



THE REPUBLIC OF THE UNION OF MYANMAR

The 2014 Myanmar Population and Housing Census

KACHIN STATE, PUTAO DISTRICT

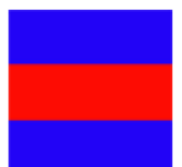
Machanbaw Township Report



Department of Population

Ministry of Labour, Immigration and Population

October 2017



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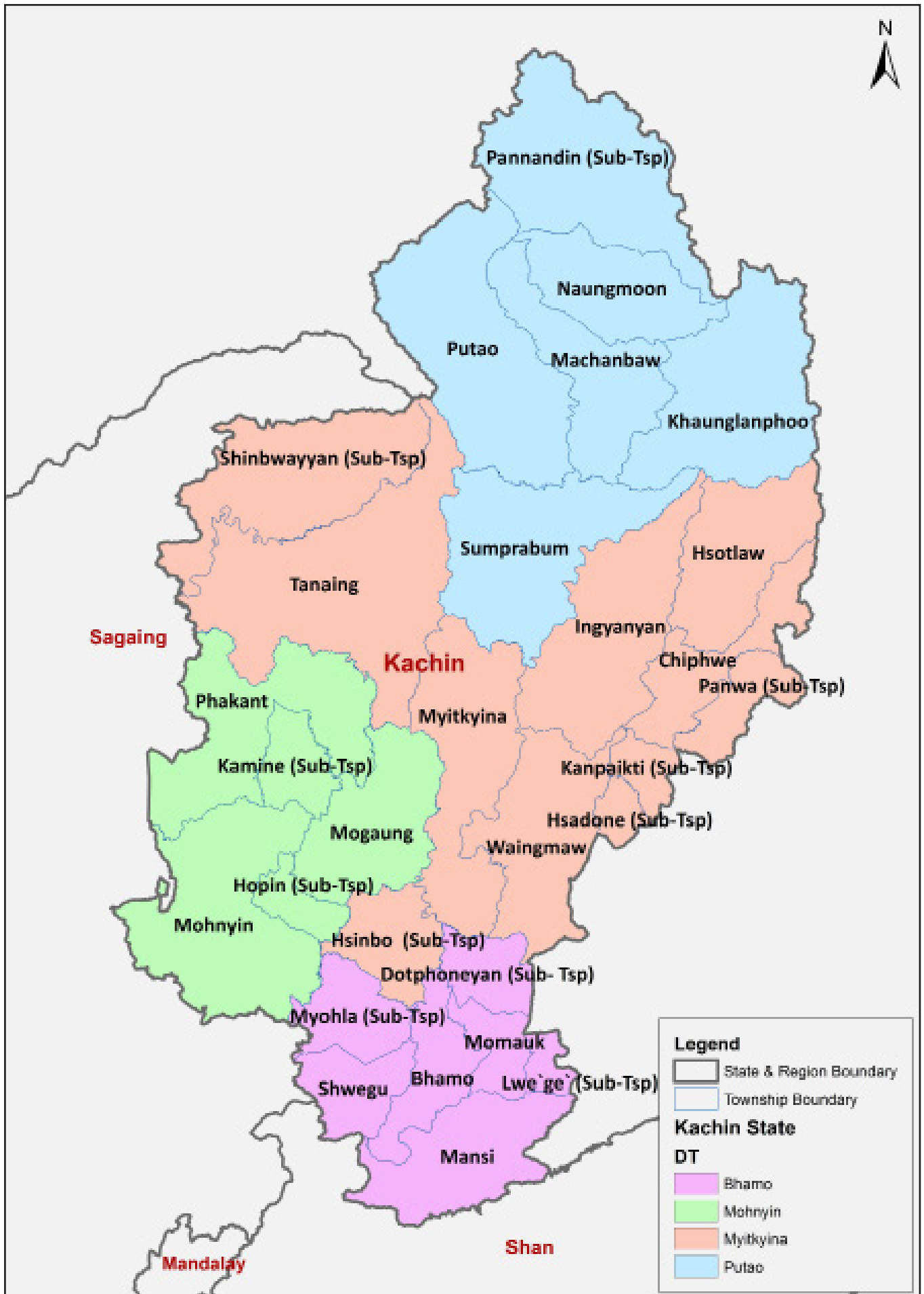
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Figure 1 : Map of Kachin State, showing the townships



Machanbaw Township Figures at a Glance ¹

Total Population	8,858 ²	
Population males	4,455 (50.3%)	
Population females	4,403 (49.7%)	
Percentage of urban population	26.1%	
Area (Km²)	2,859.9 ³	
Population density (per Km²)	3.1 persons	
Median age	22.5 years	
Number of wards	4	
Number of village tracts	12	
Number of private households	1,719	
Percentage of female headed households	29.7%	
Mean household size	4.9 persons ⁴	
Percentage of population by age group		
Children (0 – 14 years)	39.3%	
Economically productive (15 – 64 years)	55.8%	
Elderly population (65+ years)	4.9%	
Dependency ratios		
Total dependency ratio	79.3	
Child dependency ratio	70.4	
Old dependency ratio	8.9	
Ageing index	12.6	
Sex ratio (males per 100 females)	101	
Literacy rate (persons aged 15 and over)	87.2%	
Male	90.9%	
Female	83.8%	
People with disability	Number	Per cent
Any form of disability	928	10.5
Walking	333	3.8
Seeing	441	5.0
Hearing	390	4.4
Remembering	423	4.8

Type of Identity Card (persons aged 10 and over)	Number	Per cent	
Citizenship Scrutiny	5,591	86.9	
Associate Scrutiny	*	< 0.1	
Naturalised Scrutiny	*	0.1	
National Registration	*	0.1	
Religious	*	0.1	
Temporary Registration	*	0.1	
Foreign Registration	*	< 0.1	
Foreign Passport	*	< 0.1	
None	806	12.5	
Labour Force (aged 15 – 64)	Both sexes	Male	Female
Labour force participation rate	72.1%	87.1%	56.7%
Unemployment rate	2.3%	2.7%	1.7%
Employment to population ratio	70.4%	84.7%	55.7%
Ownership of housing unit (Tenure)	Number	Per cent	
Owner	1,512	88.0	
Renter	53	3.1	
Provided free (individually)	33	1.9	
Government quarters	110	6.4	
Private company quarters	*	0.2	
Other	*	0.4	
Material for housing	Wall	Floor	Roof
Dhani/Theke/In leaf	0.3%		86.9%
Bamboo	77.4%	63.4%	0.1%
Earth	-	0.1%	
Wood	18.5%	32.4%	-
Corrugated sheet	0.2%		12.9%
Tile/Brick/Concrete	3.5%	3.7%	-
Other	0.1%	0.4%	0.1%
Main source of energy for cooking	Number	Per cent	
Electricity	*	0.8	
LPG	-	-	
Kerosene	-	-	
Biogas	*	0.2	
Firewood	1,698	98.8	
Charcoal	*	0.2	
Coal	-	-	
Other	*	0.1	

Main source of energy for lighting	Number	Per cent
Electricity	298	17.3
Kerosene	*	0.1
Candle	659	38.3
Battery	328	19.1
Generator (private)	*	0.1
Water mill (private)	94	5.5
Solar system/energy	320	18.6
Other	*	1.0
Main source of drinking water	Number	Per cent
Tap water/piped	146	8.5
Tube well, borehole	47	2.7
Protected well/spring	634	36.9
Bottled/purifier water	-	-
<i>Total Improved Water Sources</i>	<i>827</i>	<i>48.1</i>
Unprotected well/spring	603	35.1
Pool/pond/lake	*	0.5
River/stream/canal	227	13.2
Waterfall/rainwater	54	3.1
Other	-	-
<i>Total Unimproved Water Sources</i>	<i>892</i>	<i>51.9</i>
Main source of water for non-drinking use	Number	Per cent
Tap water/piped	148	8.6
Tube well, borehole	45	2.6
Protected well/spring	624	36.3
Unprotected well/spring	601	35.0
Pool/pond/lake	*	0.5
River/stream/canal	240	14.0
Waterfall/rainwater	53	3.1
Bottled/purifier water	-	-
Other	-	-

Type of toilet	Number	Per cent
Flush	69	4.0
Water seal (Improved pit latrine)	1,283	74.7
<i>Total Improved Sanitation</i>	<i>1,352</i>	<i>78.7</i>
Pit (Traditional pit latrine)	343	20.0
Bucket (Surface latrine)	*	0.4
Other	-	-
None	*	0.9
Availability of communication amenities	Number	Per cent
Radio	517	30.1
Television	403	23.4
Landline phone	*	0.9
Mobile phone	106	6.2
Computer	22	1.3
Internet at home	*	0.2
Households with none of the items	975	56.7
Households with all of the items	-	-
Availability of Transportation equipment	Number	Per cent
Car/Truck/Van	*	0.4
Motorcycle/Moped	505	29.4
Bicycle	107	6.2
4-Wheel tractor	*	0.3
Canoe/Boat	31	1.8
Motor boat	*	0.8
Cart (bullock)	1,005	58.5

Note: ¹ Population figures for Machanbaw Township are as of 29th March 2014.

² Includes both household population and institution population.

³ Settlement and Land Record Department, Ministry of Agriculture, Livestock and Irrigation, (2014-2015)

⁴ Calculated based on conventional household population

* Less than 20.

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Introduction

In April 2014, the Government of the Republic of the Union of Myanmar conducted its latest census, after three decades without a Population and Housing Census. In the post-independence period, comprehensive population and housing censuses were only successfully undertaken in 1973, 1983 and most recently in April 2014.

Censuses are an important source of benchmark information on the characteristics of the population and households in every country. One unique feature of a census is its ability to provide information down to the lowest administrative level. Such information is vital for planning and evidence based decision-making at every level. Additional data uses include allocation of national resources; the review of administrative boundaries; the positioning of social infrastructures, drawing national development plans, service provision and developing social infrastructure, and for humanitarian preparedness and response.

The results of the 2014 Census have been published so far in a number of volumes. The first was the Provisional Results released in August 2014. The Census Main Results were launched in May 2015. These included The Union Report, Highlights of the Main Results, and reports of each of the 15 States and Regions. The reports on Occupation and Industry and Religion were launched in March 2016 and July 2016, respectively. All the publications are available online at <http://www.dop.gov.mm/> and <http://myanmar.unfpa.org/node/15104>.

The current set of the 2014 Census publications comprise township and sub-township reports. Their preparation involved collaborative efforts of the Department of Population and UNFPA. This report contains selected demographic and socio-economic characteristics of Machanbaw Township in Kachin State. The information included in this report is the situation of 2014 March 29, Census night. Township level information is very important. However, the level of confidence of township estimates is not the same as Union level information. Some of the townships have relatively small populations; the interpretation of these estimates should be made with caution. Some of the indicators, such as IMR/U5MR, were adopted only after careful analysis considering a number of factors to ensure consistency in the results. Estimates for townships with relatively small number of observations should not be taken as exact estimates of the mortality level, but rather they should be regarded as reasonable indicators for the scale of mortality risk they experience, an indication of which townships are better off and which are in a more vulnerable situation.

Census information on Machanbaw Township

(A) Demographic Characteristics

Total population	8,858 *		
Males	4,455		
Females	4,403		
Sex ratio	101 males per 100 females		
Percentage of urban population	26.1%		
Area (Km ²)	2,859.9 **		
Population density (persons per Km ²)	3.1 persons		
Number of wards	4		
Number of village tracts	12		
	Total	Urban	Rural
Population in conventional households	8,353	2,039	6,314
Number of conventional households	1,719	408	1,311
Mean household size	4.9 persons ***		
<ul style="list-style-type: none"> • In Machanbaw Township, there are slightly more females less than males with 101 males per 100 females. • The majority of the people in the Township live in rural areas with only (26.1%) living in urban areas. • The population density of Machanbaw Township is 3 persons per square kilometre. • There are 4.9 persons living in each household in Machanbaw Township. This is slightly higher than of the Union average (4.4 persons). 			

Note: * Includes both household population and institution population.

