



Poverty, food insecurity, and social protection during COVID-19 in Myanmar

Combined evidence from a household telephone survey and micro-simulations

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To assess the welfare impacts of COVID-19 on households in Myanmar, recent high-frequency telephone survey evidence on incomes, coping strategies, and food security from both rural and urban households was combined with survey-based simulations that were designed to assess the ex-ante impacts on poverty of differing levels of targeted cash transfers to poor households.

Key findings

- Income-based poverty rose at an alarming rate between August and October 2020. Food insecurity and inadequate maternal dietary diversity are also rising sharply in the urban sub-sample, raising serious concerns for the nutritional status of mothers and young children.
- The poor continue to cope with declining incomes mainly by resorting to loans or other credit sources, while better off households draw down on their savings.
- Over half of the survey households received government cash assistance of 20,000 Myanmar Kyat in September. Yet, accurate targeting of these transfers remains a problem.
- There is low uptake of the one-off maternal and child cash transfers (MCCT) for pregnant mothers introduced on 20 September 2020. Only 16 percent of pregnant mothers in our October survey sample had received these payments.
- Simulation results suggest that, even with perfect targeting, 20,000 Myanmar Kyat transfers have only moderate impacts on severe poverty during lockdowns. Larger transfers during lockdowns may be advisable. This may also improve compliance with stay-at-home orders.

Recommended actions

- Raise awareness of eligibility for MCCTs and facilitate easier access to these transfers.
- Re-assess the current mechanisms used to target poor households with cash transfers.
- Under tight fiscal constraints, it may be advisable to offer households more generous cash transfers during lockdown periods and smaller or more tightly targeted transfers during post-lockdown recovery periods, including cash-for-work schemes.
- The Government and its development partners should invest more in monitoring and evaluating the government's COVID-19 related household welfare interventions.

Introduction

This study assesses the welfare impacts of COVID-19 on households in Myanmar by combining recent high-frequency telephone survey evidence for two specific rural and urban geographies with national-level survey-based simulations designed to assess ex-ante impacts on poverty with differing amounts of targeted cash transfers.

The first source of evidence – the COVID-19 Rural and Urban Food Security Survey (C19-RUFSS) – consists of four rounds of monthly data collected from a sample of over 2,000 households, all with young children or pregnant mothers, divided evenly between urban and peri-urban Yangon and the rural Dry Zone. This survey sheds light on household incomes prior to COVID-19 (January 2020), incomes and food security status soon after the first COVID-19 wave (June 2020), the gradual economic recovery thereafter (July and August 2020), and the more prolonged second COVID-19 wave in September and October 2020. This survey gives timely and high-quality evidence on the recent welfare impacts of COVID-19 for two important geographies and for households that are nutritionally highly vulnerable to shocks due to the presence of very young children or pregnant mothers.

However, the relatively narrow geographic and demographic focus of this telephone survey and the need for forecasting the poverty impacts of COVID-19 into 2021 prompt us to explore simulation-based evidence derived by applying parameter shocks to household models developed from nationally representative household survey data collected prior to COVID-19, the 2015 Myanmar Poverty and Living Conditions Survey (MPLCS). By realistically simulating the kinds of disruptions imposed on Myanmar's economy by both international forces, e.g., lower agricultural exports and workers' remittances, and domestic COVID-19 prevention measures, e.g., stay-at-home orders and temporary business closures, we not only can predict the impacts of COVID-19 on household poverty at the rural, urban, and national levels, but also can assess the further benefits to household welfare of social protection in the form of monthly household cash transfers of different magnitudes.

Combined, these two sources of evidence yield insights on both the on-the-ground impacts of COVID-19 in recent months and the potential poverty reduction impacts of social protection measures in the coming year. We conclude the study with a discussion of the policy implications of these findings.

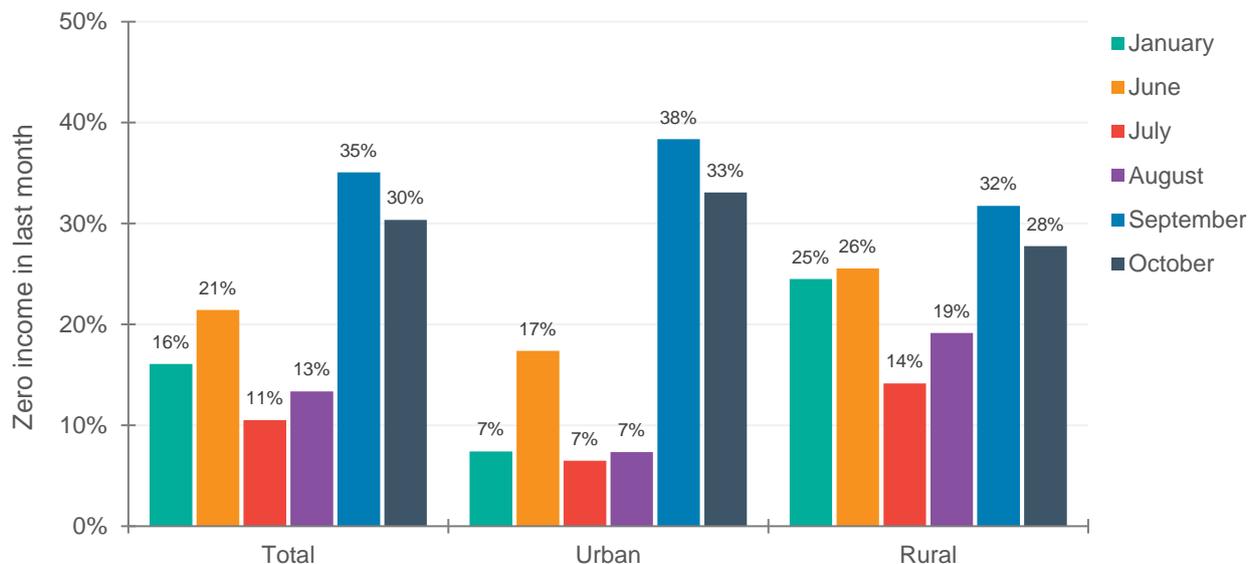
Income-based poverty rose sharply in September 2020

