**MINISTRY OF
NATIONAL PLANNING
AND ECONOMIC DEVELOPMENT**

INTEGRATED HOUSEHOLD LIVING CONDITIONS SURVEY IN MYANMAR

POVERTY PROFILE

INTEGRATED HOUSEHOLD LIVING CONDITIONS SURVEY IN MYANMAR:

POVERTY PROFILE

PREPARED BY:

IDEA INTERNATIONAL INSTITUTE
QUEBEC CITY, CANADA

IHLCA PROJECT TECHNICAL UNIT
YANGON, UNION OF MYANMAR

WITH SUPPORT FROM:

MINISTRY OF NATIONAL PLANNING AND ECONOMIC DEVELOPMENT
UNION OF MYANMAR

UNITED NATIONS DEVELOPMENT PROGRAMME
YANGON, UNION OF MYANMAR

TABLE OF CONTENTS

POVERTY PROFILE

Determination of poverty lines

1. The methodological approach used to set the poverty line is known as the 'cost of basic needs' method. To provide a more comprehensive perspective on poverty, two poverty lines were calculated:

Food Poverty Line (FPL), based on minimum food expenditure. Minimum food expenditure is the amount of Kyats necessary to pay for a consumption basket that will satisfy caloric requirements of household members;

Poverty line (PL), based on (i) minimum food expenditures to satisfy caloric requirements (ii) plus reasonable non-food expenditure to meet basic needs. The food expenditure component of the PL is the FPL. The non-food expenditure[1] component of the PL is calculated as a proportion of the FPL based on the share of non-food expenditures over food expenditures for those households whose total expenditures are around the poverty line.

2. Food Poverty Lines were calculated for the first and second rounds of the survey separately and then averaged to have a single poverty line. The PL was then calculated using the share of non-food expenditures of households around the FPL. The resulting FPL is 118 402 Kyats and the PL is 162 136 Kyats. These poverty lines are normalized, i.e., presented in Kyats per adult equivalent per year as of November 2004.

Monetary poverty measures

Food poverty headcount index

3. The food poverty headcount index is the proportion of individuals whose normalized consumption expenditure per adult equivalent is lower than the Food Poverty Line. This refers to households with insufficient consumption expenditure to cover their food needs. At Union level, 10% of the population falls below the FPL. There are large disparities between S/Ds. Food poverty is highest in Chin State with a food poverty headcount index of 40%, followed by Shan North and Shan East. It is lowest in Kayin (2%), followed by Yangon and Mon.

---

[1] Non food expenditures include such items as education and rent. Health expenditures are excluded from the calculation of household consumption expenditures used for poverty calculations since they might artificially raise the expenditures of the poor. User cost of durable goods are excluded because of the peculiar nature of durable goods markets in Myanmar characterized by high and increasing prices as a result of import restrictions.

Poverty headcount index

4. The poverty headcount index is the proportion of individuals whose normalized consumption expenditures per adult equivalent is lower than the Poverty Line. Such households have insufficient consumption expenditure to cover basic food and non-food needs. The poverty headcount index at Union level stands at 32%. However, this figure hides important disparities between S/Ds. Chin State is the poorest S/D with 73% poor, followed by Shan East (52%) and Shan North (51%). The lowest poverty headcount indices are encountered in Kayin (12%), Yangon (15%) and Mon (22%).

Poverty gap index

5. The poverty gap index measures the intensity of poverty, i.e. the average shortfall from the poverty line of the poor multiplied by the poverty headcount. This index can be used to provide an estimate of the sums required to raise the consumption level of all poor families to the poverty line. At Union level, the poverty gap index stands at 0.07 which means that the total sum required to eradicate poverty equals 7% of the poverty line multiplied by the population (assuming perfect targeting, no disincentive effects, etc.). There is variation across S/Ds. The highest values are found in Chin State (0.23) followed by Shan North (0.12) and Shan East (0.12). The lowest values are found in Kayin (0.02), Yangon (0.03) and Mon (0.04).

Squared poverty gap index

6. The squared poverty gap is an indicator of the severity of poverty. It differs from the poverty gap index in that it gives more weight to the poorest households (i.e. those furthest from the poverty line). The squared poverty gap has no intuitive interpretation analogous to the poverty gap index. Again, it is highest in Chin, Shan North and Shan East and lowest in Kayin, Yangon and Mon.

Share of poorest quintile in consumption

7. The share of the poorest quintile in consumption at Union level is an indicator of the proportion of national consumption expenditure going to the poorest 20% of households. It is a standard measure of inequality. At Union level, the poorest quintile account for 12.2% of consumption expenditure. Variation between S/Ds is less important for this indicator, which ranges from 10.7% to 12.9%. The lowest shares are found in Shan South, Chin and Tanintharyi and the highest in Bago (E), Mon and Bago (W).

8. The contribution of each S/D to national poverty takes into account both the incidence of poverty and the population weight (size of the population) of each S/D. The S/D which contributes most to national poverty is Mandalay (5.7%). Otherwise stated, of the 32% poor at Union level, 5.7% come from Mandalay Division. It is followed by Ayeryawaddy (4.2%) and Magwe (3.7%). Although Chin and Shan East are the poorest S/Ds, their population is quite small, which reduces their contribution to poverty at Union level. The figure below provides interesting information about where poverty is the highest in Myanmar, but also which SDs contribute most to poverty due to their population size.

		Poverty Headcount Index		
		Lower	**Average**	**Higher**
Population size	Lower	Kayin	Kayah Tanintharyi	Chin Shan East Kachin
	Average	Mon	Shan South Magwe Rakhine Bago East Bago West	Shan North
	Higher	Yangon	Mandalay Ayeyarwaddy Sagaing	

CHARACTERISTICS OF POVERTY

Demographic characteristics of households

Average household size

9. Average household size, i.e., average number of individuals in the household, at Union level is 5.2 with a slightly higher household size in rural areas than in urban areas (5.2 and 5.1, respectively). Household size is an important correlate of poverty. Poor households are systematically larger than non-poor households at 6.1 and 4.9 members respectively. This pattern holds across all S/Ds. S/Ds with highest average household size are Rakhine (6.0), Kachin (6.0) and Chin (5.9) while those with lowest average household size are Bago West (4.2) and Yangon (4.7).

Age dependency ratio

10. The age dependency ratio provides information on the number of dependents (i.e. children aged less than 15 and people aged 61 years old and above), compared to the number of persons aged 15 to 60 years. The higher the dependency ratio, the higher the number of dependents compared to the number of non-dependents. The dependency ratio at Union level is 0.58. This ratio is higher in rural areas than in urban areas for most S/Ds. It is highest in Chin, Kayin and Rakhine (more than 0.70), while it is lowest in Yangon and Shan East (less than 0.50). Although poor households have larger household size, the age dependency ratio does not seem to be an important correlate of poverty.

Economic dependency ratio

11. The economic dependency ratio is measured by dividing the number of non-working[2] members in the household by the number of working members in the household. It provides information on the number of economic dependents compared to the number of economically active persons in the household. The economic dependency ratio at Union level is 0.46. It is slightly higher in rural areas (0.47) than in urban areas (0.42). Surprisingly, there is no significant difference in the economic dependency ratio of poor and non poor households. The highest economic dependency ratios are found in Shan East and Shan North while the lowest ratio is found in Rakhine, where there are around 3 economically active persons for each dependent. The lack of relationship between age/economic dependency ratios and poverty suggests that low returns or low remuneration are much more important determinants of poverty than unemployment or low participation rates in the labor force.

Proportion of female-headed households

12. At Union level, 18.9% of households are female-headed households. This proportion is much higher in urban than rural areas at 25.1% and 16.7% respectively. The highest proportion of female-headed households is in Yangon with 24.4% of households, followed by Kachin (22.8%). The lowest proportion of female-headed households is in Chin with 10.4% of households, followed by Shan South (11.1%) and Shan East (12.8%). In Myanmar, female-headship does not appear to be a correlate of poverty. The proportion of poor households headed by women is slightly lower than the proportion of non poor households headed by women (18.3% compared to 19.1%). Accordingly, poverty incidence for female-headed households is comparable to poverty incidence of male-headed households at 29% and 30%, respectively. The lack of relationship between deprivation and female-headship has been found before in Myanmar[3] and may be attributable to any of the following: 1) receipt of significant remittance income; 2) better-

---

[2] Non-working individuals are individuals who did not work for pay or profit or in any household business in the 6 months preceding the survey.
[3] UNDP/UNDESA. 1999. *Studies in Social Deprivation in Myanmar*. Yangon. April

off (urban) women can afford to head their own households and not be absorbed into other households upon death of a spouse or divorce/separation (the high percentages of female-headed households in urban areas is consistent with this explanation). For policy or programming purposes a better disaggregation of the category of female-headship is required, identifying subgroups who face particular hardship.

Education of head of the household

13. At Union level, 20.1% of household heads are illiterate. This proportion is higher in rural areas with 23.4% of household heads who are illiterate compared to 11.1% in urban areas. The level of education is higher among household heads in urban areas than in rural areas with 11.9% having attended post-secondary education compared to 1.3% in rural areas. A higher proportion of female households heads (37.6%) are illiterate than male household heads (16.1%). Education of the household head, especially literacy[4] of the household head, is an important dimension of poverty. Illiteracy rates for poor household heads are close to double those of non-poor household heads at 28.3% and 17% respectively. Further, the percentage of poor households who have never attended school or attended only Monastic schools is 42.3%, compared to 27.7% for non-poor households. The level of education of household heads is higher in Yangon with 13.3% having attended post-secondary education and lowest in Shan East where 65% of household heads are illiterate.

Consumption expenditure

Total household consumption expenditure

14. Average normalized[5] household consumption expenditure, excluding health expenditure,[6] varies between rural and urban areas and across SDs. Average household consumption expenditure per adult equivalent is 220 910 Kyats at Union level. It is lower in rural areas at 202 186 Kyats, compared to 273 043 Kyats in urban areas. Average consumption expenditure of non poor households represents nearly twice that of poor households. The lowest average consumption expenditure is found in Chin, Shan East and Shan North while the highest is found in Yangon, Kayin and Mon.

Budget shares

15. Food and non food budget shares (excluding health expenditures) vary across SDs, between rural and urban areas and poverty levels. At Union level, food expenditures represent 73% of

---

[4] Literacy is defined as those 15 and above who can read with an understanding in local language of a simple text and resolve a simple calculation problem or those who have completed the 2nd standard.
[5] Consumption expenditures have been normalized using a Paasche Index to take into account price differences across SDs and between the two survey rounds.
[6] Along with health expenditures, total consumption expenditures exclude the user cost of durable goods.

total consumption expenditure.[7] In rural areas the share of food expenditures is 76.3% compared to 66.3% in urban areas. The share of food expenditures is higher for poor households than for non poor households at 75.4% and 72.6% respectively. The highest food shares are found in Chin (82.6%), Kayin (79%), Sagaing (78.5%) and Bago West (78.5%) whereas the lowest are found in Yangon (66%), Tanintharyi (69.8%) and Shan South (69.9%). At Union level, non food expenditures represent 27% of total consumption expenditures.

16. When including health expenditure, food budget shares represent 69.4% of total expenditure at Union level with 72.7% in rural areas and 62.6% in urban areas.

Economic characteristics

Distribution of the population engaged in an economic activity by occupational category

17. Occupational category provides information on productive activities of the economically active population. [8] At Union Level, 45.5% of the working population are employers or own account workers, of which 9.1% are employers and 36.4% are own account workers. In rural areas, own account workers represent 37.8% of the working population, while contributing family workers and casual laborers each represent 18.7% and 18.6% of the working population. In urban areas, employees represent the biggest proportion of the working population with 34.9%, followed by own account workers (32.3%) and contributing family workers (11.5%). The proportion of non poor working individuals who are employers or own account workers is higher than for poor individuals (respectively 48.8% and 38.4%). A higher proportion of men than women are employers or own account workers (27.2% for men and 18.3% for women). Casual labor appears to be an important correlate of poverty. The proportion of the working population in poor households that are casual laborers is almost twice that for the non poor (22.9% and 12.5%, respectively). Casual labor is much more important in rural areas where it represents 18.6% of the working population against 7.7% in urban areas.

Distribution of the population engaged in an economic activity by industry group

18. The distribution of the population engaged in an economic activity by industry group provides information on the most important industries in the country in terms of employment, but also on the types of economic activities associated with poverty. Agriculture (including hunting and forestry) is the main industry in Myanmar, employing over 50% of the working population. It is followed by wholesale and retail trade, and repair with 11.6% of the working population, manufacturing with 7.4% and real estate, renting and business activities with 5.8% of

---

[7] These extremely high food share values may be due to low rental expenditures in Myanmar (see below) in addition to exclusion of health expenditures. Similar results have been found in other low income South East Asian countries such as Cambodia whose average food share was 69% in 1997 (Cambodia Ministry of Planning, 1997).

[8] The economically active population is defined as individuals who worked for pay or profit or any household business.

the working population. In rural areas, agriculture employs 64.3% of the working population. In urban areas, wholesale and retail trade, and repair employs the majority of the working population with 24.5%. It is followed by manufacturing (12.5%) and real estate, renting and business activities (10.8%). Individuals engaged in agriculture only represent 7.5% of the working population. There is a strong association between agriculture and poverty. The proportion of individuals from poor households working in agriculture is 59.4%, compared to 45.8% for non poor households. The highest proportion of the working population engaged in agriculture is found in Chin, Shan South, Shan North and Magwe, while the lowest proportion is found in Yangon. Fishing is most important in terms of proportion of the working population in Tanintharyi (21.8%) and in Rakhine (13.2%).

Household business activities

<u>Agriculture</u>

19. Average area farmed presents the total area farmed by agricultural households divided by the total number of agricultural households. It varies significantly across S/Ds and between rural and urban areas. Average area farmed for the rainy season is 6.9 acres per agricultural household on average. The smallest farmed areas are in Chin (1.5 acres), Shan East (2.9 acres) and Shan North (3.6 acres), even though a majority of the population works in agriculture. These regions are mountainous which makes it hard to access farm land. Households turn mostly to slash-and-burn agriculture as the main method of cultivation, which explains in part the small size of areas farmed. It is in Ayeyarwaddy that average area farmed is the largest with 12.4 acres per agricultural household, followed by Bago East with 9.7 acres per agricultural household, Sagaing with 8.3 acres and Yangon with 8.2 acres per agricultural household. There is a high correlation between average area farmed and poverty, especially in rural areas. Average area farmed for non-poor households is significantly higher than for poor households at 7.7 and 4.9 acres, respectively.

20. Average land area owned by agricultural households is 6.1 acres. The size of land owned is slightly higher in rural areas with an average of 6.2 acres compared to 4.9 acres in urban areas[9]. As with area farmed, land ownership is an important correlate of poverty. Average land area owned by non poor households is significantly higher than for poor households (6.9 acres compared to 4.1 acres). SDs where average land area owned is the smallest are Chin (0.6 acres), Shan North (2.2 acres) and Shan East (2.1 acres). SDs where average land area owned is the largest are Ayeyarwaddy (11.2 acres), Sagaing (7.9 acres), Yangon (7.3 acres) and Bago East (6.9 acres). On average, area farmed by agricultural households is larger than the land area owned by the households at 6.9 and 6.1 acres respectively. In some areas, the two measures diverge sharply, as in Chin, where households farm an average area that is 2.5 times the average area owned. This is

---

[9] Only 770 agricultural households answered this question in urban areas compared to 7 601 households in rural areas.

mainly due to the fact that households not only farm the land they own but also farm land acquired through user rights from local authorities, rented, borrowed, obtained as collateral for a loan or any other mode[10].

21. One quarter of the people working in agriculture are landless[11]. The landless rate is higher in urban areas than in rural areas (44.2% compared to 25.1%). A higher proportion of poor individuals working in agriculture is landless (31.8%) compared to non poor individuals working in agriculture (22%). SDs with highest landless rates are Yangon (51.2%), Bago East (45.6%), Bago West (36.1%) and Ayeyarwaddy (32.3%).

22. Access to agricultural credit has the potential of increasing farmed area and crop yields by enabling farmers to lease land and purchase more inputs at the start of the agricultural season. The proportion of agricultural households having received a loan for their agricultural activities between May and November 2004 (first round), which covers most of the agricultural season, is 38.1%. In the dry season (second round) only 13.3% of agricultural households declared having received a loan for their agricultural activities. The proportion of agricultural households having received an agricultural loan is higher in rural areas than in urban areas (39% and 19.9%, respectively). There is only a slight different in credit access between poor and non-poor households at 36.7 and 38.6% respectively.

Non agricultural business

23. Access to credit for non-agricultural businesses is quite low with only 15% of households with non-agricultural business activities having received a loan for their business activities during the rainy season (first round). This proportion declines to 9.6% in the dry season (second round).

Household with any adult member owing money to any source

24. Indebtedness can be both a cause of poverty and a coping strategy depending on its level and conditions leading to its occurrence. In the first round of the survey (November 2004), almost half of the households had at least one outstanding loan (48.8%) while only 32.6% of households had one in the second round (May 2005). A higher proportion of households seem to go in debt during the rainy season than during the dry season. The proportion of households with outstanding loans is much higher in rural areas than in urban areas (54.8% of households vs. 32%). A higher proportion of poor households owed money at the time of the first round than non poor households (53.3% vs. 47%).

---

[10] This aspect is analyzed in more details in the Vulnerability Report.
[11] Landless rate in agriculture is defined here as the proportion of the population working in the agriculture sector in the last 6 months for their main economic activity that does not own any agricultural land. This includes farmers who do not own any agricultural land, agricultural employees, casual laborers working in agriculture, etc.

Participation in the labor market

Labor force participation rate

<u>Population 10 years and over</u>

25. The labor force participation rate of the population aged 10 years and over is defined as the proportion of the population aged 10 years and over that are in the labor force, i.e., working or available for work[12]. Labor force participation at Union level for the first round is 57.6% compared to 57.2% in the second round. It is higher in rural areas than in urban areas for both rounds at around 60% and 50%, respectively. The participation rate is higher for poor households than non poor households: 60.5% compared to 56.3% in the first round and 59.8% compared to 56.1% for the second round. Men's participation rate is higher than women's in both rounds at 70% and 45%, respectively.

<u>Population 15 years and over</u>

26. The labor force participation rate of the population aged 15 years and over is defined as the proportion of the population aged 15 years and over that are in the labor force, i.e., working or available for work. At Union level, the rate is virtually the same across the two rounds of the survey at 64.3% and 63.8%, respectively. It is higher in rural areas than in urban areas in both rounds at approximately 67% 56%, respectively. Men's participation rate is higher than women's for both rounds at 79.5% and around 50%, respectively). The participation rate of the population aged 15 years and over is higher for poor households than non poor households in both rounds at around 67% and 62%. This last finding provides added evidence for the point discussed above, that poverty has more to do with low returns and low remuneration than lack of employment.

Unemployment rate in the last 6 months

<u>Population 10 years and over</u>

27. The unemployment rate of the population aged 10 years and over is defined as the proportion of labor force participants that did not work at any point in the 6 months preceding the survey: It is a measure of relatively long-term open unemployment. At Union level, the unemployment rate is very low at 2.3% in both rounds. The rates vary significantly between rural and urban areas at 1.5% and 4.6%, respectively. Unemployment rates vary significantly across SDs with highest rates found in Rakhine (6.9%), Yangon (5.3%) and Chin (3.4%). The unemployment rate is slightly higher for individuals in poor households (2.6%) than individuals in non poor households (2.1%).

---

[12] The labor force is defined as individuals who worked for pay or profit or any household business or were available for work. It excludes: individuals who were absent due to health or other reasons, individuals doing housework fulltime, individuals studying fulltime (or other training), fulltime religious personnel, the disabled or developmentally delayed, individuals living on pension or retired, and individuals who stopped looking for work.

It should be underlined that this association between poverty and unemployment occurs for a very small percentage of the poor (2-3%) and as such, does not invalidate the conclusion (above) that poverty is much more about low returns/low remuneration than lack of employment.

Population 15 years and over

28. The unemployment rate of the population aged 15 years and over is defined as the proportion of the labor force participants that did not work at any point in the 6 months preceding the survey. Values for this indicator are very similar to those for the 10 and over age group. The rate is very low (2%) for both survey rounds. It varies significantly between rural and urban areas at 1.3%and 4.4%, respectively. It is slightly higher for individuals in poor households (2.4%) than for individuals in non poor households.

Unemployment rate in the last 7 days

Population 10 years and over

29. The unemployment rate of the population aged 10 years and over in the last 7 days[13] provides information on recent or short term unemployment. Seasonal variations are easier to grasp using this indicator, if data are collected over the course of different seasons. At Union level, the rates were quite low at 3% in November 2004 (first round) and 3.7% in May 2005 (second round). In rural areas, unemployment was lower in the first round which corresponds to harvest time (2.1% compared to 3.1%). In urban areas we find the opposite pattern, as the unemployment rate is higher in the first than the second round (6.1% compared to 5.3%). The qualitative study showed that economic activities slow down during the rainy season, especially in urban areas. For example, construction workers or even trishaw peddlers don't have much work in the rainy season, whereas agricultural households will have more work in the rainy season and even need the help of the children to work in the field, which can explain the higher participation rate in the first round in rural areas. The SD with the highest unemployment rate in the first round is Chin (10.2%) while for the second round it is Rakhine (9.1%). Unemployment is slightly higher for individuals from poor households than non poor households. In the first round the unemployment rate for the poor was 3.7% compared to 2.7% for the non poor. In the second round it is 4.1% for the poor compared to 3.5% for the non poor.

---

[13] The unemployment rate of the population aged 10 years and over in the last 7 days is defined as the proportion of the labor force participants aged 10 years and over that did not work at any point in the 7 days preceding the survey.

Population 15 years and over

30. The unemployment rate of the population aged 15 years and over in the last 7 days[14] provides information on recent or short term unemployment. At Union level, the rate was 2.8% in November 2004 (first round) and 3.5% in May 2005. Generally speaking, unemployment data are very similar for the 15 and over and 10 and over age groups.

Population 10 years and over excluding unpaid family workers

31. If we exclude unpaid family workers from the working population, unemployment rates of the population aged 10 years and over in the last 7 days are somewhat higher at 4.4% at first round and 5.4% at second round. Once again, the unemployment rate increases in rural areas in the second round and decreases in urban areas.

Underemployment rate

32. The underemployment rate by the time-utilization approach (30 hours) is defined as the proportion of employed persons (aged 10 years and over) that worked for less than 30 hours a week in the 7 days preceding the survey. The underemployment rate at Union level was 9.0% in November 2004 (first round) and 10.8% in May 2005 (second round). In rural areas, underemployment is lower for the first round (November 2004) which corresponds to the harvest period (8.6% compared to 11.5%). It is slightly higher for individuals from poor households than from non poor households in both rounds. S/Ds with the highest underemployment rate for the first round are: Kayah, Shan East and Tanintharyi, whereas for the second round, they are Kayah, Magwe and Shan East.

33. The underemployment rate by the time-utilization approach (44 hours) provides information on the proportion of employed persons (aged 10 years and over) that worked for less than 44 hours a week in the 7 days preceding the survey. At Union level, the rate was 30.3% in November 2004 (first round) and.37.85 in May 2005 (second round). In rural areas, underemployment is much lower for the first round which corresponds to harvest time (28.9% compared to 39.0%). S/Ds with the highest underemployment rates for the first round are: Shan East, Chin and Kayah, whereas for the second round they are Shan East, Magwe and Chin. There are very slight differences in underemployment rates for poor and non poor households in both rounds which, once again, suggests that lack of employment is not a major determinant of poverty.

---

[14] The unemployment rate of the population aged 15 years and over in the last 7 days is defined as the proportion of the labor force participants aged 15 years and over that did not work at any point in the 7 days preceding the survey.

Housing conditions and assets

Type of dwelling

34. The majority of households in Myanmar live in single family dwellings (90.5%), with 95.7% in rural areas and 76.1% in urban areas. It is only in Yangon that a large proportion of households (17.5%) live in multi-dwelling buildings with 3 or more flats/apartments. Very few poor households live in multi-dwelling buildings with 3 or more flats/apartments (0.1% of poor households compared to 3.5% of non poor households).

Type of construction material

35. The type of material of the roof, walls and floors of the dwelling can provide information on the living conditions and poverty status of the household. A majority of households in Myanmar live in dwellings with thatched roofs (49.6%), bamboo walls (52.2%) and wood plank floors (51.4%). In rural areas, 60.8% of dwellings are made of thatched roofs and 31.3% of roofs made with corrugated metal. In urban areas, the most common material for the roof is corrugated metal (70.2% of dwellings). Dwellings with bamboo walls are most common in rural areas with 57.4% of dwellings compared to 37.7% in urban areas. In urban areas, 25.8% of dwellings have walls made of cement. The construction material for the floor of the dwelling consists mostly of wood planks in rural areas (53.6%), and palm or bamboo (26.5%). In urban areas, wood plank is also the most common material for floors (45.1%), but it is followed by cement (20.5% of dwellings). A higher proportion of poor households live in dwellings with thatched roofs (65.5%) compared to non poor households (45.1%). A higher proportion of poor households live in dwellings with walls made of thatch or other leaves (12.8%) or of bamboo (64.7%) than non poor households (8.8% and 47.5% respectively). A higher proportion of poor households live in dwellings with floors made of palm or bamboo (33.8%) or of earth or sand (11.5%) compared to non poor households.

Type of tenure

36. In Myanmar, a very high proportion of the population owns their own dwelling (94.2%). This proportion is highest in rural areas at 97.6%. In urban areas, 84.7% own their own dwelling, the rest rent from private individuals or enterprises (6.6%), rent or borrow from a relative (5.5%), or rent or borrow from government (1.8%). It is in Yangon that we find the lowest proportion of households owning their own dwelling (82.6%), followed by Chin with 90.2% and Tanintharyi (90.4%).

Access to a safe and convenient drinking water source[15]

37. This indicator is defined as the proportion of the population with access to a safe drinking water source within 1 kilometer (30 minutes walking distance) of the user's dwelling. At Union level, 62.6% of the population has access to a safe and convenient drinking water source. There are large differences between rural and urban areas at 55.3% and 89.6 % of the population respectively. Non poor households have better access to safe drinking water than poor households (respectively 64.2% and 59.4%). Regions where access to safe drinking water is more problematic (less than 50% of households having access) are, for rural areas, in Ayeyarwaddy (30.1%), Rakhine (33.9%), Shan South (46.3%) and Tanintharyi (49.2%).

Access to improved sanitation[16]

38. At Union level, 67.3% of Myanmar households have access to improved sanitation. This proportion is higher in urban (75.6%) than rural (64.4%) areas. A smaller proportion of poor households have access to improved sanitation compared to non poor households (58.7% vs. 71.4%). SDs where less than 60% of households have access to improved sanitation are Rakhine (35.8%), Tanintharyi (53.4%), Bago West (55.6%), Magwe (56%), Shan East (57.6%) and Shan North (59.9%).

Access to electricity

39. At Union level, only 38% of households have access to electricity. There are pronounced urban/rural differences with 81.3% of urban households having access compared to only 22.4% for rural households. Only 22.4% of poor households have access to electricity compared to 44.6% of non poor households. The SD where the highest proportion of households has access is by far Yangon at 82.6%. SDs where access to electricity is the lowest are Chin (14.7%), Bago West (13.2%), Bago East (20.3%) and Rakhine (23.2%).

Household assets

Agricultural equipment

40. Only 15.9% of agricultural households own motorized or mechanical agricultural equipment. The indicator is not significantly different for rural and urban agricultural households at 15.9%

---

[15] Proportion of the population with access to a safe drinking water source within 1 kilometer (30 minutes walking distance) of user's dwelling. Safe drinking water source includes: private and public tap water and stand pipes, tube well, borehole or pump, protected wells, protected spring/pond or protected rainwater. It does not include: commercial bottled drinking water, water sold by vendor (truck, cart, etc.), unprotected hand dug well, unprotected spring/pond or unprotected rainwater, river/streams, and lakes/dams.

[16] Access to improved sanitation is defined as the proportion of the population with access to unshared facilities that hygienically separate human excreta from human, animal and insect contact. It includes: flush toilets, pour flush toilets with water seal, covered pit latrines with foot lid, indirect covered pit latrines and direct covered pit latrines.

and 15.8%, respectively. A smaller proportion of poor agricultural households (8.7%) own mechanical equipment than non poor agricultural households (18.8%). SDs with lower access to mechanical agricultural equipment are Chin (only 0.2%), Rakhine (5.1%) and Kayin (8.3%).

41. Animal-drawn agricultural equipment is more widespread with 63.7% of agricultural households owning animal-drawn equipment. This indicator is higher in rural areas than in urban areas (65.1% and 34.5%, respectively). A slightly lower proportion of poor households own animal-drawn agricultural equipment than non poor households (61.7% compared to 64.5%). The SD with lowest access is Chin at only 15.6%.

Draft animals and breeding animals

42. At Union level 66.4% of agricultural households own draft animals. This proportion is higher in rural areas at 67.5% compared to 42.1% in urban areas. A slightly lower proportion of poor households own draft animals compared to non poor households (65.2% compared to 66.9%). SDs where a lower proportion of agricultural households own draft animals are Chin (24.4%), Kayin (32%) and Mon (34.7%). SDs where a higher proportion of agricultural households own draft animals are Sagaing (81.9%) and Bago East (80.1%).

43. In terms of ownership of breeding animals, only 1.3% of households own goats or sheep though around 16% own at least one pig. Ownership of poultry is the most widespread at 27.9% of households. On average, households own 4.4 poultry. Rural households own 5.3 poultry on average compared to 1.9 for urban households. Poor households own fewer poultry on average with 3.5 heads compared to 4.7 for non poor households.

44. Ownership of electrical appliances such as a radio-cassette or stereo, television or a telephone can serve as proxy indicators of a household's living conditions. At Union level, 21.1% of households own a radio-cassette or stereo. This proportion is higher in urban areas at 30.4% compared to 17.7% of rural households. A smaller proportion of poor households own a radio-cassette or stereo compared to non poor households (12.7% and 24.2%, respectively). At Union level, 25.7% of households own a television set. This proportion is much higher in urban than rural areas at 52.7% and 16% respectively. Very few poor households own a television set compared to non poor households (9.5% vs. 31.8%). Only 3.1% of households own land-line telephone equipment at Union level. This proportion is higher in urban areas with 9.7% of households compared to less than 1% in rural areas. Very few poor households own land-line telephone equipment (0.3%) compared to non poor households (4.1%). The SD with highest land-line telephone access is Yangon at 10%. Rakhine and Chin are among the SDs with the lowest proportion of households owning assets such as radio-cassettes or stereos, and televisions.

45. Ownership of a means of transportation can also be a good indicator of a household's living conditions. The proportion of households owning at least one bicycle is 41.8% at Union level.

This proportion is higher in urban areas than in rural areas at 48.8% and 39.2% respectively. A higher proportion of non poor households own a bicycle (45.4%) compared to poor households (32.9%). The proportion of households owning a motorcycle is 9.8% at Union level. This proportion is higher in urban than rural areas at 15.3% and 7.8% respectively. A smaller proportion of poor households owns a motorcycle at only 3.9%. Rakhine and Chin are among the SDs with the lowest proportion of households owning a means of transportation such as a bicycle or motorcycle.

Health, nutrition status and access to health services

Proportion of 1 year old children immunized against measles

46. The proportion of 1 year old children immunized against measles provides a measure of the coverage and the quality of the child health care system. For measles, immunization coverage should be above 90% to stop transmission of the virus. At Union level, immunization coverage is 80.3%. There are important differences across SDs and strata in terms of immunization coverage. SDs with the lowest coverage in the first round are Shan North (59.9%), Chin (62.9%), Rakhine (66.8%) and Bago West (69%). A slightly lower proportion of children from poor families have been immunized against measles compared to children from non poor families (78.4% vs. 81.4%).

Antenatal care coverage

47. Antenatal care coverage is defined here as the proportion of women having given birth in the last 5 years who visited skilled health personnel (excluding traditional birth attendants) for antenatal care at least three times during their last pregnancy. At Union level, 53% of pregnant women have visited skilled personnel at least three times during their pregnancy. This proportion is lower in rural areas at 48.2%, compared to 69.8% in urban areas. Women from poor households have lower access to antenatal care than women from non-poor households at 44.5% and 57.7% respectively. Access to antenatal care varies across SDs with lowest rates found in Rakhine (31.8%), Chin (34.6%), Sagaing (41.6%), Kayah (42.3%), Shan South (43%), Shan North (47%), Shan East (48.7%) and Kayin (49%). The SD with highest access to antenatal care is Yangon at 73.9%.

Proportion of births attended by skilled health personnel

48. At Union level, 72.5% of births are attended by skilled health personnel (excluding traditional birth attendants) with much higher rates in urban (88.6%) than in rural areas (67.9%). The indicator is higher for women from non poor households (76.9%) than for women from poor households (64.6%). There are important differences across SDs with much lower rates found in Chin (45.2%) and Rakhine (48.5%) compared to other SDs.

Morbidity incidence

49. There is considerable seasonal variation in self-reported morbidity incidence[17] in Myanmar. The rainy season usually brings higher rates of malaria and other water-borne diseases. At the end of the rainy season (first round), the morbidity rate at Union level was 6.5%, while it decreased to 4.0% at the end of the dry season (second round). Morbidity rates are higher in rural areas in both rounds. For the first round, the morbidity rate in rural Myanmar was 7%, while it was 5.2% in urban areas. For the second round, rural areas had a morbidity rate of 4.2% compared to 3.4% in urban areas. There is no significant difference in self-reported morbidity rates between members of poor and non poor households[18].

Average health expenditures

50. The ability to spend for health care can provide information on the poverty status of households, although high costs of health care can also have a negative impact on living conditions of households. Average annual expenditures on health are lower in rural than urban areas at 9 906 and 16 291 Kyats respectively. Average health expenditures per adult equivalent are much lower for poor households with health expenditures of non poor households representing more than twice health expenditures of poor households[19]. SDs with the highest average health expenditures are Yangon and Bago East while those with the lowest health expenditures are Shan North and Shan East.

Prevalence of moderately underweight children under 5 years of age

51. The prevalence of moderately underweight children is the proportion of children under five years old whose weight[20] for age is less than minus two standard deviations from the median for the international reference population ages 0–59 months[21]. The prevalence of moderately underweight children at Union level is 34.4%. It is slightly higher for rural than urban areas at 35.1% and 31.5%, respectively. The prevalence of moderately underweight children is higher for

---

[17] Self-reported morbidity incidence is defined as the number of people who declared having reduced their activity and/or stayed in bed due to illness or injury during the 30 days preceding the survey.

[18] Self-reported morbidity rates are usually quite unreliable at accurately capturing poor/non poor differences since the poor often do not perceive illness as such.

[19] It is important to underline again that health expenditures were not included in the consumption expenditures used for poverty analyses.

[20] Children were weighted using Salter weighing scales. Two separate readings of weight were made, one by a local nurse or midwife and the other by the survey enumerator.

[21] The weight-for-age indicator reflects body mass relative to chronological age and is influenced by both the height of the child (height for age) and weight-for-height. Its composite nature makes interpretation complex. For example, weight for age fails to distinguish between short children of adequate body weight and tall, thin children. Low height for age or stunting measures the cumulative deficient growth associated with long-term factors, including chronic insufficient daily protein intake. Low weight for height or wasting indicates in most cases a recent and severe process of weight loss, often associated with acute starvation or severe disease. Unfortunately, it was decided not to measure height for logistical reasons so it was not possible to measure the prevalence of stunting and wasting in children aged less than 5 years.

children from poor than non-poor households at 38% and 32.2%, respectively. There is no significant difference between girls and boys in terms of prevalence of moderate malnutrition. There are very important differences across SDs. The situation is particularly alarming in Rakhine where 60.5% of children show moderate malnutrition (58.5% in rural areas and 80.2% in urban areas).

Prevalence of severely underweight children under 5 years of age

52. The prevalence of severely underweight children is the proportion of children under five years old whose weight for age is less than minus three standard deviations from the median for the international reference population ages 0–59 months. The prevalence of severely underweight children at Union level is 9.4%. It is slightly higher for rural than urban areas at 9.8% and 8% respectively. The prevalence of severely underweight children is higher for children from poor than non-poor households at 11.3% and 8.2% respectively. There is no significant difference between girls and boys in terms of prevalence of severe malnutrition. There are very important differences across SDs. The situation is particularly serious in Rakhine where 26.8% of children have severe malnutrition (25.4% in rural areas and 40.6% in urban areas). It is also higher than 10% in Mon and Bago East.

Access to health care services[22]

53. Access to primary health care services is measured by the proportion of the population living within one hour's walking distance of a health centre or hospital. At Union level, 64.9% of the population has access to primary health care services. This rate is much higher in urban areas (96.2%) than rural areas (53.8%). SDs with the lowest rates include Chin (36.5%) and Rakhine (48.1%).

54. The majority of health facilities included in the Community Survey are public facilities (67%), though there are important differences across strata and SDs. In rural areas, 92% of facilities surveyed were public whereas only 36% of facilities in urban areas were public. There are important differences in the types of health facilities available in rural areas compared to urban areas. As would be expected, the main health facilities surveyed in rural areas were sub-rural health centers (59%), rural health centers (20%) or station hospitals (11%). In urban areas, the main health facilities surveyed were 'other' health facilities such as specialized private clinics or other private clinics (73%) followed by township hospitals (14%).

