MYANMAR

IFPRI

Livelihoods, poverty, and food insecurity in Myanmar

Survey evidence from June 2020 to December 2021

Ten rounds of the Rural-Urban Food Security Survey (RUFSS) have been conducted between June 2020 and December 2021 to assess the impacts of Myanmar's economic, political, and health crises on various dimensions of household welfare. RUFSS interviews about 2000 mothers of young children per round from urban Yangon, the rural Dry Zone, and recent migrants from these areas.

Key Findings

- Myanmar has experienced four distinct economic shocks since early 2020. The most recent of these shocks–the spread of the Delta variant–was devastating, with 63 percent of respondents stating that at least one household member had experienced COVID-like symptoms and almost all cases occurring in the May-September 2021 third wave were driven by the Delta variant.

- Twelve percent of interviewed households moved townships between their original township and December 2021. Around 84 percent of these migrants were from the Yangon sample.

- Physical insecurity has emerged as a key impact of political instability, with 55 percent of respondents in December 2021 stating they feel unsafe compared to 37 percent in May 2021.

- In December 2021, more respondents cited food supply problems (61 percent compared to 32 percent in May 2021) and 35 percent cited loss of jobs or income (31 percent in May 2021). Travel restrictions were also more commonly reported.

- Job loss has been high in December 2021–8 percent of urban Yangon households, 11 percent of rural Dry Zone households and 21 percent of migrants reported job loss.

- Income-based poverty declined among Yangon households between June and December 2021 (to 30 percent) but remained high among migrants (50 percent) and rural households (58 percent).

- Mothers in urban and migrant samples were more likely to have inadequately diverse diets, and dietary quality seems to be deteriorating in the rural Dry Zone in 2021. We also observed a severe deterioration in the diet quality of rural children between 2020 and 2021.

- To cope with the crisis, households have not only cut back on expenditures but also sold assets (25 percent), taken collateral loans (15 percent), and borrowed money (72 percent) that they say will be difficult to repay.

Recommended actions

- International donors and local NGOs/CSOs must scale up assistance to Myanmar's poor through conditional, unconditional, and nutrition-sensitive social protection schemes for vulnerable communities. Further monitoring of the situation in Myanmar will also be essential.

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Background

Myanmar's political and economic instability from February 1, 2021 onwards has resulted in widespread business closures, declining consumer and investor confidence, and major disruptions to the finance sector. The ensuing widespread protests, civil disobedience actions, and military crackdowns have also resulted in disruptions in trade, transport, and government services. Impacted heavily by these factors, Myanmar's economy collapsed in 2021 just as it was beginning to recover from the 2020 economic crisis caused by COVID-19. Furthermore, in May 2021 this turmoil was compounded by rising COVID-19 cases linked to the rapid emergence of the Delta variant throughout the summer months. As a result of low testing rates, the true scale of this third wave is still not precisely known, though the Delta variant is widely thought to be highly prevalent due not only to low vaccination rates and weak social distancing measures but also to the high degree of contagiousness of the variant.

In this note, we provide an update on results from the Rural-Urban Food Security Survey (RUFSS), a household phone survey of approximately 2000 mothers per round–who were pregnant or had young children under the age of five as of January 2020–from households originally located in urban or peri-urban Yangon and the rural Dry Zone. RUFSS is an unbalanced panel survey including six rounds of surveys from June-December 2020 and four rounds in 2021 (May, July, September, and December). RUFSS was initially designed to monitor the impacts of COVID-19 on incomes, coping strategies, food security, dietary diversity, and other nutrition-related indicators (e.g., healthcare, breastfeeding practices, etc.). However, the survey now incorporates additional questions regarding the impacts of political instability on household welfare. In September and December 2021, we also asked respondents how many of their household members had experienced COVID-19-like symptoms and when these symptoms occurred.

Although RUFSS is a panel that allows us to track welfare changes within households over time, it is critically important to note three features of this unbalanced panel. First, not all mothers respond in each survey round, especially in the urban sample as many gave birth in 2020. Second, when we attempted to recontact households in May 2021, we found that around 20 percent of the previous urban sample could not be reached by phone and were therefore replaced–first by households from the same underlying sample frame and then by a snowballing approach designed to ensure the same kind of demographic coverage (mothers with young children) and geographical coverage (the same townships in approximately equal proportion). Although some 2020 respondents returned in the July and September rounds, attrition is still an issue in the urban sample. Third, in May 2021 we found high rates of migration. However, in the most recent round we use a new and more rigorous classification of migrants based on township changes between a household's original township and December 2021.

Due to these high rates of migration in our sample, we now report a three-way sample stratification that defines a new stratum of migrants who are households that changed townships since their first RUFSS interview, unless they only moved within Yangon city itself (since this may not have affected their livelihood in any material way). Hence the three strata are: (1) "Still in Yangon" (same township as their first interview, or only moved to a new urban area in the city of Yangon), "Still in Dry Zone" (same township), and "Recent Migrants" (changes in township since first interview). Of the 2,005 households interviewed in December, 960 remained in their original rural Dry Zone township, 876 remained in their original Yangon township, and 169 were classified as migrants.

The remainder of this Research Note reviews trends in the Google mobility index in Myanmar to show the degree of economic disruption due to economic, political, and health shocks, followed by a stratification of results on the major impacts of these shocks: income-based poverty trends, unemployment, coping strategies, food insecurity, maternal dietary diversity, and receipts of

government, NGO, and private charity assistance. We also examine self-reported COVID-19-like symptoms to better understand the scale of the health crisis in Myanmar.

Consumer mobility fell sharply again during the most recent COVID-19 wave

Figure 1 reports trends in the Google Mobility Index, which measures how much phone users are staying at home compared to a pre-COVID-19 baseline for Myanmar, Bangladesh, and Indonesia (i.e., comparator countries with similar economic structures and levels of development). There were four distinct shocks throughout 2021 along with aborted economic recoveries: (1) the first wave of COVID-19, associated with lockdown measures imposed in April 2020; (2) the second wave of COVID-19 associated with the rapid spread of COVID-19 cases from September 2020 to January 2021; (3) the military takeover from February 2021 and the ensuing disruptions; and (4) the third COVID-19 wave that occurred between June and September 2021.

