# Monitoring the Impact of COVID-19 in Myanmar

## Agricultural production and rural livelihoods in two irrigation schemes – August 2020 survey round

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### Key findings

- Despite the relaxation of COVID-19 mitigation measures in June and July, households continue to feel the impacts of the economic downturn. Almost 60 percent of all households continue to report lower incomes than usual and a third are reducing food expenditures to cope with income reduction.
- Landless households have been more severely affected by the crisis, largely due to lost nonfarm employment, lower remittances, and further negative impacts on rural enterprises.
- Monsoon farming activities experienced fewer disruptions in June and July, as fewer farmers experienced difficulties accessing inputs, labor, and output markets compared to during the period from February to May. However, about half of farmers anticipate challenges in accessing inputs and selling their crops in coming months. Moreover, crop production during the monsoon season of 2020 was constrained by prolonged drought and shortages of irrigation water.
- Fewer respondents reported difficulties in their enterprises and in finding farm and nonfarm employment compared to the February to May period. However, the proportions of women and men affected remain high. Over 40 percent of households continue to report difficulties in finding customers for their nonfarm enterprises, and between 45 and 56 percent of those usually employed as wage laborers could not find work.
- Government transfer programs intensified and reached 93 percent of households, mostly in the form of income assistance.

**Recommended actions** 

- Assistance to rural households should continue to be provided to soften the impact of reduced income during the COVID-19 crisis.
- Supporting rural non-farm businesses and employment will be key to building resilience in household livelihoods and to achieving a faster economic recovery overall.

### Introduction

This policy note provides evidence of the immediate impacts of the COVID-19 crisis on farming communities in Myanmar's Central Dry Zone using baseline data from January 2020 (BL) and followup telephone survey data.<sup>1</sup> The first round of the telephone survey was conducted with 606 households between 10 and 21 June 2020 (PS1) and inquired about the effects of COVID-19 on agricultural production and other livelihood sources from February to May 2020.<sup>2</sup> The second round of the telephone survey was conducted with 543 households in August 2020 (PS2) and captured the effects of COVID-19 in June and July.<sup>3</sup>

The communities surveyed lie in the catchment areas of two irrigation sites in Myanmar's Central Dry Zone: the Sinthe irrigation site in Tatkon township in Nay Pyi Taw Region and the North Yamar irrigation site in Pale and Yinmarbin townships in Sagaing Region (Figure 1).They are the focus pilot sites of the Myanmar Agricultural Development Support Project (ADSP). These study sites provide good settings in which to assess the impact of COVID-19 on irrigated and nonirrigated agricultural production as well as the varied livelihood strategies of farm (landed) and nonfarm (landless) households in rural communities.

The period covered in first telephone survey round, February to May 2020, captures the first wave of COVID-19 cases in Myanmar and the series of COVID-19 measures implemented for three weeks in April to contain the spread of the disease. The period covered in the second telephone survey round, June and July 2020, coincides with the onset of the monsoon and the main planting period for paddy rice in our study area. It also coincides with a period in which Myanmar had few reported COVID-19 cases and during which the Myanmar government relaxed lockdown measures.





Source: IFPRI/World Bank/MSR (2020).

### Crop production and marketing, impacts experienced in June and July 2020

Seventy percent of the households in our study site cultivated crops in June and July 2020. The most commonly grown crop was paddy (grown by 84 percent of survey households), followed by sesame (36 percent) and green gram (5 percent). Paddy was mostly sown during June and July, whereas sesame and green gram had been planted prior to June and were harvested in June or July. Half of

<sup>&</sup>lt;sup>1</sup> Ragasa, C., K. Mahrt, Z.W. Aung, I. Lambrecht, and J. Scott. 2020. *Gender, crop diversification, and nutrition in irrigation catchment areas in the Central Dry Zones in Myanmar: Implications for agricultural development support.* IFPRI Discussion Paper 01947. Washington, DC: International Food Policy Research Institute.