** Settlement and Land Record Department, Ministry of Agriculture, Livestock and Irrigation, (2014-2015)

*** Calculated based on conventional household population

Table 1: Population and number of conventional households by sex by ward and village tract; Machanbaw Township (Putao District, Kachin State)

Sr	Ward/Village Tract	No. of Conventional households	Population		
			Total	Males	Females
	Total	1,719	8,858	4,455	4,403
	Ward	408	2,315	1,181	1,134
1	No(1)(W)	151	835	462	373
2	No(2)(W)	73	511	241	270
3	No(3)(W)	101	505	248	257
4	No(4)(W)	83	464	230	234
	Village Tract	1,311	6,543	3,274	3,269
1	In Bu Bawt(VT)	87	500	261	239
2	Nam Hkam(VT)	235	1,011	489	522
3	Hta Ran Dam(VT)	365	1,881	906	975
4	Kawng Mu Lon(VT)	194	1,026	531	495
5	Man No(VT)	160	743	342	401
6	Ah Lang Ga(VT)	112	602	327	275
7	Htang Ga(VT)	28	165	99	66
8	In Ga Ding Chet(VT)	60	281	137	144
9	Shin Mway Yang(VT)	28	149	88	61
10	Ma Jang Ga(VT)	13	66	31	35
11	Dawng Shar Lar (Dawng Ga)(VT)	14	46	25	21
12	Ding Bu Ding Sar(VT)	15	73	38	35

Figure 2: Population by broad age groups, Machanbaw Township

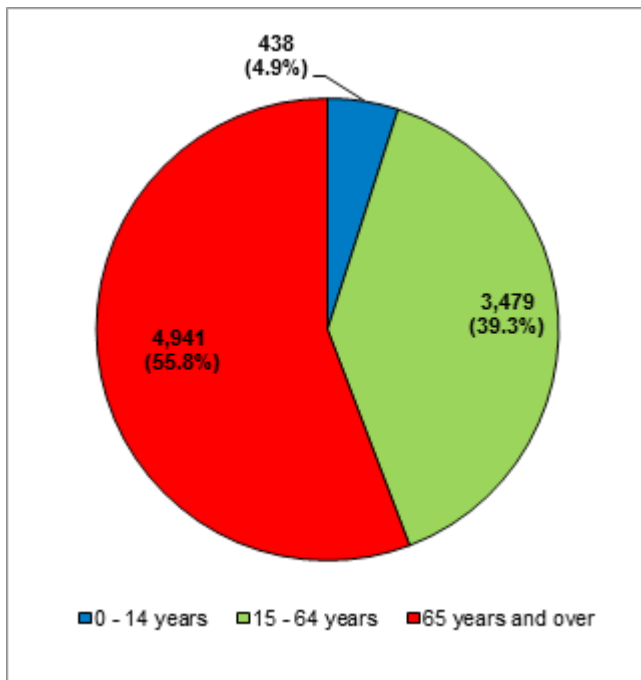
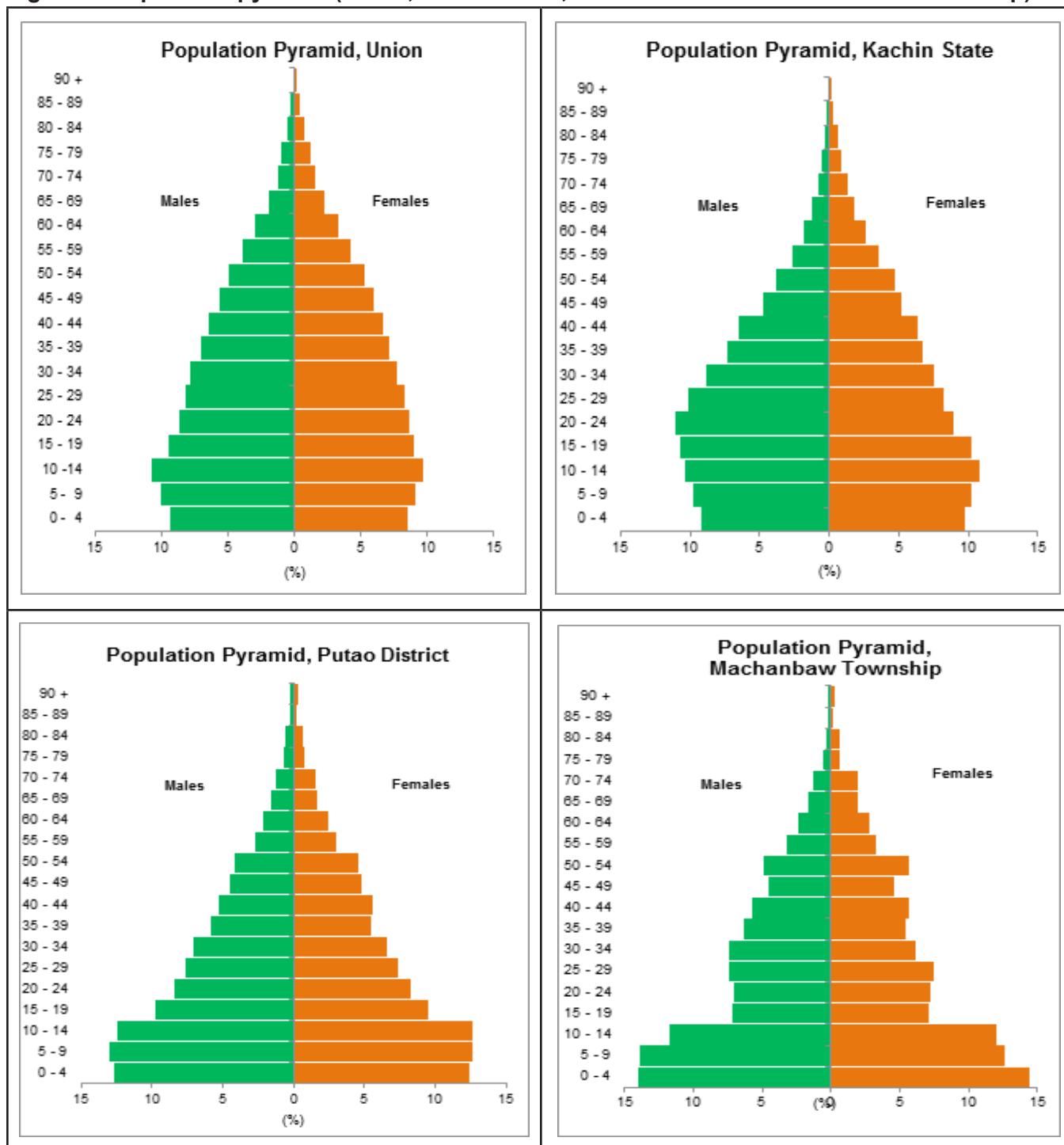


Table 2: Population by 5-year age groups, Machanbaw Township

Age groups	Total	Males	Females
Total	8,858	4,455	4,403
0 - 4	1,257	624	633
5 - 9	1,170	616	554
10 - 14	1,052	520	532
15 - 19	635	321	314
20 - 24	630	314	316
25 - 29	659	329	330
30 - 34	600	328	272
35 - 39	522	283	239
40 - 44	508	257	251
45 - 49	405	203	202
50 - 54	468	220	248
55 - 59	286	144	142
60 - 64	228	104	124
65 - 69	158	73	85
70 - 74	147	60	87
75 - 79	52	26	26
80 - 84	43	15	28
85 - 89	16	7	9
90 +	22	11	11

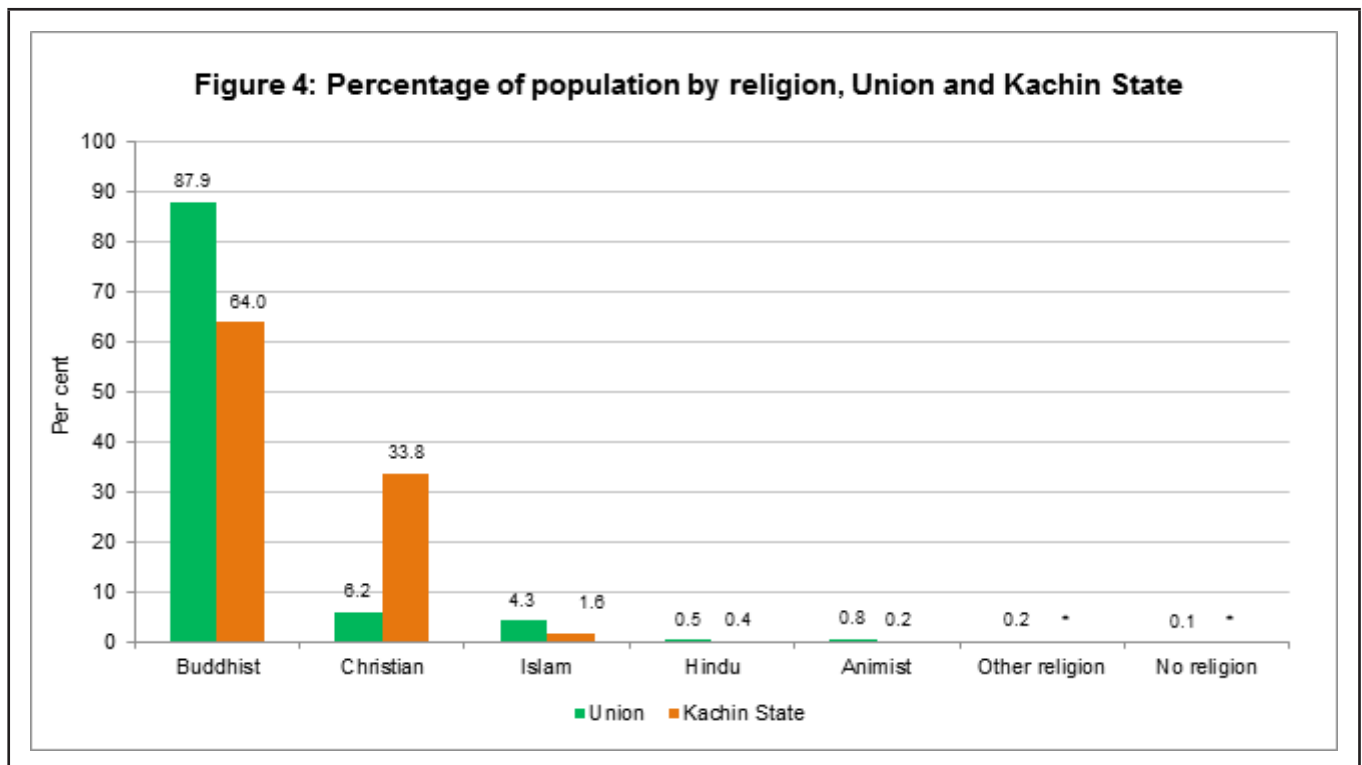
- The proportion of productive working population between 15 and 64 years of age in Machanbaw Township is 55.8 per cent.
- The proportion of children aged 14 and below together with the proportion of the elderly aged 65 and over are less than the proportion of the working age group population.
- Fewer proportions of children and elderly reduce the dependency of those age groups on the working age population.

Figure 3: Population pyramid (Union, Kachin State, Putao District and Machanbaw Township)



- In Machanbaw Township, the population in age group (0-4) is the largest.
- The population has markedly declined from age group 15-19 onwards.
- Compared to Union level, there is a smaller percentage of working age group 15-64 population in Machanbaw Township.
- Starting from age group 60-64, there are less males than females in all age groups.

(B) Religion



- At the Union level, the composition of the population by religion is: 87.9% Buddhist, 6.2% Christian, 4.3% Islam, 0.5% Hindu, 0.8% Animist, 0.2% Other religion and 0.1% No religion.
- In Kachin State, it is 64.0% Buddhist, 33.8% Christian, 1.6% Islam, 0.4% Hindu, 0.2% Animist, and less than 0.1% each for Other religion and those with No religion.

Note: * Less than 0.1 per cent.

(C) Education

Table 3: Population aged 5 - 29 and current school attendance by sex by age

Age	Total population			Currently attending		
	Total	Males	Females	Total	Males	Females
5	221	133	88	86	51	35
6	236	123	113	206	109	97
7	253	123	130	237	116	121
8	237	116	121	221	105	116
9	211	114	97	205	110	95
10	245	126	119	227	116	111
11	182	92	90	169	84	85
12	222	112	110	209	106	103
13	191	96	95	175	86	89
14	195	84	111	176	72	104
15	142	65	77	113	52	61
16	138	70	68	103	45	58
17	108	52	56	58	23	35
18	99	49	50	39	19	20
19	96	48	48	28	14	14
20	125	65	60	16	9	7
21	96	43	53	14	4	10
22	97	46	51	3	-	3
23	99	37	62	3	-	3
24	104	45	59	3	1	2
25	126	64	62	3	2	1
26	115	51	64	4	2	2
27	98	49	49	1	-	1
28	131	56	75	3	2	1
29	86	44	42	2	1	1

Figure 5: School attendance by age, Union, Kachin State and Machanbaw Township

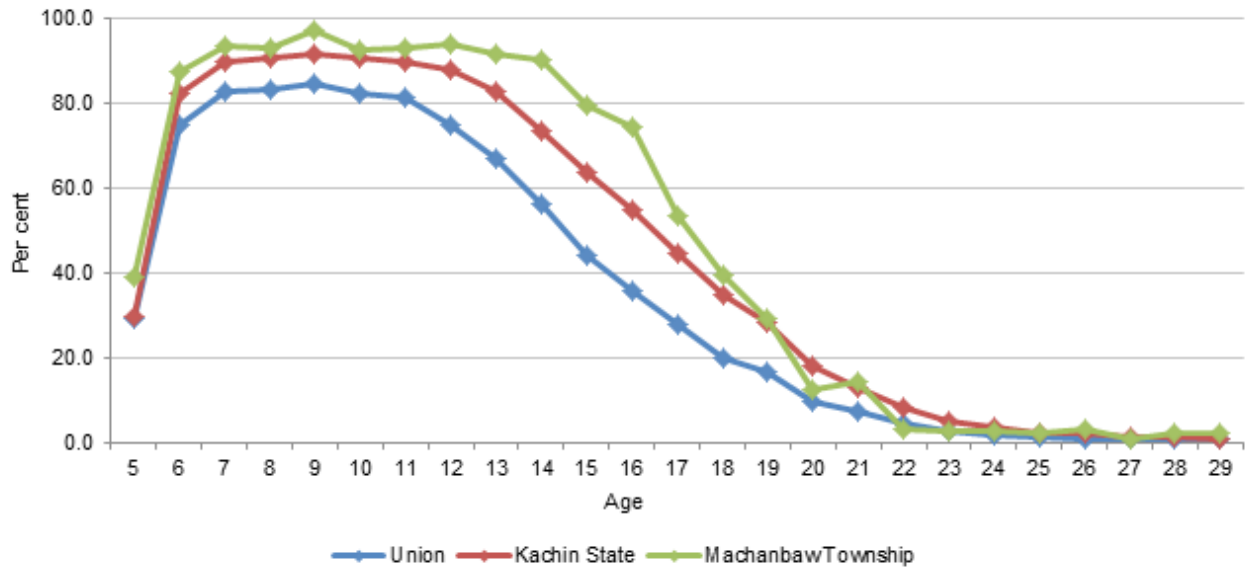
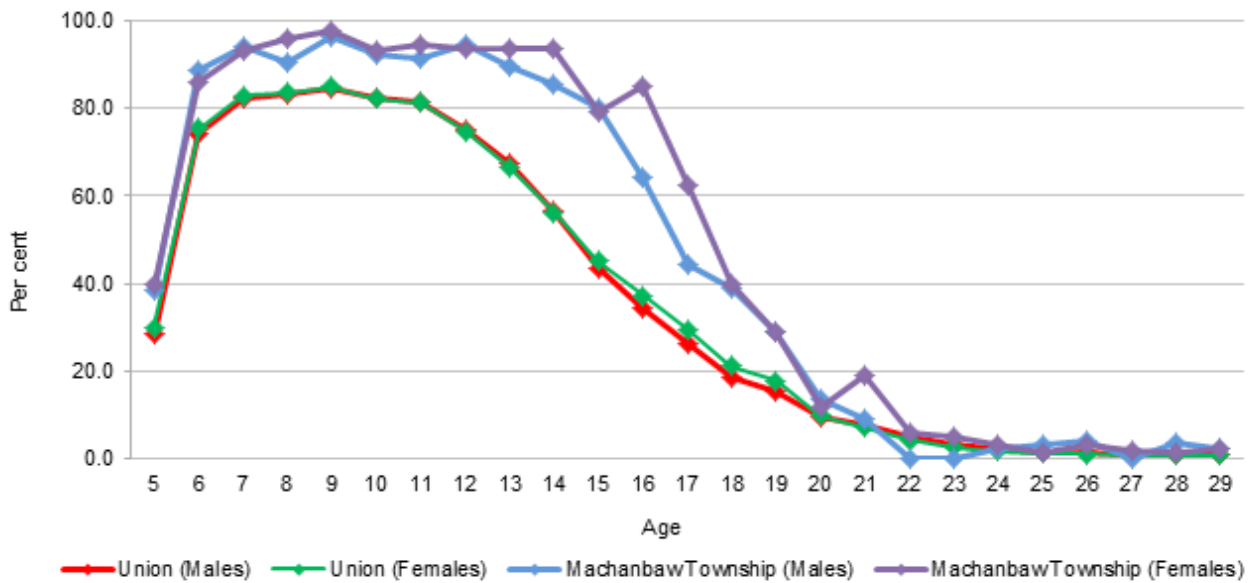


Figure 6: School attendance by age by sex, Union and Machanbaw Township



- School attendance in Machanbaw Township drops starting from age 15 for both males and females.
- Compared to the Union, the school attendance of males and females in Machanbaw Township is higher from school going age.