Figure 1. Trends in the Google Mobility Index in 2020 and 2021 in Myanmar, Bangladesh, and Indonesia
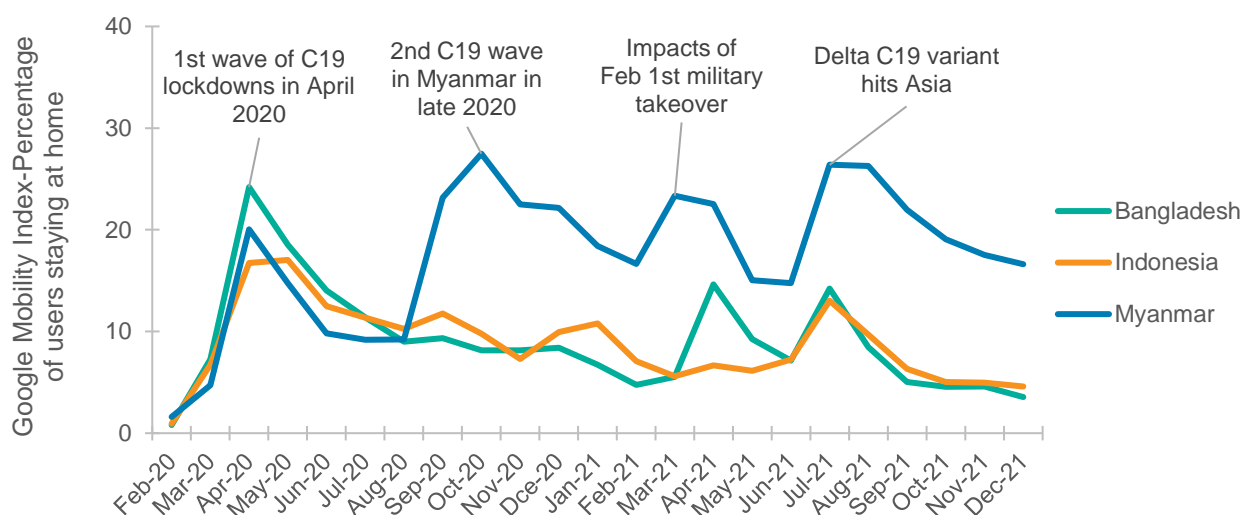
Note: The Google mobility index measures how much phone users are staying at home compared to a pre-COVID-19 baseline.
Source: Authors' estimates from Google mobility data.

The extent to which Myanmar consumers stayed at home increased by 20 percent in the first of these lockdowns (less than Bangladesh but more than Indonesia). However, subsequent mobility shocks were far more severe, with the Mobility Index invariably 10-20 points higher in Myanmar than in the other two countries. In the recent Delta wave that affected all three countries in mid-2021, Myanmar's Mobility Index was at 26 percent for two consecutive months, compared to 13-14 percent in a single month (July) in Bangladesh and Indonesia. However, updated mobility data as of late 2021 suggests that Myanmar consumers are staying at home more not only due to COVID-19 cases (which were low in late 2021), but likely also due to other factors associated with economic and political instability. Indeed, as of late December 2021, consumers stayed at home 17 percent more than pre-COVID-19 times in Myanmar, compared to 4-5 percent more in the other two countries.

Respondents report very high prevalence of COVID-like symptoms in mid-2021

In the September and December 2021 survey rounds, we asked respondents how many members of their household exhibited COVID-19-like symptoms and the timing of these symptoms by month in 2020 and 2021. In Figure 2, we used these indicators to construct a measure of the share of households with COVID-19-like symptoms by month (on the left axis) and compare it to official confirmed cases per 100 people (on the right axis). We observe a high prevalence of households

reporting COVID-19-like symptoms in the third wave that took place in mid-2021, with almost 63 percent of households reporting COVID-19-like symptoms at any time in 2020 and 2021. Almost all of these households reported symptoms in mid-2021. In the Yangon sub-sample, the share of households with at least one case peaked in July 2021 at 34 percent, while in the rural Dry Zone sample, the share peaked in July 2021 at 30.6 percent. Prevalence of households with symptoms was also very high in August but declined in September and October. However, November saw a prominent increase in prevalence of symptoms, especially in the Yangon-based sample.

Figure 2. Trends in the share of RUFSS households reporting COVID-19-like symptoms vs. official national cases (5 population) from January 2020 to December 2021
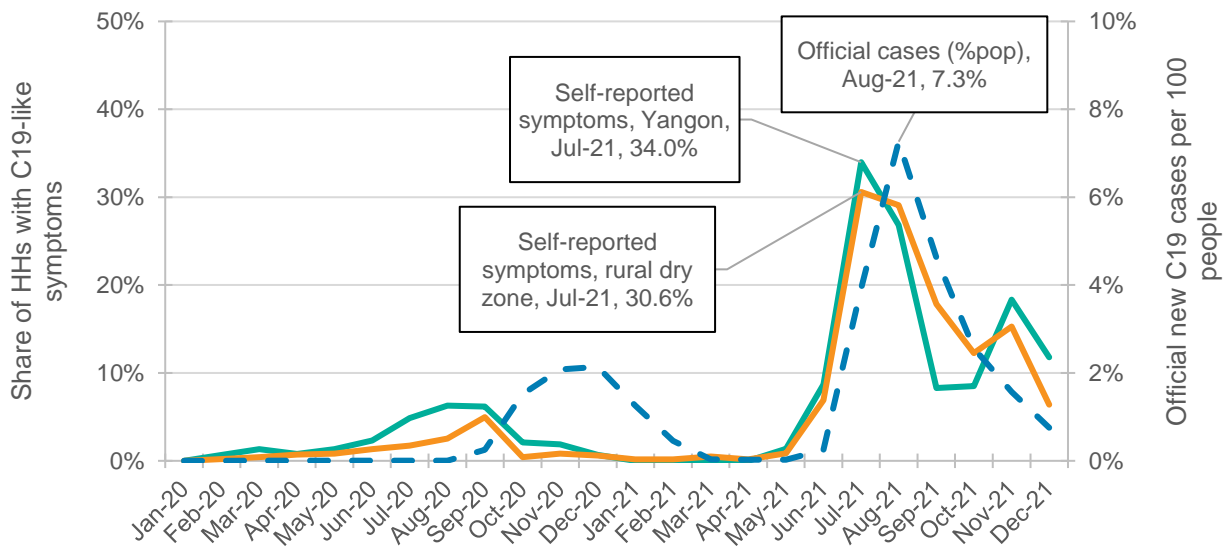
Note: RUFFS estimates are based on responses from on a question about the number of household members who had COVID-19-like symptoms (i.e., high fever, cough, breathlessness, body pains, loss of smell), and which months in 2020 and 2021 that household members had such symptoms. From that we estimate the share of households that reported any member having symptoms in each month over 2020 and 2021.
Source: RUFSS-September 2021 survey round. Official cases per capita are estimated from the Oxford COVID-19 Response Tracker at https://www.bsg.ox.ac.uk/research/research-projects/COVID-19-government-response-tracker

