Monitoring the Impact of COVID-19 in Myanmar

Mechanization Service Providers – May 2020 survey round

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Key findings

- COVID-19 related challenges can aggravate the business environment for mechanization service providers (MSP) in the main 2020 cropping season. MSPs are already facing lower effective demand early in the season due to weather conditions.
- Significant numbers of MSPs, particularly for tractors or combine-harvester services in the Delta and Dry Zone, have faced movement restrictions or suspension of their businesses due to restrictions related to COVID-19.
- Due to now higher costs of equipment, imported spare parts, worker shortages, and delays by farmers in making payments for services, many MSPs are facing difficulties in repaying the loans they obtained to purchase their machines.
- However, the extent and nature of these challenges varies across regions and states.

Recommended actions

- Adjust the repayment terms on loans for machines and equipment owned by MSPs. Consider offering temporary loans for general MSP business expenses.
- Institute temporary waivers on taxes and customs duties, including those on machines and imported spare parts.
- Encourage regional/state governments to grant MSPs exemptions to the COVID-19 related controls that restrict their providing farmers with mechanization services.
- Continue general support to farmers to enhance their ability to pay for mechanization services, including improving their access to farm loans.

Background

Agricultural mechanization service providers (MSP) are crucial to enabling smallholder farmers to undertake a range of power-intensive farm and post-harvest operations in a timely manner. These operations are important for food production and farm income. MSPs are capital-intensive operations. The economic viability of these businesses is highly sensitive to capacity utilization, which generates the cash flow needed to repay equipment loans; to prices of imported capital goods,

including machines, equipment, and fuels; and to the availability of machine operators, among others. Hence, the operations of MSPs are sensitive to restrictions on mobility and trade.

The COVID-19 pandemic in Myanmar, the restrictions imposed as policy responses to control the spread of the virus, and the associated market disruptions affect the operations of MSPs across the country. However, the specific impacts MSPs experience depends on factors specific to different regions and states. Measures to support MSPs and to ensure farmer access to their services should be guided by an understanding of the situation on the ground.

Based on qualitative findings from a rapid phone survey of MSPs, this policy note sheds light on the following questions:

- To what extent have COVID-19-related regulations restricted MSP activities?
- How has farmer demand for mechanization services been affected?
- How has the supply of services been affected? What changes in prices of equipment, repair services, technical labor costs, and fuels have resulted?
- What are the key financial and other challenges MSP face under the COVID-19 crisis? What coping mechanisms are they adopting?
- What is the expected effect of the crisis on MSP business revenues?
- What policies and interventions would enable MSPs to meet farmer demand and remain in operation? Does the support MSPs require vary across types of services and locations?

Phone interviews were conducted between 22 and 26 May 2020 with a total of 424 MSPs – 333 tractor service providers, 67 combine-harvester, 14 thresher, 8 reaper, and 2 other types of MSPs. The MSPs were identified from earlier studies conducted by IFPRI and Michigan State University (Belton et al. 2018; Win et al. 2020) and using snowballing methods through which interviewed MSPs suggest other MSPs to be interviewed. As shown in Figure 1, the MSPs that participated in this study primarily come from communities within the Delta and Dry Zones.¹

Figure 1. Locations in Myanmar of mechanization service providers interviewed

Source: Mechanization Service Provider Phone Survey, May 2020

¹ The sample of MSPs is not representative at national or at state/region levels. However, we discuss heterogeneity, where appropriate, to highlight the potential importance of machine-specific or region/state-specific support measures. We highlight such heterogeneity where, given the sample sizes, differences across MSPs are statistically significant.

Characteristics of mechanization service providers

A majority of the interviewed MSPs are small to medium scale, employing three or fewer workers (Figure 2). Tractor service providers generally earn between 10 and 100 lakh MMK a year, while combine-harvester provider earn 50 to 500 lakh MMK.² These MSPs typically have been operating their respective business for 3 or 4 years.

Figure 2. Employees and annual revenues of mechanization service providers, by type of service provided

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

Reported effects of COVID-19 on mechanization service providers

Restrictions on business

One COVID-19 related restriction significantly affecting MSP operations is that on physical movement across space. As of late-May 2020, about 85 percent of MSPs were allowed to operate only within the village tract in which their business was located (Figure 3). The share of MSPs restricted within the village tract was higher in Magway than in other regions. A fraction of tractor and combine-harvester SPs had also been banned from operations due to COVID-19 at some point. In Sagaing, a relatively higher share of tractor SPs had faced such bans than in other regions.