Figure 7: Literacy rate, Kachin State (aged 15 and over)

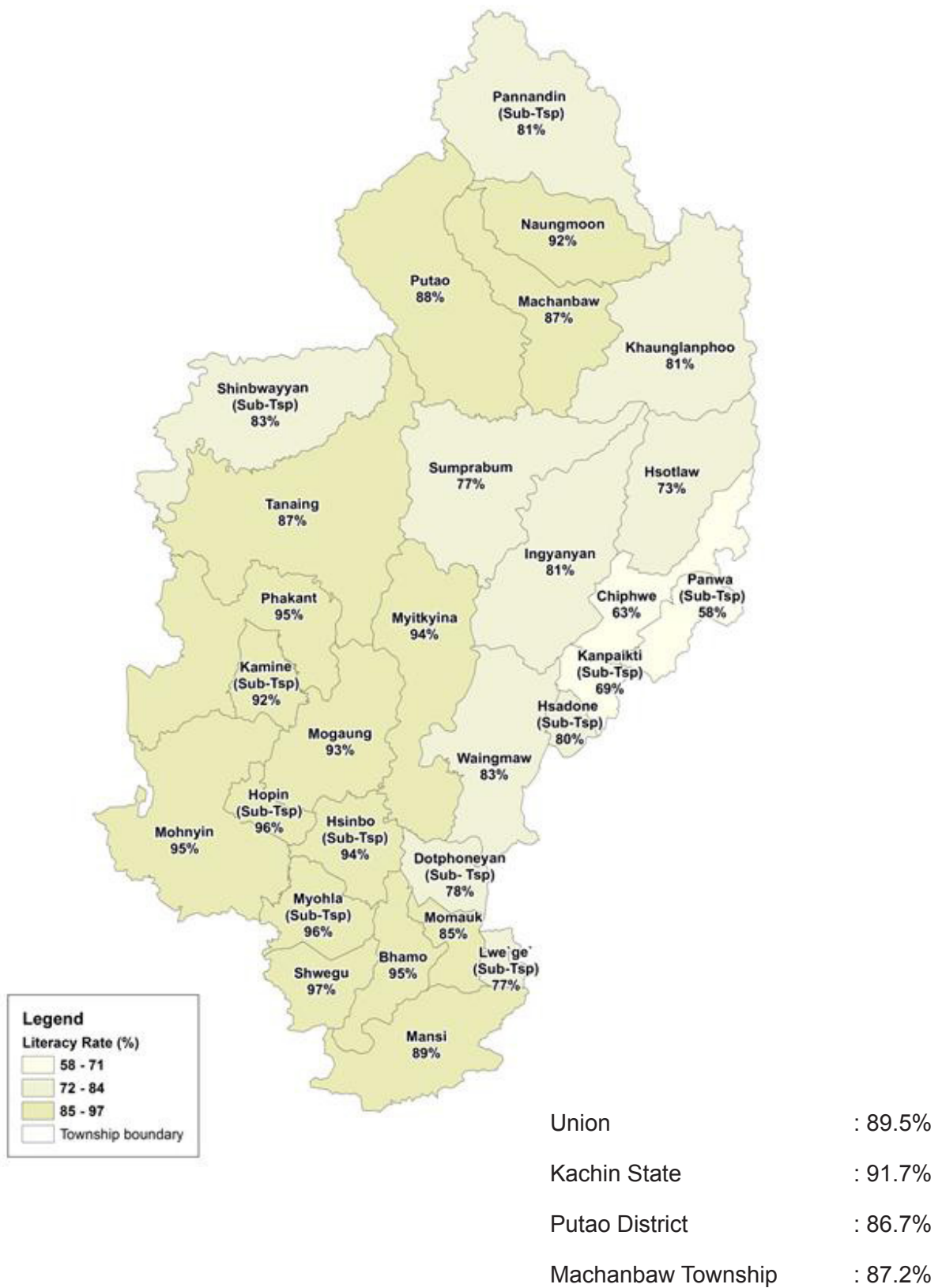


Table 4: Youth literacy rate (15 - 24), Machanbaw Township

Sex	Total Population (15 - 24)	Literacy Rate (15 - 24)
Total	1,104	98.2
Males	520	97.9
Females	584	98.5

- The literacy rate of those aged 15 and over in Machanbaw Township is 87.2 per cent. It is lower than the literacy rate of Kachin State (91.7%) and the Union (89.5%). Female literacy rate is 83.8 per cent and for the males it is 90.9 per cent.
- The literacy rate for youth aged 15-24 is 98.2 per cent with 98.5 per cent for females and 97.9 per cent for males.

Table 5: Population aged 25 and over by highest level of education completed, urban/rural and sex

	Total	None	% Never attended	Primary school		Middle school (grade 6 - 9)	High school (grade 10 - 11)	Diploma	University/College	Post-graduate and above	Vocational training	Other
				(grade 1 - 4)	(grade 5)							
Total	4,114	698	17	1,152	442	1,039	505	28	219	17	10	4
Urban	1,108	102	9	211	115	273	214	16	158	11	8	-
Rural	3,006	596	20	941	327	766	291	12	61	6	2	4
Males	2,060	245	12	525	252	604	285	19	106	14	9	1
Females	2,054	453	22	627	190	435	220	9	113	3	1	3

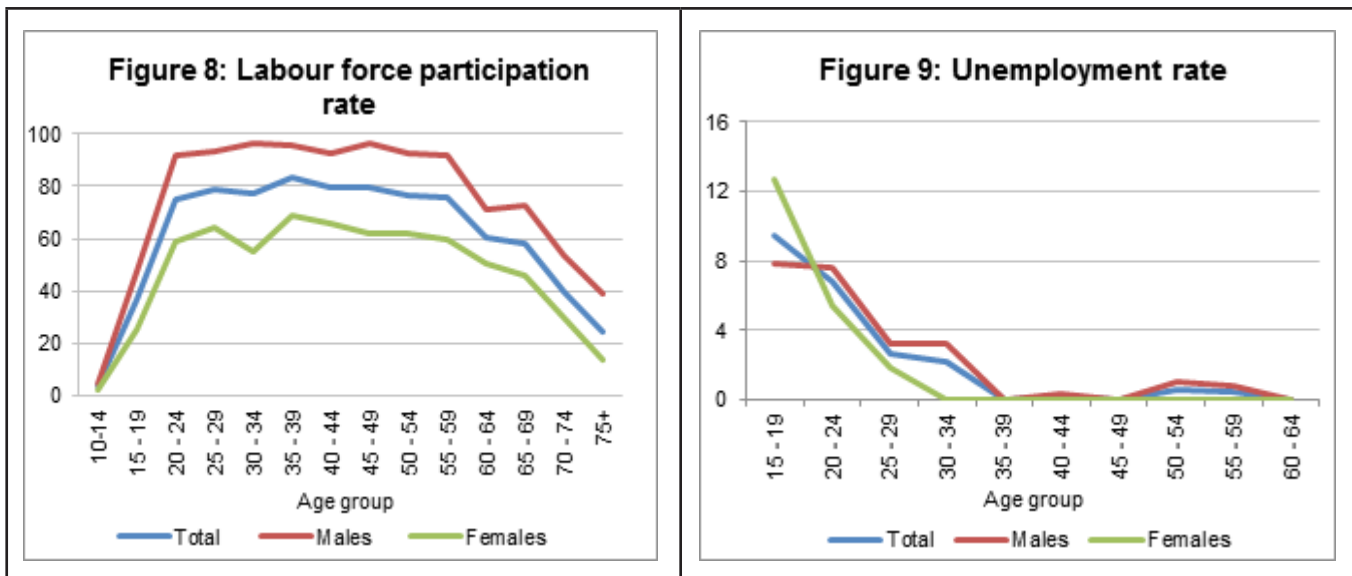
- Seventeen per cent of the population aged 25 and over have never been to school.
- Of the rural population aged 25 and over, 19.8 per cent have never been to school.
- There are 11.9 per cent of males aged 25 and over who have never attended school as against 22.1 per cent for females.
- Among those aged 25 and over, 10.7 per cent has completed primary school (grade 5) and only 5.3 per cent has completed university/college education.

(D) Economic Characteristics

Table 6: Population aged 10 and over by labour force participation rate and unemployment rate by sex and age group

Age groups	Labour Force Participation Rate		
	Total	Males	Females
10-14	3.6	4.6	2.6
15 - 19	36.5	47.7	25.2
20 - 24	75.2	91.7	58.9
25 - 29	78.9	93.6	64.2
30 - 34	77.5	96.3	54.8
35 - 39	83.1	95.4	68.6
40 - 44	79.5	92.6	66.1
45 - 49	79.3	96.6	61.9
50 - 54	76.5	92.7	62.1
55 - 59	75.9	91.7	59.9
60 - 64	60.1	71.2	50.8
65 - 69	58.2	72.6	45.9
70 - 74	39.5	53.3	29.9
75+	24.8	39.0	13.5
15 - 24	55.8	69.4	42.1
15 - 64	72.1	87.1	56.7

Age groups	Unemployment Rate		
	Total	Males	Females
10 -14	10.5	4.2	21.4
15 - 24	7.6	7.7	7.5
15 - 64	2.3	2.7	1.7
65+	-	-	-



- Labour force participation rate for the population aged 15-64 in Machanbaw Township is 72.1 per cent.
- The labour force participation rate of females is 56.7 per cent and is much lower than that of their male counterparts which is 87.1 per cent.
- In Machanbaw Township, labour force participation rate for the population aged 10-14 is 3.6 per cent.
- The unemployment rate for those aged 15-64 in Machanbaw Township is 2.3 per cent. There is some difference between the unemployment rate for males (2.7%) and for females (1.7%).
- The unemployment rate for young females aged 15-24 is 7.5 per cent.

Table 7: Population aged 10 and over not in the labour force by usual activity status and sex

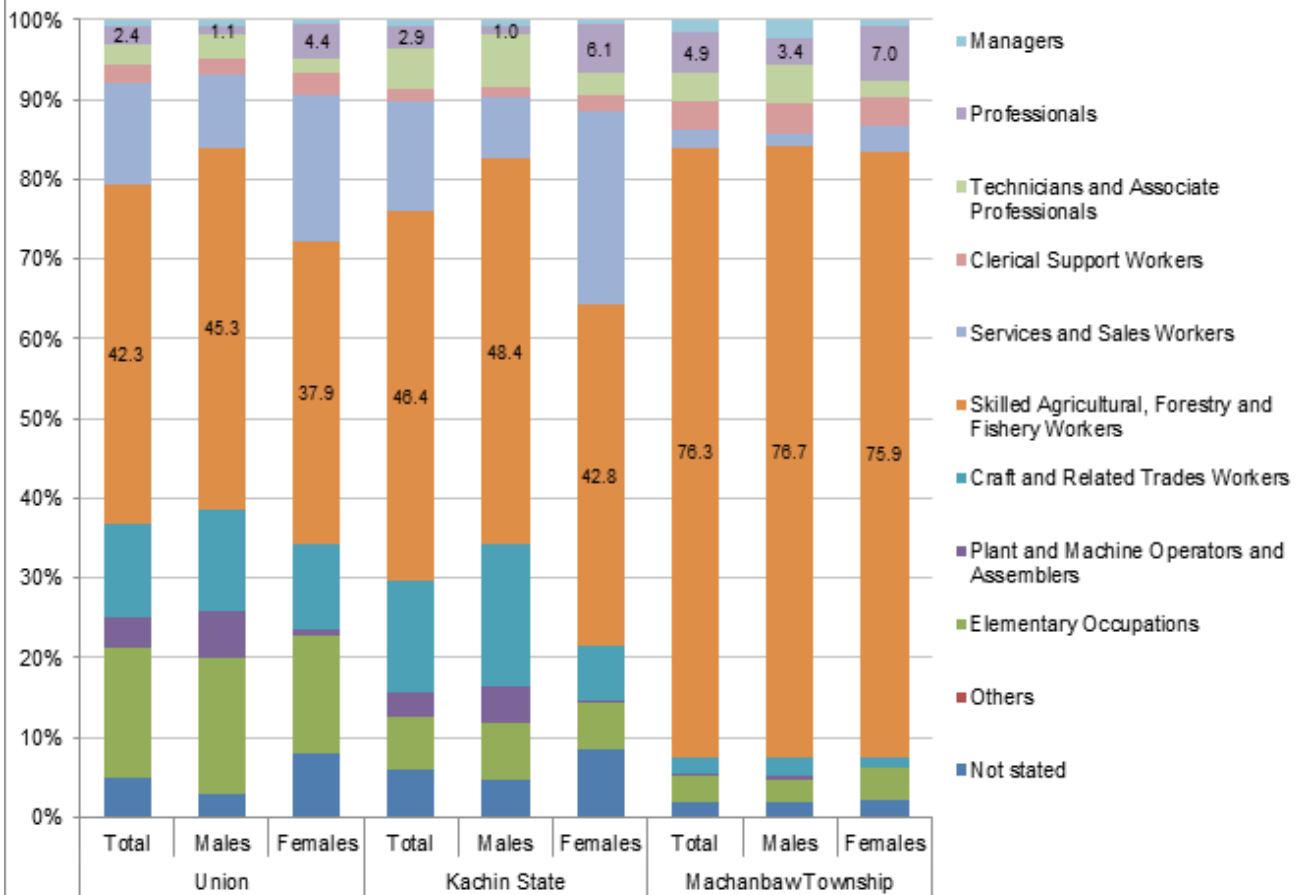
Sex	Usual activity status						
	Total	Did not seek work	Full time student	Household worker	Pensioner, retired, elderly	Ill, disabled	Other
Total	2,648	0.3	53.2	31.1	8.6	3.9	2.9
Males	904	0.3	74.3	3.3	10.2	6.3	5.5
Females	1,744	0.2	42.3	45.5	7.8	2.6	1.5

- Among those aged 10 and over who are not in the labour force, 74.3 per cent of males are full time students while 45.5 per cent of females are household workers.