This pattern of self-reported symptoms follows confirmed cases trends in two ways: first, confirmed cases per 100 people at the national level (on the right y-axis in Figure 2) also peaked in mid-2021; and second, confirmed cases also rose first in Yangon and subsequently increased in the rural Dry Zone. Thus, despite the use of a COVID-19 proxy, the RUFSS-based indicator in Figure 2 follows highly plausible trends. Moreover, the survey results likely give a much better indicator of the true prevalence of the disease than confirmed cases–which peaked at just 2.5 per 100 people in July 2021–because of extremely low testing rates. Such high rates of infection also explain why infection rates declined quickly from September despite very low vaccination rates nationwide. However, the surge in COVID-like symptoms in November 2021 is also striking, and perhaps suggests some resurgence of Delta cases or new Omicron cases. Yet, this surge is not apparent in official new case data.

Respondents cite wide-ranging impacts of political instability, with rising food supply problems a worrying trend

Figure 3 reports results from a question asking respondents to list the three main impacts of recent political instability. In May 2021–our first survey after the military takeover–respondents cited job/income losses more frequently than other impacts, though from May to December 2021 we observe a dramatic doubling of the share citing food supply problems (likely reflect high rates of food inflation, food shortages and disruptions to agricultural production) and a large increase in the share

of households citing personal safety problems (55 percent in December 2021 compared to 38 percent in May) and fear of household members getting hurt or detained (28 percent in December 2021). There are not many differences across sub-samples.

Figure 3. Respondents increasingly cite food supply problems, safety issues and long-distance travel restrictions as the main impacts of political instability
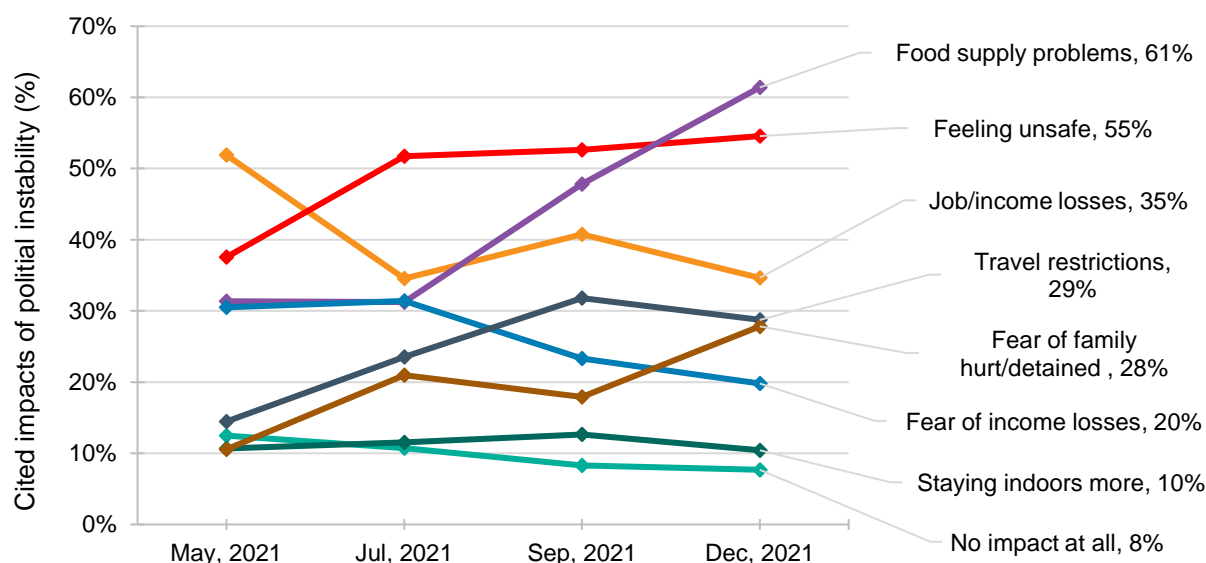
Note: Responses are based on a question asking respondents to cite the three main impacts of recent political instability, if any.
Source: RUFSS-December 2021 survey round.

Poverty and unemployment declined from September to December 2021

The income-based poverty measure in RUFSS is based on respondents' estimates of total household income in the past month as well as on a one-time retrospective estimate of income in January 2020 prior to COVID-19's economic impacts. Households are defined as income-poor if their daily per capita income in the past month was less than 890 Myanmar Kyat in June 2020 terms, which approximates the $1.90/day poverty line used by the World Bank to measure extreme poverty. Note that our measure of income-based poverty deviates from standard methods of poverty calculation and is therefore not directly comparable to previous nationally representative estimates in Myanmar or to other developing countries. The standard calculation method uses an extensive set of questions to calculate expenditure-based poverty, which was not feasible when conducting phone survey interviews. Also note that nominal incomes reported in RUFSS were adjusted for food price inflation to produce real income estimates. To do so, we used a weighted food price series from the Myanmar Agriculture Policy Support Activity (MAPSA) Food Vendor survey data–which provided prices for key food commodities in different regions of Myanmar–with weights for each food group corresponding to household food expenditure patterns from nationally representative survey data from 2017.[1] Therefore, poverty estimates are adjusted for food price inflation, which was minimal in 2020 but significant from December 2020 to December 2021 for most foods, with rice being a notable and important exception.