---

[22] This section is based on results of the Community Survey which was undertaken in all ward segments and villages visited during the survey. The Community Survey aimed at providing information on infrastructures and services available to the population in the ward segments and villages selected. The Community Survey did not intend to be representative of all health facilities in Myanmar but only provides information on the health facilities visited during the survey.

55. Most rural and sub-rural health centers surveyed were not open to in-patients, i.e., they did not keep patients overnight. On the other hand, public specialized hospitals, township hospitals and station hospitals are usually open to in-patients. Most rural health centers and sub-rural health centers surveyed had restricted hours to receive patients. In rural areas, rural health centers were open an average of 12 days in the 30 days prior to the Community survey and sub-rural health centers, 10 days on average. Public specialized hospitals, township hospitals and station hospitals were open to out-patients most of the time.

56. The different types of hospitals surveyed (township, public specialized, station) had between one half and three quarters of the 41 essential medicines available at the time of the survey[23]. Rural health centers surveyed had on average 43% of the 41 essential medicines and sub-rural health centers 34%.

57. The health facilities surveyed with the largest number of doctors are public specialized hospitals, followed by townships hospitals. Station hospitals surveyed had an average of one doctor. Usually rural and sub-rural health centers surveyed did not have a doctor on their staff. The health facilities surveyed with the largest number of nurses are public specialized hospitals, followed by townships hospitals. Station hospitals surveyed had an average of two nurses. Usually rural and sub-rural health centers surveyed did not have a nurse on their staff. The health facilities surveyed with the largest number of midwives are township hospitals. Station hospitals, rural health centers and maternal and child health centers surveyed had an average of respectively 2.6, 2.7 and 2.5 midwives. Sub-rural health centers surveyed had an average of 1 midwife per facility. The health facilities surveyed with the largest number of health assistants are public specialized hospitals, followed by township hospitals. Usually rural and sub-rural health centers surveyed did not have a health assistant present.

Net enrolment rate in primary education

58. The net enrolment rate in primary education is the ratio of students of official primary school age over the total population of official primary school age. The indicator is a measure of the coverage and efficiency of the school system. At Union level, the rate is 84.7%. It is slightly lower in rural areas (84%) than in urban areas (87.6%). The net enrolment rate for children from poor households is lower at 80.1% compared to 87.2% for non poor children. The rate is lowest in Rakhine where only 66.7% of children are enrolled in primary education.

Gross enrolment rate in primary education

59. The gross primary enrollment rate is the ratio of children of any age enrolled in primary school over the total population of children of official primary school age. At Union level, the ratio is 113.9. It is lower in urban areas (116.5) than in rural areas (103.7). This may be due to the

---

[23] The list of 41 essential medicines is presented in Appendix 3.

fact that in rural areas children start attending primary school at an older age than the official age or that they have a higher repetition rate. It is lowest in Yangon at 101.5.

Ratio of female to male students in primary education

60. The ratio of girls to boys in primary education is 96.1 at Union level. In rural areas, the ratio of girls to boys is the highest with 98 girls for 100 boys, while it is lowest in urban areas with 87.8 girls for 100 boys. The higher ratio in rural areas may be due to the fact that males are required to participate in income-earning activities especially farm work. The ratio of girls to boys is higher for poor children with a 100.7 to 100 ratio of girls to boys, while it is lower for non poor households (93.7 girls for 100 boys). It varies significantly across SDs. It is above 100 in Magwe, Tanintharyi and Ayeyarwaddy, while it is lower in Bago East, Mandalay and Shan South.

Adult literacy rate

61. At Union level, the literacy rate[24] for those aged 15 years and above is 84.9%. This proportion is higher in urban than rural areas at 92.1% and 82.1% respectively. Individuals from poor households have lower literacy rates than individuals from non poor households at 78.8% and 87.6% respectively. Literacy rates vary across SDs. They are lowest in Shan East (41.6%), Rakhine (65.8%), Shan North (67.1%) and Shan South (71.9%) and highest in Yangon at 93.7%.

Access to school[25]

62. Access to primary school is measured by the proportion of the population living within a 30 minutes walking distance of a primary school.[26] According to this definition, 91.4% of the population has access to a primary school. The rate is lower in rural than urban areas at 89.6% and 96.4% respectively. SDs with lowest access to a primary school are Rakhine (72.1%) and Bago West (78.2%).

63. Access to middle school is measured by the proportion of the population living within a 30 minutes walking distance of a middle school. According to this definition, only 46% of the population has access to a middle school. The rate is lower in rural than urban areas at 35.7% and

---

[24] Literacy is defined as the population proportion that can easily read and understand a common simple text, and solve simple mathematical problems or any individual who has completed the second standard. When the survey was administered, respondents had to be able to read easily and explain the meaning of a simple text and correctly solve a number of simple mathematical problems to be identified as literate (for those who had not completed the second form).

[25] This section is based on results from the Community Survey which was undertaken in all ward segments and villages visited during the survey. The Community Survey aimed at providing information on infrastructures and services available to the population in the ward segments and villages visited. The Community Survey did not intend to be representative of all education facilities in Myanmar.

[26] It is important to note that this indicator provides information about the physical access but does not provide information about the quality of infrastructure nor the quality of education.

75.5% respectively. SDs with lowest access to a primary school are Mandalay (21.4%), Rakhine (28.3%) and Shan North (31.1%).

64. Access to secondary school is measured by the proportion of the population living within a 30 minutes walking distance of a secondary school. According to this definition, only 31.8% of the population has access to a secondary school. The rate is lower in rural than urban areas at 16.5% and 75.2% respectively. SDs with lowest access to a primary school are Magwe (12.6%), Rakhine (17.3%), Bago West (19.6%) and Shan North (19.8%).

65. The pupil to teacher ratio in the primary schools surveyed is 30 pupils for 1 teacher on average. There is not much difference between rural and urban areas. The highest pupil to teacher ratio in primary schools surveyed is in Rakhine with 38 pupils per teacher, while the lowest is found in Shan East with less than 20 pupils by teacher. The pupil to teacher ratio in the middle schools surveyed is 30 pupils for 1 teacher on average. It is slightly higher in rural areas than in urban areas (33 compared to 29). The highest pupil to teacher ratio in middle schools surveyed is in Tanintharyi with 38 pupils per teacher, while the lowest is found in Bago West with 22 pupils for 1 teacher. The pupil to teacher ratio in the high schools surveyed is 39 pupils for 1 teacher on average. It is slightly higher in urban areas than in rural areas (42 compared to 37). The highest pupil to teacher ratio in high schools surveyed is in Kayin and Tanintharyi with 97 and 60 pupils per teacher, respectively.

SUMMARY OF KEY CHARACTERISTICS OF THE POOR

66. The preceding analysis, as well as results from the qualitative study, allows for a summary account of some of the key characteristics of poverty in Myanmar. More specifically:

∉ Poor households are systematically larger than non-poor households at 6.1 and 4.9 members respectively. This pattern holds across all S/Ds.

∉ Although poor households have larger household size, the age and economic dependency ratios do not appear to be associated with poverty. The lack of relationship between age/economic dependency ratios and poverty suggests that low returns or low remuneration are much more important determinants of poverty than unemployment or low participation rates in the labor force.

∉ Labor market data provides additional support of the preceding point. The participation rate of the population aged 10 and 15 years and over is higher for poor households than non poor households in both rounds at around 60% vs. 56% and 67% vs. 62% respectively. In addition, open unemployment for the poor is extremely low, at 2-3 % for long-term, open unemployment (in the 6 months preceding the survey) and 3-4% for short-term open unemployment (in the 7 days preceding the survey).

∉ Female-headship does not appear to be a correlate of poverty. The proportion of poor households headed by women is slightly lower than the proportion of non poor households headed by women (18.3% compared to 19.1%). For policy or programming purposes a better

disaggregation of the category of female-headship is required, identify subgroups that face particular hardship.

∉ The level of education of the head of household is lower for poor households. Illiteracy rates for poor household heads are close to double those of non-poor household heads at 28.3% and 17% respectively. Further, the percentage of poor households who have never attended school or attended only Monastic schools is 42.3%, compared to 27.7% for non-poor households. Lower education signifies reduced access to income earning opportunities and lower returns/remuneration for economic activities.

∉ In terms of occupational categories, there is a strong association between poverty and casual labor. The proportion of the working population in poor households that are casual laborers is almost twice that for non poor households (22.9% and 12.5%, respectively). Casual laborers typical have a higher time rate of unemployment (i.e., the time between jobs) and earn lower wages.

∉ There is a strong association between agriculture and poverty. The proportion of individuals from poor households working in agriculture is 59.4%, compared to 45.8% for non poor households. Poor agricultural households farm and own smaller land areas. Average farmed and owned area for non-poor households is significantly higher than for poor households at 7.7 vs. 4.9 acres, and 6.9 vs. 4.1 acres, respectively. Furthermore, a smaller proportion of poor agricultural households (9%) own mechanical equipment than non poor agricultural households (19%). There is only a slight different in access to agricultural credit between poor and non-poor households at 36.6 and 38.8% respectively.

∉ Poor households usually live in lower quality dwellings. A higher proportion of poor than non-poor households live in dwellings with thatched roofs (65.5% vs. 45.1% respectively), with walls made of thatch or other leaves (12.8% vs. 8.8% respectively) or of bamboo (64.7% vs. 47.5% respectively) and with floors made of palm or bamboo (33.8% vs. 17 respectively) or of earth or sand (11.5% vs. 7.4% respectively). Further, only 22.4% of poor households have access to electricity compared to 44.6% of non poor households.

∉ A smaller proportion of poor than non-poor households have access to improved sanitation at 58.7% and 71.4% respectively. The same is true for access to safe drinking water with 59.4% of poor households having access to safe drinking water compared to 64.2% of non poor households, although the difference is not as high as for access to sanitation. This is probably due to the fact that improved sanitation facilities are privately secured, whereas the infrastructure and facilities required for safe drinking water are often publicly provided.

∉ Poor households have fewer household assets and durable goods such as a radio, television set, telephone, bicycle, motorcycle or other vehicle.

∉ Poor households have lower access to a range of health services and worse health outcomes. A lower percentage of women from poor than non-poor households have access to antenatal care (44.5% vs. 57.7% respectively) and have births attended by skilled health personnel (64.6% vs. 76.9%). indicators for immunization rates, antenatal care, and skilled birth attendance are all lower for poor households. This is in part due to the higher proportion of

poor households that live in rural areas where physical access to these services is lower. The prevalence of moderately underweight children is higher for children from poor than non-poor households at 38% and 32.2% respectively, while the corresponding prevalence estimates for severely underweight children are 11.3% and 8.2%, respectively.

∉ Poor households also have lower access to education. The net enrolment rate is lower for children from poor than non-poor households at 80.1% and 87.2%, respectively. Individuals from poor households have lower literacy rates lower than individuals from non poor households at 78.8% and 87.6% respectively. Low education is likely both a cause and consequence of poverty.

CSO	Central Statistical Office
IHLCA	Integrated Household Living Conditions Assessment
IMR	Infant Mortality Rate
FERD	Foreign Economic Relations Department
FPL	Food Poverty Line
MNPED	Ministry of National Planning and Economic Development
PD	Planning Department
PL	Poverty Line
SD	State/Division
UNDP	United Nations Development Programme
WHO	World Health Organization

List of Tables:

List of Figures:

CONTEXT, OBJECTIVES AND METHODOLOGY

CONTEXT AND OBJECTIVES

In order to provide the Government of Myanmar and donor agencies a reliable and up-to-date integrated assessment of all major aspects of household living conditions in the Union of Myanmar, the United Nations Development Programme (UNDP) and the Government of the Union of Myanmar have agreed on the implementation of an Integrated Household Living Conditions Assessment (IHLCA) in 2003-2005. The Planning Department (PD) of the Ministry of National Planning and Economic Development (MNPED) has implemented the IHLCA in collaboration with the Central Statistical Office (CSO), with the financial assistance of UNDP and the technical assistance of the IDEA International Institute.

The outputs of this project include:

∉ A nationwide qualitative study on people's perceptions of poverty in Myanmar including 224 focus groups in December 2003. The results of this study were published in July 2004 in four volumes[27];

∉ A nationwide quantitative survey of 18 660 households with two rounds of data collection (November-December 2004 and May 2005).

The first analysis of IHLCA data led to the preparation of four reports:

∉ Integrated Household Living Conditions Assessment in Myanmar: Poverty Profile (the present report);

∉ Integrated Household Living Conditions Assessment in Myanmar: Vulnerability-Relevant Information;

∉ Integrated Household Living Conditions Assessment in Myanmar: MDG-Relevant Information;

∉ Integrated Household Living Conditions Assessment in Myanmar: Quantitative Survey Technical Report.

This report has three objectives:

1. to present the poverty profile of Myanmar, including poverty lines and standard poverty measures;

2. to present key characteristics of living conditions of the sampled population drawing on a range of demographic, economic and social information;

3. to identify key characteristics or correlates of poverty.

SUMMARY OF THE METHODOLOGY[28]

The quantitative survey was designed to collect reliable and representative information on a number of dimensions of living conditions in Myanmar. Data collection tools included structured questionnaires to be administered to

---

[27] Qualitative study on household living conditions in Myanmar: Volume I: Methodology; Volume II: Results Aggregated at Union Level; Volume III: Results Aggregated at State/division level; Volume IV: Summary of Main Findings, July 2004.

[28] Although the survey methodology is presented in detail in the IHLCA Survey Technical Report, this section provides a summary of the methodology used for the IHLCA Survey.

nationally representative samples of the population at different levels (community, household and individual), each divided into several modules for monitoring the different domains of living conditions. Some of the modules were repeated for the same households and individuals at different points in time throughout the year to allow for temporal comparisons, notably with regard to seasonality of food and non-food consumption patterns. The multi-round approach combined with a modular questionnaire design proved a very useful and convenient data collection tool.

Sampling

In order to minimise sampling errors, the careful design of a statistically sound sampling plan was deemed of critical importance. The starting point of such a plan was a sampling frame or complete listing of communities and households from which a sample could be drawn and the desired precision level for key indicators. The sampling plan was designed to collect representative information from a stratified multiple-stage random sample across all regions of the country. The total number of households interviewed in the first round is 18 660. Only 25 households were not located in the second round, so the total number of household interviewed in second round is 18 635[29].

A number of factors had to be addressed in the determination of a survey design, including the sampling plan. Factors to be considered with regard to sampling were:

∉ The specific objectives of the survey;

∉ The country's characteristics, in particular its administrative divisions;

∉ The level of precision desired for the resulting estimates;

∉ The desired time frame for availability of results;

∉ The availability of human and financial resources.

On the one hand, designing a plan to include a very large sample of households would allow for more precise estimates of the selected indicators and enable greater degrees of disaggregation at the sub-national level.

On the other hand, in favour of a sample size that was not too big were the needs of concerned stakeholders to have preliminary results available in a timely manner (within a few weeks or months from the end of fieldwork) as well as the workload and budget constraints.

Another consideration was the desired level of disaggregation by main IHLCA data users. It was decided to ensure collection of representative data for the following spatial units:

∉ National level;

∉ States/divisions (17);

∉ Urban/rural areas by state/division.

This breakdown suggested a total of 34 strata (2 area types * 17 states/divisions).

One significant constraint to the design of the sampling plan for the IHLCA quantitative survey was the absence of a

---

[29] Note that sampling weights were revised accordingly.

reliable updated sampling frame or complete listing of households across the country from which a sample could be drawn. Usually such frames are based on the results of the most recent population census; however there had been no national count in Myanmar since 1983. Updated population estimates were to be obtained from The Department of Population (DOP) of the Ministry of Population. The frame was imperfect. In addition a number of areas were excluded by PD because of inaccessibility for fieldwork implementation due to transportation/communication problems or ongoing security concerns[30].

The options for selecting households for questionnaire implementation ranged from simple random sampling of households across the country (the most efficient methodology from a purely statistical viewpoint, but one for which fieldwork costs may be prohibitive), to multi-stage random selection based on probability proportional to size (a more commonly used approach given the costs-benefits tradeoffs). However, considering the lack of reliable population numbers at the lowest levels of geographic disaggregation for Myanmar, the sampling plan had to rely on probability proportional to estimated size (PPES) approaches and the measures of size used were the number of households at different geographical levels.

Another issue that was considered in the determination of the sample size was the desired precision level by the IHLCA main

data users. The calculation was based on observed variances for key variables in past survey experiences.

Data collection

The design for the quantitative survey entailed a two-round data collection approach for monitoring household living conditions. There were several arguments in favor of conducting two rounds. Predominant was the important seasonal variations in household expenditure and consumption patterns. In particular, Myanmar is characterized by: (i) three distinct seasons (cold season from October until January, summer from February through May, and rainy season from June through September); (ii) a high dependence on agriculture for income-generating activities; and (iii) a high food/non-food expenditure ratio in household budgets. Thus, it is of critical importance to capture these variations if the survey results are to be meaningful and representative. Two other reasons for improving the quality of the results were the evidence that a multiple round survey increases the level of confidence between enumerators and respondents, and helps increase respondents' memories thereby reducing recall errors.

Specific factors that were considered in determining the timing of such rounds included:
∉ The potential difficulties of conducting survey fieldwork during the rainy season in certain areas;
∉ The need for the results of the qualitative study to be finalised before

---

[30] A total of 45 townships were excluded. One must thus be careful when interpreting results at SD level for the SDs where townships were excluded (see Figure 10.1 of the IHLCA Survey Technical Report).

starting the quantitative survey phase (with the ensuing implication that the tools for the quantitative survey could not be finalised before March 2004);

∉ The timing of important national holidays and cultural events (notably the Water festival in April);

∉ The need for comparability of the IHLCA results with findings from previous surveys (notably the 1997 and 2001 HIES, for which data collection was conducted in October-November).

This led to the plan to conduct data collection activities for the first round of the quantitative survey in May-June 2004 and for the second round in October-November 2004. Unfortunately due to unforeseen circumstances, these dates had to be changed and data collection activities were rescheduled to take place respectively in November 2004 and May 2005.

Depending on the nature of the information to be collected, different types of questions (current status and retrospective) were included in the survey instruments. For instance, current status questions were asked to assess level of education. On the other hand, retrospective questions were also asked to collect information on household consumption expenditures. Thus one important issue was the reference period for specific consumption items. In order to minimise recall errors, different reference periods were used for different types of items. In particular, shorter periods were used for smaller items bought on a regular basis (such as one week for some food items and one week for some non-food items), and longer periods for larger items (such as

six months for bulky non-food items and equipment).

Another issue relevant to the collection of quality data was cultural and gender sensitivity, particularly with regard to questions of a highly personal nature such as reproductive health. Field enumerators were recruited at the local level, in order to ensure that the interviews were conducted in the respondents' own language. Field teams were composed of at least one female and one male enumerator, so that respondents could be interviewed by a person of the same sex. As previously mentioned, strong literacy and mathematical skills were required for all field staff.

With regard to potential non-sampling errors, when collecting information from the respondent, it was important to plan for several controls: (i) immediately during the interview by the enumerator; (ii) after the interview during the review of the completed questionnaire by the field supervisor; and (iii) during data processing. For instance, ranges for data on the monetary value of household expenditures were set, such as minimum and maximum acceptable prices for a given quantity of each major food and non-food item (based on independently obtained data of market prices). The appropriate ranges were verified during questionnaire pre-testing, and flagged during manual and automatic data editing. Thus strong literacy skills and qualifications in calculations and statistics were used as a basis for the selection of field enumerators and supervisors, as well as data entry operators (skills generally verified during the

recruitment processes by means of written examinations).

Moreover, in order to continually monitor the quality of the information being collected, and correct any potential discrepancies as soon as possible, entry and validation of incoming data for the quantitative survey were conducted at the PD states/divisions offices, and then transferred to PD Central Level Office. The raw micro-datasets for all states/divisions were aggregated and processed at the national level by PD staff under the supervision of the Technical Unit at PD Central Level Office in Yangon.

The following survey questionnaires were used for the IHLCA survey[31]:

1) The household questionnaire, administered at household level, included 9 modules covering different aspects of household living conditions:

Module 1: Household Basic Characteristics (administered in round 1 and round 2);

Module 2: Housing (administered in round 1 completely and round 2 in part);

Module 3: Education (administered in round 1 only);

Module 4: Health (administered in round 1 and round 2);

Module 5: Consumption Expenditures (administered in round 1 and round 2);

Module 6: Household Assets (administered in round 1 and round 2);

Module 7: Labour and Employment (administered in round 1 and round 2);

Module 8: Business (administered in round 1 and round 2);

Module 9: Finance and Savings (administered in round 1 and round 2).

2) The Community questionnaire, administered to local key informants during round 1 only, which included 4 modules which aimed at providing general information on the village/wards where the survey was being undertaken and at reducing the length of the household interview. Modules included in the Community questionnaire were:

Module 1.1: Village/Ward Infrastructure;

Module 1.2: Population;

Module 1.3: Housing;

Module 1.4: Labour and Employment

Module 1.5: Business Activities;

Module 1.6: Agricultural Activities;

Module 1.7: Finance and Savings;

Module 2: Schools

Module 3: Health facilities

Module 4: Pharmacies and Drug Stores

3) The Community Price Questionnaire, administered in both rounds, which aimed at providing information on market prices of specific items in each village/ward surveyed, in order to calculate regional price indexes and consequently regional food poverty lines in the case implicit prices calculated from the household questionnaire were not consistent. The Community Price Questionnaire comprised of only one module.

---

[31] For IHLCA Survey questionnaires see Appendices 1, 2, 3 and 4 of Technical Report Appendices.

4) The Township Profile questionnaire aimed at collecting administrative information about the Townships included in the survey administered in the first round only.

All final questionnaires were translated from English to Myanmar after pilot testing, and then back-translated into English for validation.

Since the household questionnaire was administered in two rounds, choices had to be made for the presentation of survey results. In general:

1) For indicators which do not vary seasonally, results from both rounds were very close so there was no added value in presenting both rounds results.

In that case, round 2 results are presented;

2) For indicators related to the dwelling (e.g., type of dwelling, dwelling material, access to water and sanitation, etc.), results from round 1 are presented since most of these indicators were only collected in round 1;

3) For indicators related to agriculture, it was judged more pertinent to present first round data since agricultural activities are most important during the rainy season which is covered by the first round;

4) For seasonal indicators such as employment indicators, access to credit, etc., results from both rounds are usually presented.

PART I: POVERTY PROFILE

Part I presents first, the determination of poverty lines and second, standard poverty measures.

1. DETERMINATION OF POVERTY LINES[32]

The general approach followed in this survey is the 'cost of basic needs' method[33]. To provide a more comprehensive perspective on poverty, two poverty lines were calculated:

1. **Food Poverty Line (FPL)**, based on minimum food expenditure. Minimum food expenditure is the amount of Kyats necessary to pay for a consumption basket that will satisfy caloric requirements of household members;

2. **Poverty line (PL)**, based on (i) minimum food expenditures to satisfy caloric requirements (ii) plus reasonable non-food expenditure to meet basic needs. The food expenditure component of the PL is the FPL. The non-food expenditure[34] component of the PL is calculated as a proportion of the FPL based on the share of non-food expenditures over food expenditures for

those households whose total expenditures are around the poverty line.

1.1 DETERMINATION OF FOOD POVERTY LINE

The Food Poverty Line (FPL) was derived in four (4) steps:
Step 1: Selecting the reference household for each survey round;
Step 2: Calculating the caloric requirements of the representative household (calories per adult equivalent per year) for each survey round;
Step 3: Establishing a food consumption basket that reflects annual caloric requirements and food consumption patterns for the representative household (kilos per adult equivalent per year) for each survey round;
Step 4: Valuating the normative food consumption basket chosen for each survey round (Kyats per adult equivalent per year).

Step 1: Selecting the reference household for each survey round

The reference household was the average of consumption expenditures of households in the second quartile of normalized[35] total consumption expenditures per adult equivalent. The number of male adults, female adults, and children, and total (household size) in the reference household was then calculated to determine the

---

[32] For a detailed methodology on poverty analysis, refer to Chapter 6 of the IHLCA Survey Technical Report.

[33] Ravallion, M. (1998) *Poverty Lines in Theory and Practice*, LSMS Working Paper 133, World Bank, Washington, D.C.

[34] Non food expenditures include such items as education and rent. Health expenditures are excluded from the calculation of household consumption expenditures used for poverty calculations since they might artificially raise the expenditures of the poor. User cost of durable goods are excluded because of the peculiar nature of durable goods markets in Myanmar characterized by high and increasing prices as a result of import restrictions.

[35] Normalized expenditures: Nominal expenditures have been deflated by a Paasche's price index to reflect both variations in price and quantities over time and space.

minimum caloric requirement of the reference household.

Step 2: Calculating caloric requirements of the reference household for each survey round

Nutritional caloric norms vary depending on age, gender, and type of activity (the latter being related to location: rural or urban areas).

Table 1.1: Nutritional caloric norms

Calories per day	Rural	Urban
Male adult	2800	2200
Female adult	2450	2050
Child (<15)	1800	1800

Source: National Nutrition Centre, Department of Health, Ministry of Health, Union of Myanmar.

Based on the composition by age, gender and location of the reference household, the total caloric needs were then calculated for this reference household by:

- Multiplying the size of each population category (male adults, female adults, and children) by the weighted caloric requirement per day in the table above.
- Summing over all population categories to get household weighted caloric requirements per day.
- Dividing by the reference household size (in adult equivalent) to get the minimum caloric requirement per day, which is estimated at 2304 calories per adult equivalent per day for first round and 2295 calories for second round.

Step 3: Establishing a reference food consumption basket that reflects annual caloric requirements per adult equivalent and food consumption patterns for the reference household for each survey round

The average quantity of each food item consumed by the reference household (households in the second quartile) in kg per adult equivalent per year was calculated, and then average quantities were multiplied by the caloric content of each food item per kg to get total caloric intake for the reference household by adult equivalent per year.

An adjustment factor was calculated by dividing the caloric norm for the reference household by adult equivalent per day divided by the total caloric intake for the reference household.

Quantities of each food item in kg per adult equivalent per year were then multiplied by the adjustment factor to get required quantities of each food item in the reference food basket.

Step 4: Valuation of the reference food consumption basket for each survey round

Each food item in the reference food consumption basket was valued by multiplying the adjusted quantity by the median implicit price at Union level (from round 1).

Values over all food items in the reference food consumption basket were then summed to get the Food Poverty Line (FPL) in Kyats per adult equivalent per year for each round separately.

The average FPL of both rounds was then calculated to get the merged FPL.

1.2 DETERMINATION OF THE POVERTY LINE

The Poverty Line (PL) was derived in three (3) steps:

Step 1: Estimating the budget shares for food and non food consumption expenditures for the reference household (for both rounds merged);

Step 2: Estimating normative minimum non-food expenditures for the PL (for both rounds merged);

Step 3: Calculating the Poverty Line (both rounds merged).

Step 1: Estimating the budget shares for food and non food consumption expenditures for the reference household (both rounds merged)

Average food and non food shares of households with food consumption expenditures per year per adult equivalent around the food poverty line ($\pm$ 10%) were calculated.

Step 2: Estimating normative minimum non-food expenditures for the PL (both rounds merged)

The normative minimum non food consumption expenditures per adult equivalent per year (or non food poverty line) were calculated as:

Non food expenditures = FPL * average non food share / average food share.

Step 3: Calculating the Poverty Line (Both rounds merged)

The PL per adult equivalent per year is equal to the sum of the Food Poverty Line (FPL)

and the normative minimum non food consumption expenditures per adult equivalent per year.

1.3 POVERTY LINES

1) A Food Poverty Line was calculated as the average of the first round FPL and the second round FPL. The FPL is normalized, i.e., presented in Kyats per adult equivalent per year as of November 2004.

2) The PL was then calculated by adding the normative minimum non food consumption expenditures per adult equivalent per year.

Table 1.2: Food, non food and poverty lines (Kyats)

	Poverty lines (Kyats)
Food Poverty Line	118 402
Non Food Poverty Line	43 734
Poverty Line	162 136

2. MONETARY POVERTY MEASURES

The following poverty indicators are presented:

∉ Poverty Headcount Index;

∉ Poverty Gap Index;

∉ Squared Poverty Gap Index;

∉ Share of Poorest Quintile in consumption;

∉ Contribution of each S/D to national poverty.

2.1 FOOD POVERTY HEADCOUNT INDEX

The food poverty headcount index is the proportion of individuals whose normalized consumption expenditure per adult equivalent is lower than the Food Poverty Line. This refers to households with insufficient consumption expenditure to cover their food needs. At Union level, 10% of the population falls below the FPL. There are large disparities between S/Ds. Food poverty is highest in Chin State with a food poverty headcount index of 40%, followed by Shan North and Shan East. It is lowest in Kayin (2%), followed by Yangon and Mon. *(see Table 1.3 and Figure 1.1)*

Figure 1.1: Food poverty headcount index (% of population)
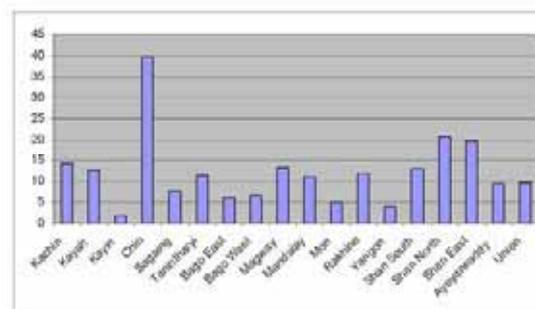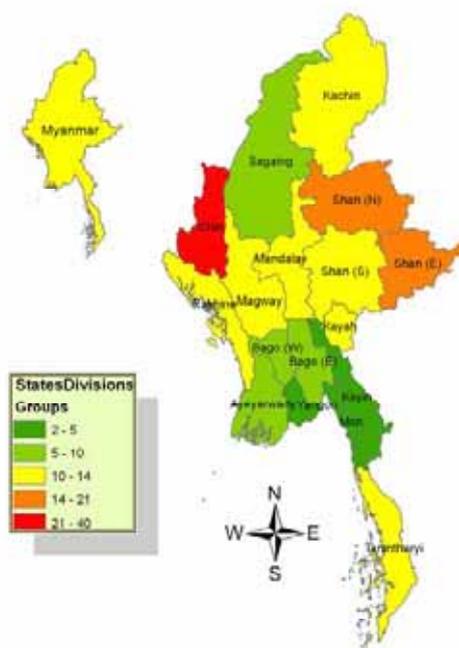
2.2 POVERTY HEADCOUNT INDEX

The poverty headcount index is the proportion of individuals whose normalized consumption expenditures per adult equivalent is lower than the Poverty Line. Such households have insufficient consumption expenditure to cover basic food and non-food needs. The poverty headcount index at Union level stands at 32%. However, this figure hides important disparities between S/Ds. Chin State is the poorest S/D with 73% poor, followed by Shan East (52%) and Shan North (51%). The lowest poverty headcount indices are encountered in Kayin (12%), Yangon (15%) and Mon (22%). *(see Table 1.4 and Figure 1.2)*

Table 1.3:   Food Poverty Headcount Index (% of population)

S/D and Union	Rural Incidence (%)	Rank	Urban[36] Incidence (%)	Rank	Total Incidence (%)	Rank[37]
Kayin	2	1	0	1	2	1
Yangon	5	4	4	2	4	2
Mon	4	2	8	11	5	3
Bago (E)	5	3	12	16	6	4
Bago (W)	7	5	5	5	7	5
Sagaing	8	6	4	3	8	6
Ayeyarwaddy	10	7	9	15	10	7
Mandalay	13	10	6	7	11	8
Tanintharyi	12	8	9	14	11	9
Rakhine	13	9	7	9	12	10
Kayah	17	14	5	4	13	11
Shan (S)	14	12	8	10	13	12
Magwe	14	11	7	8	13	13
Kachin	17	13	9	13	14	14
Shan (E)	23	16	8	12	20	15
Shan (N)	22	15	16	17	21	16
Chin	49	17	5	6	40	17
Union	**11**		**6**		**10**	

Table 1.4:   Poverty Headcount Index (% of population)

S/D and Union	Rural Incidence (%)	Rank	Urban Incidence (%)	Rank	Total Incidence (%)	Rank
Kayin	12	1	8	1	12	1
Yangon	17	2	14	2	15	2
Mon	21	3	23	5	22	3
Sagaing	27	4	22	4	27	4
Ayeyarwaddy	30	6	24	8	29	5
Bago (E)	30	5	35	14	31	6
Bago (W)	34	7	23	6	33	7
Kayah	38	9	26	12	34	8
Tanintharyi	37	8	21	3	34	9
Rakhine	41	10	26	9	38	10
Mandalay	45	13	24	7	39	11
Shan (S)	44	12	26	11	40	12
Magwe	44	11	26	10	42	13
Kachin	47	14	38	16	44	14
Shan (N)	55	15	35	13	51	15
Shan (E)	56	16	37	15	52	16
Chin	81	17	46	17	73	17
Union	**36**		**22**		**32**	

---

[36] Urban areas are defined as segments of towns/townships (or wards) which have a hospital/health center, regular market, Middle/high school, post office, electricity plus recognition as ward by the Ministry of Home affairs.

[37] In all the tables, the value which corresponds to the best situation is given rank 1, while the value which corresponds to the worst situation is given rank 17.

Figure 1.2: Poverty headcount index (% of population)
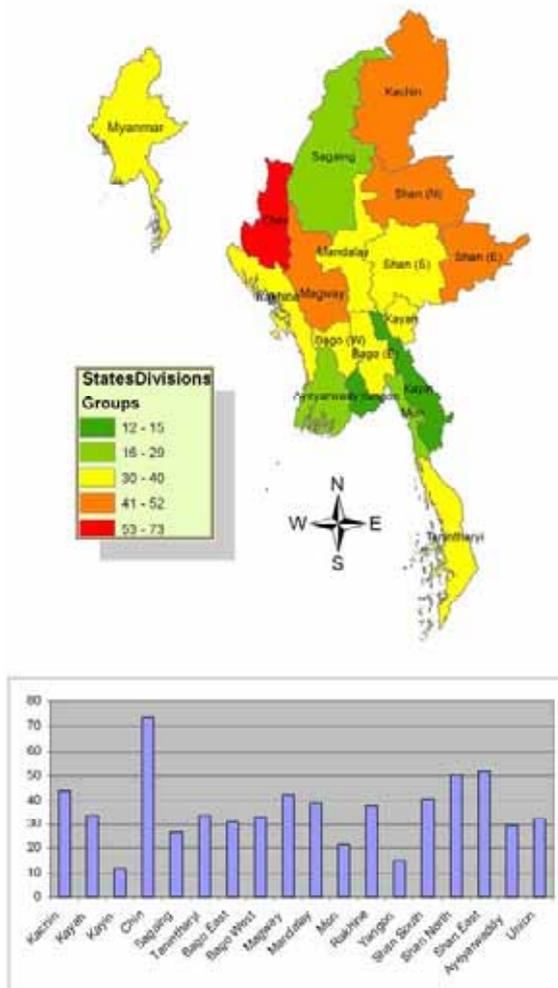
2.3 POVERTY GAP INDEX

Figure 1.3: Poverty gap index
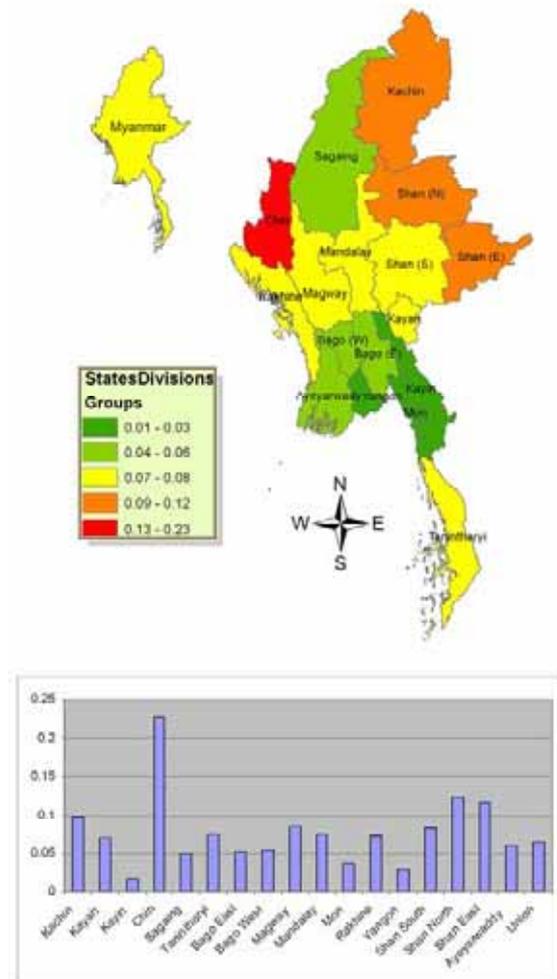
For illustrative purposes only[38], Table 1.5 presents poverty headcount indexes for a number of other Asian countries. Myanmar's poverty headcount index falls within the range of other low income countries in South East Asia.

