SHAKY FOUNDATIONS:

The Looming Collapse of Human Capital in Myanmar

SEPTEMBER 2024

Map 1: The States and Regions of Myanmar

This map is for illustrative purposes only. Names and boundaries do not imply official endorsement or acceptance by the United Nations Development Programme.

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Abbreviations

CATI	Computer Assisted Telephone Interviewing
CDM	Civil Disobedience Movement
ICS	Inter-censal survey
IFPRI	International Food Policy Research Institute
LPG	Liquefied petroleum gas
MLCS	Myanmar Living Conditions Survey
MSPS	Myanmar Subnational Phone Surveys
NEP	National Electrification Plan
NHP	National Health Plan
NLD	National League for Democracy
PPS	People's Pulse Survey
SAC	State Administration Council
UHC	Universal health coverage
UNDP	United Nations Development Programme
USDP	Union Solidarity and Development Party

Executive Summary

The ongoing conflict and resulting socio-economic crisis in Myanmar have meant not only a significantly higher poverty headcount and depth of poverty as reported in the UNDP report "Poverty and the Household Economy of Myanmar: a Disappearing Middle Class"[1], but also grave risks to the human capital of the country.

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[1]   UNDP (2024) Poverty and the Household Economy of Myanmar: A Disappearing Middle Class

The data from the survey that informed that report, also shows that faced with challenges of falling incomes, disappearing livelihoods, and rising prices, one of the coping mechanisms of the affected population is to cut down on non-food expenditure including on health and education, while also compromising on the quality of food. The consequent reduced demand for health, education and nutritious food is compounded by severe disruptions in the supply of the same due to intertwined reasons of political instability, conflict, and disruptions to existing supply chains.

This report highlights three channels through which human capital is being affected: poor access to health, education, and basic utilities, including access to safe water and sanitation, electricity and roads. In addition, there is a huge exodus of people especially of working age and with higher skills to other countries which is depleting the quantity of productive capacity of Myanmar.

These negative coping mechanisms, lack of supply, and exodus of talent, if not urgently addressed, will have lasting consequences reflected in a significant deterioration of the future quality of human capital in Myanmar. Without a political resolution to the crisis and a significant and sustainable economic recovery soon, the rise in poverty is becoming likelier to be near-permanent, and not transient.

This study takes a deep dive into the data obtained through the People's Pulse Survey 2023 (PPS), presenting both the national as well as sub-national variations of the detrimental effects on human capital which should provide guidance on sectoral and locally targeted interventions. The education sector presents a particularly bleak picture, with nearly a quarter of school-aged children not attending school in the 2022/23 academic year. Between the 2022/23 and 2023/24 academic years, over 10% of students dropped out, with rural areas, asset-poor families, and males experiencing higher dropout rates. The dropout rate is the highest in conflict-affected Sagaing, surpassed 37%, compared to a dropout rate of only 8% in 2017, indicating that conflict significantly impacts dropout rates and overall school attendance.

> " **This report highlights three channels through which human capital is being affected: poor access to health, education, and basic utilities, including access to safe water and sanitation, electricity and roads. In addition, there is a huge exodus of people especially of working age and with higher skills to other countries which is depleting the quantity of productive capacity of Myanmar.** "

The health sector mirrors the education crisis. Over half of the households surveyed indicated health needs. Chin State stood out with the highest needs across most health service categories, with 27 percent of households reporting a need for emergency care in the past 12 months. Unmet healthcare needs were also severe in Sagaing and Kayah, mirroring the education challenges in these regions. Nationally, 45% of households relied on private hospitals which are significantly more expensive and affordable only to the relatively well-off.

The data underlines that reducing non-food expenditure was the primary coping strategy across all states, regions, and asset quintiles. This raises concerns about households' ability to sustain their education and healthcare needs in the short to medium term. Access to basic utilities is equally concerning. Despite expectations for improved access to water, a comparison with data from the 2017 Myanmar Living Conditions Survey shows no change in urban areas and a slight decline in rural areas, where 16% lacked access in 2017. Additionally, access to improved water is strongly correlated with households' positions in the asset quintiles.

In the current context of virtually non-existent social safety nets and increasing territory under Ethnic Resistance Organizations, which have limited resources and capabilities to invest in human development, ensuring greater socioeconomic wellbeing and human development investments will be increasingly challenging. Meanwhile, the significant flight of existing human capital depletes scarce reserves of knowledge, experience, and skills, further putting Myanmar's future human capital at risk.

In the current crisis context, nationally driven interventions for equitable and effective reach seem unfeasible. A deeply decentralized approach, engaging local entities to build capacity within their contexts and providing them with the necessary resources, is critical to mitigating the dramatic regression we are likely to see. Implementing mitigating measures, even at small, localized levels, is both important and critical. These interventions cannot await a political resolution to the crisis and need to be enabled simultaneously while determining and realizing a pathway to a lasting resolution.

Introduction:
The People's Pulse 2023

This report is part of a series of analytical reports based on the 2023 People's Pulse Survey (PPS), which aimed to assess public perceptions across key sectors, including security, economic conditions, public service delivery, governance, media accessibility, the role of women, and migration. This particular report focuses on analyzing the education, health, and infrastructure modules of the survey.

The findings are organized into three sections: Section 1 covers educational data, focusing on enrollment rates and reasons for non-enrollment; Section 2 presents health-related findings, assessing health needs and access; and Section 3 evaluates household access to electricity, water & sanitation, and roads.

The principal objective of the survey was to track and monitor shifts in the mood, outlook, and perceptions of various population segments in Myanmar using a combination of qualitative and quantitative indicators. This evidence-based approach aims to build a comprehensive understanding of the country's current social and economic dynamics. The report is intended to inform the improvement of public services and the development of relevant interventions to reduce hardships for the people and enable them to maintain productivity in their workplaces. As the data was collected at the household level rather than the individual level, the sample cannot be sex-disaggregated, making it impossible to infer differences between women and men. However, the data has been disaggregated and presented based on whether households are headed by men or women.

Data and Methodology

The People's Pulse Survey (PPS) sampled 12,684 households. The survey was conducted using Computer-Assisted Telephone Interviewing (CATI) over a period of three and a half months, beginning on June 15th and concluding on October 1st, 2023. The survey encompassed every state and region within Myanmar, ensuring a comprehensive representation of the diverse perspectives and sentiments across the nation. The sample questions were carefully designed to ensure robustness, allowing for individual analysis of each state and region, thereby enabling meaningful comparisons. In crafting the sample for each state and region, the goal was to obtain statistically reliable data, characterized by a 99 percent confidence interval and a margin of error of plus or minus 4 percentage points. The next step involved distributing the sample within each state and region between urban and rural areas.

Table 1 provides a summary of the main characteristics of the 12,684 respondents, including the urban/rural divide, the state/region of the respondents, gender, marital status, education status, and age.

In the subsequent analysis, we classified households by asset quintiles. An asset index is a commonly employed method for categorizing households into wealth/prosperity quintiles. The asset-based approach offers a more resilient and enduring categorization, particularly in Myanmar's situation, where income and expenditure exhibit volatility due to various shocks. The asset index is calculated by applying principal component analysis (PCA) to durable assets/items such as housing quality, appliances, vehicles, land ownership, and more.

The resulting asset quintiles demonstrate a strong correlation with income and expenditure patterns, highlighting that households at the lower end of the asset index tend to have the lowest income and expenditure levels. This correlation underscores the reliability and effectiveness of the asset index as a tool for capturing and assessing economic disparities within a population. As will become clearer in the subsequent analyses, mapping several of the survey indicators to asset quintiles offers much more meaningful inferences than simple income or consumption quintiles.

Table 1: Main summary of the respondent's information

	Sample	%
Overall	12,684	100.0
Urban/Rural		
Urban	4,556	35.9
Rural	8,128	64.1
State/Region		
Kachin	924	7.3
Kayah	410	3.2
Kayin	521	4.1
Chin	407	3.2
Sagaing	935	7.4
Tanintharyi	612	4.8
Bago	1,102	8.7
Magway	1,026	8.1
Mandalay	1,149	9.1
Mon	674	5.3
Rakhine	907	7.2
Yangon	1,207	9.5
Shan	889	7.0
Ayeyarwady	1,161	9.2
Naypyitaw	760	6.0
Gender		
Male	6,298	49.7
Female	6,372	50.3
Marital status		
Single	4,315	34.0
Married	7,742	61.0
Other	627	4.9
Education status		
No formal education	340	2.7
Below primary education	2,580	20.3
Completed primary school	3,271	25.8
Completed middle school	4,492	35.4
Completed high school	142	1.1
Completed higher education	1859	14.7
Age group		
18-20 years	1,119	8.8
21-30 years	4,165	32.8
31-40 years	3,233	25.5
41-50 years	2,304	18.2
51-60 years	1,358	10.7
60+ years	505	4.0
Household type		
Male-headed households	6,893	88.4
Female-headed households	905	11.6

Causes of Diminishing Human Capital in Myanmar

1. Education in Crisis

School enrolment: The absence of a recovery

Before the onset of the COVID-19 pandemic, school enrollment in Myanmar had experienced decades of consistent and positive growth. Between 2010 and 2017, middle school net enrollment surged from 52 percent to 71 percent. Additionally, primary school enrollment was impressively high at 94 percent in 2017, according to data from the Myanmar Living Conditions Survey (MLCS) 2017.[2] This trend was supported by the increasing share of the national budget allocated to the Ministry of Education, which rose from 3.7 percent in 2011/12[3] to 8.4 percent in 2017.

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[2]   UNDP (2018) Myanmar Living Conditions Survey 2017: Key Indicators Report | United Nations Development Programme
[3]   UNICEF (2021) Myanmar 2019-2020 Education Budget Brief. Available at: https://reliefweb.int/report/myanmar/myanmar-2019-2020-education-budget-brief-december-2020.

However, since 2017, the growth trajectory of Myanmar's education budget has experienced noticeable stagnation, with recent years marked by a concerning decline, as evidenced by data from the World Bank. This troubling trend can be attributed to the compounded effects of the COVID-19 pandemic and the ongoing political upheaval, which have had a detrimental impact on the nation's educational funding landscape.

Figure 1: Government spending on education as a percentage of total government spending, World Bank.[4]
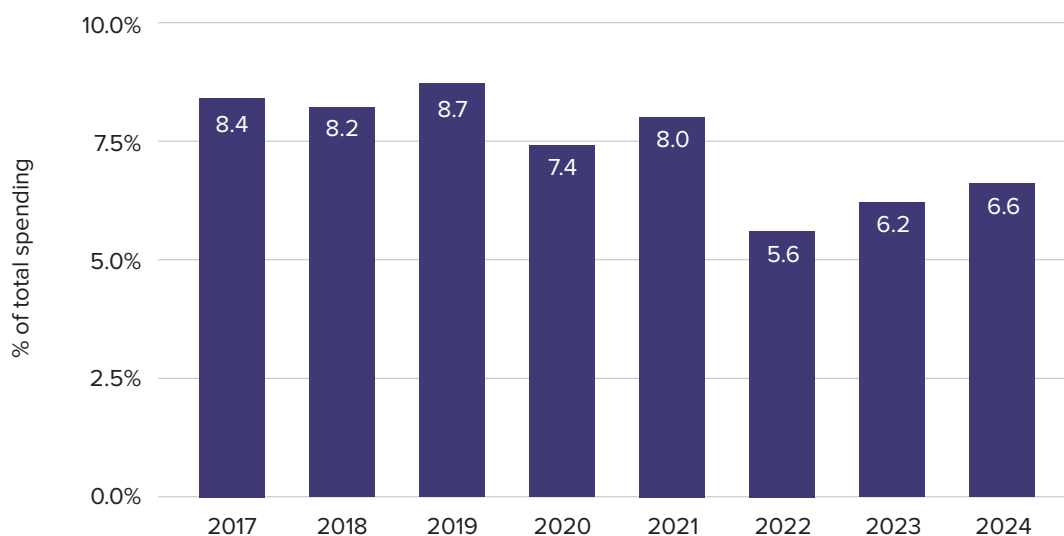
In March 2020, schools closed in response to the unfolding COVID-19 pandemic. Before they could resume operations, Myanmar was thrust into political turmoil in February 2021. This upheaval triggered widespread unrest and sparked the Civil Disobedience Movement (CDM), prompting many civil servants, including teachers, to tender their resignations. A member of the Myanmar Teachers' Federation revealed that initially, over 300,000 state education workers joined the CDM.[5] Amidst this turmoil, compounded by ongoing security concerns and a shortage of teachers, the reopening of schools became a disjointed and challenging endeavor.

The PPS found that in the 2022/23 school year, almost a quarter of school-aged children[6] were not attending school (Figure 2). This finding corroborates data from the Myanmar Subnational Phone Surveys 2023 (MSPS 2023), which showed that 28 percent of 6–17-year-olds were not attending school.[7]

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4   World Bank (2023) Myanmar Economic Monitor: Challenges Amid Conflict, December 2023. Available at: https://documents.worldbank. org/en/publication/documents-reports/documentdetail/099121123082084971/p5006631739fd70a01a66c1e15bf7b34917
5   Radio Free Asia (2021) Myanmar Air Force bases hit by 'improvised rocket attacks'. Available at: https://www.rfa.org/english/news/myanmar/ air-base-attacks-04292021184313.html
6   The PPS asked the schooling details for those aged above 5 but under 18
7   Further similarities were found in poorer asset quintiles having a higher out of school rate. The MSPS 2023 followed a similar phone-based household survey, but the data was collected approximately 6 months earlier, between November 2022 and March 2023.

Enrollment rates tend to decline as students' progress through different school levels, often marked by significant dropout rates between primary, middle, and high schools.[8] A concerning revelation from the PPS is that 26.3 percent of primary school-aged children were not enrolled in the 2022/23 academic year (see Appendix Table 1). This disparity in primary school enrollment stands out as the most pronounced change compared to the pre-pandemic period, such as the previously cited 94 percent primary enrollment. Non-enrollment at the primary level carries a more profound and far-reaching impact due to its foundational role in shaping education, alleviating poverty, and fostering human development.[9]

The prospect of a recovery in school enrollment looks bleak. Half of all out-of-school children in the world live in conflict-affected countries.[10] In the years preceding the pandemic, Shan State consistently exhibited a notable disparity in school enrollment rates compared to other regions. Data from both the MLCS and the Ministry of Education[11] reported that Shan State had the lowest primary school-age enrollment rate of 86 percent in the 2016/17 academic year. However, the PPS shows that the highest non-attendance rates, across all education levels, are in Sagaing (48 percent), Chin (38 percent), and Kayah (37 percent)—all areas that experienced high rates of conflict during the collection of the PPS data in 2023. Even for those enrolled, students were prevented from taking the important Grade 12 matriculation examination, with no examination centers operating in Kayah State.[12]

Further analysis of the PPS data also suggests a high level of change in school enrollment. Over one in ten children who attended school in 2022/23 dropped out in the current 2023/24 school year (Appendix Table 3). While this is a significant dropout rate, overall enrollment increased for 2023/24, with non-enrollment falling from 23 percent to 21 percent (Appendix Table 4).

For the 2023/24 school year, there was no significant difference in the type of school attended, with approximately 90 percent attending a government school in 2022/23 and 91 percent in 2023/24 (Figure 3). It is important to note that "government school" includes all forms of government schooling, whether that is SAC Ministry of Education schools or ethnic government schooling systems. However, there was a noticeable drop in homeschooling in 2023/24, with the decline spread equally among increases in private, monastic, and government schools. In terms of asset quintiles, the lower the quintile, the higher the dropout rate. Unsurprisingly, it was mostly the top quintile that sent children to private schools. Dropout rates were highest in Sagaing (37 percent), Chin (21 percent), and Tanintharyi (15 percent), which already had some of the highest non-enrollment rates. Conflict led to public schools closing due to security reasons and teachers' reluctance to work for the SAC. As a result, private schools have become an option for the wealthy, who can afford to send their children to safer places and private schools.

An urban-rural divide in enrollment was noticeable. Rural areas experienced a lower enrollment rate by approximately 2 percent in both the 2022/23 and 2023/24 school years. Children residing in rural localities are substantially more likely to attend government-administered schools, with enrollment rates in private and monastic schools markedly lower compared to their urban counterparts. This underscores the limited array of educational options available to rural populations in terms of school selection.