Table 1 shows striking trends in poverty since January 2020. In the full sample, poverty was 18 percent in January 2020 prior to COVID-19's economic impacts, but rose sharply to 50 percent by June 2020 and rose again to 65 percent by September 2020 when Myanmar was hit by very rapid growth in COVID-19 cases. Poverty rates remained the same in October 2020 (67 percent), but began to improve by November 2020 (59 percent) as the rate of new COVID-19 cases gradually

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[1] Myanmar Agriculture Policy Support Activity (MAPSA) Research Note 74. 2022. "Monitoring the Agri-food System in Myanmar: The rising costs of healthy diets–December 2021 survey round."

started to decline. Other economic indicators, such as consumer mobility indices, continued to improve in December 2020 and January 2021 (Figure 1), suggesting poverty rates were declining prior to the military takeover. However, in 2021 poverty rates have declined only marginally.

Table 1. Income-based poverty trends from January 2020 to December 2021 at the $1.90/day poverty line, by percentage of respondents

Income-based poverty	Jan 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	May 2021	Jul 2021	Sep 2021	Dec 2021
Total sample (%)	21	50	40	46	66	67	59	58	61	55	48
Remaining in urban Yangon (%)	10	37	23	28	60	62	49	51	45	45	30
Remaining in rural Dry Zone (%)	28	58	50	58	70	70	66	62	70	59	58
Recent migrants who changed township (%)	10	39	29	40	65	69	58	55	55	59	50

Note: January estimates of monthly income are based on recalled income responses from the first round in which each household was surveyed. All other monthly estimates are based on recalled income in the month prior to the survey. Note that all these statistics exclude households that were not interviewed in any round of 2020 to improve comparability to 2020 results.
Source: RUFSS–various survey rounds.

Moreover, statistics for the three sub-samples in Table 1 suggest divergent poverty dynamics among different households. In the Dry Zone, poverty rates fell slightly between November 2020 and December 2021 in a largely unchanged panel (66 percent to 58 percent), suggesting rural households are doing very poorly in economic terms. Among respondents still in Yangon in December 2021, income-based poverty was exceptionally high in October 2020 (62 percent) but fell to 51 percent in May 2021, steadying at 45 percent in the July and September 2021 rounds, and then fell sharply to 30 percent in December 2021.

Although this trend signals an important decline among respondents who stayed in Yangon, as we noted above, recent migrants in the sample mostly come from Yangon and were generally much worse off than still-in-Yangon households even in late 2020 (when most migrants were also still in Yangon). For migrants, poverty rates reached 69 percent in October 2020 and then fluctuated between 55 and 59 percent for most of 2021 before falling marginally to 50 percent in December 2021. Whether these trends signal some recovery or not remains to be scene, however, especially as seasonality factors could be affecting trends in the rural sub-sample. Moreover, the aforementioned attrition problems in the survey could produce biases if respondents who left the survey are more likely to be experiencing more severe economic shocks.

In addition to measuring poverty, RUFSS asked respondents qualitative questions about whether their current income was lower than normal, and if so, why (Table 2). Across all survey rounds, we found that about three-quarters of households state their income is lower than normal. However, the reasons for income losses vary across households and samples. Among households that remained in Yangon in December 2021, 33 percent cited loss of employment, 54 percent cited loss of daily labor opportunities, 30 percent cited travel restrictions, and 35 percent cited reduced salaries/wages. Among households in the Dry Zone, we observed loss of employment and reduced daily labor opportunities to be the most frequently cited reasons, although rural households also cited several other explanations with lower frequency responses which are not reported in Table 2 (e.g., poor weather). It is also notable that rural Dry Zone respondents were 14 percentage points more likely to report reductions in daily labor opportunities in December 2021 (54 percent) compared to November 2020 (40 percent). This likely indicates that farmers are hiring fewer farm workers due to higher input costs and reduced credit availability. Among recent migrants, we see explanations similar to those of respondents who remained in Yangon, although loss of employment and daily labor opportunities are more commonly cited.

Table 2. Reasons for changes in income by survey round, among households reporting lower than normal incomes in the past month

Reasons for changes in income	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	May 2021	Jul 2021	Sep 2021	Dec 2021
Remaining in Yangon (%)										
Loss of employment	56	35	26	47	40	34	42	35	32	33
No work due to travel restrictions	28	12	13	37	28	27	26	16	36	30
Daily labor opportunities reduced	25	31	42	25	31	42	25	49	47	54
Reduced salary/wage	23	18	13	13	18	23	19	27	29	35
Less customers/clients	14	13	14	9	8	12	9	13	22	15
Remaining in Dry Zone (%)										
Loss of employment	53	42	33	32	28	35	37	40	41	36
No work due to travel restrictions	31	14	14	33	31	29	16	21	23	30
Daily labor opportunities reduced	26	29	35	31	37	40	34	46	41	54
Reduced salary/wage	8	5	5	3	6	9	15	20	22	22
Less customers/clients	18	17	19	13	16	15	15	18	16	15
Recent migrants (%)										
Loss of employment	61	40	38	53	45	46	43	39	36	43
No work due to travel restrictions	19	12	14	29	33	29	24	23	40	34
Daily labor opportunities reduced	20	23	33	16	27	35	22	46	56	51
Reduced salary/wage	23	14	10	9	10	12	22	20	41	37
Less customers/clients	6	13	14	11	9	11	11	19	18	15

Notes: These statistics are derived from the sub-sample of households reporting income lower than normal for this time of year, which typically averages 75 percent of the full sample. Note that all these statistics exclude households that were not interviewed in any round of 2020 rounds to improve comparability to 2020 results. Other responses to this question were recorded, but less frequently, and are therefore omitted for brevity.
Source: RUFSS–various survey rounds.

From August 2020 onwards, we asked whether any household member lost or found new employment in the previous month. Figure 4 records whether a household member lost employment and was not able to find a new permanent job or was only able to find casual work (though this was relatively uncommon).

