STRATEGY SUPPORT PROGRAM POLICY NOTE 27

Poverty and food insecurity during COVID-19

Evidence from the COVID-19 Rural and Urban Food Security Survey (RUFSS) – June and July 2020 round

Derek Headey, Sophie Goudet, Isabel Lambrecht, Than Zaw Oo, Elisa Maria Maffioli, Erica Field, and Russell Toth

To assess the economic and food and nutrition security impacts of COVID-19, just over 2,000 households in urban Yangon and in rural villages of the Dry Zone were surveyed in June and July 2020.

Key findings

- COVID-19 has had strong negative impacts on income-based poverty among both rural and urban households. Losses of jobs or other income have been the main impacts.
 - Twenty percent of respondents reported their household earned no income in June.
 - USD 1.90/day poverty in the sample increased by 27 percentage points from January to June.
- Falling into poverty was strongly associated with loss of employment and recent childbirth.
- The poor frequently coped with income losses through loans or other credit, although between 15 and 20 percent of households also reduced their food expenditures.
- Self-reported food insecurity experiences and inadequate dietary diversity among mothers were much more common in the urban sample, despite the rural sample being poorer.
 - In urban areas, one-quarter of respondents were worried about food quantity and quality, and one-third had inadequate diets.
- Self-reported losses of income and jobs were strong predictors of food insecurity and inadequately diverse diets.
 - Mothers who had given birth in the past month had much less diverse diets than pregnant women.

Recommendations

 In response to income losses associated with COVID-19, the Government of Myanmar introduced a series of emergency measures to provide basic assistance to vulnerable households. It is critical to assess the effectiveness of such assistance in reaching foodinsecure populations and maintaining basic food security.

(continued)

- Maternal and child cash transfers (MCCT) currently cover mothers of young children in five states/regions. However, in September 2020, mothers not covered by this program are being offered only a one-off 30,000 Kyat (USD 22) payment through remote enrollment.
 - In the long run, government should look to accelerate the multi-year scale-up of the regular MCCT program.
 - In the short run, resources should be provided for continued support to mothers not covered in the regular MCCT program, for the means to impart social behavioral change through remote platforms, and for evaluating the targeting and impacts of these efforts.
- Job creation must be at the heart of economic recovery strategies, including for returning migrants and unskilled casual laborers. However, such efforts should be closely monitored.
- Whether loans and other credit are viable and effective coping mechanisms and economic recovery strategies for those adversely affected by the COVID-19 crisis should be assessed closely. Such approaches may create indebtedness problems for some groups.
- Income losses from childbirth are large. More family-friendly work policies are justified to
 protect pregnant women and women with young children from loss of employment and
 wages.
- Economic recovery initiatives should emphasize enhancing women's access to resources, including but not only during the first 1,000 days of life.

Introduction

The COVID-19 pandemic has triggered a global economic crisis from which very few countries will be spared. As a result of few COVID-19 cases, a relatively short-lived lockdown, and economic momentum prior to COVID-19, Myanmar is one of the few developing countries that the World Bank (2020) forecasts will not go into recession in 2020 – a very modest expansion of just 0.87 percent is forecast. A Social Accounting Matrix multiplier analysis by IFPRI projected a 0.50 percent expansion under a fast economic recovery scenario, but a 2.00 percent contraction under a slow economic recovery scenario (Diao et al., 2020). The IFPRI study projects massive declines in GDP across a range of sectors during lockdown periods, including large increases in unemployment (5 million during the lockdown period) and declines in household income of 20 to 30 percent for April to June, albeit with fast recovery thereafter.

The present study is based on data collected through the implementation of a phone survey, titled the COVID-19 Rural and Urban Food Security Survey (RUFSS), in late June and early July of 2020. This survey covered 2,017 mothers split between urban Yangon, Myanmar's largest city, and rural areas of the Dry Zone, an agricultural production area in the center of Myanmar. Both the urban and rural samples are comprised of nutritionally vulnerable groups, albeit with children at different stages of their early lifecycle. The urban sample is novel in being comprised of women who were pregnant in January 2020 just prior to the COVID-19 economic crisis. At the time of the survey, the sample comprised both pregnant mothers and mothers who recently gave birth. The rural sample includes a sub-sample of mothers who had previously been part of an evaluation of a maternal and child cash transfer (MCCT) program.¹

This note uses results from June and July 2020 round of the RUFSS to assess the welfare impacts of COVID-19 through different kinds of questions centered on household welfare: qualitative

¹ The MCCT evaluation compared the impact on several outcomes of recipients receiving a cash transfer only (treatment 1) or cash and behavioral change communications (treatment 2) relative to a control group.

questions on the economic, social, and health impacts of COVID-19; questions on household coping mechanisms in response to income shocks; and questions on food security and dietary diversity posed to female respondents. We use these questions to address three basic objectives.