Table 8: Employed persons aged 15 - 64 by occupation by sex

Occupation	Employed persons			Per cent		
	Total	Males	Females	Total	Males	Females
Total	3,051	1,796	1,255	100.0	100.0	100.0
Managers	52	42	10	1.7	2.3	0.8
Professionals	149	61	88	4.9	3.4	7.0
Technicians and Associate Professionals	110	85	25	3.6	4.7	2.0
Clerical Support Workers	113	69	44	3.7	3.8	3.5
Services and Sales Workers	67	26	41	2.2	1.4	3.3
Skilled Agricultural, Forestry and Fishery Workers	2,329	1,377	952	76.3	76.7	75.9
Craft and Related Trades Workers	63	45	18	2.1	2.5	1.4
Plant and Machine Operators and Assemblers	9	9	-	0.3	0.5	-
Elementary Occupations	99	48	51	3.2	2.7	4.1
Others	-	-	-	-	-	-
Not stated	60	34	26	2.0	1.9	2.1

Figure 10: Percentage of employed persons aged 15 - 64 by occupation by sex, Union, Kachin State and Machanbaw Township

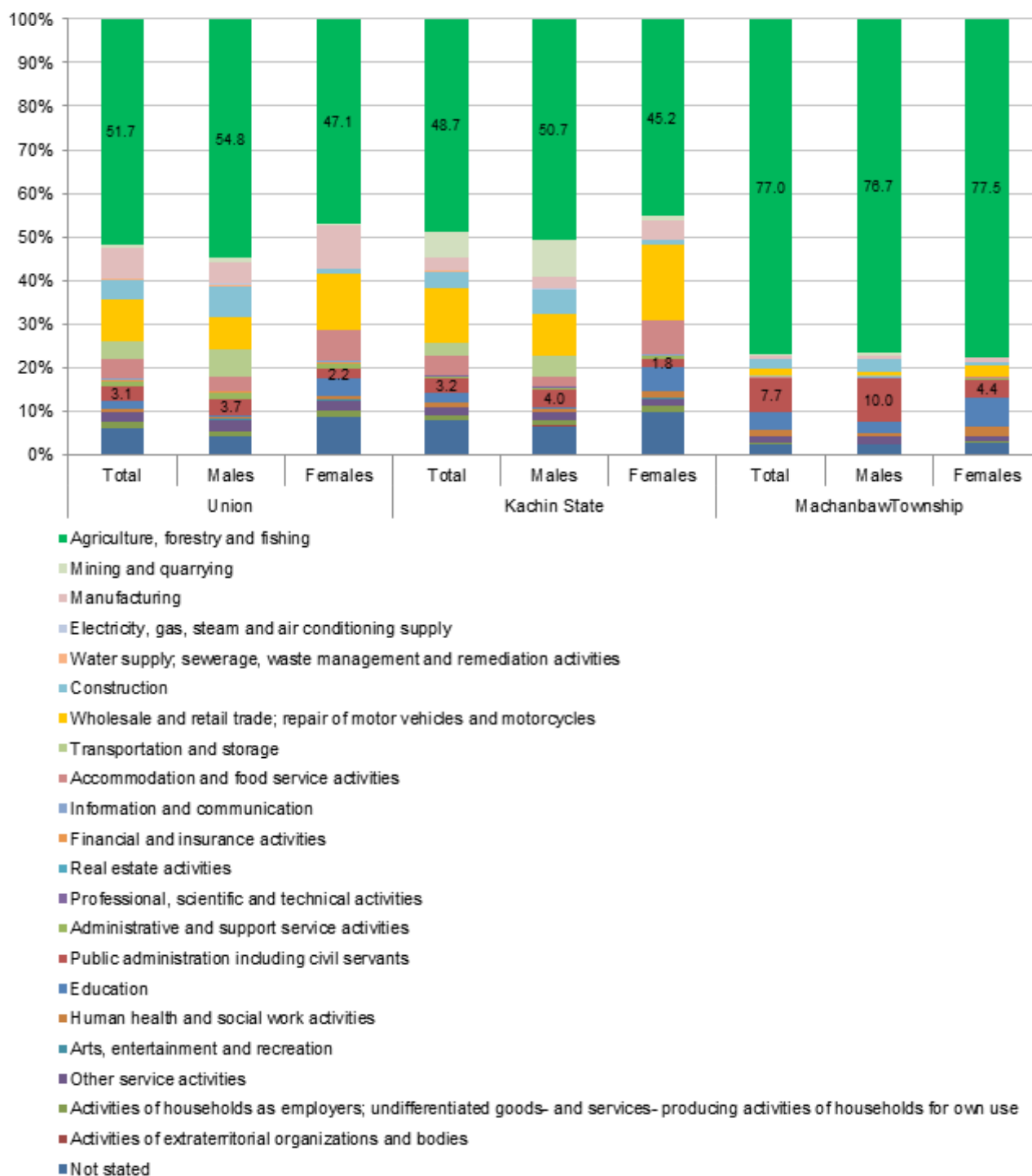


- In Machanbaw Township, 76.3 per cent of the employed persons aged 15-64 are skilled agricultural, forestry and fishery workers and is the highest proportion, followed by 4.9 per cent are professionals.
- Analysis by sex shows that 76.7 per cent of males and 75.9 per cent of females are skilled agricultural, forestry and fishery workers.
- In Kachin State, 46.4 per cent are skilled agricultural, forestry and fishery workers and 2.9 per cent are professionals.

Table 9: Employed persons aged 15 - 64 by industry by sex

Industry	Employed persons			Per cent		
	Total	Males	Females	Total	Males	Females
Total	3,051	1,796	1,255	100.0	100.0	100.0
Agriculture, forestry and fishing	2,349	1,377	972	77.0	76.7	77.5
Mining and quarrying	13	13	-	0.4	0.7	-
Manufacturing	23	8	15	0.8	0.4	1.2
Electricity, gas, steam and air conditioning supply	-	-	-	-	-	-
Water supply; sewerage, waste management and remediation activities	-	-	-	-	-	-
Construction	64	53	11	2.1	3.0	0.9
Wholesale and retail trade; repair of motor vehicles and motorcycles	47	13	34	1.5	0.7	2.7
Transportation and storage	10	10	-	0.3	0.6	-
Accommodation and food service activities	7	3	4	0.2	0.2	0.3
Information and communication	2	2	-	0.1	0.1	-
Financial and insurance activities	2	2	-	0.1	0.1	-
Real estate activities	-	-	-	-	-	-
Professional, scientific and technical activities	-	-	-	-	-	-
Administrative and support service activities	2	1	1	0.1	0.1	0.1
Public administration including civil servants	235	180	55	7.7	10.0	4.4
Education	123	41	82	4.0	2.3	6.5
Human health and social work activities	43	18	25	1.4	1.0	2.0
Arts, entertainment and recreation	-	-	-	-	-	-
Other service activities	50	34	16	1.6	1.9	1.3
Activities of households as employers; undifferentiated goods- and services- producing activities of households for own use	4	-	4	0.1	-	0.3
Activities of extraterritorial organizations and bodies	-	-	-	-	-	-
Not stated	77	41	36	2.5	2.3	2.9

Figure 11: Percentage of employed persons aged 15 - 64 by industry by sex, Union, Kachin State and Machanbaw Township



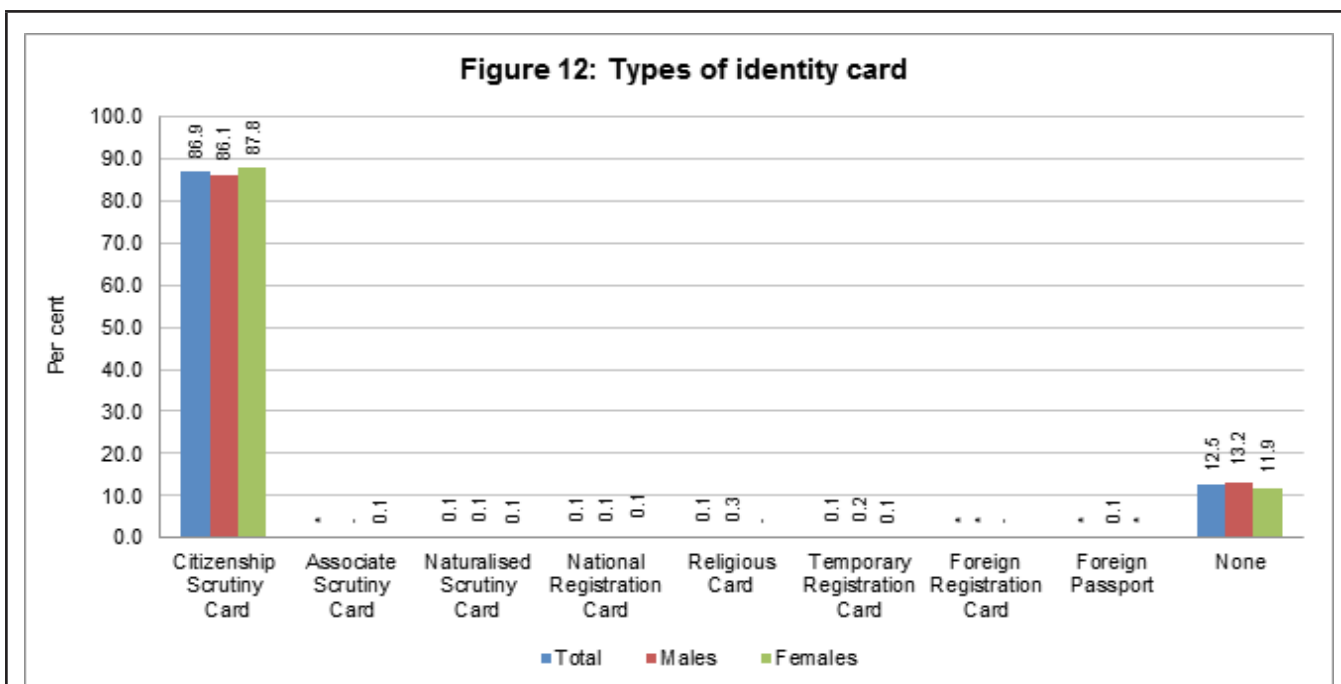
- In Machanbaw Township, the proportion of employed persons working in the industry of “Agriculture, forestry and fishing” is the highest with 77.0 per cent.
- The second highest industry is “Public administration including civil servants” at 7.7 per cent.
- There are 76.7 per cent of males and 77.5 per cent of females working in “Agriculture, forestry and fishing” industry.
- In Kachin State, there are 48.7 per cent of employed population working in “Agriculture, forestry and fishing” industry and 3.2 per cent in “Public administration including civil servants”.

(E) Identity Cards

Table 10: Population aged 10 and over by type of identity card, urban/rural and sex

	Citizenship Scrutiny Card	Associate Scrutiny Card	Naturalised Scrutiny Card	National Registration Card	Religious Card	Temporary Registration Card	Foreign Registration Card	Foreign Passport	None
Total	5,591	*	*	*	*	*	*	*	806
Urban	1,669	*	-	*	*	*	*	-	132
Rural	3,922	*	*	*	*	*	-	*	674
Males	2,767	-	*	*	*	*	*	*	424
Females	2,824	*	*	*	-	*	-	*	382

Note: * Less than 20 cards.



- In Machanbaw Township, 86.9 per cent of the population aged 10 and over have Citizenship Scrutiny Card while 12.5 per cent have none.
- Analysis by sex shows that 13.2 per cent of males and 11.9 per cent of females do not have any type of card.

Note: * Less than 0.1 per cent.

(F) Disability

Table 11: Population by disability prevalence rate and type of disability by sex by age group

Age groups	Total Population				Type of disability			
	Total	Not disabled	With any of 4 disabilities	Disability prevalence rate (%)	Seeing	Hearing	Walking	Remembering
Total	8,858	7,930	928	10.5	441	390	333	423
0 - 14	3,479	3,356	123	3.5	6	14	74	81
15 - 64	4,941	4,371	570	11.5	280	254	146	217
65+	438	203	235	53.7	155	122	113	125
Males	4,455	3,979	476	10.7	216	217	158	204
0 - 14	1,760	1,700	60	3.4	4	9	34	40
15 - 64	2,503	2,189	314	12.5	143	144	77	121
65+	192	90	102	53.1	69	64	47	43
Females	4,403	3,951	452	10.3	225	173	175	219
0 - 14	1,719	1,656	63	3.7	2	5	40	41
15 - 64	2,438	2,182	256	10.5	137	110	69	96
65+	246	113	133	54.1	86	58	66	82

- Eleven in every 100 persons in Machanbaw Township have, at least, one form of disability.
- Slightly less females than males have disability.
- The prevalence of disability increases with age and it increases considerably at elderly group age 65 and above.
- Difficulty with seeing was the highest among all forms of disability followed by remembering.