Figure 4. Share of households with members who lost a job in the past month without finding a new job, August 2020 to December 2021
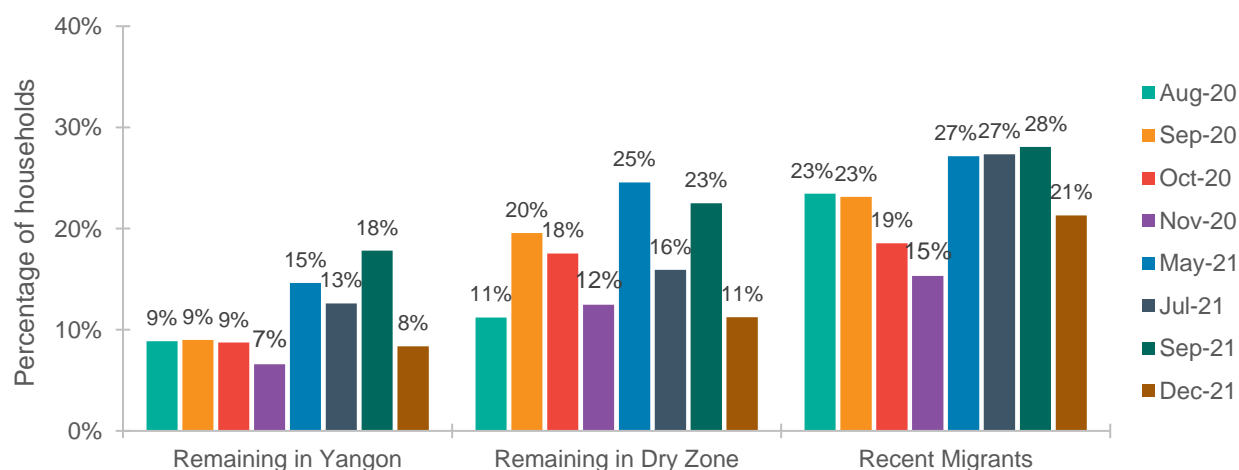
Notes: Note that these statistics exclude households that were not interviewed in any round of 2020 to improve comparability to 2020 results.
Source: RUFSS–various survey rounds.

As with poverty, we again observe divergent trends between migrants and the households who remained in Yangon or the Dry Zone as of December 2021. Towards the end of the second COVID-19 wave in September 2020, job losses were very high among what are now classed as "recent migrants", with around 23 percent of migrants stating that they had lost a job in August and September of 2020, compared to just 9 percent among households who are now classified as still in Yangon. However, since most of the households now classified as recent migrants were still in their original Yangon townships in 2020, this suggests that job and income losses partly precipitated their migration. Job losses were also high in the rural Dry Zone in September and October of 2020 (20 and 18 percent, respectively).

While unemployment situation seemed to be improving by November 2020, by May 2021 job losses rose yet again, up to 15 percent among the still-in-Yangon sample, 25 percent among those still in the Dry Zone, and 27 percent among recent migrants. July saw slight lower job losses for groups except recent migrants, but by September 2021 job losses were high once more. In December 2021, however, we see signs of some recovery, with job losses in the past month falling to 8 percent in the Yangon sample, 11 percent in the Dry Zone sample, and falling also in the migrant sample, despite remaining at a high level in absolute terms (21 percent).

Worrying changes in coping strategies in 2021

Households facing major income shocks resort to a wide range of coping strategies. Previous analyses of RUFSS data found that wealthier households relied on cash savings while poorer households borrowed more and households of all economic strata cut back on non-food expenditures. In 2020, we saw relatively few households selling assets or reducing food consumption.

However, in mid-2021 we saw a significant shift in coping strategies (Table 3). Reducing non-food consumption remained common and increased among households still in Yangon (at 51 percent in December 2021) and in the Dry Zone (48 percent in December 2021). Using cash savings remains common but borrowing is far more common among all samples, especially so in the Dry Zone (46 percent in December 2021 compared to 34 percent and 40 percent in the Yangon and migrant samples, respectively). Migrants are also much more likely to have reported receiving help from relatives (30 percent), unsurprising given that many will have moved to live with relatives. Finally, we pooled all rounds of data to assess the share of households that used a coping mechanism at least once at any point across all survey rounds, provided they reported reduced income at any point in time, and then stratified results by asset levels. We do this to particularly assess the share of households that used coping mechanisms with potentially negative long run implications on economic recovery. Here, asset levels refer to simple counts of the number of assets owned: 0-1 assets (asset-poor), 2-3 assets (asset-low) and 4-6 assets (asset-rich).

Table 3. Frequency of strategies for coping with income losses, by survey round

	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	May 2021	Jul 2021	Sep 2021	Dec 2021	Change, Nov 20 - Dec 21
Remaining in Yangon (%)											
Reduced non-food consumption	31	41	42	34	34	42	35	44	54	51	9
Used cash savings	33	25	26	41	31	29	23	18	24	18	-11
Borrowed money	30	26	28	26	29	32	25	34	34	34	3
Reduced food consumption	19	15	8	8	11	7	21	16	14	11	5
Sold off assets	8	5	7	5	6	4	7	7	5	10	6
Help from parents or relatives	2	8	12	18	16	13	23	16	15	13	-1
Remaining in Dry Zone (%)											
Reduced non-food consumption	33	41	40	47	40	38	44	46	51	48	9
Used cash savings	26	25	30	33	28	28	25	20	27	24	-4
Borrowed money	41	37	37	32	34	40	41	45	46	46	6
Reduced food consumption	11	10	7	7	9	3	16	13	7	9	5
Sold off assets	8	4	3	5	5	7	7	8	7	9	2
Help from parents or relatives	1	4	5	6	7	6	9	8	7	7	1
Recent migrants (%)											
Reduced non-food consumption	32	43	49	35	39	37	41	42	47	46	8
Used cash savings	32	22	26	32	23	24	13	23	29	14	-10
Borrowed money	28	35	31	39	32	36	32	41	36	40	3
Reduced food consumption	16	10	7	8	5	3	16	9	9	8	5
Sold off assets	3	1	2	5	2	4	10	13	8	8	4
Help from parents or relatives	6	8	9	10	20	11	19	24	21	30	19

Notes: These statistics are derived from the sub-sample of households reporting income lower than normal for this time of year, which typically averages 75 percent of the full sample. All these statistics exclude households that were not interviewed in any round of 2020 to improve comparability to 2020 results.
Source: RUFSS-various rounds.

Through this lens, we find that most households report lowering non-food consumption (86 percent), borrowing (72 percent), and using cash savings (66 percent), and 42 percent lowered food consumption at least once, 25 percent sold assets at least once, and 15 percent took a collateral loan. However, there is one very large difference across asset levels–the asset-poor are 25 percentage points more likely to borrow money than the asset-rich and 20 points more likely to buy goods on credit. Overall, the results in Table 4 point to worrying signs, since households that deplete productive assets could find themselves in poverty traps through high rates of indebtedness and/or lacking the assets to recover incomes if conditions improve. Moreover, lowering both consumption of food and non-food goods and services could also reduce human capital, particularly in terms of increasing the risk of malnutrition in young children, but also in terms of the health of income earners.