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[8]   UNDP (2018) Myanmar Living Conditions Survey 2017: Key Indicators Report | United Nations Development Programme
[9]   UNICEF. Primary education data. Available at: https://www.unicef.org/education/primary-education
[10]   Roser, M. (2024) Access to basic education: Almost 60 million children of primary school age are not in school, Our World in Data. Available at: https://ourworldindata.org/children-not-in-school
[11]   UNICEF (2021) Myanmar 2019-2020 Education Budget Brief. Available at: https://www.unicef.org/myanmar/media/6461/file/2019-20%20 Myanmar%20Education%20Budget%20Brief.pdf
[12]   Burma News International (2024) War prevents junta-organized matriculation exams from taking place in Karenni State. Available at: https://www.bnionline.net/en/news/war-prevents-junta-organized-matriculation-exams-taking-place-karenni-state

Regarding gender disparities in educational participation, the 2022/23 academic year (see Appendix Table 2) witnessed a slightly higher enrollment rate among females (80 percent) compared to males (78 percent). However, the 2023/24 school year saw a more pronounced gender divide in school attrition rates, with males exhibiting a notably higher dropout rate of 12 percent compared to 9 percent among females (see Appendix Table 3). These figures underscore a deteriorating landscape for male students in maintaining their academic pursuits. A gender divide was also observed in households headed by males: nationally, in the 2023/24 academic year, 28 percent of children were not enrolled from rural, asset-poor, male-headed households (see Appendix Table 2). According to Annex Table 5, the continuation of education for students in Myanmar was affected by several factors: the closure of schools (22%), students' unwillingness and guilt about attending school amid the current revolutionary period (19%), the need to join the workforce (16%), security concerns (14%), financial difficulties (13%), and health situations (5%), among others. Notably, the majority of male students (23%) opted out of school simply because they did not want to attend, while the majority of female students (22%) cited school closures as the primary reason.

It's important to note that the PPS enrollment data takes into account the extension of school years with the introduction of Grade 12 in the 2022/23 academic year. This addition was part of the National League for Democracy's (NLD) education plan announced in 2017, aimed at aligning Myanmar's education system with global standards.[13] This change has had a significant impact, particularly as high school accounts for 91 percent of non-enrollment (Appendix Table 4). It is also crucial to recognize that enrollment data does not equate to attendance. Chronic absenteeism, defined as missing more than 10 percent of school days, significantly hampers a child's learning.[14]

> "Concerns regarding the quality of education delivery have been exacerbated by the Civil Disobedience Movement (CDM) and the subsequent recruitment of temporary teachers to fill the void left by experienced educators. Many of these temporary teachers, reportedly military and Union Solidarity and Development Party (USDP) supporters, are not subjected to the usual teacher recruitment tests, raising questions about their qualifications and competency."

Additionally, concerns regarding the quality of education delivery have been exacerbated by the Civil Disobedience Movement (CDM) and the subsequent recruitment of temporary teachers to fill the void left by experienced educators. Many of these temporary teachers, reportedly military and Union Solidarity and Development Party (USDP) supporters, are not subjected to the usual teacher recruitment tests, raising questions about their qualifications and competency.[15] These factors collectively heighten the risk of further learning loss among students.

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[13] Oxford Business Group (2022) Major changes to Myanmar's education sector under way. Available at: https://oxfordbusinessgroup.com/reports/myanmar/2017-report/economy/back-to-basics-major-changes-to-the-education-sector-are-under-way

[14] Kearney, C.A. and Gonzálvez, C. (2022) Unlearning school attendance and its problems: Moving from historical categories to postmodern dimensions, Frontiers.
Available at: https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2022.977672/full

[15] Frontier (2022) Education vs. revolution: School reopenings bring hard choices, Frontier Myanmar. Available at: https://www.frontiermyanmar.net/en/education-vs-revolution-school-reopenings-bring-hard-choices/

Figure 2: School enrolment, for all age groups, in academic year 2022/2023 and 2023/2024

	2022/2023 academic year		2023/2024 academic year	
	Enrolled	Not enrolled	Enrolled	Not enrolled
Union	77.1	22.9	79.0	21.0
Urban	74.7	25.3	80.5	19.5
Rural	77.9	22.1	78.5	21.5
Kachin	85.6	14.4	87.9	12.1
Kayah	63.0	37.0	87.1	12.9
Kayin	84.0	16.0	78.9	21.1
Chin	62.5	37.5	62.4	37.6
Sagaing	52.3	47.7	44.1	55.9
Tanintharyi	77.0	23.0	75.1	24.9
Bago	83.5	16.5	85.6	14.4
Magway	73.6	26.4	81.6	18.4
Mandalay	78.0	22.0	80.1	19.9
Mon	79.6	20.4	87.4	12.6
Rakhine	90.5	9.5	91.0	9.0
Yangon	73.5	26.5	80.6	19.4
Shan	83.3	16.7	85.6	14.4
Ayeyarwady	81.3	18.7	83.6	16.4
Nay Pyi Taw	89.4	10.6	86.2	13.8

■ Enrolled   ■ Not enrolled

Figure 3: Types of schools attended in academic year 2022/2023 and 2023/2024

■ Public school   ■ Private school   ■ Monastic school   ■ Home school
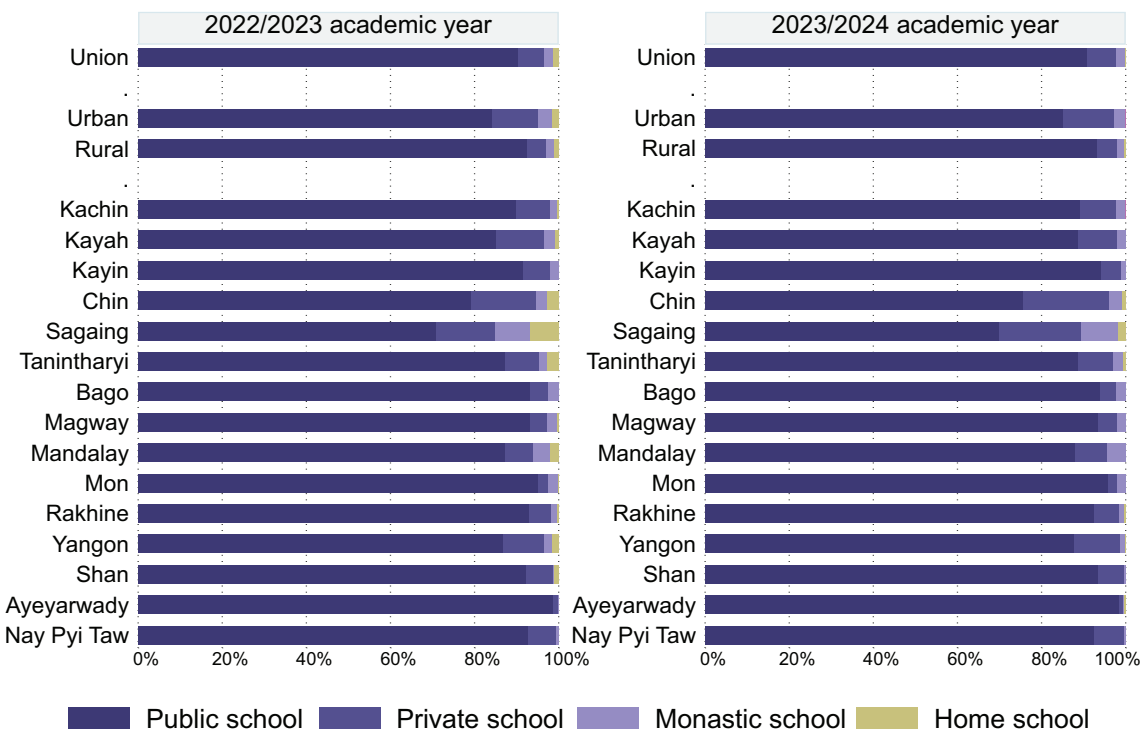
Reasons for low enrolment

Since March 2020, when schools closed due to COVID-19, many children have not returned to school, with the reasons clearly linked to poverty and conflict (Figure 4), exacerbated by the political upheaval that followed in February 2021.

In the most severe cases of poverty, 16 percent of respondents indicated that children are required to work. In areas affected by conflict, 21 percent of respondents reported that schools simply cannot open. Even when local schools are open, a further 14 percent of respondents stated that safety concerns prevent them from enrolling their children. Additional reasons for non-enrollment include children not wanting to attend school (19 percent) and families being unable to afford it (16 percent). The reluctance of 19 percent of respondents to enroll their children may stem from the desire to state a "safer" reason, rather than explicitly citing safety concerns or opposition to enrolling in a SAC-controlled government school. While Myanmar implemented free education at all levels of basic education in 2017-2018[16], there are still many associated costs, such as uniforms and stationery. Additionally, where free government schools are not available, the affordability of private schools remains a significant constraint due to the ongoing economic crisis.

Accessibility was not a significant barrier to educational participation (see Appendix Table 6). Nationally, the average school commute took a reasonable 13.5 minutes, with minimal variation observed across different regions. The majority of students used walking (51 percent), motorcycles (21 percent), and bicycles (19 percent) as their primary modes of school transport. Higher asset quintiles were more likely to use motorcycles and less likely to walk.

Beyond enrollment, major concerns also arise regarding the quality of education being provided and the ability of Grade 12 students to sit for their matriculation exams. Furthermore, actual school attendance rates are significantly lower, with around 2% of enrolled students in 2023 not actually attending school.[17]

Figure 4: Reasons for school dropout
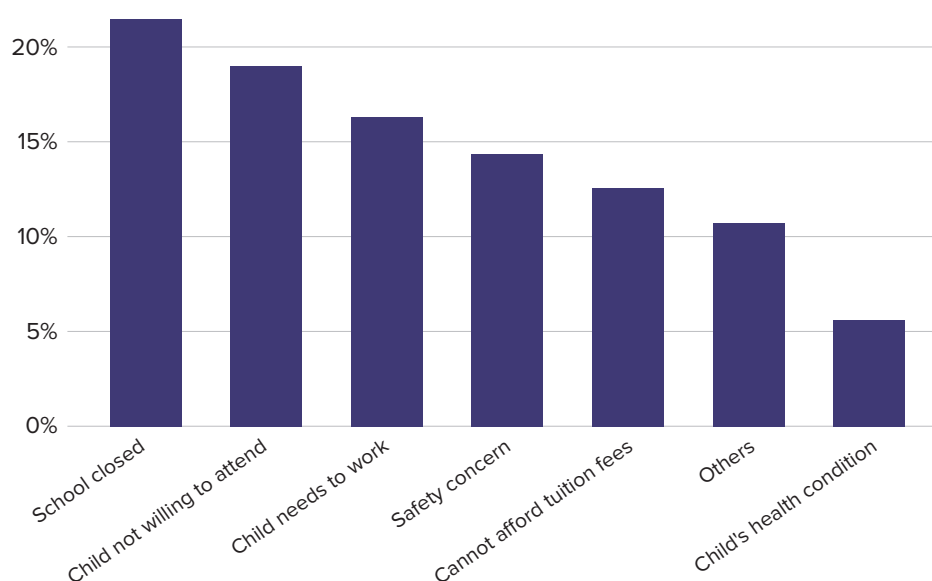
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[16]   Oxford Business Group (2022) Major changes to Myanmar's education sector under way. Available at: https://oxfordbusinessgroup.com/reports/myanmar/2017-report/economy/back-to-basics-major-changes-to-the-education-sector-are-under-way
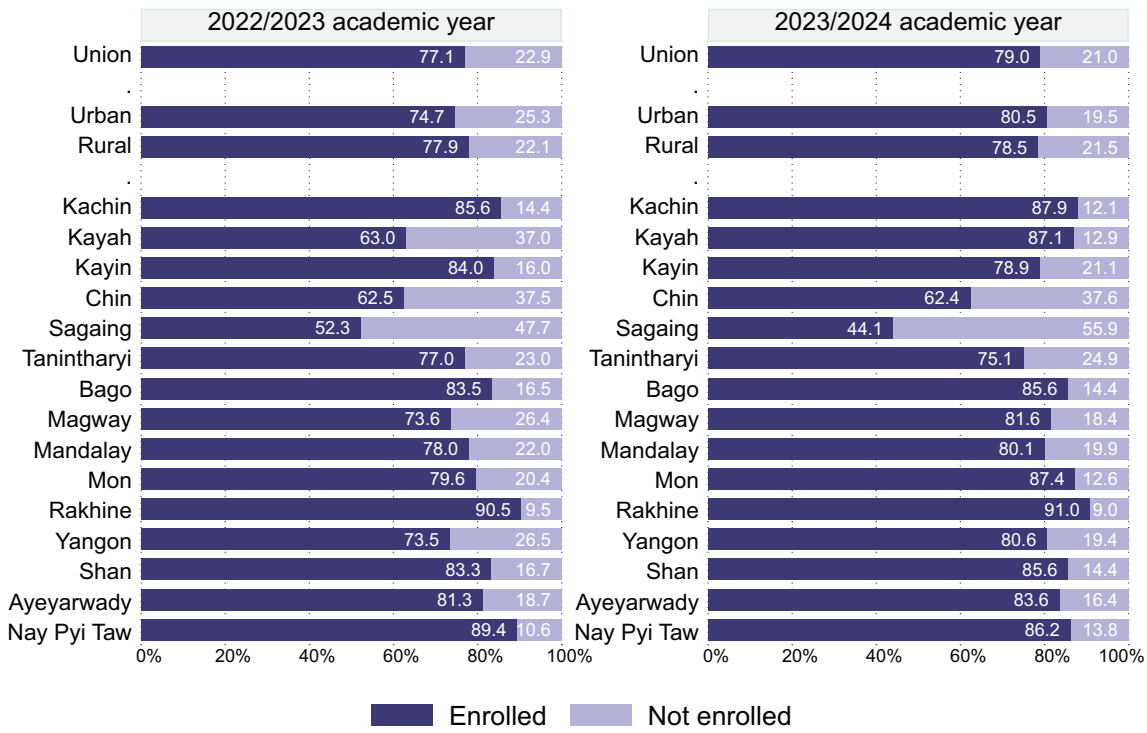
[17]   World Bank (2023) Education in Myanmar: Where are we now? Available at: https://thedocs.worldbank.org/en/doc/716418bac40878ce262f57dfbd4eca05-0070012023/original/State-of-Education-in-Myanmar-July-2023.pdf

2. Healthcare: from strain to paralysis

The condition of Myanmar's healthcare sector mirrors that of its education system in several aspects. The onset of the COVID-19 pandemic initially placed significant strain on the healthcare sector, which was expected to be temporary. However, with the emergence of the political crisis on February 1st, 2021, the severity and duration of Myanmar's weak health services have persisted, showing little indication of improvement in the foreseeable future. The PPS asked households about their healthcare needs over the preceding 12 months and further probed to determine if any needed services were not received.

Critical Care Required: Assessing Healthcare Needs

Universal health coverage (UHC) comprises two primary pillars: ensuring access to essential healthcare services and shielding individuals from financial burdens associated with healthcare utilization. The National Health Plan (NHP) 2017-2021 set out the first phase of strengthening Myanmar's health system to achieve the goal of UHC by 2030.

The findings from the PPS clearly illustrate that Myanmar's healthcare system is in a dire state, failing to provide adequate and equitable access to essential health services across the country. The widespread reliance on private hospitals, even among lower socioeconomic groups, is a testament to the public healthcare system's inability to shield individuals from financial burdens associated with out-of-pocket expenses on healthcare. This situation exacerbates existing inequalities, as wealthier households are better positioned to afford private healthcare, while poorer households struggle with affordability issues and limited access to quality services. Furthermore, the data highlights the disproportionate burden faced by female-headed households in accessing healthcare, as they were significantly more likely to cite affordability concerns as a barrier to seeking care (see Appendix Table 9).

Figure 5 shows that adult medical care (61 percent) was the most common healthcare requirement, followed by the COVID-19 vaccine (53 percent). This is likely due to the life-saving needs of adults as opposed to preventive healthcare for younger cohorts. There were wide differences at the regional level (see Appendix Table 7); only 28 percent reported a COVID-19 vaccine need in Sagaing, but in Kayah, Bago, and Ayeyarwady, approximately two-thirds of households did. This variation could be due to regional disparities in the vaccine rollout since early 2021, when vaccines first became available in Myanmar, or other health issues being so much more pressing in Sagaing that COVID-19 vaccines are not considered major requirements.

Overall, Chin State appears to have the most concerning data. It reported the highest health needs in almost all categories, including adult care needs (79 percent), childcare needs (68 percent), dental needs (34 percent), under-5 vaccines (41 percent), maternal care (24 percent), other vaccines (17 percent), and psychological support (5 percent). Most concerning is that over a quarter of households needed emergency care in the previous 12 months, well above the next highest state, Rakhine (17 percent), which had been hit by Cyclone Mocha, and lowest-placed Mon (7 percent). The Naypyitaw region reported the lowest health needs in all but a couple of categories and indicated that almost a quarter of households had no healthcare requirements.

Male-headed households were much more in need of family planning (17 percent versus 9 percent) and childcare services (43 percent versus 33 percent), while female-headed households were more in need of emergency care (15 percent versus 9 percent).

