IFPRI MYANMAR

STRATEGY SUPPORT PROGRAM RESEARCH NOTE 130 APRIL 2026

Combine Harvester Service Providers in Myanmar

Insights from the 2025 Monsoon Season

Ian Masias, May Thet Htar, Theingi Oo, and Hiroyuki Takeshima

This note presents results from a January–February 2026 phone survey of 325 combine harvester service provider (CHSPs), offering insights into the 2025 monsoon season.

Key Findings

- Acres harvested declined by 11 percent (7 percent in the Dry Zone, 11 percent in the Delta), with 61 percent of CHSPs reporting lower demand, associated with poor rice price incentives in the Delta and movement restrictions in the Dry Zone.
- Nominal service charges fell by a median of 6 percent, concentrated in the Delta where fuel costs declined, while Dry Zone charges remained flat reflecting limited fuel savings and a restricted operating environment.
- Most CHSPs (91 percent) extended credit to farmers without interest, and 74 percent provided more financial assistance than the previous year, highlighting their role as an important source of informal credit.
- Cash flow problems affected 26 percent of CHSPs, driven by declining revenues and rising costs that may be understated in real terms given Myanmar's persistently high inflation, with many coping by borrowing, selling assets, or drawing on other income.
- Emerging fuel supply disruptions linked to the Iran conflict pose a significant risk to the 2026 monsoon season, potentially limiting CHSP operations at a time when farmers may also face fertilizer shortages, threatening agricultural production.

Recommended Actions

- De-risk credit for mechanization services by expanding farmers' access to affordable formal credit or introducing partial guarantee schemes.
- Improve mobility and security for CHSP operations through greater transparency and reductions of checkpoints, fewer required permissions, and safer roads.
- Support training and retention of machine operators to address shortages driven by outmigration and insecurity.

LIFT Livelihoods and Food Security Fund

UKaid · European Union · Australian Aid · Canada · New Zealand · Norway

managed by UNOPS

Background

Combine harvester service providers (CHSPs) play a vital role in Myanmar's agrifood system, enabling smallholder farmers to harvest on time and reduce post-harvest losses. These businesses are capital intensive, relying on steady demand for their services to cover the high costs of machines, fuel, and labor. Their financial health is therefore closely tied to broader conditions in agriculture and the economy.

The 2025 monsoon harvesting season is unfolding amid multiple overlapping crises. Farmers face an environment shaped by persistent climate risks, the aftereffects of a recent earthquake, ongoing conflict, labor shortages, and uncertainty in global rice markets, all of which influence harvesting decisions. In this context, monitoring CHSPs offers a timely indication of how the harvest has proceeded, as demand for combine harvesting services reflects agricultural activity and farmer confidence at the end of the season. This research note draws on a survey of CHSPs to provide those insights while also examining their overall financial position.

This survey was conducted between January 30 and February 12, 2026, and asked 325 CHSPs to reflect on their experiences during the 2025 monsoon harvesting season. The analysis in this note presents findings separately for the Delta (279 CHSPs) and the Dry Zone (42 CHSPs), while the four respondents from the Hills are included only in the overall sample. This distribution reflects the geographic concentration of combine harvester adoption in Myanmar, which is heavily centered in the Delta (Belton et al., 2021). Although the sample is not statistically representative, it provides valuable insights into the conditions and challenges facing CHSPs. Table 1 shows the sample distribution by agro-ecological zone.

Table 1. Sample of CHSPs, by agro-ecological zone

Agro-ecological zone	CHSPs
Delta	**279**
- Bago	44
- Mon	1
- Yangon	13
- Ayeyawady	221
Dry Zone	**42**
- Sagaing	8
- Magway	21
- Mandalay	7
Hills	**4**
- Kayin	1
- Shan	3
Total	**325**