COVID-19 is having major negative impacts on incomes, resulting in rising rates of income-based poverty among both rural and urban samples. Both quantitative and qualitative measures confirm severe and widespread income losses. In January just 16 percent of households reported zero income, mostly in rural areas. In June, soon after the first series of lockdowns in April, 16 percent of households again reported no income, but this fell to 11 and 13 percent in July and August, respectively. However, with the second wave of COVID-19 infections and accompanying lockdowns 35 percent of respondents in September stated their household earned no income, while 30 percent reported no income in October (Figure 1). The prevalence of income-based poverty at the relatively low USD 1.90/day poverty line follows similar patterns and trends, increasing from 16 percent in January to 63 and 62 percent in September and October 2020, respectively (Figure 2).

As expected, income losses were more pronounced among urban households due to several factors: the higher number of COVID-19 cases in Yangon; the stricter prevention measures in cities; the greater dependence of urban households on non-farm livelihoods which were more affected by prevention measures; and the significant number of mothers in this sample who had recently given birth. In January 2020, prior to COVID-19's economic impacts, just 7 percent of Yangon households reported earning no income. This value rose to 17 percent after the first COVID-19 wave in June

2020 before falling back to 7 percent in subsequent months. In September, however, 38 percent of urban respondents stated that their household had earned no income in the past month. Likewise, income-based poverty rose from 7 percent in the Yangon sample prior to COVID-19 to 32 percent in June 2020, and stood at the extremely high rate of 59 percent as of September and October 2020.

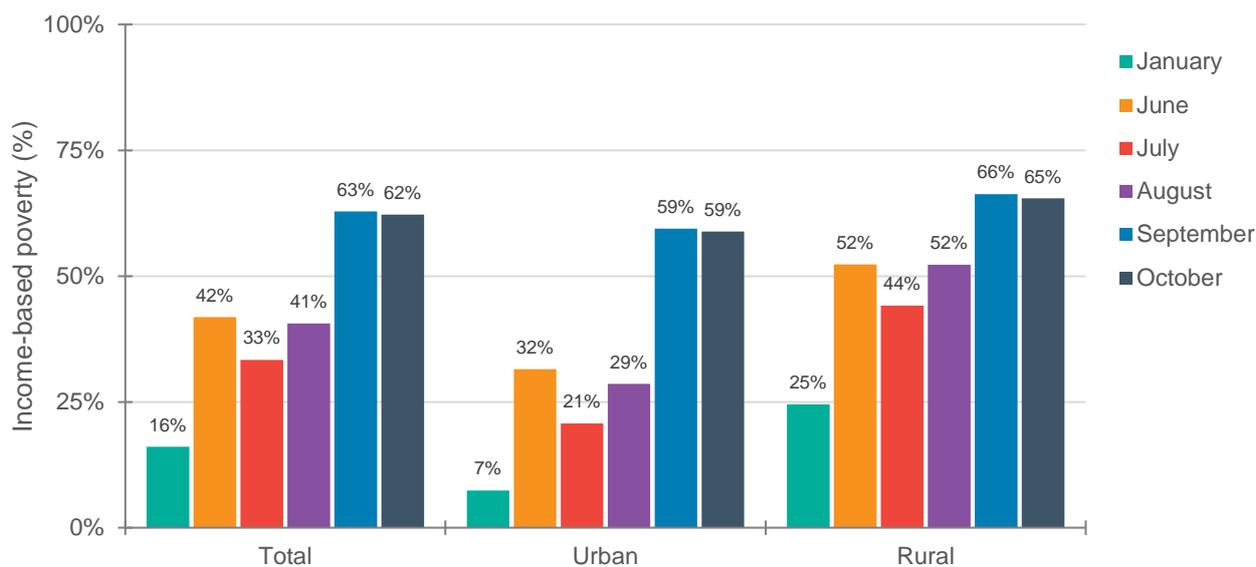
Figure 1. Percentage of respondents who stated their household earned no income in the past month: January (pre-COVID-19) to October 2020



Source: C19-RUFSS, various rounds.

Notes: January 2020 estimates of monthly income are based on recalled income responses from the June 2020 survey round. All other monthly estimates are based on recalled income in the month prior to the survey.

Figure 2. Trends in income-based poverty prevalence from January to October 2020 at the USD 1.90/day poverty line



Source: C19-RUFSS, various rounds.

Notes: January 2020 estimates of monthly income are based on recalled income responses from the June 2020 survey round. All other monthly estimates are based on recalled income in the month prior to the survey. We note that most respondents seem to interpret income as “earned income” and often do not count transfers in their income estimates.