<sup>&</sup>lt;sup>2</sup> The results of the first telephone survey round are presented in: Lambrecht, I., C. Ragasa, K. Mahrt, Z.W. Aung, and M. Wang. 2020. Monitoring the Impact of COVID-19 in Myanmar: Agricultural production and rural livelihoods in two irrigation schemes - June 2020 survey round. <u>Myanmar SSP Policy Note 20</u>. Yangon: International Food Policy Research Institute

<sup>&</sup>lt;sup>3</sup> The total attrition from BL to PS1 was 39 percent, mainly due to telephone numbers that were not working. The attrition from PS1 to PS2 was 10 percent. Respondents in Tatkone township were more likely to drop out from PS1 to PS2, whereas those with the highest education levels and in the highest asset quintile (richest quintile) were less likely to drop out. We addressed attrition by running attrition regressions by survey rounds and applying inverse probability weighting. The intuition behind this procedure is that it gives more weight to households who have similar initial characteristics to households that subsequently dropped out than to households with characteristics that make them more likely to remain in the panel.

all farmers in our sample reported drought and shortages of irrigation water as major challenges to crop production in June and July.

Eleven percent of farmers also experienced additional difficulties due to COVID-19 measures, which is a reduction compared to the 16 percent of sample farmers who reported experiencing such difficulties between February and May (Table 1). Those experiencing difficulties mainly noted challenges in accessing farm machinery services and inorganic fertilizer. Nevertheless, 9 percent of farmers said they invested much less in agricultural inputs than they usually do, with 7 percent stating that they invested less in agricultural inputs this year due to financial constraints.

Experienced effect	Feb-May 2020, % of farmers	June-July 2020, % of farmers
Difficulty in purchasing inputs	17	11
If any difficulties, for which inputs:		
Pesticides, herbicides, fungicides	48	11
Inorganic fertilizer	38	48
Farm machinery services	45	58
Improved seed	13	8
Investing in agricultural inputs		
A lot less than usual because of finance constraints		9
Less than usual because of finance constraints		7
Finding labor		
Difficulty finding male labor	17	13
Difficulty finding female labor	17	10
Higher wage for farm labor than normal	22	26
Number of households	389	367

### Table 1. COVID-19 effects on crop production are reduced in the June and July 2020 period compared to the February to May 2020 period

Source: IFPRI/MSR telephone survey (June and August 2020).

Fifty-eight percent of landed households obtained a loan from the Myanmar Agricultural Development Bank (MADB) in June or July. More than half of the households that obtained a MADB loan also reported having obtained the special COVID-19 loan, which offers an additional 50,000 MMK per acre. Among those who obtained a MADB loan, 15 percent experienced a significant delay in receiving the loan of more than two weeks. Six percent of farmers mentioned they had wanted to borrow funds from any source in June or July but were unsuccessful in obtaining a loan.

Few farmers experienced difficulties finding agricultural wage labor in June and July; 13 percent reported challenges in finding male workers and 10 percent reported challenges in finding female workers as compared to 17 percent for each type of labor between February and May. However, more farmers mentioned that labor was more expensive than usual (26 percent).

Problems experienced in selling their crops eased for farmers between the February to May and June and July periods, though still 33 percent of farmers who harvested crops in June and July reported difficulties in selling their harvest. This finding stands in contrast to the two-thirds of farmers who experienced difficulties in selling their crops between February and May 2020 when more stringent COVID-19 measures were in place. Nevertheless, more farmers (47 percent) in June and July anticipated challenges in selling their harvest in the following months, mainly due to poor demand (59 percent) and lower prices (55 percent) (Table 2).

Table 2. Farme	ers anticipate	challenges in	selling their	harvest in	coming months
		<u> </u>	<u> </u>		<u> </u>

Feb-May 2020, % of farmers	June-July 2020, % of farmers
36	47
73	55
41	59
7	5
17	15
22	14
418	340
	Feb-May 2020,   % of farmers   36   73   41   7   17   22   418

Source: IFPRI/MSR telephone survey (June and August 2020).

### Effects of COVID-19 on nonfarm business, employment, and migration

COVID-19 continues to impact agricultural wage employment in June and July, but to a lesser degree than the more sustained effects on non-agricultural wage labor and non-farm businesses. A third of respondents – 36 percent of male respondents and 31 percent of female respondents – said they normally engage in farm wage employment in June and July (Figure 2). This share is higher among respondents in landless households (42 percent) compared to landed households (29 percent). Among those who normally engage in farm wage labor, 45 percent reported having challenges in finding employment. Nevertheless, only 9 percent of those normally employed in farm wage labor in June or July did not work as farm wage workers this year, mostly due to potentially non-COVID related conditions, such as poor health (31 percent), lack of time due to household chores and childcare activities (32 percent), or lack of interest in working this year (8 percent). Additionally, as some respondents reported engaging in farm wage labor this year when they would not normally do so, the total share of respondents who are engaged in farm wage employment in June or July remained stable as compared to previous years.







