

Monitoring the Impact of COVID-19 in Myanmar

Mechanization Service Providers – November 2020 survey round

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Mechanization service providers (MSP) in Myanmar were originally surveyed by telephone over three rounds in May, June, and July 2020 to determine how their businesses were being affected by COVID-19 related restrictions. Most of the MSPs interviewed were engaged in providing farmers with tractor-related services. The results of those surveys were published in Myanmar Strategy Support Program Policy Notes [07](#), [12](#), and [17](#), respectively. To trace the continuing impact of the COVID-19 pandemic on their economic activities, a fourth round of the survey of MSPs was done in early-November 2020, administered mostly to those engaged in harvesting activities. This note reports on the results of the fourth survey, as well as some trends seen between the earlier survey rounds and this last one.

Key findings

- Combine harvester and tractor service providers engaged in the harvesting and the transport of harvests continue to face restrictions, particularly in the movement of their machines. However, MSPs generally managed to provide timely services to farmers for harvesting and charged similar hiring rates as in 2019.
- MSPs perceive movement restrictions to be increasingly common. They principally attributing these restrictions to COVID-related regulations.
- Financial challenges continue to affect farmers, many of whom approach MSPs for informal financial support.
- The expectations of MSPs on their business prospects continue to remain dire, although there have been some improvements since earlier survey rounds.

Recommended actions

- Support measures that allow for the sufficient movement of MSPs while containing COVID-19 spread. Continue granting MSPs exemptions to COVID-19 related controls that limit MSPs' abilities to provide farmers with the services they require.
- Adjust loan repayment terms for machines and other equipment owned by MSPs. Consider offering temporary loans, waivers, or reductions of MSP business expenses.
- For tractor service providers, facilitate greater non-farm use of their tractors, as this will mitigate some of the revenue losses that they are experiencing in the farming sector.

Background

The operations of agricultural mechanization service providers (MSP) continue to be affected by market disruptions associated with the COVID-19 pandemic in Myanmar and the restrictions imposed as policy responses to control the spread of the virus. As 2020 progresses and enters the main harvesting season, the pandemic situation in Myanmar has worsened considerably, policy responses have evolved, and MSPs continue to be adversely impacted. Measures to support MSPs and to ensure farmers' access to MSP services should continue to be guided by an understanding of the situation on the ground.

MSPs in Myanmar were originally surveyed by telephone over three rounds in May, June, and July 2020 to determine how their businesses were being affected by COVID-19 related restrictions. To trace the continuing impact of the COVID-19 pandemic on their economic activities, a fourth round of the survey was done in early-November 2020. This policy note sheds light on the current situation and how it has changed since the May, June, and July¹ rounds of the MSP survey through qualitative findings regarding the following questions:

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

The fourth round of phone interviews with MSPs was done in early November 2020, approximately four months after the third survey round. Compared with prior survey rounds, most MSP activities in the early November survey had shifted to harvesting, and the composition of MSPs interviewed changed significantly, though a proportion of MSPs interviewed are panel-respondents. In the fourth-round, a total of 256 MSPs were interviewed: 196 combine harvester service providers (CHSP), including 138 from Ayeyarwady region and 58 from the rest of the country, 56 tractor service providers (TSP), and four other types of MSP. Of these, 29 CHSPs and 49 TSPs are in a panel sample of MSPs who had responded with information about the same machines in at least one of the first three rounds of the survey (henceforth, “summer” rounds) (**Error! Reference source not found.**).

This policy note focuses primarily on the 196 CHSPs and 56 TSPs in round 4, and 78 MSPs that are members of the

Table 1. Agricultural mechanization service providers from survey round 4

Sample	Combine harvester MSPs	Tractor MSPs (transporting harvests)	Total
Round 4 (November)	196 [Ayeyarwady: 138; elsewhere: 58]	56	252
Panel sample	29	49	78

Source: Mechanization Service Provider Phone Surveys of May- July, November 2020.

*Panel Sample includes service providers who were interviewed in both round 4 and in at least one of rounds 1 to 3, and reported on the same type of machine.