In the rural Dry Zone sample, seasonal fluctuations in income are more pronounced – there are several months in which farm households may earn no cash income, as evidenced by one-quarter of rural households stating they had no income in January 2020 prior to the major COVID-19 disruptions. However, the evidence still suggests that income-based poverty among rural

households rose sharply from August to September 2020. One-quarter of households were poor based on reported income in January 2020, while roughly half of all households were income-poor from June to August 2020. However, two thirds of rural households were poor in September and October 2020. Moreover, in all five rounds of C19-RUFSS, the majority of rural respondents stated that their incomes were lower than normal for that time of year.

Although these samples are specific to households with young children in urban and peri-urban Yangon and the rural Dry Zone, they are corroborated by the Myanmar Agriculture Policy Support Activity (MAPSA) COVID-19 community survey, which covered over 300 communities spread across Myanmar. Respondents in that survey were asked to estimate the share of members in their community who were extremely poor¹ (Oo et al., 2020). In June, community survey respondents estimated that 17 percent of local residents were extremely poor; this estimate fell to 11 percent in August, but rose sharply to 27 percent in September 2020. Estimated poverty prevalence at the community level increased in both rural and urban areas and in all major geographical zones. Hence, we believe that the trend of rising poverty since September 2020 in Myanmar is not specific to the C19-RUFSS survey; economic hardship is being felt throughout Myanmar.

Table 1 presents the explanations for income losses among the roughly 80 percent of the sample who reported lower than normal income in October 2020, stratified by livelihoods. Among all respondents, the most frequently cited explanations for changes in household income in October were loss of employment (34 percent), a reduction in daily labor opportunities (34 percent), and inability to work due to travel/movement restrictions (30 percent).

Table 1. Stated reasons for changes in income in the past month by principal livelihood, percent of households that reported income losses in October 2020

	Total	Farmers	Skilled labor	Unskilled labor	Salaried	Trade	Other
Loss of employment	34	19	26	29	16	8	70
Daily labor opportunities reduced	34	23	53	55	32	18	12
No work - movement restrictions	30	25	49	30	20	42	26
Less customers/clients	13	13	11	11	3	72	2
Reduced salary/wage	11	8	15	4	52	5	3
Lean season	10	44	0	0	3	6	6
Weather/climate problems	8	29	2	6	2	5	3
Pregnancy, childbirth, childcare	5	1	12	3	8	5	7
Had to close shop/business	5	2	7	3	2	21	7
Lower prices for products	3	9	7	0	2	5	0
Declining in agricultural yield	3	15	0	0	1	2	1
Household health problems	1	1	1	1	1	0	1
Disruptions in markets	1	3	1	0	1	1	0
Less remittances	0	0	0	0	1	0	0
Job changes	0	0	0	0	0	0	0
Support/assistance reduced	0	0	0	0	1	0	0
Social issues	0	0	0	0	0	0	0
Household sickness/quarantine	0	0	0	0	0	0	0
Observations	1,770	289	219	505	189	130	438

Source: C19-RUFSS, October 2020 round.

However, the frequency of these explanations varies predictably by livelihood. Farm households often cited lean season factors (44 percent), though 29 percent cited poor weather/climate and 15 percent cited poor yields, while about one in five cited at least one COVID-related factor such as

¹ Extremely poor households are those that are very short of food, suffering from hunger, and in urgent need of assistance by the respondent's estimation.

mobility restrictions. Skilled and unskilled laborers both cited lost employment and lost daily labor opportunities, though skilled laborers more frequently cited work lost due to movement restrictions (49 percent compared to 30 percent for unskilled labor households). Salaried households also frequently cited these factors but additionally cited reduced salary and wages. In contrast, trading households overwhelmingly cited fewer customers and clients (72 percent). “Other livelihoods” respondents frequently cited loss of employment and movement restrictions, which is consistent with households working in the transport sector or in petty trade and services. Compared to August (data not shown), the frequency of households citing loss of employment increased from 31 to 40 percent, while loss of work due to movement restrictions increased from 14 to 35 percent. Other factors – including those related to health problems – were not commonly cited.

In response to income losses, the most common coping strategies that households employed in October were reducing non-food spending, borrowing, or using cash savings (Table 2). Relatively few households reduced food consumption or sold assets (<10 percent). Coping strategies often differed systematically by asset status. The asset-poor were twice as likely to borrow than the asset-rich (39 percent compared to 19 percent), while the asset-rich were almost twice as likely to use cash savings (40 percent) than the asset-poor (22 percent). The fact that poor households continue to borrow money or spend on credit raises concerns that they may be taking on high-interest loans that will be difficult for them to repay, leading some households into long-term chronic poverty (poverty traps).²

Table 2. Frequency of use of different strategies for coping with income losses in October 2020 by asset-class, percent of households that reported income losses

	Total	Asset-poor	Asset-low	Asset-rich
Reduced non-food spending	38	38	38	38
Borrowed money	32	39	32	19
Used cash savings	28	22	28	40
Help from relatives	13	10	13	15
Reduced food consumption	9	9	9	9
Spend on credit	8	11	8	5
Sold off assets	5	5	4	6
Taking collateral loan	4	4	4	6
Did nothing	3	3	3	3
Cash advance from the work	1	1	1	1
Collected wild fruit/veg	1	0	1	1
Reduced savings	0	0	1	1
Casual work	0	0	0	1
Street vending	0	0	0	1
Used bank savings	0	0	0	0
Job compensation	0	0	0	0
Fishing/hunting	0	0	0	0
Employer donation	0	0	0	0
Observations	1,712	599	781	332

Source: C19-RUFSS, October 2020 round.

Note: Asset status is based on ownership of six household assets: asset poor (0-1 assets), asset low (2-3), and asset rich (4-6).