Figure 5: Share of respondents needed healthcare services by types of services

Legend:
- Adult care
- Covid-19 vaccination
- Child care
- Under-5 vaccination
- Dental care
- Family planning
- No need
- Emergency care
- Maternal & pregnancy care
- Other vaccination
- Surgeries
- Psychological support
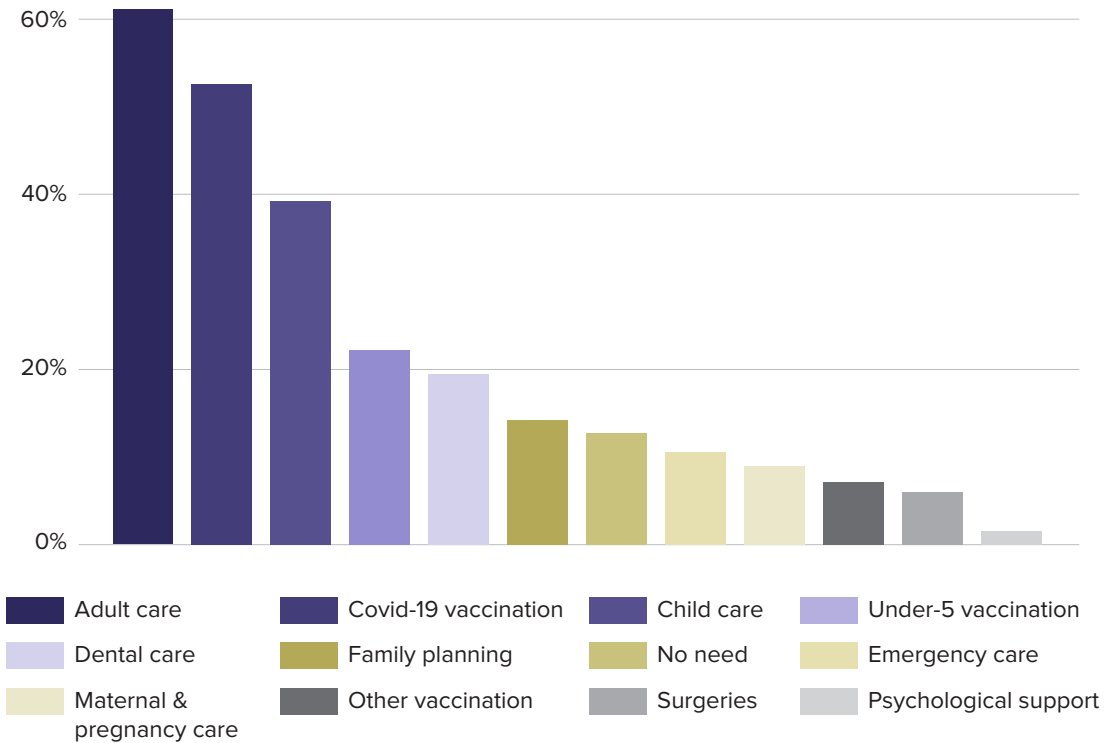
Health access: Breaking barriers

The unmet need for healthcare is one of the key indicators used to assess the performance of a healthcare system. While many households were able to receive the healthcare they required, Sagaing (15 percent), Chin (14 percent), and Kayah (11 percent) reported the highest levels of unmet needs. This aligns with the regions showing the highest levels of non-enrollment, indicating serious negative effects on human capital. Perhaps as a testament to the reach and capability of the Karen Health Department, Kayin State reported the lowest unmet healthcare needs at just 4 percent.

For those with unmet healthcare needs, self-medication appeared to be a common coping mechanism (44 percent), a quarter reported that the health issue was minor, and 12 percent cited healthcare being too expensive as the reason for unmet needs. For the lowest asset quintile, affordability was unsurprisingly more common (19 percent). The issue of affordability is further validated by the Poverty and the Household Economy report, which noted that across all states, regions, and asset quintiles, cutting non-food expenditure—with deleterious effects on the future of human capital—was the primary coping strategy[18]. It is worth noting that self-medication may be a result of not being able to afford care, meaning that effectively 56 percent of respondents may have had unmet healthcare needs due to affordability.

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[18]   UNDP (2024) Poverty and the Household Economy of Myanmar: A Disappearing Middle Class

Figure 6: Unmet healthcare needs

Region	Value
Union	8.1
Urban	8.1
Rural	8.1
Sagaing	14.9
Chin	14.0
Kayah	11.1
Shan	9.8
Yangon	9.1
Tanintharyi	7.8
Naypyitaw	7.8
Ayeyarwady	7.4
Magway	7.1
Kachin	7.1
Mandalay	6.7
Rakhine	5.7
Bago	5.4
Mon	4.8
Kayin	3.9
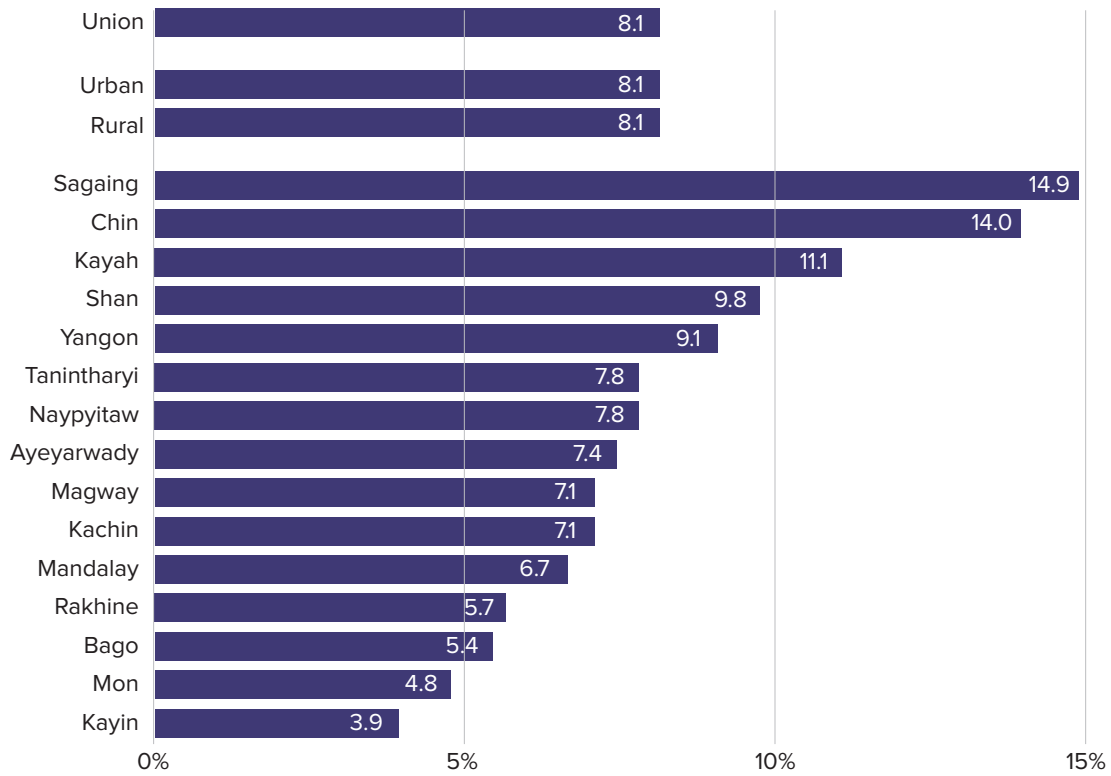
Figure 7: Reasons for not seeking care

Legend: Self-medication, Illness was minor, Could not afford, Others, Too far to travel
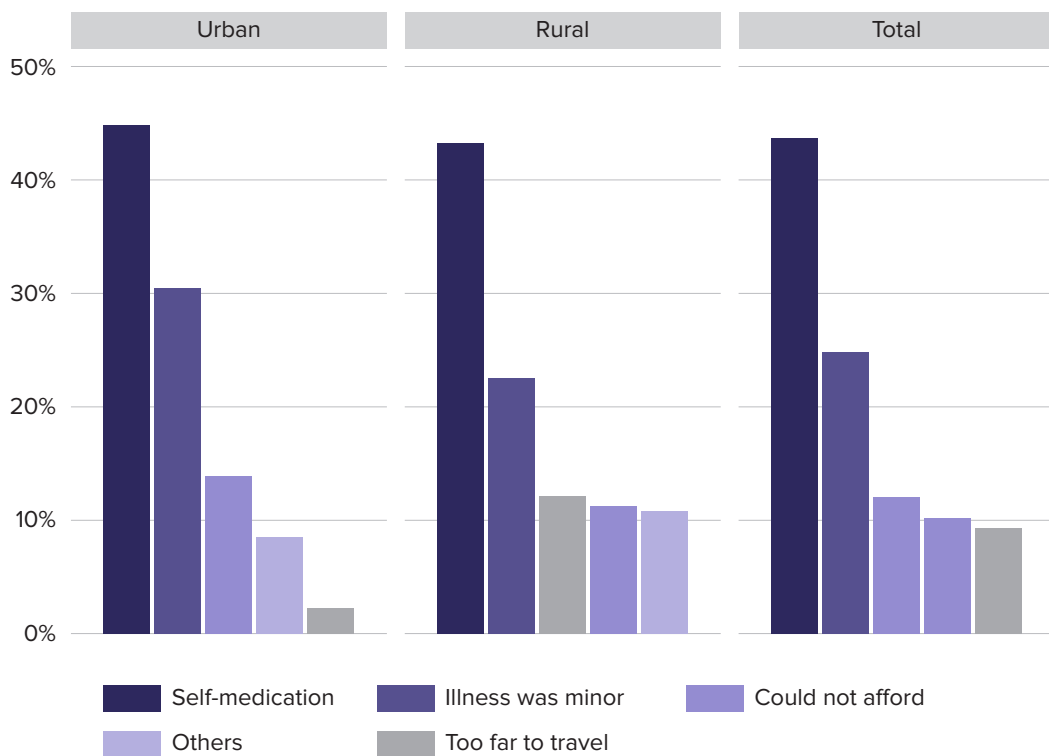
Nationally the most common place where healthcare needs were sought (Figure 8) were private hospitals (45 percent). The Poverty and the Household Economy report revealed the number one coping strategy for all regions is cutting non-food expenditure, and that households allocated 16 percent of their expenditure to healthcare, suggesting significant pressures on maintaining healthcare access.[19]

Yangon, despite hosting the large Yangon General Hospital had the lowest level of government hospital usage (24 percent) and the highest private hospital usage (59 percent) conveying the larger options available and higher incomes in the region allowing for private care (see Appendix Tabel 10).

Chin State had the highest government hospital usage (40 percent) and the highest level of government health post care (15 percent). Likewise with education, "government" services may refer to SAC or regional self-autonomous government administrations. Nevertheless, the data implies few options existing beyond the rudimentary government provisions. Data from Rakhine shows a similar picture with the second highest government hospital usage (39 percent) and the lowest private hospital usage (35 percent).

The overall regional disparity was one of an urban-rural divide. The majority of urban households use a private hospital for meeting their healthcare requirements; however rural areas were reliant on government hospitals, government health centers or government health posts. Asset wealthier households spend a greater amount on healthcare, with a clear trend of the higher the asset quintile the higher the rate of private healthcare.

Figure 8: Place where the care was sought (for those seeking healthcare)

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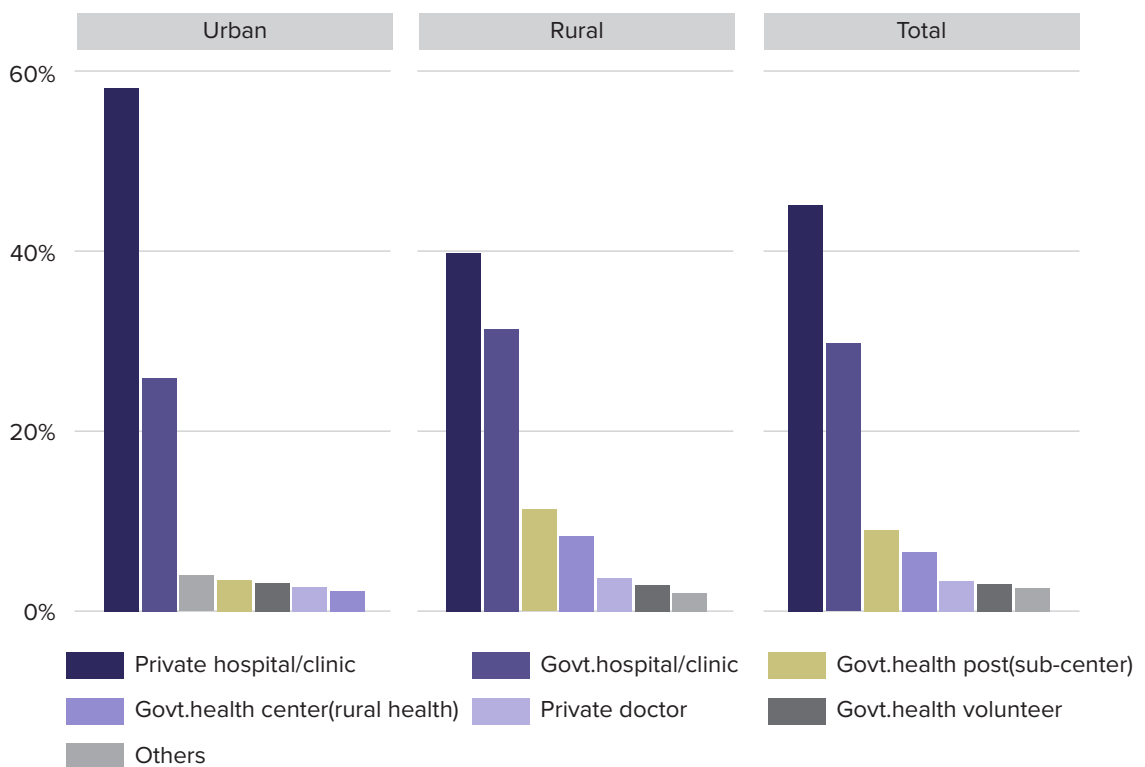
[19]   UNDP (2024) Poverty and the Household Economy of Myanmar: A Disappearing Middle Class

3. Uneven reduced access to basic utilities

Until February 2021, Myanmar experienced rapid development and change over the preceding decade, with significant investments made to improve infrastructure and basic utilities. However, progress has been uneven, with rural areas often left behind, and development has stalled in recent years. This section provides a snapshot of basic utilities across Myanmar—specifically, electricity, water, sanitation, and roads. These utilities are essential complements to health and education, ensuring that citizens have an enabling environment to remain productive.

Electricity: Powerless Progress

In 2014, the Myanmar National Electrification Plan (NEP) was established. At that time, Myanmar had one of the lowest rates of electrification in Southeast Asia, with less than 30 percent of households having access to electricity. The NEP aimed for universal electricity access by 2030, with a target of 75 percent by 2025, using a mix of the National Grid, mini-grids, and off-grid solutions. The PPS results (Figure 9) show that 92 percent of households in the sample now have electricity access, indicating significant progress[20]. However, a nuanced picture emerges when considering the disparity among different socio-economic groups. Among the poorest asset quintile households, 26 percent still lack access to electricity, in stark contrast to the 6 percent in the second poorest asset quintile. This suggests that while substantial strides have been made, challenges remain in reaching the most impoverished households, highlighting the complexity of connecting the hardest-to-reach populations in the ongoing electrification efforts. Regionally (see Appendix Table 11), the highest percentages of respondents without electricity were in Ayeyarwady (14 percent), Kayin (13 percent), and Sagaing (11 percent).

In all regions except Chin, the predominant source of electricity for the majority of households is grid electricity (Map 1), with 98 percent referring to the National Grid. Notably, Chin State stands out with the highest reliance on self-produced electricity, accounting for 60 percent of households. The accessibility to the National Grid is supported by IFPRI Round 5 data, which reported that 90 percent of urban and 53 percent of rural residents have National Grid access. The data indicates a notable difference between households headed by males versus females. While the analysis did not reveal significant differences in electricity access between male- and female-headed households, differences were found regarding the source of electricity. Female-headed households tend to rely slightly more on the National Grid, whereas male-headed households rely more on self-produced electricity. This divergence might be partly explained by the sample's slight overrepresentation of female-headed households in urban areas. Consequently, the result could be attributed more to geographic distribution than solely to household headship and should be treated with caution.

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[20] Access does not mean actual availability. The country is experiencing severe power outages at the time of writing this report with some areas having no more than 8 hours of electricity during the whole day. It should also be kept in mind that those without electricity in the household are likely to have a much larger non-response rate in a telephone survey.