¹ Takeshima, H., M.T. Win, and I. Masias. 2020. [Monitoring the Impact of COVID-19 in Myanmar: Mechanization Service Providers – May 2020 survey round](#). IFPRI Myanmar SSP Policy Note 07. Yangon: International Food Policy Research Institute ([blog](#))

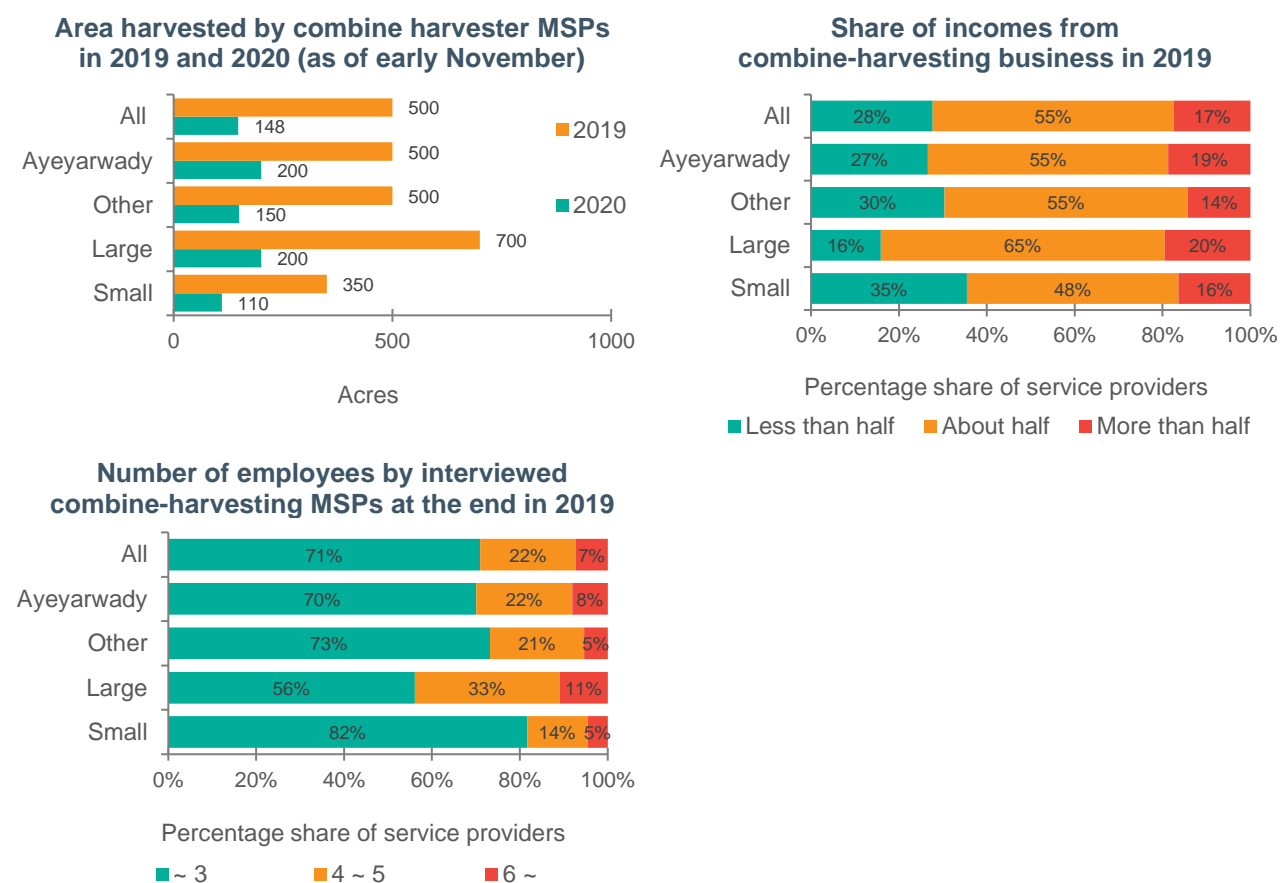
Takeshima, H., M.T. Win, and I. Masias. 2020. [Monitoring the impact of COVID-19 in Myanmar: Mechanization service providers – June 2020 survey round](#). IFPRI Myanmar SSP Policy Note 12. Yangon: International Food Policy Research Institute.

Takeshima, H., M.T. Win, and I. Masias. 2020. [Monitoring the impact of COVID-19 in Myanmar: Mechanization service providers - July 2020 survey round](#). Myanmar SSP Policy Note 17. Washington, DC: International Food Policy Research Institute.

panel sample where relevant. While the panel sample members are a minority of both the summer survey samples and the round 4 sample, their information can shed some light on changes in their business between the summer rounds and round 4.² For basic characteristics of the full samples for the three earlier survey rounds, refer to the policy notes on each.

Figure 1 summarizes the general characteristics of CHSPs interviewed in round 4. Typically, they harvested about 500 acres in 2019. CHSPs harvesting more than 500 acres (“large” hereafter) harvested around 700 acres, while those harvesting less than or equal to 500 acres (“small” hereafter) harvested around 350 acres in 2019. In 2020, as of early November, CHSPs harvested about 150 acres, which is between 30 and 40 percent of what they harvested in 2019. The information for CHSP in this policy note should therefore be interpreted as provisional and may change as the harvesting season progresses. Supplementary probing, however, suggested that the total harvested areas at the end of 2020 season may be smaller than in 2019, partly due to poor weather conditions and pest outbreaks, but also to COVID-19 related movement restrictions.