Rising food insecurity and inadequate dietary diversity among women

As was reported for the June round of C19-RUFSS (Headey et al. 2020), self-reported food insecurity experiences³ and inadequate dietary diversity among mothers continue to be much more common

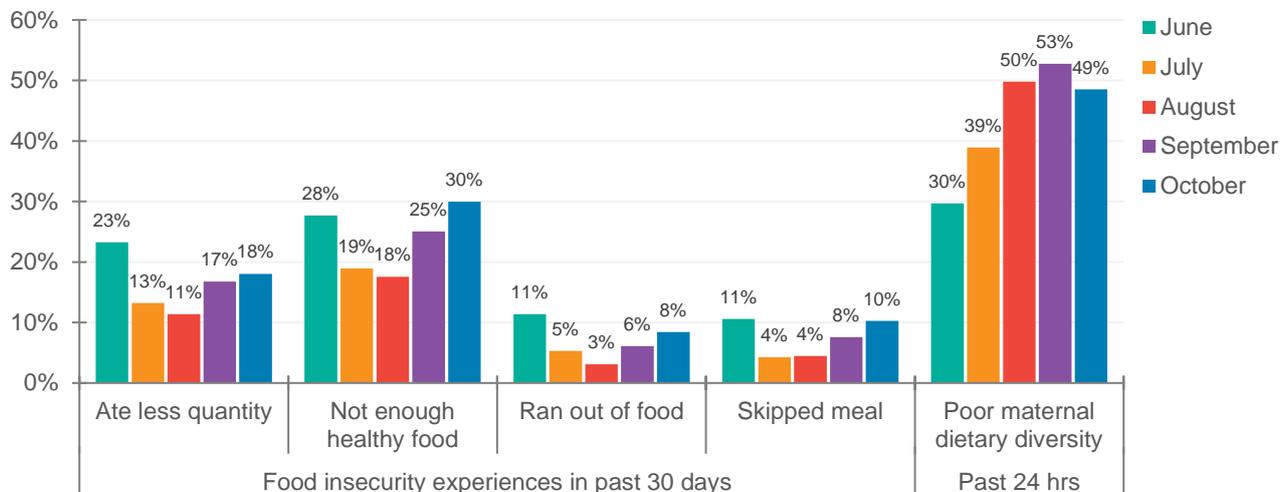
² An upcoming round of C19-RUFSS will investigate indebtedness issues in greater detail.

³ Food insecurity experience indicators are recorded with one month recall at the household level.

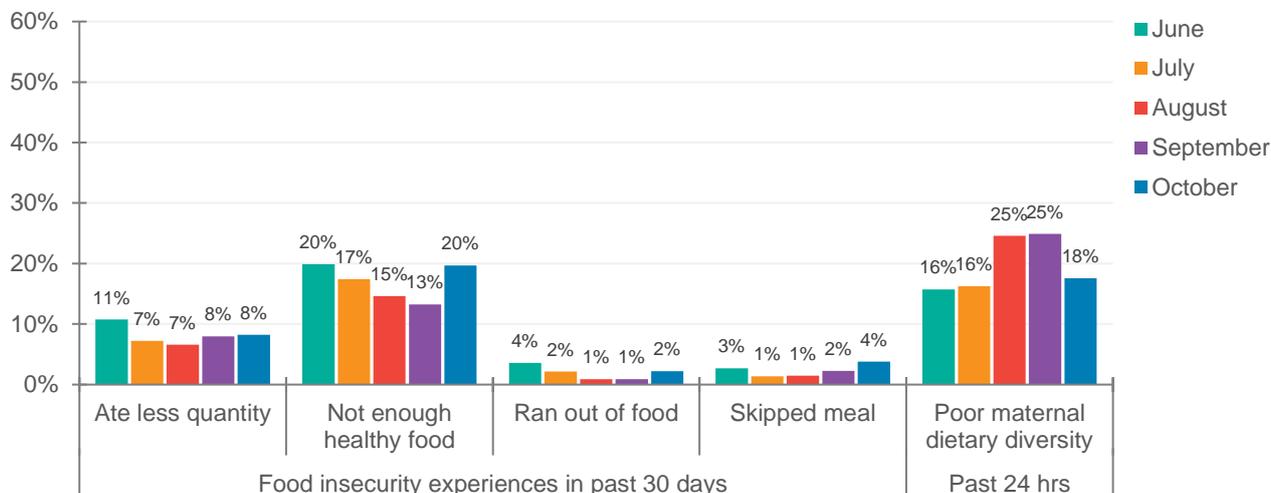
in the urban sample, which raises concerns that malnutrition may be rising among urban households. Figure 3 reports trends in food insecurity experiences over the past month and inadequate maternal dietary diversity in the past 24 hours for the urban (Panel A) and rural (Panel B) sub-samples.

Figure 3. Trends in food insecurity experiences and poor maternal dietary diversity from June to October 2020 in the urban (Panel A) and rural (Panel B) sub-samples

Panel A: Urban Yangon sub-sample



Panel B: Rural dry zone sub-sample



Source: C19-RUFSS.

Notes: Poor maternal dietary diversity is calculated from the sub-sample of urban women who did not give birth in the past month. Our earlier results (Headey et al. 2020) showed that mothers of newborns consumed far fewer food groups, mostly likely because of cultural norms.