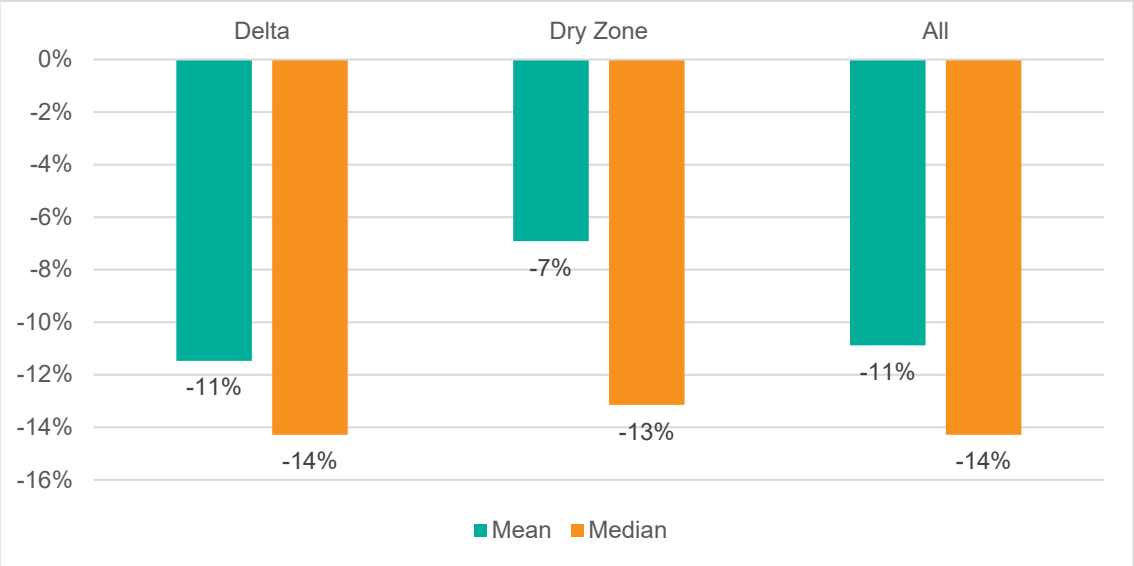
Sources: Combine Harvester Service Provider Survey (January 2026)

Demand for Harvesting Services

CHSPs harvested fewer acres in 2025 than in the previous monsoon season. On average, CHSPs harvested 11 percent fewer acres overall, with a similar contraction in the Delta but a more modest mean decline in the Dry Zone (−7 percent). The median decline was larger across all zones (−14

percent overall), suggesting that a minority of CHSPs maintained or increased their acreage while the majority experienced steeper reductions. This divergence between mean and median is particularly pronounced in the Dry Zone, where the uneven geographic spread of insecurity likely affected CHSPs differently depending on their location. Despite the reduction in acres harvested, the timing of operations was broadly normal, with 91 percent of CHSPs reporting hiring at the usual time.

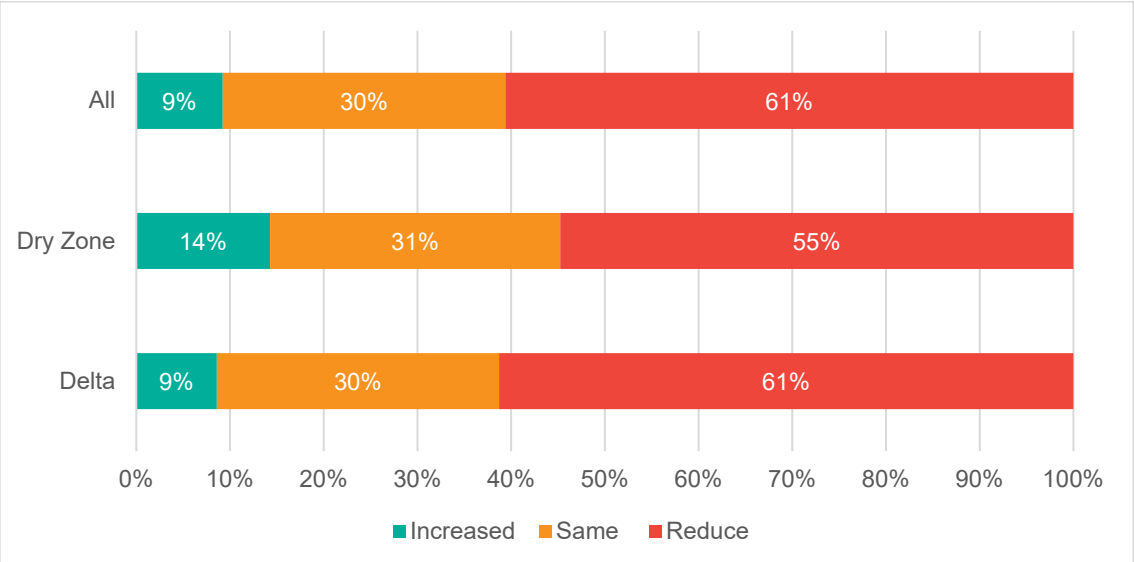
Figure 1. Percent change in acres prepared by CHSPs between the 2024 and 2025 monsoon seasons, by agro-ecological zone



Sources: Combine Harvester Service Provider Survey (January 2026)

These reductions are consistent with CHSPs' own reports of weaker demand. As shown in Figure 2, 61 percent of CHSPs overall reported reduced demand compared to the previous year, while 30 percent said demand stayed the same and only 9 percent reported an increase. Reduced demand was somewhat more prevalent in the Delta (61 percent) than in the Dry Zone (55 percent), a pattern that mirrors the sharper contraction in acres prepared in the Delta. Similarly to tractor service providers during the monsoon planting season, 98 percent of CHSPs in the Dry Zone reported that the 2025 earthquake did not affect demand for their services.