Figure 1. Characteristics of combine-harvester service providers interviewed in Round 4



*Large = harvesting more than 500 acres in 2019; Small = harvesting not more than 500 acres in 2019

For most CHSPs, the combine harvester business accounts for half or more of their total incomes. Typically, these businesses employ less than 3 workers, although about half of large CHSPs employed 4 workers or more in 2019. These characteristics are generally similar among CHSPs in both Ayeyarwady region and elsewhere.

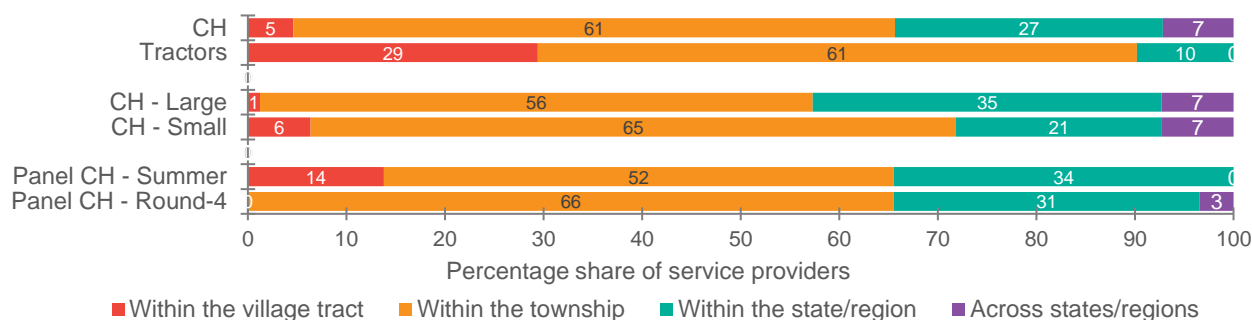
² The sample of MSPs is not representative at national or at state/region levels. However, we discuss heterogeneity, where appropriate, to highlight the potential importance of machine-specific or region/state-specific support measures. We highlight such heterogeneity where, given the sample sizes, differences across MSPs are statistically significant.

Reported effects of COVID-19 on mechanization service providers

Continued easing of restrictions on business since May and June 2020

A majority of CHSPs and TSPs remain restricted to operating only within their village tracts or townships. Similar to the summer surveys, these restrictions on movement across different geographies result partly from efforts to contain the spread of COVID-19 (Figure 2). While the movement restrictions are particularly rigid for TSPs, about two-thirds of CHSPs are also restricted to operating only within their townships. Since CHSPs tend to travel over wider geographical areas than TSPs for to provide harvesting services, the effects on their businesses of these movement restrictions may be equally important for CHSPs. Among the panel CHSPs, conditions have largely remained unchanged since the summer.

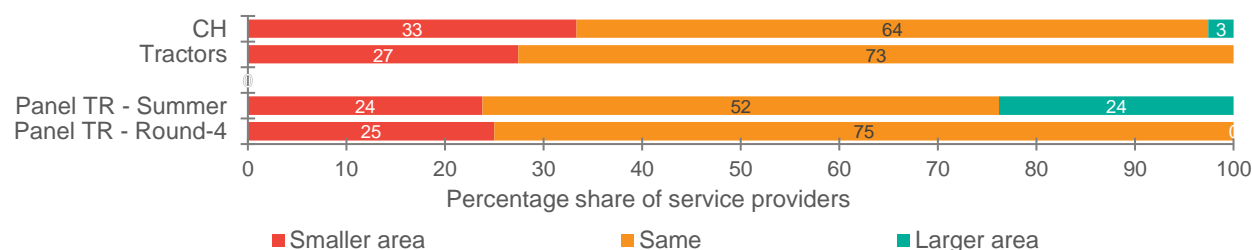
Figure 2. Service providers that experienced COVID-19 related restrictions on areas of operation, by type of machines and by season



Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. CH = combine harvester MSPs. In this and all the subsequent figures, "Summer" refers to the latest of the rounds 1 – 3 in which each panel MSPs provided responses.

Similar to what was seen in the summer survey rounds, COVID-19 related geographic restrictions have limited CHSPs and TSPs to areas smaller than was their normal area of operation in 2019 (Figure 3). In round 4 of the survey, 33 and 27 percent of CHSPs and TSPs, respectively, reported this. Moreover, for TSPs, the geographic restrictions may now be more binding than was the case in summer. While about 24 percent of TSPs in the panel sample reported that the summer geographic restrictions allowed them to operate in larger areas than their normal areas of operations in 2019, none of them reported this being still the case in round 4 of the survey (Figure 3).