In the wake of the first lockdowns in April and May, food insecurity was relatively high in Yangon in the first round of C19-RUFSS in June, but declined in July and August before rising again in September and October (Panel A, Figure 3). For example, the share of women reporting they had not eaten enough healthy food in the past month rose from 18 percent in August to 25 percent in September and to 30 percent in October. More severe food insecurity experiences were not as common, but again showed a worrying rising trend. In August just 3 percent of mothers said there were times they had run out of food, but this rose to 6 percent in September and 8 percent in October, with similar patterns for skipping meals.

In rural households, food insecurity experience indicator levels were typically around half those of urban households in most months and the U-shaped trend seen among urban households across rounds is less evident. However, the share of mothers reporting not eating enough healthy food rose

from 13 percent in September to 20 percent in October (Panel B, Figure 3). So far, however, very few rural households (<4 percent) reported severe food insecurity experiences.

Urban mothers also had much worse dietary diversity than rural mothers (Figure 3), which is disconcerting from a nutritional standpoint. In June, 30 percent of mothers in Yangon consumed less than five out of the ten food groups, which is the definition of adequate maternal dietary diversity. However, the prevalence of inadequately diverse maternal diets in urban households rose to 39 percent in July and to 50 percent in August where rates have since remained. Given that dietary diversity metrics are strong predictors of micronutrient adequacy, these trends suggest rising risks of micronutrient deficiencies in urban areas, both for women and potentially for their children. In rural areas, trends in maternal dietary diversity are less clear and may reflect lean season factors, with August and September standing out as months of poor dietary diversity (25 percent compared to between 16 and 18 percent in other months).

Households and mothers receiving assistance, including cash transfers

In addition to household coping strategies, survey respondents were also asked if they received any kind of assistance related to COVID-19 emergency response measures.⁴ The percentage of households receiving assistance increased from June to September and was mostly in the form of cash rather than food.⁵ Moreover, essentially all households stated the assistance received was from government (99.9 percent), though a small share of households said they also received assistance from private organizations (1.5 percent) or NGOs (0.8 percent). Almost all households stated that they had received 20,000 Myanmar Kyat in the past month, as per the policy outlined in the Government of Myanmar's (GoM) COVID-19 Economic Recovery Plan (CERP).

Table 3 examines the issue of targeting cash transfers with poverty defined by either low asset ownership (owning three or less of six assets) or income (the USD 1.90/person/day poverty line, equivalent to about 890 Myanmar Kyat). Asset ownership is likely a good long-term measure of welfare, but it may not pick up the effect on household welfare of recent economic hardship, such as loss of income, which justifies the use of income-based poverty. The results are reasonably consistent across asset- and income-based poverty measures: the poor are between 12 and 18 percentage points more likely to receive assistance than the non-poor, depending on the sample and the poverty measure used. Hence, current targeting approaches are moderately pro-poor. However, there are many poor households not receiving cash-based assistance when it is likely much needed, and many non-poor households receiving such assistance when it may not be needed.

Table 3. Percentage share of households that received cash-based assistance by asset-based and income-based poverty status in September 2020

September survey round	All households	Asset-based poverty		Income-based poverty		Observations
		Poor	Non-poor	Poor	Non-poor	
All	44.6	47.6	32.8	49.6	36.1	2,005
Rural sample	48.2	50.3	32.5	53.2	38.7	1,004
Urban sample	41.0	44.2	32.9	45.7	34.1	1,001

Source: C19-RUFSS.

Note: Asset-poor is defined as households with less than 3 out of 6 assets in total, while asset non-poor households have 4 to 6 assets. Income-poor are households with pre-assistance income less than USD 1.90 per person per day, or 890 Myanmar Kyat in 2020 terms.

⁴ Household cash transfers were also the subject of questions in the October survey round, but disbursements of cash in October mostly happened after the household interview dates, so we report September statistics instead.

⁵ In September just 1 and 3 percent of rural and urban households received food-based assistance, respectively

The September and October rounds of C19-RUFSS also asked about receipt of one-off maternal and child cash transfers (MCCT), which started on 20 September. GoM reported that pregnant mothers would qualify for a one-off mobile money payment of 30,000 Myanmar Kyat if they provided a copy of their pregnancy medical book and if they registered on the NgweBike mobile app.⁶

Table 4. Pregnant (qualifying) mothers who reported receiving the COVID-19 one-time maternal and child cash transfer (MCCT) in September and October 2020, percent

	Total	Urban	Rural	Income poor	Income non-poor	Asset poor	Asset non-poor
Received in September, %	16	21	8	12	24	13	27
Observations	121	71	50	77	41	95	26
Received in October, %	14	25	10	11	14	11	27
Observations	74	21	53	51	19	59	15

Source: C19-RUFSS, September 2020 round.

Note: Mothers who received a transfer in September were excluded from the calculations for October, since this refers to a one-time payment only.

As with household cash transfers, Table 4 reports receipt of one-off MCCTs for sub-samples and for income and asset-based poverty classes. However, there are two caveats to the results reported. First, the September C19-RUFSS round was implemented from 30 September to 13 October, so it should not be expected that all pregnant women should have received a payment at the time of survey. Second, the sub-samples of eligible pregnant women are relatively small (121 in September and 74 in October).

Bearing those caveats in mind, Table 4 nevertheless reveals a potential concern with these transfers since urban and non-poor non-mothers are substantially more likely to receive the transfers than are rural mothers and poor mothers (the latter disparity is true based on both income-poverty and asset-poverty). In both September and October urban mothers were around 2.5 times more likely to receive these transfers, while asset non-poor mothers were at least twice as likely.