Source: IFPRI/MSR telephone survey (June and August 2020).

A smaller percentage of men and women, 23 percent and 8 percent, respectively, are usually engaged in nonfarm wage employment in June and July (Figure 2). Of that share, 56 percent of men and 53 percent of women experienced a negative impact on nonfarm work and wages during the crisis. This amounts to only a small improvement on the conditions of the non-farm labor market as

compared to the February to May period, when 75 percent reported negative impacts. Moreover, 51 percent and 14 percent of men and women, respectively, who normally work in nonfarm wage employment did not engage in any nonfarm wage employment during this period. A much higher share of respondents from landed households did not work this year as compared to respondents from landless households – 70 percent and 19 percent, respectively. The gap in the total share of respondents engaged in non-farm wage employment this year as compared to normal years was reduced in June and July compared to the situation in the February to May period, but has not closed entirely.

Over 40 percent of nonfarm businesses continued to report facing adverse effects from the COVID-19 crisis in June and July, which consists of a relatively small reduction from the 59 percent of nonfarm businesses that reported having been affected between February and May 2020. Again, no difference was observed between woman- and man-led nonfarm businesses. A quarter of these businesses reported having no work at all, compared to half of these businesses in the previous period. A third reported facing less work than usual. This, too, points at sustained negative impacts of the pandemic on non-farm businesses and employment in rural settings.

### Effects of COVID-19 on income loss and coping mechanisms

Responses to questions regarding changes in household income and coping mechanisms show continued impacts of the pandemic on rural households in June and July. Similar to the previous period, 57 percent of households experienced income loss during the crisis (Table 3). More landless households than landed households were affected by income loss (72 versus 52 percent). The main mechanisms used by households to cope with loss of income include using savings (70 percent), reducing food expenditure (59 percent), borrowing (35 percent), and selling assets (26 percent).

	Feb-May	<sup>,</sup> 2020, % c	of farmers		June-Jul	y 2020, %	of farmers
	All	Landed	Landless		All	Landed	Landless
Decreased total household income due to COVID-19 crisis	56	50	71	***	57	52	72 **
Used savings to deal with income reduction	78	77	79		70	70	70
Sold assets to cope with income reduction	35	32	38		26	22	34
Borrowed to cope with income reduction	41	37	47		35	35	34
Reduced food expenditures to cope with income reduction	55	52	62	*	59	57	64
Received and accepted transfer (cash or in-kind) from government related to COVID-19 crisis	36	23	63	***	85	84	88
Received and accepted transfer (cash or in-kind) from NGO or private individuals related to COVID-19 crisis	8	7	9		2	2	3
Number of observations	606	523	83		543	479	64

### Table 3. Households continue to experience decreased total household income in June and July, especially landless households

Source: IFPRI/MSR telephone survey (June and August 2020). Asterisks show statistically significant differences in proportions of surveyed households reporting between 'Landed' and 'Landless' sub-samples; \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Government assistance to mitigate the negative impact of the COVID-19 crisis intensified in June and July, with 85 percent of households in the study area having received a cash or in-kind transfer, and another 8 percent being offered a transfer but deciding to forego accepting the transfer. This represents a steep increase compared to the 36 percent of households who received a transfer from the government between February and May 2020. In nearly all cases (98 percent), the transfer was in the form of income assistance, though 25 percent of households receiving income assistance also received food assistance. A much smaller share (2 percent) reported receiving transfers from an NGO or from private individuals in June or July 2020, mainly in the form of food assistance (77 percent) rather than income assistance (23 percent). There was no significant difference in the likelihood of receiving transfers between landed and landless households.

### Effects of COVID-19 on nutrition

In both time periods, respondents mentioned reducing the frequency and quantity of meat and fish consumed compared to normal times, whereas they reported increasing vegetable consumption (Table 4). However, we see signs of recovery with fewer households reporting lower fish or meat consumption in June and July as compared to the February to May period. Nearly a quarter of all households ate meat less often or in smaller quantities than usual. The main reason for consuming less meat was lower income. Other reasons reported included higher prices and fear of contracting COVID-19 when purchasing or eating meat. Only a few respondents mentioned a decrease in the availability of meat in June and July. For the February to May period, 13 percent of respondents noted low meat availability as among the reasons for their lower consumption levels.