The poverty gap index measures the intensity of poverty, i.e. the average shortfall from the poverty line of the poor multiplied by the poverty headcount. This index can be used to provide an estimate of the sums required to raise the consumption level of all poor families to the poverty line. At Union level, the poverty gap index stands at 0.07 which means that the total sum required to eradicate poverty equals 7% of the poverty line multiplied by the population (assuming perfect targeting, no disincentive effects, etc.). There is variation across S/Ds. The

---

[38] In the absence of comparable information across all countries in the region, using for example $1 PPP poverty line, data presented in Table 1.5 are based on national poverty lines. One must be careful when comparing poverty rates across countries since methodologies used are different.

highest values are found in Chin State (0.23) followed by Shan North (0.12) and Shan East (0.12). The lowest values are found in Kayin (0.02), Yangon (0.03) and Mon (0.04). *(see Table 1.6 and Figure 1.3)*

Table 1.5: Poverty headcount index in other South Asia and Southeast Asia countries[39]

Country	Year	Population in poverty (%)		
		Rural	Urban	Total
Southeast Asia				
Cambodia	1999	40.1	18.2	35.9
Indonesia	2002	21.1	14.5	18.2
Lao PDR	1997	41.0	26.9	38.6
Malaysia	1999	12.4	3.4	7.5
Philippines	2003	-	-	30.4
Thailand	2002	12.6	4.0	9.8
Vietnam	2002	35.6	6.6	28.9
South Asia				
Bangladesh	2000	53.0	36.6	49.8
Bhutan	2000	-	-	25.3
India	2000	30.2	24.7	28.6
Maldives	1998	50.0	20.0	43.0
Nepal	2004	34.6	9.6	30.9
Pakistan	1999	34.8	25.9	32.6
Sri-Lanka	1996	27.0	15.0	25.0

Source: Asian Development Bank, 2005.

Table 1.6: Poverty Gap Index

S/D and Union	Rural		Urban		Total	
	Gap	Rank	Gap	Rank	Gap	Rank
Kayin	0.02	1	0.01	1	0.02	1
Yangon	0.03	2	0.03	2	0.03	2
Mon	0.03	3	0.05	8	0.04	3
Sagaing	0.05	5	0.03	3	0.05	4
Bago (E)	0.05	4	0.07	16	0.05	5
Bago (W)	0.06	6	0.04	4	0.05	6
Ayeyarwaddy	0.06	7	0.05	11	0.06	7
Kayah	0.09	10	0.04	5	0.07	8
Rakhine	0.08	9	0.05	6	0.07	9
Tanintharyi	0.08	8	0.05	12	0.07	10
Mandalay	0.09	11	0.05	7	0.07	11
Shan (S)	0.09	13	0.05	9	0.08	12
Magwe	0.09	12	0.05	10	0.08	13
Kachin	0.11	14	0.07	15	0.10	14
Shan (E)	0.13	15	0.06	13	0.12	15
Shan (N)	0.14	16	0.08	17	0.12	16
Chin	0.27	17	0.06	14	0.23	17
Union	**0.07**		**0.04**		**0.07**	

---

[39] When available, official poverty lines were used.

2.4 SQUARED POVERTY GAP INDEX

The squared poverty gap is an indicator of the severity of poverty. It differs from the poverty gap index in that it gives more weight to the poorest households (i.e. those furthest from the poverty line). The squared poverty gap has no intuitive interpretation analogous to the poverty gap index. Again, it is highest in Chin, Shan North and Shan East and lowest in Kayin, Yangon and Mon. *(see Table 1.7 and Figure 1.4)*

Figure 1.4:   Squared poverty gap index
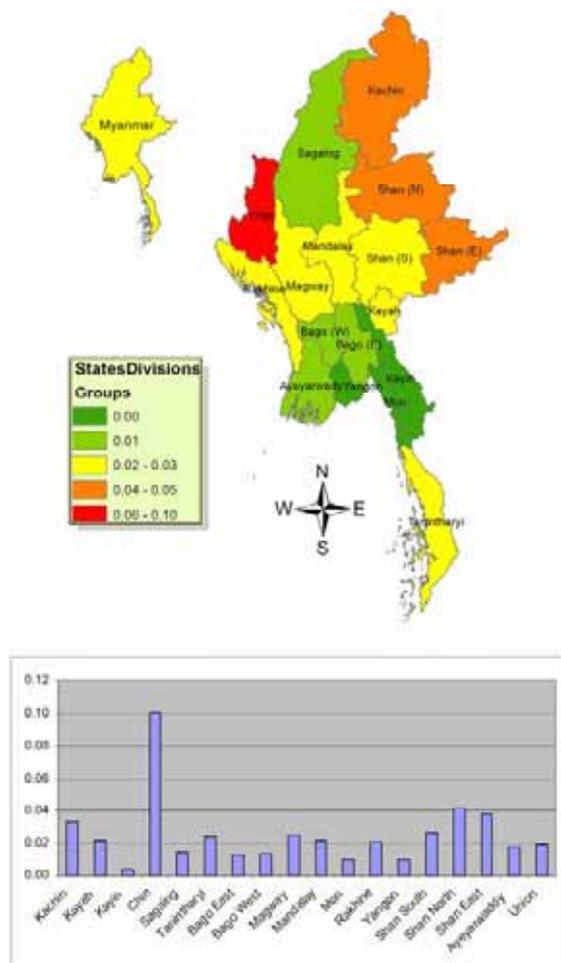
2.5 SHARE OF POOREST QUINTILE IN CONSUMPTION

Figure 1.5:   Share of poorest quintile in consumption (%)
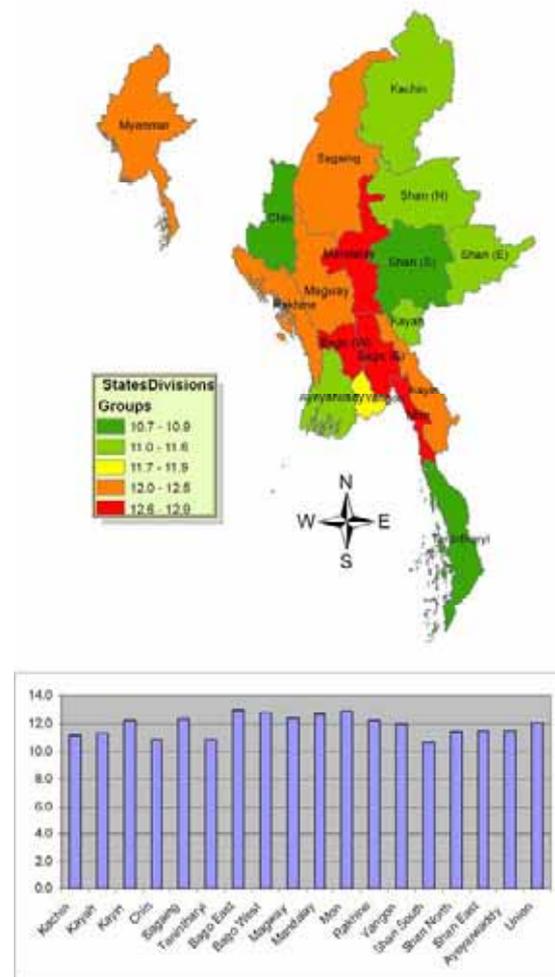
The share of the poorest quintile in consumption at Union level is an indicator of the proportion of national consumption expenditure going to the poorest 20% of households. It is a standard measure of inequality. At Union level, the poorest quintile account for 12.2% of consumption expenditure. Variation between S/Ds is less important for this indicator, which ranges from 10.7% to 12.9%. The lowest shares are found in Shan South, Chin and Tanintharyi and the highest in Bago (E), Mon and Bago(W). *(see Table 1.8 and Figure 1.5)*

43

Table 1.7: Squared Poverty Gap Index

S/D and Union	Rural		Urban		Total	
	Gap	Rank	Gap	Rank	Gap	Rank
Kayin	0.00	1	0.00	1	0.00	1
Yangon	0.01	3	0.01	3	0.01	2
Mon	0.01	2	0.01	7	0.01	3
Bago (E)	0.01	4	0.02	16	0.01	4
Bago (W)	0.01	5	0.01	4	0.01	5
Sagaing	0.01	6	0.01	2	0.01	6
Ayeyarwaddy	0.02	7	0.02	12	0.02	7
Rakhine	0.02	8	0.01	6	0.02	8
Kayah	0.03	12	0.01	5	0.02	9
Mandalay	0.02	10	0.01	9	0.02	10
Tanintharyi	0.02	9	0.02	15	0.02	11
Magwe	0.03	11	0.01	11	0.02	12
Shan (S)	0.03	13	0.01	8	0.03	13
Kachin	0.04	14	0.02	14	0.03	14
Shan (E)	0.05	15	0.01	10	0.04	15
Shan (N)	0.05	16	0.03	17	0.04	16
Chin	0.12	17	0.02	13	0.10	17
Union	**0.02**		**0.01**		**0.02**	

Table 1.8: Share of poorest quintile in consumption (%)

S/D and Union	Rural		Urban		Total	
	Share (%)	Rank	Share (%)	Rank	Share (%)	Rank
Bago (E)	13.0	14	12.5	17	12.9	1
Mon	13.1	15	11.6	12	12.8	2
Bago (W)	12.9	13	12.3	16	12.8	3
Mandalay	13.2	16	11.8	14	12.7	4
Magwe	12.6	12	11.4	11	12.5	5
Sagaing	12.6	11	11.2	8	12.3	6
Rakhine	12.4	9	11.9	15	12.3	7
Kayin	12.5	10	11.1	7	12.3	8
Yangon	13.2	17	11.8	13	12.0	9
Shan (E)	11.8	7	10.9	6	11.6	10
Ayeyarwaddy	11.7	5	10.8	5	11.5	11
Shan (N)	11.8	6	10.6	4	11.5	12
Kayah	12.4	8	10.0	1	11.3	13
Kachin	11.6	4	10.1	2	11.2	14
Tanintharyi	10.7	2	11.3	10	10.9	15
Chin	10.7	1	11.3	9	10.9	16
Shan (S)	10.8	3	10.6	3	10.7	17
Union	**12.4**		**11.6**		**12.2**	

2.6 CONTRIBUTION OF EACH SD TO NATIONAL POVERTY

The contribution of each S/D to national poverty takes into account both the incidence of poverty and the population weight (size of the population) of each S/D. The S/D which contributes most to national poverty is Mandalay (5.7%). Otherwise stated, of the 32% poor at Union level, 5.7% come from Mandalay Division. It is followed by Ayeryawaddy (4.2%) and Magwe (3.7%). Although Chin and Shan East are the poorest S/Ds, their population is quite small, which reduces their contribution to poverty at Union level. The figure below provides interesting information about where poverty is the highest in Myanmar, but also which SDs contribute most to poverty due to their population size. *(see Table 1.9 and Figure 1.6)*

Figure 1.6: Contribution of each SD to National poverty

45
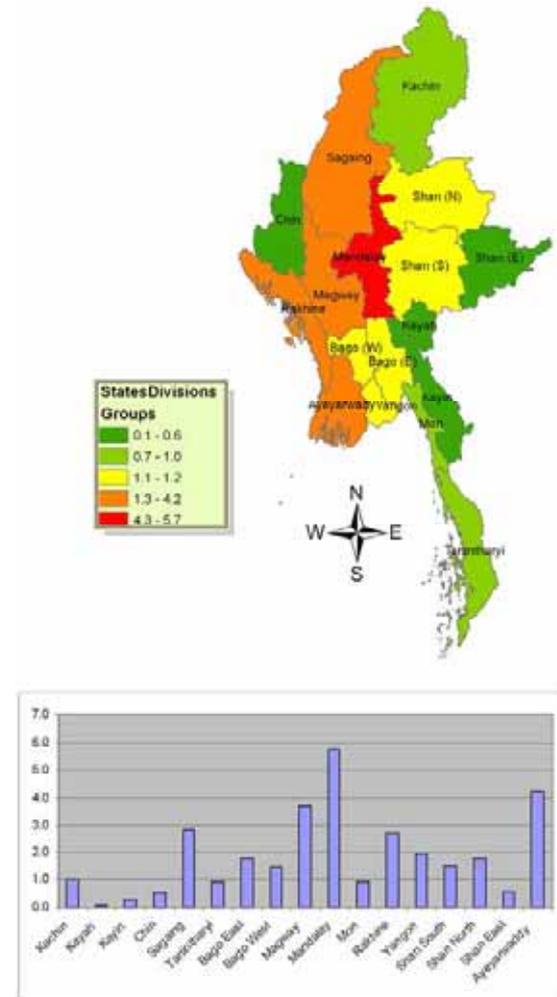
Table 1.9:   Contribution of each S/D to national poverty

S/D and Union	Overall Poverty Headcount Index	% of total population	Contribution to Union overall poverty	Rank
Kayah	34	0.2	0.1	1
Kayin	12	2.4	0.3	2
Chin	73	0.7	0.5	3
Shan (E)	52	1.1	0.6	4
Tanintharyi	34	2.8	0.9	5
Mon	22	4.3	0.9	6
Kachin	44	2.3	1.0	7
Bago (W)	33	4.4	1.4	8
Shan (S)	40	3.7	1.5	9
Shan (N)	51	3.5	1.8	10
Bago (E)	31	5.9	1.8	11
Yangon	15	12.8	1.9	12
Rakhine	38	7.2	2.7	13
Sagaing	27	10.6	2.8	14
Magwe	42	8.8	3.7	15
Ayeyarwaddy	29	14.5	4.2	16
Mandalay	39	14.7	5.7	17
Union	**32**		**32.0**	

Table 1.10:   Relative position of each SD in relation to its contribution to Union overall poverty

| | | Overall Poverty Headcount Index | | |
		Lower	Average	Higher
Population size	Lower	Kayin	Kayah Tanintharyi	Chin Shan East Kachin
	Average	Mon	Shan South Magwe Rakhine Bago East Bago West	Shan North
	Higher	Yangon	Mandalay Ayeyarwaddy Sagaing	

It is relevant to underline that Table 1.10 only reflects the relative contribute of SDs to consumption poverty and does not take into account other aspects of deprivation.

PART II: CHARACTERISTICS OF POVERTY

Part II presents data on population characteristics related to living conditions, disaggregating by strata (urban/rural) and poverty status (poor/non-poor). Specifically, it reviews:

∉ Demographic characteristics;

∉ Consumption expenditures;

∉ Economic characteristics;

∉ Participation in the labor market;

∉ Housing conditions and assets;

∉ Health and nutrition status and access to health services;

∉ Education status and access to education services.

A concluding section summarizes key characteristics of poverty.

3. DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLDS

Demographic characteristics include the following indicators:

∉ Average household size;

∉ Age dependency ratio;

∉ Economic dependency ratio;

∉ Proportion of female-headed households;

∉ Education of head of household.

3.1 AVERAGE HOUSEHOLD SIZE

Average household size, i.e., average number of individuals in the household, at Union level is 5.2 with a slightly higher household size in rural areas than in urban areas (5.2 and 5.1, respectively). Household size is an important correlate of poverty. Poor households are systematically larger than non-poor households at 6.1 and 4.9 members respectively. This pattern holds across all S/Ds. S/Ds with highest average household size are Rakhine (6.0), Kachin (6.0) and Chin (5.9) while those with lowest average household size are Bago West (4.2) and Yangon (4.7). *(see Table 2.1)*

3.2 AGE DEPENDENCY RATIO

The age dependency ratio provides information on the number of dependents (i.e. children aged less than 15 and people aged 61 years old and above), compared to the number of persons aged 15 to 60 years. The higher the dependency ratio, the higher the number of dependents compared to the number of non-dependents. The dependency ratio at Union level is 0.58. This ratio is higher in rural areas than in urban areas for most S/Ds. It is highest in Chin, Kayin and Rakhine (more than 0.70), while it is lowest in Yangon and Shan East (less than 0.50). Although poor households have larger household size, the age dependency ratio does not seem to be an important correlate of poverty. *(see Table 2.2)*

Table 2.1:   Average household size (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Bago West	4.2	4.2	5.1	3.8	4.2	1
Yangon	4.5	4.8	5.9	4.6	4.7	2
Magwe	5.0	4.6	5.5	4.6	5.0	3
Ayeyarwaddy	5.1	5.1	5.8	4.9	5.1	4
Bago East	5.2	5.4	6.2	4.9	5.2	5
Mandalay	5.3	5.2	6.0	4.9	5.2	6
Mon	5.3	5.4	6.6	5.0	5.3	7
Kayah	5.6	5.3	6.4	5.1	5.5	8
Shan North	5.4	5.7	5.9	5.1	5.5	9
Sagaing	5.6	5.3	6.5	5.2	5.5	10
Shan East	5.4	6.1	6.2	5.0	5.5	11
Kayin	5.4	6.4	6.8	5.4	5.6	12
Shan South	5.7	5.1	6.7	5.0	5.6	13
Tanintharyi	5.8	5.8	6.9	5.4	5.8	14
Chin	6.1	5.6	6.4	5.0	5.9	15
Kachin	5.7	6.7	6.5	5.6	6.0	16
Rakhine	5.9	6.3	6.9	5.6	6.0	17
Union	**5.2**	**5.1**	**6.1**	**4.9**	**5.2**	

Table 2.2:   Age dependency ratio (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Yangon	0.51	0.44	0.47	0.45	0.45	1
Shan East	0.47	0.43	0.48	0.44	0.46	2
Shan North	0.57	0.52	0.54	0.58	0.56	3
Bago West	0.56	0.52	0.65	0.52	0.56	4
Mon	0.58	0.47	0.61	0.55	0.56	5
Mandalay	0.59	0.49	0.58	0.55	0.56	6
Sagaing	0.57	0.49	0.61	0.54	0.56	7
Magwe	0.60	0.49	0.63	0.55	0.59	8
Ayeyarwaddy	0.61	0.52	0.63	0.58	0.59	9
Kayah	0.58	0.62	0.57	0.61	0.60	10
Bago East	0.63	0.53	0.64	0.61	0.62	11
Kachin	0.66	0.59	0.67	0.62	0.64	12
Shan South	0.74	0.45	0.72	0.62	0.66	13
Tanintharyi	0.71	0.60	0.65	0.71	0.69	14
Rakhine	0.77	0.53	0.80	0.67	0.72	15
Kayin	0.77	0.59	0.87	0.73	0.75	16
Chin	0.83	0.63	0.79	0.77	0.78	17
Union	**0.62**	**0.48**	**0.62**	**0.56**	**0.58**	

3.3 ECONOMIC DEPENDENCY RATIO

The economic dependency ratio is measured by dividing the number of non-working[40] members in the household by the number of working members in the household. It provides information on the number of economic dependents compared to the number of economically active persons in the household. The economic dependency ratio at Union level is 0.46. It is slightly higher in rural areas (0.47) than in urban areas (0.42). Surprisingly, there is no significant difference in the economic dependency ratio of poor and non poor households. The highest economic dependency ratios are found in Shan East and Shan North while the lowest ratio is found in Rakhine, where there are around 3 economically active persons for each dependent. The lack of relationship between age/economic dependency ratios and poverty suggests that low returns or low remuneration are much more important determinants of poverty than unemployment or low participation rates in the labor force. *(see Table 2.3)*

3.4 PROPORTION OF FEMALE-HEADED HOUSEHOLDS

At Union level, 18.9% of households are female-headed households. This proportion is much higher in urban than rural areas at 25.1% and 16.7% respectively. The highest proportion of female-headed households is in Yangon with 24.4% of households,

followed by Kachin (22.8%). The lowest proportion of female-headed households is in Chin with 10.4% of households, followed by Shan South (11.1%) and Shan East (12.8%). In Myanmar, female-headship does not appear to be a correlate of poverty. The proportion of poor households headed by women is slightly lower than the proportion of non poor households headed by women (18.3% compared to 19.1%). Accordingly, the poverty incidence for female-headed households is comparable to the poverty incidence for male-headed households at 29% and 30%, respectively. The lack of relationship between deprivation and female-headship has been found before in Myanmar[41] and may be attributable to any of the following: 1) receipt of significant remittance income; 2) better-off (urban) women can afford to head their own households and not be absorbed into other households upon death of a spouse or divorce/separation (the high percentages of female-headed households in urban areas is consistent with this explanation). For policy or programming purposes a better disaggregation of the category of female-headship is required, identifying subgroups that face particular hardship. *(see Table 2.4)*

---

[40] Non-working individuals are individuals who did not work for pay or profit or in any household business in the 6 months preceding the survey.

[41] UNDP/UNDESA. 1999. *Studies in Social Deprivation in Myanmar*. Yangon. April

Table 2.3: Economic dependency ratio (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Rakhine	0.34	0.37	0.32	0.37	0.35	1
Tanintharyi	0.40	0.41	0.40	0.41	0.41	2
Kachin	0.41	0.42	0.41	0.41	0.41	3
Yangon	0.47	0.40	0.41	0.42	0.42	4
Chin	0.42	0.40	0.41	0.45	0.42	5
Kayin	0.42	0.40	0.42	0.42	0.42	6
Mon	0.43	0.43	0.41	0.44	0.43	7
Bago (E)	0.46	0.44	0.44	0.46	0.46	8
Ayeyarwaddy	0.47	0.44	0.47	0.47	0.47	9
Sagaing	0.48	0.45	0.46	0.48	0.47	10
Mandalay	0.50	0.44	0.50	0.47	0.48	11
Kayah	0.51	0.45	0.49	0.49	0.49	12
Shan (S)	0.51	0.46	0.50	0.50	0.50	13
Bago (W)	0.51	0.49	0.50	0.51	0.50	14
Magwe	0.52	0.47	0.51	0.52	0.52	15
Shan (N)	0.57	0.48	0.57	0.53	0.55	16
Shan (E)	0.56	0.51	0.55	0.55	0.55	17
Union	**0.47**	**0.42**	**0.46**	**0.46**	**0.46**	

Table 2.4: Proportion of female-headed households (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Chin	10.8	9.3	8.9	13.6	10.4	1
Shan (S)	8.9	17.5	12.6	10.4	11.1	2
Shan (E)	10.6	21.4	11.5	13.8	12.8	3
Ayeyarwaddy	12.8	21.5	12.7	14.8	14.3	4
Bago (W)	14.8	19.2	14.4	15.6	15.3	5
Mon	14.8	28.0	20.7	16.6	17.3	6
Sagaing	16.7	20.7	15.2	17.9	17.3	7
Shan (N)	13.5	35.7	16.1	19.7	18.0	8
Kayah	9.5	31.9	9.9	21.7	18.3	9
Kayin	18.2	24.0	7.3	20.1	18.9	10
Rakhine	18.2	24.9	21.9	18.3	19.5	11
Tanintharyi	19.8	21.6	19.9	20.3	20.2	12
Magwe	19.9	28.7	21.8	20.2	20.8	13
Mandalay	19.8	23.6	18.6	22.0	20.9	14
Bago (E)	19.7	27.9	19.7	21.4	21.0	15
Kachin	19.8	31.7	25.1	21.2	22.8	16
Yangon	17.6	26.7	30.9	23.5	24.4	17
Union	**16.7**	**25.1**	**18.3**	**19.1**	**18.9**	

3.5 EDUCATION OF HEAD OF HOUSEHOLD

At Union level, 20.1% of household heads are illiterate.[42] This proportion is higher in rural areas with 23.4% of household heads who are illiterate compared to 11.1% in urban areas. The level of education is higher among household heads in urban areas than in rural areas with 11.9% having attended post-secondary education compared to 1.3% in rural areas. A higher proportion of female households heads (37.6%) are illiterate than male household heads (16.1%). Education of the household head, especially literacy[43] of the household head, is an important dimension of poverty. Illiteracy rates for poor household heads are close to double those of non-poor household heads at 28.3% and 17% respectively. Further, the percentage of poor households who have never attended school or attended only Monastic schools is 42.3%, compared to 27.7% for non-poor households. The level of education of household heads is higher in Yangon with 13.3% having attended post-secondary education and lowest in Shan East where 65% of household heads are illiterate. *(see Table 2.5)*

4. CONSUMPTION EXPENDITURE

Consumption expenditures indicators include:

∉ Total Household Consumption Expenditure;

∉ Budget Shares.

4.1 TOTAL HOUSEHOLD CONSUMPTION EXPENDITURE

Total household consumption expenditures excluding health expenditure

Average normalized[44] household consumption expenditure, excluding health expenditure,[45] varies between rural and urban areas and across SDs. Average household consumption expenditure per adult equivalent is 220 910Kyats at Union level. It is lower in rural areas at 202 186 Kyats, compared to 273 043 Kyats in urban areas. Average consumption expenditure of non poor households represents nearly twice that of poor households. The lowest average consumption expenditure is found in Chin, Shan East and Shan North while the highest is found in Yangon, Kayin and Mon. *(see Table 2.6 and Figure 2.1)*

---

[42] See Section 9 (below) for literacy rates of the population as a whole (not simply the household head).

[43] Literacy is defined as those 15 and above who can read with an understanding in local language of a simple text and resolve a simple calculation problem or those who have completed the 2nd standard.

[44] Consumption expenditures have been normalized using a Paasche Index to take into account price differences across SDs and between the two survey rounds.

[45] Along with health expenditures, total consumption expenditures exclude the user cost of durable goods.

Table 2.5:   Distribution of levels of education of household heads (%) (second round)

Group	Never attended school/ KG or 1st standard		Monastic school		Primary school (2nd to 4th std)	Middle school (5th to 8th std)	Secondary school (8th to 10th std)	Post-secondary education
	Illiterate	Literate	Illiterate	Literate				
S/D and Union								
Kachin	19.5	2.1	6.5	7.4	31.9	21.9	8.4	2.1
Kayah	30.5	0.5	6.6	1.0	29.5	16.4	9.4	6.3
Kayin	19.5	0.5	7.0	3.2	39.2	23.7	5.2	1.7
Chin	14.0	2.8	0.0	0.0	45.4	24.1	10.6	3.0
Sagaing	5.6	1.7	12.0	16.3	39.2	16.2	6.9	2.2
Tanintharyi	10.9	1.7	9.2	9.4	43.4	15.4	8.2	1.8
Bago (E)	6.9	0.5	13.2	14.3	36.3	19.3	7.8	1.5
Bago (W)	3.3	1.2	9.7	6.5	47.5	24.3	5.8	1.7
Magwe	9.1	1.6	12.9	18.1	37.0	13.6	5.6	2.1
Mandalay	10.1	1.1	11.1	12.1	33.8	18.9	10.0	2.8
Mon	10.4	0.6	6.1	2.7	43.0	24.2	9.5	3.4
Rakhine	31.8	0.5	7.1	1.9	32.2	17.0	6.4	3.2
Yangon	4.8	0.5	3.5	5.0	22.9	26.0	23.9	13.3
Shan (S)	21.8	3.1	8.8	7.6	34.1	15.9	6.6	2.0
Shan (N)	28.9	3.1	12.0	9.3	27.3	12.7	5.1	1.8
Shan (E)	46.8	0.4	18.2	8.8	10.8	9.5	3.9	1.5
Ayeyarwaddy	4.6	1.3	10.1	13.8	37.6	19.8	9.2	3.7
Strata								
Rural	12.1	1.4	11.3	12.1	39.1	17.3	5.6	1.3
Urban	6.9	0.8	4.2	5.5	22.8	25.4	22.3	11.9
Poverty status								
Poor	15.9	1.8	12.4	12.2	37.1	14.7	4.8	1.1
Non Poor	8.7	1.0	8.3	9.7	33.9	21.2	12.0	5.2
Gender								
Men	6.9	1.1	9.2	10.9	35.2	21.4	11.0	4.3
Women	27.0	1.6	10.6	7.9	33.2	11.0	5.6	3.0
Union	**10.7**	**1.2**	**9.4**	**10.4**	**34.8**	**19.4**	**10.0**	**4.1**

Figure 2.1: Total Household Consumption Expenditure (excluding health expenditure) (Kyats)
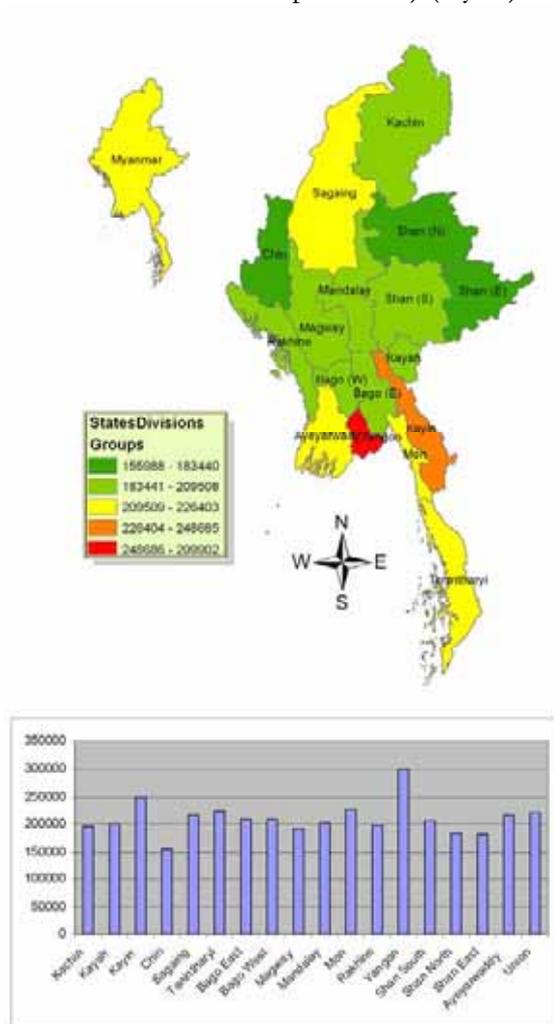
Total household consumption expenditure including health expenditure

Average normalized household consumption expenditure, including health expenditures, varies between rural and urban areas and across SDs. Average household consumption expenditure per adult equivalent is 232 504 Kyats at Union level. It is lower in rural areas at 212 093 Kyats, compared to 289 335 Kyats in urban areas. Average consumption expenditures of non poor households represent nearly twice that of poor households. The lowest average consumption expenditure is found in Chin, Shan East and Shan North while the highest is found in Yangon, Kayin and Mon. *(see Table 2.7)*

Table 2.6: Normalized Household Consumption Expenditure excluding health expenditure per adult equivalent (Kyats[46])

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non poor	Value	Rank
Yangon	231 107	323 388	132 130	323 092	299 902	1
Kayin	241 192	303 153	139 712	260 317	248 685	2
Mon	226 806	224 644	134 703	245 657	226 403	3
Tanintharyi	208 852	278 005	126 877	261 550	223 219	4
Ayeyarwaddy	212 739	240 855	130 318	247 987	217 559	5
Sagaing	213 449	239 646	132 633	241 856	217 249	6
Bago (E)	209 743	208 236	136 844	235 123	209 508	7
Bago (W)	203 906	238 204	137 337	233 216	207 776	8
Shan (S)	192 179	249 542	130 060	244 670	206 735	9
Mandalay	183 784	249 535	132 198	238 745	202 553	10
Kayah	192 787	214 705	128 908	230 275	201 392	11
Rakhine	190 717	229 352	131 549	231 346	198 155	12
Kachin	189 561	220 004	127 778	244 072	197 165	13
Magwe	187 133	241 776	130 604	230 352	192 722	14
Shan (N)	172 731	225 183	124 350	236 269	183 440	15
Shan (E)	171 881	220 547	128 602	227 289	181 799	16
Chin	148 335	181 149	113 393	247 954	155 988	17
Union	**202 186**	**273 043**	**131 203**	**254 873**	**220 910**	**-**

Table 2.7: Normalized Household Consumption Expenditure including health expenditure per adult equivalent (Kyats)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non poor	Value	Rank
Yangon	239 745	344 652	137 526	342 892	317 953	1
Kayin	254 452	316 083	147 006	274 170	261 905	2
Mon	239 417	232 256	145 500	257 519	238 080	3
Tanintharyi	224 036	291 474	134 994	279 047	238 047	4
Ayeyarwaddy	225 757	257 979	137 295	264 061	231 281	5
Sagaing	222 359	254 318	139 821	252 346	226 996	6
Bago (E)	224 694	228 150	148 130	252 413	225 233	7
Shan (S)	203 962	265 581	138 822	259 563	219 598	8
Bago (W)	211 183	248 435	141 442	242 092	215 386	9
Kachin	202 651	246 107	136 787	265 368	213 505	10
Kayah	201 376	227 295	135 323	241 927	211 552	11
Mandalay	191 342	259 652	137 379	248 631	210 841	12
Rakhine	198 088	236 629	137 488	239 405	205 508	13
Magwe	194 584	256 111	134 752	240 934	200 877	14
Shan (N)	177 754	231 060	126 600	244 101	188 637	15
Shan (E)	177 143	226 648	133 648	233 053	187 233	16
Chin	161 508	203 838	125 276	270 920	171 379	17
Union	**212 093**	**289 335**	**137 465**	**268 485**	**232 504**	

---

[46] Kyats at the time of the first round (November 2004).

4.2   BUDGET SHARES

Share of Food Expenditure in Overall Consumption excluding health expenditure

Food and non food budget shares (excluding health expenditures) vary across SDs, between rural and urban areas and poverty levels. At Union level, food expenditures represent 73% of total consumption expenditure.[47] In rural areas the share of food expenditures is 76.3% compared to 66.3% in urban areas. The share of food expenditures is higher for poor households than for non poor households at 75.4% and 72.6% respectively. The highest food shares are found in Chin (82.6%), Kayin (79%), Sagaing (78.5%) and Bago West (78.5%) whereas the lowest are found in Yangon (66%), Tanintharyi (69.8%) and Shan South (69.9%). *(see Table 2.8)*

Share of Food Expenditures in Overall Consumption including health expenditures

If we include health expenditures in total expenditures, the average share of food expenditures at union level is 69.4%. The food budget share is higher in rural areas with 72.7% compared to 62.6% in urban areas. The food budget share is still higher

for poor households (72%) than non poor households (68.9%). *(see Table 2.9)*

Share of Non Food Expenditures in Overall Consumption excluding health expenditures

At Union level, non food expenditures excluding health represent 27% of overall consumption expenditures. The share of non food consumption expenditures is higher in urban areas than in rural areas and is higher for non poor households than for poor households. *(see Table 2.10)*

Share of Non Food Expenditures in Overall Consumption including health expenditures

At Union level, non food expenditures including health represent 30.6% of overall consumption expenditures. The share of non food consumption expenditures is higher in urban areas than in rural areas and is higher for non poor households than for poor households. *(see Table 2.11)*

---

[47] These extremely high food share values may be due to low rental expenditures in Myanmar (see below) in addition to exclusion of health expenditures. Similar results have been found in other low income South East Asian countries such as Cambodia whose average food share was 69% in 1997 (Cambodia Ministry of Planning, 1997).

Table 2.8:   Share of Food Expenditure in Overall Consumption (excluding health expenditure)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non poor	Value	Rank
Yangon	77.0	63.4	67.6	66.0	66.0	1
Tanintharyi	71.8	63.9	71.7	69.4	69.8	2
Shan (S)	72.9	63.0	71.2	69.5	69.9	3
Kachin	72.8	64.3	72.4	69.7	70.4	4
Rakhine	71.7	67.7	72.2	70.5	70.9	5
Ayeyarwaddy	72.9	68.5	73.6	71.8	72.1	6
Mandalay	77.0	67.1	76.2	72.7	73.5	7
Shan (E)	75.8	67.8	76.8	72.4	73.8	8
Kayah	74.8	73.4	72.8	74.6	74.3	9
Mon	76.1	72.9	76.8	75.4	75.5	10
Bago (E)	76.0	73.8	76.4	75.5	75.7	11
Shan (N)	78.6	70.4	79.0	75.4	76.6	12
Magwe	78.8	71.4	78.9	77.5	77.9	13
Bago (W)	79.1	74.5	78.6	78.5	78.5	14
Sagaing	79.8	71.9	77.5	78.7	78.5	15
Kayin	79.8	74.2	82.6	78.8	79.0	16
Chin	85.7	74.4	79.9	85.3	82.6	17
Union	**76.3**	**66.3**	**75.4**	**72.6**	**73.0**	

Table 2.9:   Share of Food Expenditures in Overall Consumption (including health expenditures)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non poor	Value	Rank
Yangon	74.2	59.5	64.9	62.2	62.3	1
Kachin	68.1	57.5	67.6	64.1	65.0	2
Tanintharyi	66.9	60.9	67.4	65.0	65.4	3
Shan (S)	68.7	59.2	66.7	65.5	65.8	4
Ayeyarwaddy	68.7	64.0	69.8	67.4	67.8	5
Rakhine	69.1	65.7	69.1	68.1	68.3	6
Bago (E)	71.0	67.4	70.6	70.4	70.4	7
Mandalay	73.9	64.5	73.3	69.8	70.6	8
Kayah	71.7	69.4	69.4	71.0	70.7	9
Shan (E)	73.5	66.0	73.9	70.6	71.7	10
Mon	72.1	70.5	71.1	71.9	71.8	11
Shan (N)	76.4	68.6	77.6	73.0	74.4	12
Magwe	75.8	67.4	76.5	74.1	74.7	13
Kayin	75.7	71.1	78.5	74.8	75.0	14
Sagaing	76.6	67.8	73.5	75.4	75.2	15
Chin	78.7	66.1	72.3	78.1	75.2	16
Bago (W)	76.4	71.4	76.3	75.6	75.7	17
Union	**72.7**	**62.6**	**72.0**	**68.9**	**69.4**	

Table 2.10: Share of Non Food Expenditures in Overall Consumption (excluding health expenditures)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non poor	Value	Rank
Yangon	23.0	36.6	32.4	34.0	34.0	1
Tanintharyi	28.2	36.1	28.3	30.6	30.2	2
Shan (S)	27.1	37.0	28.8	30.5	30.1	3
Kachin	27.2	35.7	27.6	30.3	29.6	4
Rakhine	28.3	32.3	27.8	29.5	29.1	5
Ayeyarwaddy	27.1	31.5	26.4	28.2	27.9	6
Mandalay	23.0	32.9	23.8	27.3	26.5	7
Shan (E)	24.2	32.2	23.2	27.6	26.2	8
Kayah	25.2	26.6	27.2	25.4	25.7	9
Mon	23.9	27.1	23.2	24.6	24.5	10
Bago (E)	24.0	26.2	23.6	24.5	24.3	11
Shan (N)	21.4	29.6	21.0	24.6	23.4	12
Magwe	21.2	28.6	21.1	22.5	22.1	13
Bago (W)	20.9	25.5	21.4	21.5	21.5	14
Sagaing	20.2	28.1	22.5	21.3	21.5	15
Kayin	20.2	25.8	17.4	21.2	21.0	16
Chin	14.3	25.6	20.1	14.7	17.4	17
	23.7	**33.7**	**24.6**	**27.4**	**27.0**	

Table 2.11: Share of Non Food Expenditures in Overall Consumption (including health expenditures)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non poor	Value	Rank
Bago (W)	23.6	28.6	23.7	24.4	24.3	1
Chin	21.3	33.9	27.7	21.9	24.8	2
Sagaing	23.4	32.2	26.5	24.6	24.8	3
Kayin	24.3	28.9	21.5	25.2	25.0	4
Magwe	24.2	32.6	23.5	25.9	25.3	5
Shan (N)	23.6	31.4	22.4	27.0	25.6	6
Mon	27.9	29.5	28.9	28.1	28.2	7
Shan (E)	26.5	34.0	26.1	29.4	28.3	8
Kayah	28.3	30.6	30.6	29.0	29.3	9
Mandalay	26.1	35.5	26.7	30.2	29.4	10
Bago (E)	29.0	32.6	29.4	29.6	29.6	11
Rakhine	30.9	34.3	30.9	31.9	31.7	12
Ayeyarwaddy	31.3	36.0	30.2	32.6	32.2	13
Shan (S)	31.3	40.8	33.3	34.5	34.2	14
Tanintharyi	33.1	39.1	32.6	35.0	34.6	15
Kachin	31.9	42.5	32.4	35.9	35.0	16
Yangon	25.8	40.5	35.1	37.8	37.7	17
Union	**27.3**	**37.4**	**28.0**	**31.1**	**30.6**	

5. ECONOMIC CHARACTERISTICS

Economic characteristics indicators include:

∉ Distribution of the population engaged in an economic activity by occupational category;

∉ Distribution of the population engaged in an economic activity by industry group;

∉ Household business activities;

∉ Households with any adult member owing money to any source.