Further research is needed to assess why it is that non-poor mothers – who are likely also more educated and informed – were more likely to access the MCCT payments. It is possible that awareness of eligibility for these transfers is a major constraint, as well as problems in providing proof of pregnancy or in accessing the mobile app.

Poverty and social protection findings from MPLCS microsimulations

An earlier Myanmar SSP Working Paper by Diao and Mahrt (2020) used income, expenditure, and occupational data in the 2015 Myanmar Poverty and Living Conditions Survey (MPLCS) to simulate the potential impacts of different degrees of COVID-19 economic disruptions on household expenditure and expenditure-based poverty using the Myanmar national poverty line. Using assumptions about different degrees of domestic and international disruptions under different COVID-19 scenarios, the study predicted that household incomes would decline by around one-third during the April 2020 lockdown and be between 15 and 25 percent lower than normal in the months following the April lockdown. These predictions quite closely match the results reported above from the C19-RUFSS survey. Diao and Mahrt (2020) also found that the expenditure-based poverty prevalence rate – based on the national poverty line – would double from just over one-quarter to just over half of households.

⁶ Details on the maternal and child cash payment were reported in the 15 August *Myanmar Times* article: <https://www.mmtimes.com/news/myanmar-govt-give-covid-19-cash-pregnant-women.html>

Here we use the same suite of domestic and international economic disruption scenarios built by Diao and Mahrt (2020) to simulate the impacts on severe poverty among households in Myanmar, as defined by the severe poverty line of 1,213 Myanmar Kyat per adult equivalent per day in 2020 terms (or USD 2.47 in international 2020 dollars). This severe poverty line is based on the amount of household expenditure required to purchase a typical Myanmar food basket that satisfies calorie requirements.⁷

A further extension is implemented here to estimate severely-poor poverty headcount scenarios with and without perfectly targeted monthly cash transfers to severely-poor households, which includes those that were severely-poor households prior to COVID-19 and those that have become severely-poor since the start of the crisis. As we observed above, the GoM is currently implementing 20,000 Myanmar Kyat cash transfers per household per month, albeit with imperfect targeting. The results in Table 5 therefore give an indication of the impact that perfect targeting would have on national, rural, and urban severely-poor poverty headcounts with a 20,000 Myanmar Kyat transfer as well as with transfers of different amounts and with different degrees of economic disruption (see notes to Table 5).

Table 5. Severely-poor poverty headcounts estimated under various COVID-19 economic disruption scenarios with different-sized cash transfers perfectly targeted to the severely-poor, percent of population that is severely poor (national, rural, and urban)

	Magnitude of monthly transfers to poor households (Myanmar Kyat)			
	0	20,000*	40,000	60,000
NATIONAL				
Severe poverty prior to COVID-19 disruptions	9.8			
Scenario 1: Strict lockdown + external disruptions	31.6	25.9	21.1	16.8
Scenario 2: Lockdown easing + external disruptions	21.7	16.1	12.2	8.5
Scenario 3: Modest restrictions + some external recovery	15.8	11.3	7.7	5.1
Scenario 4: Modest restrictions + further external recovery	12.9	8.9	6.0	4.1
RURAL				
Severe poverty prior to COVID-19 disruptions	12.5			
Scenario 1: Strict lockdown + external disruptions	34.2	27.5	22.6	17.6
Scenario 2: Lockdown easing + external disruptions	26.1	19.5	14.8	10.6
Scenario 3: Modest restrictions + some external recovery	20.2	14.4	10.0	6.7
Scenario 4: Modest restrictions + further external recovery	16.6	11.6	7.9	5.4
URBAN				
Severe poverty prior to COVID-19 disruptions	2.7			
Scenario 1: Strict lockdown + external disruptions	24.7	21.9	17.2	14.6
Scenario 2: Lockdown easing + external disruptions	10.1	7.3	5.4	3.1
Scenario 3: Modest restrictions + some external recovery	4.5	3.5	1.7	0.8
Scenario 4: Modest restrictions + further external recovery	3.2	2.0	1.1	0.7

Source: Results of household model scenarios based on the 2015 Myanmar Poverty and Living Conditions Survey (MPLCS).

Notes: Poverty headcounts are estimated at the national severe poverty line, amounting to 1,213 Myanmar Kyat per adult equivalent per day in 2020 terms (or USD 2.47 in international 2020 dollars), using the 2015 MPLCS. The poverty estimates are derived following the approach described by Diao and Mahrt (2020).

*20,000 kyat is the current monthly cash transfer implemented by the GoM.

Table 5 of Diao and Mahrt (2020) describes the assumptions about the average decline in incomes for 19 different income sources, including domestic and workers remittances and agricultural exports. As an example of the income shocks in different scenarios, in the strict lockdown scenario (scenario 1 above) construction wages decline 100 percent below normal (i.e. the pre-COVID), while they are 60 percent below normal in scenario 2, 9 percent below normal in scenario 3, and 3 percent below normal in scenario 4.

Consistent with the C19-RUFSS results on income-based poverty reported above, strict lockdowns combined with much-reduced levels of international remittances and agricultural exports

⁷ However, Mahrt et al. (2019) show that the cost of a nutritionally recommended diet, rather than one based on calorie requirements alone, is substantially larger than 1,213 Myanmar Kyat.

result in sharp increases in severe poverty, from 9.8 percent pre-COVID-19 to 31.6 percent with extreme disruptions. There are always many more severely poor people in rural areas than urban areas, but the increase in urban areas is more pronounced during lockdowns, which also is consistent with the C19-RUFSS results reported above. Rural severe poverty prevalence increases from 12.5 percent to 34.2 percent (almost a threefold increase) and urban poverty increases from 2.7 percent to 24.7 percent (a nine-fold increase).