### Table 4. Consumption of animal-sourced foods has improved since Feb-May but many households still cite problems with affordability

	Feb-May 2020, % of farmers	June-July 2020, % of farmers
Meat – did you eat it less often than normal?	39	24
Did you eat a smaller quantity of meat?	37	24
[For those that reported doing so] Why did you eat a smaller quantity of meat or eat meat with less frequency?		
Reduced income	78	83
Not available	13	2
Higher price	16	19
Afraid of COVID	12	10
Other	11	12
Fish – did you eat it less often than normal?	29	18
Did you eat a smaller quantity of fish?	26	17
[For those that reported doing so] Why did you eat a smaller quantity of fish or eat fish with less frequency?		
Reduced income	67	65
Not available	12	14
Higher price	13	12
Afraid of COVID	10	7
Other	26	15
Vegetables – did you eat them less often than normal?	2	2
Orange vegetables – did you eat them less often than normal?	4	0
Leafy green vegetables – did you eat them less often than normal?	33	25
Other vegetables – did you eat them less often than normal?	14	9
Diet diversity score for women (MDD-W)	6.4	6.4
Number of observations	606	543

Source: IFPRI/MSR telephone survey (June and August 2020).

Eighteen percent of households also ate fish less frequently and in smaller quantities than usual, which is again substantially lower than the 29 percent of households reporting this for the period from February to May. Similar to meat, this reduced fish consumption was due to lower income (65 percent), as well as higher prices or fear of contracting the COVID-19 virus. Respondents continue to report lower availability of fish for purchase (14 percent) in June and July, as was the case for the February to May period.

In contrast, respondents were harvesting and utilizing more vegetables available in their neighborhood, resulting in higher than usual vegetable consumption, though to a smaller extent in June and July compared to February to May. Overall, the overall dietary diversity score for the sample households continued to be relatively high (6.4) and significantly higher than the dietary diversity in our baseline survey of January 2020 (4.9). However, while we can confidently compare the dietary diversity scores from round 1 and round 2 of the telephone survey, some caution on interpreting our results as an improvement in dietary diversity compared to the baseline survey is warranted given the change in survey methods from face-to-face to telephone interviewing.

### **Recommended actions**

The persistent effects of the COVID-19 crisis on the incomes of rural households are alarming. It remains critical that government and its development partners not only continue to support households during the aftermath of the crisis but also continue to seek ways to support livelihoods when the immediate disruptions of COVID-19 mitigation measures subside. Supporting rural non-farm businesses and employment will be key to a faster economic recovery.

During the COVID-19 crisis, households depended more on informal sources for borrowing, which may offer greater flexibility but, in some cases, also less beneficial conditions and interest rates. Government should continue building on the momentum generated by the comprehensive COVID-19 Economic Recovery Plan, support official and safe access to loans, and stay vigilant to protect households from harmful loan arrangements.

The Government has successfully reached with livelihoods support a large share of the population, including vulnerable households, such as landless households. Moving forward, options for targeting transfers particularly to female household members, women producers, and women entrepreneurs should be explored. If women are not explicitly targeted for interventions and, rather, are assumed to be reached, they are often missed. The past Maternal and Child Cash Transfer program in Myanmar has demonstrated that transferring money to women is a successful approach to increasing the share of the household budget that is under women's control.<sup>4</sup> Putting money in women's hands is also strongly recommended as a best practice in many countries as it has been shown to generate a positive impact on women's empowerment, which is often associated with positive outcomes, such as improved child nutrition, higher educational attainment, and increased household welfare.<sup>5,6</sup>

<sup>&</sup>lt;sup>4</sup> Maffioli, E.M., E. Field, T.N. Zaw, F. Esu, and A. Fertig. 2019. "LEGACY Program Randomized Controlled Trial Endline Report." Save the Children UK and IPA (Innovations for Poverty Action).

<sup>&</sup>lt;sup>5</sup> Doss, C. 2013. "Intrahousehold Bargaining and Resource Allocation in Developing Countries." *World Bank Research Observer*, 28 (1): 52-78.

<sup>&</sup>lt;sup>6</sup> Hidrobo, M., Kumar, N., Palermo, T., Peterman, A., and Roy, S. 2020. *Gender-Sensitive Social Protection. A Critical Component of the COVID-19 Response in Low- and Middle-Income Countries.* IFPRI Issue Brief. Washington, DC: International Food Policy Research Institute.

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