- What is the scale and scope of income changes by location, livelihood, and economic status?
- How do food and nutrition insecurity measures vary by location, livelihood, and economic status?
- What kinds of maternal and household characteristics predict poverty and food insecurity?

Income and poverty findings

Figure 1 displays responses to a question about the major impacts of COVID-19 on the respondent's household, stratified by rural and urban samples. Responses can broadly be categorized as economic, social, and health related. By far the largest perceived impact of the COVID-19 shock is loss of income or employment, with a somewhat higher rate in urban areas compared to rural. Interestingly, 20 percent of urban respondents stated they are concerned about food supply, referring to food availability, prices, or affordability, whereas just 10 percent of rural respondents reported concerns about supply. About one in five households also cite travel restrictions as having a significant impact. Many households report fear of sickness, particularly in rural areas where villages may have poor access to health services.

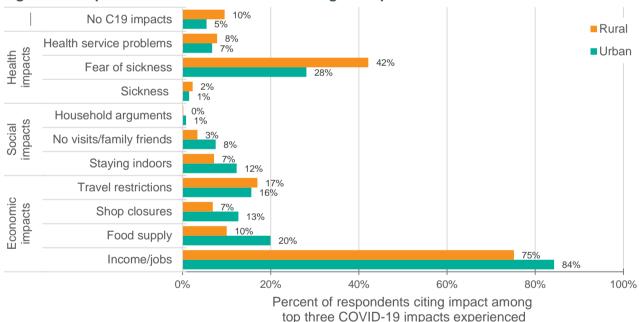


Figure 1. Respondent assessments of three largest impacts of COVID19 on their household

Source: Authors' estimates from RUFSS data. Observations: 2,017 households. C19 = COVID-19.

When stratified by livelihood, the self-reported economic impacts of COVID-19 suggest that most households in each livelihood category experienced declines in income or employment because of COVID-19 (Table 1). However, farming households less frequently report an impact on income or employment, whereas both skilled and unskilled households are more frequently impacted. Likewise, farming households are less likely to be affected by food supply issues or shop closures, while households with trade/retail livelihoods are most affected by shop closures. Travel restrictions show less variation across livelihood.

Variation by asset classes indicates that the asset-poor and asset-low classes are more likely to report income/job loss impacts than the asset-rich. However, it is striking that almost three-quarters of the asset-rich still report these problems.

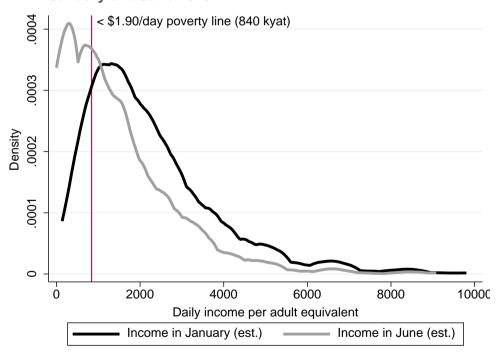
Table 1. Self-reported economic impacts of COVID19 by household livelihood and asset wealth level, percent of households reporting impact

	Income or jobs	Food supply	Shop closures	Travel restrictions
Farming	69.1	12.4	4.5	15.6
Unskilled labor	86.7	17.6	10.4	15.1
Skilled labor	85.0	15.0	9.4	18.3
Salary	74.4	14.7	8.4	17.2
Trade/retail	79.9	14.4	21.1	14.4
Other livelihood	79.2	16.7	12.5	12.5
Asset-poor	81.3	15.8	7.8	17.5
Asset-low	81.7	14.3	8.8	15.4
Asset-rich	72.9	15.3	15.1	16.3

Source: Authors' estimates from RUFSS data. Observations: 2,017 households.

Next we turn to income trends for the sub-sample of 1,528 households in which the respondent felt confident enough to estimate household monthly income for both January and June 2020. Figure 2 shows the distributions of estimated incomes – converted to daily income per adult equivalent – for January and June. The data suggest a severe decline in reported income for most households. Perhaps most worrying, large numbers of households report little or no income in June.