Figure 2. Percent change in demand for harvesting services between the 2024 and 2025 monsoon seasons, by agro-ecological zone



Sources: Combine Harvester Service Provider Survey (January 2026)

Poor price incentives and low rice prices were an important factor in the reduced demand, particularly in the Delta. International prices fell to their lowest real level in 15 years in 2025, while Myanmar's dual exchange rate system and rising marketing costs further depressed farmgate prices, leaving farmers with fewer incentives to cultivate (Minten et al., 2025). Among the subset of CHSPs reporting the largest contractions in demand, poor price incentives were the most frequently cited reason, mentioned by 53 percent and concentrated almost entirely among Delta respondents.

Movement restrictions presented a significant but uneven challenge across zones. While only 20 percent of CHSPs overall reported being restricted from operating in a larger geographic area, this figure varies considerably by zone: 44 percent of Dry Zone CHSPs faced such restrictions compared to only 16 percent in the Delta (Table 2). The Dry Zone pattern likely reflects the reach of conflict and insecurity there, with administrative blockages (e.g. road closures, checkpoints, and restricted zones) being the most common constraint, compounded by fees for crossing administrative borders affecting nearly one in five CHSPs. In the Delta, where the security situation remains comparatively stable, most CHSPs were able to operate without meaningful geographic limitations.

Table 2. Geographic operating restrictions and type of restrictions faced by CHSPs in the 2025 monsoon season, by agro-ecological zone

	Dry Zone (%)	Delta (%)	All (%)
CHSPs restricted from operating in a larger geographic area	44	16	20
Types of restrictions			
Administrative or security blockages (e.g., road closures, checkpoints, restricted zones)	47	51	50
Road damage or weather conditions (e.g., flooding, landslides, damaged bridges)	0	19	13
Fees for crossing administrative borders	41	44	43
Curfews, stay-at-home orders, or martial law	0	2	2
Special permissions required to enter/exit certain areas	29	30	30
Active conflict or security concerns (e.g., land mines)	18	7	10
Difficulties finding fuel	6	0	2
Difficulties finding operators willing to travel	0	0	0
Need to switch operators along the route to comply with restrictions	0	0	0
Difficulties finding carrier trucks/haulers to move equipment	12	0	3

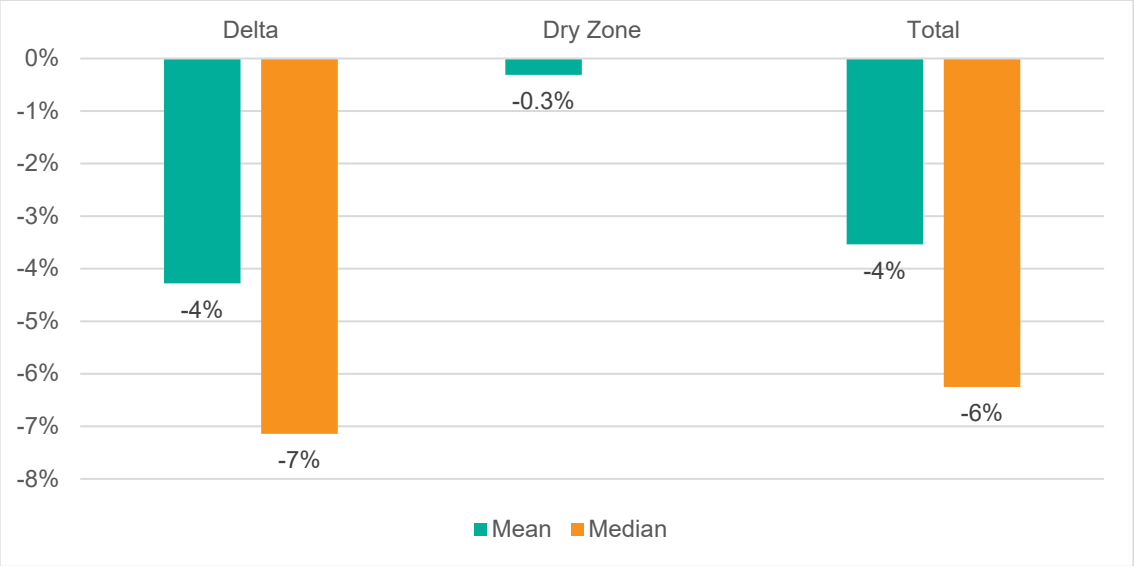
Sources: Combine Harvester Service Provider Survey (January 2026)