5.1 DISTRIBUTION OF THE POPULATION ENGAGED IN AN ECONOMIC ACTIVITY BY OCCUPATIONAL CATEGORY

Occupational category provides information on productive activities of the economically active population. [48] At Union Level, 45.5% of the working population are employers or own account workers, of which 9.1% are employers and 36.4% are own account workers. In rural areas, own account workers represent 37.8% of the working population, while contributing family workers and casual laborers each represent 18.7% and 18.6% of the working population. In urban areas, employees represent the biggest proportion of the working population with 34.9%, followed by own account workers (32.3%) and contributing family workers (11.5%). The proportion of non poor working individuals who are employers or own account workers

is higher than for poor individuals (respectively 48.8% and 38.4%). A higher proportion of men than women are employers or own account workers (27.2% for men and 18.3% for women). Casual labor appears to be an important correlate of poverty. The proportion of the working population in poor households that are casual laborers is almost twice that for the non poor (22.9% and 12.5%, respectively). Casual labor is much more important in rural areas where it represents 18.6% of the working population against 7.7% in urban areas. *(see Table 2.12)*

---

[48] The economically active population is defined as individuals who worked for pay or profit or any household business.

Table 2.12:   Distribution of the population 10 years and over engaged in an economic activity by occupational category for main economic activity in the last 7 days (%) (second round)

Groups	Employer	Own account worker	Employee	Member of Producer's cooperative	Contributing family worker	Casual laborer	Workers not classifiable
State/Division							
Kachin	6.9	48.1	11.3	0.1	17.5	11.9	4.2
Kayah	5.5	35.8	24.0	0.2	26.4	7.2	0.8
Kayin	4.2	53.9	9.9	0.0	15.2	14.1	2.6
Chin	1.6	80.6	5.2	0.0	8.5	1.5	2.6
Sagaing	8.7	39.8	12.6	0.1	23.6	12.0	3.2
Tanintharyi	7.7	34.6	22.9	0.4	16.1	11.6	6.6
Bago (E)	10.7	31.6	18.3	0.4	8.2	28.8	1.9
Bago (W)	10.2	29.0	8.0	0.0	17.0	29.4	6.3
Magwe	6.9	38.7	11.1	0.4	18.3	21.2	3.3
Mandalay	8.6	33.7	20.9	0.1	18.1	14.6	4.0
Mon	11.2	42.1	12.9	0.0	14.1	16.0	3.8
Rakhine	10.1	37.5	12.4	0.1	7.1	25.4	7.3
Yangon	8.6	26.2	44.3	0.2	9.7	6.7	4.3
Shan (S)	5.6	39.5	9.0	1.3	30.6	12.5	1.5
Shan (N)	5.9	54.6	9.1	0.2	20.0	8.7	1.5
Shan (E)	9.3	42.3	6.2	0.1	36.5	4.1	1.6
Ayeyarwaddy	13.1	33.8	13.0	0.1	17.5	17.9	4.6
Strata							
Rural	9.1	37.8	11.9	0.2	18.7	18.6	3.7
Urban	8.9	32.3	34.9	0.2	11.5	7.7	4.4
Poverty status							
Poor	5.1	33.3	16.1	0.2	17.4	22.9	5.0
Non Poor	10.9	37.9	18.4	0.2	16.6	12.5	3.4
Gender							
Men	6.8	20.4	11.1	0.1	8.1	9.7	2.5
Women	2.3	16.0	6.5	0.1	8.8	6.2	1.4
Union	**9.1**	**36.4**	**17.6**	**0.2**	**16.9**	**15.9**	**3.9**

Table 2.13: Distribution of the population 10 years and over engaged in an economic activity by industry group for main economic activity in the last 7 days (%) (second round)

Groups	Industry code															
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
State/Division																
Kachin	40.6	0.7	9.8	3.6	0.2	4.6	19.9	0.3	2.7	0.1	6.5	1.1	2.9	2.2	3.5	0.0
Kayah	57.2	0.3	1.3	7.4	0.6	2.7	11.9	0.8	4.1	0.0	1.0	3.6	2.3	2.9	1.8	0.6
Kayin	59.5	1.1	0.9	4.7	0.2	2.3	10.0	0.0	4.3	0.0	7.8	0.9	1.5	4.6	1.6	0.0
Chin	71.2	0.2	0.8	1.1	0.0	4.9	2.6	1.3	8.6	0.0	1.3	2.9	2.5	1.1	0.9	0.0
Sagaing	61.2	0.8	2.7	5.8	0.2	2.2	8.4	0.7	2.4	0.1	2.8	1.5	2.2	4.3	3.9	0.0
Tanintharyi	31.0	21.8	1.4	3.4	0.1	5.9	17.7	0.9	2.7	0.2	5.0	0.8	1.5	6.0	1.2	0.0
Bago (E)	58.9	1.1	0.7	5.8	0.0	2.8	8.5	0.4	3.7	0.2	7.9	0.9	1.8	5.1	1.7	0.0
Bago (W)	64.5	3.5	0.1	3.6	0.2	2.6	6.3	0.1	2.3	0.2	7.4	0.3	1.8	5.6	1.4	0.0
Magwe	69.0	1.1	1.1	5.7	0.2	1.2	6.0	0.5	1.8	0.2	2.9	0.8	1.8	4.7	2.7	0.0
Mandalay	51.0	0.2	1.5	11.9	0.4	2.7	13.1	1.4	2.8	0.1	3.0	1.2	2.3	3.9	3.7	0.0
Mon	37.7	4.7	0.6	8.5	0.2	4.2	16.2	2.0	4.3	0.1	8.8	1.6	2.1	6.7	1.7	0.0
Rakhine	34.1	13.2	0.1	8.3	0.3	2.0	11.7	0.5	3.5	0.2	5.9	2.7	2.8	9.2	4.7	0.3
Yangon	13.5	0.9	1.2	12.5	0.8	4.5	18.9	1.1	6.9	0.4	11.6	8.2	2.4	8.8	5.8	0.8
Shan (S)	71.0	1.7	0.3	4.0	0.3	2.9	1.6	0.1	2.9	0.3	8.1	0.1	1.6	3.8	0.6	0.0
Shan (N)	69.9	0.1	2.2	3.0	0.0	1.6	10.7	1.2	2.9	0.1	2.1	0.9	1.2	2.2	1.3	0.0
Shan (E)	67.1	0.9	0.1	5.2	0.0	2.9	14.3	0.7	2.9	0.1	1.8	0.6	0.5	1.5	1.0	0.0
Ayeyarwaddy	49.6	4.9	0.1	5.8	0.2	1.7	13.1	0.9	2.7	0.1	7.0	0.9	1.8	7.5	2.9	0.0
Strata																
Rural	64.3	3.4	1.2	5.7	0.1	2.1	7.4	0.5	2.1	0.1	4.2	0.7	1.4	4.3	2.1	0.0
Urban	7.5	1.0	1.3	12.5	0.9	4.5	24.5	1.9	7.1	0.5	10.8	5.9	3.9	9.5	6.1	0.4
Poverty status																
Poor	59.4	3.1	1.4	6.9	0.1	2.8	7.7	0.6	2.6	0.1	4.1	1.1	1.1	5.2	3.2	0.01
Non Poor	45.8	2.6	1.2	7.6	0.4	2.6	13.5	1.0	3.7	0.2	6.7	2.4	2.5	5.8	3.1	0.2
Union	**50.2**	**2.8**	**1.2**	**7.4**	**0.3**	**2.7**	**11.6**	**0.9**	**3.3**	**0.2**	**5.8**	**2.0**	**2.0**	**5.6**	**3.1**	**0.1**

(1) Agriculture, hunting and forestry; (2) Fishing; (3) Mining and quarrying; (4) Manufacturing; (5) Electricity, Gas and water supply; (6) Construction; (7) Wholesale and retail trade, repair of motor vehicles, motor cycles and personal and household goods; (8) Hotel and restaurants; (9) Transport, storage and communications; (10) Financial intermediation; (11) Real estate, renting and business activities; (12) Public administration and defense; compulsory social security; (13) Education; (14) Health and social work; (15) Activities of private households as employers and undifferentiated production activities of private households; (16) Extra-territorial organizations and bodies.

5.2 DISTRIBUTION OF THE POPULATION ENGAGED IN AN ECONOMIC ACTIVITY BY INDUSTRY GROUP

The distribution of the population engaged in an economic activity by industry group provides information on the most important industries in the country in terms of employment, but also on the types of economic activities associated with poverty. Agriculture (including hunting and forestry) is the main industry in Myanmar, employing over 50% of the working population. It is followed by wholesale and retail trade, and repair with 11.6% of the working population, manufacturing with 7.4% and real estate, renting and business activities with 5.8% of the working population. In rural areas, agriculture employs 64.3% of the working population. In urban areas, wholesale and retail trade, and repair employs the majority of the working population with 24.5%. It is followed by manufacturing (12.5%) and real estate, renting and business activities (10.8%). Individuals engaged in agriculture only represent 7.5% of the working population. There is a strong association between agriculture and poverty. The proportion of individuals from poor households working in agriculture is 59.4%, compared to 45.8% for non poor households. The highest proportion of the working population engaged in agriculture is found in Chin, Shan South, Shan North and Magwe, while the lowest proportion is found in Yangon. Fishing is most important in terms of proportion of the working population in Tanintharyi (21.8%) and in Rakhine (13.2%). *(see Table 2.13)*

5.3 HOUSEHOLD BUSINESS ACTIVITIES

Agricultural Activities

Average area farmed presents the total area farmed by agricultural households divided by the total number of agricultural households. It varies significantly across S/Ds and between rural and urban areas. Average area farmed for the rainy season is 6.9 acres per agricultural household on average. The smallest farmed areas are in Chin (1.5 acres), Shan East (2.9 acres) and Shan North (3.6 acres), even though a majority of the population works in agriculture. These regions are mountainous which makes it hard to access farm land. Households turn mostly to slash-and-burn agriculture as the main method of cultivation, which explains in part the small size of areas farmed. It is in Ayeyarwaddy that average area farmed is the largest with 12.4 acres per agricultural household, followed by Bago East with 9.7 acres per agricultural household, Sagaing with 8.3 acres and Yangon with 8.2 acres per agricultural household. There is a high correlation between average area farmed and poverty, especially in rural areas. Average area farmed for non-poor households is significantly higher than for poor households at 7.7 and 4.9 acres, respectively. Average area farmed decreases slightly in the dry season (second round) to an average of 6.0 acres per agricultural household. *(see Table 2.14 and Figure 2.2)*

Figure 2.2: Average area farmed in the last 6 months in acres (first round)
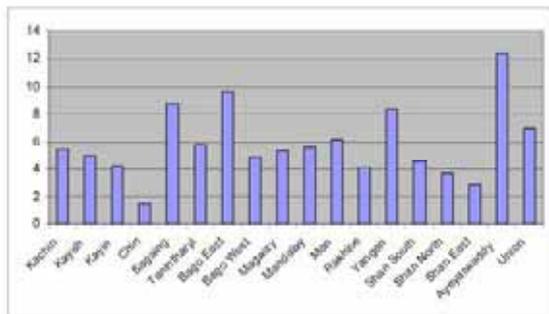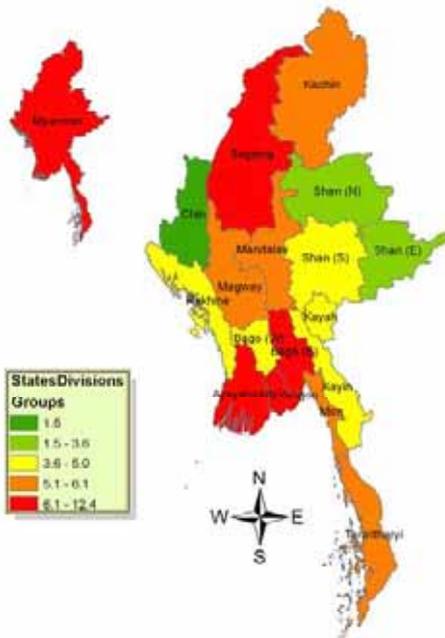
Average land area owned by agricultural households is 6.1 acres. The size of land owned is slightly higher in rural areas with an average of 6.2 acres compared to 4.9 acres in urban areas[49]. As with area farmed, land ownership is an important correlate of poverty. Average land area owned by non poor households is significantly higher than for poor households (6.9 acres compared to 4.1 acres). SDs where average land area owned is the smallest are Chin (0.6 acres), Shan North (2.2 acres) and Shan East (2.1

acres). SDs where average land area owned is the largest are Ayeyarwaddy (11.2 acres), Sagaing (7.9 acres), Yangon (7.3 acres) and Bago East (6.9 acres). On average, area farmed by agricultural households is larger than the land area owned by the households at 6.9 and 6.1 acres respectively. In some areas, the two measures diverge sharply, as in Chin, where households farm an average area that is 2.5 times the average area owned. This is mainly due to the fact that households not only farm the land they own but also farm land acquired through user rights from local authorities, rented, borrowed, obtained as collateral for a loan or any other mode[50]. *(see Table 2.15 and Figure 2.3)*

Figure 2.3: Average land area owned by agricultural households (acres) (first round)

---

[49] Only 770 agricultural households answered this question in urban areas compared to 7 601 households in rural areas.
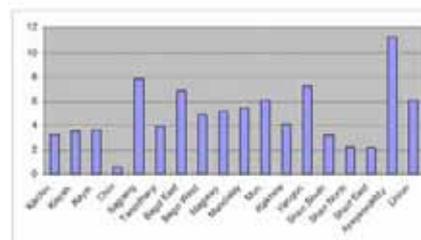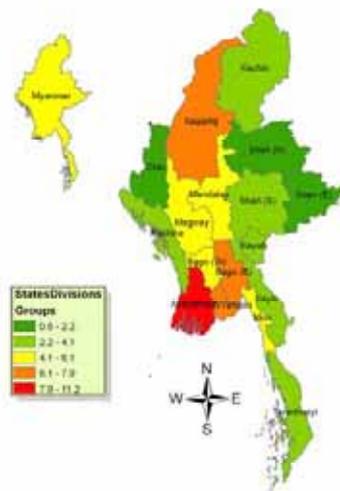
[50] This aspect is analyzed in more details in the Vulnerability Profile.

Table 2.14:   Average area farmed in the last 6 months among agricultural households in acres (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Ayeyarwaddy	12.3	15.9	5.8	14.3	12.4	1
Bago (E)	9.7	8.2	7.7	10.0	9.7	2
Sagaing	8.9	5.6	8.7	8.8	8.7	3
Yangon	8.4	7.8	5.8	8.8	8.3	4
Mon	6.2	5.2	4.8	6.3	6.1	5
Tanintharyi	5.7	6.2	3.9	6.5	5.8	6
Mandalay	5.7	3.4	4.5	6.2	5.6	7
Kachin	5.5	5.5	4.7	6.1	5.5	8
Magwe	5.4	5.5	5.0	5.7	5.4	9
Kayah	5.1	4.7	4.5	5.3	5.0	10
Bago (W)	4.9	4.7	3.4	5.3	4.9	11
Shan (S)	4.8	1.8	4.5	4.6	4.6	12
Kayin	4.1	9.2	3.9	4.2	4.2	13
Rakhine	4.2	2.2	3.1	4.5	4.1	14
Shan (N)	3.5	5.3	3.0	4.3	3.6	15
Shan (E)	2.5	6.3	2.1	3.7	2.9	16
Chin	1.5	1.7	1.4	1.8	1.5	17
Union	**7.0**	**6.0**	**4.9**	**7.7**	**6.9**	

Table 2.15:   Average land area owned by agricultural households (acres) (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Ayeyarwaddy	11.2	14.1	0.5	0.9	11.2	1
Sagaing	8.0	4.7	1.6	2.7	7.9	2
Yangon	7.3	7.4	1.7	2.8	7.3	3
Bago East	6.8	7.9	2.6	3.6	6.9	4
Mon	6.2	4.5	2.6	3.8	6.1	5
Mandalay	5.6	3.1	3.0	3.9	5.5	6
Magwe	5.2	5.2	2.8	3.8	5.2	7
Bago West	4.9	4.6	2.5	4.5	4.9	8
Rakhine	4.2	1.6	2.4	4.7	4.1	9
Tanintharyi	4.0	3.3	3.3	5.3	3.9	10
Kayin	3.5	9.4	4.8	5.3	3.7	11
Kayah	2.9	6.7	4.4	6.1	3.6	12
Kachin	3.3	3.6	5.0	6.2	3.3	13
Shan South	3.3	1.0	5.7	7.1	3.2	14
Shan North	2.2	2.7	5.6	7.6	2.2	15
Shan East	2.1	2.1	7.5	8.0	2.1	16
Chin	0.6	1.0	4.9	13.1	0.6	17
Union	**6.2**	**4.9**	**4.1**	**6.9**	**6.1**	

One quarter of the people working in agriculture are landless[51]. The landless rate is higher in urban areas than in rural areas (44.2% compared to 25.1%). A higher proportion of poor individuals working in agriculture is landless (31.8%) compared to non poor individuals working in agriculture (22%). SDs with highest landless rates are Yangon (51.2%), Bago East (45.6%), Bago West (36.1%) and Ayeyarwaddy (32.3%). *(see Table 2.16)*

Figure 2.4:   Proportion of households with access to agricultural credit in the last 6 months (%) (first round)

Access to agricultural credit has the potential of increasing farmed area and crop yields by enabling farmers to lease land and purchase more inputs at the start of the agricultural season. The proportion of agricultural households having received a loan for their agricultural activities between May and November 2004 (first round), which covers most of the agricultural season, is 38.1%. In the dry season (second round) only 13.3% of agricultural households declared having received a loan for their agricultural activities. The proportion of agricultural households having received an agricultural loan is higher in rural areas than in urban areas (39% and 19.9%, respectively). There is only a slight different in credit access between poor and non-poor households at 36.7 and 38.6% respectively. S/Ds where agricultural households had more access to an agricultural loan are: Bago East (67.7% of households), Yangon (59.9%), Ayeyarwaddy (49.4%) and Bago West (48%). Shan East has the lowest access to agricultural credit due to traditional social mores against lending or borrowing money. Access to agricultural credit is also quite low in Chin and Tanintharyi at 5.4% and 10.7% of agricultural households respectively. *(see Table 2.17 and Figure 2.4)*

---

[51] Landless rate in agriculture is defined here as the proportion of the population working in the agriculture sector in the last 6 months for their main economic activity that belongs to a household that does not own any agricultural land. This includes farmers who do not own any agricultural land, agricultural employees, casual laborers working in agriculture, etc.

Table 2.16: Landless rate in agriculture (%) (first round)

S/D and Union	By milieu		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan East	7.6	8.3	4.6	12.0	7.6	1
Shan South	7.8	47.9	9.9	10.0	10.0	2
Chin	10.0	15.2	9.7	12.1	10.2	3
Shan North	10.1	18.9	10.0	11.4	10.6	4
Kayah	4.7	47.4	11.6	10.6	11.1	5
Sagaing	14.9	37.1	20.9	13.4	15.6	6
Kayin	16.4	15.5	9.9	17.7	16.4	7
Mandalay	23.7	51.5	30.7	19.2	24.3	8
Mon	24.7	27.9	41.8	20.5	24.9	9
Tanintharyi	26.5	17.5	26.9	24.8	25.5	10
Kachin	24.4	36.5	30.7	20.4	25.6	11
Magwe	26.0	41.2	34.6	19.6	26.2	12
Rakhine	30.0	69.5	42.9	23.2	31.5	13
Ayeyarwaddy	32.2	40.4	43.7	26.8	32.3	14
Bago West	35.1	72.3	52.5	27.7	36.1	15
Bago East	44.5	77.3	64.3	38.0	45.6	16
Yangon	48.9	73.4	63.1	47.3	51.2	17
Union	**25.1**	**44.2**	**31.8**	**22.0**	**25.7**	

Table 2.17: Proportion of agricultural households having received an agricultural loan in the last 6 months (% in the first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Bago (E)	67.6	73.4	56.9	69.7	67.7	1
Yangon	65.9	15.9	49.1	61.5	59.9	2
Ayeyarwaddy	50.0	28.9	54.8	47.8	49.4	3
Bago (W)	48.5	32.0	48.5	47.8	48.0	4
Magwe	45.7	24.4	42.8	46.5	45.3	5
Kayah	44.6	23.7	41.3	40.6	40.8	6
Sagaing	39.4	23.6	42.1	37.9	38.7	7
Shan (S)	40.0	17.7	51.9	30.0	38.5	8
Mandalay	36.8	20.6	38.9	34.8	36.2	9
Rakhine	26.0	2.9	27.7	23.9	24.9	10
Mon	23.9	12.2	35.7	21.1	22.9	11
Kachin	21.2	27.3	25.5	18.9	21.7	12
Kayin	16.4	12.0	3.3	18.1	16.3	13
Shan (N)	15.3	15.0	10.6	20.2	15.2	14
Tanintharyi	11.2	7.1	3.4	13.6	10.7	15
Chin	4.7	20.5	6.2	2.4	5.4	16
Shan (E)	1.8	0.0	1.8	1.4	1.6	17
Union	**39.0**	**19.9**	**36.7**	**38.6**	**38.1**	

Non-Agricultural Activities

Access to credit for non-agricultural businesses is quite low with only 15% of households with non-agricultural business activities having received a loan for their business activities during the rainy season (first round). This proportion declines to 9.6% in the dry season (second round). Values of this indicator are lowest in Shan East, Shan South, Chin and Shan North and highest in Kayin, Kayah and Ayeyarwaddy. *(see Table 2.18 and Figure 2.5)*

Figure 2.5: Proportion of non-agricultural households with access to credit for non-agricultural businesses (% in the first round)
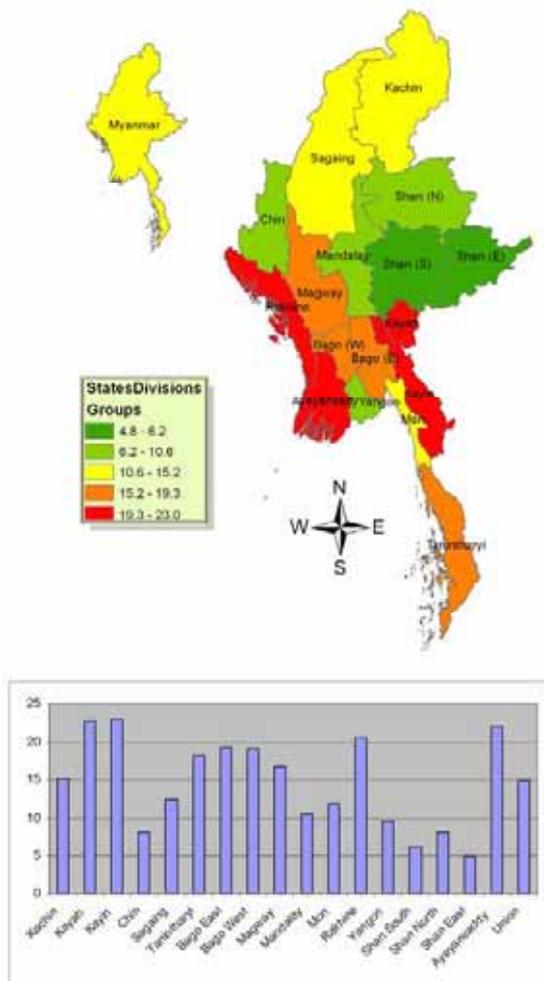
5.4 HOUSEHOLDS WITH ANY ADULT MEMBER OWING MONEY TO ANY SOURCE

Figure 2.6: Households with any adult member owing money to any source (% in the first round)
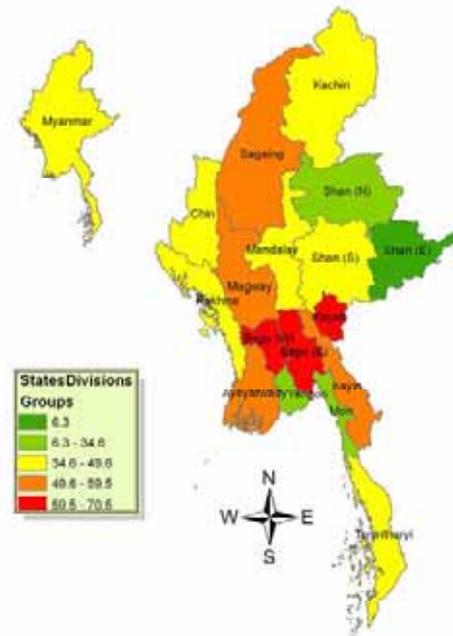
Indebtedness can be both a cause of poverty and a coping strategy depending on its level and conditions leading to its occurrence. In the first round of the survey (November 2004), almost half of the households had at least one outstanding loan (48.8%) while only 32.6% of households had one in the second round (May 2005). A higher proportion of households seem to go in debt during the rainy season than during the

dry season. The proportion of households with outstanding loans is much higher in rural areas than in urban areas (54.8% of households vs. 32%). A higher proportion of poor households owed money at the time of the first round than non poor households (53.3% vs. 47%). Again, it is in Shan East

that we find the smallest proportion of households owing money (6.3%) and in Shan North (23.6%). S/Ds with the highest proportion of households owing money are: Bago West (70.5%), Bago East (62.9%) and Kayah (61.4%). *(see Table 2.19 and Figure 2.6)*

Table 2.18: Proportion of non-agricultural households having received a loan for a non-agricultural business in the last 6 months (% in the first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayin	25.3	17.3	20.2	23.2	23.0	1
Kayah	28.0	20.4	27.9	21.5	22.7	2
Ayeyarwaddy	22.5	21.1	29.2	20.0	22.0	3
Rakhine	23.8	12.1	22.8	19.7	20.6	4
Bago (E)	17.2	25.1	17.1	20.0	19.3	5
Bago (W)	20.2	16.4	32.5	16.3	19.2	6
Tanintharyi	19.0	16.1	25.2	16.1	18.2	7
Magwe	17.0	16.3	12.9	18.1	16.8	8
Kachin	19.0	9.6	17.7	13.8	15.2	9
Sagaing	11.1	15.5	14.3	12.0	12.4	10
Mon	13.0	8.0	10.4	12.0	11.8	11
Mandalay	11.0	10.1	10.9	10.5	10.6	12
Yangon	9.4	9.7	26.7	7.7	9.6	13
Shan (N)	8.6	7.3	8.4	7.8	8.1	14
Chin	0.0	10.9	7.9	8.2	8.0	15
Shan (S)	1.5	9.6	8.8	5.6	6.2	16
Shan (E)	6.5	2.4	0.9	6.4	4.8	17
Union	**16.6**	**12.6**	**18.8**	**14.0**	**15.0**	

Table 2.19: Proportion of households with any adult member owing money to any source at the time of the first round (% in the first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan (E)	5.8	8.2	4.9	7.5	6.3	1
Shan (N)	25.2	17.6	18.6	28.1	23.6	2
Mon	32.0	18.5	29.2	29.6	29.5	3
Yangon	47.2	30.3	53.8	32.0	34.6	4
Chin	36.5	53.7	40.2	41.2	40.5	5
Kachin	47.2	28.0	49.4	37.7	42.4	6
Mandalay	49.8	29.4	49.4	41.1	43.9	7
Shan (S)	52.1	24.2	51.8	41.7	45.0	8
Rakhine	54.1	30.3	55.8	46.4	49.5	9
Tanintharyi	50.7	45.5	52.3	48.5	49.6	10
Kayin	55.9	31.7	55.4	52.7	53.0	11
Sagaing	57.2	38.1	64.6	51.5	54.4	12
Magwe	58.7	37.3	57.1	56.2	56.5	13
Ayeyarwaddy	64.3	36.6	63.8	58.0	59.5	14
Kayah	66.8	53.1	74.5	56.3	61.4	15
Bago (E)	64.6	53.4	61.4	63.4	62.9	16
Bago (W)	73.8	44.6	71.1	70.3	70.5	17
Union	**54.8**	**32.0**	**53.3**	**47.0**	**48.8**	

6. PARTICIPATION IN THE LABOR MARKET

Indicators of participation in the labor market are the following:

∉ Labor force participation rate

∉ Unemployment rate

∉ Underemployment rate

6.1 LABOR FORCE PARTICIPATION RATE

Population 10 years and over

The labor force participation rate of the population aged 10 years and over is defined as the proportion of the population aged 10 years and over that are in the labor force, i.e., working or available for work[52]. Labor force participation at Union level for the first round is 57.6% compared to 57.2% in the second round. It is higher in rural areas than in urban areas for both rounds at around 60% and 50%, respectively. The participation rate is higher for poor households than non poor households: 60.5% compared to 56.3% in the first round and 59.8% compared to 56.1% for the second round. Men's participation rate is higher than women's in both rounds at 70% and 45%, respectively. In the first round, the lowest participation rates were found in Yangon at 49.8%, followed by Rakhine (50.9%), Chin (51.8%) and Mon (52.3%). In the second round, lowest rates were found

in Rakhine (49.1%), Yangon (50.4%) and Tanintharyi (52.2%). The highest participation rates in the both rounds are in Shan East (69.4%), Shan North (67.4%) and Shan South (63.4%). *(see Table 2.20, Table 2.21 and Figure 2.7)*

Figure 2.7: Labor force participation rate in population 10 years and over in the last 6 months (first round)

---

[52] The labor force is defined as individuals who worked for pay or profit or any household business or were available for work. It excludes: individuals who were absent due to health or other reasons, individuals doing housework fulltime, individuals studying fulltime (or other training), fulltime religious personnel, the disabled or developmentally delayed, individuals living on pension or retired, and individuals who stopped looking for work.

Table 2.20: Labor force participation rate in population 10 years and over in the last 6 months (% in the first round)

S/D and Union	By strata		By poverty status		By gender		Total	
	Rural	Urban	Poor	Non Poor	Men	Women	%	Rank
Shan East	71.4	62.5	72.1	66.6	78.5	60.2	69.4	1
Shan North	69.9	58.7	68.5	66.2	75.1	60.1	67.4	2
Shan South	66.3	55.1	65.7	62.0	69.2	57.6	63.4	3
Magwe	63.5	54.2	63.8	61.8	74.5	52.6	62.6	4
Bago West	62.7	56.4	64.0	61.0	76.8	48	62	5
Sagaing	61.4	54	61.9	59.8	70.3	51.3	60.3	6
Mandalay	61.5	52.2	62.3	56.6	68.9	49.9	58.8	7
Bago East	59.4	54.2	58.5	58.6	71.6	46.2	58.5	8
Kayah	60.9	54.2	60.3	57.3	68.8	48	58.3	9
Ayeyarwaddy	59.8	51.1	61.4	56.9	72.6	44.7	58.2	10
Kachin	60	52.1	61.1	55.2	67.8	48.3	57.7	11
Kayin	57.3	52.2	66.0	55.4	72.2	41.6	56.5	12
Tanintharyi	54.1	52.3	54.0	53.6	71.5	37.6	53.7	13
Mon	53.3	48.5	51.5	52.6	68.4	38	52.3	14
Chin	53.3	46.8	50.5	55.4	60.2	43.6	51.8	15
Rakhine	50.7	51.5	50.0	51.4	68	34.9	50.9	16
Yangon	57.1	47.5	52.5	49.3	66.8	34.8	49.8	17
Union	**60.2**	**50.8**	**60.5**	**56.3**	**70.6**	**45.8**	**57.6**	

Table 2.21: Labor force participation rate in population 10 years and over in the last 6 months (% in the second round)

S/D and Union	By strata		By poverty status		By gender		Total	
	Rural	Urban	Poor	Non Poor	Men	Women	%	Rank
Shan North	70.8	58.6	70.4	65.8	75.7	61.0	68.1	1
Shan East	68.3	62.4	68.0	65.8	78.7	55.1	66.9	2
Shan South	67.4	54.5	66.1	62.7	69	58.9	64	3
Magwe	63.8	54.9	64.2	62.0	74.3	53.4	62.9	4
Kayah	64.7	55.2	62.7	60.1	71.7	50.3	61.0	5
Bago West	60.9	56.5	62.2	59.6	77.2	44.8	60.4	6
Chin	60.8	53.6	58.0	62.3	67.2	51.6	59.2	7
Mandalay	61.5	52.4	62.5	56.7	69.3	49.7	58.9	8
Bago East	59.0	56.7	58.1	58.8	72.8	45.2	58.6	9
Sagaing	59.0	53.4	59.2	57.9	69.8	48.0	58.2	10
Ayeyarwaddy	59.3	51.9	60.2	57.1	72.1	44.9	58.0	11
Kayin	57	51.3	59.8	55.7	71.1	42.3	56.1	12
Kachin	53.6	51.8	54.0	52.4	66	41.0	53.1	13
Mon	53.0	50.1	52.4	52.5	69	37.5	52.5	14
Tanintharyi	52.2	52.4	51.1	52.8	70.5	35.8	52.2	15
Yangon	56.5	48.6	53.3	50.0	67.5	35.3	50.4	16
Rakhine	48.8	50.1	47.5	50.0	66.6	32.7	49.1	17
Union	**59.4**	**51.4**	**59.8**	**56.1**	**70.6**	**45.1**	**57.2**	

Population 15 years and over

The labor force participation rate of the population aged 15 years and over is defined as the proportion of the population aged 15 years and over that are in the labor force, i.e., working or available for work. At Union level, the rate is virtually the same across the two rounds of the survey at 64.3% and 63.8%, respectively. It is higher in rural areas than in urban areas in both rounds at approximately 67% 56%, respectively. Men's participation rate is higher than women's for both rounds at 79.5% and around 50%, respectively). The participation rate of the population aged 15 years and over is higher for poor households than non poor households in both rounds at around 67% and 62%. This last finding provides added evidence for the point discussed above, that poverty has more to do with low returns and low remuneration than lack of employment. In both rounds, participation rates were lowest in Yangon, Rakhine and Mon and highest in Shan East, Shan North and Shan South. *(see Table 2.22 and Table 2.23)*

6.2 UNEMPLOYMENT RATE

Unemployment rate over the last 6 months
Population 10 years and over

The unemployment rate of the population aged 10 years and over is defined as the proportion of labor force participants aged 10 years and over that did not work at any point in the 6 months preceding the survey: It is a measure of relatively long-term open unemployment. At Union level, the unemployment rate is very low at 2.3% in

both rounds. The rates vary significantly between rural and urban areas at 1.5% and 4.6%, respectively. Unemployment rates vary significantly across SDs with highest rates found in Rakhine (6.9%), Yangon (5.3%) and Chin (3.4%). The unemployment rate is slightly higher for individuals in poor households (2.6%) than individuals in non poor households (2.1%). It should be underlined that this association between poverty and unemployment occurs for a very small percentage of the poor (2-3%) and as such, does not invalidate the conclusion (above) that poverty is much more about low returns/low remuneration than lack of employment. *(see Table 2.24 and Figure 2.8)*

Figure 2.8:   Unemployment rate of population 10 years and over in the last 6 months (second round)

Table 2.22: Labor force participation rate in population 15 years and over in the last 6 months (% in the first round)