Figure 2. Distributions of estimated daily income per adult equivalent of sample households in January and June 2020



Source: Authors' estimates from RUFSS data. Observations: 1,528 households.

The income data reported in Figure 2 are clearly susceptible not only to recall error but also to seasonality, particularly for farming households. To mitigate these issues, Table 2 reports both the estimated percentage change in median household income from January to June 2020 as well as more qualitative measures. Median reported income fell by 34.4 percent, with somewhat higher losses reported by skilled and unskilled labor households, farming households, and trade/retail

households, and lower losses reported by salaried households. Column (2) shows that just over two-thirds of households reported lower income in June 2020 than in January 2020, though only about half of salaried households reported income losses. In the full sample, 18 percent of households reported earning no income in June (column (3)). Unsurprising given seasonality issues, this was higher in rural areas than in urban areas, but still relatively high for livelihoods unlikely to be affected by seasons, e.g., skilled labor and trade/retail. Column (4) uses data from a question specifically designed to net out seasonality by asking if income was lower in June 2020 compared to a year earlier in June 2019. Three-quarters of households responded affirmatively, with particularly high affirmative responses from skilled and unskilled labor households.

Table 2. Estimated income effects of COVID-19 on different household types in Myanmar

Household type	(1) Percentage change in estimated median income from January to June 2020	(2) Households reporting income in June 2020 lower than in January 2020, percent	(3) Households reporting zero income in June 2020, percent	(4) Households reporting June 2020 income lower than June 2019 income, percent
Rural (Dry Zone)	-37.6	68.0	22.8	76.5
Urban (Yangon)	-31.1	64.0	12.6	78.3
Farming	-37.3	70.4	28.1	75.3
Unskilled labor	-36.4	71.9	17.3	84.1
Skilled labor	-39.7	70.6	15.7	80.8
Salaried	-24.8	51.6	12.7	65.7
Trade/retail	-34.0	66.7	17.3	82.7
Other livelihoods	-11.5	54.5	18.2	81.8
Asset poor	-33.3	69.8	21.3	77.3
Asset low	-34.6	64.0	17.7	78.7
Asset high	-35.6	64.5	12.2	74.6
Full sample	-34.4	66.0	17.7	77.4

Source: Authors' estimates from RUFSS data. Data are reported for the income-reporting sub-sample. Observations: 1,528 households.

Table 3. Estimates of income-based poverty at updated USD 1.90/day poverty line in January and June 2020 by location, livelihood, and asset level, percent of households

	(1)	(2)	(3)	
Household type	Income-poor in January	Income-poor in June	Percentage point change	
Rural (Dry Zone)	18.5	50.3	31.9	
Urban (Yangon)	5.8	27.7	21.9	
Farming	20.2	55.1	34.8	
Unskilled labor	16.5	45.5	29.0	
Skilled labor	8.7	38.2	29.4	
Salaried	3.7	21.3	17.6	
Trade/retail	16.0	40.0	24.0	
Other livelihoods	18.2	27.3	9.1	
Asset poor	20.5	49.5	29.0	
Asset low	9.9	35.6	25.6	
Asset high	4.0	30.3	26.3	
Full sample	12.2	39.1	26.9	

Source: Authors' estimates from RUFSS data using the USD 1.90/day poverty line updated to 2019 prices, corresponding to 840 kyat per day. Data are reported for the income-reporting sub-sample. Observations: 1,528 households.

Table 3 reports income-based poverty at the USD 1.90/day poverty line (updated to 2020) in January and June, as well as changes in poverty. Income-based poverty had risen dramatically by June in both urban and rural areas. The steep rise in income-based poverty for farm households may be exaggerated by seasonality issues. However, all other livelihoods also experienced large

increases in income-based poverty, particularly unskilled and skilled labor households. Even trade and salary-based households, which are unlikely to be affected drastically by short-term shocks, saw increases in income-based poverty.²

We asked respondents to explain why their incomes in June 2020 were lower than they were in June 2019. By far the most cited explanation was losing a job or casual employment, with over two-thirds of rural and urban respondents citing this reason. Notably, 81 percent of unskilled labor households and 77 percent of skilled labor households cited this problem. Reductions in salaries or wages were most cited by salaried households (36 percent) and were more common in urban than rural areas (23 versus 8 percent). Movement or travel restrictions were widely cited in rural and urban areas, but most commonly among skilled laborer (37 percent) and trade/retail households (30 percent). Market disruptions – including shop closures, lower prices, fewer customers, and other disruptions – were cited as a source of lost income most commonly among trade/retail (77 percent) and farm households (39 percent). Unsurprisingly, pregnancy, childbirth, or childcare was cited as a source of income loss in the urban sample for 18 percent of households. Low yields or climatic factors were cited by 13 percent of farmers. Other reasons – including loss of remittances, health shocks, and loss of transfers – were rarely cited.