Figure 3. COVID-19 related restrictions on area of operations relative to service providers actual areas of operations in 2019 (same season)

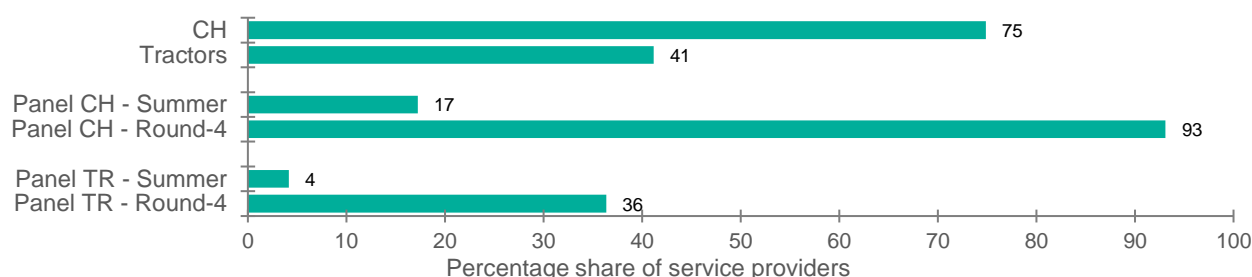


Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. TR = tractor; CH = combine harvester MSPs

Regardless of where they are allowed to operate, a significant share of CHSPs and TSPs perceive their travels with machines to be restricted due to quarantine and other COVID-19 related geographic restrictions (Figure 4). Moreover, these perceptions appear to be growing among MSPs. Among panel sample CHSPs and TSPs, while 17 and 4 percent, respectively expressed feeling the effects of traveling restrictions with machines in the summer survey rounds, 93 and 36 percent of them are

feeling these effects now. While the true effects of travel restrictions on actual service provision are not yet clear, these perceptions need to be continuously monitored.

Figure 4. Service providers who perceive their travel with machines are restricted, by machine type and samples

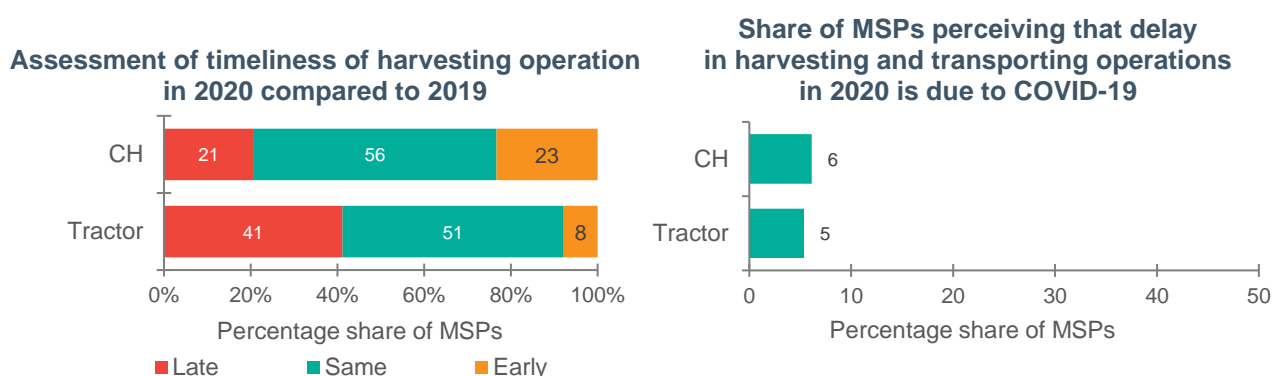


Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. TR = tractor; CH = combine harvester MSPs

Mechanization services provision compared to the same month in 2019

Generally, CHSPs managed to provide harvesting services with similar timeliness compared to the same harvesting season in 2019 (Figure 5, left chart). However, this may reflect CHSP efforts to increase revenue as much as possible despite movement restrictions in order to navigate their business through the uncertain economic outlook under COVID-19. On the other hand, a relatively higher share of TSPs reported delays in their harvest transportation services, as compared with 2019. While the timing of farming in 2020 has also been significantly affected by poor weather conditions, a small fraction of CHSPs and TSPs perceive that delays in their harvesting season activities in 2020 are due to COVID-19. The potential impacts of such production delays should be continuously monitored.