Figure 3. Mechanization service providers that experienced COVID-19 related restrictions on their business operations

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

² MMK = Myanmar Khat. In May 2020, 1.00 USD = 1,385 MMK. Lakh is a unit commonly used in Myanmar and south Asia that is equivalent to 100,000. 1.0 lakh MMK ≈ 70 USD in May 2020.

Between 10 and 20 percent of MSPs indicated they had been granted some exemptions from these restrictions. Obtaining such exemptions typically required village authorities providing them with letters of recommendations or certificates. However, these exceptions were conditional – for example, MSPs granted an exception were banned from conducting any night-time operations or all personnel were required to wear protective equipment, like masks.

These restrictions on movement did not significantly restrict the operations of MSPs. Especially tractor SPs normally operate exclusively within the locality in which they are based. This is due to other factors than COVID-19, such as the high costs of transporting their machines out of the locality (Takeshima et al. 2015) and significant competition. Combine-harvester SPs, in contrast, tend to operate more regionally (Zhang et al. 2017). Even with these inherent restrictions on the mobility of MSPs, between 40 and 53 percent of combine-harvester SPs and between 14 and 22 percent of tractor SPs felt their ability to move with their equipment was constrained by the COVID-19 related restrictions (Figure 4).

Figure 4. Mechanization service providers that felt that COVID-19 related restrictions on their area of operation constrained their business, by area scope of restrictions

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

Mechanization services provision in May 2020 compared to May 2019

Most tractor SPs consider that the timing of land preparation in 2020 was later or about the same as in 2019 (Figure 5). In Sagaing, a greater share of tractor SPs indicated that land preparation was delayed in 2020. Most respondents who felt land preparation was late in 2020 attributed the delays to drought or a delay in the onset of the rains. However, several (about 15 percent) attributed the delays directly to COVID-19.

Figure 5. Tractor service providers assessment of timeliness of land preparation for 2020 main cropping season compared to 2019, by region or state

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

Most tractor and combine-harvester SPs accept late payments from farmers – these delayed payments serve as a form of credit for farmers (Figure 6). In May 2020, both tractor SPs and combine-harvester SPs reported facing more requests from farmers to allow them to make late

payments. This pattern is common across all regions and states. While it is unclear how much these late payment requests are due to COVID-19, the potential linkage should be investigated further.

Figure 6. Tractor and combine-harvester service providers accepting and being requested for late payments from farmers

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

Due to a combination of weather and COVID-19, half of the tractor SPs experienced reduced demand for their services compared to the same month in 2019 (Figure 7). The reduction in demand for primary tillage was particularly seen in Sagaing region, suggesting regional heterogeneity.

Figure 7. Service providers that reported lower demand for their services in 2020 relative to 2019, by type of operation and by region or state for primary tillage

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

To cope with lower demand, some tractor SPs provided more land preparation services on farms with poor field conditions. These are farms with insufficiently cleaned fields containing debris or crop residues from the previous season or with soils unsuited for preparation using the machines of the SP. Others extended their areas of operation to serve farmers at further locations, especially if they were allowed to travel outside the townships. Some simply reduced their operations.

Supply-side factors

MSPs are also facing generally higher costs of operation and lower availability of equipment, particularly for machines and imported spare parts. Costs of repair services and wages for mechanics or operators have not increased as much (Figure 8). Higher prices and unavailability generally correlate. These patterns are commonly observed for both tractor and combine-harvester SPs and are seen across regions and states, although slightly more so in Ayeyarwady. Fuel is the only component of the business costs of MSP that is universally cheaper in 2020 than in 2019.

Figure 8. Changes in prices compared to one-year ago reported by mechanization service providers, by cost category

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

Examining the availability of workers for MSPs, about 30 percent of tractor and combine-harvester SPs reported facing worker shortages (Figure 9). Those MSPs that reported experiencing more COVID-19 related restrictions (Figure 4) also expressed experiencing worker shortage. Among tractor SPs, a larger share of those based in Ayeyarwady, Bago, and Magway, respectively, reported facing problems in hiring worker than was the case for those in Sagaing. Both trained (mechanics and machine operators) and unskilled casual labor were reported as being in shorter supply than normal. To cope with these labor challenges, many SPs reported charging farmers more for their services or reduce service provision. Several owners of MSPs facing worker shortages reported coping with the problem by working more by themselves or by offering higher wages.