Figure 9: Main sources of electricity in the household, overall, urban/rural, and by socio-economic status

Grid | Community production | Own production | No electricity
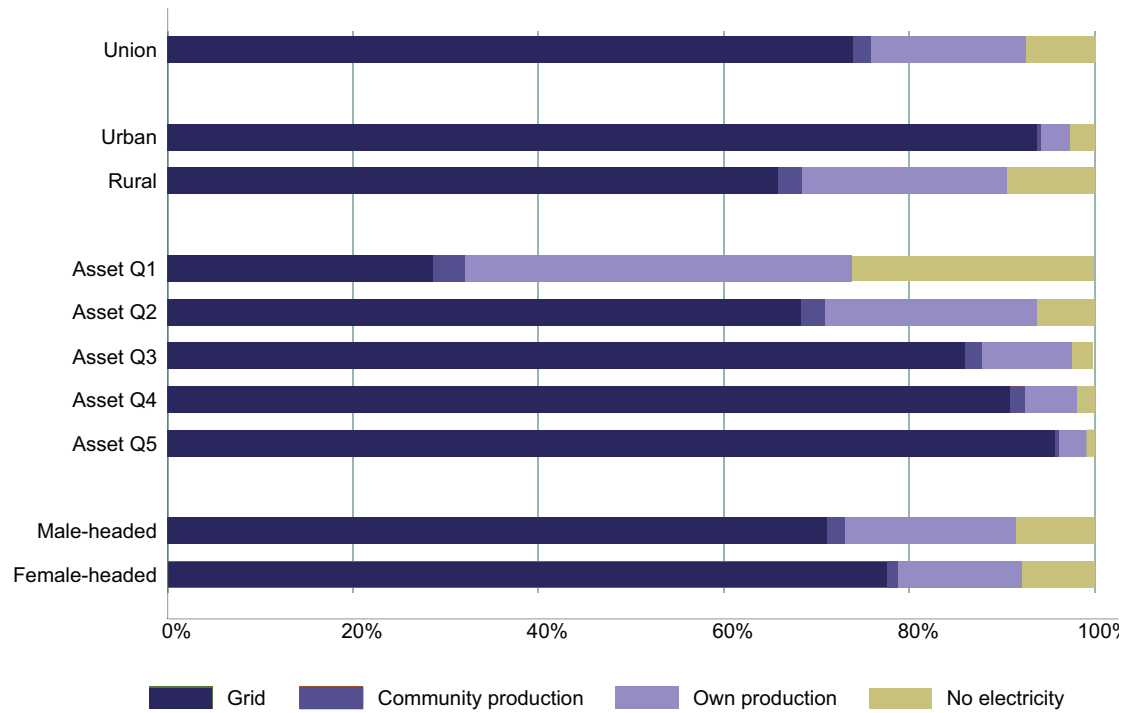
Map 2: Grid electricity, own production and no electricity (left to right), by state/region

A) Main grid

B) Own production

C) No electricity

84 - 94
80 - 84
72 - 80
63 - 72
33 - 63

24 - 59
17 - 24
13 - 17
8 - 13
4 - 8

10 - 14
7 - 10
4 - 7
3 - 4
2 - 3
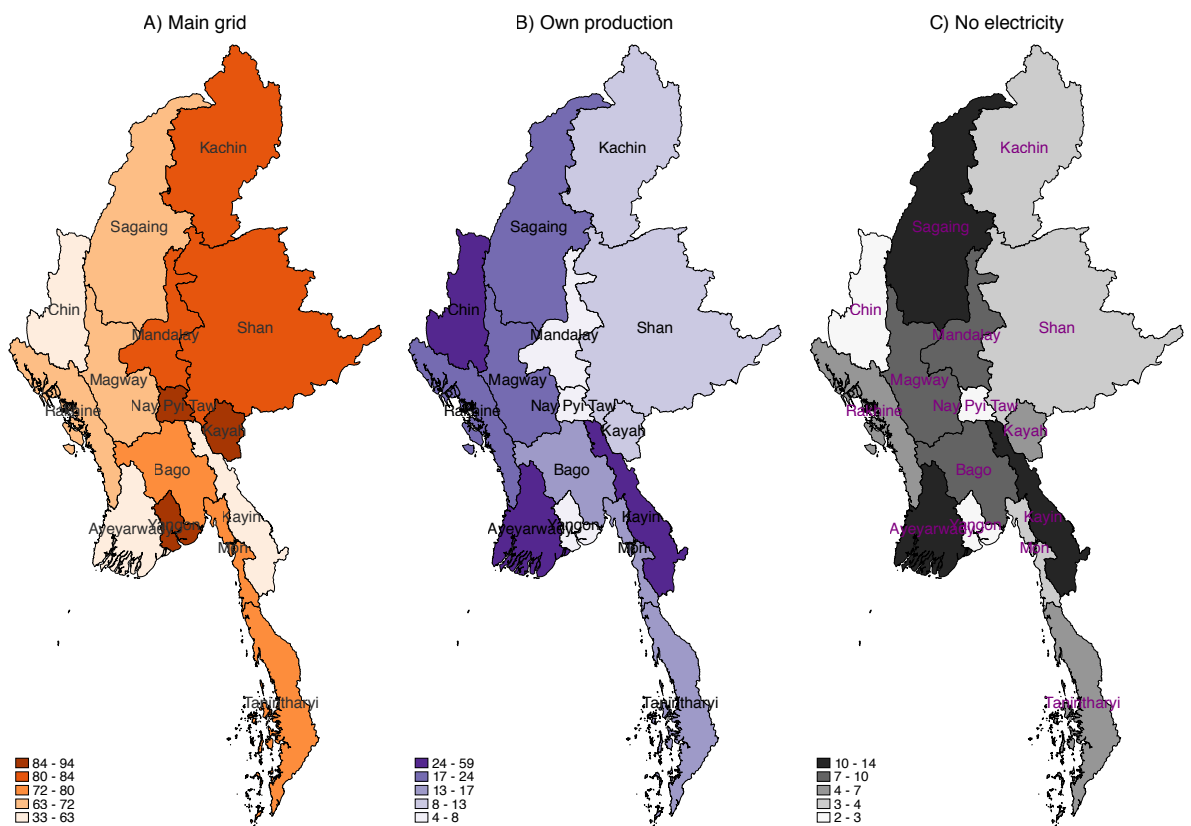
Most (60 percent) of households in the country did not have a secondary source of electricity. This increased to 68 percent for urban households. As shown in Figure 10, batteries (29 percent), solar panels (16 percent), and generators (8 percent) were the most common sources of secondary energy, and all were more prevalent in rural areas compared to urban ones, suggesting the severity of the unreliability of primary energy sources in rural areas.

Chin State was once again an outlier (see Appendix Table 12). Only 19 percent of households did not have a secondary source of electricity, while 71 percent had solar panels and 79 percent had a battery, presumably purchased together. In the absence of access to the National Grid, Chin has achieved a high level of clean energy self-reliance. Sagaing was a distant second in the highest use of solar panels (23 percent) and batteries (38 percent).

Figure 10: Secondary sources of electricity in the household, overall, urban/rural, and by socio-economic status
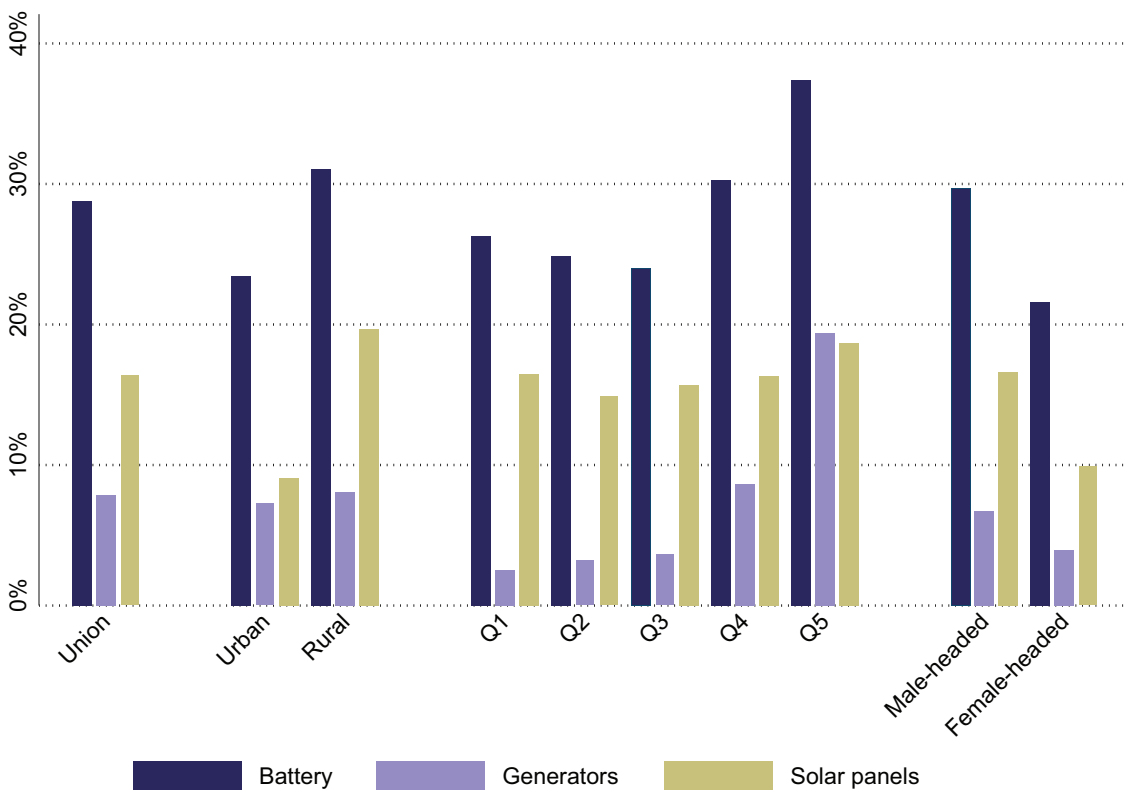
Map 3: Battery/Solar panels, generator and no secondary electricity (left to right), by state/region

A) Battery/Solar panels

■	40 - 78
■	32 - 40
■	28 - 32
□	20 - 28
□	11 - 20

B) Generators

■	11 - 13
■	8 - 11
■	6 - 8
□	5 - 6
□	1 - 5

C) No secondary electricity

■	75 - 88
■	62 - 75
■	60 - 62
□	51 - 60
□	18 - 51
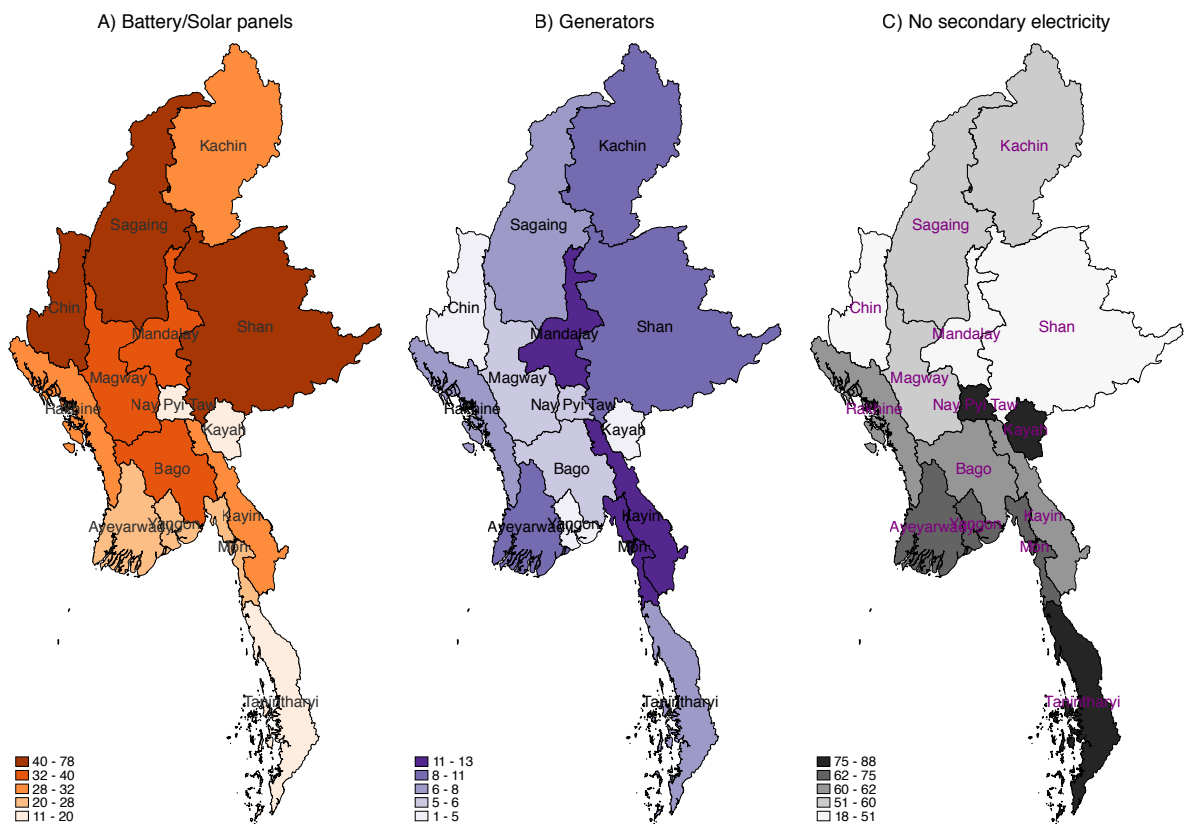
Kayah had the highest percentage of households (88 percent) without a secondary source of electricity, followed by Naypyitaw (77 percent) and Tanintharyi (75 percent). The high percentage in Naypyitaw is due to the low frequency of electricity outages in the city, with respondents reporting an average of 21 hours of electricity per day, well above the national average of 10.6 hours. The regions experiencing the lowest average hours of electricity, as visualized in Map 3, were Ayeyarwady (7.8 hours), Mandalay (7.9 hours), and Chin (8.4 hours). Ayeyarwady and Chin, which reported some of the lowest levels of electricity hours, also had the highest levels of own production as their primary electricity source. This suggests that the quantity and quality of solar panels and batteries—the predominant sources of self-produced electricity—are insufficient to provide electricity outside sunlight hours. Mandalay had a high primary reliance on grid electricity (84 percent), indicating that the region experiences some of the most severe grid power outages. Indeed, respondents who exclusively relied on the National Grid for their electricity needs (constituting 44 percent of the total respondents) had access to electricity for an average of 11 hours per day. This data underscores the challenges faced by the NEP. While extending grid and off-grid infrastructure to reach the remaining impoverished population is critical, providing a consistent and reliable supply of electricity to all by 2030 will also be a substantial challenge.

Myanmar's environmental issues, such as deforestation and poor air quality, are reflected in the high levels of biomass (49 percent) and charcoal (17 percent) used as the main sources of energy for cooking (Figure 11). Electricity was also common (30 percent), with the remaining 4 percent made up of Liquefied Petroleum Gas (LPG) stoves, biogas, kerosene, and coal. The consequences of

Map 4:   Average hours of electricity, by state/region

Legend:
- 16 - 21
- 11 - 16
- 9 - 11
- 9 - 9
- 8 - 9
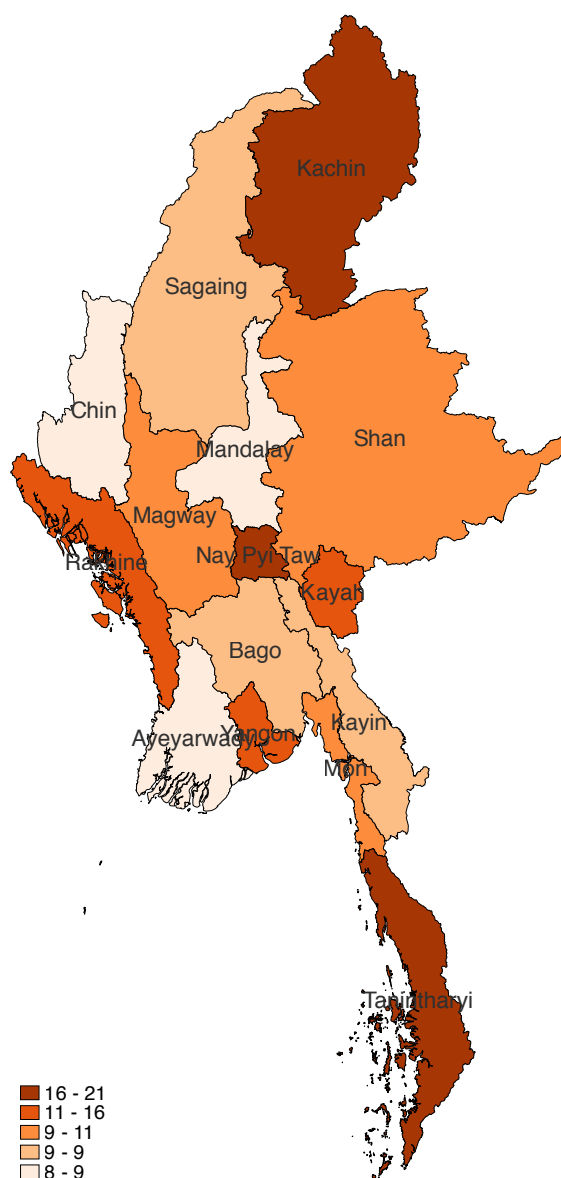
poor air quality affect the poor the most, with 93 percent of households in the lowest asset quintile (Q1) using biomass or charcoal, compared to 21 percent in the highest asset quintile (Q5). There is also a significant rural/urban divide, with urban areas primarily using electricity (49 percent), while the majority in rural areas rely on biomass (63 percent), reflecting the fact that poorer and rural households spend time collecting their biomass (e.g., firewood) for cooking fuel.