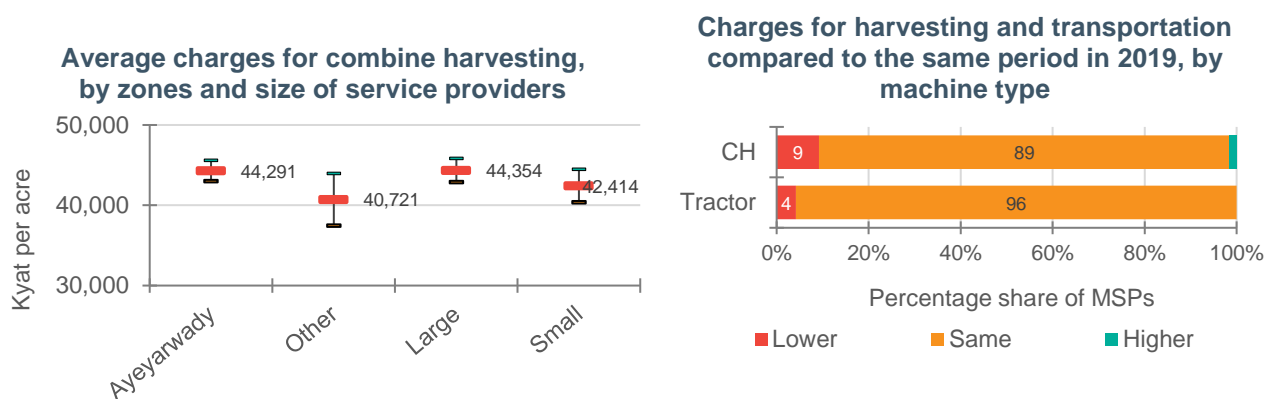
Figure 5. Round-4 service providers assessment of timeliness of harvesting and transporting operations for 2020 main cropping season compared to 2019



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

Service charges for combine harvesting are generally about 44,000 Kyat per acre in Ayeyarwady region for large CHSPs, which are slightly higher than the 40,000 Kyat they charge in other regions or the 42,000 Kyat charged by small CHSPs (Figure 6, left chart). Thus far, the service charges received by CHSPs and TSPs for harvesting and transporting services are largely similar to those obtained in 2019 (Figure 6, right chart). These contrast somewhat to patterns reported in the summer survey rounds, in which a relatively higher share of TSPs indicated lower charges for land preparation in 2020 compared with 2019.

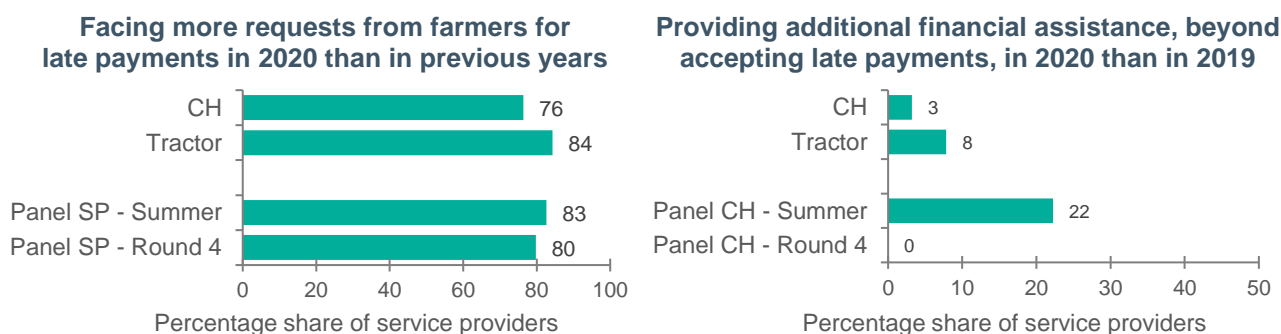
Figure 6. Service charges in 2020 and differences from 2019



Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. Black lines (left) show 95% confidence intervals for charges for primary tillage. CH = combine harvester MSPs

As in the summer survey rounds, MSPs continue to face reduced farmer capacity to make payments, which could be related to the COVID-19 crisis (Figure 7). A significant and persistently large majority of CHSPs and TSPs report more requests from farmers to allow for late payments. A potentially more concerning trends is that, despite such challenges, no panel CHSPs reported in November providing financial assistance to farmers, whereas about 22 percent of them reported doing so in the summer. While a more careful investigation is needed, these patterns may suggest that MSPs are facing increasing financial difficulties due to prolonged COVID-19 related restrictions.