We used regression analysis to predict risk factors for becoming poor between January and June 2020 at the USD 1.90/day poverty line. Job loss for a present member or a migrant from the household increases the risk of a household becoming poor by around 10 percentage points. Strikingly, the birth of a child significantly raises the risk of becoming poor, but pregnancy does not, suggesting most pregnant mothers continue to work, while mothers of newborns do not often immediately return to work. Finally, although only 33 households reported still having a migrant in June, these households were significantly less likely to have become poor between January and June.

Table 4. Coping mechanisms used among households who reported lower income in 2020 compared to same time in 2019, percent reporting use of mechanism

	Took loans	Reduced savings	Reduced non-food spending	Reduced food spending	Sold assets	Other coping strategies	No coping strategies
Rural (Dry Zone)	51.1	28.0	33.3	10.9	7.9	1.0	2.2
Urban (Yangon)	41.3	31.5	29.6	16.6	6.4	3.8	4.2
Farming	48.2	30.9	29.4	12.1	11.0	1.8	2.5
Unskilled labor	54.0	21.7	30.9	16.1	5.1	2.4	2.2
Skilled labor	47.6	30.0	33.2	14.6	5.6	2.2	2.9
Salaried	36.8	34.6	32.0	12.9	8.5	2.6	4.8
Trade/retail	38.2	38.7	32.4	11.0	6.9	2.9	4.6
Other livelihoods	17.6	35.3	17.6	11.8	11.8	11.8	5.9
Asset poor	52.6	21.0	28.4	15.1	8.5	2.8	2.5
Asset low	47.8	29.8	30.9	13.0	6.4	2.5	2.4
Asset high	31.8	44.2	37.7	13.4	6.5	1.6	6.2
Full sample	46.1	29.8	31.4	13.8	7.2	2.4	3.2

Source: Authors' estimates from RUFSS data. Data are reported for the sub-sample that states income is lower at this time of year than in the previous year. Observations: 1,565 households.

Table 4 displays coping mechanisms for the sub-sample of households that reported lower than normal income for June. By far the most common coping mechanism was taking loans, albeit more so in rural areas, and particularly among poorer households. Conversely, richer households used

² Despite the caveats surround income estimates in this setting, the results in Table 3, column (1) give some confidence that the income estimates are imparting plausible information on income. In particular, incomes in January 2020 are highly correlated with asset levels and livelihoods. In addition, 85 percent of households that were poor in January were also poor in June.

savings much more frequently compared to poorer households. Asset-rich households were also more likely to reduce non-food expenditure, but there was no wealth gradient for the reduction of food spending, although unskilled labor households were more likely to reduce food spending than were households with other livelihoods. Selling assets was rare except among farming households who may have sold agricultural assets, such as livestock. Very few households reported no coping strategies, consistent with the notion that incomes losses were significant for most households and required adaptive measures.

We also asked respondents if they received any kind of government or non-governmental assistance. The COVID-19 Emergency Response Plan (CERP) set out several means to reduce the economic impacts of COVID-19: (a) in-kind food transfers to vulnerable households and at-risk populations; (b) emergency rations through community-based food banks and associations; (c) top-up benefits for Maternal and Child Cash Transfer and social pension beneficiaries; and (d) cash transfers to the most vulnerable affected households. 28 percent of respondents reported receiving cash or food assistance in June – almost all government assistance (25 percent) – with higher coverage in rural areas and among the asset poor and unskilled labor households (Figure 3). However, while the poor are more likely to receive this assistance, it is concerning that almost two-thirds of asset-poor households did not report receiving any assistance.

10 20 0 30 40 50 Rural (Dry Zone) Urban (Yangon) Farming Unskilled labor Skilled labor Salaried Trade/retail Other livelihoods Asset poor Asset low Asset high Full sample

Figure 3. Respondents reporting having received cash or food assistance in the past month, percentage share

Source: Authors' estimates from RUFSS data.