Table 4. The share of households reporting using a coping mechanism at least once at any point in time across all survey rounds, stratified by asset levels

	Total sample (%)	Asset-poor (%)	Asset-low (%)	Asset-rich (%)	Difference: rich-poor (%)
Lower non-food consumption	86	88	85	85	-2
Borrowing money	72	81	74	56	-25
Using cash savings	66	62	64	76	14
Lower food consumption	42	43	42	42	-1
Help from family	36	32	38	38	6
Goods on credit	29	37	29	17	-20
Sold assets	25	26	25	24	-1
Did nothing	15	15	13	21	7
Collateral loan	15	13	15	17	4
Reduced savings	6	5	5	7	2

Source: RUFSS-various rounds. Asset levels refer to simple counts of the number of assets owned: 0-1 assets (asset-poor), 2-3 assets (asset-low) and 4-6 assets (asset-rich).

Food insecurity declined from September to December 2021

Table 5 reports trends in several one-month recall indicators from the Food Insecurity Experience Scale (FIES) module, including "there were times when I ate only a few kinds of foods", as well as two more extreme measures of deprivation: "there were times when we ran out of food"; and "there were times when I was hungry but did not eat". In general, we observe only high frequency reporting of eating only a few kinds of foods, while severe food insecurity indicators are less frequently reported. However, there were several difficult months for some sub-samples, notably May 2021 in the Yangon sample (10 percent reported running out of food) as well as May and October 2020 for the migrant sample (mostly from Yangon, and clearly suffering from worse employment conditions).

Table 5. Trends in selected food insecurity experience indicators

|	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	May 2021	Jul 2021	Sep 2021	Dec 2021
Remaining in Yangon (%)										
Eating only a few kinds of food	22	10	7	16	19	13	16	14	17	11
Not enough healthy food	25	17	14	21	28	18	16	20	20	15
Hungry but did not eat	8	2	2	1	4	1	2	3	5	4
Running out of food	11	4	3	5	7	3	4	6	5	3
Remaining in Dry Zone (%)										
Eating only a few kinds of food	10	8	5	6	10	5	11	12	13	7
Not enough healthy food	19	18	15	13	20	12	14	22	17	14
Hungry but did not eat	2	1	0	0	1	1	0	2	3	3
Running out of food	4	2	1	1	2	1	1	2	2	1
Recent migrants (%)										
Eating only a few kinds of food	16	11	12	16	23	12	20	17	20	10
Not enough healthy food	31	20	20	24	32	21	19	23	29	15
Hungry but did not eat	11	3	1	3	6	3	2	4	1	5
Running out of food	6	4	3	5	11	5	8	3	1	1

Notes: Note that all statistics exclude households were not interviewed in any round of 2020 to improve comparability to 2020 results.
Source: RUFSS-various rounds.

In 2020, we observed that Yangon-based respondents were more likely to report all three kinds of food insecurity experiences despite the rural sample being poorer in income terms. This may be explained by rural residents, many of whom grow food or have family networks that grow food, feeling more secure about their food supplies (which is consistent with results from MAPSA agricultural production phone survey, also conducted in the Dry Zone).[2] However, in 2021 we saw only a slight increase in households that remained in Yangon reporting to eat only a few kinds of food (13 percent to 16 percent), whereas in the rural sample we saw large increases in this indicator (5 percent in November 2020 but 11-13 percent in the May, July, and September 2021 rounds). The migrant sample also reported an increase in eating only a few kinds of foods in 2020 and in not eating enough healthy food in September 2021 (29 percent). However, in all three samples we see a striking improvement in December 2021 in these two indicators. Eating only a few kinds of foods fell by 6 points in the Yangon and Dry Zone subsamples and 10 points among the migrant sample, while not enough healthy food fell by 5 points in the Yangon sample, 3 points in the Dry Zone sample, and 14 points in the migrant sample. These results are consistent with reductions in poverty and unemployment.

Inadequate dietary diversity is more prevalent among Yangon and migrant households, but trending upwards in the rural Dry Zone

To investigate whether maternal dietary diversity is declining, we examined trends in this indicator for the sub-sample of mothers who stayed in the Dry Zone for both 2020 and 2021 (Figure 5). We look only at trends for the Yangon and migrant samples in the three rounds in 2021 because of complications related to many women adjusting eating patterns after giving birth, according to local cultural customs.[3]

Figure 5. Trends in inadequate dietary diversity among mothers who stayed in the Dry Zone
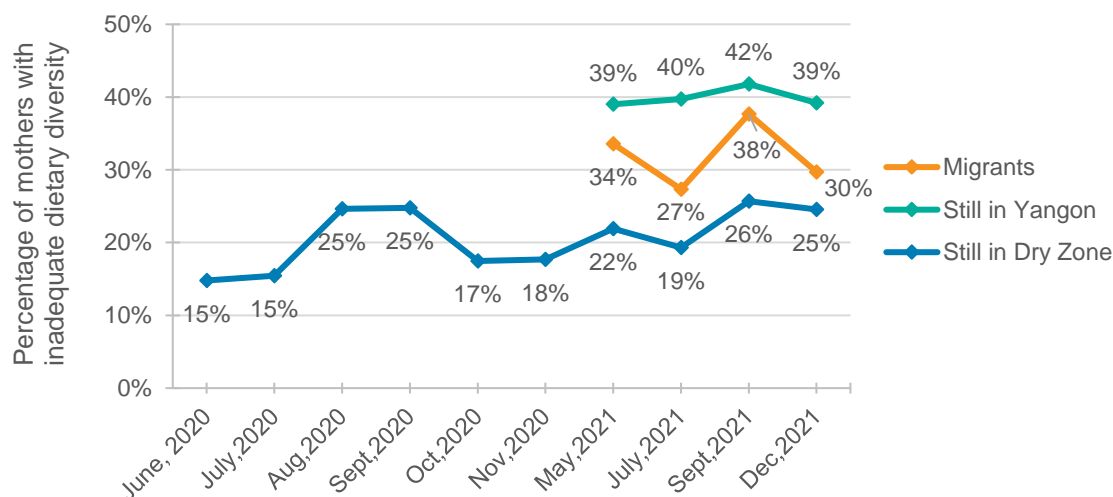
Source: RUFSS-various rounds.