Figure 7. Mechanization service providers reporting receiving late payments requests from farmers and providing additional financial assistance

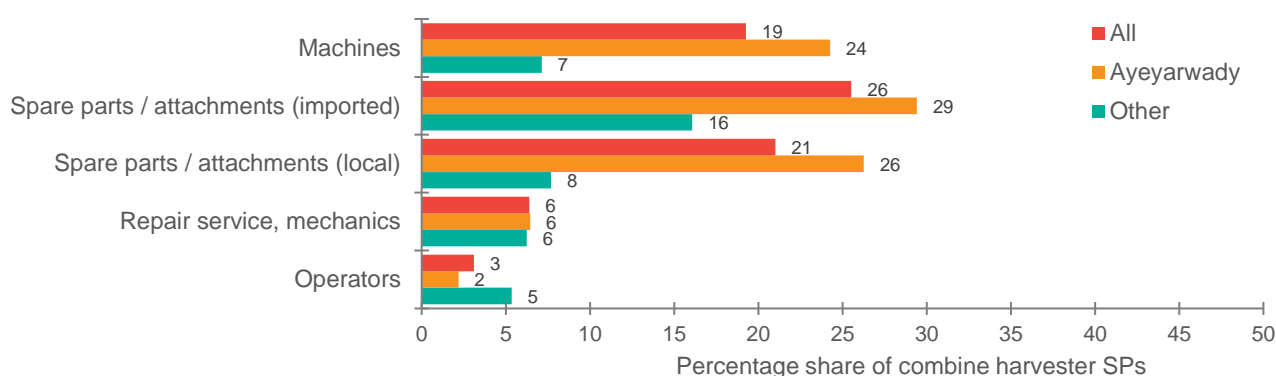


Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. CH = combine harvester MSPs

Supply-side factors

On the supply-side, a significant share of CHSPs experienced reduced availability of machines, spare parts, and both imported and locally manufactured attachments, as well as repair services, mechanics, and operators, compared to the same period in 2019 (Figure 8). Reduced availability is particularly common for machines, spare parts, and attachments, while less so for more labor-intensive services, like repair services, mechanics, or operators. These patterns are similar to the challenges that TSPs experienced in the summer across most of Myanmar. Reduced availability is particularly pronounced in Ayeyarwady region.

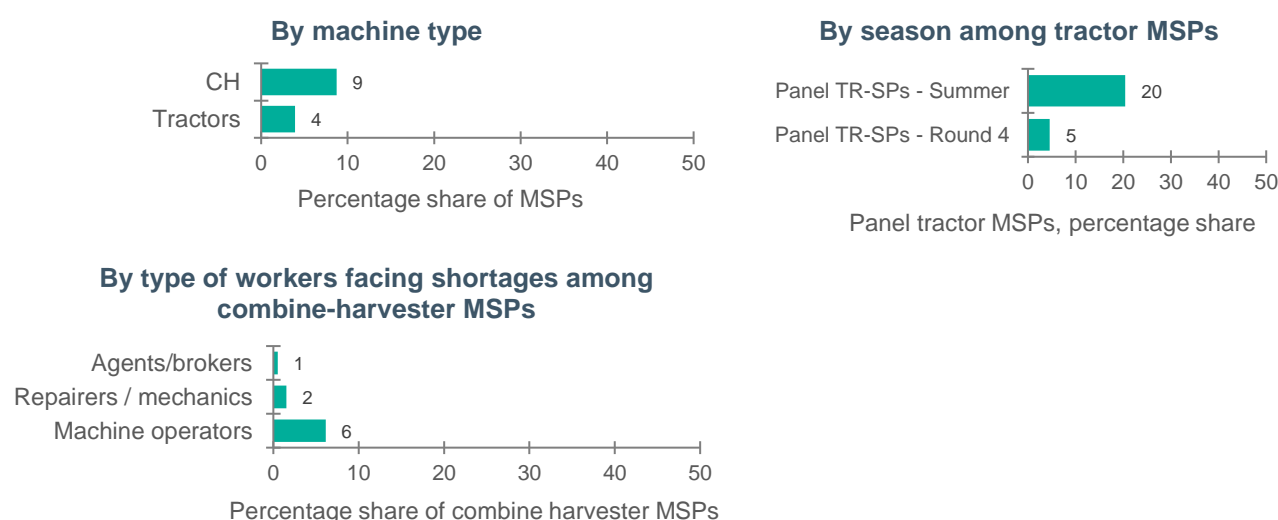
Figure 8. Share of combine harvester SPs reporting reduced availability of equipment, repair services, and operators compared to one-year earlier, by zones



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

Compared with machines, spare parts, and attachments, the shortage of skilled workers is thus far a relatively minor constraint. Among round 4 respondents, 9 percent of CHSPs and 4 percent of TSPs reported any shortages. The share of panel sample TSPs reporting shortages of skilled workers due to COVID-19 also decreased from 20 percent in the summer to 5 percent in round 4 (Figure 9, right chart). These patterns are generally similar between Ayeyarwady and elsewhere, as well as between large and small CHSPs. However, machine operators are particularly in short supply for CHSPs (Figure 9, left-bottom chart), which can have immediate effects on CHSP service provision capacity. Machine operator shortages for CHSPs should continue to be monitored.