Food and nutrition insecurity

Table 5 reports food insecurity experience scale (FIES) indicators and inadequate maternal dietary diversity. FIES indicators are subjective indicators ordered by intensity from the more psychosocial "food worries" indicator at one extreme (indicators 1 and 2) to various indicators designed to capture sacrifices in food quality or quantity (3 to 5) to more serious markers of extreme food insecurity that involve running out of food or experiencing severe hunger (6 to 8). Inadequate maternal dietary diversity is the proportion of women who reported consuming less than five out of ten food groups in the previous 24 hours and has shown to be a strong predictor of inadequate micronutrient intake.

Consistent with this ordering of severity, general anxiety about food or not eating enough healthy food is more common than markers of dietary sacrifices, which are also more common than hunger-related metrics. Just over 20 percent of respondents said they were worried about accessing sufficient food or sufficient healthy food, with these anxieties much more prevalent among the urban sample and among unskilled labor. Similarly, about 22 percent of urban respondents reported consuming fewer food types, in contrast to about 10 percent of rural respondents. Relatively few

respondents reported skipping meals, but about 23 percent of urban respondents reported eating less quantity, and around one quarter of respondents from unskilled laborer households stated there had been times when they had eaten less. At lower prevalence levels, these patterns held true for running out of food, and about 9 percent of respondents from urban households and unskilled labor households said there were times when they had gone hungry. Very few households stated they had gone a whole day without food.

Table 5. Food insecurity experience indicators and inadequate maternal dietary diversity by location, livelihood, and asset status, percent of households

	Food insecurity experience scale (FIES) Indicators								
	(1) Food worries	(2) Not enough healthy food	(3) Fewer food types	(4) Skipped meals	(5) Ate less quantity	(6) Ran out of food	(7) Went hungry	(8) Whole day without food	Inade- quate maternal dietary diversity
Rural (Dry Zone)	15.8	19.9	9.6	2.7	10.7	3.6	2.6	0.4	15.7
Urban (Yangon)	26.1	27.7	21.9	10.6	23.2	11.4	9.2	1.9	34.3
Farming	10.6	17.7	10.0	2.9	10.8	3.2	3.2	0.0	17.9
Unskilled labor	29.8	30.6	22.4	9.4	24.7	12.7	9.2	0.0	25.0
Skilled labor	23.2	27.2	16.9	7.1	18.1	8.1	7.3	0.0	29.2
Salaried	18.7	21.6	13.5	6.9	14.5	5.7	4.4	1.1	24.2
Trade/retail	18.7	17.2	12.0	5.7	12.0	4.8	2.9	0.0	22.0
Other livelihoods	16.7	4.2	16.7	4.2	20.8	12.5	4.2	0.0	29.2
Asset poor	26.2	29.2	18.0	7.1	20.5	9.1	6.3	0.9	24.7
Asset low	21.9	24.7	17.5	7.0	17.5	8.1	6.6	1.4	26.8
Asset high	10.6	13.2	8.5	5.2	10.4	3.5	3.8	0.9	21.7
Full sample	21.0	23.8	15.8	6.6	17.0	7.5	5.9	1.1	25.0

Source: Authors' estimates from RUFSS data. Data are reported for the income-reporting sub-sample. Observations: 2,017 households.

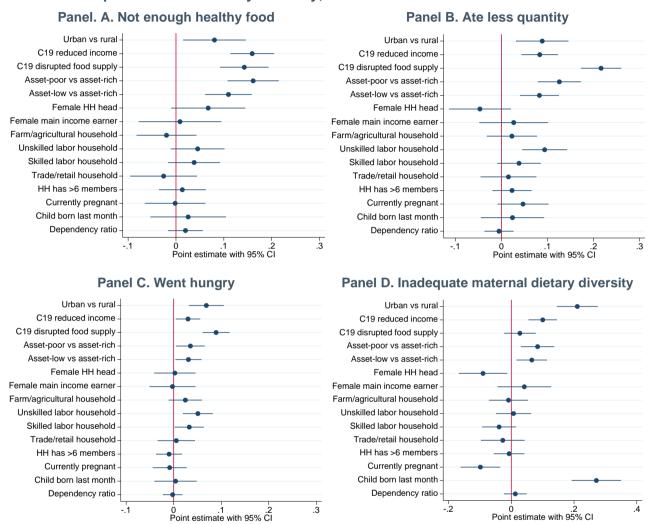
The final column of Table 5 reports prevalence of inadequate maternal dietary diversity. Strikingly, inadequate diets are almost 20 percentage points more prevalent among urban mothers compared to rural mothers. Despite being poorer, only 18 percent of respondents from farming households had inadequate diets compared to 25 percent of respondents from unskilled labor households and 29 percent from skilled labor households. Furthermore, diets were often inadequate for respondents from asset-rich households and those with higher income livelihoods.