In the rural sample, we observe fluctuations that could be due to be lean season effects (for example, worse diet in outcomes August and September, the traditional lean season in Myanmar), as well as impacts of economic shocks. Somewhat worryingly in 2021 we appear to be seeing a

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[2] Myanmar Agriculture Policy Support Activity (MAPSA) Research Note 70. 2021. "Community perceptions of the agricultural impacts of Myanmar's health and political crises: Insights from the National COVID-19 Community Survey–September 2021."

[3] Trends in maternal dietary diversity in the urban sample are more difficult to assess because most of this sample gave birth during the survey and appear to follow postnatal food avoidance taboos that make it difficult to discern meaningful trends related to COVID-19.

rising secular trend in the share of mothers with inadequate diet diversity, from 18 percent in November/December 2020 up to 25 percent compared to December 2021 (18 percent).

In the other two samples, mothers have less diversified diets than in the rural Dry Zone, and the situation is not improving in Yangon, where inadequately diverse diets averaged around 40 percent in 2021. We see somewhat lower rates among migrants, and more fluctuation across rounds.

We also report trends in inadequate dietary diversity among infants 6-18 months of age now that the Yangon sample of children are old enough to have passed the six-month threshold for consuming solid foods. It is well known that stunting increases very rapidly in the 6-18-month period when children in low-income settings are too often fed monotonous diets and lack a diverse range of nutritious foods. In all three samples, we also observe that younger infants start with very poor dietary diversity as they are initially fed very few foods. To demonstrate this, Figures 6a and 6b plot the prevalence of inadequate dietary diversity against child age using local polynomial regression smoothing, first for the rural sample in both 2020 and 2021 (Figure 6a) and then for the Yangon and migrant samples in 2021 only (Figure 6b).

For the rural Dry Zone sample, we observe a steep increase in the prevalence of infants with inadequate diets in 2021 which holds across the full age range of infants 6-18 months of age. The increase in inadequate diets varies but is around 20 percentage points in magnitude, suggesting a major deterioration in child feeding practices in this sample. The result is consistent with trends in many of the economic indicators for the rural Dry Zone sample, including higher and more persistent poverty, higher reported job losses in 2021 compared to 2020, worse food security outcomes in 2021 compared to 2020, and signs of a deterioration in maternal dietary diversity.

For the Yangon and recent migrant samples, we do not have a 2020 comparison, though in 2021 we observe patterns in these two samples which are very similar to the rural Dry Zone results in 2021, even by 12 months of age. For example, around 60 percent of children in both samples had inadequately diverse diets in 2021 at around 12 months of age. Since inadequate dietary diversity in children have been shown to predict both increased micronutrient inadequacy and increased stunting risks, the results in Figures 6a and 6b suggest a significantly elevated risk of micronutrient deficiencies and stunting among children in Myanmar.

Figure 6a. Comparisons of inadequate dietary diversity among children 6-18 months of age in the rural Dry Zone sample in 2020 and 2021
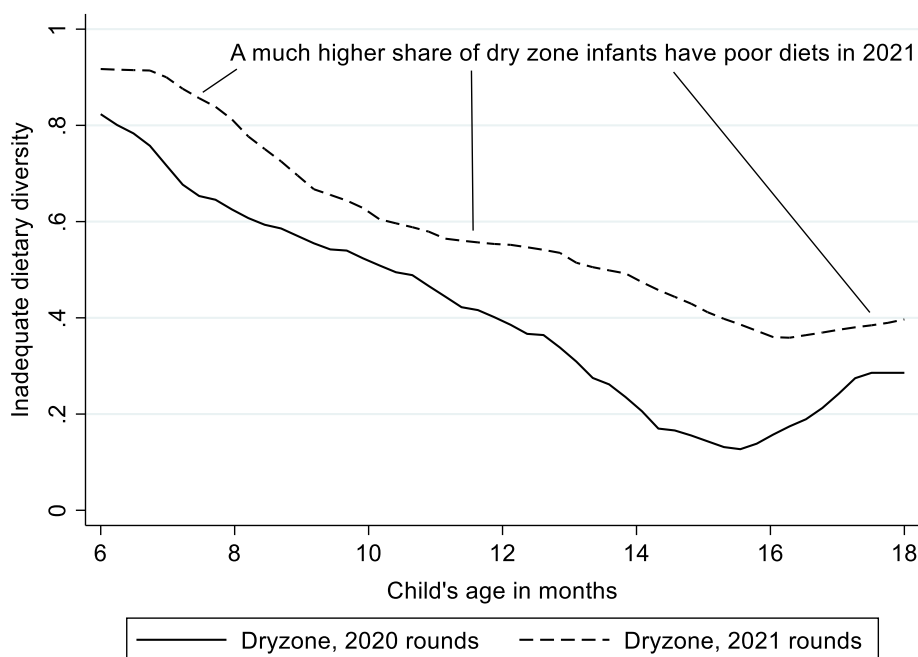
Figure 6b. Comparisons of inadequate dietary diversity between infants 6-18 months of age still in Yangon and those from households that recently migrated
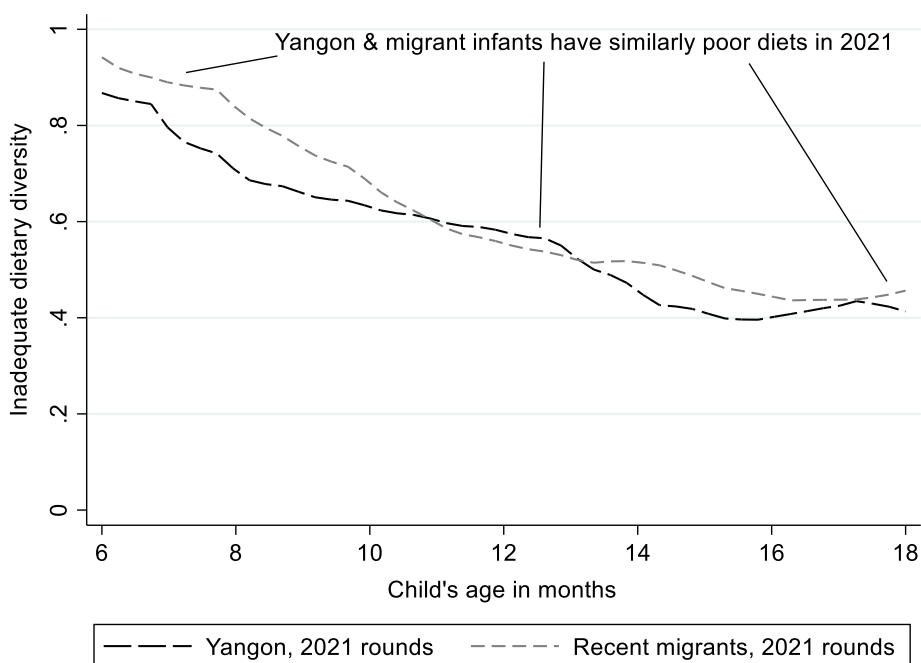