The data clearly suggest that unclean energy sources are the cheapest and most relied upon for cooking. While electrification is the primary solution, there is also potential for further promotion of cleaner cooking fuels. Map 4 shows that urgent efforts are required to address the prevalent use of biomass in Chin (74 percent) and Ayeyarwady (76 percent), as well as the use of charcoal in Tanintharyi (46 percent). The high use of charcoal in Tanintharyi is particularly concerning, given the likelihood that mangroves and primary forest wood are the sources. In Chin, only 8 percent of households use electricity for cooking, again revealing the heavy reliance on solar panels, which do not support power-intensive electric cooking applications.

Figure 11: Main types of energy used for cooking, overall, urban/rural, and by socio-economic status

Biomass | Charcoal | LPG gas stove | Electricity | Others
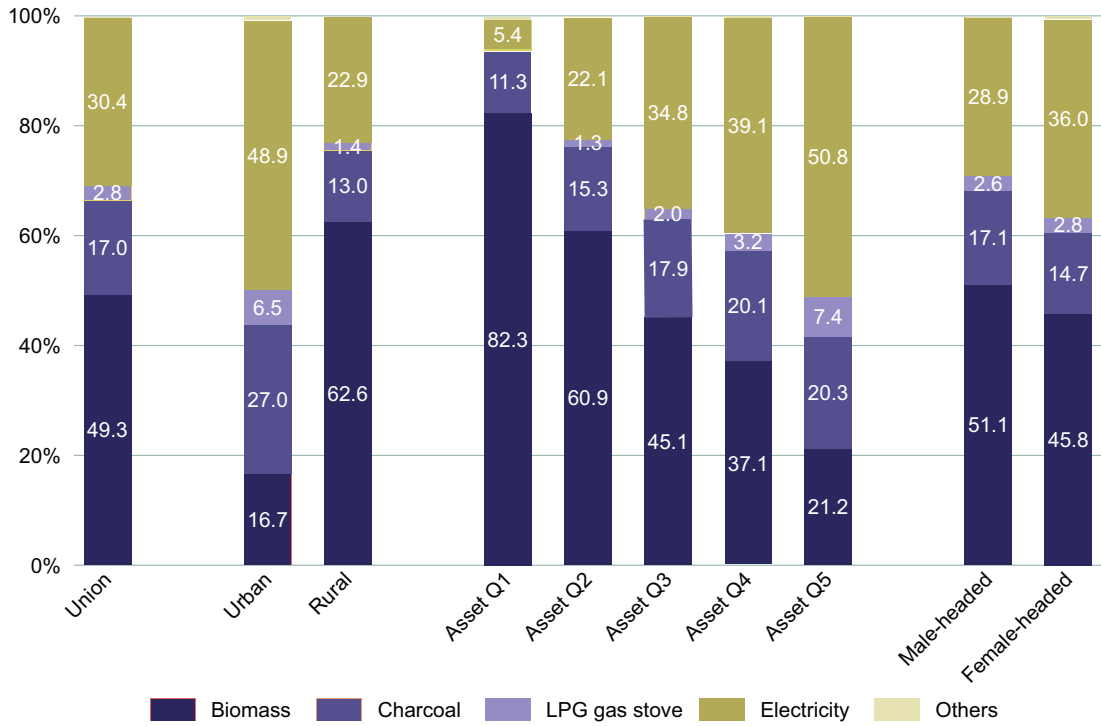
Map 5: Main types of energy used for cooking, by state/region

A) Biomass

B) Charcoal

C) Electricity
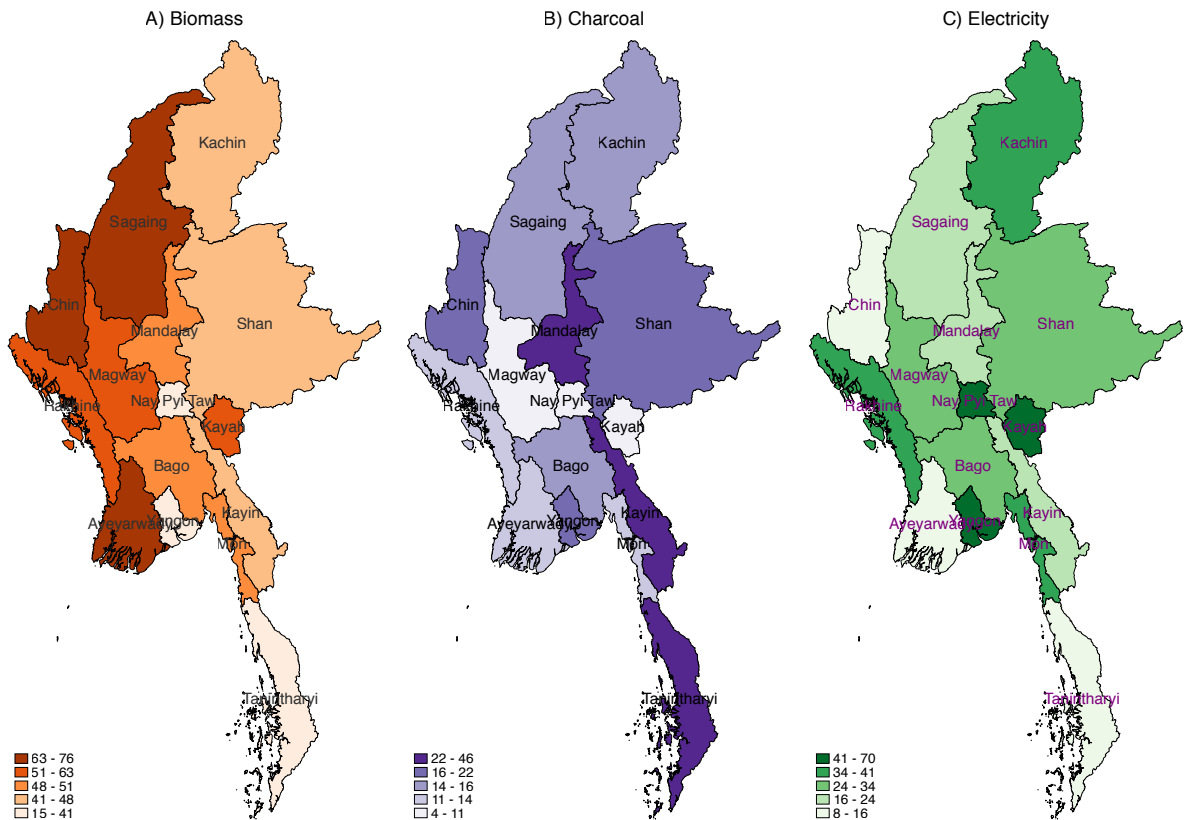
Water and Sanitation: Flowing forwards but disparities persist

Despite many households nationwide enjoying improved water access, a noticeable rural/urban disparity persists. In rural areas, 17 percent of households lack access to improved water, a significantly higher figure compared to the 5 percent observed in urban settings (Figure 12). The percentage of households with access to improved water strongly correlates with their asset quintiles.

However, certain states and regions still grapple with substantial water challenges (Map 5). Rakhine, Ayeyarwady, and Kayah stand out with significantly higher percentages of households lacking access to improved water, recording figures of 40 percent, 32 percent, and 20 percent, respectively. In contrast, Naypyitaw, Kachin, and Tanintharyi report the lowest percentages, demonstrating noteworthy success with figures of 3 percent, 6 percent, and 7 percent, respectively. These regional variations underscore the need for localized interventions to ensure equitable access to improved water sources nationwide.

The survey reveals that 72 percent of respondents have their primary water source located on their premises. However, for the remaining 28 percent who need to travel to obtain their main water source, the average time spent collecting water is 14 minutes, with a median of 10 minutes. This data highlights both the favorable accessibility for many and the notable time commitment required by a significant segment of the population to secure their water supply.

Figure 12: Access to improved water sources, overall, urban/rural, and by socio-economic status

Map 6: Access to improved/unimproved water sources, by state/region

A) Improved water sources

B) Unimproved water sources

Legend A:
- 93 - 97
- 91 - 93
- 89 - 91
- 82 - 89
- 60 - 82

Legend B:
- 18 - 40
- 11 - 18
- 9 - 11
- 7 - 9
- 3 - 7
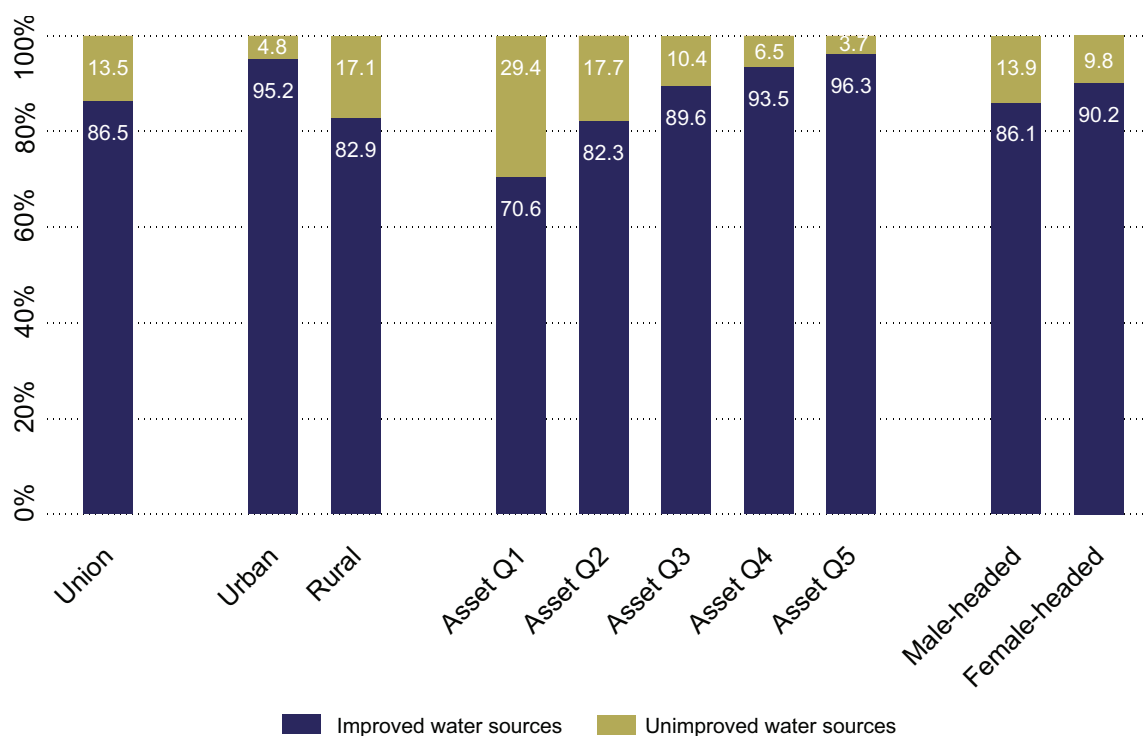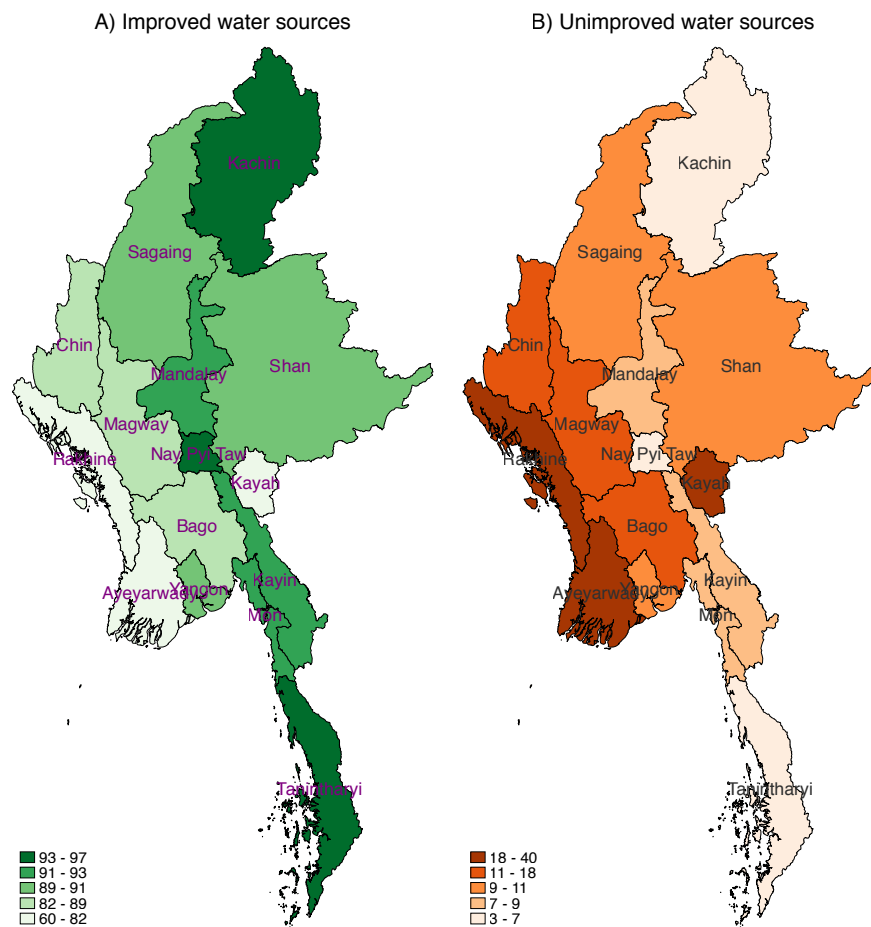
Figure 13 shows that the majority of households nationwide have access to improved sanitation facilities (86 percent), which is an improvement from the Inter-censal Survey (ICS) of 2019, which reported 75 percent. The data continues to show a trend of rural households having better access to improved sanitation. Notably, Rakhine stands out with the highest percentage of households lacking access to improved sanitation, reaching 19 percent, closely followed by Mandalay and Yangon, both reporting 17 percent (see Appendix Table 16). The absence of improved sanitation access in urban informal settlements, primarily inhabited by domestic migrants, represents a rare instance where the rural setting surpasses the urban. Conversely, Chin, Tanintharyi, and Bago (Map 6) showcase notable access, with the smallest percentages of households without access to improved sanitation at 5 percent, 7 percent, and 11 percent, respectively. In terms of asset quintiles, there has been an 11 percent improvement in the lowest quintile (Q1) compared to the Myanmar Living Condition Survey (MLCS), suggesting successful targeted improvements for the most vulnerable households. However, the highest quintile (Q5) has remained consistent at 93 percent. Only 4 percent of respondents stated they did not have access to handwashing facilities with soap.