These surprising rural-urban differences for dietary diversity could be explained by several factors, including unusually high availability of nutritious foods in rural areas at this particular time of year, e.g., mangoes, green leafy vegetables, and wild fruits and vegetables, more severe food supply disruptions in urban compared to rural areas, food taboos related to the fact that the urban sample of mothers was either pregnant or had recently given birth, and more permanent structural differences in diets between Yangon and the rural Dry Zone.

One of these factors can be easily quantified: in urban areas the prevalence of inadequate maternal dietary diversity falls from 34 to 27 percent once mothers who have just given birth are excluded from the sample. Low dietary diversity immediately after birth likely reflects food taboos surrounding postnatal maternal diets that are quite prevalent in Myanmar. Even so, the remaining sample of urban mothers are 12 percentage points more likely to have an inadequate diet than rural mothers, perhaps suggesting that dietary diversity is generally poorer in Yangon than in rural areas. Consistent with this, the 2015-16 Demographic Health Survey (MoHS and ICF-International, 2017) found that only 13 percent of children 6 to 23 months of age achieved adequate dietary diversity in Yangon, as compared to 30 to 40 percent of children in the Dry Zone.

In Figure 4 we look at predictors of three FIES indicators and inadequate maternal dietary diversity. The four regression models use the full sample of households with a similar set of explanatory variables to the results reported above on movements into poverty. However, because we wished to exploit the full sample we used two alternative indicators of COVID-19 impacts – whether a respondent reported income/job loss as a main impact of COVID-19, and whether they reported food supply problems as a main impact (Figure 1).

Figure 4. Linear probability model estimates of predictors of food insecurity experiences and inadequate maternal dietary diversity, with 95% confidence intervals



Source: Authors' estimates from RUFSS data using linear probability regressions with 95% confidence intervals. Observations: 2,017 households. C19 = COVID-19; HH = household.

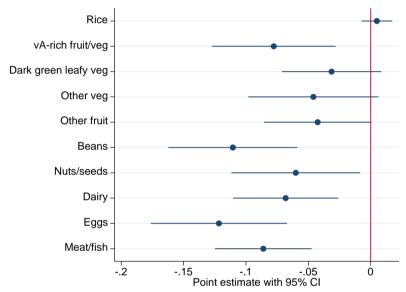
Panel A in Figure 4 shows that being worried about not eating enough healthy food is positively related to being urban, reporting both reduced income and disrupted food supplies as main COVID-19 effects, and having fewer assets. Similar results are reported for eating less food (Panel B) and going hungry (Panel C), although in these regressions respondents from unskilled labor households are also more likely to state they are food insecure.

Results for inadequate maternal diets are similar with respect to asset levels and income losses due to COVID-19, but are quite different in several other respects. First, urban mothers are around 20 percentage points more likely to consume an insufficiently diverse diet. This pattern is seen even after adjusting mothers who have recently given birth in this urban sample, who are around 25 percentage points more likely to consume an inadequate diet. In contrast, pregnant women are about 10 percentage points less likely to have an inadequately diverse diet. Another difference is that self-

reported reductions in household income due to COVID-19 predict insufficiently diverse diets, increasing the risk of inadequate diets by around 10 percentage points. However, self-reported disruptions to food supplies are no longer significant. This perhaps suggests that food supply disruptions create anxiety about food security without materially affecting diets. Another explanation could be that self-reported food supply disruption is itself a food insecurity metric.

In Figure 5, we extend these results to look more closely at the associations between self-reported COVID-19 income losses and consumption of the ten specific foods groups included in the maternal dietary diversity score. Results are drawn from ten different linear probability models with the same set of control variables used in the regressions reported in Figure 4. Strikingly, the 80 percent of households who report income losses from COVID-19 have significantly lower consumption of all non-staple foods, with particularly large associations for eggs, beans, and meat/fish.