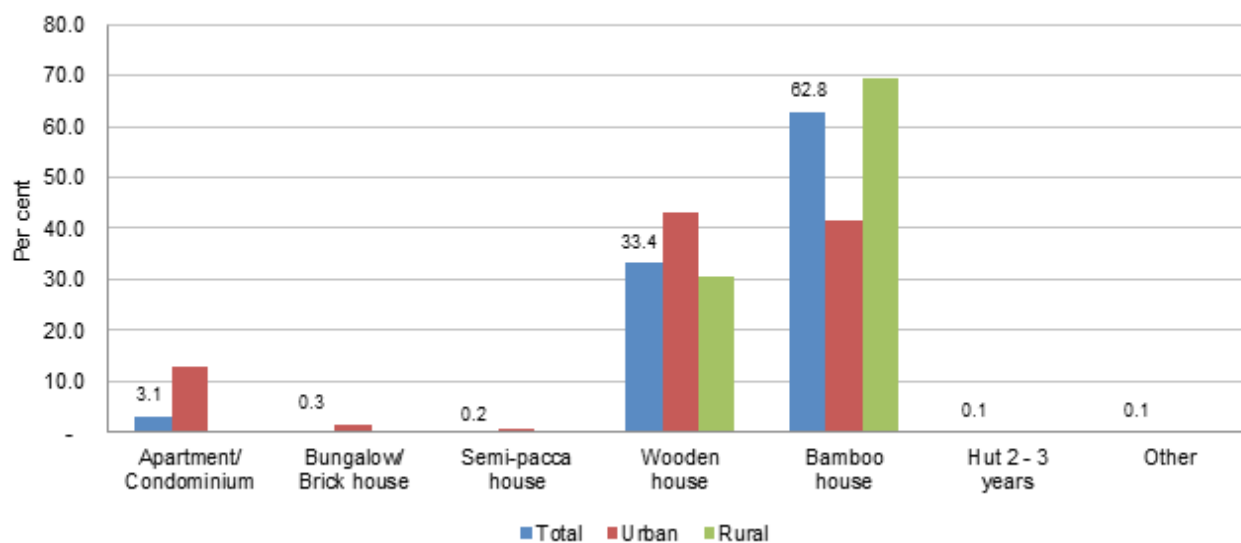
(G) Housing Conditions and Household Amenities

Type of housing unit

Table 12: Conventional households by type of housing unit by urban/rural

Residence	Total	Apartment/ Condominium	Bungalow/ Brick house	Semi-pacca house	Wooden house	Bamboo house	Hut 2 - 3 years	Hut 1 year	Other
Total	1,719	3	0	0	33	63	0	-	0
Urban	408	13	1	1	43	41	-	-	0
Rural	1,311	-	-	0	30	69	0	-	-

Figure 13: Types of housing unit



- The majority of the households in Machanbaw Township are living in bamboo houses (62.8%) followed by households in wooden houses (33.4%).
- Some 43.1 per cent of urban households live in wooden houses while 69.4 per cent of rural households live in bamboo houses.

Type of toilet

Figure 14: Proportion of households with access to improved sanitation

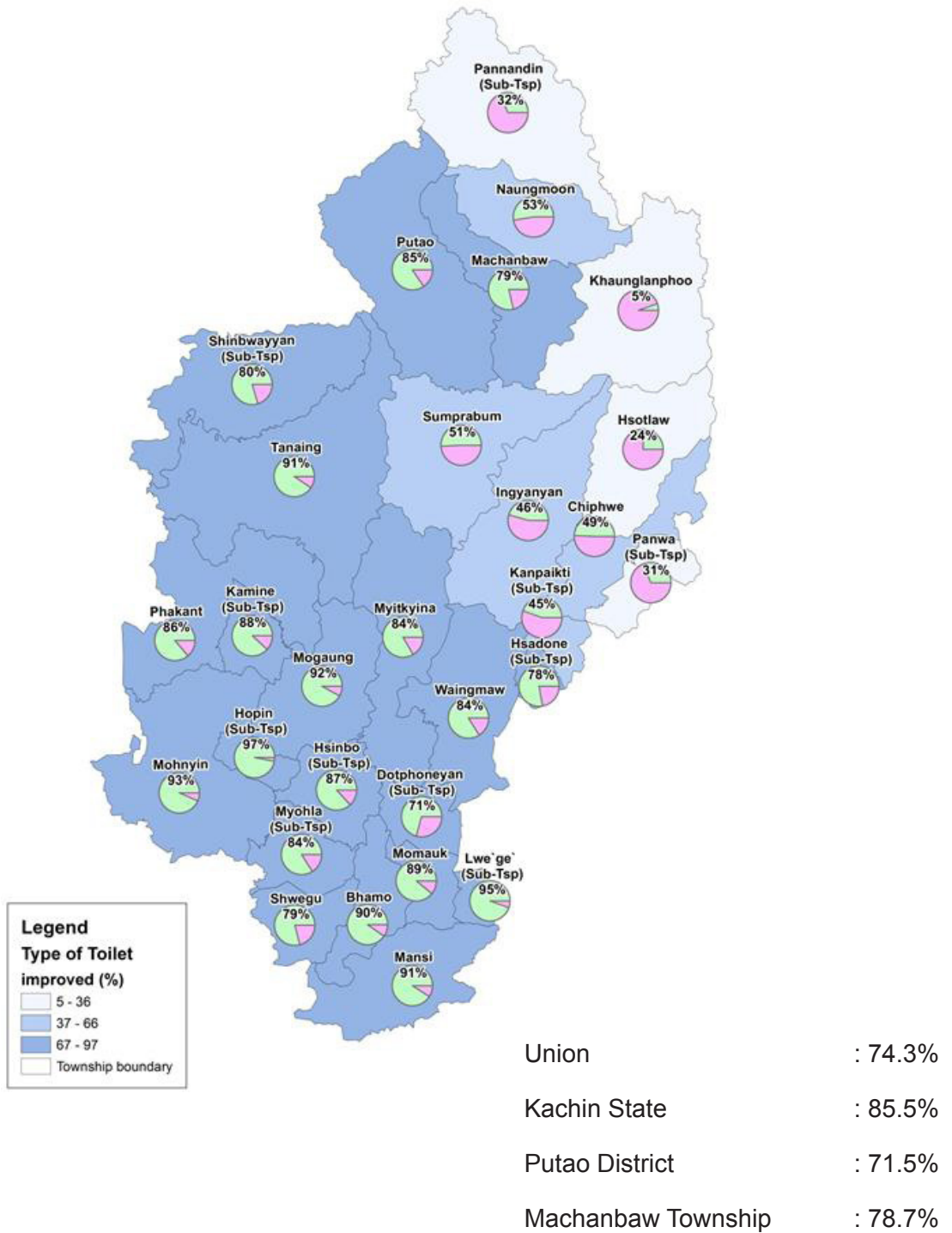


Table 13: Conventional households by type of toilet by urban/rural

Type of toilet		Total	Urban	Rural
Flush		4.0	0.5	5.1
Water seal (Improved pit latrine)		74.7	81.9	72.4
<i>Improved sanitation</i>		78.7	82.4	77.5
Pit (Traditional pit latrine)		20.0	15.4	21.3
Bucket (Surface latrine)		0.4	0.5	0.4
Other		-	-	-
None		0.9	1.7	0.8
Total	Per cent	100.0	100.0	100.0
	Number	1,719	408	1,311

- Some 78.7 per cent of the households in Machanbaw Township have improved sanitation facilities (flush toilet (4.0%), water seal (improved pit latrine) (74.7%)).
- Compared to other townships in Kachin State, the proportion of households with improved sanitation facilities in Machanbaw is in the range of (67-97) per cent.
- The proportion of households with improved sanitation facilities in Kachin State is 85.5 per cent while it is 74.3 per cent at the Union level.
- Some 0.9 per cent of the households in the township have no toilet facilities. For the entire Kachin State, it is 2.0 per cent.
- In the rural areas of Machanbaw Township, 0.8 per cent of the households have no toilet facilities.

Source of drinking water

Figure 15: Proportion of households with access to improved source of drinking water

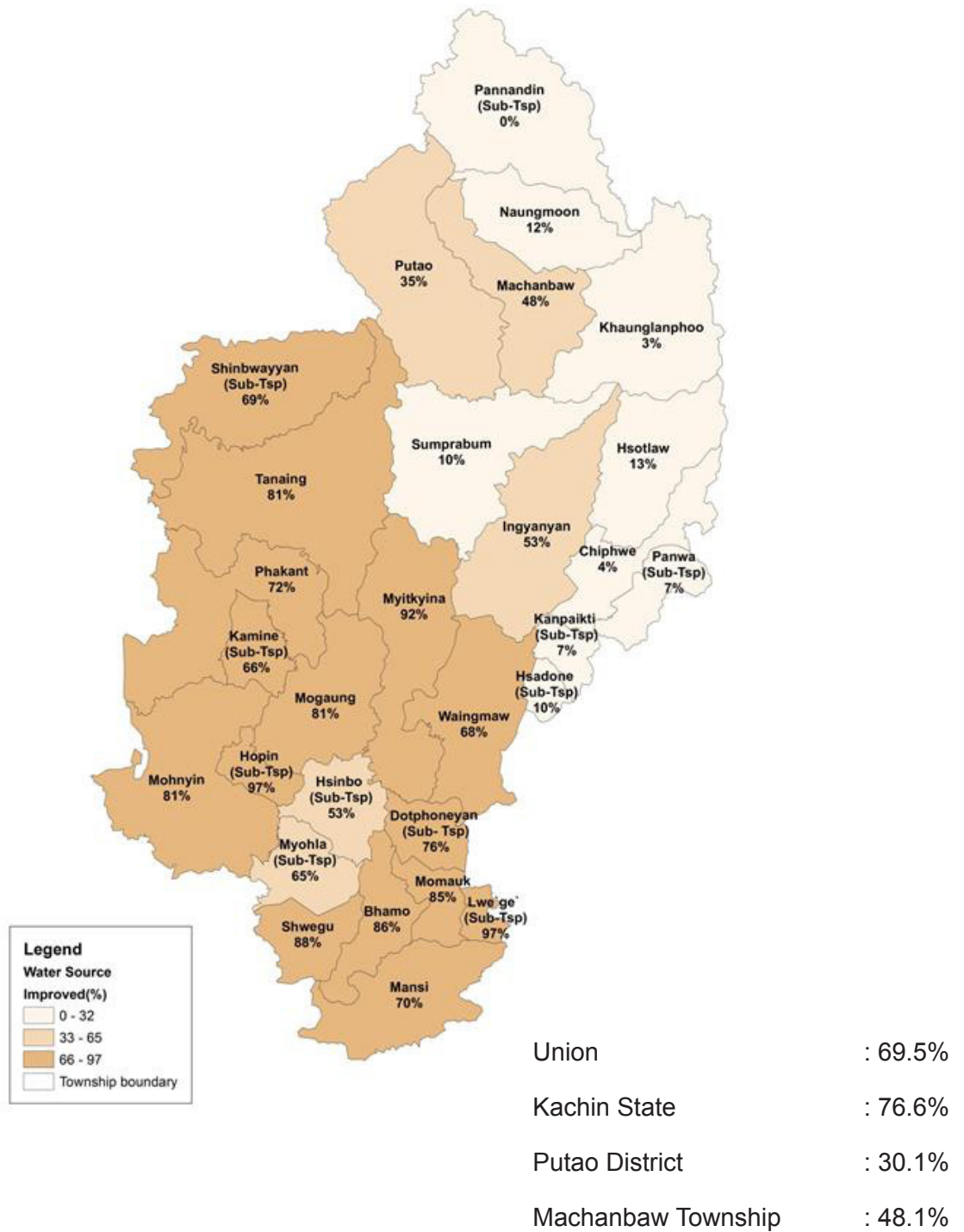


Table 14: Conventional households by source of drinking water by urban/rural

Source of drinking water		Total	Urban	Rural
Tap water/ Piped		8.5	19.4	5.1
Tube well, borehole		2.7	11.0	0.2
Protected well/ Spring		36.9	27.7	39.7
Bottled water/ Water purifier		-	-	-
<i>Total improved drinking water</i>		<i>48.1</i>	<i>58.1</i>	<i>45.0</i>
Unprotected well/Spring		35.1	35.5	34.9
Pool/Pond/ Lake		0.5	1.5	0.2
River/stream/ canal		13.2	4.9	15.8
Waterfall/ Rain water		3.1	-	4.1
Other		-	-	-
<i>Total unimproved drinking water</i>		<i>51.9</i>	<i>41.9</i>	<i>55.0</i>
Total	Per cent	100.0	100.0	100.0
	Number	1,719	408	1,311

- In Machanbaw Township, 48.1 per cent of households use improved sources of drinking water (tap water/piped, tube well, borehole, protected well/spring and bottled water/water purifier).
- Compared to other townships in Kachin State, it is in the range of (33-65) per cent group and it is also lower than the Union average (69.5%).
- Some 36.9 per cent of the households use water from protected well/spring and 35.1 per cent use water from unprotected well/spring.
- Some 51.9 per cent of the households use water from unimproved sources.
- In rural areas, 55.0 per cent of the households use water from unimproved sources for drinking water.