S/D and Union	By strata		By poverty status		By gender		Total	
	Rural	Urban	Poor	Non Poor	Men	Women	%	Rank
Shan East	77.8	69	77.7	73.8	86.3	65	75.8	1
Shan North	77.7	65.6	76.1	73.7	84.8	65.7	74.9	2
Shan South	76.8	60	74.4	70.7	79.8	64.5	72.1	3
Magwe	70.1	59.2	70.5	67.9	82.5	57.6	69	4
Bago West	68.7	61.4	70.8	66.5	84.2	52.4	67.8	5
Sagaing	68.3	59.9	69.3	66.3	79.1	56.5	67.1	6
Bago East	67.5	59.1	66.2	66.0	81.5	51.6	66.1	7
Kayah	68.5	61.9	65.2	66.3	79.2	53.5	65.9	8
Kachin	69.1	58.1	69.3	63.1	77.9	54.7	65.8	9
Mandalay	68.7	57.7	69.0	63.3	78	54.6	65.4	10
Kayin	66.3	59.8	74.1	64.2	83.7	47.9	65.3	11
Ayeyarwaddy	66.7	56.1	67.5	63.6	81	49.5	64.7	12
Tanintharyi	63	58.7	62.2	62.0	82.2	43.6	62.1	13
Chin	63	54	60.1	62.7	70.7	51.1	60.8	14
Mon	60.5	55.8	58.1	59.9	79.1	42.6	59.6	15
Rakhine	58.3	58	57.3	58.7	80.1	38.6	58.2	16
Yangon	63.9	52	57.3	54.3	73.9	38	54.7	17
Union	**67.5**	**56.1**	**67.5**	**62.9**	**79.7**	**50.5**	**64.3**	

Table 2.23: Labor force participation rate in population 15 years and over in the last 6 months (% in the second round)

S/D and Union	By strata		By poverty status		By gender		Total	
	Rural	Urban	Poor	Non Poor	Men	Women	%	Rank
Shan North	78.2	65.5	77.8	72.8	84.5	66.9	75.3	1
Shan East	74.8	67.9	73.9	72.4	86.3	60	73.2	2
Shan South	77.1	59.5	74.4	70.9	79.9	64.6	72.2	3
Magwe	70.3	60.2	71.0	68.1	82.8	57.9	69.3	4
Chin	70.3	62.8	67.6	71.1	77.8	60	68.5	5
Kayah	70.8	62.8	67.6	67.8	79.5	56.2	67.7	6
Bago West	67.2	61.2	69.8	65.0	84.6	49.6	66.5	7
Bago East	66.2	62.3	65.5	65.6	82.8	49.6	65.6	8
Mandalay	68.5	58.1	69.1	63.3	78.2	54.6	65.5	9
Sagaing	65.6	59.1	66.4	64.0	78.3	52.8	64.6	10
Ayeyarwaddy	66.1	57.2	66.0	63.8	80.3	49.6	64.4	11
Kayin	65.2	58.4	66.4	63.9	81.5	48.1	64.2	12
Tanintharyi	60.9	58.7	58.7	61.3	81.1	41.6	60.4	13
Kachin	61.6	56.9	61.5	59.1	75.8	45.9	60.2	14
Mon	60.3	57.3	59.4	59.8	79.9	42.2	59.7	15
Rakhine	56.2	56.3	54.5	57.2	78.5	36.1	56.2	16
Yangon	63.3	53	58.5	54.8	74.4	38.7	55.4	17
Union	**66.5**	**56.7**	**66.6**	**62.5**	**79.5**	**49.7**	**63.8**	

Table 2.24:   Unemployment rate of population 10 years and over in the last 6 months (% in the second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	0.0	0.0	0.0	0.0	0.0	1
Magwe	0.9	2.0	1.4	0.7	1.0	2
Shan (S)	0.2	3.8	0.7	1.2	1.0	3
Bago (W)	0.8	3.3	1.7	0.8	1.1	4
Ayeyarwaddy	1.1	1.8	1.8	0.9	1.2	5
Kayin	0.9	3.5	0.0	1.4	1.3	6
Shan (N)	0.9	3.2	1.8	0.9	1.3	7
Shan (E)	1.1	3.2	1.2	1.9	1.5	8
Tanintharyi	1.4	2.2	1.5	1.6	1.5	9
Mandalay	1.1	3.0	1.7	1.5	1.6	10
Kachin	1.8	1.5	2.0	1.5	1.7	11
Bago (E)	1.5	4.4	2.8	1.6	2.0	12
Sagaing	2.0	2.1	2.7	1.8	2.0	13
Mon	2.3	2.4	3.1	2.1	2.3	14
Chin	3.1	4.7	4.4	0.9	3.4	15
Yangon	1.1	6.8	8.1	4.8	5.3	16
Rakhine	6.0	10.1	8.6	6.0	6.9	17
Union	**1.5**	**4.6**	**2.6**	**2.1**	**2.3**	

Population 15 years and over

The unemployment rate of the population aged 15 years and over is defined as the proportion of labor force participants aged 15 years and over that did not work at any point in the 6 months preceding the survey. Values for this indicator are very similar to those for the 10 and over age group. The rate is very low (2%) for both survey rounds. It varies significantly between rural and urban areas at 1.3%and 4.4%, respectively. It is slightly higher for individuals in poor households (2.4%) than for individuals in non poor households. *(see Table 2.25)*

Unemployment rate over the last 7 days

Population 10 years and over

The unemployment rate of the population aged 10 years and over in the last 7 days[53]

provides information on recent or short term unemployment. Seasonal variations are easier to grasp using this indicator, if data are collected over the course of different seasons. At Union level, the rates were quite low at 3% in November 2004 (first round) and 3.7% in May 2005 (second round). In rural areas, unemployment was lower in the first round which corresponds to harvest time (2.1% compared to 3.1%). In urban areas we find the opposite pattern, as the unemployment rate is higher in the first than the second round (6.1% compared to 5.3%). The qualitative study showed that economic activities slow down during the rainy season, especially in urban areas. For example, construction workers or even trishaw peddlers don't have much work in the rainy season, whereas agricultural households will have more work in the rainy season and even need the help of the children to work in the field, which can explain the higher

---

[53] The unemployment rate of the population aged 10 years and over is defined as the proportion of labor

force participants aged 10 years and over that did not work at any point in the 7 days preceding the survey

participation rate in the first round in rural areas. The SD with the highest unemployment rate in the first round is Chin (10.2%) while for the second round it is Rakhine (9.1%). Unemployment is slightly higher for individuals from poor households than non poor households. In the first round the unemployment rate for the poor was 3.7% compared to 2.7% for the non poor. In the second round it is 4.1% for the poor compared to 3.5% for the non poor. *(see Table 2.26, Table 2.27 and Figure 2.9)*

Figure 2.9: Unemployment rate of population 10 years and over in the last 7 days (first round)
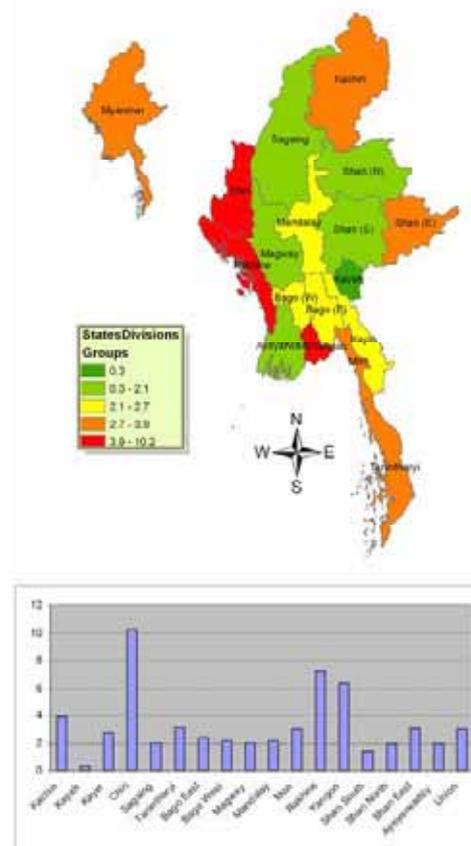
Table 2.25: Unemployment rate of population 15 years and over in the last 6 months (% in the second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	0.0	0.0	0.0	0.0	0.0	1
Bago (W)	0.6	3.0	1.3	0.7	0.9	2
Kayin	0.6	3.4	0.0	1.1	0.9	3
Magwe	0.9	1.9	1.4	0.7	1.0	4
Shan (S)	0.2	3.8	0.7	1.2	1.0	5
Ayeyarwaddy	0.9	1.8	1.8	0.8	1.1	6
Shan (N)	0.6	3.1	1.3	0.9	1.1	7
Tanintharyi	1.1	2.2	1.0	1.5	1.3	8
Shan (E)	0.9	3.2	0.9	1.9	1.4	9
Mandalay	0.9	2.8	1.4	1.4	1.4	10
Kachin	1.5	1.5	1.8	1.3	1.5	11
Bago (E)	1.4	4.1	2.6	1.5	1.8	12
Sagaing	1.8	1.9	2.4	1.6	1.8	13
Mon	2.2	2.4	3.1	2.0	2.2	14
Chin	2.7	4.7	4.0	0.9	3.1	15
Yangon	0.8	6.5	8.0	4.5	5.0	16
Rakhine	4.5	9.6	6.9	5.0	5.7	17
Union	**1.3**	**4.4**	**2.4**	**1.9**	**2.0**	

Table 2.26:   Unemployment rate of population 10 years and over in the last 7 days (% in the first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	0.0	0.9	0.0	0.5	0.3	1
Shan (S)	0.3	5.4	1.3	1.5	1.4	2
Shan (N)	1.2	5.3	2.4	1.5	2.0	3
Ayeyarwaddy	1.8	3.2	2.9	1.6	2.0	4
Magwe	1.7	5.5	3.4	1.0	2.0	5
Sagaing	1.5	6.0	3.1	1.7	2.1	6
Mandalay	1.5	4.2	2.7	1.8	2.2	7
Bago (W)	1.7	6.5	3.5	1.5	2.2	8
Bago (E)	2.0	4.3	2.1	2.5	2.4	9
Kayin	2.1	6.7	1.5	2.9	2.7	10
Mon	2.7	4.5	5.2	2.5	3.0	11
Shan (E)	3.0	3.4	3.5	2.7	3.1	12
Tanintharyi	3.2	2.8	3.5	2.9	3.1	13
Kachin	3.4	5.3	4.3	3.6	3.9	14
Yangon	2.3	7.8	9.3	5.8	6.4	15
Rakhine	6.5	10.1	7.6	7.1	7.3	16
Chin	6.9	22.6	9.3	12.6	10.2	17
Union	**2.1**	**6.1**	**3.7**	**2.7**	**3.0**	

Table 2.27:   Unemployment rate of population 10 years and over in the last 7 days (% in the second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	0.0	0.0	0.0	0.0	0.0	1
Shan (S)	0.4	4.4	0.9	1.6	1.3	2
Shan (N)	1.1	3.5	2.1	1.0	1.6	3
Mandalay	1.6	3.4	2.5	1.7	2.0	4
Shan (E)	1.9	3.3	2.1	2.3	2.2	5
Magwe	2.3	2.8	2.9	1.9	2.3	6
Tanintharyi	2.3	2.7	2.3	2.4	2.4	7
Ayeyarwaddy	2.7	2.4	3.0	2.5	2.7	8
Mon	2.8	2.4	4.1	2.3	2.7	9
Bago (E)	3.1	5.1	3.9	3.2	3.4	10
Kayin	3.4	6.0	4.5	3.7	3.7	11
Bago (W)	4.8	4.2	5.5	4.4	4.7	12
Kachin	5.9	3.0	5.2	4.9	5.0	13
Chin	3.7	10.5	5.5	4.0	5.1	14
Sagaing	5.8	3.2	6.8	4.9	5.4	15
Yangon	2.0	7.6	8.8	5.7	6.2	16
Rakhine	8.6	10.6	10.7	8.2	9.1	17
Union	**3.1**	**5.3**	**4.1**	**3.5**	**3.7**	

Population 15 years and over

The unemployment rate of the population aged 15 years and over in the last 7 days[54] provides information on recent or short term unemployment. At Union level, the rate was 2.8% in November 2004 (first round) and 3.5% in May 2005. Generally

---

[54] The unemployment rate of the population aged 15 years and over is defined as the proportion of labor force participants aged 10 years and over that did not work at any point in the 7 days preceding the survey

speaking, unemployment data are very similar for the 15 and over and 10 and over age groups. *(see Table 2.28)*

Population 10 years and over excluding unpaid family workers

If we exclude unpaid family workers from the working population, unemployment rates are somewhat higher at 4.4% at first round and 5.4% at second round. Once again, the unemployment rate increases in rural areas in the second round and decreases in urban areas. *(see Table 2.29 and Table 2.30)*

Table 2.28:   Unemployment rate of population 15 years and over in the last 7 days (% in the second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	0.0	0.0	0.0	0.0	0.0	1
Shan (S)	0.4	4.4	0.9	1.6	1.3	2
Shan (N)	0.8	3.4	1.7	1.0	1.3	3
Mandalay	1.4	3.2	2.2	1.6	1.9	4
Shan (E)	1.7	3.3	1.8	2.4	2.1	5
Tanintharyi	2.0	2.8	1.8	2.3	2.1	6
Magwe	2.3	2.7	2.9	1.9	2.3	7
Ayeyarwaddy	2.5	2.4	2.9	2.3	2.5	8
Mon	2.6	2.4	4.1	2.2	2.6	9
Bago (E)	2.9	4.8	3.7	3.0	3.2	10
Kayin	3.1	5.4	4.7	3.3	3.4	11
Bago (W)	4.6	3.9	4.9	4.3	4.5	12
Chin	3.3	10.6	5.2	4.1	4.9	13
Kachin	5.7	3.1	5.1	4.8	4.9	14
Sagaing	5.5	3.0	6.4	4.8	5.2	15
Yangon	1.6	7.4	8.6	5.4	5.9	16
Rakhine	6.9	10.1	8.7	7.1	7.7	17
Union	**2.9**	**5.1**	**3.8**	**3.3**	**3.5**	

Table 2.29:   Unemployment rate of population 10 years and over excluding unpaid family workers in the last 7 days (% in the first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	0.0	1.1	0.0	0.7	0.5	1
Shan (S)	0.5	6.8	1.8	2.4	2.1	2
Ayeyarwaddy	2.7	3.8	3.8	2.4	2.9	3
Bago (W)	2.4	7.7	4.4	2.3	3.1	4
Bago (E)	2.8	4.9	2.5	3.5	3.2	5
Mandalay	2.4	5.0	3.8	2.8	3.2	6
Shan (N)	2.2	6.8	4.3	2.5	3.4	7
Magwe	3.0	6.7	5.3	1.9	3.4	8
Sagaing	2.7	7.5	5.1	2.9	3.5	9
Mon	3.9	5.9	6.6	3.7	4.3	10
Kachin	4.6	6.2	5.7	4.5	5.0	11
Tanintharyi	5.4	4.7	5.1	5.3	5.2	12
Kayin	5.3	10.3	5.6	6.3	6.3	13
Yangon	2.6	8.9	10.3	6.6	7.1	14
Shan (E)	8.9	4.7	9.2	5.8	7.3	15
Rakhine	7.7	10.8	8.4	8.5	8.5	16
Chin	12.2	26.9	15.0	20.3	16.4	17
Union	**3.2**	**7.2**	**5.1**	**4.1**	**4.4**	

Table 2.30:   Unemployment rate of population 10 years and over excluding unpaid family workers in the last 7 days (% in the second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	0.0	0.0	0.0	0.0	0.0	1
Shan (S)	1.0	5.7	1.8	3.0	2.5	2
Shan (N)	2.2	4.3	4.0	1.6	2.7	3
Mandalay	2.6	4.0	3.4	2.8	3.1	4
Mon	3.9	3.2	5.3	3.3	3.7	5
Ayeyarwaddy	4.1	2.9	4.0	3.8	3.9	6
Tanintharyi	3.9	4.4	3.5	4.3	4.0	7
Magwe	4.2	3.5	4.8	3.6	4.1	8
Bago (E)	4.2	6.1	4.7	4.5	4.5	9
Shan (E)	5.9	4.6	5.9	5.1	5.4	10
Bago (W)	6.6	5.1	7.0	6.1	6.4	11
Kachin	7.9	3.6	7.1	6.1	6.5	12
Yangon	2.2	8.5	9.9	6.3	6.9	13
Kayin	8.0	10.0	14.2	7.8	8.3	14
Sagaing	9.8	3.9	9.9	8.2	8.7	15
Chin	6.7	14.6	10.8	5.1	8.7	16
Rakhine	10.1	11.4	11.7	9.6	10.4	17
Union	**5.0**	**6.3**	**5.8**	**5.2**	**5.4**	

6.3 UNDEREMPLOYMENT RATE

Underemployment rate by the time-utilization approach (30 hours)

Figure 2.10: Underemployment rate by the time-utilization approach (proportion of the working population who worked less than 30 hours in the last 7 days (first round)

The underemployment rate by the time-utilization approach (30 hours) is defined as the proportion of employed persons (aged 10 years and over) that worked for less than 30 hours in the 7 days preceding the survey. The underemployment rate at Union level was 9.0% in November 2004 (first round) and 10.8% in May 2005 (second round). In rural areas, underemployment is lower for

the first round (November 2004) which corresponds to the harvest period (8.6% compared to 11.5%). It is slightly higher for individuals from poor households than from non poor households in both rounds. S/Ds with the highest underemployment rate for the first round are: Kayah, Shan East and Tanintharyi, whereas for the second round, they are Kayah, Magwe and Shan East. *(see Table 2.31, Table 2.32 and Figure 2.10)*

Underemployment rate by the time-utilization approach (44 hours)

Figure 2.11: Underemployment rate by the time-utilization approach (proportion of the working population who worked less than 44 hours in the last 7 days (first round)
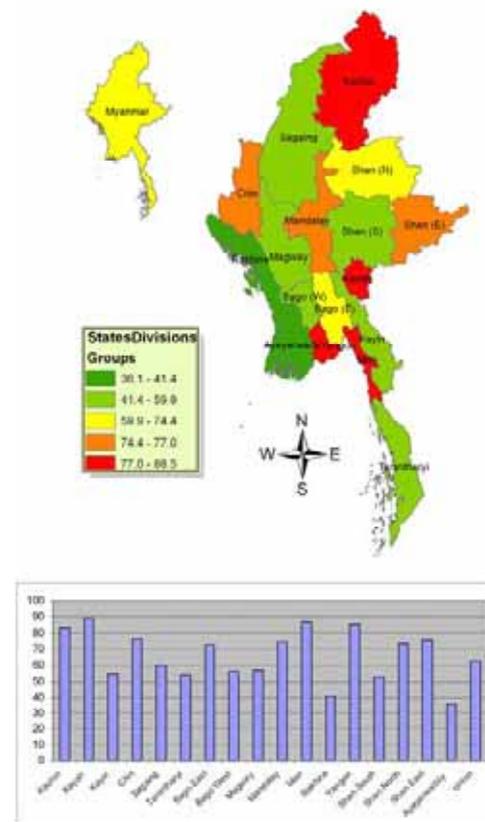
Table 2.31:   Underemployment rate by the time-utilization approach (proportion of the working population who worked less than 30 hours in the last 7 days (% in the first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan (S)	5.0	9.1	3.5	7.5	5.8	1
Bago (E)	6.9	7.0	5.9	7.4	6.9	2
Yangon	7.0	7.1	6.4	7.2	7.1	3
Bago (W)	6.4	19.5	6.9	8.2	7.8	4
Kayin	7.1	13.9	4.6	8.5	8.0	5
Mandalay	7.5	11.0	8.8	8.1	8.4	6
Sagaing	7.5	16.4	11.2	7.6	8.6	7
Chin	7.1	15.6	8.7	8.4	8.6	8
Mon	8.5	9.1	9.0	8.6	8.6	9
Kachin	10.0	7.4	11.8	7.3	9.3	10
Ayeyarwaddy	9.2	11.1	10.7	9.1	9.5	11
Shan (N)	7.7	18.0	7.8	11.6	9.6	12
Magwe	10.8	10.3	10.9	10.7	10.8	13
Rakhine	11.9	14.5	11.3	13.1	12.5	14
Tanintharyi	11.9	15.5	12.8	12.6	12.6	15
Shan (E)	21.7	15.1	17.8	22.6	20.2	16
Kayah	19.2	22.4	23.4	19.0	20.3	17
Union	**8.6**	**10.4**	**9.3**	**8.9**	**9.0**	

Table 2.32:   Underemployment rate by the time-utilization approach (proportion of the working population who worked less than 30 hours in the last 7 days (% in the second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Chin	5.7	6.8	5.6	6.7	5.9	1
Yangon	6.3	6.2	6.0	6.2	6.2	2
Bago (E)	7.2	7.4	6.2	7.7	7.2	3
Shan (S)	8.6	8.1	8.4	8.5	8.5	4
Shan (N)	8.3	13.0	8.2	10.2	9.2	5
Ayeyarwaddy	9.6	8.9	11.2	8.8	9.5	6
Rakhine	9.3	12.8	8.9	10.9	10.1	7
Mon	10.5	9.9	11.5	10.1	10.4	8
Kachin	12.4	6.0	11.1	10.0	10.5	9
Mandalay	11.0	9.7	10.6	10.7	10.7	10
Kayin	11.4	6.5	11.6	10.6	10.7	11
Bago (W)	11.2	19.8	10.4	13.1	12.3	12
Sagaing	13.3	11.3	11.2	13.6	13.0	13
Tanintharyi	12.4	16.3	13.7	13.0	13.2	14
Shan (E)	15.3	15.2	12.4	18.2	15.3	15
Magwe	20.3	7.7	20.4	18.3	19.2	16
Kayah	18.1	23.4	22.2	18.9	20.0	17
Union	**11.5**	**8.8**	**11.3**	**10.6**	**10.8**	

The underemployment rate by the time-utilization approach (44 hours) is defined as the proportion of employed persons (aged 10 years and over) that worked for less than 44 hours in the 7 days preceding the survey. At Union level, the rate was 30.3% in November 2004 (first round) and 37.8% in May 2005 (second round). In rural areas, underemployment is much lower for the first round which corresponds to harvest time (28.9% compared to 39.0%). S/Ds with the highest underemployment rates for the

first round are: Shan East, Chin and Kayah, whereas for the second round they are Shan East, Magwe and Chin. There are very slight differences in underemployment rates for poor and non poor households in both rounds which, once again, suggests that lack of employment is not a major determinant of poverty. *(see Table 2.33, Table 2.34 and Figure 2.11)*

Table 2.33:   Underemployment rate by the time-utilization approach (proportion of the working population who worked less than 44 hours in the last 7 days (% in the first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Bago (E)	19.2	24.7	20.5	19.8	20.0	1
Bago (W)	22.9	49.8	23.4	26.7	25.6	2
Shan (S)	24.8	34.2	23.1	29.3	26.7	3
Mandalay	24.3	34.0	26.0	27.2	26.7	4
Ayeyarwaddy	27.5	35.3	30.3	28.1	28.8	5
Kayin	27.9	36.5	32.0	28.5	29.0	6
Rakhine	28.2	35.0	29.9	29.6	29.7	7
Yangon	23.1	32.7	26.5	30.5	30.0	8
Magwe	31.5	32.3	33.0	30.6	31.6	9
Sagaing	30.6	43.5	32.2	32.2	32.2	10
Kachin	32.6	37.2	36.2	31.8	33.8	11
Tanintharyi	35.4	37.3	35.7	35.7	35.7	12
Mon	36.4	39.7	35.6	37.3	37.0	13
Shan (N)	44.2	38.8	44.9	41.3	43.2	14
Kayah	48.4	47.5	51.1	46.7	48.1	15
Chin	48.4	59.4	49.5	52.8	50.4	16
Shan (E)	67.3	50.1	67.6	59.1	63.3	17
Union	**28.9**	**35.1**	**30.8**	**30.1**	**30.3**	

Table 2.34:   Underemployment rate by the time-utilization approach (proportion of the working population who worked less than 44 hours in the last 7 days (% in the second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Bago (E)	20.7	22.2	17.6	22.3	20.9	1
Yangon	25.2	32.9	26.6	31.6	30.8	2
Ayeyarwaddy	32.6	32.0	34.0	31.8	32.5	3
Rakhine	33.2	32.5	31.7	33.8	33.0	4
Mandalay	33.5	32.8	30.9	35.0	33.3	5
Tanintharyi	36.5	37.9	37.8	36.3	36.8	6
Shan (S)	41.1	33.7	35.5	42.4	39.5	7
Kachin	40.9	38.5	44.6	36.9	40.2	8
Mon	40.4	40.4	39.2	40.7	40.4	9
Kayin	43.1	30.1	47.0	40.6	41.4	10
Sagaing	44.4	37.0	41.7	43.9	43.4	11
Shan (N)	46.1	36.2	47.1	41.0	44.2	12
Bago (W)	45.0	51.3	38.4	49.1	45.8	13
Kayah	50.0	48.6	45.9	51.2	49.5	14
Chin	52.7	43.6	48.7	56.6	50.9	15
Magwe	55.1	34.6	55.8	51.4	53.3	16
Shan (E)	73.6	59.4	75.7	65.1	70.4	17
Union	**39.0**	**34.0**	**38.3**	**37.5**	**37.8**	

7. HOUSING CONDITIONS AND ASSETS

Indicators on housing conditions and assets include the following::
∉ Type of dwelling;
∉ Type of Dwelling Construction Material;
∉ Type of Tenure;
∉ Sustainable Access to a Safe and Convenient Drinking Water Source;
∉ Access to Improved Sanitation;
∉ Access to Electricity;
∉ Household Assets.

7.1 TYPE OF DWELLING

The majority of households in Myanmar live in single family dwellings (90.5%), with 95.7% in rural areas and 76.1% in urban areas. It is only in Yangon that a large proportion of households (17.5%) live in multi-dwelling buildings with 3 or more flats/apartments. Very few poor households live in multi-dwelling buildings with 3 or more flats/apartments (0.1% of poor households compared to 3.5% of non poor households). *(see Table 2.35)*

7.2 TYPE OF DWELLING CONSTRUCTION MATERIAL

The type of material of the roof, walls and floors of the dwelling can provide information on the living conditions and poverty status of the household. A majority of households in Myanmar live in dwellings with thatched roofs (49.6%), bamboo walls (52.2%) and wood plank floors (51.4%). In rural areas, 60.8% of dwellings are made of thatched roofs and 31.3% of roofs made with corrugated metal. In urban areas, the most common material for the roof is

corrugated metal (70.2% of dwellings). Dwellings with bamboo walls are most common in rural areas with 57.4% of dwellings compared to 37.7% in urban areas. In urban areas, 25.8% of dwellings have walls made of cement. The construction material for the floor of the dwelling consists mostly of wood planks in rural areas (53.6%), and palm or bamboo (26.5%). In urban areas, wood plank is also the most common material for floors (45.1%), but it is followed by cement (20.5% of dwellings). A higher proportion of poor households live in dwellings with thatched roofs (65.5%) compared to non poor households (43.7%). A higher proportion of poor households live in dwellings with walls made of thatch or other leaves (12.8%) or of bamboo (64.7%) than non poor households (8.8% and 47.5% respectively). A higher proportion of poor households live in dwellings with floors made of palm or bamboo (33.8%) or of earth or sand (11.5%) compared to non poor households. *(see Table 2.36, Table 2.37 and Table 2.38)*

7.3 TYPE OF TENURE

In Myanmar, a very high proportion of the population owns their own dwelling (94.2%). This proportion is highest in rural areas at 97.6%. In urban areas, 84.7% own their own dwelling, the rest rent from private individuals or enterprises (6.6%), rent or borrow from a relative (5.5%), or rent or borrow from government (1.8%). It is in Yangon that we find the lowest proportion of households owning their own dwelling (82.6%), followed by Chin with 90.2% and Tanintharyi (90.4%). *(see Table 2.39)*

Table 2.35: Proportion of households per type of dwelling (%) (first round)

Groups	Single family house	Multi family house	Multi-dwelling building with 3 or more flats/ apartments	Apartment of house with attached business or shop	Room in a hostel	Hut / improvised housing unit	Other
State/Division							
Kachin	93.7	4.7	0.0	0.3	0.1	1.2	0.00
Kayah	95.5	4.5	0.0	0.0	0.0	0.0	0.00
Kayin	97.0	2.6	0.0	0.2	0.0	0.2	0.04
Chin	94.6	5.1	0.1	0.1	0.0	0.0	0.00
Sagaing	94.2	5.2	0.1	0.1	0.0	0.4	0.00
Tanintharyi	93.1	5.2	0.2	0.7	0.6	0.2	0.00
Bago (E)	96.1	2.3	0.2	0.3	0.0	1.2	0.00
Bago (W)	94.1	4.8	0.0	0.0	0.0	1.0	0.00
Magwe	96.8	3.1	0.0	0.1	0.0	0.1	0.00
Mandalay	91.0	7.5	0.1	0.2	0.2	0.8	0.16
Mon	92.8	4.6	0.2	0.7	0.2	1.1	0.37
Rakhine	90.4	9.1	0.0	0.0	0.0	0.4	0.07
Yangon	71.0	11.2	17.5	0.2	0.0	0.0	0.00
Shan (S)	93.3	5.8	0.0	0.4	0.0	0.5	0.00
Shan (N)	94.6	4.9	0.2	0.1	0.1	0.1	0.00
Shan (E)	95.0	2.1	0.1	1.6	0.2	0.9	0.00
Ayeyarwaddy	94.2	3.2	0.3	1.5	0.0	0.7	0.09
Strata							
Rural	95.7	3.5	0.0	0.1	0.0	0.5	0.01
Urban	76.1	12.2	9.6	1.2	0.2	0.5	0.18
Poverty status							
Poor	93.6	5.1	0.1	0.1	0.1	0.9	0.08
Non Poor	89.4	6.1	3.5	0.5	0.1	0.4	0.05
Union	**90.5**	**5.8**	**2.6**	**0.4**	**0.1**	**0.5**	**0.06**

Table 2.36: Proportion of households per type of construction material of the roof of the dwelling (%) (first round)

Groups	Thatch/ large leaves/Palm/ Denee	Bamboo	Tin pieces	Tiles	Corrugated metal	Wooden shingles	Cement	Other
State/Division								
Kachin	55.9	1.1	0.0	0.9	40.0	0.4	0.0	1.7
Kayah	45.2	0.0	0.0	0.0	52.9	0.7	1.2	0.0
Kayin	43.7	1.7	0.8	1.5	51.1	0.0	0.0	1.2
Chin	22.3	0.4	0.0	1.3	63.4	0.7	0.0	12.0
Sagaing	45.0	19.1	0.0	0.8	34.3	0.2	0.4	0.2
Tanintharyi	81.6	0.2	0.0	1.1	16.8	0.3	0.0	0.0
Bago East	67.9	0.4	0.0	0.5	30.2	0.1	0.0	0.9
Bago West	61.5	0.0	0.1	1.0	37.4	0.0	0.0	0.0
Magwe	62.0	16.4	0.3	0.2	20.9	0.1	0.0	0.0
Mandalay	37.5	17.5	0.1	0.9	43.4	0.0	0.5	0.0
Mon	49.7	0.3	0.0	1.1	47.2	0.2	0.0	1.5
Rakhine	82.7	0.9	3.3	0.2	10.7	0.1	0.0	2.1
Yangon	20.4	0.1	0.0	2.5	76.5	0.1	0.4	0.0
Shan South	32.1	1.0	0.8	1.0	64.2	1.0	0.0	0.0
Shan North	33.2	0.6	0.0	0.6	64.6	0.3	0.3	0.3
Shan East	27.3	0.0	0.8	42.1	25.7	1.8	1.3	0.9
Ayeyarwaddy	64.5	0.4	0.0	0.7	34.3	0.0	0.1	0.0
Strata								
Rural	60.8	5.9	0.3	1.0	31.3	0.1	0.0	0.6
Urban	18.5	7.4	0.5	2.5	70.2	0.1	0.7	0.0
Poverty status								
Poor	65.5	6.7	0.2	1.3	25.2	0.2	0.0	0.8
Non Poor	43.7	6.1	0.4	1.5	47.8	0.1	0.3	0.3
Union	**49.6**	**6.3**	**0.3**	**1.4**	**41.6**	**0.1**	**0.2**	**0.4**

Table 2.37: Proportion of households per type of construction material of the outer walls of the dwelling (%) (first round)

Groups	Thatch/ Large leaves/ Palm/Denee	Bamboo	Rudimentary wood	Unbaked bricks and mud	Baked bricks and mortar	Cement	Pucca cement	Finished wood	Other
State/Division									
Kachin	4.1	70.9	8.8	0.2	4.0	4.4	0.1	7.2	0.2
Kayah	0.7	32.5	27.3	6.3	0.8	10.2	0.0	22.2	0.0
Kayin	9.8	29.3	39.2	0.4	1.8	3.0	0.3	16.1	0.0
Chin	1.7	11.5	57.3	0.2	1.0	0.2	0.1	27.6	0.2
Sagaing	3.7	67.3	10.3	0.4	2.2	8.4	0.6	6.8	0.3
Tanintharyi	20.2	26.2	27.7	1.1	2.1	9.0	0.2	13.3	0.2
Bago East	3.6	67.3	15.7	0.5	1.1	5.5	0.3	6.0	0.0
Bago West	4.3	71.6	18.2	0.2	0.6	2.5	0.3	2.4	0.0
Magwe	9.7	71.5	9.8	0.6	1.1	3.0	0.1	4.1	0.0
Mandalay	6.0	71.7	6.1	0.9	2.0	9.8	0.7	2.7	0.1
Mon	9.8	24.0	31.8	0.8	3.4	9.1	0.2	20.6	0.3
Rakhine	11.3	67.9	12.1	1.2	0.3	2.8	0.1	4.0	0.3
Yangon	3.4	30.2	28.7	0.7	1.8	28.6	1.9	4.5	0.2
Shan South	3.1	37.6	29.4	1.6	1.2	20.2	0.5	6.4	0.0
Shan North	1.0	56.0	6.8	13.4	3.4	13.8	0.4	4.9	0.2
Shan East	1.6	26.3	31.0	4.1	10.6	19.0	0.7	6.6	0.2
Ayeyarwaddy	32.0	31.4	24.5	0.2	0.9	5.7	0.4	4.0	0.9
Strata									
Rural	12.1	57.4	17.8	0.9	1.4	4.6	0.1	5.4	0.3
Urban	3.8	37.7	19.4	1.6	2.6	25.8	2.0	6.9	0.1
Poverty status									
Poor	12.8	64.7	12.9	1.2	0.9	3.1	0.1	4.0	0.4
Non Poor	8.8	47.5	20.3	1.1	2.0	12.9	0.8	6.5	0.2
Union	**9.9**	**52.2**	**18.2**	**1.1**	**1.7**	**10.2**	**0.6**	**5.8**	**0.3**

Table 2.38:   Proportion of households per type of construction material of the floor of the dwelling (%) (first round)

Groups	Earth/ Sand	Wood planks	Palm/ bamboo	Combination earth & wood/ palm/ bamboo	Parquet or polished wood	Tongue or groove wood	Vinyl or tiles	Cement	Wood with covering	Cement with covering	Combination cement/ finished wood and other	Other
State/Division												
Kachin	6.3	43.7	32.5	2.4	0.0	5.4	0.0	8.4	0.3	0.1	0.8	0.0
Kayah	0.0	78.4	0.6	0.5	0.0	4.5	2.7	13.3	0.0	0.0	0.0	0.0
Kayin	0.4	59.2	19.5	2.8	0.3	7.4	0.5	1.5	0.0	0.3	8.1	0.0
Chin	1.1	82.2	4.6	3.7	0.9	1.8	0.2	0.4	0.0	0.0	5.0	0.0
Sagaing	24.3	52.4	10.7	0.9	0.2	1.9	0.0	8.6	0.1	0.2	0.4	0.3
Tanintharyi	0.9	69.2	10.4	2.7	0.6	7.0	0.2	7.5	0.1	0.2	0.9	0.3
Bago East	1.2	68.8	17.6	2.2	0.0	5.4	0.0	2.7	0.0	0.0	2.1	0.0
Bago West	2.0	62.0	32.4	0.7	0.1	1.7	0.0	0.8	0.1	0.1	0.2	0.1
Magwe	10.7	26.4	56.9	0.6	0.1	0.1	0.0	3.8	0.0	0.0	1.2	0.1
Mandalay	21.8	33.7	25.9	1.3	0.1	2.5	0.4	12.7	0.4	0.2	0.2	0.7
Mon	0.2	54.5	10.8	1.3	0.4	25.5	0.1	2.3	0.0	0.4	4.3	0.1
Rakhine	12.2	49.7	30.9	2.1	0.0	2.3	0.0	1.3	0.0	0.4	0.6	0.4
Yangon	0.9	53.2	7.2	0.7	2.5	9.2	3.1	16.5	1.9	4.4	0.5	0.0
Shan South	0.9	59.0	18.9	1.1	0.6	3.4	0.0	6.9	0.6	0.1	8.3	0.2
Shan North	12.9	22.3	21.7	4.6	0.5	0.7	0.6	36.0	0.4	0.1	0.2	0.0
Shan East	5.6	37.4	18.9	2.9	0.3	2.6	3.1	24.7	2.1	1.7	0.8	0.0
Ayeyarwaddy	1.0	71.7	15.7	0.7	0.3	3.3	0.3	5.4	0.2	0.2	1.0	0.2
Strata												
Rural	9.2	53.6	26.5	1.4	0.1	3.1	0.1	4.4	0.1	0.1	1.2	0.2
Urban	6.7	45.1	7.9	1.1	1.6	8.9	2.2	20.5	1.4	2.7	1.5	0.4
Poverty status												
Poor	11.5	46.3	33.8	2.0	0.1	1.4	0.0	3.7	0.2	0.2	0.5	0.2
Non Poor	7.4	53.3	17.0	1.1	0.7	5.8	0.9	10.6	0.5	1.0	1.6	0.2
Union	**8.5**	**51.4**	**21.6**	**1.3**	**0.5**	**4.6**	**0.6**	**8.7**	**0.4**	**0.8**	**1.3**	**0.2**