Notably, movement restrictions in the Delta were far less prevalent among CHSPs during the harvest season than among tractor service providers during the planting season, when 40 percent of Delta TSPs reported operating restrictions (Masias et al., 2025). This was accompanied by fewer reports of administrative blockages and security-related constraints, suggesting that conditions in the Delta may have eased somewhat as the season progressed.

Service Charges, Costs, and Input Availability

Nominal service charges for combine harvesting declined in 2025, with mean charges falling by 4 percent overall compared to the previous year and the median declining by 6 percent (Figure 3). This decline was concentrated in the Delta, where mean and median charges fell by 4 and 7 percent respectively, while Dry Zone charges remained broadly flat (mean: -0.3%).

Figure 3. Percent change in nominal service charges per acre for combine harvesting by CHSPs between the 2024 and 2025 monsoon seasons, by agro-ecological zone



Sources: Combine Harvester Service Provider Survey (January 2026)

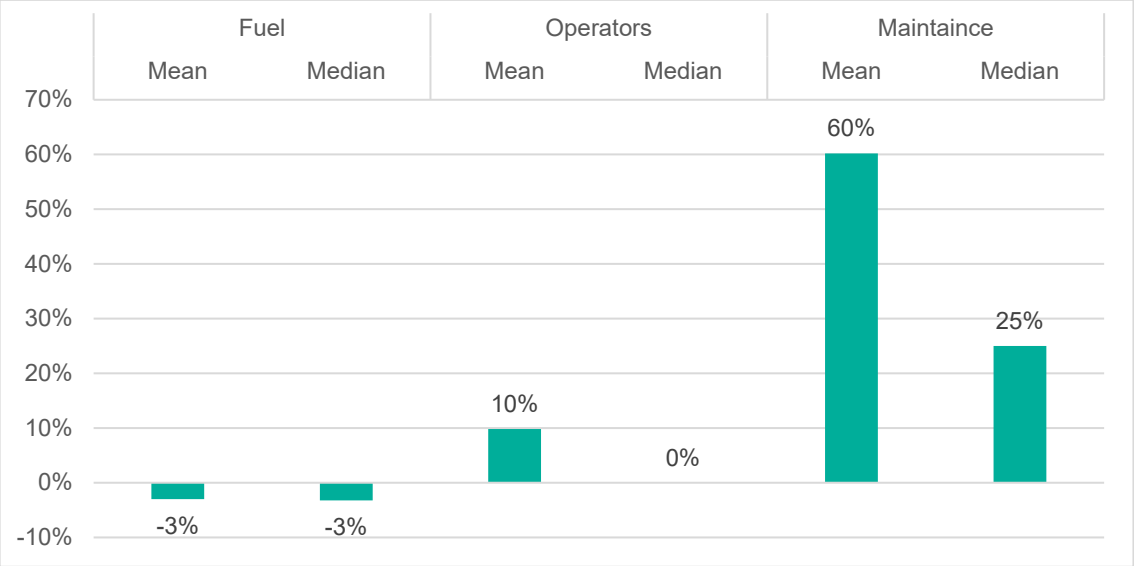
The decline in the Delta appears to reflect a combination of lower fuel costs and weaker demand. Fuel costs fell by a median of 3.2 percent (Figure 4) and 39 percent of CHSPs reported lower fuel costs compared to the previous year. The median service charge decline was also largest among those reporting reduced demand (-10 percent) compared to those reporting stable demand (-6.5 percent) or increased demand (0 percent), suggesting that competitive pressure contributed alongside falling fuel costs.

In the Dry Zone, these dynamics played out differently. Only 24 percent of Dry Zone CHSPs reported lower fuel costs and the median fuel cost change was zero, meaning most operators saw no fuel savings to pass through to farmers. Service charges remained flat regardless of whether demand fell or held steady, likely reflecting the broader restricted operating environment, limiting competition. Restriction-related costs such as checkpoint fees and longer routes may have further constrained the ability of Dry Zone CHSPs to lower charges.