At the national level, easing the lockdown (Scenario 2) reduces the national prevalence of severe poverty from 32 percent to 22 percent, while more modest restrictions and external recovery push the prevalence of severe poverty (Scenario 3) further down to 16 percent and, with further external recovery (Scenario 4), to 13 percent. Moreover, the different scenarios predict different impacts in rural and urban areas. The lockdown measures are particularly disruptive in urban areas; relaxation of lockdown measures results in a decline of severe poverty from 24.7 to 10.1 percent. Relaxation of lockdowns matters in rural areas as well, but so does external recovery in agricultural trade and remittances.

Table 5 also shows that monthly cash transfers reduce the prevalence of severe poverty, although it is important to note that there may be other benefits to cash payments, such as reducing the risk of negative coping mechanisms and extreme food insecurity. However, the impact of the current 20,000 Myanmar Kyat transfers is only moderately large, reducing national severe poverty by 5.7 percentage points in the lockdown scenario, but by just 3.8 points in urban areas where many households have little or no income in lockdown situations. Unsurprisingly, 40,000 Myanmar Kyat transfers have much larger impacts, cutting the severe poverty headcount by almost half in rural areas and making a much larger dent in urban severe poverty, dropping the estimate of the prevalence of severe poverty from 24.7 to 17.2 percent.

Clearly, a potential implication of Table 5 is that cash transfers during lockdown periods should be generous and target large swathes of the population because of the significant increases in severe poverty caused by these disruptions, particularly among the urban population. Larger cash transfers also can be justified because more generous cash transfers are likely to provide greater adherence to COVID-19 prevention measures, i.e., informal workers have reduced incentive to violate stay-at-home orders if they are receiving a decent transfer income. See Hausman and Schetter (2020) for further discussion on the relationship between social protection and COVID-19 prevention measures. There may also be a rationale to give larger cash disbursements to groups more affected by lockdown measures, including many of the urban poor but also agricultural laborers in rural areas.

Table 6 reports estimates of the number of severely-poor households in Myanmar under the different scenarios, rather than headcounts based on individual level severe poverty. Prior to COVID-19 there were approximately 784,000 severely-poor households, overwhelmingly in rural areas. However, a notable feature of the lockdown scenario is that the share of urban severely-poor households rises from just 6.7 percent prior to COVID (or 52,500 households) to 22.6 percent during lockdown (690,000). However, in both rural and urban areas there are vast numbers of new poor. Table 6, therefore, has important implications for targeting resources and identifying the new poor.

Table 6. Estimated numbers of severely-poor households under scenarios with different degrees of COVID-19 economic disruptions and no cash-based transfers

	National	Rural	Urban	Share urban, %
Severely-poor prior to COVID-19 disruptions	783,731	731,283	52,448	6.7
Scenario 1: Strict lockdown + external disruptions	3,054,722	2,364,495	690,227	22.6
Scenario 2: Lockdown easing + external disruptions	1,934,524	1,688,855	245,669	12.7
Scenario 3: Modest restrictions + some external recovery	1,340,371	1,243,013	97,358	7.3
Scenario 4: Modest restrictions + further external recovery	1,085,987	1,017,152	68,835	6.3

Source: Results of household model scenarios based on the 2015 Myanmar Poverty and Living Conditions Survey (MPLCS).

Notes: Poverty headcounts are estimated at the national severe poverty line, amounting to 1,213 Myanmar Kyat per adult equivalent per day in 2020 terms (or USD 2.47 in international 2020 dollars), using the 2015 MPLCS. The poverty estimates are derived following the approach described by Diao and Mahrt (2020).

Table 5 of Diao and Mahrt (2020) describes the assumptions about the average decline in incomes for 19 different income sources, including domestic and workers remittances and agricultural exports. As an example of the income shocks in different scenarios, in the strict lockdown scenario (scenario 1 above) construction wages decline 100 percent below normal (i.e. the pre-COVID), while they are 60 percent below normal in scenario 2, 9 percent below normal in scenario 3, and 3 percent below normal in scenario 4.

Table 7 estimates the direct fiscal costs of perfectly targeting severely-poor households with monthly transfers of different magnitudes. Panel A reports monthly costs of targeting all severely-poor households under the four different economic disruption scenarios, while Panel B reports annual costs under the assumption that each scenario plays out for one quarter of 2020/21, i.e., the “strict lockdown + external disruptions” lasts three months, as do the other three scenarios in turn. This assumption could be motivated by the current COVID-19 wave requiring approximately two months of continuous lockdown in October and early November 2020, and a further month of lockdown re-applied at some stage in 2021.

Table 7. Estimated monthly and annual costs of perfectly targeting severely-poor households with different levels of monthly cash transfers under various COVID-19 disruption scenarios

Panel A: Magnitudes for monthly transfers to poor households (billion Myanmar Kyat)			
	20,000*	40,000	60,000
Scenario 1: Strict lockdown + external disruptions	61.1	122.2	183.3
Scenario 2: Lockdown easing + external disruptions	38.7	77.4	116.1
Scenario 3: Modest restrictions + some external recovery	26.8	53.6	80.4
Scenario 4: Modest restrictions + further external recovery	21.7	43.4	65.2
Panel B: Annual costs of perfect targeting of poor households with different magnitudes of monthly transfers if each scenario lasts one quarter of the year (billion Myanmar Kyat)			
	20,000*	40,000	60,000
National	444.9	889.9	1,334.8
Rural	378.8	757.6	1,136.4
Urban	66.1	132.3	198.4

Source: Results of household model scenarios based on the 2015 Myanmar Poverty and Living Conditions Survey (MPLCS).