Figure 5. Linear probability model estimates of association between maternal consumption of different food groups in the past 24 hours against self-reported income loss due to COVID-19



Source: Authors' estimates from RUFSS data using a series of ten different linear probability regressions with 95% confidence intervals, with the same set of control variables as those reported in Figure 4. Observations: 2,017 households.

These results suggest that dietary diversity among mothers may have declined steeply due to COVID-19, with consequent heightened risks for a range of micronutrient deficiencies. Specifically, Panel D in Figure 4 roughly suggests that without COVID-19 the prevalence of inadequately diverse diets among mothers would be around 10 percentage points lower, while Figure 5 suggests that consumption of nutrient dense foods would be 3 to13 percentage points higher depending on the food group.

Recommendations

The results of this study have significant policy implications for social protection and economic recovery strategies in Myanmar.

Scale-up social protection as part of efforts to strengthen both short term protection
and long term economic recovery. In 2017 the percentage of the population in Myanmar
covered by cash transfers – generally the most beneficial form of social protection – was just
0.45 percent (Gentilini et al., 2020). While the Government of Myanmar (GoM) had been
scaling up social protection programs prior to COVID-19, it is now critically important to
accelerate the expansion of social protection programs both for short-term protection and as a

central pillar of Myanmar's economic recovery. Doing so would help households recover more quickly and build resilience to future economic and ecological shocks, such as climate change. Legislators should also look to protect key social protection expenditures through appropriate legislative actions.

- Continue to expand social protection for pregnant women and mothers with young children. After implementing successful pilot programs over the past few years, the GoM has committed to scaling up maternal and child cash transfers (MCCT) to all pregnant women and mothers with young children by 2025. Currently, MCCT covers five states/regions with geographical expansion ongoing. A key immediate challenge is protecting mothers and young children not covered by this program, since COVID-19 is harshly affecting households not previously considered highly vulnerable to malnutrition. From September, mothers not covered by the regular MCCT program are being offered a one-off 30,000 Myanmar Kyat (USD 22) payment through remote enrollment. While welcome, this emergency response effort faces several challenges.
 - First, it is crucial to monitor and evaluate the coverage of this effort to assess awareness of the program and the ability of vulnerable mothers to access benefits.
 - Second, GoM should find resources to provide additional cash payments, as one-off payments will typically not provide sufficient protection against the scale of income losses documented here.
 - Third, GoM should provide social behavioral change for nutrition through remote platforms which cover health, breastfeeding and complementary feeding, and good hygiene practices.

Though there is a significant fiscal outlay involved in sustaining nutrition-sensitive social protection for mothers of young children, the long-term benefits of preventing acute and chronic undernutrition in early childhood are immense from both social and economic perspectives (Hoddinott et al., 2013a; Hoddinott et al., 2013b; Shekar et al., 2016).

- Strengthen monitoring and evaluation of COVID-19 job creation programs. On 18 March, the Ministry of Planning, Finance, and Industry announced the establishment of an initial 100 billion Myanmar Kyat fund to provide one percent annual interest rate loans to the business sectors that are most affected by COVID-19, particularly garment companies, hotel and tourism companies, and small- and medium-sized enterprises. It is critical that this program and other programs affecting job creation and recovery, such as cash or food for work programs, are closely monitored to ensure that they that they are creating or protecting jobs and providing decent wages. Currently, little is known about the effectiveness of these programs from a job creation standpoint.
- Monitor the effects of indebtedness on chronic poverty. This study shows that a high proportion of the poor are taking loans or credit to cope with the economic impacts of COVID-19. This could be an effective and sustainable strategy if interest rates are sufficiently low and economic recovery is sufficiently fast and strong. However, the risk of creating indebtedness problems for some groups is significant. Monitoring of indebtedness is warranted to assess the viability of this coping mechanism within the current economic climate.
- Adjust labor laws to protect incomes during pregnancy, childbirth, and early infancy.
 Uniquely, the results in this study show that incomes decline sharply when a woman gives
 birth, suggesting that very few women are afforded sufficient job security at this critical stage
 in their family's lives. This highlights the importance of promoting family-friendly business
 policies that protect pregnant women and women with children from loss of employment or
 wages.

Adopt a gender-sensitive nutrition lens to economic recovery, focusing on women's control of resources. Ensuring that women have greater control of resources will help ensure that economic recovery is both more protective of nutrition security – especially for young children – and more empowering for women, many of whom may be especially vulnerable during the COVID-19 crisis.

