit latrine with slab ..... 22 Pit latrine without slab / Open pit ..... 23 **Container based sanitation** ..... 31 **Hanging toilet / hanging latrine** ..... 41 **No facility / Bush / Field** ..... 51 **Other** 61 _____ (specify)	Skip to Q100
Shared sanitation			
96	**Do you share this facility with others who are not members of your household?**	Yes ..... 1 No 2	
Location of sanitation facility			
97	**Where is this toilet facility located?**	In own dwelling ..... 1 In own yard / plot ..... 2 Elsewhere 3	
Emptying of on-site sanitation facilities			
98	**Has your septic tank ever been emptied or buried when the latrine pit is full?** ASK: IF CODE "12", "13", "21", "22", "23", OR "31" IN Q95	Yes ..... 1 No ..... 2 Don't know 9	Skip to Q100
Disposal of excreta from on-site sanitation facilities			
99	**The last time it was emptied or buried, where were the contents emptied to or what did you do? Was it removed by a service provider?** ASK: IF CODE "12", "13", "21", "22", "23", OR "31" IN Q95	**Removed by service provider** to a treatment plant ..... 11 buried in a covered pit..... 12 to don't know where ..... 13 **Emptied by household** buried in a covered pit ..... 21 to uncovered pit, open ground, water body or elsewhere ..... 22 **Other** 31 _____ (specify) Don't know 99	
Solid waste disposal			
100	**How does your household usually dispose of garbage?**	Collected by formal service provider ..... 1 Collected by informal service provider ..... 2 Disposed of in designated waste disposal area ... 3 Disposed of within household yard or plot ..... 4 Buried or burned ..... 5 Disposed of elsewhere ..... 6 Other 7 _____ (specify)	

WATER, SANITATION AND HYGIENE			
No.	**Questions**	**Coding categories**	**Skip**
Handwashing facility observation			
101	**Can you please show me where members of your household most often wash their hands?**	Fixed facility observed (sink/tap) In dwelling ..... 1 In yard/plot ..... 2 Mobile object observed (bucket/jug/kettle) .... 3 No handwashing place in dwelling/yard/plot .... 4 Not observed, no permission to see ..... 5 Not observed, other reason 6	Skip to Q103
Water and Soap observation			
102	OBSERVE AVAILABILITY OF WATER, SOAP OR DETERGENT AT THE PLACE FOR HANDWASHING	(MARK ALL THAT APPLY) Water is available ..... A Water is not available ..... B Soap or detergent available ..... C Soap or detergent not available ..... D	
Water Quality Test			
103	**Can you please provide me with a glass of water that members of your household usually drink?** CONDUCT TESTS WITHIN 30 MINS OF COLLECTING SAMPLES. WAIT FOR 24 TO 48 HOURS TO SEE THE CHANGES OF WATER COLOUR RECORD THE COLOUR OF WATER; CHANGE TO BLUE GREEN – YES CHANGE TO YELLOW – NO	Presence of E-coli detected in the water sample Yes..... 1 No..... 2	

MORTALITY/MATERNAL MORTALITY

DEATH IN THE HOUSEHOLD DURING THE LAST 12 MONTHS

104 **Was there any death among the previous members of this household during the past 12 months?**

1 - Yes
2 - No, END INTERVIEW

Serial number	105	106	107	If Q 107 = "000"	If Q106 is "1" - Male or Q107 is less than 10 or greater than 49, END INTERVIEW	If Q109 is "4", "5", or "6", END INTERVIEW
				108	109	110
	What was the name of the deceased household member?	**Was (NAME) a male or a female?** 1- Male 2 - Female	**How old was (NAME)'s in completed years at the time of his/her death?** If less than one year, write "000"	**How old was (NAME) in months or days?**	**Did (NAME) die during pregnancy, delivery, or in the first 6 weeks after delivery?** 1 - Pregnancy 2 - Delivery 3 - First 6 weeks after delivery 4 - No, did not die during pregnancy, delivery or within first 6 weeks after delivery 5 - Don't know when she died 6 - Don't know if pregnant	**Was (NAME)'s death due to act of violence or accident?** 1 - Act of violence 2 - Accident 3 - No, not act of violence, not accident 9 - Don't know
1		☐	☐☐☐	1. Months ☐☐ 2. Days ☐☐	☐	☐
2		☐	☐☐☐	1. Months ☐☐ 2. Days ☐☐	☐	☐
3		☐	☐☐☐	1. Months ☐☐ 2. Days ☐☐	☐	☐
4		☐	☐☐☐	1. Months ☐☐ 2. Days ☐☐	☐	☐

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