Source of lighting

Figure 16: Proportion of households using electricity for lighting

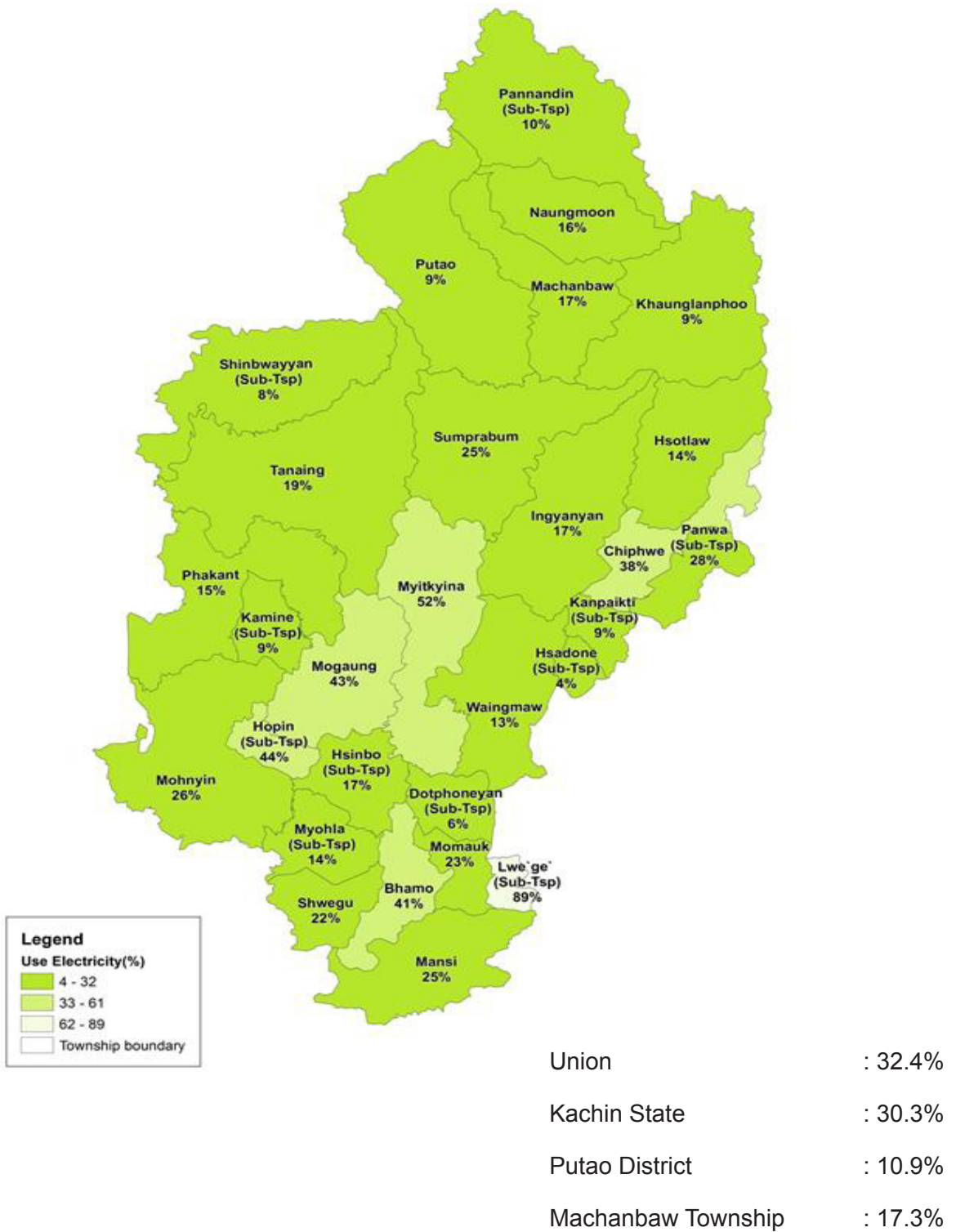


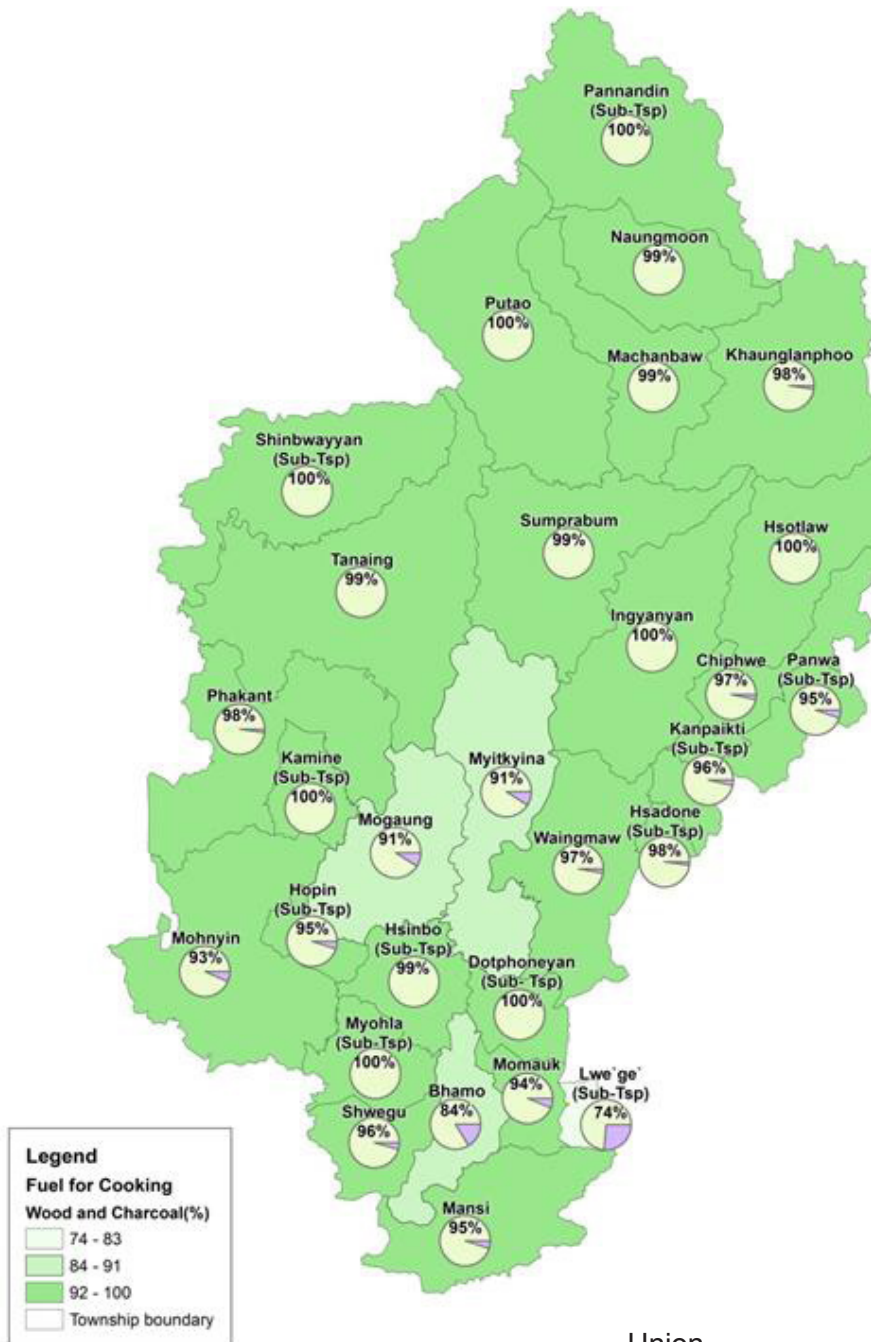
Table 15: Conventional households by source of lighting by urban/rural

Source of lighting		Total	Urban	Rural
Electricity		17.3	66.9	1.9
Kerosene		0.1	-	0.1
Candle		38.3	21.1	43.7
Battery		19.1	0.5	24.9
Generator (private)		0.1	-	0.1
Water mill (private)		5.5	-	7.2
Solar system/energy		18.6	10.8	21.1
Other		1.0	0.7	1.1
Total	Per cent	100.0	100.0	100.0
	Number	1,719	408	1,311

- In Machanbaw Township, 17.3 per cent of the households use electricity for lighting. This proportion belongs to the range of (4-32) per cent group in electricity usage compared to other townships in Kachin State. The percentage of households that use electricity in Kachin State is 30.3 per cent.
- The use of candle for lighting is the highest in the township with 38.3 per cent.
- In rural areas, 43.7 per cent of the households use candle for lighting.

Type of cooking fuel

Figure 17: Proportion of households using wood-related cooking fuel



Union	: 81.0%
Kachin State	: 93.7%
Putao District	: 99.3%
Machanbaw Township	: 99.0%

Table 16: Conventional households by type of cooking fuel by urban/rural

Type of cooking fuel		Total	Urban	Rural
Electricity		0.8	2.5	0.2
LPG		-	-	-
Kerosene		-	-	-
BioGas		0.2	-	0.3
Firewood		98.8	97.3	99.2
Charcoal		0.2	0.2	0.2
Coal		-	-	-
Other		0.1	-	0.1
Total	Per cent	100.0	100.0	100.0
	Number	1,719	408	1,311

- In Machanbaw Township, households mainly use wood-related fuels for cooking with 98.8 per cent using firewood and 0.2 per cent using charcoal.
- Only 0.8 per cent of households use electricity for cooking.
- Some 99.2 per cent of households in rural areas use firewood and 0.2 per cent use charcoal.

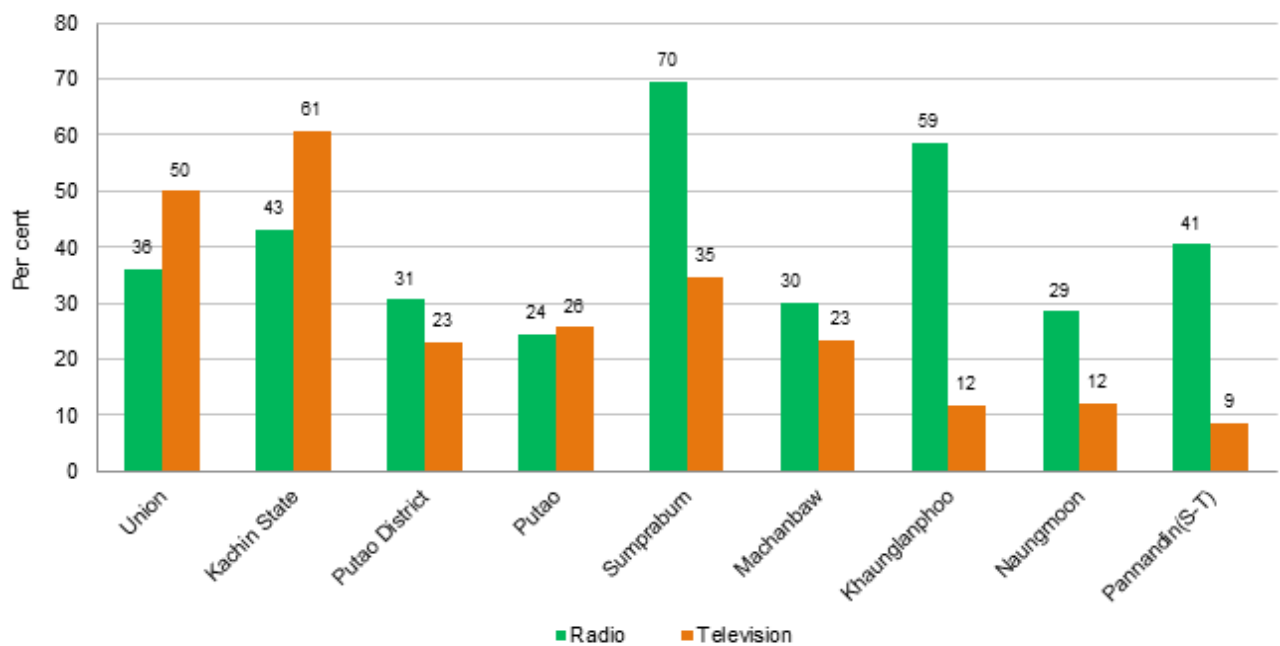
Communication and related amenities

Table 17: Conventional households by availability of communication and related amenities by urban/rural

Residence	Conventional households	Radio	Television	Land line phone	Mobile phone	Computer	Internet at home	% with none of the items	% with all of the items
Total	1,719	30.1	23.4	0.9	6.2	1.3	0.2	56.7	-
Urban	408	46.3	43.9	0.5	16.2	4.7	0.5	33.6	-
Rural	1,311	25.0	17.1	1.1	3.1	0.2	0.1	63.9	-