References

- Diao, X., N. Aung, W.Y. Lwin, P.P Zone, K.M. Nyunt, and J. Thurlow. 2020. Assessing the Impacts of COVID-19 on Myanmar's Economy: A Social Accounting Matrix (SAM) Multiplier Approach. Myanmar Strategy Support Program Working Paper 01. Yangon: International Food Policy Research Institute.
- Gentilini, U., M. Almenfi, P. Dale, A.V. Lopez, and U. Zafar. 2020. Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures. "Living paper" version 12 (10 July 2020). Washington DC: World Bank.
- Hoddinott, J., H. Alderman, J.R. Behrman, L. Haddad, and S. Horton. 2013. "The economic rationale for investing in stunting reduction." *Maternal & Child Nutrition* 9, 69-82.
- Hoddinott, J.F., M.W. Rosegrant, and M. Torero. 2013. *Investments to reduce hunger and undernutrition*. Challenge Paper on Hunger and malnutrition. Lowell, MA: Copenhagen Consensus Center.
- Ministry of Health and Sports (MoHS) and ICF. 2017. *Myanmar Demographic and Health Survey 2015-16*. Nay Pyi Taw, Myanmar, and Rockville, Maryland USA: Ministry of Health and Sports and ICF.
- Shekar, M., J. Kakietek, J.D. Eberwein, and D. Walters. 2016. *An Investment Framework for Nutrition*. Washington DC: World Bank.
- World Bank, 2020. Pandemic, Recession: The Global Economy in Crisis. Washington, DC: World Bank.

ABOUT THE AUTHOR(S)

Derek Headey is a Senior Research Fellow with the Food Consumption and Nutrition Division of the International Food Policy Research Institute (IFPRI), based in Yangon, Myanmar. **Sophie Goudet** is an independent nutrition researcher and consultant to IFPRI, based in Yangon. **Isabel Lambrecht** is a Research Fellow in the Development Strategy and Governance Division (DSGD) of IFPRI, based in Yangon. **Than Zaw Oo** is a Research Analyst with DSGD of IFPRI, based in Yangon. **Elisa Maria Maffioli** is an Assistant Professor of Health Management and Policy at the Michigan School of Public Health, based in Michigan, United States. **Erica Field** is a Professor of Economics and Global Health at Duke University, based in North Carolina, United States. **Russell Toth** is a Senior Lecturer in the School of Economics at the University of Sydney, based in Sydney, Australia.

ACKNOWLEDGMENTS

This work was undertaken as part of the Myanmar Agricultural Policy Support Activity (MAPSA) led by the International Food Policy Research Institute in partnership with Michigan State University. Funding support for this study was provided by the CGIAR Research Program on Policies, Institutions, and Markets, the United States Agency of International Development, and the Livelihoods and Food Security Fund.

The authors thank the Innovations for Poverty Action (IPA) Myanmar office for implementation of the survey, particularly Thein Zaw Oo, Afke Jager, and Ricardo Morel, as well as the survey enumeration team. We thank staff of LIFT, USAID, and UNICEF for constructive comments and suggestions.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

1201 Eye St, NW | Washington, DC 20005 USA T. +1-202-862-5600 | F. +1-202-862-5606 ifpri@cgiar.org

IFPRI-MYANMAR

No. 99-E6 U Aung Kein Lane Than Lwin Road, Bahan Township Yangon, Myanmar IFPRI-Myanmar@cgiar.org www.myanmar.ifpri.info



The Myanmar Strategy Support Program (Myanmar SSP) is led by the International Food Policy Research Institute (IFPRI) in partnership with Michigan State University (MSU). Funding support for Myanmar SSP is provided by the CGIAR Research Program on Policies, Institutions, and Markets; the Livelihoods and Food Security Fund (LIFT); and the United States Agency for International Development (USAID). This publication has been prepared as an output of Myanmar SSP. It has not been independently peer reviewed. Any opinions expressed here belong to the author(s) and do not necessarily reflect those of IFPRI, MSU, LIFT, USAID, or CGIAR.

© 2020, Copyright remains with the author(s). This publication is licensed for use under a Creative Commons Attribution 4.0 Internationa License (CC BY 4.0). To view this license, visit https://creativecommons.org/licenses/by/4.0.