Figure 9. Tractor and combine-harvester service providers reporting worker shortages attributed to COVID-19 restrictions

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

Financial effects on business

Seventy percent or more tractor and combine-harvester SPs reported experiencing financial challenges due to the impacts of COVID-19 and the regulations established to control the spread of the virus. These restrictions have resulted in higher costs, lower demand, and later payment for mechanization services from farmers (Figure 10). Many of the MSPs reported that they are facing challenges in repaying the loans that they obtained to purchase their equipment. Meanwhile, paying wages for their workers and managing other expenses is also proving difficult for many, implying the need for greater operating capital for MSPs and, given delays in payments from farmers, an adjustment in the repayment terms for the loans for which the MSPs are responsible. Many MSPs facing financial challenges reported selling assets, diverting other income to their businesses, and obtaining loans from private individuals. Also, 20 percent reported having received loans from the government.

Figure 10. Mechanization service providers reporting financial challenges due to COVID-19 related restrictions

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

A majority of MSPs expect their revenues to decrease in 2020 compared to 2019 (Figure 11). Several respondents to the MSP survey stated that they expect the current business cost structure to be maintained for some time. Consequently, the higher prices of equipment, spare parts, or repair services will tend to offset the relatively lower cost of fuel, so reduced revenues will translate into reduced profits. This applies regardless of the type of mechanization service provided.

Figure 11. Mechanization service providers expectations of revenues in 2020 relative to 2019

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

Among tractor SPs, there are some indications of heterogeneity in prospects across region and states. While some are pessimistic, in part due to weather effects causing late planting, and not only due to the impact of COVID-19, it is worth monitoring how these MSPs fare over the entire main 2020 cropping season.

Policy Recommendations

MSP survey respondents were also asked their opinions on what policies would be most beneficial for their businesses to better enable them to continue during the COVID-19 crisis. The policies that they were asked to evaluate ranged from financial support through various mechanisms, temporary lifting regulations on using agricultural machinery for nonfarm use, reducing restrictions on movement across regions, and allowing the full operations of machinery and parts shops, among others (Figure 12).

Their opinions, as well as observed conditions on the ground, suggest the following short-term policy recommendations, many of which can be incorporated in the COVID-19 Economic Relief Plan (CERP) formulated by the Government of Myanmar:

- Support adjustments on loan-repayment terms on machines and equipment owed by SPs, as well as temporary government loans for general business expenses. Such measures can be incorporated in CERP Actions 2.1.1 and 2.1.6 on financial support for small and medium enterprises. Such support should be extended to both formal and informal MSPs.

Figure 12. Mechanization service providers perceptions on effective policies to reduce the adverse impact of COVID-19 on their businesses, by type of business

Source: Mechanization Service Provider (MSP) Phone Survey, May 2020.

- Waivers during the peak farming season on taxes and customs duties, including those on agricultural machinery and equipment and on imported spare parts. Such measures can fall under CERP 2.1.3, which proposes deferred tax payments and increased tax waivers.
- Encourage regional governments to grant MSPs exemptions to many of the COVID-19 related restrictions. The proportion of MSPs experiencing restrictions was observed to vary significantly across regions, despite our small sample of MSPs. Under CERP, the restrictions on MSPs should be applied appropriately and uniformly.
- Continue general financial support to farmers to enable them to pay for mechanization services, including through improved access to farm loans. Such efforts would fall under CERP Action 2.1.7 on support to farmers. Improving farmers' liquidity at planting season also enhances their ability to make more prompt payments for services. This will mitigate some of the financial challenges many MSPs are now facing.

At the same time, continuing to monitor the demand for mechanization services is important. Demand for land preparation in May 2020 was relatively lower than May 2019 partly due to the delay in the onset of the rains. Once the rains begin, to better understand the impact of COVID-19 on Myanmar's agriculture sector, it will be necessary to determine whether tractor SPs can meet the expected increased demand for their services. In Ayeyarwady, Bago, and Magway, where delayed rains did not reduce demand as much as in Sagaing, MSPs highlighted the challenges they are facing in finding workers (Figure 9). This also may adversely affect supply of mechanization services.

Assessments also are needed of whether demand for agricultural mechanization services is adversely affected by non-weather factors. These include increased manual labor availability in rural areas due to restrictions on population movements and increased financial constraints for farmers, as evidenced by more farmers asking MSPs to allow them to make late payments this year for the services MSPs provided. It is also important to continue to monitor the broader market conditions affecting farmer demand for mechanization services, including crop prices and their access to agricultural loans. Similarly, market factors will also affect the ability of MSPs to provide services to farmers and to service the loans that they obtained to purchase their equipment.

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