84

Table 2.39:   Proportion of households per type of tenure (%) (first round)

Groups	Owned	Rented/ borrowed from government	Rented/ borrowed from employer	Rented/ borrowed from relative	Rented from private individual/ enterprise	Squatter	Other
State/Division							
Kachin	96.2	0.1	0.0	2.1	1.4	0.0	0.2
Kayah	92.7	0.0	0.0	5.9	1.4	0.0	0.0
Kayin	98.0	0.0	0.1	1.4	0.4	0.0	0.2
Chin	90.2	1.3	0.0	2.3	6.0	0.0	0.1
Sagaing	96.0	0.8	0.0	2.0	0.4	0.3	0.4
Tanintharyi	90.4	0.0	0.2	2.6	3.1	0.0	3.3
Bago (E)	97.2	0.2	0.0	1.7	0.6	0.0	0.3
Bago (W)	98.2	0.1	0.0	1.5	0.2	0.0	0.0
Magwe	98.1	0.0	0.0	1.4	0.2	0.0	0.2
Mandalay	93.8	0.9	0.3	2.1	2.2	0.2	0.6
Mon	95.8	0.8	0.0	1.7	1.0	0.3	0.4
Rakhine	96.4	0.1	0.1	1.9	0.7	0.2	0.6
Yangon	82.6	1.6	0.3	7.5	7.1	0.3	0.7
Shan (S)	95.9	0.2	0.0	1.8	1.7	0.0	0.2
Shan (N)	97.3	0.0	0.0	1.7	0.5	0.0	0.3
Shan (E)	97.7	0.0	0.0	0.6	1.2	0.0	0.3
Ayeyarwaddy	96.6	0.1	0.2	1.5	0.8	0.1	0.3
Strata							
Rural	97.6	0.1	0.1	1.6	0.2	0.1	0.3
Urban	84.7	1.8	0.2	5.5	6.6	0.3	0.9
Poverty status							
Poor	95.1	0.7	0.1	2.3	1.2	0.1	0.5
Non Poor	93.9	0.5	0.1	2.7	2.1	0.2	0.5
Union	**94.2**	**0.5**	**0.1**	**2.6**	**1.9**	**0.1**	**0.5**

7.4 ACCESS TO A SAFE AND CONVENIENT DRINKING WATER SOURCE

Figure 2.12: Proportion of the population with access to a safe and convenient drinking water source (%) (first round)

This indicator is defined as the proportion of the population with access to a safe drinking water source within 1 kilometer (30 minutes walking distance) of the user's dwelling. At Union level, 62.6% of the population has access to a safe and convenient drinking water source. There are large differences between rural and urban areas at 55.3% and 89.6 % of the population respectively. Non poor households have better access to safe drinking water than poor households (respectively 64.2% and 59.4%). Regions where access to safe drinking water is more problematic (less than 50% of households having access) are, for rural areas, in Ayeyarwaddy (30.1%), Rakhine (33.9%), Shan South (46.3%) and Tanintharyi (49.2%). *(see Table 2.40 and Figure 2.12)*

7.5 ACCESS TO IMPROVED SANITATION

Figure 2.13: Proportion of the population with access to improved sanitation (%) (first round)
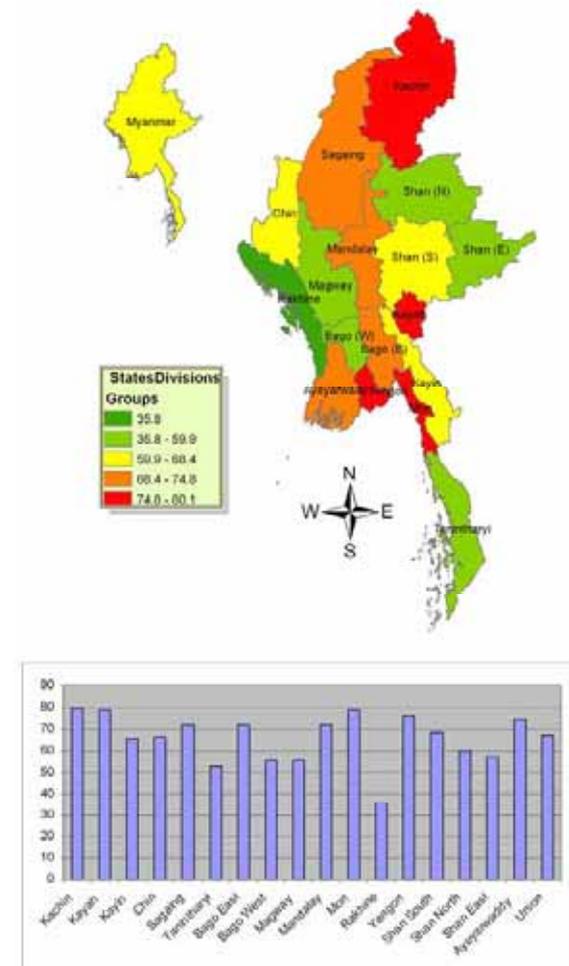
At Union level, 67.3% of Myanmar households have access to improved sanitation. This proportion is higher in

urban (75.6%) than rural (64.4%) areas. A smaller proportion of poor households have access to improved sanitation compared to non poor households (58.7% vs. 71.4%). SDs where less than 60% of households have access to improved sanitation are Rakhine (35.8%), Tanintharyi (53.4%), Bago West (55.6%), Magwe (56%), Shan East (57.6%) and Shan North (59.9%). *(see Table 2.41 and Figure 2.13)*

7.6 ACCESS TO ELECTRICITY

At Union level, only 38% of households have access to electricity. There are pronounced urban/rural differences with 81.3% of urban households having access compared to only 22.4% for rural households. Only 20.4% of poor households have access to electricity compared to 44.6% of non poor households. The SD where the highest proportion of households has access is by far Yangon at 82.6%. SDs where access to electricity is the lowest are Chin (14.7%), Bago West (13.2%), Bago East (20.3%) and Rakhine (23.2%). *(see Table 2.42 and Figure 2.14)*

Figure 2.14: Proportion of households with access to electricity (%) (first round)
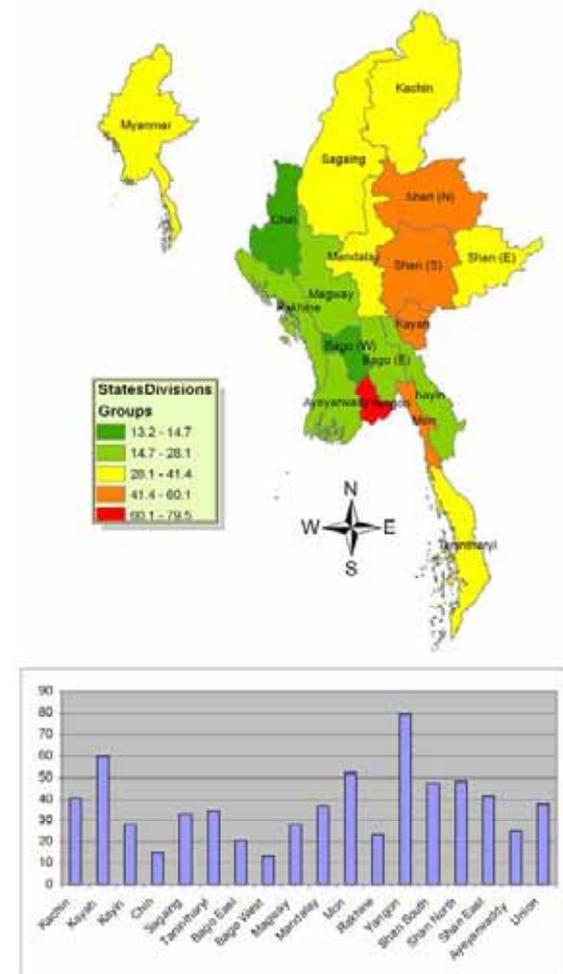
Table 2.40: Proportion of the population with access to a safe and convenient drinking water source[55] (%) (first round)

SD and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	83.5	97.0	87.7	89.0	88.5	1
Mon	84.7	94.7	79.1	88.6	86.6	2
Yangon	63.8	97.4	93.5	84.6	86.1	3
Kachin	79.0	97.2	78.8	88.0	83.9	4
Chin	74.9	84.7	72.8	88.9	77.0	5
Shan (E)	71.5	94.9	67.5	85.8	75.8	6
Mandalay	68.7	96.3	66.6	81.4	75.5	7
Shan (N)	69.3	94.3	68.2	80.9	74.4	8
Bago (E)	69.2	93.7	73.4	73.0	73.1	9
Sagaing	57.8	74.5	58.5	60.5	59.9	10
Magwe	53.7	94.1	52.1	60.4	56.8	11
Bago (W)	53.4	82.7	57.7	54.9	55.8	12
Kayin	53.1	70.7	40.7	57.5	55.4	13
Tanintharyi	49.2	79.4	52.8	53.9	53.5	14
Shan (S)	46.3	78.4	40.8	61.4	52.8	15
Rakhine	33.9	71.7	42.6	40.6	41.4	16
Ayeyarwaddy	30.1	76.4	43.1	32.8	36.1	17
Union	**55.3**	**89.6**	**59.4**	**64.2**	**62.6**	

Table 2.41: Proportion of the population with access to improved sanitation[56] (%) (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kachin	82.1	75.2	75.1	84.1	80.1	1
Kayah	78.7	79.6	73.4	81.9	79.0	2
Mon	77.5	85.4	72.1	80.9	79.0	3
Yangon	74.4	76.8	59.0	79.2	76.2	4
Ayeyarwaddy	73.8	79.3	69.8	76.8	74.8	5
Bago (E)	70.4	81.8	73.1	71.9	72.3	6
Sagaing	71.8	74.9	69.7	73.1	72.2	7
Mandalay	71.5	73.1	66.7	75.3	72.0	8
Shan (S)	67.1	72.6	63.2	71.9	68.4	9
Chin	63.5	76.3	64.3	72.0	66.3	10
Kayin	63.8	79.3	49.4	68.2	65.9	11
Shan (N)	55.8	74.8	55.7	64.3	59.9	12
Shan (E)	50.2	83.3	42.3	74.0	57.6	13
Magwe	53.9	75.2	43.2	65.2	56.0	14
Bago (W)	52.5	79.7	43.8	61.3	55.6	15
Tanintharyi	49.8	67.1	36.3	62.1	53.4	16
Rakhine	29.3	61.4	31.2	38.6	35.8	17
Union	**64.4**	**75.6**	**58.7**	**71.4**	**67.3**	

---

[55] Proportion of the population with access to a safe drinking water source within 1 kilometer (30 minutes walking distance) of user's dwelling. Safe drinking water source includes: private and public tap water and stand pipes, tube well, borehole or pump, protected wells, protected spring/pond or protected rainwater. It does not include: commercial bottled drinking water, water sold by vendor (truck, cart, etc.), unprotected hand dug well, unprotected spring/pond or unprotected rainwater, river/streams, and lakes/dams.

[56] Access to improved sanitation is defined as the proportion of the population with access to unshared facilities that hygienically separate human excreta from human, animal and insect contact. It includes: flush toilets, pour flush toilets with water seal, covered pit latrines with foot lid, indirect covered pit latrines and direct covered pit latrines.

Table 2.42:   Proportion of households with access to electricity (%) (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Yangon	40.5	92.8	59.5	82.2	79.5	1
Kayah	38.2	94.1	53.2	62.9	60.1	2
Mon	48.6	68.7	31.9	56.6	52.3	3
Shan North	40.9	77.4	36.2	59.3	48.4	4
Shan South	36.4	79.5	31.0	55.4	47.3	5
Shan East	34.2	69.6	28.8	52.2	41.4	6
Kachin	34.0	61.3	23.9	52.2	40.8	7
Mandalay	20.2	79.2	20.0	45.8	37.1	8
Tanintharyi	25.1	70.7	13.2	43.0	34.5	9
Sagaing	26.6	70.5	23.3	35.7	32.9	10
Magwe	22.4	77.6	13.6	36.9	28.1	11
Kayin	20.8	77.5	9.1	29.7	27.7	12
Ayeyarwaddy	14.6	74.8	12.4	29.3	25.0	13
Rakhine	9.4	80.8	10.5	29.5	23.2	14
Bago East	14.8	50.1	9.4	24.2	20.3	15
Chin	5.4	45.1	9.6	25.6	14.7	16
Bago West	6.4	66.3	6.0	15.7	13.2	17
Union	**22.4**	**81.3**	**20.4**	**44.6**	**38.0**	

7.7   HOUSEHOLD ASSETS

Agricultural assets

Ownership of agricultural equipment

Only 15.9% of agricultural households own motorized or mechanical agricultural equipment. The indicator is not significantly different for rural and urban agricultural households at 15.9% and 15.8%, respectively. A smaller proportion of poor agricultural households (8.7%) own mechanical equipment than non poor agricultural households (18.8%). SDs with lower access to mechanical agricultural equipment are Chin (only 0.2%), Rakhine (5.1%) and Kayin (8.3%) while those with higher access are Ayeyarwaddy (30.9%), Kayah (23.2%) and Shan East (21.1%). *(see Table 2.43)*

Animal-drawn agricultural equipment is more widespread with 63.7% of agricultural households owning animal-drawn equipment. This indicator is higher in rural areas than in urban areas (65.1% and 34.5%, respectively). A slightly lower proportion of poor households own animal-drawn agricultural equipment than non poor households (61.7% compared to 64.5%). The SD with lowest access is Chin at only 15.6% whereas the SDs with highest access are Bago East (90.1%), Yangon (75.6%) and Rakhine (75.3%). *(see Table 2.44)*

Ownership of draft animals

At Union level 66.4% of agricultural households own draft animals. This proportion is higher in rural areas at 67.5% compared to 42.1% in urban areas. A slightly lower proportion of poor households own draft animals than non poor households (65.2% compared to 66.9%). SDs where a lower proportion of agricultural households own draft animals are Chin (24.4%), Kayin (32%) and Mon (34.7%). SDs where a higher proportion of agricultural households

own draft animals are Sagaing (81.9%) and
Bago East (80.1%). *(see Table 2.45)*

Table 2.43:   Proportion of agricultural households owning motorized or mechanical agricultural
equipment (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Chin	0.0	1.6	14.7	35.8	0.2	1
Rakhine	4.6	16.4	15.4	27.5	5.1	2
Kayin	8.5	4.5	13.1	28.9	8.3	3
Magwe	9.9	15.1	11.5	20.0	10.0	4
Mandalay	12.2	9.2	8.5	24.0	12.1	5
Shan North	12.7	21.1	10.3	17.6	13.3	6
Bago West	13.3	11.3	6.0	19.2	13.3	7
Yangon	13.6	15.3	0.0	16.6	13.8	8
Shan South	15.1	0.0	11.5	15.9	14.2	9
Mon	15.5	3.9	0.0	16.3	14.5	10
Tanintharyi	15.2	17.7	6.7	14.8	15.5	11
Bago East	16.3	29.6	8.9	17.7	16.5	12
Kachin	17.8	10.1	8.6	14.1	17.2	13
Sagaing	18.3	16.1	5.6	12.2	18.2	14
Shan East	20.8	23.6	3.7	9.0	21.1	15
Kayah	23.5	21.2	4.4	5.4	23.2	16
Ayeyarwaddy	30.6	41.1	0.3	0.0	30.9	17
Union	**15.9**	**15.8**	**8.7**	**18.8**	**15.9**	

Table 2.44:   Proportion of agricultural households owning animal-drawn agricultural equipment
(%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Bago East	90.0	97.3	85.7	90.9	90.1	1
Yangon	80.0	34.4	59.9	78.4	75.6	2
Rakhine	78.0	16.4	68.9	77.5	75.3	3
Shan North	72.6	42.3	75.5	65.4	70.5	4
Bago West	70.3	55.3	58.9	72.4	69.9	5
Mandalay	70.3	23.4	65.8	70.5	68.8	6
Magwe	68.7	51.0	66.2	69.5	68.4	7
Ayeyarwaddy	66.4	64.9	57.2	69.1	66.3	8
Sagaing	67.3	36.5	76.6	63.4	66.1	9
Kachin	65.7	62.4	62.9	67.5	65.5	10
Shan East	57.7	25.4	62.2	46.7	54.3	11
Shan South	43.9	16.1	39.9	43.8	42.3	12
Kayah	41.8	16.2	39.3	37.0	37.8	13
Kayin	32.4	13.4	51.3	29.2	31.8	14
Mon	31.6	14.9	34.1	29.5	30.1	15
Tanintharyi	24.7	13.2	20.2	24.6	23.4	16
Chin	17.3	5.3	16.3	13.8	15.6	17
Union	**65.1**	**34.5**	**61.7**	**64.5**	**63.7**	

Table 2.45:   Proportion of agricultural households owning at least one draft animal (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Sagaing	83.0	54.4	79.1	82.7	81.9	1
Bago East	80.4	65.0	86.6	78.9	80.1	2
Magwe	76.8	59.3	77.7	75.9	76.5	3
Kachin	77.5	55.9	77.8	74.5	75.9	4
Rakhine	75.6	31.6	67.6	75.8	73.7	5
Mandalay	74.0	45.2	73.0	73.2	73.1	6
Yangon	72.7	45.5	63.3	71.3	70.1	7
Shan East	73.4	31.0	73.0	65.1	69.0	8
Bago West	61.6	71.8	48.6	64.9	61.9	9
Ayeyarwaddy	60.0	58.7	51.1	62.6	59.9	10
Shan North	60.1	39.6	62.2	55.2	58.7	11
Shan South	53.1	25.6	58.0	47.4	51.5	12
Kayah	55.8	21.2	45.4	53.2	50.4	13
Tanintharyi	37.8	21.9	34.7	36.4	35.9	14
Mon	36.6	14.3	35.1	34.7	34.7	15
Kayin	32.2	23.5	33.7	31.7	32.0	16
Chin	25.3	19.1	27.9	15.3	24.4	17
Union	**67.5**	**42.1**	**65.2**	**66.9**	**66.4**	

Ownership of breeding animals

Goats/Sheep

The ownership of goats or sheep is not very widespread at only 1.3% at Union level. It is in Chin where we find the highest proportion of households owning goats or sheep (13.3%). The average number of goats or sheep per household is highest in Magwe (0.7 goats/sheep per household). *(see Table 2.46 and Table 2.47)*

Table 2.46:   Proportion of households owning goats/sheep (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Chin	14.9	8.3	11.5	17.4	13.3	1
Magwe	3.1	0.7	3.2	2.6	2.8	2
Rakhine	3.2	0.0	3.5	2.1	2.6	3
Mandalay	2.6	0.5	2.5	1.7	2.0	4
Sagaing	1.9	0.5	1.2	1.8	1.7	5
Kachin	2.1	0.2	1.1	2.0	1.6	6
Kayin	1.5	0.8	0.9	1.5	1.4	7
Mon	0.9	0.0	0.8	0.7	0.8	8
Bago West	0.7	0.7	0.0	1.0	0.7	9
Ayeyarwaddy	0.8	0.2	0.6	0.7	0.7	10
Shan East	0.5	0.1	0.4	0.4	0.4	11
Yangon	1.2	0.1	0.0	0.5	0.4	12
Shan North	0.4	0.0	0.3	0.3	0.3	13
Shan South	0.4	0.0	0.9	0.0	0.3	14
Bago East	0.1	0.6	0.4	0.1	0.2	15
Tanintharyi	0.1	0.5	0.3	0.2	0.2	16
Kayah	0.0	0.0	0.0	0.0	0.0	17
Union	**1.7**	**0.3**	**1.6**	**1.2**	**1.3**	

Table 2.47:   Average number of goats/sheep per household (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Magwe	0.73	0.23	0.47	0.81	0.68	1
Sagaing	0.50	0.03	0.15	0.52	0.43	2
Mandalay	0.45	0.02	0.46	0.26	0.33	3
Chin	0.30	0.21	0.27	0.30	0.28	4
Kachin	0.19	0.02	0.02	0.23	0.15	5
Bago West	0.12	0.03	0.00	0.15	0.11	6
Rakhine	0.12	0.00	0.15	0.07	0.09	7
Kayin	0.08	0.01	0.03	0.08	0.07	8
Shan East	0.07	0.00	0.07	0.04	0.05	9
Mon	0.06	0.00	0.07	0.04	0.05	10
Ayeyarwaddy	0.05	0.01	0.06	0.04	0.04	11
Yangon	0.14	0.01	0.00	0.04	0.04	12
Tanintharyi	0.01	0.01	0.02	0.00	0.01	13
Shan North	0.01	0.00	0.01	0.01	0.01	14
Shan South	0.01	0.00	0.02	0.00	0.01	15
Bago East	0.01	0.01	0.00	0.01	0.01	16
Kayah	0.00	0.00	0.00	0.00	0.00	17
Union	**0.25**	**0.02**	**0.18**	**0.19**	**0.19**	

Pigs

At Union level, 16.4% of households own pigs. This proportion is higher in rural areas with 20.7% of households owning pigs compared to only 4.4% in urban areas. The proportion of households owning pigs is highest in Chin (67.4% of households) and Shan East (54.1%). The average number of pigs per household is highest in Shan East and Chin with 1.65 and 1.13 pigs per household, respectively. *(see Table 2.48 and Table 2.49)*

Table 2.48:   Proportion of households owning pigs (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Chin	78.0	32.7	76.4	47.9	67.4	1
Shan East	62.9	19.4	59.3	49.6	54.1	2
Kachin	37.9	24.3	39.4	31.2	34.5	3
Kayin	36.3	9.9	35.2	32.9	33.1	4
Bago East	36.8	12.3	27.4	34.9	33.0	5
Kayah	36.2	24.9	36.5	29.9	31.8	6
Ayeyarwaddy	28.0	5.8	22.4	24.8	24.2	7
Bago West	22.6	6.0	19.4	21.2	20.7	8
Tanintharyi	22.7	9.7	22.5	19.1	20.0	9
Sagaing	20.1	12.6	23.6	17.7	19.0	10
Magwe	16.9	6.8	17.3	15.1	15.9	11
Shan South	16.7	7.7	21.2	11.1	14.4	12
Shan North	16.3	6.7	13.9	14.8	14.4	13
Mandalay	13.4	3.0	11.0	10.2	10.5	14
Mon	6.3	2.5	3.5	6.0	5.6	15
Rakhine	6.4	0.7	4.4	5.7	5.3	16
Yangon	8.6	0.4	3.8	2.3	2.5	17
Union	**20.7**	**4.4**	**18.5**	**15.6**	**16.4**	

Table 2.49:   Average number of pigs owned by households (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan East	1.93	0.54	1.54	1.74	1.65	1
Chin	1.31	0.53	1.31	0.75	1.13	2
Kachin	1.07	0.90	0.97	1.07	1.03	3
Shan North	0.81	0.35	0.67	0.77	0.72	4
Bago East	0.72	0.34	0.49	0.72	0.66	5
Kayah	0.63	0.55	0.61	0.60	0.60	6
Kayin	0.65	0.21	0.65	0.59	0.60	7
Ayeyarwaddy	0.62	0.15	0.48	0.56	0.54	8
Tanintharyi	0.61	0.22	0.45	0.56	0.53	9
Sagaing	0.49	0.35	0.47	0.47	0.47	10
Bago West	0.50	0.11	0.50	0.44	0.46	11
Shan South	0.39	0.18	0.38	0.32	0.34	12
Magwe	0.31	0.17	0.28	0.30	0.29	13
Mandalay	0.30	0.10	0.29	0.22	0.24	14
Mon	0.21	0.07	0.12	0.20	0.18	15
Rakhine	0.11	0.01	0.05	0.11	0.09	16
Yangon	0.24	0.02	0.06	0.08	0.08	17
Union	**0.48**	**0.13**	**0.40**	**0.38**	**0.39**	

Poultry

The ownership of poultry is the most common at 27.9% of households at Union level. This proportion is higher in rural areas with 35.8% of households owning poultry compared to only 5.7% of urban households. It is in Chin where we find the highest proportion of households owning poultry with 76% of households, followed by Shan East (70%). SD where ownership of poultry is the least widespread is Yangon (5.1%). On average, households own 4.4 poultry. Rural households own 5.3 poultry on average compared to 1.9 for urban households. Poor households own fewer poultry on average with 3.5 heads compared to 4.7 for non poor households. SDs where a higher number of poultry is owned on average are Kayah (14.6), Shan East (10) and Ayeyarwaddy (8.6). SDs where the lowest number of poultry is owned on average are Mon (1.3), Mandalay (2.3), Yangon (2.3) and Shan South (2.7). *(see Table 2.50 and Table 2.51)*

Table 2.50: Proportion of households owning poultry (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Chin	85.6	44.2	81.3	64.5	76.0	1
Shan East	81.6	25.1	74.1	66.6	70.0	2
Kayin	60.9	22.1	75.6	54.2	56.2	3
Kachin	64.0	30.5	57.8	54.1	55.6	4
Kayah	69.9	26.9	63.2	49.0	53.1	5
Bago West	56.5	14.4	48.1	53.1	51.7	6
Bago East	50.8	12.0	34.4	48.5	44.8	7
Ayeyarwaddy	38.6	5.7	28.3	34.5	32.9	8
Magwe	35.3	8.0	30.9	33.5	32.5	9
Rakhine	36.0	13.7	29.9	32.6	31.7	10
Sagaing	32.1	12.9	36.0	27.4	29.3	11
Shan North	34.2	6.2	30.5	26.7	28.5	12
Tanintharyi	31.6	10.9	30.4	26.1	27.3	13
Shan South	32.2	3.9	33.6	20.9	25.1	14
Mandalay	19.8	2.4	16.5	14.0	14.8	15
Mon	15.0	5.8	16.2	12.6	13.3	16
Yangon	17.3	0.9	5.3	5.1	5.1	17
Union	**35.9**	**5.7**	**30.2**	**27.0**	**27.9**	

Table 2.51: Average number of poultry per household (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	7.7	25.3	8.5	17.0	14.6	1
Shan East	11.4	4.2	10.8	9.3	10.0	2
Ayeyarwaddy	10.3	0.7	4.8	10.0	8.6	3
Kayin	7.4	2.7	8.8	6.6	6.8	4
Chin	7.5	2.6	6.8	5.5	6.4	5
Kachin	7.4	3.3	6.0	6.6	6.4	6
Tanintharyi	6.5	1.5	3.6	6.2	5.4	7
Bago East	6.1	1.4	3.5	6.0	5.4	8
Bago West	5.3	3.8	3.0	5.9	5.2	9
Shan North	6.0	1.8	6.4	4.0	5.1	10
Sagaing	4.4	4.2	4.7	4.2	4.3	11
Magwe	3.5	1.8	2.8	3.6	3.3	12
Rakhine	2.7	5.0	1.7	3.9	3.1	13
Shan South	3.1	1.5	3.6	2.2	2.7	14
Mandalay	2.1	3.1	1.8	2.7	2.4	15
Yangon	6.5	0.8	0.7	2.5	2.3	16
Mon	1.5	0.5	1.7	1.2	1.3	17
Union	**5.3**	**1.9**	**3.5**	**4.7**	**4.4**	

Other assets

Ownership of radio-cassette/stereo

At Union level, 21.1% of households own a radio-cassette or stereo. This proportion is higher in urban areas with 30.4% of households owning a radio-cassette or stereo compared to rural households (17.7%). A smaller proportion of poor households own a radio-cassette or stereo compared to non poor households (respectively 12.7% and 24.2%). It is in Rakhine and Chin where there is the lowest proportion of households owning a radio-cassette or stereo (respectively 10.3% and 11.8%). *(see Table 2.52)*

Ownership of a television set

At Union level, 25.7% of households own a television set. This proportion is much higher in urban areas where it is 52.7% compared to only 16% in rural areas. Very few poor households own a television set compared to non poor households (9.5% compared to 31.8%). SDs with the lowest proportion of households owning a television set are Chin (5.2%) and Rakhine (10%). *(see Table 2.53)*

Land-line telephone equipment ownership

Very few households own land-line telephone equipment with only 3.1% of households at Union level. This proportion is higher in urban areas with 9.7% of households compared to less than 1% in rural areas. Very few poor households own

land-line telephone equipment (0.3%) compared to non poor households (4.1%). SD with the highest access to land-line telephone is Yangon with 10% of households owning line telephone equipment. *(see Table 2.54)*

Bicycle ownership

The proportion of households owning at least one bicycle is 41.8% at Union level. This proportion is higher in urban areas than in rural areas with respectively 48.8% and 39.2% of households owning a bicycle. A higher proportion of non poor households own a bicycle (45.4%) compared to poor households (32.2%). SDs where the lowest proportion of households owns a bicycle are Chin (11%), Shan East (19.3%) and Rakhine (20.9%). *(see Table 2.55)*

Motorcycle ownership

The proportion of households owning a motorcycle is 9.8% at Union level. This proportion is higher in urban areas with 15.3% of households compared to rural areas (7.8% of households). A smaller proportion of poor households own a motorcycle with only 3.9% of households compared to non poor households (12.0%). SDs with the lowest proportion of households owning a motorcycle are Yangon[57] (1.9%), Rakhine (2.4%) and Chin (2.4%). *(see Table 2.56)*

---

[57] It is important to note that motorcycle traffic is not permitted in the city of Yangon which explains why so few households own a motorcycle in Yangon Division.

Table 2.52: Proportion of households owning a radio-cassette or stereo (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	30.4	41.5	35.9	34.3	34.7	1
Yangon	17.0	35.0	5.5	33.8	30.4	2
Shan South	24.2	36.6	25.7	28.2	27.4	3
Kachin	25.3	32.7	21.5	31.0	27.2	4
Shan East	23.6	35.0	16.8	33.8	25.9	5
Shan North	22.8	30.0	22.9	25.6	24.3	6
Sagaing	21.3	31.1	16.4	24.5	22.7	7
Ayeyarwaddy	19.2	31.1	11.9	24.5	21.2	8
Magwe	18.3	35.5	10.4	26.0	20.1	9
Tanintharyi	20.3	17.8	15.0	21.7	19.8	10
Mon	19.5	19.1	15.8	20.2	19.5	11
Bago East	16.1	25.9	12.7	19.4	17.7	12
Kayin	15.5	30.5	10.3	18.0	17.3	13
Mandalay	15.5	20.9	11.9	19.7	17.0	14
Bago West	15.0	31.2	8.6	19.8	16.8	15
Chin	9.8	18.5	10.5	14.6	11.8	16
Rakhine	6.2	28.0	3.5	13.7	10.3	17
Union	**17.7**	**30.4**	**12.7**	**24.2**	**21.1**	

Table 2.53: Proportion of households owning a television set (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Yangon	30.7	64.0	20.2	60.4	55.5	1
Mon	40.6	58.4	35.4	45.7	43.9	2
Shan East	29.2	70.0	22.2	50.6	37.5	3
Ayeyarwaddy	23.3	57.1	13.2	34.6	29.1	4
Kayah	18.0	39.7	13.4	31.8	26.5	5
Shan South	13.0	60.1	12.0	31.4	24.9	6
Kayin	20.1	57.6	6.6	26.6	24.7	7
Kachin	14.9	50.7	9.6	33.5	23.8	8
Shan North	15.3	53.6	12.5	32.5	23.1	9
Mandalay	12.2	43.0	8.3	27.5	21.0	10
Tanintharyi	15.5	37.4	6.9	25.3	20.1	11
Bago West	18.1	35.7	8.8	24.1	20.1	12
Sagaing	11.7	35.6	5.7	18.0	15.2	13
Bago East	10.8	25.6	3.9	16.3	13.1	14
Magwe	7.3	39.0	3.9	14.6	10.6	15
Rakhine	3.0	39.4	2.0	14.0	10.0	16
Chin	1.5	17.7	2.3	11.6	5.2	17
Union	**16.0**	**52.7**	**9.5**	**31.8**	**25.7**	

Table 2.54:   Proportion of households owning land-line telephone equipment (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Yangon	0.0	13.4	0.5	11.3	10.0	1
Shan East	3.6	12.4	1.1	9.0	5.4	2
Kachin	0.7	13.9	0.5	6.3	4.0	3
Ayeyarwaddy	1.3	10.2	1.0	3.5	2.8	4
Shan South	1.2	7.3	1.6	3.4	2.8	5
Shan North	0.6	9.4	0.8	3.8	2.4	6
Bago East	1.4	5.2	0.0	2.7	2.0	7
Chin	0.0	8.3	0.4	5.2	1.9	8
Magwe	0.7	12.3	0.1	3.0	1.9	9
Tanintharyi	0.6	6.7	0.0	2.6	1.9	10
Mandalay	0.4	5.7	0.0	2.9	1.9	11
Kayah	0.8	3.5	0.0	2.6	1.9	12
Mon	1.3	4.3	0.0	2.2	1.8	13
Sagaing	0.4	7.3	0.0	1.8	1.4	14
Kayin	0.4	4.5	0.0	1.0	0.9	15
Rakhine	0.1	3.4	0.0	1.1	0.7	16
Bago West	0.0	5.6	0.0	0.9	0.6	17
Union	**0.7**	**9.7**	**0.3**	**4.1**	**3.1**	

Table 2.55:   Proportion of households owning at least one bicycle (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	83.1	82.0	90.2	79.7	82.7	1
Kachin	62.0	87.7	61.9	72.9	68.5	2
Mon	59.6	70.0	51.0	63.8	61.6	3
Sagaing	52.8	76.4	50.1	58.0	56.2	4
Bago East	53.8	57.7	44.4	57.9	54.4	5
Mandalay	48.3	66.2	41.4	59.6	53.4	6
Bago West	47.8	66.6	34.5	55.5	49.9	7
Shan North	36.2	60.4	32.8	48.6	41.2	8
Ayeyarwaddy	28.7	68.5	30.1	37.4	35.5	9
Magwe	31.4	70.9	24.2	42.3	35.5	10
Shan South	35.4	27.1	27.7	36.0	33.3	11
Kayin	28.5	49.0	14.1	32.7	30.9	12
Yangon	39.5	27.1	16.6	32.1	30.3	13
Tanintharyi	23.3	28.4	15.2	28.0	24.4	14
Rakhine	11.1	62.0	9.4	26.6	20.9	15
Shan East	16.8	28.9	11.6	25.8	19.3	16
Chin	9.0	17.8	7.3	19.1	11.0	17
Union	**39.2**	**48.8**	**32.2**	**45.4**	**41.8**	

Table 2.56:   Proportion of households owning at least one motorcycle (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan East	25.3	61.0	20.7	42.8	32.6	1
Kachin	24.0	46.5	14.7	39.7	29.6	2
Shan North	21.9	44.7	17.0	35.1	26.5	3
Sagaing	15.5	28.0	8.3	20.0	17.3	4
Tanintharyi	14.1	28.0	2.6	22.7	17.0	5
Mon	15.4	18.0	2.5	18.7	15.9	6
Mandalay	7.9	29.6	3.5	19.5	14.1	7
Shan South	7.2	27.4	5.5	15.7	12.3	8
Kayah	4.5	23.7	6.8	14.2	12.0	9
Kayin	5.7	24.8	0.0	8.9	8.0	10
Ayeyarwaddy	3.2	19.4	1.8	7.5	6.0	11
Magwe	3.4	25.5	0.9	8.5	5.6	12
Bago East	4.1	12.3	0.4	7.2	5.4	13
Bago West	4.4	10.3	0.3	6.8	5.1	14
Chin	0.6	8.6	0.7	6.3	2.4	15
Rakhine	1.5	6.5	0.8	3.2	2.4	16
Yangon	3.9	1.3	0.3	2.2	1.9	17
Union	**7.8**	**15.3**	**3.9**	**12.0**	**9.8**	

8.   HEALTH, NUTRITION STATUS AND ACCESS TO HEALTH SERVICES

Indicators are presented on:

∉   Proportion of 1 Year Old Children Immunized Against Measles;

∉   Infant Mortality Rate;

∉   Antenatal Care Coverage;

∉   Proportion of births attended by skilled health personnel;

∉   Morbidity Incidence;

∉   Average Health Expenditures;

∉   Prevalence of Moderately Underweight Children Under 5 Years of Age;

∉   Prevalence of Severely underweight Children Under 5 Years of Age;

∉   Access to Essential Primary Health Care Services.