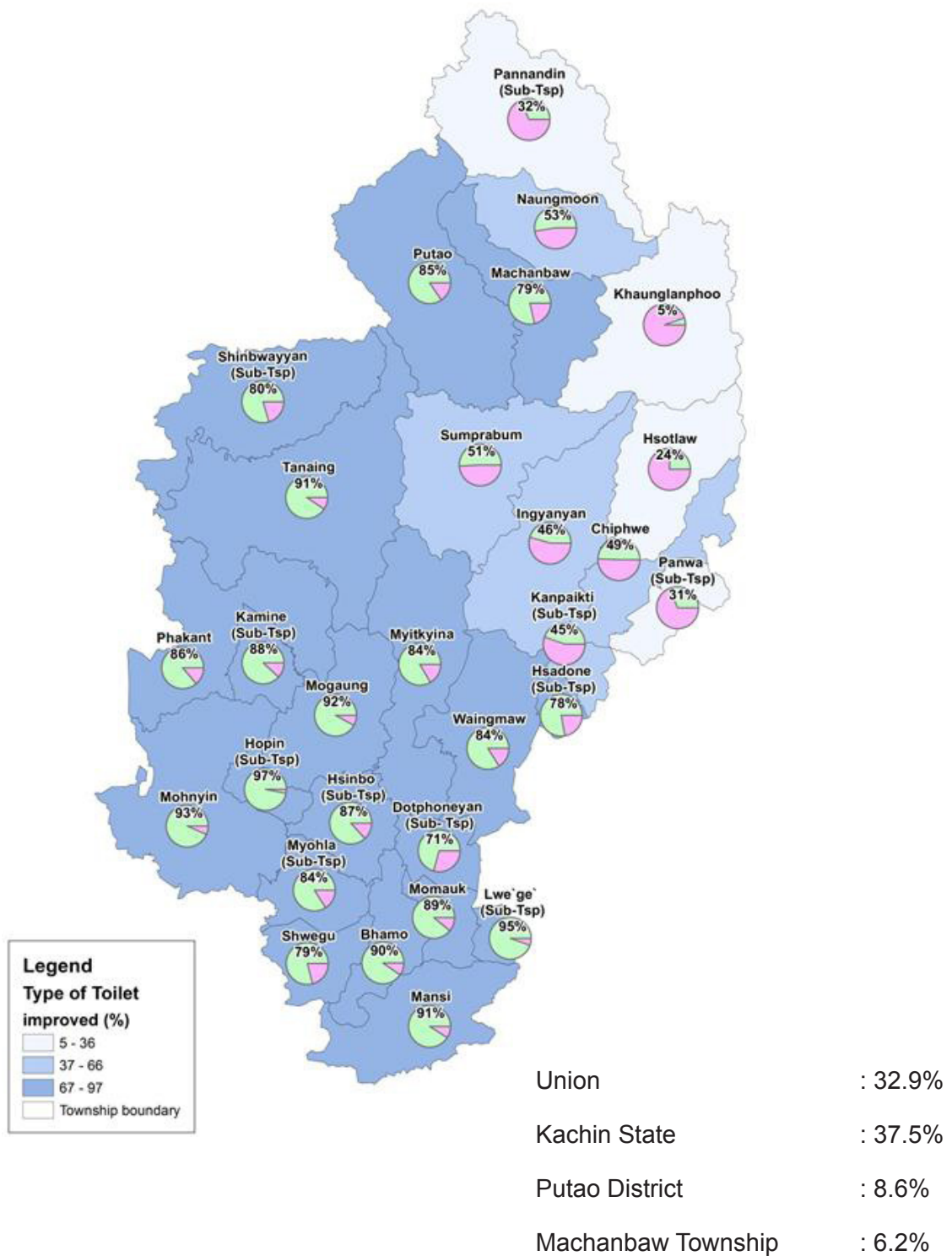
- About 30.1 per cent of the households in Machanbaw Township have access to radio and is the highest among the access of communication and related amenities. Some 46.3 per cent of households in urban areas have access to radio, while the proportion for rural areas was 25.0 per cent.

Figure 18: Percentage of households with access to radio and television



- In Machanbaw Township, about 23.4 per cent of households having a television and about one in three households (30.1%) reported having a radio.

Figure 19: Proportion of households with access to mobile phone



- Only 6.2 per cent of the households in Machanbaw Township reported having mobile phones. In Kachin State, there is 37.5 per cent of the households reported having mobile phones.

Transportation items

Table 18: Conventional households by availability of transportation items by urban/rural

State/District/ Township	Conventional households	Car/Truck/ Van	Motorcycle/ Moped	Bicycle	4-Wheel tractor	Canoe/ Boat	Motor boat	Cart (bullock)
Kachin State	269,365	10,911	188,959	94,853	14,759	10,977	6,252	70,938
Urban	95,859	5,765	75,218	44,841	2,780	1,683	1,249	10,459
Rural	173,506	5,146	113,741	50,012	11,979	9,294	5,003	60,479
Putao District	15,864	95	5,089	1,484	74	122	47	7,476
Urban	3,845	70	1,923	681	30	4	5	1,589
Rural	12,019	25	3,166	803	44	118	42	5,887
Machanbaw Township	1,719	7	505	107	6	31	13	1,005
Urban	408	6	178	28	2	-	3	131
Rural	1,311	1	327	79	4	31	10	874

- In Machanbaw Township, 58.5 per cent of the households have cart (bullock) as a means of transport and it is the highest proportion, followed by 29.4 per cent having motorcycle/moped.
- Analysis by urban/rural residence, the majority of the urban households mainly use motorcycle/moped and rural households use cart (bullock) as a means of transport.

(H) Fertility and Mortality

Fertility

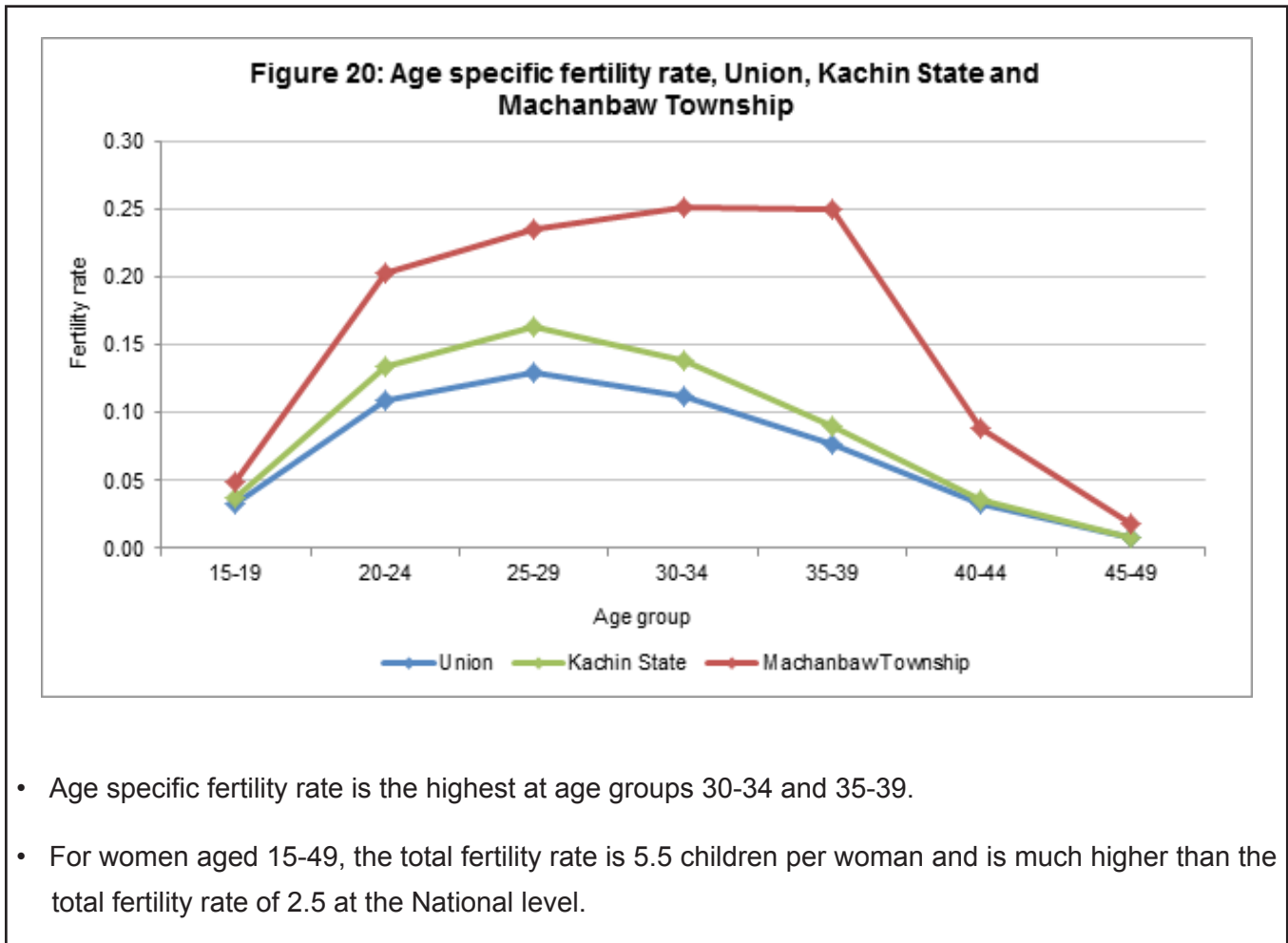
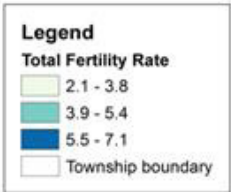
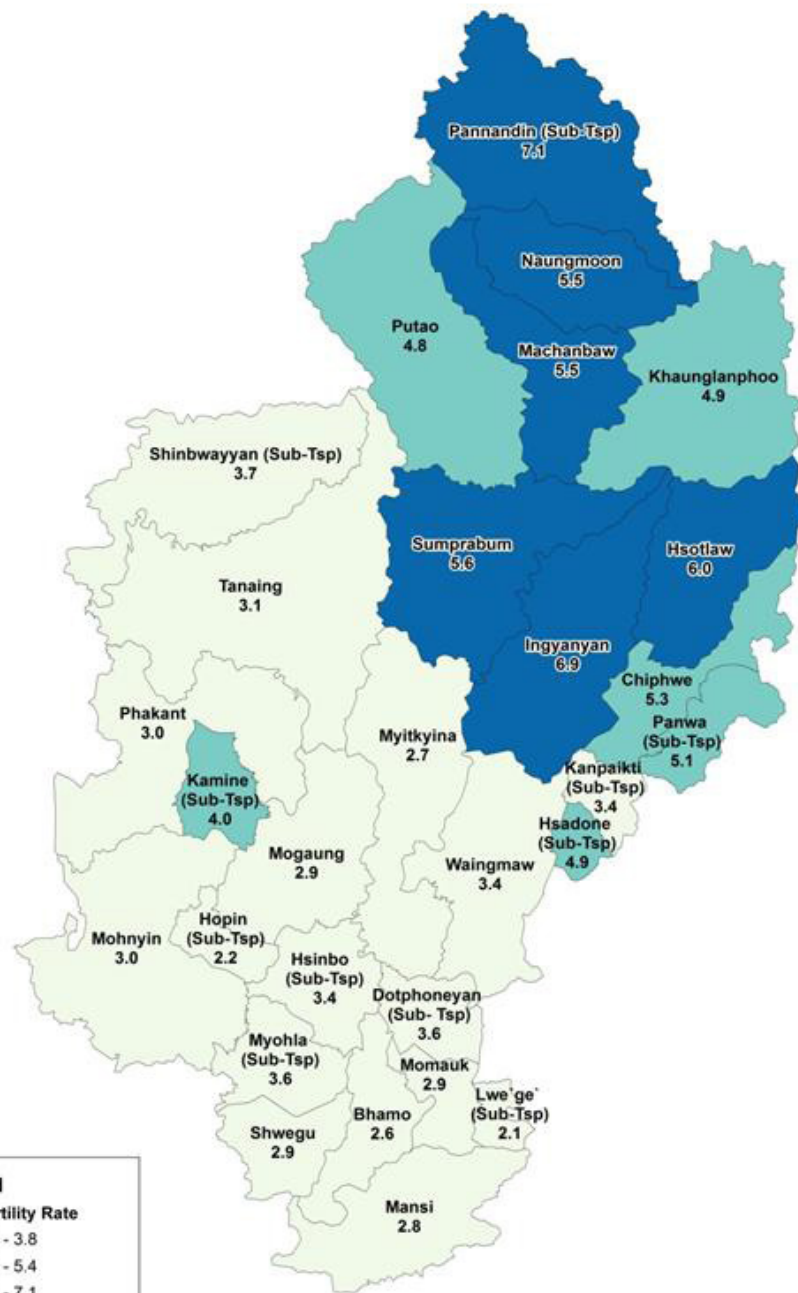
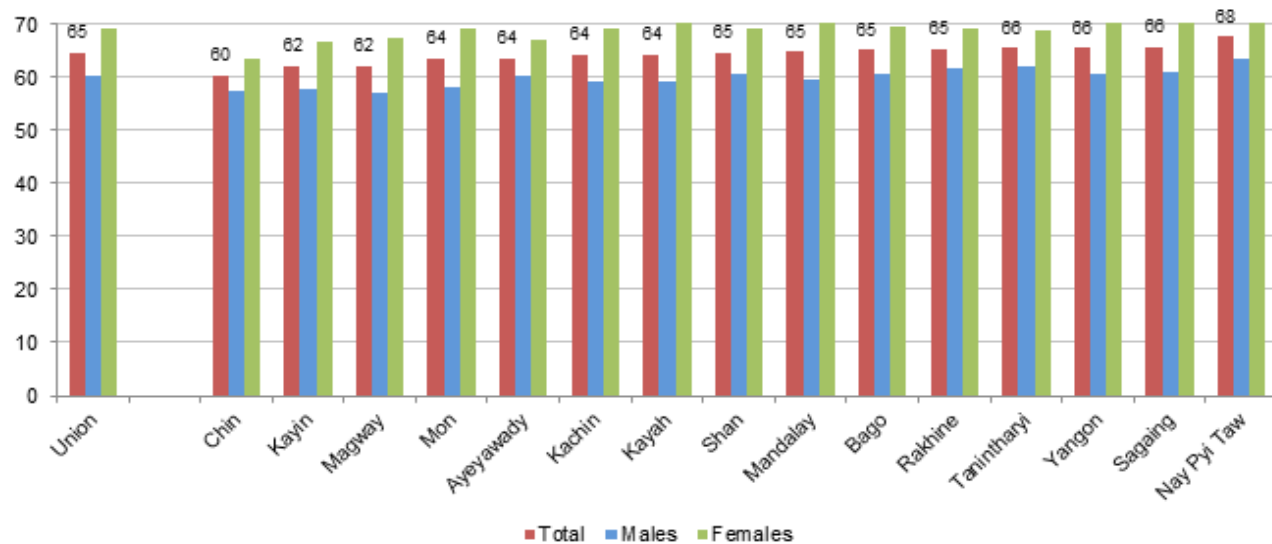


Figure 21: Total fertility rate



Union	: 2.5
Kachin State	: 3.0
Putao District	: 4.9
Machanbaw Township	: 5.5

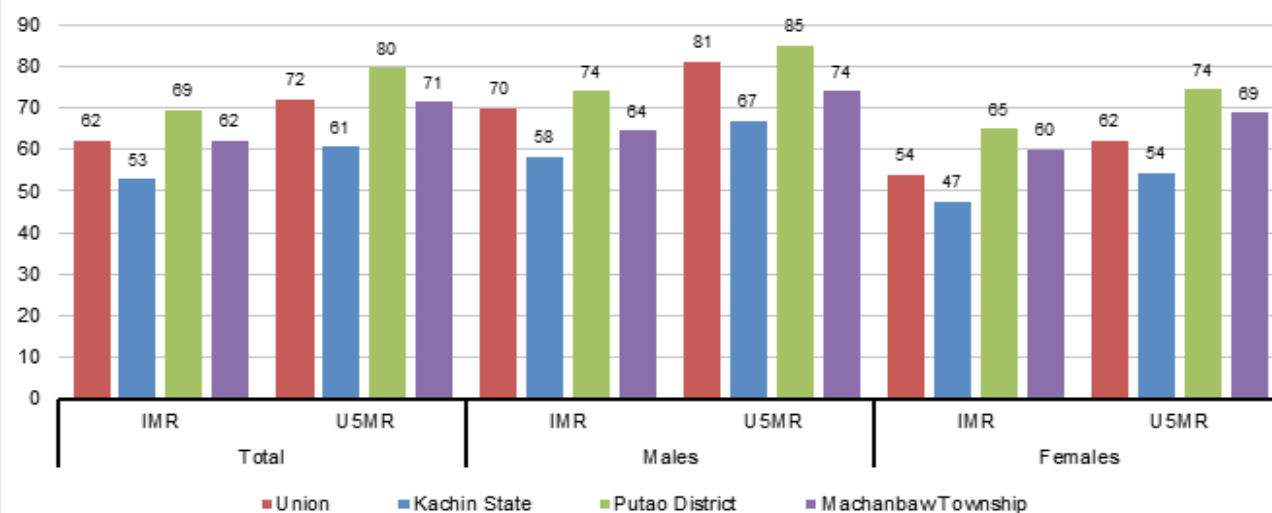
Figure 22: Life expectancy (Union and State/Region)



- The expectation of life at birth in Kachin State is 64.2 years and is slightly lower than that of National level at 64.7 years.
- The female life expectancy at 69.3 years is higher than that of the males at 59.4 years.