Figure 9. Service providers reporting worker shortages attributed to COVID-19 restrictions

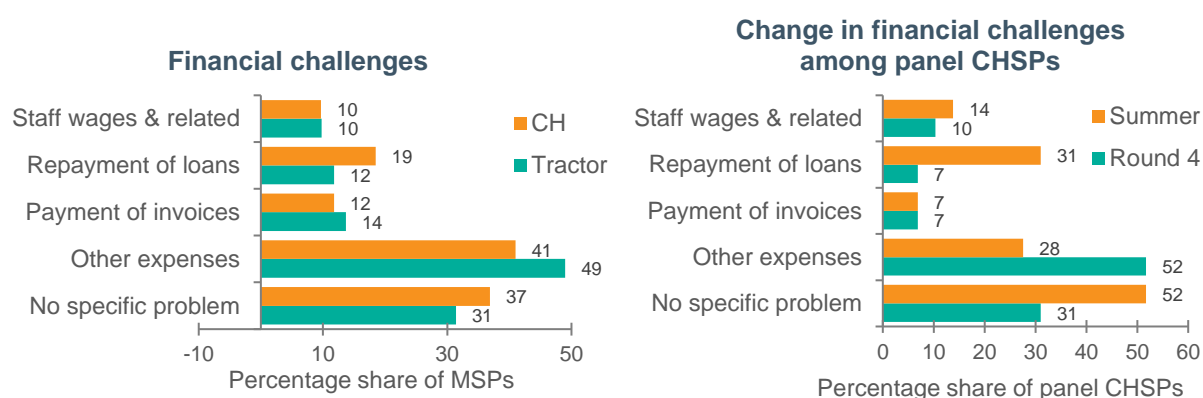


Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. CH = combine harvester; TR = tractor MSPs

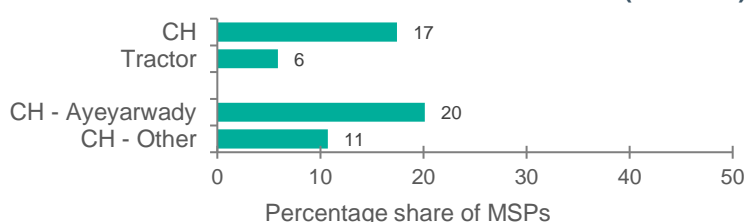
Financial effects on business

Approximately two-thirds of both CHSPs and TSPs, almost unchanged from summer, continue to experience financial challenges due to the impacts of COVID-19 and related regulations (Figure 10, top-left chart). As the peak operation season started during the round 4 survey, panel sample CHSPs are now less concerned about loan repayments for their equipment and are more concerned about other expenses, which may be associated with the operations of current service provision (top-right chart). On balance, the financial challenges seem to be becoming more serious, as the share of panel sample CHSPs who expressed no specific financial problems decreased from 52 percent in the summer to 31 percent in round 4.

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



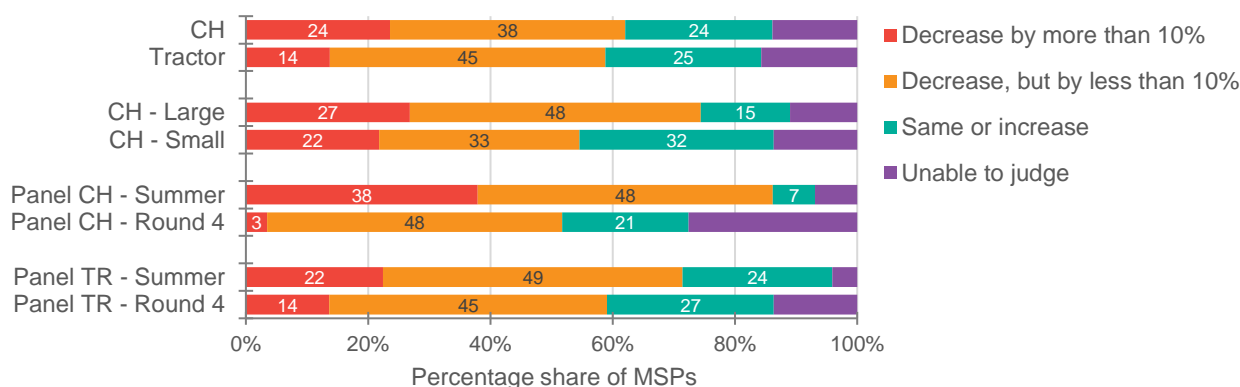
Service providers who know other MSPs whose machines have been foreclosed since COVID-19 outbreak (Round 4)



Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. CH = combine harvester

Foreclosures on equipment remain relevant concerns. In round 4, almost 17 percent of CHSPs (20 percent in Ayeyarwady region) reported knowing other CHSPs whose machines had been foreclosed since the beginning of the COVID-19 outbreak. To cope with these financial challenges, many CHSPs reported selling more assets, diverting other income to their businesses, and obtaining loans from private individuals.