Figure 13: Access to improved sanitation, overall, urban/rural, and by socio-economic status

Improved toilets ■ Unimproved toilets

Map 7: Access to improved/unimproved water sources, by state/region

A) Improved toilets

B) Unimproved tiolets

89 - 95
87 - 89
85 - 87
84 - 85
81 - 84

16 - 19
15 - 16
13 - 15
11 - 13
5 - 11
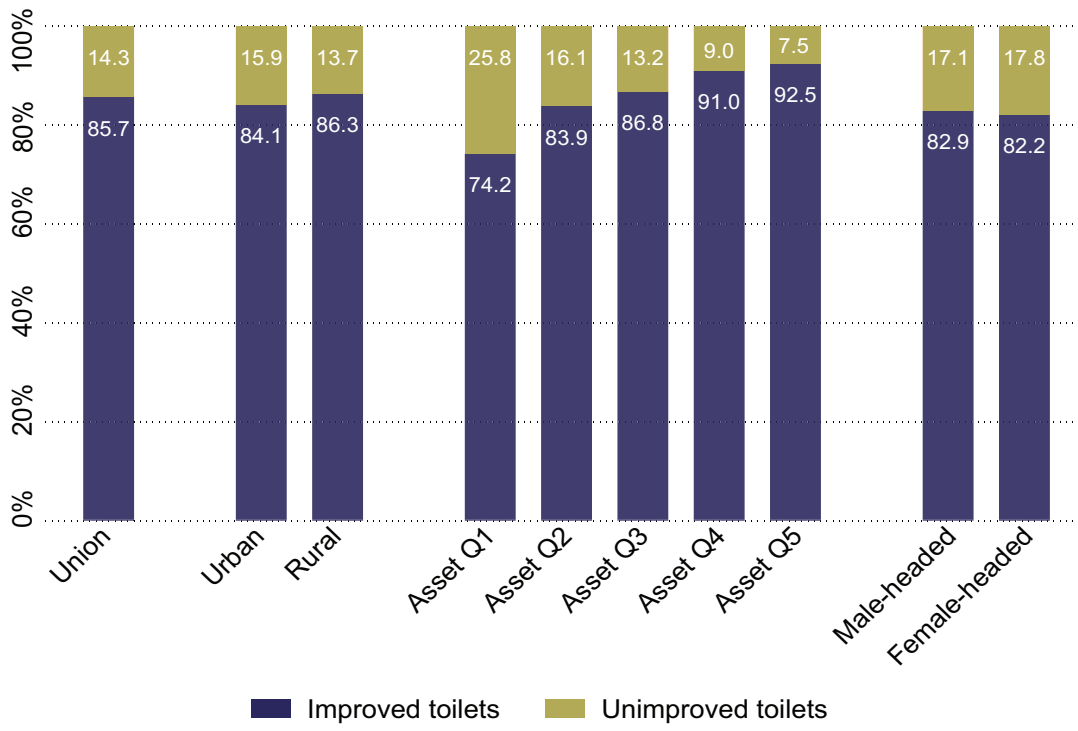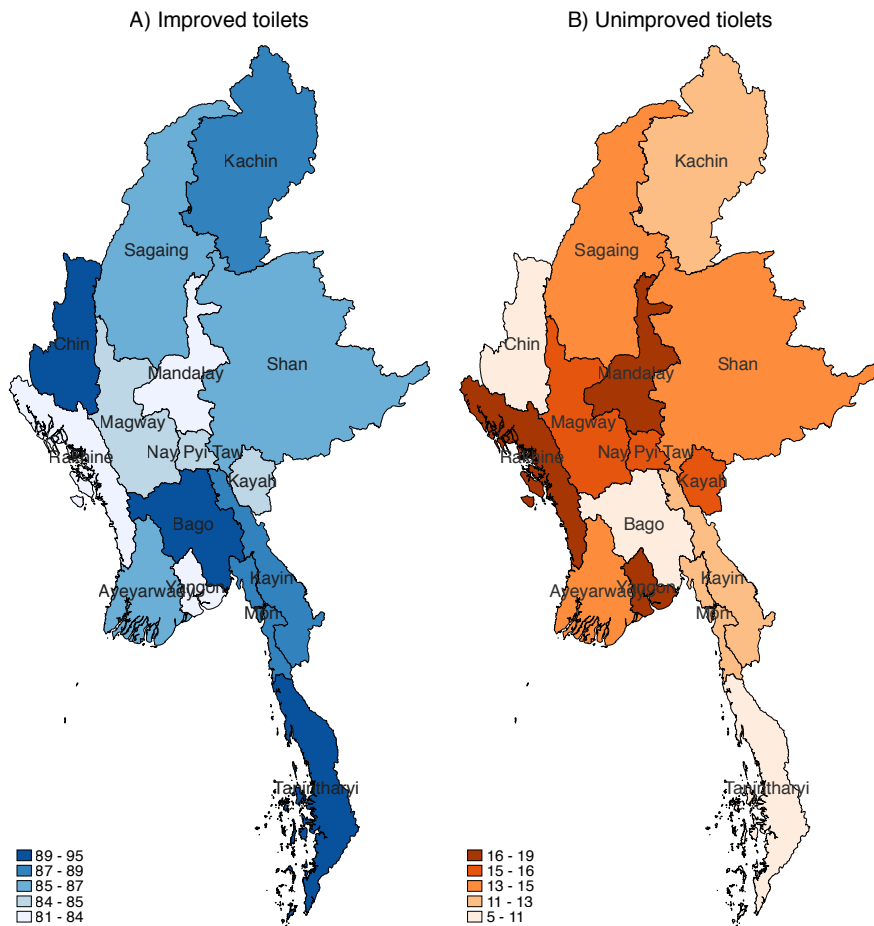
Roads: Paving the way for development or conflict?

In urban areas, the quality of roads varies significantly, with certain regions exhibiting notable differences. Unsurprisingly, Naypyitaw, the capital city constructed in 2005 with its vast empty highways, reported the best road quality, with 89 percent of respondents rating the road quality as very good or good (Figure 14). Mon and Kayah also scored highly, with both reporting 84 percent of roads as very good or good.

On the other hand, Rakhine and Chin stand out with the highest percentages of households expressing dissatisfaction with the quality of roads. In Rakhine, 18 percent rated the roads as very poor, compared to a national average of 5 percent. In Chin, only 6 percent rated urban roads as very good, compared to a national average of 16 percent. This geographical disparity underscores the need for localized infrastructure improvements.

Figure 14: Quality of roads, overall, and by state/region (According to "urban")
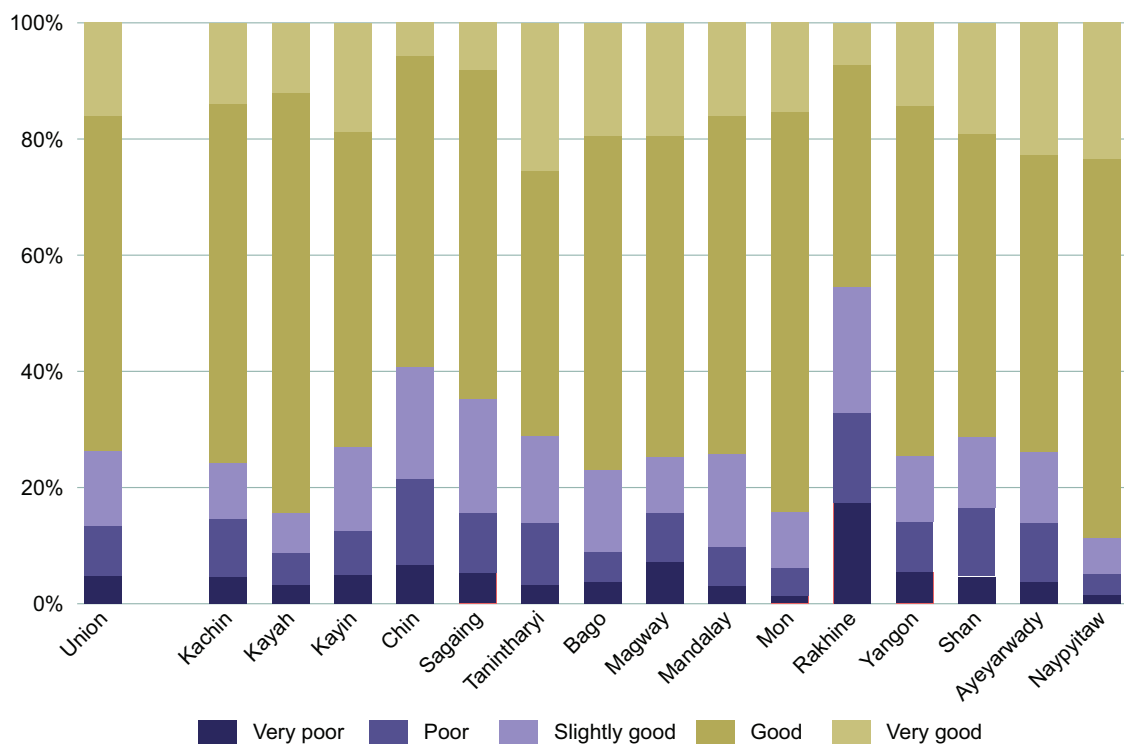
Most rural households expressed satisfaction with the condition of roads, though at a lower rate than urban households. At the national level, 60 percent of rural households reported very good or good roads, compared to 74 percent in urban areas. The highest percentages of rural households reporting very good or good roads were in Naypyitaw (85 percent) and Mon (78 percent). However, Kayah was no longer highly rated, suggesting a large disparity between urban and rural roads in the region. Rakhine (42 percent) and Chin (71 percent) again showcased the highest percentages of households reporting poor or very poor road conditions. Notably, the disparity was significant, with Chin's percentage exceeding Rakhine's by approximately 30 points; this pronounced dissatisfaction suggests that road quality is particularly problematic in Chin State.

Figure 15: Quality of roads, overall and by state/region (According to "rural")
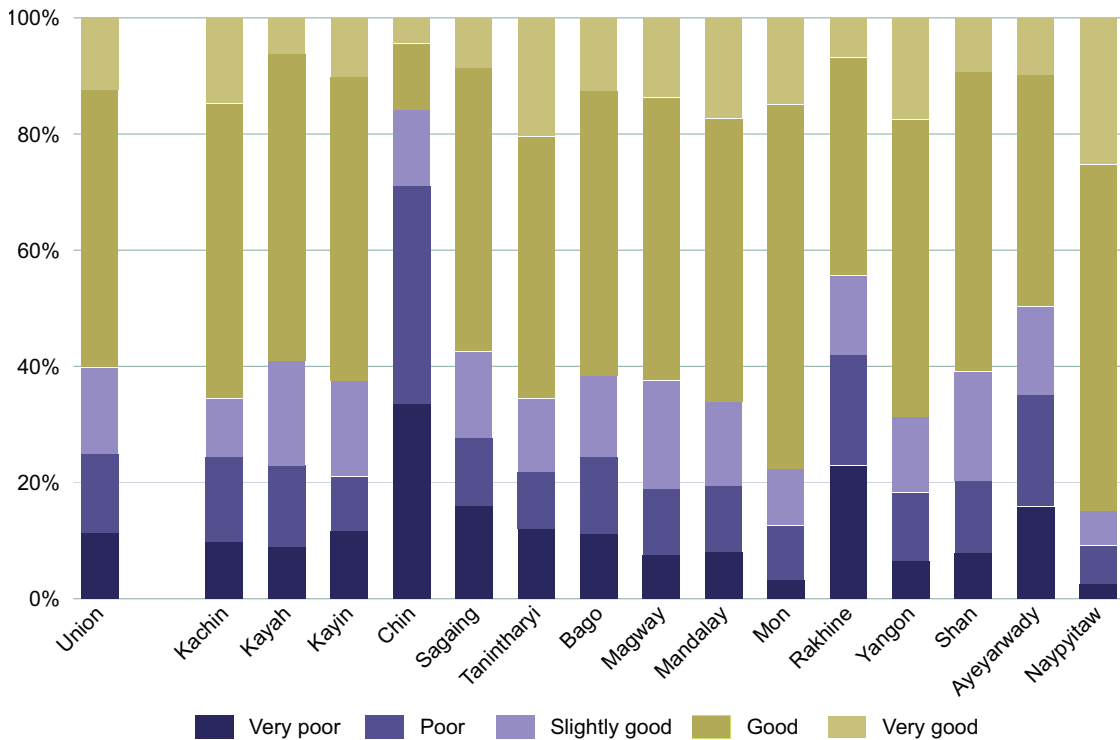
Access to roads is a vital development metric, facilitating connections to essential services like healthcare and education, while also contributing to increased incomes and poverty reduction. However, a notable caveat exists in Myanmar, where certain communities deliberately choose to reside in locations with limited road connectivity. This decision is influenced by factors such as a desire for better protection from potential attacks. Furthermore, in recent years, roads—and specifically bridges—have become key strategic assets to either control or destroy in the bid for territorial dominance. These complex dynamics underscore the multifaceted considerations that communities must weigh in the pursuit of development and security, highlighting the nuanced challenges inherent in developing Myanmar's socio-economic landscape.

4. Conclusion

The People's Pulse Survey 2023 reveals a concerning deterioration in Myanmar's human capital. Education, healthcare, and basic utilities—three key pillars of human capital—have been severely impacted by rising poverty levels and widening inequality in the aftermath of the COVID-19 pandemic, the ongoing socio-economic crisis, and escalating conflict. The decline in human capital investment is driven both by reduced demand from negative coping mechanisms and constrained supply due to conflict and political instability.

In education, nearly a quarter of school-aged children were not attending school during the 2022/23 academic year, with the highest rates of non-attendance in conflict-affected areas such as Sagaing, Chin, and Kayah. Dropout rates are alarmingly high, particularly among rural, asset-poor, and male students. Even among those enrolled, actual attendance and the quality of education remain significant concerns.

The healthcare sector mirrors the education crisis, with over half of the surveyed households reporting unmet health needs. Chin State is particularly affected, with the highest health needs—27 percent of households required emergency care in the past 12 months. Unmet healthcare needs are most prevalent in conflict-affected regions like Sagaing, Chin, and Kayah. The widespread reliance on private hospitals, even among lower socioeconomic groups, underscores the public healthcare system's inability to provide affordable and accessible care.

Basic utilities, while showing some progress, still exhibit significant disparities. Electricity access has increased substantially, but reliability remains a major challenge, especially in rural areas. While water and sanitation access has improved, rural households and those in lower asset quintiles continue to lag behind. Road quality varies greatly across states and regions, with conflict-affected areas like Rakhine and Chin reporting the highest levels of dissatisfaction.

The findings underscore the urgent need for targeted interventions to address the adverse effects of the current crisis on Myanmar's human capital. Strengthening the education system, and public healthcare sector, and investing in equitable basic utilities should be top priorities to prevent the deepening of poverty. However, progress in basic utilities will be severely hindered as long as the country remains mired in conflict and political instability. Large-scale investments at a national level are challenging, but localized solutions with strong community engagement are feasible.

Without concerted efforts to address these challenges, Myanmar risks losing a generation to poverty, ill-health, and lack of education, further entrenching inequality and undermining prospects for sustainable development. This would make it exceedingly difficult for Myanmar to return to a path of higher growth and human development in the coming years. The political crisis is starkly visible, but the crisis affecting human capital is a silent destroyer of Myanmar's future.

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Appendix Tables

Table 1. Schools enrolled in the 2022/23 academic year, by type of school (%)

	Not attended	Government	Private	Monastic	Home schooling
Union	22.95	69.55	4.86	1.67	0.97
Urban/Rural					
Urban	25.26	62.99	8.06	2.58	1.11
Rural	22.06	72.08	3.63	1.32	0.92
Asset quintile					
Asset Q1	27.40	68.38	2.22	1.34	0.66
Asset Q2	22.19	72.39	2.54	1.98	0.89
Asset Q3	23.43	69.45	4.23	1.89	1.00
Asset Q4	22.70	69.91	4.99	1.75	0.64
Asset Q5	18.80	67.57	10.59	1.37	1.67
State/Region					
Kachin	14.35	76.99	6.97	1.40	0.30
Kayah	36.96	53.70	7.11	1.77	0.45
Kayin	16.05	76.94	5.40	1.62	0.00
Chin	37.51	49.56	9.54	1.63	1.76
Sagaing	47.70	37.10	7.26	4.35	3.59
Tanintharyi	23.02	67.13	6.31	1.51	2.03
Bago	16.51	77.74	3.69	2.06	0.00
Magway	26.35	68.69	2.95	1.69	0.32
Mandalay	22.02	68.03	5.22	3.13	1.60
Mon	20.41	75.78	1.91	1.73	0.18
Rakhine	9.51	84.22	4.81	1.09	0.37
Yangon	26.53	63.74	7.22	1.31	1.20
Shan	16.66	76.81	5.51	0.15	0.87
Ayeyarwady	18.68	80.28	0.90	0.13	0.00
Naypyitaw	10.58	82.97	5.93	0.53	0.00
Gender					
Male	22.69	70.29	4.50	1.50	1.02
Female	23.21	68.80	5.23	1.84	0.92
Age					
5-9	26.29	63.90	6.40	1.62	1.79
10-14	15.35	78.38	3.53	2.26	0.49
15-18	30.46	63.36	4.81	0.79	0.58
Type of household					
Male headed	22.44	70.18	4.76	1.87	0.74
Female headed	21.99	70.17	5.50	2.17	0.18

Table 2. Schools enrolled in the current 2023/24 academic year, by type of school (%)