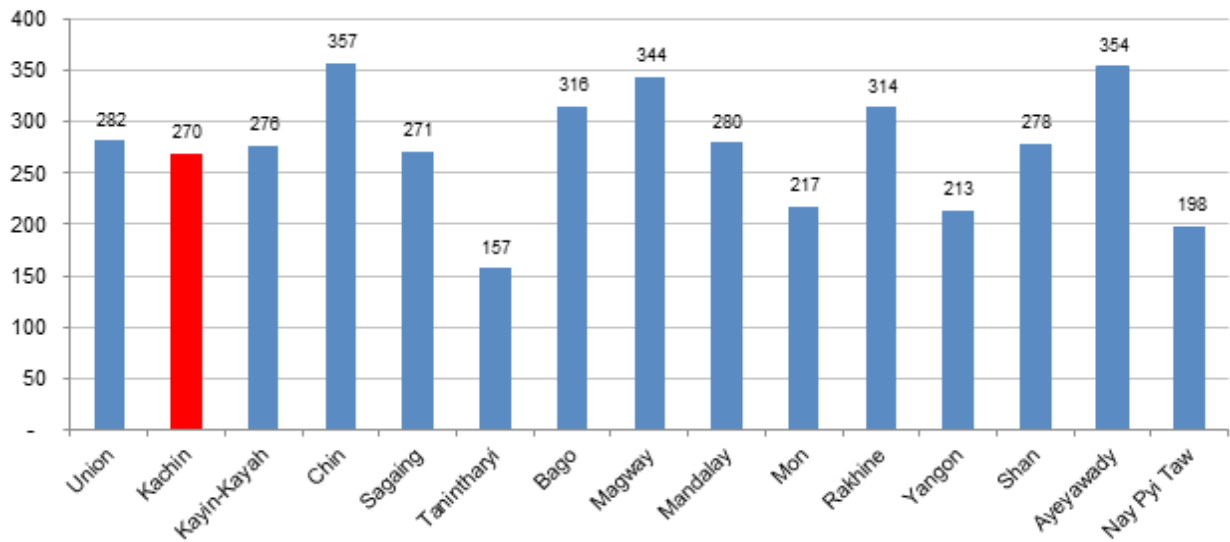
Childhood Mortality and Maternal Mortality

Figure 23: Infant and Under 5 mortality rates



- The Infant and Under 5 mortality rates in Putao District are higher than the Union average. The Infant mortality in Putao District is 69 deaths under age one per 1,000 live births while Under 5 mortality is 80 deaths under age 5 per 1,000 live births.
- The Infant and Under 5 mortality rates in Machanbaw Township are higher than those in Kachin State and Putao District. The Infant mortality in Machanbaw Township is 62 per 1,000 live births and Under 5 mortality is 71 per 1,000 live births.

Figure 24: Maternal mortality ratios (Union and State/Region)



- In Kachin State, there are 270 women dying while during pregnancy/delivery or within 42 days of termination of pregnancy for every 100,000 live births.
- The maternal mortality ratio in Kachin State is lower than that of the Union level.
- Compared to the average maternal mortality ratio of 140 for Southeast Asian countries, the maternal mortality ratio of 282 for Myanmar is high.

Definitions and Concepts

Population: The population in this report corresponds to the de-facto population of Myanmar on Census Night (see below).

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

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

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

Population Density: The population density relates to the number of persons in a given administrative area to the surface of the area, expressed in square kilometres (Km²). Areas covered by water are excluded from the calculation.

Mean Household Size: The average number of persons per household (people living in households divided by number of conventional households).

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

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). Data are shown as the proportion of dependents per 100 working-age population. Three different measures can be calculated: total dependency ratio, child dependency ratio and old age dependency ratio.

Child Dependency Ratio: is the proportion of people younger than 15 years to the working age population (15-64).

Old Dependency Ratio: is the proportion of people older than 64 years to the working age population (15-64).

Ageing Index: The number of persons aged 65 years and over per 100 people under the age of 15 years.

Median Age: The age that divides a population into two numerically equal groups; that is, half the people are younger than this age and half are older.

Education: Education is the process by which people learn through instruction and teaching. The 2014 MPHC placed an emphasis on literacy skills, school attendance and educational attainment. The other categorisations used under education were:

- (a) **Literacy:** The ability to read and write in any language with reasonable understanding.
- (b) **School attendance:** The attendance at any regular educational institution or systematic instruction at any level of education during the last 12 months. This included schooling at pre-primary, primary, middle, high school and tertiary institutions of higher learning. The options were: (a) Currently attending; (b) Attended previously; (c) Never attended.

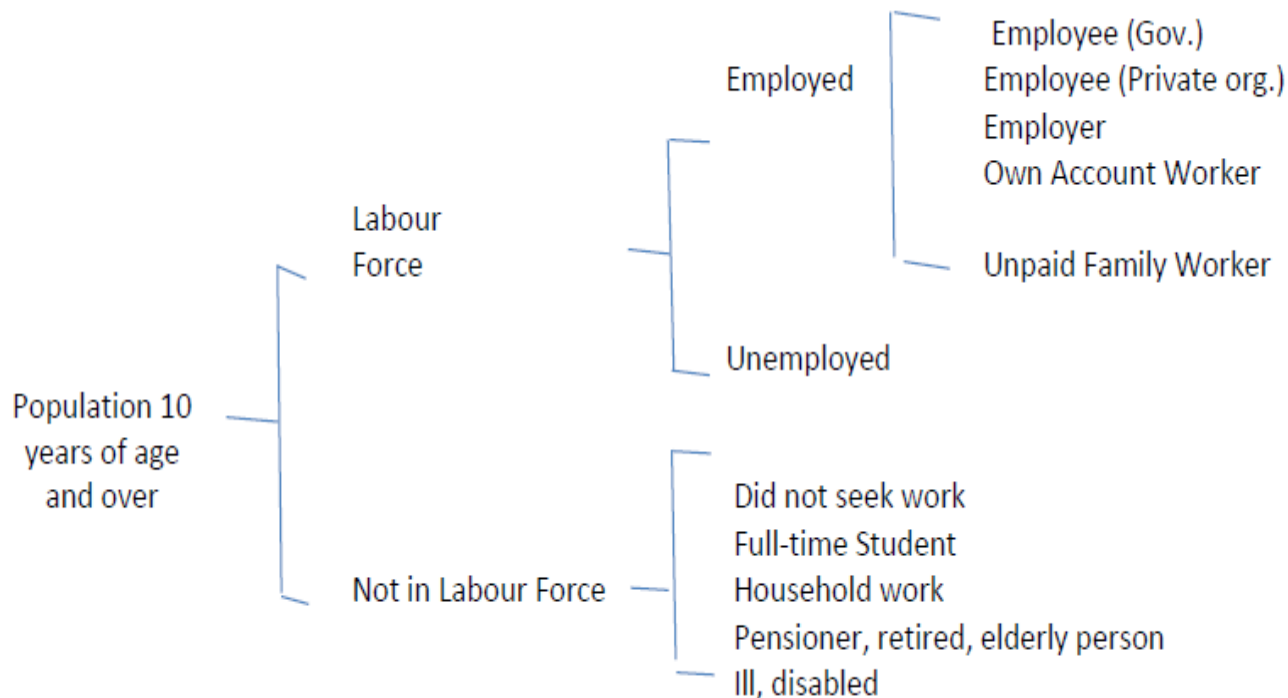
(c) **Educational Attainment:** The highest grade/standard/diploma/degree completed within the most advanced level attended in the education system of the country where the education was received. It covered both public and private institutions accredited by government.

Disability: 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 2014 census included:

- (a) **Walking difficulty** (wheel chairs, crutches, limping, problems climbing steps);
- (b) **Seeing difficulty** (low vision, blind);
- (c) **Hearing difficulty** (partially or completely deaf);
- (d) **Mental/Intellectual difficulty** (slow learning development making it hard to compete with their counterparts at school, other mental conditions).

Identity card: An identity card is a document used to verify aspects of a person's personal identity. There are several types of identity cards issued by the Government of Myanmar, and national passports in the case of foreigners.

Labour Force Status: According to the type of usual economic activities during the 12 months before Census Night, all persons 10 years of age and over were classified as follows:



Labour Force: The Labour force is a general term covering “employed” and “unemployed” persons in the population.

Employed: “Employed” persons refer to those who did any work during the time of the week before the census date or worked for more than 6 months in the 12 months before the census date for pay or profit, such as a wage, salary, allowance, business profit, etc. Also included in this category were persons

working in family businesses, on a farm, in a store, in a private hospital etc., even though they were not paid any wages.

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

Not in labour force: This category comprised persons who had no work and did not make any positive efforts to find a job during the 6 months before the census date or were unable to work. This included full time students, household work, elderly people, etc.

Employment Status: All employed persons were classified according to the economic activity status in the place where they worked during the last 12 months or if they worked in more than one place, where they worked most of the time. There were five employment categories:

- (a) **Employee (Government):** those employed and working for government including in state organisation institutions.
- (b) **Employee (Private organisation):** those employed and working for private employers or private organisations. All people in private companies, NGOs, international organisations, retail and wholesale enterprises fell under this category.
- (c) **Employer:** persons who during the reference period worked in their own business, which also employed one or more other persons.
- (d) **Own account worker:** self-employed persons who worked in their own business or worked in their own/family business for family gain **and did not have any employees.**
- (e) **Unpaid family worker:** persons who worked in a business, farm, trade or professional enterprise operated by a member of the household/family and received no pay.

Labour force participation rate: The labour force participation rate is the ratio between the labour force and the overall size of the total population of the same age range. This is an important indicator as it portrays the proportion of the population that is economically active.

$$\text{Labour force participation rate} = \frac{\text{Labour force (Employed + Unemployed)}}{\text{Total Population}} \times 100$$

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

$$\text{Unemployment rate} = \frac{\text{Unemployed}}{\text{Labour force (Employed + Unemployed)}} \times 100$$

Employment to population ratio: A statistical ratio that measures the proportion of the country's working-age population (ages 15 to 64) that is employed. The International Labour Organization (ILO) states that a person is considered employed if they have worked at least 1 hour in "gainful" employment in the most recent week.

$$\text{Employment to population ratio} = \frac{\text{Employed}}{\text{Total Population}} \times 100$$

Occupation: Occupation refers to the kind of work an employed person did in the establishment during the 12 months (reference period) before the census date. Put differently, occupation is the kind of work done during the last 12 months by the person employed, regardless of the industry of the establishment. In the 2014 Myanmar Census, field data collectors were instructed to collect a detailed description of the work being done such as accounts clerk, data entry operator (clerk), legal secretary, domestic worker, fisherman, human resource manager, etc. If an employed person was engaged in two or more jobs, the kind of work was decided by the work in which he/she was mainly engaged in, that is in terms of time. The occupational classification is based on the ISCO 2008.

Industry: Industry refers to the main activity of the establishment where an employed person usually worked during the 12 months (reference period) before the census date. In the 2014 Myanmar Census, industry was explained to the enumerators as the type of economic activity carried out at the person's place of work. It is defined in terms of the kind of goods produced or services supplied by the enterprise in which the person works and not necessarily the specific duties or functions of the person's job. For example, a clerical officer working in stores within a factory that makes television sets. The industry should be recorded as manufacture of electrical goods. If an employed person worked in two or more establishments, "industry" was decided by the establishment where he/she worked most. The industrial classification is based on the ISIC Revision 4.

Live Birth: A live birth is one where the infant shows one or more of the following signs of life immediately after birth: crying or similar sounds, movement of the limbs or any other parts of the body and/or any other tangible signs of life. The census was concerned only with children born alive. Also collected was information on the last live birth of ever married female respondents.

Total fertility rate (TFR): The average number of children that a woman would give birth to if all women lived to the end of their childbearing years and bore children according to the current schedule of age-specific fertility rates.

$$\text{Total fertility rate (TFR)} = 5 \sum \text{Age specific fertility rate (ASFR)}$$

Age specific fertility rate (ASFR): The age-specific fertility rate measures the annual number of births to women of a specified age or age group per 1,000 women in that age group. Unless otherwise specified, the reference period for the age-specific fertility rates is the calendar year.

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The Townships Reports

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