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



Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. CH = combine harvester; TR = tractor.

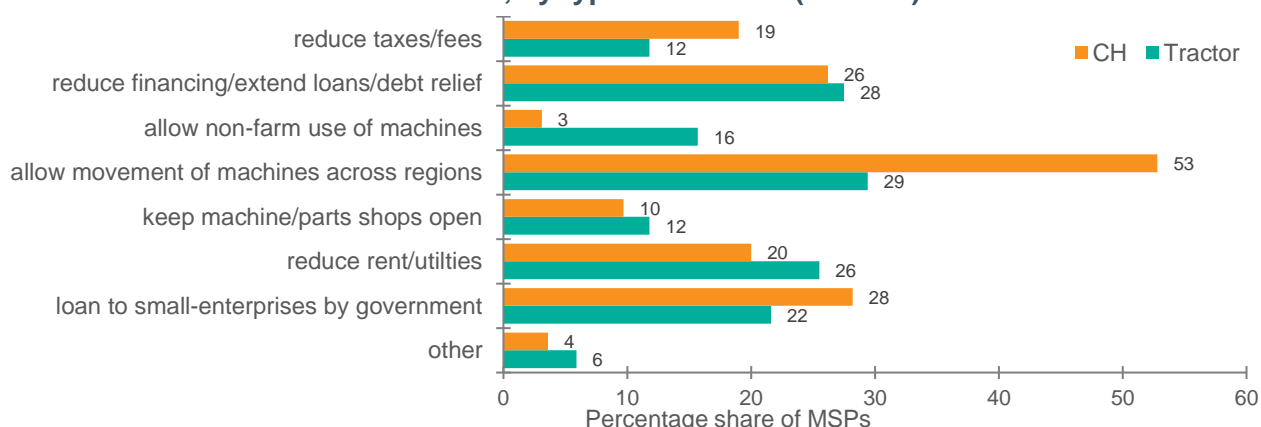
Overall, CHSPs and TSPs perceptions of their financial prospects in 2020 remain relatively pessimistic. More than half continue to expect their revenues to be lower than what they realized in 2019. Among CHSPs, a particularly large share (75 percent) of large CHSPs expressed such an outlook, compared to about 55 percent among small CHSPs (Figure 11). However, there are some signs of prospects improving slightly compared with the summer. For example, while in the summer survey rounds about 40 percent of panel sample CHSPs expected their revenues to decrease by more than 10 percent in 2020 compared to 2019, only 3 percent maintained this prospect in round 4. The rest modified their expectation from the summer survey rounds, judging now that revenue

losses might be smaller than expected. Similar patterns are also observed among panel sample TSPs. However, these patterns are only in relative terms and might partly reflect the extraordinary uncertainty felt about COVID-19 earlier in the year. As overall prospects are still negative, how the businesses of these agricultural mechanization service providers can recover over the rest of the harvesting season must continue to be monitored.

Policy recommendations

As in the summer survey rounds, respondents were asked for their opinions on what policies would be most beneficial to better enable them to continue with their businesses during the COVID-19 crisis (Figure 12). Among these policies, easing of movement restrictions continues to be an important option, especially for CHSPs who tend to serve larger geographical areas than TSPs. Financial support through various mechanisms (particularly loan-related) and rent and utility payment support also remain preferred options. Among TSPs, allowing broader non-farm use of machines, including transportation of other goods beyond harvested crops alone, are also relatively more preferred, which can provide additional revenues from tractors.

Figure 12. Service providers perceptions on effective policies to reduce the adverse impact of COVID-19 on their businesses, by type of machine (round 4)



Source: Mechanization Service Provider (MSP) Phone Survey, May-July, November 2020. CH = combine harvester MSPs

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

- As was suggested in the summer rounds of the survey, it remains important to support adjustments on loan-repayment terms for machines and equipment owed by MSPs, 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.
- Continue minimizing CHSP and TSP movement restrictions across regions. Also, continue reviewing and extending waivers, when necessary, on taxes and customs duties, including those on agricultural machinery, equipment, and imported spare parts. Such measures are likely to continue to fall under CERP 2.1.3 mechanisms, which proposes deferred tax payments and increased tax waivers.

Furthermore, it is potentially important to explore complementary support, such as skill training initiatives for mechanics or operators and sensitization for multifunctional use of machines. These may include temporary support for increased use of tractors for transportation of broader types of goods, which can provide further revenue earning prospects after the peak land preparation season.

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