Notes: Poverty headcounts are estimated at the national severe poverty line, amounting to 1,213 Myanmar Kyat per adult equivalent per day in 2020 terms (or USD 2.47 in international 2020 dollars), using the 2015 MPLCS. The poverty estimates are derived following the approach described by Diao and Mahrt (2020).

*20,000 kyat is the current monthly cash transfer implemented by the GoM.

Table 5 of Diao and Mahrt (2020) describes the assumptions about the average decline in incomes for 19 different income sources, including domestic and workers remittances and agricultural exports. As an example of the income shocks in different scenarios, in the strict lockdown scenario (scenario 1 above) construction wages decline 100 percent below normal (i.e. the pre-COVID), while they are 60 percent below normal in scenario 2, 9 percent below normal in scenario 3, and 3 percent below normal in scenario 4.

During a lockdown, Panel A of Table 7 shows that perfectly targeting severely-poor households with monthly 20,000 Myanmar Kyat transfers is estimated to cost 61.1 billion Myanmar Kyat per month. This rises proportionately with the size of transfers, so the total cost per month of a 40,000 Myanmar Kyat monthly transfer is 122.2 billion Myanmar Kyat, exactly double the cost of a 20,000

Myanmar Kyat monthly transfer program. With lockdown easing, the total cost of the monthly 20,000 Myanmar Kyat transfers perfectly targeted to the severely-poor declines from 61.1 to 38.7 billion, and declines further again to 26.8 billion with modest restrictions and some external recovery, and to 21.7 billion with further external recovery (Scenario 4).

Under the assumption that each of the four economic disruption scenarios lasts three months in duration in turn, Panel B of Table 7 shows that the annual costs of a 20,000 Myanmar Kyat transfer program is approximately 450 billion Myanmar Kyat. These costs again rise proportionately based on the amount of the monthly transfers. The bulk of these transfers would need to be spent in rural areas (>80 percent), even though urban populations are disproportionately affected by strict lockdown measures.

However, we note that the monthly transfer estimates under different economic disruption scenarios reported in Panel A could be used to cost out different strategies. These could include implementing generous transfers during lockdowns when severe poverty rates are highest, but then implementing more modest and more stringently targeted transfers during periods of less disruption to economic activity when the prevalence of severe poverty is lower. Given the volatile nature of COVID-19 and the need for sudden lockdown measures in the context of limited health service capacity, this kind of flexible strategy may be advisable.

Recommended actions

Both the survey and simulation results presented above show that lockdown periods have extremely high economic costs in terms of rising poverty and food insecurity, which in turn has significant policy implications for social protection and economic recovery strategies in Myanmar. The following provides a summary of key policy recommendations emerging from this analysis.

Consider new approaches to targeting cash transfers

- The GoM has introduced a series of emergency measures to provide basic assistance to vulnerable households, and over half of all households in the survey received cash assistance of 20,000 Myanmar Kyat in September. However, many poor households in the survey sample reported not receiving cash payments even as many non-poor households received cash payments when they likely did not need them.
- Based on these results, the GoM should re-assess the current mechanisms used to identify and target poor households with cash transfers. We concur with the recommendations of the International Growth Center (Brancati et al. 2020), who propose a two-step targeting and cash dispersion procedure:
 1. Assess how much funding to allocate to each state/region, township, and ward/village tract based on pre-COVID-19 asset-based poverty measures, which can be done using census data.
 2. Identify beneficiary households within each ward/village tract via local leaders and establish clear criteria and budget ceilings for transfer allocations at the community level.

Improve targeting of one-time maternal and child cash payments

- The GoM has been offering pregnant women one-time 30,000 Kyat transfers since 20 September, but our early results suggest that better-off mothers are substantially more likely to receive these transfers. This may be because of greater awareness or because the mobile app-based approach to accessing this payment disadvantages mothers of lower socioeconomic status in some fashion. We recommend that the Department of Social Welfare and its partners investigate why lower status mothers are having difficulty accessing

this payment and that they then develop appropriate steps to remedy this problem, such as more proactive communication campaigns targeted at mothers with lower socioeconomic status.

Consider expanding allocations to social protection in the government budget, but also use social protection funds more flexibly, with larger transfers during lockdowns

- Our microsimulation results suggest that even with perfect targeting, 20,000 Myanmar Kyat transfers have only moderate impacts on extreme poverty headcounts during lockdowns. We also show that relaxing COVID-19 related restrictions can result in large reductions in severe poverty in both rural and urban areas. This suggests that, with tight fiscal constraints, it may be advisable to offer households more generous transfers during lockdown periods and smaller or more tightly targeted transfers during post-lockdown recovery periods, including cash-for-work schemes that essentially involve self-targeting, as only unemployed households are expected to volunteer to participate in them.
- More generous, flexible, and efficiently targeted social protection programs could have synergies with efforts to prevent the spread of COVID-19 (Hausman and Schetter 2020). Since lockdown measures cause especially sharp income losses in densely populated urban areas where the disease can spread more quickly if prevention measures are ineffective, the GoM and its partners should consider more generous short-term transfers to the urban poor during strict lockdown periods.

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