Source: RUFSS, various rounds. The y-axis measures inadequate dietary diversity as the share of children who consume less than 4 out of 7 food groups.

Government assistance in the form of cash and food transfers has almost entirely collapsed, but private donations and NGO assistance slightly increased

Figure 7 reports trends in cash or in-kind assistance from various sources for the full sample. During the COVID-19 crisis, we found that about half of RUFSS respondents received assistance from the government by July 2020 (almost all in the form of cash), and roughly half of households continued to receive this assistance through subsequent RUFSS rounds in 2020. However, the May 2021

survey revealed that government assistance programs had almost entirely collapsed (<1 percent of respondents received assistance). Assistance from NGOs or private charities was unable to step in as a substitute in May 2021, though NGO and private charity assistance has increased slightly since then. In July and September 2021, we see around 10 percent of households reporting assistance from NGOs, and 6 percent reporting assistance from private donations in July 2021 but trailing off thereafter. Overall, the share of households receiving assistance is very low relative to measures of poverty, unemployment, food insecurity, or inadequate dietary diversity.

Figure 7. Trends in cash or in-kind assistance from the government, NGOs, and private charities
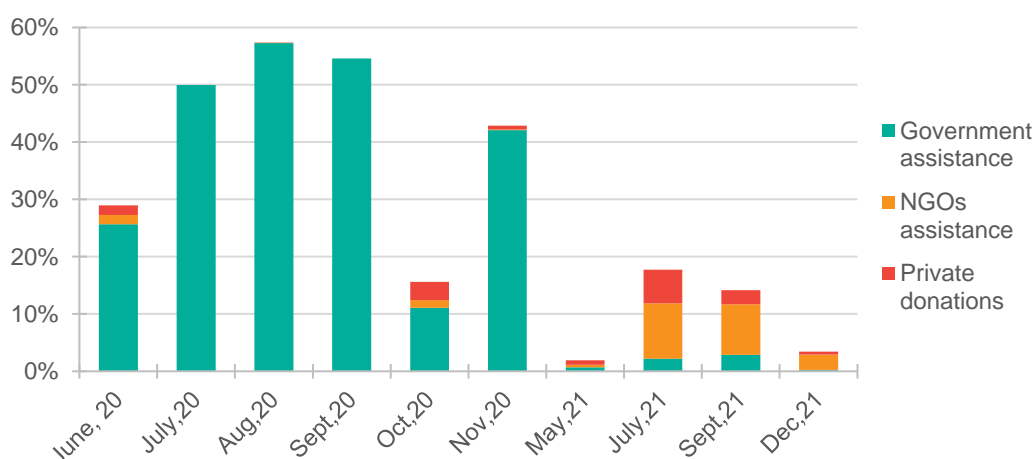
Source: RUFSS, various rounds.

Recommended actions

- A series of severe economic, political, and health shocks have hit Myanmar hard. COVID-19 was one critical shock that resulted in repeated reductions in consumer mobility as well as a high infection rate (62 percent of the sample), especially in mid-2021. To avoid or mitigate future waves of COVID-19, increasing vaccination rates as well as other recommended public health measures such as mask wearing and social distancing will be critical.

- Our follow-up surveys in 2021 have found that a large proportion of households have changed townships and that these recent migrants are economically vulnerable. In late 2020, recent migrants were typically worse off than other households in terms of poverty and unemployment. It is likely that poverty and unemployment, along with growing political instability in 2021, prompted migration, though migration itself has also posed significant economic challenges. Further monitoring of these groups is needed to understand their welfare dynamics and the impacts of migration on host communities.

- From September 2021 to December 2021, we saw some reduction in income-based poverty, unemployment indicators, and food insecurity indicators, especially among respondents still residing in Yangon. While this is encouraging if it indicates some economic recovery in the offering, trends in the rural Dry Zone are less encouraging. Several indicators of welfare in the rural Dry Zone indicate a substantially worse situation there and far fewer signs of economic recovery. Further monitoring of both rural and urban areas will be needed to assess these somewhat divergent trends.

- Inadequate dietary diversity is a primary form of food insecurity, with implications for malnutrition. The dietary diversity situation of mothers and young children in Yangon–and among migrants–is deeply concerning and warrants immediate actions to prevent malnutrition

- such as maternal and child cash transfers, behavioral change interventions, and supplements and/or food fortification

- Food insecurity could climb if there is any significant contraction in output from the agricultural sector. Thus, it is vitally important to strengthen agricultural monitoring through high frequency monitoring surveys and other specialized surveys of key value chain actors.

- It will be critically important for international actors to find effective new ways of reaching Myanmar's poor–including the new poor–given the severe challenges in Myanmar's financial system, the breakdown of many regular government services, and the prohibitions to cooperate with the military government. Targeting of nutritionally vulnerable groups, such as families with young children or pregnant women, should be prioritized. In the medium term, food- or cash-for-work schemes may also help improve targeting of these programs to households that are underemployed and in need of assistance.

- While we observe a slight increase in households benefiting from NGO/private charity assistance in July and September 2021, the share of households receiving assistance is very low relative to the prevalence of reported socioeconomic hardship. Since February 1, 2021, government-based social protection has collapsed in Myanmar and support from international and local organizations is urgently needed. It is of paramount importance to use evidence such as this study to raise international awareness of the plight of Myanmar's poor in the wake of such a prolonged series of economic shocks and ongoing political instability.

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