8.1   PROPORTION OF 1 YEAR OLD CHILDREN IMMUNIZED AGAINST MEASLES

The proportion of 1 year old children immunized against measles provides a measure of the coverage and the quality of the child health care system. For measles, immunization coverage should be above 90% to stop transmission of the virus. At Union level, immunization coverage is 80.3%. There are important differences across SDs and strata in terms of immunization coverage. SDs with the lowest coverage in the first round are Shan North (59.9%), Chin (62.9%), Rakhine (66.8%) and Bago West (69%). A slightly lower proportion of children from poor families have been immunized against measles compared to children from non poor families (78.4% vs. 81.4%). *(see Table 2.57 and Figure 2.15)*

Figure 2.15: Proportion of 1 year old children immunized against measles (%) (second round)

8.2 ANTENATAL CARE COVERAGE

Antenatal care coverage is defined here as the proportion of women having given birth in the last 5 years who visited skilled health personnel (excluding traditional birth attendants) for antenatal care at least three times during their last pregnancy. At Union level, 53% of pregnant women have visited skilled personnel at least three times during their pregnancy. This proportion is lower in rural areas at 48.2%, compared to 69.8% in urban areas. Women from poor households have lower access to antenatal care than women from non-poor households at 44.5%

and 57.7% respectively. Access to antenatal care varies across SDs with lowest rates found in Rakhine (31.8%), Chin (34.6%), Sagaing (41.6%), Kayah (42.3%), Shan South (43%), Shan North (47%), Shan East (48.7%) and Kayin (49%). The SD with highest access to antenatal care is Yangon at 73.9%. *(see Table 2.58 and Figure 2.16)*

Figure 2.16: Antenatal care coverage (% of women having given birth in the last 5 years)[58] (second round)

_____
[58] Excluding traditional birth attendants (TBA).

Table 2.57:   Proportion of 1 Year Old Children Immunized Against Measles (%) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan (S)	95.8	100.0	96.9	95.2	96.1	1
Kayah	92.5	81.8	100.0	80.7	89.6	2
Mandalay	90.7	86.0	83.2	95.5	89.6	3
Magwe	87.7	84.6	86.4	88.6	87.5	4
Bago (E)	90.9	54.0	85.5	88.8	87.4	5
Shan (E)	88.3	67.9	89.6	81.5	84.6	6
Yangon	86.4	78.6	71.2	81.5	80.0	7
Kachin	83.1	66.9	65.4	89.6	79.8	8
Mon	77.8	89.5	75.0	81.1	79.5	9
Sagaing	78.9	78.7	76.0	79.9	78.8	10
Ayeyarwaddy	78.1	80.8	80.3	77.3	78.4	11
Kayin	76.1	81.8	100.0	74.9	76.6	12
Tanintharyi	75.8	72.9	72.5	76.8	75.2	13
Bago (W)	67.9	81.3	79.2	59.4	69.0	14
Rakhine	62.5	87.7	62.1	70.1	66.8	15
Chin	57.0	87.9	57.0	80.7	62.9	16
Shan (N)	58.3	66.9	59.4	60.4	59.9	17
Union	**80.4**	**79.7**	**78.4**	**81.4**	**80.3**	

Table 2.58:   Antenatal care coverage (% of women having given birth in the last 5 years) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Yangon	59.9	78.6	56.2	78.3	73.9	1
Mon	65.1	62.1	64.7	64.5	64.6	2
Magwe	60.6	67.5	53.7	67.5	61.1	3
Bago (E)	56.8	77.8	56.3	61.9	60.0	4
Tanintharyi	58.8	60.0	62.2	57.6	59.0	5
Kachin	55.2	58.9	48.4	64.1	56.0	6
Bago (W)	51.1	63.4	45.3	56.6	52.0	7
Mandalay	43.2	74.0	41.1	59.0	51.4	8
Ayeyarwaddy	49.5	64.8	45.5	54.6	51.4	9
Kayin	45.0	73.7	37.8	50.5	49.0	10
Shan (E)	45.0	65.2	43.5	55.2	48.7	11
Shan (N)	41.8	76.2	35.1	58.4	47.0	12
Shan (S)	40.4	57.1	37.9	46.6	43.0	13
Kayah	36.5	55.3	24.8	53.0	42.3	14
Sagaing	42.5	34.1	41.6	41.6	41.6	15
Chin	27.2	65.9	27.4	50.2	34.6	16
Rakhine	29.3	46.6	24.3	36.7	31.8	17
Union	**48.2**	**69.8**	**44.5**	**57.7**	**53.0**	

Table 2.59:   Proportion of births attended by skilled health personnel (% of deliveries in the last 5 years) (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Mon	90.1	96.4	93.8	90.2	91.2	1
Yangon	73.1	92.3	73.0	91.1	87.5	2
Shan (S)	85.8	92.0	79.9	91.7	86.8	3
Mandalay	81.9	89.6	78.4	88.0	83.9	4
Kayah	72.3	100.0	82.7	79.6	80.8	5
Tanintharyi	77.6	87.2	80.0	79.6	79.7	6
Magwe	75.3	89.0	72.3	79.8	76.3	7
Bago (E)	74.6	85.5	68.5	80.2	76.2	8
Shan (N)	69.8	96.5	64.1	83.3	73.9	9
Sagaing	65.6	79.1	61.9	69.2	67.1	10
Kachin	63.4	79.4	58.4	75.4	66.6	11
Ayeyarwaddy	61.4	88.4	55.9	69.6	64.8	12
Shan (E)	60.2	80.0	52.7	77.7	63.9	13
Bago (W)	58.0	93.5	57.4	62.7	60.6	14
Kayin	55.2	80.4	41.7	61.0	58.8	15
Rakhine	44.2	73.0	36.8	56.1	48.5	16
Chin	41.2	61.6	42.0	52.1	45.2	17
Union	**67.9**	**88.6**	**64.6**	**76.9**	**72.5**	

8.3   PROPORTION OF BIRTHS ATTENDED BY SKILLED HEALTH PERSONNEL

At Union level, 72.5% of births are attended by skilled health personnel (excluding traditional birth attendants) with much higher rates in urban (88.6%) than in rural areas (67.9%). The indicator is higher for women from non poor households (76.9%) than for women from poor households (64.6%). There are important differences across SDs with much lower rates found in Chin (45.2%) and Rakhine (48.5%) compared to other SDs. *(see Table 2.59 and Figure 2.17)*

Figure 2.17:   Proportion of births attended by skilled health personnel (% of deliveries in the last 5 years)[59] (second round)

---
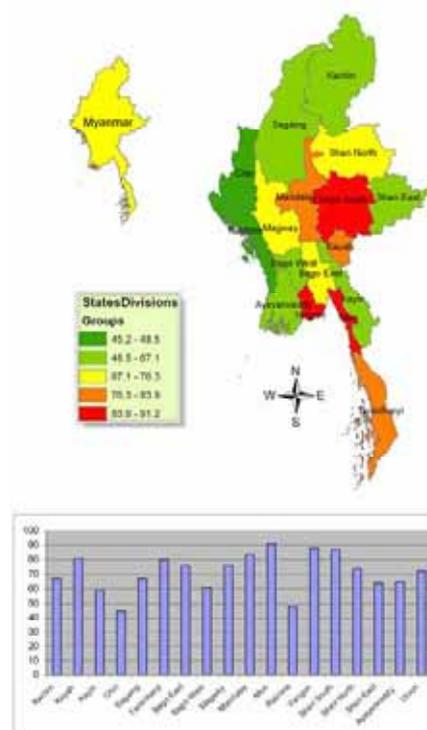
[59] Excluding traditional birth attendants (TBA).

8.4 MORBIDITY INCIDENCE

There is considerable seasonal variation in self-reported morbidity incidence[60] in Myanmar. The rainy season usually brings higher rates of malaria and other water-borne diseases. At the end of the rainy season (first round), the morbidity rate at Union level was 6.5%, while it decreased to 4.0% at the end of the dry season (second round). Morbidity rates are higher in rural areas in both rounds. For the first round, the morbidity rate in rural Myanmar was 7%, while it was 5.2% in urban areas. For the second round, rural areas had a morbidity rate of 4.2% compared to 3.4% in urban areas. There is no significant difference in self-reported morbidity rates between members of poor and non poor households[61]. *(see Table 2.60, Table 2.61 and Figure 2.18)*

Figure 2.18: Morbidity incidence (first round)

---
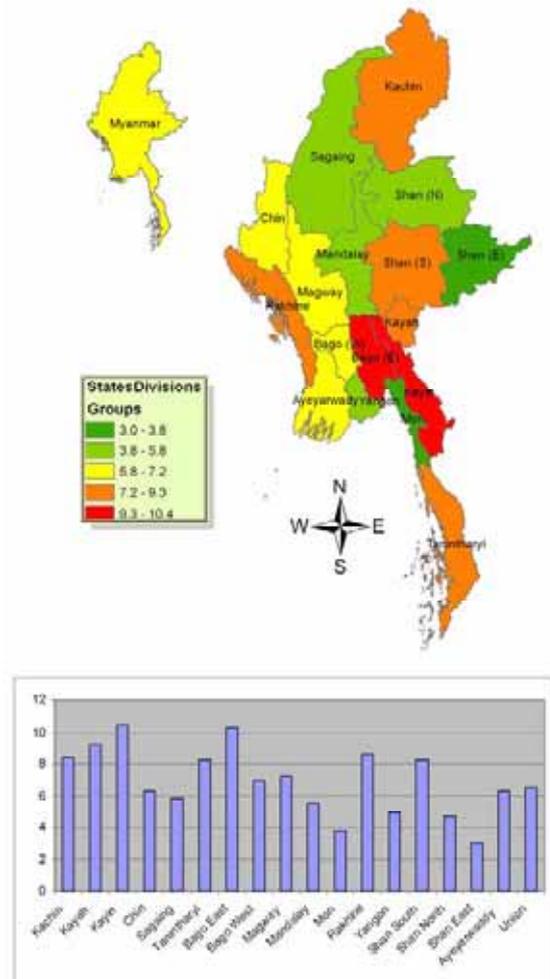
[60] Self-reported morbidity incidence is defined as the number of people who declared having reduced their activity and/or stayed in bed due to illness or injury during the 30 days preceding the survey.

[61] Self-reported morbidity rates are usually quite unreliable at accurately capturing poor/non poor differences since the poor often do not perceive illness as such.

Table 2.60:   Morbidity incidence (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan (E)	2.3	5.4	2.4	3.7	3.0	1
Mon	3.9	3.3	3.5	3.9	3.8	2
Shan (N)	5.0	3.4	3.5	5.9	4.7	3
Yangon	5.5	4.7	5.2	4.9	4.9	4
Mandalay	5.9	4.7	6.1	5.1	5.5	5
Sagaing	5.8	5.6	6.4	5.6	5.8	6
Ayeyarwaddy	6.4	6.0	6.5	6.2	6.3	7
Chin	5.8	8.1	5.3	9.2	6.3	8
Bago (W)	6.9	7.2	7.1	6.8	6.9	9
Magwe	7.2	7.4	5.5	8.4	7.2	10
Shan (S)	9.7	3.3	11.6	6.0	8.3	11
Tanintharyi	8.3	8.2	6.6	9.2	8.3	12
Kachin	8.7	7.7	8.3	8.6	8.5	13
Rakhine	9.9	3.6	9.3	8.3	8.7	14
Kayah	10.4	7.4	10.3	8.7	9.3	15
Bago (E)	10.5	9.1	8.4	11.2	10.3	16
Kayin	11.1	6.5	12.8	10.1	10.4	17
Union	**7.0**	**5.2**	**6.6**	**6.5**	**6.5**	

Table 2.61:   Morbidity incidence (second round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Shan (N)	1.7	1.5	1.0	2.4	1.7	1
Shan (E)	2.2	2.0	1.9	2.4	2.1	2
Mandalay	3.1	2.0	2.8	2.8	2.8	3
Mon	3.4	1.6	4.4	2.7	3.1	4
Sagaing	3.1	3.3	2.5	3.3	3.1	5
Kayah	3.3	3.8	3.6	3.5	3.5	6
Yangon	4.0	3.8	6.1	3.4	3.8	7
Bago (W)	4.2	2.4	2.5	4.8	4.0	8
Magwe	4.1	5.2	3.6	4.7	4.2	9
Ayeyarwaddy	4.4	3.4	4.1	4.3	4.2	10
Shan (S)	5.1	3.1	5.6	4.0	4.6	11
Tanintharyi	4.6	5.1	4.4	4.9	4.7	12
Rakhine	5.6	3.1	4.8	5.3	5.1	13
Bago (E)	6.2	3.9	5.5	6.0	5.9	14
Kachin	7.2	4.9	7.3	6.0	6.6	15
Kayin	7.3	6.9	7.8	7.2	7.3	16
Chin	9.5	7.6	8.2	11.7	9.1	17
Union	**4.2**	**3.4**	**3.9**	**4.1**	**4.0**	

8.5   AVERAGE HEALTH EXPENDITURES

The ability to spend for health care can provide information on the poverty status of households, although high costs of health care can also have a negative impact on living conditions of households. Average annual expenditures on health are lower in rural than urban areas at 9 906 and 16 291 Kyats respectively. Average health expenditures per adult equivalent are much lower for poor households with health expenditures of non poor households representing more than twice health

expenditures of poor households[62]. SDs with the highest average health expenditures are Yangon and Bago East while those with the lowest health expenditures are Shan North and Shan East. *(see Table 2.62)*

8.6 PREVALENCE OF MODERATELY UNDERWEIGHT CHILDREN UNDER 5 YEARS OF AGE

The prevalence of moderately underweight children is the proportion of children under five years old whose weight[63] for age is less than minus two standard deviations from the median for the international reference population ages 0–59 months[64]. The prevalence of moderately underweight children at Union level is 34.4%. It is slightly higher for rural than urban areas at 35.1% and 31.5%, respectively. The prevalence of moderately underweight children is higher for children from poor than non-poor households at 38% and 32.2%, respectively. There is no significant difference between

girls and boys in terms of prevalence of moderate malnutrition. There are very important differences across SDs. The situation is particularly alarming in Rakhine where 60.5% of children show moderate malnutrition (58.5% in rural areas and 80.2% in urban areas). *(see Table 2.63 and Figure 2.19)*

Figure 2.19: Prevalence of moderately underweight children under 5 years of age (%) (second round)

---

[62] It is important to underline again that health expenditures were not included in the consumption expenditures used for poverty analyses.

[63] Children were weighted using Salter weighing scales. Two separate readings of weight were made, one by a local nurse or midwife and the other by the survey enumerator.

[64] The weight-for-age indicator reflects body mass relative to chronological age and is influenced by both the height of the child (height for age) and weight-for-height. Its composite nature makes interpretation complex. For example, weight for age fails to distinguish between short children of adequate body weight and tall, thin children. Low height for age or stunting measures the cumulative deficient growth associated with long-term factors, including chronic insufficient daily protein intake. Low weight for height, or wasting indicates in most cases a recent and severe process of weight loss, often associated with acute starvation or severe disease. Unfortunately, it was decided not to measure height for logistical reasons so it was not possible to measure the prevalence of stunting and wasting in children aged less than 5 years.

Table 2.62: Average health expenditures per adult equivalent (Kyats)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non poor	Value	Rank
Yangon	8 638	21 264	5 395	19 800	18 051	1
Kachin	13 090	26 103	9 009	21 296	16 340	2
Bago East	14 951	19 914	11 286	17 290	15 725	3
Chin	13 172	22 689	11 884	22 966	15 392	4
Tanintharyi	15 184	13 469	8 116	17 497	14 827	5
Ayeyarwaddy	13 017	17 124	6 977	16 073	13 721	6
Kayin	13 260	12 930	7 295	13 853	13 220	7
Shan South	11 783	16 039	8 761	14 893	12 863	8
Mon	12 611	7 612	10 797	11 862	11 677	9
Kayah	8 589	12 591	6 415	11 652	10 160	10
Sagaing	8 911	14 671	7 188	10 490	9 746	11
Mandalay	7 558	10 117	5 182	9 886	8 288	12
Magwe	7 450	14 335	4 147	10 582	8 154	13
Bago West	7 277	10 231	4 105	8 876	7 610	14
Rakhine	7 372	7 277	5 938	8 059	7 353	15
Shan East	5 262	6 101	5 047	5 764	5 433	16
Shan North	5 023	5 877	2 250	7 832	5 197	17
Union	**9 906**	**16 291**	**6 262**	**13 612**	**11 594**	

Table 2.63: Prevalence of moderately underweight children under 5 years of age (%) (second round)

S/D and Union	By strata		By poverty status		By gender		Total	
	Rural	Urban	Poor	Non Poor	Female	Male	Value	Rank
Kayah	20.5	22.3	13.6	25.6	35.5	6.5	21.0	1
Bago (W)	23.2	37.3	25.1	23.5	28.9	19.2	24.2	2
Shan (E)	26.0	22.9	26.5	23.8	33.0	19.1	25.3	3
Shan (N)	26.5	26.9	32.3	20.5	27.7	25.2	26.6	4
Yangon	30.9	25.9	36.3	24.9	23.1	32.0	27.1	5
Kachin	29.4	23.8	36.3	21.5	26.9	29.9	28.2	6
Tanintharyi	32.0	16.9	31.8	27.3	30.9	27.1	28.9	7
Sagaing	27.6	38.1	33.9	26.6	31.6	25.8	28.9	8
Kayin	29.6	32.2	8.0	32.7	29.5	30.4	30.0	9
Chin	30.7	38.2	30.1	35.6	30.6	33.1	31.7	10
Bago (E)	31.4	34.2	36.4	29.4	28.5	35.1	31.8	11
Mandalay	34.0	30.4	34.1	32.3	33.2	33.0	33.1	12
Shan (S)	36.1	23.4	34.7	33.8	36.0	32.9	34.2	13
Mon	34.3	39.2	37.9	34.0	39.6	31.1	35.1	14
Ayeyarwaddy	36.0	37.9	40.1	34.2	33.7	39.0	36.2	15
Magwe	42.5	41.4	46.7	38.5	43.1	41.7	42.4	16
Rakhine	58.5	80.2	59.7	61.1	63.8	56.4	60.5	17
Union	**35.1**	**31.5**	**38.0**	**32.2**	**34.5**	**34.2**	**34.4**	

Table 2.64:   Prevalence of severely underweight children under 5 years of age (%)

S/D and Union	By strata		By poverty status		By gender		Total	
	Rural	Urban	Poor	Non Poor	Female	Male	Value	Rank
Kayah	1.5	8.2	6.4	1.7	7.0	0.0	3.5	1
Yangon	4.4	4.5	3.0	4.9	4.6	4.4	4.5	2
Chin	4.2	6.5	3.2	7.9	3.9	5.3	4.6	3
Shan (N)	4.8	9.6	8.3	2.3	6.7	3.9	5.4	4
Kayin	5.3	9.1	2.8	6.2	2.6	9.1	5.8	5
Sagaing	5.5	9.6	6.8	5.6	7.0	4.8	6.0	6
Bago (W)	5.8	10.1	6.6	5.7	5.9	6.2	6.1	7
Tanintharyi	7.7	2.5	8.5	5.6	4.2	8.7	6.6	8
Shan (E)	6.3	10.0	5.6	9.2	9.5	5.2	7.2	9
Mandalay	9.6	6.9	9.4	8.6	8.0	9.9	8.9	10
Kachin	9.2	8.4	15.9	3.3	9.7	8.2	9.1	11
Magwe	9.7	7.5	9.7	9.4	10.2	8.9	9.5	12
Shan (S)	11.0	3.2	10.6	9.0	13.7	6.9	9.8	13
Ayeyarwaddy	9.9	9.7	9.4	10.1	7.2	12.8	9.9	14
Bago (E)	9.9	11.3	14.1	8.0	8.3	11.8	10.1	15
Mon	9.7	14.3	13.2	9.4	13.9	7.4	10.4	16
Rakhine	25.4	40.6	34.3	20.9	29.3	23.6	26.8	17
Union	**9.8**	**8.0**	**11.3**	**8.2**	**9.3**	**9.5**	**9.4**	

Table 2.65:   Proportion of the population with access to primary health care services (%)

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Kayah	100.0	100.0	100.0	1
Yangon	76.8	100.0	94.4	2
Mon	77.5	86.1	79.1	3
Kachin	64.9	99.6	74.6	4
Kayin	63.7	100.0	68.7	5
Mandalay	58.2	89.5	67.0	6
Bago East	59.5	97.6	65.7	7
Shan East	54.9	98.8	64.7	8
Ayeyarwaddy	56.5	100.0	63.9	9
Shan South	52.4	100.0	63.4	10
Tanintharyi	57.9	75.9	61.6	11
Shan North	47.4	80.1	54.4	12
Sagaing	47.2	96.3	54.0	13
Bago West	44.5	100.0	50.8	14
Magwe	44.4	100.0	49.7	15
Rakhine	35.7	97.0	48.1	16
Chin	21.5	89.0	36.5	17
Union	**53.8**	**96.2**	**64.9**	

8.7 PREVALENCE OF SEVERELY UNDERWEIGHT CHILDREN UNDER 5 YEARS OF AGE

Figure 2.20: Prevalence of severely underweight children under 5 years of age (%) (second round)

The prevalence of severely underweight children is the proportion of children under five years old whose weight for age is less than minus three standard deviations from the median for the international reference population ages 0–59 months. The prevalence of severely underweight children at Union level is 9.4%. It is slightly higher for rural than urban areas at 9.8% and 8%

respectively. The prevalence of severely underweight children is higher for children from poor than non-poor households at 11.3% and 8.2% respectively. There is no significant difference between girls and boys in terms of prevalence of severe malnutrition. There are very important differences across SDs. The situation is particularly serious in Rakhine where 26.8% of children have severe malnutrition (25.4% in rural areas and 40.6% in urban areas). It is also higher than 10% in Mon and Bago East. *(see Table 2.64 and Figure 2.20)*

8.8 ACCESS TO ESSENTIAL PRIMARY HEALTH CARE SERVICES

This section is based on results from the Community Survey which was undertaken in all ward segments and villages visited during the first round of the IHLCA survey. The Community Survey aimed at providing information on infrastructures and services available to the population in a limited number of ward segments and villages. The Community Survey did not intend to be representative of all health facilities in Myanmar.

Proportion of the population with access to primary health care services

Access to primary health care services is measured by the proportion of the population living within one hour's walking distance of a health centre or hospital. At Union level, 64.9% of the population has access to primary health care services. This rate is much higher in urban areas (96.2%) than rural areas (53.8%). SDs with the

lowest rates include Chin (36.5%) and Rakhine (48.1%). *(see Table 2.65 and Figure 2.21)*

Types of health facilities visited during the survey

The majority of health facilities included in the Community Survey are public facilities (67%), though there are important differences across strata and SDs. In rural areas, 92% of facilities surveyed were public whereas only 36% of facilities in urban areas were public. *(see Table 2.66)*

Table 2.66:   Proportion of health facilities surveyed that are public facilities (%)

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Shan (S)	96.0	75.0	89.2	1
Chin	100.0	70.0	88.0	2
Rakhine	95.8	47.1	83.1	3
Mon	86.3	56.3	79.1	4
Sagaing	93.6	51.6	78.0	5
Bago (W)	95.7	46.2	77.8	6
Ayeyarwaddy	96.9	41.1	76.6	7
Kachin	90.6	42.9	76.1	8
Shan (N)	94.3	50.0	75.4	9
Shan (E)	100.0	41.2	75.0	10
Tanintharyi	87.5	42.1	74.6	11
Magwe	95.9	35.0	74.3	12
Kayah	100.0	37.5	68.8	13
Bago (E)	85.7	41.9	67.1	14
Mandalay	84.8	31.3	57.4	15
Kayin	81.4	22.2	54.4	16
Yangon	100.0	18.6	32.6	17
Union	**91.8**	**35.9**	**67.1**	

Figure 2.21:   Proportion of the population with access to primary health care services (%)
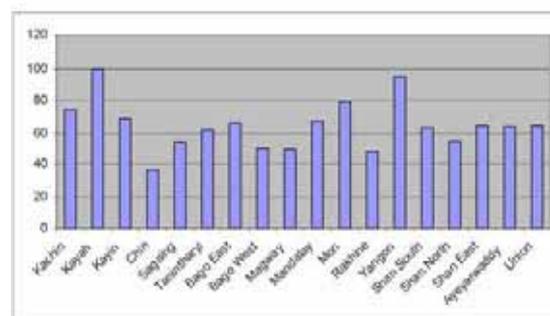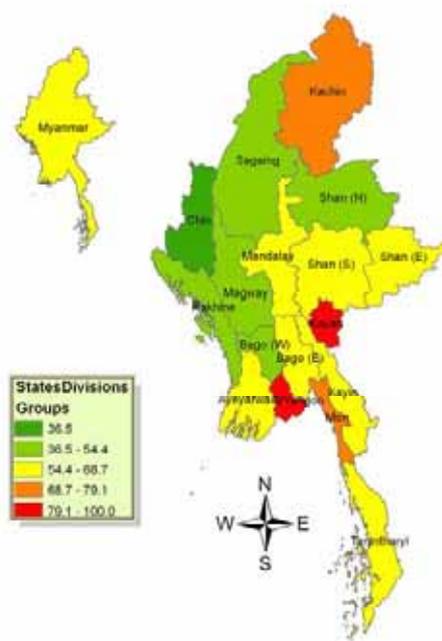
There are important differences in the types of health facilities available in rural areas compared to urban areas. As would be expected, the main health facilities surveyed in rural areas were sub-rural health centers (59%), rural health centers (20%) or station hospitals (11%). In urban areas, the main health facilities surveyed were 'other' health facilities such as specialized private clinics or other private clinics (7.3%) followed by township hospitals (14%). *(see Table 2.67)*

Table 2.67:   Distribution of health facilities by type (%)

Groups	Township hospital	Public specialized hospital[65]	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other[66]
State/Division							
Kachin	13.0	0.0	10.9	6.5	43.5	0.0	26.1
Kayah	6.3	0.0	0.0	12.5	37.5	6.3	37.5
Kayin	3.8	0.0	6.3	12.7	30.4	1.3	45.6
Chin	16.0	0.0	8.0	8.0	44.0	8.0	16.0
Sagaing	9.8	0.0	8.1	12.7	39.3	6.9	23.1
Tanintharyi	7.5	0.0	7.5	11.9	44.8	0.0	28.4
Bago East	5.5	0.0	8.2	12.3	32.9	4.1	37.0
Bago West	11.1	0.0	19.4	13.9	27.8	2.8	25.0
Magway	8.8	0.0	8.8	16.8	34.5	1.8	29.2
Mandalay	5.5	0.0	5.1	8.2	29.3	4.3	47.7
Mon	6.0	0.0	7.5	16.4	40.3	4.5	25.4
Rakhine	7.7	0.0	7.7	13.8	50.8	3.1	16.9
Yangon	2.3	1.1	2.3	4.5	13.6	2.3	73.9
Shan South	10.8	0.0	5.4	13.5	48.6	2.7	18.9
Shan North	16.4	0.0	4.9	16.4	31.1	3.3	27.9
Shan East	12.5	2.5	7.5	17.5	30.0	2.5	27.5
Ayeyarwaddy	5.8	0.0	7.8	17.5	36.4	5.2	27.3
Strata							
Rural	1.8	0.0	10.7	20.3	58.8	0.2	8.1
Urban	14.3	0.5	1.8	1.5	1.4	7.9	72.6
Union	**7.3**	**0.2**	**6.8**	**12.0**	**33.4**	**3.6**	**36.6**

---

[65] There are three public specialized hospitals found in the sample, one in Yangon and two in Shan East.
[66] Other health facilities: Specialized private clinics, other private clinics, traditional medicine hospital or clinic, private doctor, private nurse/midwife, other.

Most rural and sub-rural health centers surveyed were not open to in-patients, i.e., they did not keep patients overnight. On the other hand, public specialized hospitals, township hospitals and station hospitals are usually open to in-patients. *(see Table 2.68)*

Table 2.68: Average number of days health facilities surveyed were open to in-patients in the 30 days preceding the Community Survey

Groups	Township hospital	Public specialized hospital	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other
State/Division							
Kachin	30.0	-	30.0	0.0	0.3	0.0	4.2
Kayah	30.0	-	0.0	0.0	0.0	30.0	5.0
Kayin	30.0	-	27.6	3.0	0.0	30.0	2.5
Chin	30.0	-	22.0	0.0	6.4	10.0	0.0
Sagaing	28.2	-	27.9	3.9	0.4	0.5	5.0
Tanintharyi	28.8	-	29.0	1.6	0.6	0.0	5.5
Bago East	30.0	-	30.0	0.0	0.0	0.0	0.2
Bago West	30.0	-	27.4	2.4	0.0	3.0	0.0
Magway	30.0	-	30.0	3.2	0.0	15.0	1.8
Mandalay	27.7	-	27.7	0.0	0.1	0.0	1.2
Mon	28.0	-	20.8	3.0	0.3	0.0	0.1
Rakhine	30.0	-	30.0	1.4	0.0	0.0	2.0
Yangon	30.0	30.0	15.0	0.0	0.0	15.0	1.2
Shan South	30.0	-	30.0	3.6	0.4	0.0	12.9
Shan North	30.0	-	30.0	2.4	0.4	6.0	2.2
Shan East	30.0	30.0	20.0	4.3	0.4	12.0	4.7
Ayeyarwaddy	30.0	-	28.1	2.4	0.2	0.0	2.7
Strata							
Rural	28.0	-	28.3	2.3	0.4	0.0	3.1
Urban	29.5	30.0	20.7	0.0	0.0	4.1	2.0
Union	**29.3**	**30.0**	**27.4**	**2.1**	**0.3**	**3.9**	**2.1**

In rural areas, rural health centers were open an average of 12 days in the 30 days prior to the Community survey and sub-rural health centers, 10 days on average. Public specialized hospitals, township hospitals and station hospitals were open to out-patients most of the time. *(see Table 2.69)*

Table 2.69:   Average number of days health facilities surveyed were open to out-patients in the 30 days preceding the Community Survey

Groups	Township hospital	Public specialized hospital	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other
State/Division							
Kachin	25.0	-	22.6	15.0	12.0	0.0	24.8
Kayah	22.0	-	0.0	12.0	10.0	3.0	25.0
Kayin	27.3	-	26.8	14.2	19.3	8.0	27.9
Chin	21.0	-	12.0	11.0	18.9	6.0	19.0
Sagaing	23.5	-	25.0	12.9	6.4	8.6	28.7
Tanintharyi	24.8	-	27.4	11.2	13.4	0.0	27.9
Bago East	22.7	-	27.0	11.3	6.2	14.7	24.3
Bago West	26.0	-	28.9	17.2	6.2	4.0	25.8
Magway	26.3	-	25.2	10.6	9.4	10.0	27.4
Mandalay	25.6	-	22.9	12.6	9.9	7.7	26.0
Mon	25.7	-	13.6	14.0	6.1	16.7	25.7
Rakhine	21.4	-	20.0	12.3	9.3	20.0	27.8
Yangon	27.5	30.0	23.5	21.0	20.0	23.0	26.1
Shan South	25.5	-	25.0	8.8	11.8	5.0	25.0
Shan North	25.1	-	26.7	12.9	12.1	21.0	23.6
Shan East	30.0	8.0	30.0	10.9	7.8	12.0	26.4
Ayeyarwaddy	24.9	-	24.5	11.3	9.9	14.6	24.6
Strata							
Rural	26.4	-	24.5	12.4	10.4	8.0	24.7
Urban	24.8	22.7	23.2	15.7	14.8	11.8	26.4
Union	**25.0**	**22.7**	**24.4**	**12.6**	**10.5**	**11.6**	**26.2**

The different types of hospitals surveyed (township, public specialized, station) had between one half and three quarters of the 41 essential medicines available at the time of the survey[67]. Rural health centers surveyed had on average 43% of the 41 essential medicines and sub-rural health centers 34%. *(see Table 2.70)*

Table 2.70: Proportion of the 41 essential medicines available in the last 30 days (%)

Groups	Township hospital	Public specialized hospital	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other
State/Division							
Kachin	77.2	-	34.1	36.6	35.1	0.0	46.7
Kayah	90.2	-	0.0	39.0	24.4	90.2	43.1
Kayin	90.2	-	59.5	41.0	46.5	53.7	46.9
Chin	40.9	-	19.5	30.5	7.1	28.0	29.3
Sagaing	40.9	-	45.1	42.1	33.1	24.8	36.9
Tanintharyi	54.1	-	66.3	45.4	46.0	0.0	40.1
Bago East	78.7	-	58.9	30.1	33.9	26.0	40.4
Bago West	83.5	-	69.3	46.3	37.8	0.0	43.1
Magway	63.2	-	53.7	42.2	35.8	20.7	34.3
Mandalay	70.7	-	56.3	44.6	35.3	13.5	42.8
Mon	53.7	-	63.4	41.9	36.9	21.1	42.0
Rakhine	56.6	-	47.8	36.9	28.9	53.7	38.1
Yangon	46.3	69.5	57.3	49.1	30.5	26.8	43.5
Shan South	64.6	-	46.3	46.8	24.5	12.2	52.3
Shan North	86.6	-	54.5	43.2	25.3	48.8	60.3
Shan East	84.4	92.7	72.4	48.8	48.8	12.2	48.3
Ayeyarwaddy	74.5	-	50.6	49.1	34.5	33.2	41.5
Strata							
Rural	64.6	-	53.4	42.9	34.1	15.9	45.0
Urban	65.5	77.2	57.7	49.5	45.5	26.9	42.3
Union	**65.4**	**77.2**	**53.9**	**43.3**	**34.3**	**26.5**	**42.6**

---

[67] The list of 41 essential medicines is presented in Appendix 2.

The health facilities surveyed with the largest number of doctors are public specialized hospitals, followed by townships hospitals. Station hospitals surveyed had an average of one doctor. Usually rural and sub-rural health centers surveyed did not have a doctor on their staff. Facilities surveyed with the largest number of doctors are in Yangon. *(see Table 2.71)*

Table 2.71:   Average number of doctors by type of facility surveyed

Groups	Township hospital	Public specialized hospital	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other
State/Division							
Kachin	20.5	-	1.0	0.0	0.0	0.0	1.2
Kayah	45.0	-	0.0	0.0	0.0	0.0	0.8
Kayin	9.3	-	0.8	0.1	0.0	0.0	2.1
Chin	8.7	-	0.5	0.0	0.0	0.0	1.2
Sagaing	3.7	-	0.9	0.2	0.0	0.2	0.9
Tanintharyi	2.4	-	1.0	0.0	0.0	0.0	1.4
Bago East	3.7	-	1.0	0.0	0.0	0.3	0.9
Bago West	1.7	-	1.0	0.0	0.0	0.0	0.8
Magway	7.6	-	1.0	0.0	0.0	1.0	1.2
Mandalay	9.8	-	0.8	0.1	0.0	0.1	1.0
Mon	6.7	-	1.0	0.1	0.0	0.7	0.9
Rakhine	1.8	-	0.8	0.0	0.0	0.5	4.2
Yangon	11.7	88.0	1.0	0.1	0.4	1.7	5.7
Shan South	16.7	-	1.0	0.0	0.0	0.0	4.1
Shan North	3.9	-	1.0	0.0	0.0	2.0	3.0
Shan East	7.4	12.0	0.7	0.0	0.0	0.0	1.3
Ayeyarwaddy	15.0	-	1.2	0.0	0.0	0.1	1.0
Strata							
Rural	11.5	-	0.9	0.0	0.0	0.0	1.4
Urban	7.8	62.7	1.0	0.7	1.1	0.4	2.5
Union	**8.3**	**62.7**	**1.0**	**0.1**	**0.0**	**0.4**	**2.4**

The health facilities surveyed with the largest number of nurses are public specialized hospitals, followed by townships hospitals. Station hospitals surveyed had an average of two nurses. Usually rural and sub-rural health centers surveyed did not have a nurse on their staff. Facilities surveyed with the largest number of nurses were in Yangon. *(see Table 2.72)*

Table 2.72:   Average number of nurses by type of facility surveyed

Groups	Township hospital	Public specialized hospital	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other
State/Division							
Kachin	48.7	-	1.4	0.0	0.1	0.0	0.6
Kayah	64.0	-	0.0	0.0	0.0	1.0	0.2
Kayin	10.3	-	1.8	0.6	0.0	3.0	2.6
Chin	23.0	-	1.0	0.0	0.1	0.0	1.2
Sagaing	6.6	-	1.5	0.3	0.0	0.0	0.3
Tanintharyi	6.6	-	2.6	0.0	0.0	0.0	0.3
Bago East	8.7	-	2.0	0.0	0.0	0.3	0.1
Bago West	2.7	-	1.1	0.0	0.0	0.0	0.0
Magway	10.6	-	2.1	0.0	0.0	0.0	0.2
Mandalay	19.4	-	1.3	0.4	0.0	0.0	0.2
Mon	9.5	-	2.6	0.3	0.0	0.0	0.0
Rakhine	4.2	-	1.6	0.1	0.1	0.5	4.5
Yangon	18.7	105.0	1.3	0.1	0.2	0.0	1.9
Shan South	36.5	-	2.5	0.0	0.0	0.0	4.0
Shan North	9.0	-	2.7	0.0	0.0	1.5	4.4
Shan East	16.8	19.0	2.3	0.0	0.0	0.0	0.9
Ayeyarwaddy	24.8	-	1.8	0.0	0.0	0.3	0.2
Strata							
Rural	23.6	-	1.6	0.1	0.0	0.0	0.9
Urban	14.6	76.3	3.2	1.6	0.6	0.2	1.1
Union	**15.8**	**76.3**	**1.8**	**0.1**	**0.0**	**0.2**	**1.1**

The health facilities surveyed with the largest number of midwives are township hospitals. Station hospitals, rural health centers and maternal and child health centers surveyed had an average of respectively 2.6, 2.7 and 2.5 midwives. Sub-rural health centers surveyed had an average of 1 midwife per facility. *(see Table 2.73)*

Table 2.73:   Average number of midwives by type of facility surveyed

Groups	Township hospital	Public specialized hospital	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other
State/Division							
Kachin	5.5	-	3.6	2.7	0.9	0.0	0.1
Kayah	0.0	-	0.0	2.5	2.0	6.0	0.0
Kayin	0.3	-	3.6	1.9	1.1	0.0	0.2
Chin	14.2	-	0.5	1.0	1.0	2.5	0.0
Sagaing	4.1	-	1.5	3.2	0.9	1.8	0.3
Tanintharyi	0.0	-	4.0	1.5	1.1	0.0	0.2
Bago East	0.5	-	2.3	2.7	1.0	2.7	0.0
Bago West	0.0	-	1.1	3.6	1.0	1.0	0.1
Magway	1.0	-	4.3	3.6	1.0	2.5	0.2
Mandalay	5.6	-	1.8	2.7	1.2	2.1	0.1
Mon	1.2	-	5.2	3.5	1.3	3.7	0.1
Rakhine	7.2	-	2.6	2.3	0.9	2.5	0.0
Yangon	1.0	3.0	3.5	2.3	1.0	3.5	0.4
Shan South	1.0	-	2.5	1.8	1.3	2.0	0.7
Shan North	4.5	-	0.7	1.7	1.3	0.5	0.6
Shan East	5.6	0.0	2.3	0.9	1.0	3.0	0.1
Ayeyarwaddy	8.1	-	2.5	3.0	1.1	3.5	0.1
Strata							
Rural	1.3	-	2.6	2.7	1.1	3.5	0.1
Urban	4.5	2.0	2.6	2.6	1.3	2.4	0.2
Union	**4.1**	**2.0**	**2.6**	**2.7**	**1.1**	**2.5**	**0.2**

The health facilities surveyed with the largest number of health assistants are public specialized hospitals, followed by township hospitals. Usually rural and sub-rural health centers surveyed did not have a health assistant present. *(see Table 2.74)*

Table 2.74:   Average number of health assistants by type of facility surveyed

Groups	Township hospital	Public specialized hospital	Station hospital	Rural health center	Sub-Rural health center	Maternal and child health center	Other
State/Division							
Kachin	48.7	-	1.4	0.0	0.1	0.0	0.6
Kayah	64.0	-	0.0	0.0	0.0	1.0	0.2
Kayin	10.3	-	1.8	0.6	0.0	3.0	2.6
Chin	23.0	-	1.0	0.0	0.1	0.0	1.2
Sagaing	6.6	-	1.5	0.3	0.0	0.0	0.3
Tanintharyi	6.6	-	2.6	0.0	0.0	0.0	0.3
Bago East	8.7	-	2.0	0.0	0.0	0.3	0.1
Bago West	2.7	-	1.1	0.0	0.0	0.0	0.0
Magway	10.6	-	2.1	0.0	0.0	0.0	0.2
Mandalay	19.4	-	1.3	0.4	0.0	0.0	0.2
Mon	9.5	-	2.6	0.3	0.0	0.0	0.0
Rakhine	4.2	-	1.6	0.1	0.1	0.5	4.5
Yangon	18.7	105.0	1.3	0.1	0.2	0.0	1.9
Shan South	36.5	-	2.5	0.0	0.0	0.0	4.0
Shan North	9.0	-	2.7	0.0	0.0	1.5	4.4
Shan East	16.8	19.0	2.3	0.0	0.0	0.0	0.9
Ayeyarwaddy	24.8	-	1.8	0.0	0.0	0.3	0.2
Strata							
Rural	23.6	-	1.6	0.1	0.0	0.0	0.9
Urban	14.6	76.3	3.2	1.6	0.6	0.2	1.1
Union	**15.8**	**76.3**	**1.8**	**0.1**	**0.0**	**0.2**	**1.1**

9. EDUCATION STATUS AND ACCESS TO EDUCATION SERVICES

Indicators are presented on:

∉ Net enrolment rate in primary education;

∉ Ratio of female to male students in primary education;

∉ Adult literacy rate;

∉ Access to education services.