	Enrollment			Type of school		
	Not attended	Attended	Government	Private	Monastic	Home schooling
Union	20.96	79.04	91.00	6.74	2.04	0.22
Urban/Rural						
Urban	19.45	80.55	85.20	12.09	2.62	0.09
Rural	21.53	78.47	93.29	4.63	1.81	0.27
Asset quintile						
Asset Q1	28.01	71.99	94.23	3.68	1.82	0.27
Asset Q2	22.68	77.32	94.11	3.40	2.44	0.06
Asset Q3	20.38	79.62	93.00	4.74	2.16	0.10
Asset Q4	18.43	81.57	91.74	5.80	2.12	0.34
Asset Q5	14.84	85.16	82.55	15.44	1.68	0.32
State/Region						
Kachin	12.06	87.94	89.20	8.67	1.96	0.17
Kayah	12.94	87.06	88.71	9.23	2.07	0.00
Kayin	21.12	78.88	94.15	4.79	1.06	0.00
Chin	37.57	62.43	75.67	20.39	3.22	0.72
Sagaing	55.88	44.12	69.97	19.46	8.88	1.69
Tanintharyi	24.94	75.06	88.80	8.38	2.19	0.63
Bago	14.37	85.63	93.99	3.68	2.33	0.00
Magway	18.45	81.55	93.54	4.49	1.97	0.00
Mandalay	19.91	80.09	88.03	7.55	4.42	0.00
Mon	12.64	87.36	95.79	2.24	1.97	0.00
Rakhine	9.04	90.96	92.45	6.04	1.10	0.41
Yangon	19.38	80.62	87.69	11.08	1.09	0.14
Shan	14.35	85.65	93.58	6.05	0.37	0.00
Ayeyarwady	16.39	83.61	98.34	1.15	0.15	0.36
Naypyitaw	13.77	86.23	92.57	7.00	0.44	0.00
Gender						
Male	21.63	78.37	91.76	6.26	1.82	0.17
Female	20.27	79.73	90.24	7.23	2.27	0.26
Age						
5-9	11.06	88.94	91.33	6.69	1.91	0.07
10-14	15.93	84.07	91.34	5.80	2.64	0.22
15-18	43.27	56.73	89.44	9.13	0.91	0.53
Type of household						
Male headed	19.43	80.57	90.82	6.73	2.19	0.26
Female headed	15.72	84.28	90.69	5.39	3.21	0.70

Table 3. School drop-outs (enrolled last school year but not enrolled this year), overall, urban/rural, by state/region and by socio-economic status (%)

	Dropout (%)
Union	10.70
Urban/Rural	
Urban	10.82
Rural	10.66
Asset quintile	
Asset Q1	14.11
Asset Q2	12.80
Asset Q3	9.06
Asset Q4	9.15
Asset Q5	8.45
State/Region	
Kachin	6.34
Kayah	3.22
Kayin	10.23
Chin	20.83
Sagaing	37.24
Tanintharyi	15.16
Bago	6.92
Magway	8.67
Mandalay	13.16
Mon	6.58
Rakhine	5.38
Yangon	8.87
Shan	7.42
Ayeyarwady	7.02
Naypyitaw	9.82
Gender	
Male	12.21
Female	9.15
Age	
5-9	4.94
10-14	7.77
15-18	25.23
Type of household	
Male headed	9.08
Female headed	9.88

Table 4. School enrolment in the current academic year, by level, overall, urban/rural, by state/region and by socio-economic status (%)

	Primary	Middle	High	Higher
Union	54.29	36.49	9.19	0.03
Urban/Rural				
Urban	57.77	35.82	6.38	0.03
Rural	52.92	36.75	10.30	0.03
Asset quintile				
Asset Q1	60.06	31.09	8.85	0.00
Asset Q2	53.20	38.59	8.20	0.00
Asset Q3	52.13	38.88	8.89	0.10
Asset Q4	54.03	36.34	9.58	0.04
Asset Q5	52.53	37.11	10.35	0.00
State/Region				
Kachin	52.06	35.22	12.72	0.00
Kayah	56.88	39.18	3.94	0.00
Kayin	58.86	33.46	7.68	0.00
Chin	52.72	30.87	16.41	0.00
Sagaing	60.17	31.40	8.43	0.00
Tanintharyi	62.93	31.00	6.07	0.00
Bago	51.08	40.40	8.31	0.21
Magway	54.23	36.77	9.00	0.00
Mandalay	60.76	31.87	7.37	0.00
Mon	58.87	31.83	9.12	0.18
Rakhine	44.09	40.34	15.56	0.00
Yangon	54.67	39.92	5.41	0.00
Shan	51.20	37.18	11.62	0.00
Ayeyarwady	52.61	37.86	9.53	0.00
Naypyitaw	42.33	40.79	16.88	0.00
Gender				
Male	55.85	36.02	7.78	0.35
Female	52.30	36.67	10.53	0.49
Age				
5-9	98.95	1.01	0.04	0.00
10-14	34.17	64.49	1.35	0.00
15-18	0.67	48.64	48.32	2.38
Type of household				
Male headed	55.80	34.49	9.24	0.48
Female headed	56.64	34.70	7.72	0.95

Table 5. Reasons for not being enrolled, overall, urban/rural, by state/ region and by socio-economic status (%)

	Safety concerns	School isn't open	Needs to work	Cannot afford tuition fee	Health situation	Doesn't want to go to school	Others
Union	14.29	21.47	16.34	12.66	5.51	18.91	10.83
Urban/Rural							
Urban	18.15	7.71	21.52	18.68	4.75	17.39	11.81
Rural	12.97	26.17	14.57	10.60	5.77	19.43	10.49
Asset quintile							
Asset Q1	7.54	21.05	17.98	16.75	5.67	19.55	11.46
Asset Q2	14.62	22.00	17.08	14.85	5.50	16.50	9.45
Asset Q3	14.76	24.93	13.98	11.26	7.69	17.39	9.99
Asset Q4	20.12	20.88	15.55	9.34	4.57	19.05	10.49
Asset Q5	19.66	17.15	16.19	6.82	3.19	23.57	13.42
State/Region							
Kachin	18.15	9.28	16.95	4.01	2.73	29.41	19.48
Kayah	20.73	6.95	0.00	30.35	6.78	22.79	12.40
Kayin	11.24	3.01	19.68	12.76	9.24	38.38	5.69
Chin	16.51	62.33	0.00	4.11	1.25	10.28	5.53
Sagaing	17.50	55.51	6.90	3.14	2.98	5.79	8.18
Tanintharyi	14.54	23.26	5.81	22.26	4.30	14.86	14.97
Bago	8.18	3.13	22.38	21.62	8.40	21.96	14.33
Magway	16.80	26.33	19.52	5.76	5.32	18.09	8.18
Mandalay	12.57	10.97	18.60	17.25	4.10	23.85	12.66
Mon	5.33	1.21	22.27	17.27	17.08	31.99	4.84
Rakhine	5.20	4.12	12.11	20.95	10.67	28.78	18.16
Yangon	21.52	1.39	17.42	21.78	7.63	19.64	10.62
Shan	14.49	2.25	24.86	15.16	2.10	29.82	11.31
Ayeyarwady	6.11	0.75	31.04	13.02	8.63	24.86	15.59
Naypyitaw	5.56	0.00	15.83	31.39	8.03	33.20	6.00
Gender							
Male	12.02	20.71	17.09	10.38	4.78	22.58	12.43
Female	16.80	22.32	15.50	15.18	6.32	14.83	9.05
Age							
5-9	14.86	45.46	0.00	3.33	5.37	5.23	25.75
10-14	16.56	27.61	16.53	9.23	5.47	17.04	7.56
15-18	12.72	9.01	22.23	18.12	5.58	25.05	7.29
Type of household							
Male headed	11.26	24.79	18.05	11.43	6.36	16.85	11.26
Female headed	6.56	10.50	26.14	13.66	7.27	26.80	9.07

Table 6. Time taken to school and main mode used to travel to school (%)

	Minutes	Walk	Bicycle	Car (owned)	Car (not owned)	School bus	Motor-cycle	Bus	Boat	Tuktuk/ e-bike	Online school	Hostel
Union	13.49	51.53	19.28	0.71	1.05	3.33	21.47	0.51	1.22	0.15	0.05	0.70
Urban/Rural												
Urban	12.59	42.13	16.13	1.98	1.70	5.42	30.60	1.14	0.00	0.31	0.03	0.56
Rural	13.84	55.24	20.53	0.20	0.79	2.51	17.86	0.26	1.71	0.09	0.06	0.75
Asset quintile												
Asset Q1	16.81	70.58	13.92	0.08	0.45	1.43	9.64	0.60	2.81	0.00	0.00	0.50
Asset Q2	13.63	62.46	17.80	0.02	1.10	0.77	15.85	0.38	0.99	0.28	0.00	0.35
Asset Q3	13.54	51.79	22.10	0.04	1.13	2.95	18.94	0.52	1.57	0.28	0.00	0.68
Asset Q4	11.48	43.49	23.19	0.24	1.11	4.27	25.76	0.65	0.30	0.20	0.00	0.79
Asset Q5	12.26	31.59	19.02	3.01	1.40	6.94	35.71	0.40	0.57	0.00	0.23	1.13
State/Region												
Kachin	12.96	52.85	11.56	0.96	1.72	2.25	29.10	0.22	0.00	0.22	0.00	1.12
Kayah	14.35	54.71	15.29	0.00	0.75	0.97	28.28	0.00	0.00	0.00	0.00	0.00
Kayin	12.06	52.18	16.50	0.29	1.76	3.36	23.77	0.00	0.37	0.13	0.00	1.65
Chin	15.19	77.12	2.86	0.00	0.00	2.18	17.58	0.00	0.00	0.00	0.00	0.26
Sagaing	12.36	50.35	21.04	0.00	0.60	2.44	22.49	0.00	0.00	0.64	0.41	2.02
Tanintharyi	13.98	60.24	3.40	0.26	1.57	5.10	28.44	0.22	0.00	0.00	0.25	0.51
Bago	13.91	42.19	32.16	0.46	0.17	2.84	20.60	0.59	0.17	0.16	0.17	0.49
Magway	11.55	58.63	19.34	0.41	0.48	2.30	17.51	0.00	0.00	0.00	0.00	1.33
Mandalay	13.52	41.48	19.43	0.93	0.81	2.21	34.61	0.00	0.00	0.15	0.00	0.38
Mon	11.91	44.54	22.29	0.79	1.08	7.10	24.20	0.00	0.00	0.00	0.00	0.00
Rakhine	13.32	71.13	13.47	0.00	2.17	1.48	10.21	0.15	0.17	0.00	0.00	1.23
Yangon	14.25	52.00	21.64	2.02	1.63	7.55	11.45	3.05	0.00	0.51	0.00	0.14
Shan	12.95	51.88	8.04	1.13	0.93	3.26	29.21	0.12	4.84	0.00	0.00	0.59
Ayeyarwady	15.53	56.29	23.57	0.00	1.12	0.66	13.71	0.00	4.00	0.00	0.00	0.65
Naypyitaw	12.51	40.87	33.45	0.28	1.38	6.09	16.70	0.46	0.00	0.00	0.00	0.77
Gender												
Male	13.18	52.04	20.82	0.81	1.05	2.30	21.21	0.27	0.98	0.08	0.06	0.39
Female	13.80	51.02	17.74	0.60	1.05	4.37	21.72	0.75	1.47	0.23	0.04	1.01
Age												
5-9	11.66	56.47	11.31	0.65	1.10	2.53	26.25	0.09	1.25	0.10	0.00	0.24
10-14	13.70	51.52	23.40	0.69	0.61	3.56	17.29	0.80	1.29	0.24	0.06	0.55
15-18	17.10	40.46	27.33	0.87	1.99	4.61	20.74	0.74	1.01	0.05	0.13	2.07
Type of household												
Male headed	13.04	49.79	20.07	0.71	0.96	3.18	22.79	0.36	1.31	0.22	0.04	0.57
Female headed	14.87	58.42	18.83	0.00	1.15	1.32	19.24	0.00	0.34	0.00	0.00	0.70

Table 7. Share of respondents needed healthcare services by types of services (%)

	Family plan-ning	Under 5 vaccines	Mater-nal care	Child-care	Adult care	Emer-gency care	Dental care	Covid vaccine	Other vaccine	Surgery	Psycho support	None
Union	14.18	22.22	9.01	39.20	61.21	10.52	19.47	52.61	7.16	6.02	1.49	12.75
Urban/Rural												
Urban	12.83	23.10	9.37	38.00	60.43	10.81	21.22	50.53	7.96	6.49	1.77	12.81
Rural	14.73	21.86	8.87	39.68	61.52	10.41	18.76	53.46	6.84	5.84	1.38	12.72
Asset quintile												
Asset Q1	15.45	25.49	9.45	39.91	59.27	9.75	15.07	52.01	6.73	4.59	1.42	14.56
Asset Q2	13.79	21.36	8.38	38.69	59.80	10.08	17.22	51.98	6.11	5.29	1.51	12.96
Asset Q3	13.91	22.34	8.59	41.32	61.03	9.96	21.21	52.91	7.94	5.88	1.08	12.57
Asset Q4	14.16	20.71	9.27	37.70	62.03	8.28	19.16	51.44	5.56	6.65	1.62	12.25
Asset Q5	13.58	21.19	9.36	38.36	63.91	14.56	24.70	54.72	9.46	7.72	1.83	11.39
State/Region												
Kachin	16.42	28.45	13.40	49.38	60.82	12.74	24.99	47.28	9.77	6.72	1.70	12.64
Kayah	23.38	19.28	8.96	59.18	75.00	14.60	27.74	65.52	4.85	8.12	5.13	4.85
Kayin	13.75	25.74	10.64	51.36	70.66	12.56	21.11	57.59	10.42	5.13	1.32	10.08
Chin	18.27	41.40	24.18	67.75	79.11	26.27	33.60	54.71	17.17	7.72	5.04	1.33
Sagaing	13.31	17.02	8.71	34.89	52.16	9.09	14.56	28.19	4.66	6.54	1.29	23.67
Tanintharyi	14.32	24.29	10.61	50.82	69.98	9.91	24.66	50.84	10.94	4.78	0.91	5.78
Bago	14.27	22.02	9.03	40.16	64.94	9.39	16.97	65.68	7.16	6.49	1.10	8.95
Magway	13.14	21.55	7.97	36.95	60.88	9.44	18.88	53.98	6.16	7.02	0.75	11.66
Mandalay	11.75	23.61	10.16	30.44	49.48	9.12	16.00	45.70	5.43	6.07	0.87	20.21
Mon	15.47	24.55	9.78	47.87	69.82	6.90	25.91	61.76	9.74	4.57	2.06	8.77
Rakhine	16.47	30.55	10.89	49.15	66.78	16.98	20.60	61.10	12.31	6.61	4.49	9.48
Yangon	13.96	19.79	9.00	36.19	63.01	11.70	22.35	53.39	6.64	6.53	1.87	10.10
Shan	16.10	22.57	7.61	43.16	65.42	10.66	23.23	49.20	7.21	5.63	1.65	10.07
Ayeyarwady	15.29	22.28	7.11	37.19	63.07	10.24	15.94	65.28	6.81	4.83	1.08	9.46
Naypyitaw	6.78	13.11	4.43	25.05	47.84	8.66	18.75	49.59	6.23	5.36	0.73	23.42
Type of household												
Male headed	17.28	25.61	10.09	43.6	59.73	9.38	19.8	53.7	7.72	5.72	1.19	11.82
Female headed	8.74	17.07	5.53	33.69	60.21	14.6	18.2	53.6	5.20	8.18	0.97	14.00

Table 8. Unmet need (share of respondents needing care but not receiving it), overall, urban/rural, by state/region and by socio-economic status (%)

	Unmet
Union	8.13
Urban/Rural	
Urban	8.12
Rural	8.13
Asset quintile	
Asset Q1	10.36
Asset Q2	10.29
Asset Q3	7.64
Asset Q4	6.78
Asset Q5	5.66
State/Region	
Kachin	7.05
Kayah	11.10
Kayin	3.91
Chin	13.96
Sagaing	14.88
Tanintharyi	7.82
Bago	5.45
Magway	7.08
Mandalay	6.67
Mon	4.77
Rakhine	5.66
Yangon	9.08
Shan	9.76
Ayeyarwady	7.43
Naypyitaw	7.78
Type of household	
Male headed	8.53
Female headed	7.03

Table 9. Reasons for not seeking care, overall, urban/rural, by state/region and by socio-economic status (%)

	Cannot afford	Too far	Minor illness	Self medication	Others
Union	12.00	9.28	24.85	43.70	10.17
Urban/Rural					
Urban	13.85	2.29	30.47	44.87	8.53
Rural	11.25	12.11	22.57	43.22	10.84
Asset quintile					
Asset Q1	19.03	11.39	21.31	41.10	7.17
Asset Q2	9.67	16.01	15.94	45.17	13.21
Asset Q3	12.88	7.92	26.19	43.66	9.35
Asset Q4	10.89	2.37	29.63	49.32	7.79
Asset Q5	3.88	3.53	39.56	39.04	13.98
Type of household					
Male headed	11.16	9.50	24.91	44.93	9.50
Female headed	21.57	6.61	6.18	58.96	6.68