9.1 NET ENROLMENT RATE IN PRIMARY EDUCATION

Figure 2.22: Net enrolment rate in primary education (%) (first round)

The net enrolment rate in primary education is the ratio of students of official primary school age over the total population of official primary school age. The indicator is a measure of the coverage and efficiency of the school system. At Union level, the rate is 84.7%. It is slightly lower in rural areas (84%) than in urban areas (87.6%). The net enrolment rate for children from poor households is lower at 80.1% compared to 87.2% for non poor children. The rate is lowest in Rakhine where only 66.7% of children are enrolled in primary education. *(see Table 2.75 and Figure 2.22)*

9.2 GROSS ENROLMENT RATE IN PRIMARY EDUCATION

The gross primary enrollment rate is the ratio of children of any age enrolled in primary school over the total population of children of official primary school age. At Union level, the ratio is 113.9. It is lower in urban areas (116.5) than in rural areas (103.7). This may be due to the fact that in rural areas children start attending primary school at an older age than the official age or that they have a higher repetition rate. It is lowest in Yangon at 101.5. *(see Table 2.76)*

117

Table 2.75:   Net enrolment rate in primary education[68] (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Kayah	89.2	100.0	84.8	97.2	93.1	1
Sagaing	91.3	79.7	91.1	89.7	90.1	2
Mandalay	89.0	89.1	85.2	91.7	89.0	3
Kachin	88.2	89.6	88.0	89.0	88.6	4
Magwe	87.5	88.9	86.4	88.7	87.6	5
Ayeyarwaddy	87.1	91.2	85.0	88.7	87.6	6
Yangon	84.1	89.2	82.2	89.0	87.5	7
Kayin	86.0	90.9	77.7	88.2	86.4	8
Tanintharyi	86.0	87.8	79.0	89.7	86.3	9
Bago (W)	83.9	89.6	82.3	85.4	84.4	10
Bago (E)	82.9	91.5	72.7	89.9	84.2	11
Mon	81.2	92.9	77.1	84.7	82.9	12
Chin	81.0	83.1	80.5	84.1	81.4	13
Shan (S)	79.2	79.4	72.4	83.7	79.2	14
Shan (N)	76.3	89.3	74.3	83.8	79.0	15
Shan (E)	76.0	83.3	76.8	78.6	77.6	16
Rakhine	65.3	74.2	58.9	72.1	66.7	17
Union	**84.0**	**87.6**	**80.1**	**87.2**	**84.7**	

Table 2.76:   Gross enrolment rate in primary education[69] (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Yangon	110.2	97.5	98.1	102.4	101.5	1
Kayah	97.8	115.5	102.1	105.4	104.3	2
Rakhine	107.5	93.7	98.1	110.4	105.3	3
Chin	112.7	92.6	112.6	96.6	108.5	4
Bago (E)	109.8	103.4	107.8	109.4	108.9	5
Bago (W)	112.0	106.9	123.1	105.7	111.6	6
Kayin	110.7	122.4	93.8	115.3	111.8	7
Magwe	113.2	101.7	113.9	111.1	112.4	8
Mon	111.3	123.2	111.5	113.5	113.1	9
Shan (N)	115.7	108.9	120.8	107.7	114.3	10
Shan (E)	116.6	107.1	112.4	117.5	114.6	11
Kachin	122.7	101.7	117.4	117.0	117.2	12
Mandalay	120.3	108.6	118.0	117.0	117.4	13
Sagaing	121.3	100.7	123.6	117.2	119.0	14
Shan (S)	121.9	107.8	125.6	116.1	119.9	15
Ayeyarwaddy	121.6	112.3	119.2	121.0	120.4	16
Tanintharyi	126.7	109.4	128.3	121.4	123.6	17
Union	**116.5**	**103.7**	**114.5**	**113.5**	**113.9**	

---

[68] Questions on enrollment rates where included only in the first round questionnaire since children were on school vacation in the months preceding the second round.
[69] Questions on enrollment rates where included only in the first round questionnaire since children were on school vacation in the months preceding the second round.

9.3 RATIO OF FEMALE TO MALE STUDENTS IN PRIMARY EDUCATION

Figure 2.23: Girls to boys ratio in primary level enrolment (per 100) (first round)
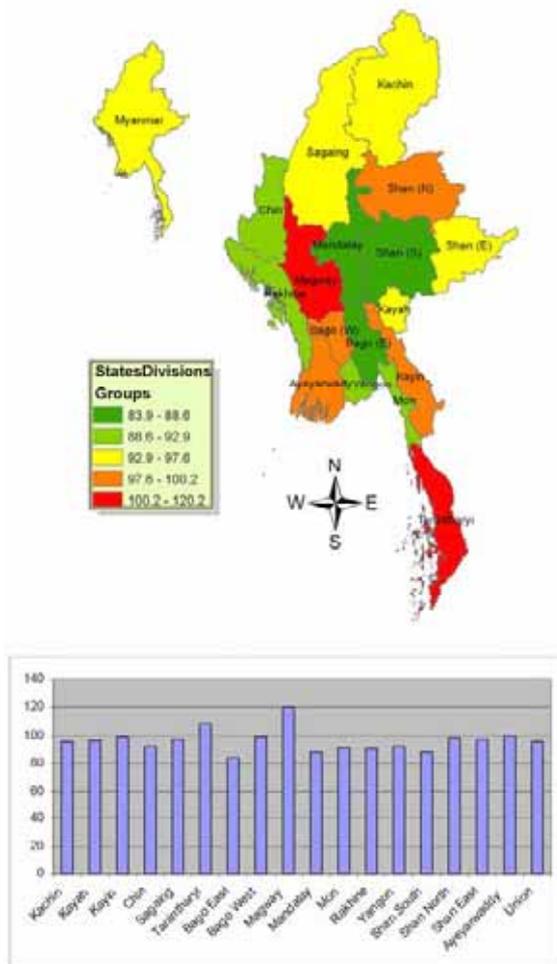
The ratio of girls to boys in primary education is 96.1 at Union level. In rural areas, the ratio of girls to boys is the highest with 98 girls for 100 boys, while it is lowest in urban areas with 87.8 girls for 100 boys. The higher ratio in rural areas may be due to the fact that males are required to participate in income-earning activities especially farm work. The ratio of girls to boys is higher for poor children with a 100.5 to 100 ratio of girls to boys, while it is lower for non poor

households (93.7 girls for 100 boys). It varies significantly across SDs. It is above 100 in Magwe, Tanintharyi and Ayeyarwaddy, while it is lower in Bago East, Mandalay and Shan South. *(see Table 2.77 and Figure 2.23)*

9.4 ADULT LITERACY RATE

Figure 2.24: Adult literacy rate (%) (second round)
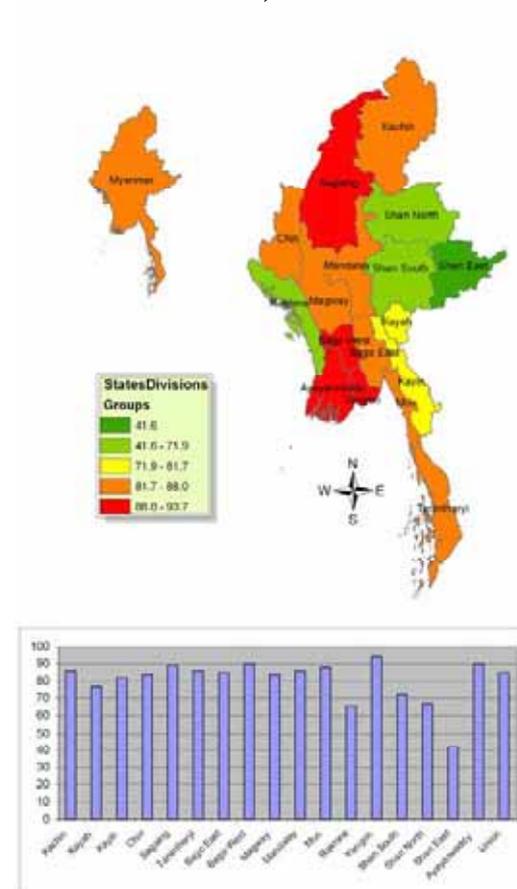
At Union level, the literacy rate[70] for those aged 15 years and above is 84.9%. This

---

[70] Literacy is defined as the population proportion that can easily read and understand a common simple text, and solve simple mathematical problems or any individual who has completed the second standard. When the survey was administered, respondents had to be able to read easily and explain the meaning of a simple text and correctly solve a number of simple mathematical problems to be identified as literate (for those who had not completed the second standard).

119

proportion is higher in urban than rural areas at 92.1% and 82.1% respectively. Individuals from poor households have lower literacy rates than individuals from non poor households at 78.8% and 87.6% respectively. Literacy rates vary across SDs.

They are lowest in Shan East (41.6%), Rakhine (65.8%), Shan North (67.1%) and Shan South (71.9%) and highest in Yangon at 93.7%. *(see Table 2.78 and Figure 2.24)*

Table 2.77:   Girls to boys ratio in primary level enrolment (per 100)[71] (first round)

S/D and Union	By strata		By poverty status		Total	
	Rural	Urban	Poor	Non Poor	Value	Rank
Magwe	124.6	67.9	137.1	106.4	120.2	1
Tanintharyi	111.7	95.3	103.7	111.6	108.9	2
Ayeyarwaddy	100.2	99.8	101.1	99.8	100.2	3
Bago (W)	99.2	97.1	102.8	96.9	99.1	4
Kayin	101.2	80.5	106.3	97.8	98.9	5
Shan (N)	96.7	105.0	92.2	105.7	98.3	6
Sagaing	98.3	90.6	105.5	94.4	97.6	7
Shan (E)	98.5	92.8	99.7	94.3	97.3	8
Kayah	73.5	143.4	91.8	98.5	96.3	9
Kachin	102.7	76.7	123.8	76.5	96.1	10
Chin	97.6	73.8	102.7	65.5	92.9	11
Yangon	97.1	89.9	113.8	87.6	92.4	12
Mon	94.3	79.2	130.5	82.4	91.7	13
Rakhine	91.3	89.4	89.4	92.0	91.0	14
Shan (S)	90.4	76.8	99.5	81.4	88.6	15
Mandalay	88.9	86.3	81.7	93.4	88.3	16
Bago (E)	86.2	71.3	78.4	86.7	83.9	17
Union	**98.0**	**87.8**	**100.5**	**93.7**	**96.1**	

Table 2.78:   Adult literacy rate (%) (second round)

S/D and Union	By strata		By poverty status		By Gender		Total	
	Rural	Urban	Poor	Non Poor	Female	Male	Value	Rank
Yangon	89.6	94.9	90.0	94.4	91.7	96.0	93.7	1
Bago (W)	89.2	93.7	84.9	92.0	87.8	91.9	89.8	2
Ayeyarwaddy	89.0	93.4	87.7	90.6	88.2	91.6	89.8	3
Sagaing	88.1	92.4	87.4	89.1	85.8	92.1	88.7	4
Mon	86.7	93.4	82.7	89.4	86.1	90.1	88.0	5
Mandalay	84.3	91.6	83.0	88.6	82.0	91.7	86.5	6
Kachin	84.2	90.1	82.9	88.3	84.3	87.8	86.0	7
Tanintharyi	85.0	88.8	84.4	86.5	84.6	87.2	85.8	8
Bago (E)	84.1	91.7	83.2	86.3	81.5	89.6	85.4	9
Chin	81.7	92.6	84.1	84.7	78.5	90.5	84.3	10
Magwe	82.3	93.6	78.3	87.0	79.3	88.5	83.5	11
Kayin	80.0	91.5	81.9	81.7	81.0	82.5	81.7	12
Kayah	70.8	85.4	75.7	76.9	73.2	80.0	76.5	13
Shan (S)	66.4	86.1	65.8	75.6	68.1	75.7	71.9	14
Shan (N)	63.8	78.2	60.8	73.6	63.4	71.1	67.1	15
Rakhine	59.7	86.6	52.6	73.3	61.7	70.3	65.8	16
Shan (E)	34.7	64.6	33.8	49.5	38.4	44.8	41.6	17
Union	**82.1**	**92.1**	**78.8**	**87.6**	**82.0**	**88.2**	**84.9**	

---

[71] Questions on enrollment rates where included only in the first round questionnaire since children were on school vacation in the months preceding the second round.

9.5 ACCESS TO EDUCATION SERVICES

This section is based on results from the Community Survey which was undertaken in all ward segments and villages visited during the first round of the IHLCA survey. The Community Survey aimed at providing information on infrastructures and services available to the population in a limited number of ward segments and villages. The Community Survey did not intend to be representative of all health facilities in Myanmar.

Access to a primary school

Figure 2.25: Proportion of population with access to a primary school (%)

Access to primary school[72] is measured by the proportion of the population living within a 30 minutes walking distance of a primary school. According to this definition, 91.4% of the population has access to a primary school. The rate is lower in rural than urban areas at 89.6% and 96.4% respectively. SDs with lowest access to a primary school are Rakhine (72.1%) and Bago West (78.2%). *(see Table 2.79 and Figure 2.25)*

Access to a middle school

Access to middle school is measured by the proportion of the population living within a 30 minutes walking distance of a middle school.[73] According to this definition, only 46% of the population has access to a middle school. The rate is lower in rural than urban areas at 35.7% and 75.5% respectively. SDs with lowest access to a primary school are Mandalay (21.4%), Rakhine (28.3%) and Shan North (31.1%). *(see Table 2.80 and Figure 2.26)*

---

[72] It is important to note that this indicator provides information about the physical access but does not provide information about the quality of infrastructure nor the quality of education.

[73] It is important to note that this indicator provides information about the physical access to a middle school but does not provide information about the quality of infrastructures nor quality of education.

Figure 2.26: Proportion of the population with access to a middle school (%)

Table 2.79: Proportion of population with access to a primary school (%)

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Kayin	98.8	100.0	98.9	1
Tanintharyi	96.9	100.0	97.5	2
Yangon	86.8	100.0	96.8	3
Ayeyarwaddy	95.3	100.0	96.1	4
Bago East	96.0	94.9	95.8	5
Mandalay	94.7	97.3	95.4	6
Mon	94.6	96.6	94.9	7
Kachin	91.9	97.5	93.4	8
Sagaing	92.6	94.8	92.9	9
Shan North	89.2	91.2	89.6	10
Chin	83.6	100.0	87.2	11
Magwe	87.0	81.9	86.5	12
Kayah	89.5	81.0	86.3	13
Shan East	85.2	84.4	85.0	14
Shan South	77.4	91.5	80.6	15
Bago West	77.6	82.5	78.2	16
Rakhine	68.8	85.3	72.1	17
Union	**89.6**	**96.4**	**91.4**	

Table 2.80: Proportion of the population with access to a middle school (%)

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Kayah	82.4	100.0	89.0	1
Yangon	38.1	87.4	75.5	2
Tanintharyi	51.3	77.4	56.7	3
Kachin	45.7	77.9	54.7	4
Chin	44.7	89.0	54.5	5
Ayeyarwaddy	42.8	90.0	50.9	6
Shan South	37.5	80.0	47.3	7
Sagaing	42.3	77.6	47.2	8
Mon	45.9	45.2	45.7	9
Mandalay	35.4	62.9	43.2	10
Kayin	34.8	84.9	41.8	11
Bago East	34.4	70.3	40.2	12
Shan East	32.0	67.0	39.8	13
Bago West	32.6	70.1	36.9	14
Shan North	21.4	66.7	31.1	15
Rakhine	24.5	43.5	28.3	16
Magwe	19.4	40.8	21.4	17
Union	**35.7**	**75.5**	**46.0**	

Access to a secondary school

Figure 2.27: Proportion of the population with access to a secondary school (%)
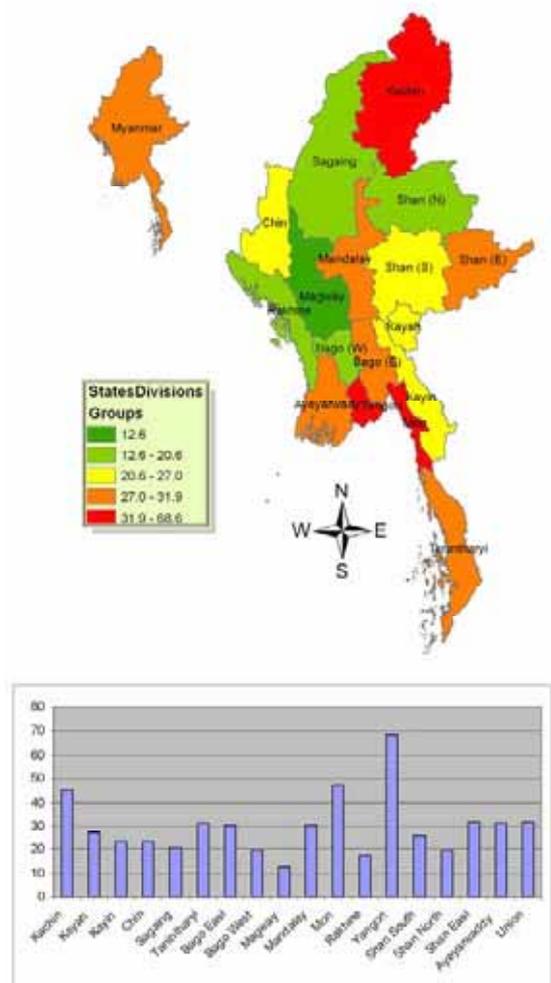
Access to secondary school is measured by the proportion of the population living within a 30 minutes walking distance of a secondary school. [74] According to this definition, only 31.8% of the population has access to a secondary school. The rate is lower in rural than urban areas at 16.5% and 75.2% respectively. SDs with lowest access

to a primary school are Magwe (12.6%), Rakhine (17.3%), Bago West (19.6%) and Shan North (19.8%). *(see Table 2.81 and Figure 2.27)*

Table 2.81: Proportion of the population with access to a secondary school (%)

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Yangon	18.1	84.5	68.6	1
Mon	36.7	92.4	47.3	2
Kachin	29.4	86.4	45.5	3
Shan East	17.3	82.6	31.9	4
Ayeyarwaddy	20.2	86.1	31.4	5
Tanintharyi	19.3	76.9	31.2	6
Mandalay	15.8	67.5	30.4	7
Bago East	25.8	54.2	30.4	8
Kayah	0.0	71.3	27.0	9
Shan South	12.9	68.9	25.9	10
Kayin	13.2	87.1	23.6	11
Chin	13.2	59.6	23.6	12
Sagaing	12.4	71.3	20.6	13
Shan North	5.9	70.5	19.8	14
Bago West	14.7	58.1	19.6	15
Rakhine	10.9	42.4	17.3	16
Magwe	8.7	49.6	12.6	17
Union	**16.5**	**75.2**	**31.8**	

9.6   PUPIL TO TEACHER RATIO

Pupil to teacher ratio in primary schools

The pupil to teacher ratio in the primary schools surveyed is 30 pupils for 1 teacher on average. There is not much difference between rural and urban areas. The highest pupil to teacher ratio in primary schools surveyed is in Rakhine with 38 pupils per teacher, while the lowest is found in Shan East with less than 20 pupils by teacher. *(see Table 2.82)*

---

[74] It is important to note that this indicator provides information about the physical access to a middle school but does not provide information about the quality of infrastructures nor quality of education.

Table 2.82: Pupil to teacher ratio in primary schools surveyed

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Shan (E)	18.4	22.8	19.3	1
Kayah	23.7	21.1	22.4	2
Kachin	24.1	24.2	24.2	3
Shan (S)	22.2	27.1	24.3	4
Shan (N)	24.7	29.1	25.5	5
Bago (W)	22.2	35.5	26.2	6
Magwe	28.4	22.2	26.7	7
Sagaing	29.9	22.8	27.2	8
Chin	28.7	25.5	27.7	9
Bago (E)	29.9	25.8	28.7	10
Tanintharyi	29.3	31.2	29.6	11
Yangon	33.3	30.4	31.1	12
Kayin	32.4	29.6	31.5	13
Ayeyarwaddy	36.2	26.0	32.4	14
Mon	33.5	30.4	32.5	15
Mandalay	34.5	31.9	33.2	16
Rakhine	39.2	34.6	38.3	17
Union	**30.6**	**28.6**	**29.9**	

Table 2.83: Pupil to teacher ratio in middle schools surveyed

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Bago (W)	23.9	13.9	22.1	1
Kayah	25.1	24.5	25.0	2
Shan (E)	23.7	29.2	25.7	3
Shan (S)	26.7	25.8	26.4	4
Magwe	28.7	28.3	28.6	5
Yangon	38.4	28.1	30.6	6
Sagaing	31.4	30.2	31.1	7
Ayeyarwaddy	33.2	23.8	31.1	8
Chin	34.0	22.5	31.5	9
Kayin	32.0	32.1	32.0	10
Rakhine	36.3	24.4	32.5	11
Kachin	33.7	27.8	33.0	12
Bago (E)	35.7	27.6	33.0	13
Shan (N)	34.3	36.6	35.4	14
Mon	36.7	33.6	36.2	15
Mandalay	37.7	33.0	36.3	16
Tanintharyi	37.1	40.7	38.1	17
Union	**33.1**	**29.2**	**32.0**	

Pupil to teacher ratio in middle schools

The pupil to teacher ratio in the middle schools surveyed is 30 pupils for 1 teacher on average. It is slightly higher in rural areas than in urban areas (33 compared to 29). The highest pupil to teacher ratio in middle schools surveyed is in Tanintharyi with 38 pupils per teacher, while the lowest is found in Bago West with 22 pupils for 1 teacher. *(see Table 2.83)*

Pupil to teacher ratio in high schools

The pupil to teacher ratio in the high schools surveyed is 39 pupils for 1 teacher on average. It is slightly higher in urban areas than in rural areas (42 compared to 37). The highest pupil to teacher ratio in high schools surveyed is in Kayin and Tanintharyi with 97 and 60 pupils per teacher, respectively. *(see Table 2.84)*

Table 2.84: Pupil to teacher ratio in high schools surveyed

S/D and Union	By strata		Total	
	Rural	Urban	Value	Rank
Kayah	27.0	26.8	26.8	1
Magwe	29.9	26.7	29.0	2
Bago (W)	33.7	26.1	30.8	3
Mon	32.3	26.5	30.8	4
Shan (E)	9.5	35.5	30.8	5
Sagaing	30.4	35.4	32.2	6
Shan (N)	28.8	34.2	32.2	7
Mandalay	34.7	37.1	35.6	8
Bago (E)	37.1	33.4	36.0	9
Chin	32.4	40.9	36.3	10
Kachin	32.8	42.2	37.1	11
Shan (S)	38.3	36.0	37.2	12
Yangon	31.0	42.9	39.9	13
Ayeyarwaddy	50.3	28.7	43.7	14
Rakhine	43.4	55.6	47.8	15
Tanintharyi	75.4	41.1	60.2	16
Kayin	36.1	137.6	97.0	17
Union	**37.1**	**42.3**	**39.3**	

PART III: SUMMARY OF KEY CHARACTERISTICS OF THE POOR

The preceding analysis, as well as results from the qualitative study, allows for a summary account of some of the key characteristics of poverty in Myanmar. More specifically:

∉ Poor households are systematically larger than non-poor households at 6.1 and 4.9 members respectively. This pattern holds across all S/Ds.

∉ Although poor households have larger household size, the age and economic dependency ratios do not appear to be associated with poverty. The lack of relationship between age/economic dependency ratios and poverty suggests that low returns or low remuneration are much more important determinants of poverty than unemployment or low participation rates in the labor force.

∉ Labor market data provides additional support of the preceding point. The participation rate of the population aged 10 and 15 years and over is higher for poor households than non poor households in both rounds at around 60% vs. 56% and 67% vs. 62% respectively. In addition, open unemployment for the poor is extremely low, at 2-3 % for long-term, open unemployment (in the 6 months preceding the survey) and 3-4% for short-term open unemployment (in the 7 days preceding the survey).

∉ Female-headship does not appear to be a correlate of poverty. The proportion of poor households headed by women is slightly lower than the proportion of non poor households headed by women (18.3% compared to 19.1%). For policy or programming purposes a better disaggregation of the category of female-headship is required, identify subgroups that face particular hardship.

∉ The level of education of the head of household is lower for poor households. Illiteracy rates for poor household heads are close to double those of non-poor household heads at 28.3% and 17% respectively. Further, the percentage of poor households who have never attended school or attended only Monastic schools is 42.3%, compared to 27.7% for non-poor households. Lower education signifies reduced access to income earning opportunities and lower returns/remuneration for economic activities.

∉ In terms of occupational categories, there is a strong association between poverty and casual labor. The proportion of the working population in poor households that are casual laborers is almost twice that for non poor households (22.9% and 12.5%, respectively). Casual laborers typical have a higher time rate of unemployment (i.e., the time between jobs) and earn lower wages.

∉ There is a strong association between agriculture and poverty. The proportion of individuals from poor households working in agriculture is 59.4%, compared to 45.8% for non poor households. Poor agricultural households farm and own smaller land areas. Average farmed and owned area for non-poor households is significantly higher than for poor households at 7.7 vs. 4.9 acres, and 6.9 vs. 4.1 acres, respectively. Furthermore, a smaller proportion of poor agricultural households (9%) own mechanical equipment than non poor agricultural

households (19%). There is only a slight different in access to agricultural credit between poor and non-poor households at 36.6 and 38.8% respectively.

∉ Poor households usually live in lower quality dwellings. A higher proportion of poor than non-poor households live in dwellings with thatched roofs (65.5% vs. 45.1% respectively), with walls made of thatch or other leaves (12.8% vs. 8.8% respectively) or of bamboo (64.7% vs. 47.5% respectively) and with floors made of palm or bamboo (33.8% vs. 17 respectively) or of earth or sand (11.5% vs. 7.4% respectively). Further, only 22.4% of poor households have access to electricity compared to 44.6% of non poor households.

∉ A smaller proportion of poor than non-poor households have access to improved sanitation at 58.7% and 71.4% respectively. The same is true for access to safe drinking water with 59.4% of poor households having access to safe drinking water compared to 64.2% of non poor households, although the difference is not as high as for access to sanitation. This is probably due to the fact that improved sanitation facilities are privately secured, whereas the infrastructure and facilities required for safe drinking water are often publicly provided.

∉ Poor households have fewer household assets and durable goods such as a radio, television set, telephone, bicycle, motorcycle or other vehicle.

∉ Poor households have lower access to a range of health services and worse health outcomes. A lower percentage of women from poor than non-poor households have access to antenatal care (44.5% vs. 57.7% respectively) and have births attended by skilled health personnel (64.6% vs. 76.9%). indicators for immunization rates, antenatal care, and skilled birth attendance are all lower for poor households. This is in part due to the higher proportion of poor households that live in rural areas where physical access to these services is lower. The prevalence of moderately underweight children is higher for children from poor than non-poor households at 38% and 32.2% respectively, while the corresponding prevalence estimates for severely underweight children are 11.3% and 8.2%, respectively.

∉ Poor households also have lower access to education. The net enrolment rate is lower for children from poor than non-poor households at 80.1% and 87.2%, respectively. Individuals from poor households have lower literacy rates lower than individuals from non poor households at 78.8% and 87.6% respectively. Low education is likely both a cause and consequence of poverty.

REFERENCES

Asian Development Bank (2005), *Key Indicators 2005: Labor Markets in Asia: Promoting Full, Productive, and decent employment*, Asian Development Bank.

Cambodia Ministry of Planning (1997), *A Poverty Profile of Cambodia – 1997*, General Directorate of Planning, Ministry of Planning, UNDP, SIDA, World Bank, Phnom Penh.

Ravallion, M. (1998), *Poverty Lines in Theory and Practice*, LSMS Working Paper 133, World Bank, Washington, D.C.

United Nations (2003), *Indicators for Monitoring Millennium Development Goals: Definitions, Rationale, Concepts and Sources*, United Nations Population Fund (UNFPA), United Nations Development Programme (UNDP), Department of Economics and Social Affairs Statistics Division, New-York.

UNDP/UNDESA. (1999),. *Studies in Social Deprivation in Myanmar*, Yangon.

APPENDIX 1: SET OF INDICATORS FROM OTHER COUNTRIES

Table A1.1:   Set of health indicators from selected Asian countries[75]

	% of 1 year old children immunized against measles	Infant Mortality Rate (IMR)	Antenatal Care Coverage	Skilled Birth Attendance
Bangladesh	77	66	11	14
Cambodia	65	95	9	32
Myanmar*	80	68	53	73
Lao	42	-	29	19
Thailand	94	35	86	99
Vietnam	93	-	29	85

Source: World Health Report, WHO, 2005.
* Data for Myanmar from: IHLCA, 2004-2005.

Table A1.2:   Indicators related to access to water and sanitation[76]

	% of population with access to an improved water source	% of population with access to improved sanitation
Bangladesh[1]	75	48
Cambodia[1]	34	16
Myanmar*	63	67
Lao[1]	43	24
Thailand[1]	85	99
Vietnam[1]	73	41

Source: United Nations Statistics Division, 2005. http://unstats.un.org/unsd/mi/mi.asp
* Data for Myanmar from: IHLCA, 2004-2005.
[1] 2002 figures.

Table A1.3:   Indicators related to education[77]

	Net enrolment rate in primary education	Girls to boys ratio in primary level enrolment
Bangladesh[1]	87	102
Cambodia[1]	86	89
Myanmar*	85	96
Lao[1]	83	86
Thailand[1]	86	96
Vietnam[1]	94	93

Source: United Nations Statistics Division, 2005. http://unstats.un.org/unsd/mi/mi.asp
* Data for Myanmar from: IHLCA, 2004-2005.
[1] 2001 figures.

---

[75] Definitions and methods of calculation used for these health indicators are usually standard internationally. The only indicator for which the method of calculation might differ is infant mortality rate.

[76] Definitions used for access to water and sanitation indicators were not specified. Therefore, figures are indicative only.

[77] Definitions used for access to water and sanitation indicators were not specified. Therefore, figures are indicative only.

APPENDIX 2 DISTRIBUTION OF HOUSEHOLDS BY TYPE OF SANITATION FACILITY

Table A2.1:   Distribution of households by type of sanitation facility (%) (first round)[78]

Groups	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Type 8	Type 9	Type 10
State/Division										
Kachin	1.5	5.0	31.6	48.6	3.8	7.2	1.5	0.0	0.6	0.1
Kayah	1.2	2.5	4.6	70.2	11.1	10.4	0.0	0.0	0.0	0.0
Kayin	0.4	14.0	10.7	42.7	11.0	10.8	0.8	1.8	7.3	0.5
Chin	0.0	3.1	6.0	37.7	21.9	24.9	1.1	0.4	4.4	0.5
Sagaing	2.3	3.2	4.1	72.6	2.8	4.3	0.3	0.3	9.5	0.7
Tanintharyi	2.4	13.2	9.5	29.0	8.2	13.9	1.9	6.0	14.2	1.9
Bago East	1.4	5.0	4.8	66.5	5.9	7.2	1.6	3.4	2.3	1.8
Bago West	0.0	1.1	1.9	60.2	3.5	17.2	1.0	10.4	3.4	1.1
Magway	1.0	5.9	7.1	45.6	5.0	19.6	0.5	0.5	14.0	0.8
Mandalay	5.9	4.7	5.8	67.4	4.5	3.6	0.8	0.2	6.6	0.4
Mon	1.7	19.8	36.0	25.9	8.0	2.6	0.0	1.4	4.5	0.2
Rakhine	0.6	3.4	19.6	15.1	4.3	4.2	1.2	4.0	46.9	0.6
Yangon	13.0	37.1	17.2	20.5	6.7	1.0	2.9	0.9	0.3	0.4
Shan South	0.0	3.1	7.0	52.4	20.6	12.0	1.5	0.4	2.5	0.5
Shan North	0.3	19.6	7.8	26.4	15.1	28.5	0.3	0.8	0.6	0.5
Shan East	2.0	25.0	5.3	25.4	2.3	9.2	6.6	0.7	22.7	1.0
Ayeyarwaddy	0.6	8.4	7.9	61.2	3.6	7.6	0.8	6.4	2.8	0.6
Milieu										
Rural	0.7	5.4	9.0	53.3	6.0	10.4	0.9	3.2	10.6	0.7
Urban	11.1	27.4	14.2	35.2	5.9	2.1	2.0	0.6	0.9	0.6
Poverty status										
Poor	1.2	4.9	7.7	48.3	6.6	13.0	1.3	3.2	12.9	0.9
Non Poor	4.3	13.6	11.4	48.6	5.7	6.3	1.1	2.2	6.2	0.6
Union	**3.4**	**11.2**	**10.4**	**48.5**	**6.0**	**8.2**	**1.2**	**2.5**	**8.0**	**0.7**

Type 1: Flush toilet connected to sewage system or septic tank   Type 6: Open pit latrine
Type 2: Pour flush toilet with water seal   Type 7: Bucket/pan latrine
Type 3: Covered pit latrine with foot step lid   Type 8: surface latrine
Type 4: Indirect covered pit latrine without foot step lid   Type 9: No facilities
Type 5: Direct covered pit latrine without foot step lid   Type 10: Other

---

[78] Whether the sanitation facility is shared with another household or not.

APPENDIX 3: LIST OF 41 ESSENTIAL MEDICINES

Table A3.1:   List of the 41 essential medicines

1. Albendazole
2. Aluminium hydroxide
3. Amoxicilline
4. Anti-snake venom serum for viper bite
5. Aspirin
6. Atropine
7. Benzoic acid+salicylic acid
8. Benzoin tincture
9. Benzyl benzoate
10. Chloramphenicol
11. Chlorhexidine
12. Chloroquine
13. Chlorpheniramine
14. Cloxacililin
15. Condom male
16. Condom female
17. Co-trimoxazole
18. Dextrose
19. Ergometrine
20. Erythromycin
21. Ferrous salts
22. Framycetin
23. Frusemide
24. Isoniazid
25 .Mebendazole
26 .Metronidazole
27. Oral rehydration salts
28. Paracematol
29. Phenoxymethyl penicilinne (Pen V)
30. Prednisolone
31. Primaquine
32. Procaine penicilline
33. Propranolol
34. Pyrazinamide
35. Quinine
36. Salbutamol
37. Tetanus vaccine
38. BCG vaccine
39. DPT vaccine
40. Polio vaccine
41. Measles vaccine