Table 10. Place where the care was sought (for those seeking healthcare), overall, urban/rural, by state/region and by socio-economic status (%)

	Gov-hospital	Gov-health center	Gov-healthpost	Gov-health volunteer	Private hospital	Private doctor	Others
Union	29.89	6.61	9.09	3.02	45.32	3.43	2.63
Urban/Rural							
Urban	26.04	2.24	3.48	3.12	58.39	2.72	4.01
Rural	31.46	8.38	11.36	2.98	40.02	3.72	2.07
Asset quintile							
Asset Q1	35.88	10.42	12.54	3.78	30.06	4.16	3.16
Asset Q2	32.41	6.96	12.02	3.53	38.35	4.04	2.69
Asset Q3	29.59	5.85	8.09	2.70	47.68	3.42	2.66
Asset Q4	28.15	6.57	7.12	2.20	50.43	3.01	2.52
Asset Q5	24.05	3.57	6.09	2.95	58.55	2.64	2.16
State/Region							
Kachin	27.30	4.88	8.59	2.34	48.71	4.13	4.04
Kayah	38.27	2.81	12.29	2.95	36.98	3.90	2.81
Kayin	36.65	6.12	7.99	2.00	39.86	4.69	2.68
Chin	40.35	2.32	14.78	0.13	40.17	1.53	0.73
Sagaing	27.18	3.36	5.87	3.00	51.72	6.41	2.47
Tanintharyi	31.07	7.73	8.57	3.13	45.67	2.33	1.50
Bago	30.93	8.58	12.43	3.21	39.40	3.84	1.62
Magway	30.22	8.46	10.47	2.94	42.70	3.99	1.21
Mandalay	25.61	6.50	8.33	2.52	48.52	3.04	5.47
Mon	26.49	5.52	9.73	2.10	48.12	6.99	1.04
Rakhine	39.19	6.56	10.70	2.16	34.72	2.87	3.82
Yangon	24.09	3.71	5.37	3.45	59.13	1.97	2.29
Shan	29.97	6.42	8.00	4.03	45.25	2.78	3.54
Ayeyarwady	35.74	10.64	11.86	2.49	34.76	2.55	1.95
Naypyitaw	32.26	6.68	13.85	7.82	36.18	1.83	1.39
Type of household							
Male headed	29.07	7.48	9.99	2.98	44.12	3.63	2.73
Female headed	29.14	8.33	8.25	3.48	42.68	3.65	4.48

Table 11. Main source of electricity in the household, overall, urban/ rural, by state/region and by socio-economic status (%)

	Grid	Community	Own	Non-electricity
Union	73.92	2.00	16.61	7.47
Urban/Rural				
Urban	93.77	0.45	3.17	2.60
Rural	65.87	2.62	22.07	9.44
Asset quintile				
Asset Q1	28.63	3.51	41.70	26.17
Asset Q2	68.37	2.57	22.84	6.22
Asset Q3	86.07	1.75	9.91	2.26
Asset Q4	90.86	1.63	5.66	1.85
Asset Q5	95.70	0.53	2.95	0.82
State/Region				
Kachin	83.04	3.82	9.12	4.02
Kayah	84.54	0.31	10.34	4.81
Kayin	60.65	1.49	24.58	13.28
Chin	32.64	4.94	59.47	2.95
Sagaing	69.74	1.36	17.59	11.30
Tanintharyi	73.78	3.54	15.81	6.87
Bago	77.44	1.24	12.89	8.43
Magway	68.41	2.46	21.67	7.47
Mandalay	84.14	0.67	5.55	9.64
Mon	80.08	0.60	15.61	3.71
Rakhine	65.64	5.07	24.29	5.00
Yangon	93.55	0.56	3.89	2.00
Shan	80.49	3.12	12.32	4.07
Ayeyarwady	41.69	3.60	41.12	13.59
Naypyitaw	89.45	0.69	6.89	2.97
Type of household				
Male-headed	71.16	1.93	18.47	8.44
Female-headed	77.67	1.15	13.36	7.83

Table 12. Secondary source of electricity in the household, overall, urban/rural, by state/region and by socio-economic status (%)

	Battery	Generator	Solar panels	Hydro power	Wind power	Power bank	none
Union	28.75	7.84	16.44	0.07	0.03	0.02	60.09
Urban/Rural							
Urban	23.45	7.33	9.06	0.07	0.05	0.04	67.49
Rural	31.06	8.06	19.66	0.08	0.03	0.01	56.86
Asset quintile							
Asset Q1	26.27	2.51	16.50	0.00	0.00	0.00	67.85
Asset Q2	24.88	3.26	14.93	0.08	0.00	0.00	67.31
Asset Q3	24.02	3.70	15.66	0.04	0.04	0.00	67.26
Asset Q4	30.28	8.67	16.36	0.03	0.00	0.03	56.87
Asset Q5	37.40	19.38	18.68	0.21	0.12	0.06	43.61
State/Region							
Kachin	28.39	10.44	18.21	0.49	0.11	0.00	59.98
Kayah	7.83	0.66	6.16	0.00	0.00	0.00	87.93
Kayin	25.03	11.17	18.02	0.19	0.00	0.00	60.69
Chin	79.12	3.31	70.53	0.00	0.00	0.00	18.47
Sagaing	37.82	7.86	23.13	0.33	0.09	0.07	50.90
Tanintharyi	13.54	6.54	10.69	0.14	0.00	0.00	75.19
Bago	29.59	5.53	13.63	0.00	0.00	0.06	61.50
Magway	29.73	5.65	19.08	0.00	0.00	0.09	58.56
Mandalay	33.34	10.78	22.67	0.06	0.14	0.00	50.24
Mon	24.77	13.12	12.65	0.00	0.11	0.00	63.05
Rakhine	22.73	7.99	20.63	0.00	0.00	0.00	62.09
Yangon	19.71	4.24	4.02	0.00	0.00	0.00	74.39
Shan	35.62	10.54	21.95	0.00	0.00	0.00	50.04
Ayeyarwady	27.41	8.10	13.61	0.09	0.00	0.00	62.68
Naypyitaw	15.34	6.39	7.12	0.00	0.00	0.00	76.82
Type of household							
Male-headed	29.71	6.75	16.63	0.07	0.03	0.03	60.31
Female-headed	21.63	3.96	10.00	0.03	0.00	0.00	72.12

Table 13. Average hours of electricity, overall, urban/rural, by state/region and by socio-economic status (%)

	Average hours	1-5 hours	5-10 hours	10-15 hours	15-20 hours	20-24 hours
Union	10.65	22.11	27.90	20.24	11.85	17.90
Urban/Rural						
Urban	11.77	13.20	28.83	22.78	16.66	18.53
Rural	10.16	27.46	27.34	18.72	8.96	17.52
Asset quintile						
Asset Q1	8.05	43.25	21.72	14.45	7.18	13.41
Asset Q2	10.00	25.48	27.49	18.17	11.48	17.36
Asset Q3	11.17	16.90	29.07	21.88	12.94	19.21
Asset Q4	11.13	15.37	31.90	23.07	11.76	17.90
Asset Q5	12.21	11.33	28.60	23.24	15.54	21.29
State/Region						
Kachin	16.80	10.96	16.50	14.35	14.35	43.84
Kayah	15.81	5.61	7.40	20.66	45.41	20.92
Kayin	9.17	25.68	38.32	16.21	5.89	13.89
Chin	8.38	30.56	33.84	27.78	5.30	2.53
Sagaing	9.09	30.20	34.84	23.78	8.56	2.62
Tanintharyi	18.81	10.23	8.15	5.03	7.97	68.63
Bago	9.42	21.87	41.95	25.15	7.85	3.18
Magway	10.46	25.77	29.14	28.93	8.66	7.50
Mandalay	7.87	35.03	41.17	15.93	5.47	2.40
Mon	9.54	22.77	36.31	30.46	8.15	2.31
Rakhine	14.38	23.34	14.63	14.29	12.66	35.08
Yangon	12.13	10.02	29.04	29.88	29.46	1.60
Shan	10.59	21.57	35.87	20.16	10.79	11.61
Ayeyarwady	7.78	43.03	29.88	19.02	4.68	3.39
Naypyitaw	21.17	4.37	4.77	5.87	8.59	76.40
Type of household						
Male-headed	10.61	22.75	26.85	20.29	11.88	18.23
Female-headed	10.89	17.68	24.71	23.77	14.75	19.09

Table 14. Outage hours of electricity, overall, urban/rural, by state/region and by socio-economic status (%)

	Every day	Every week	Every month	Not every month	No access
Union	64.61	6.69	3.60	4.81	20.28
Urban/Rural					
Urban	80.48	7.19	3.33	5.11	3.88
Rural	57.69	6.47	3.71	4.68	27.45
Asset quintile					
Asset Q1	30.13	3.62	2.31	2.58	61.37
Asset Q2	58.60	6.69	2.70	4.84	27.17
Asset Q3	70.00	8.36	4.46	5.10	12.08
Asset Q4	75.93	6.34	4.22	5.69	7.82
Asset Q5	79.48	7.67	3.95	5.30	3.60
State/Region					
Kachin	28.88	20.58	15.28	21.66	13.60
Kayah	62.58	18.49	3.92	3.82	11.19
Kayin	53.63	7.73	5.44	2.75	30.44
Chin	30.74	1.15	0.70	0.76	66.66
Sagaing	69.58	5.06	1.89	2.09	21.37
Tanintharyi	13.81	16.07	14.22	30.86	25.04
Bago	77.67	4.21	1.88	0.81	15.43
Magway	60.67	5.35	3.14	4.77	26.07
Mandalay	87.88	1.53	1.46	2.25	6.88
Mon	77.65	2.11	1.66	0.89	17.69
Rakhine	28.25	16.87	11.95	12.03	30.91
Yangon	84.26	7.37	1.87	1.96	4.53
Shan	69.02	8.10	3.60	3.18	16.09
Ayeyarwady	44.93	2.07	0.38	0.87	51.75
Naypyitaw	11.30	25.10	17.31	38.49	7.81
Type of household					
Male-headed	62.50	6.20	3.78	5.06	22.46
Female-headed	66.14	6.78	5.10	6.12	15.86

Table 15. Main type of energy used for cooking, overall, urban/rural, by state/region and by socio-economic status (%)

	Biomass	Charcoal	Electricity
Union	49.33	17.00	30.43
Urban/Rural			
Urban	16.74	26.96	48.93
Rural	62.57	12.96	22.93
Asset quintile			
Asset Q1	82.29	11.31	5.40
Asset Q2	60.90	15.34	22.10
Asset Q3	45.10	17.92	34.81
Asset Q4	37.14	20.14	39.05
Asset Q5	21.23	20.33	50.82
State/Region			
Kachin	46.16	15.16	37.04
Kayah	50.84	4.29	44.43
Kayin	47.28	29.71	20.30
Chin	73.67	17.81	7.55
Sagaing	64.91	14.17	19.47
Tanintharyi	35.04	46.20	12.76
Bago	50.63	15.31	33.28
Magway	61.65	10.68	27.01
Mandalay	49.09	26.98	20.65
Mon	48.24	13.07	34.81
Rakhine	52.48	11.63	35.49
Yangon	15.23	17.42	57.19
Shan	47.18	16.66	32.82
Ayeyarwady	75.74	10.69	12.09
Naypyitaw	20.50	9.20	69.54
Type of household			
Male-headed	51.10	17.11	28.85
Female-headed	45.76	14.74	36.00

Table 16. Access to improved water and sanitation, overall, urban/rural, by state/region and by socio-economic status (%)

	Improved water[21]	Unimproved water[22]	Improved sanitation[23]	Unimproved sanitation[24]
Union	86.48	13.52	85.68	14.32
Urban/Rural				
Urban	95.23	4.77	84.13	15.87
Rural	82.93	17.07	86.31	13.69
Asset quintile				
Asset Q1	70.58	29.42	74.24	25.76
Asset Q2	82.34	17.66	83.86	16.14
Asset Q3	89.61	10.39	86.80	13.20
Asset Q4	93.54	6.46	91.02	8.98
Asset Q5	96.34	3.66	92.50	7.50
State/Region				
Kachin	93.89	6.11	87.57	12.43
Kayah	79.78	20.22	84.21	15.79
Kayin	92.08	7.92	88.73	11.27
Chin	83.47	16.53	94.87	5.13
Sagaing	89.55	10.45	87.08	12.92
Tanintharyi	93.31	6.69	92.67	7.33
Bago	89.04	10.96	89.06	10.94
Magway	87.63	12.37	84.47	15.53
Mandalay	92.57	7.43	83.02	16.98
Mon	91.49	8.51	87.48	12.52
Rakhine	60.26	39.74	81.22	18.78
Yangon	90.80	9.20	83.06	16.94
Shan	90.83	9.17	85.44	14.56
Ayeyarwady	67.64	32.36	86.26	13.74
Naypyitaw	97.41	2.59	84.06	15.94
Type of household				
Male-headed	86.12	13.88	82.90	17.10
Female-headed	90.16	9.84	82.16	17.84

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[21] The households main water source was reported to come from: Piped water into dwelling, Piper water into yard, Piped water to a neighbour, Public tap/tube/borehole, Protected dug-well/spring, Rainwater collection, Bottled water/Water purifier, Tanker/Truck.

[22] Unimproved water refers to: Unprotected well/spring, Pool/pond/lake/dam, River/stream/canal/waterfall.

[23] Improved sanitation means the household has access to its own: flush to piped sewer, septic tank, pit latrine; or ventilated improved pit latrine; or pit latrine with slab; or composting toilet.

[24] Unimproved sanitation means toilet facilities were shared, or they used a flush toilet to elsewhere, pit latrine without slab/open pit, bucket, hanging toilet, or no facilities/bush/field.

Table 17a. Quality of roads, overall, by state/region and by socio-economic status (According to "Urban") (%)

	Very poor	Poor	Slightly good	Good	Very good
Union	4.85	8.60	12.96	57.54	16.05
Asset quintile					
Asset Q1	7.33	14.28	12.11	52.31	13.96
Asset Q2	6.37	9.39	12.86	56.30	15.07
Asset Q3	3.41	7.33	15.25	57.17	16.84
Asset Q4	4.89	7.81	12.21	58.51	16.57
Asset Q5	4.39	8.19	12.42	58.84	16.16
State/Region					
Kachin	4.64	10.00	9.63	61.85	13.88
Kayah	3.21	5.46	7.03	72.30	12.00
Kayin	5.01	7.52	14.44	54.36	18.67
Chin	6.80	14.68	19.34	53.46	5.73
Sagaing	5.36	10.25	19.69	56.58	8.13
Tanintharyi	3.31	10.66	15.01	45.58	25.44
Bago	3.85	5.18	14.04	57.56	19.37
Magway	7.21	8.40	9.73	55.32	19.34
Mandalay	3.16	6.66	15.99	58.14	16.06
Mon	1.33	4.84	9.64	68.86	15.33
Rakhine	17.46	15.41	21.69	38.33	7.12
Yangon	5.42	8.75	11.28	60.22	14.34
Shan	4.64	11.83	12.24	52.20	19.09
Ayeyarwady	3.90	9.99	12.36	51.00	22.74
Naypyitaw	1.58	3.65	6.13	65.22	23.42

Table 17b. Quality of roads, overall and by state/region and by socio-economic status (According to "Rural") (%)

	Very poor	Poor	Slightly good	Good	Very good
Union	11.35	13.46	14.93	47.82	12.43
Asset quintile					
Asset Q1	17.37	17.13	16.37	41.07	8.06
Asset Q2	10.90	13.98	15.72	47.36	12.04
Asset Q3	9.22	12.87	14.85	50.25	12.81
Asset Q4	10.48	11.03	14.23	49.42	14.84
Asset Q5	5.77	10.33	12.25	54.70	16.96
State/Region					
Kachin	9.82	14.56	10.09	50.79	14.74
Kayah	8.88	14.03	18.12	52.71	6.26
Kayin	11.64	9.46	16.42	52.20	10.27
Chin	33.48	37.49	13.13	11.52	4.37
Sagaing	16.01	11.66	14.87	48.78	8.68
Tanintharyi	12.12	9.71	12.67	45.07	20.43
Bago	11.07	13.25	14.05	48.95	12.67
Magway	7.47	11.47	18.65	48.64	13.78
Mandalay	7.97	11.45	14.58	48.60	17.39
Mon	3.24	9.37	9.68	62.83	14.87
Rakhine	22.93	19.02	13.79	37.41	6.85
Yangon	6.52	11.81	13.02	51.17	17.48
Shan	7.86	12.45	18.74	51.61	9.33
Ayeyarwady	15.82	19.23	15.26	39.84	9.84
Naypyitaw	2.46	6.69	5.99	59.62	25.25