CHSPs continued to face cost pressures across other inputs (Figure 4). Operator costs present a more mixed picture, with mean costs rising by nearly 10 percent while the flat median suggests wages were stable for most CHSPs. This may mean that wages are sticky for those that retained their operators but those who needed to find new operators paid a premium, pulling the mean upward. Post-season maintenance costs rose most sharply, with a mean increase of 60 percent and a median of 25 percent. The gap between mean and median indicates considerable variation in maintenance costs across CHSPs, likely reflecting differences in machine age, and local conditions affecting the availability and cost of parts, mechanics, and services.

Myanmar's persistently high inflation means that nominal figures likely understate movements in real terms in both directions — the real decline in service charges may be larger than reported, while the real increase in operating costs facing CHSPs may be greater than nominal figures suggest.

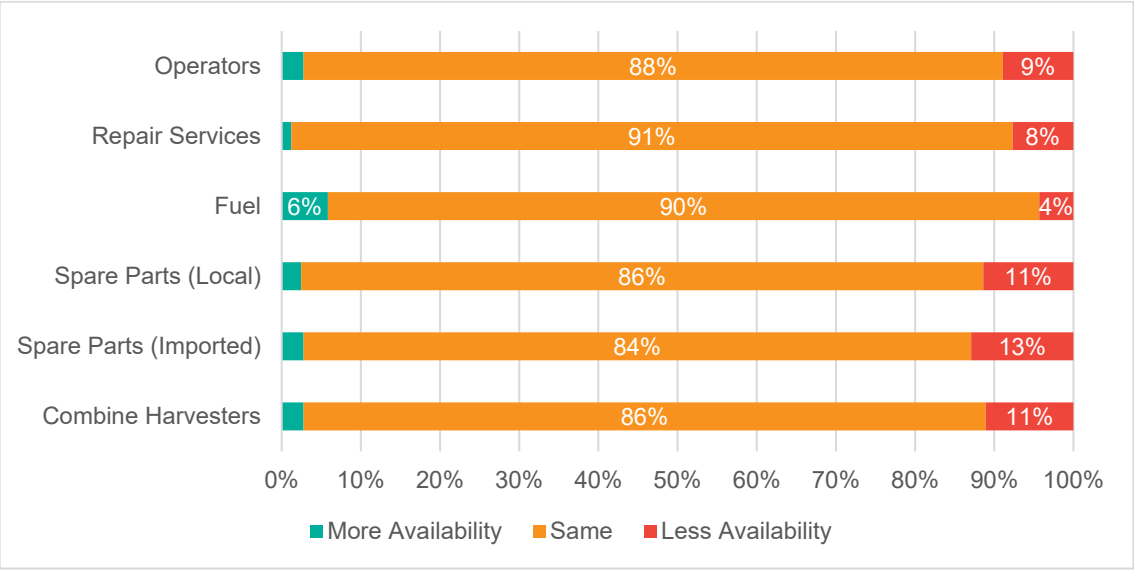
Figure 4. Percent change in nominal operating costs between 2024 and 2025 monsoon seasons as reported by CHSPs, by agro-ecological zone



Sources: Combine Harvester Service Provider Survey (January 2026)

Input availability was broadly stable for most CHSPs (Figure 5). Fuel availability improved modestly, with 6 percent of CHSPs reporting better access compared to the previous year, consistent with the fuel cost declines reported earlier. Spare parts and combine harvesters saw the most constrained availability, with 11 to 13 percent of CHSPs reporting reduced access, likely reflecting continued challenges with imports. Operator and repair service availability were also somewhat reduced, with 9 and 8 percent reporting less access respectively, though the large majority reported no change.

Figure 5. Share of CHSPs reporting changes in input availability between the 2024 and 2025 monsoon seasons



Sources: Combine Harvester Service Provider Survey (January 2026)

Labor shortages were reported by 18 percent of CHSPs overall, a notably lower rate than the 65 percent reported by tractor service providers during the planting season earlier in the year (Masias et al., 2025). Shortages were almost exclusively for operators, stated by 83 percent of those reporting shortages, with smaller shares reporting difficulties finding mechanics or casual labor. Outmigration of skilled workers was the most frequently cited reason overall (69 percent). Security concerns and

conflict were more prominent in the Dry Zone (44 percent) than the Delta (18 percent). Notably, 26 percent of those reporting shortages cited a lack of skills among available labor.

Table 3. Labor shortages and perceived reasons reported by CHSPs during the 2025 monsoon season, by agro-ecological zone

	Dry Zone (%)	Delta (%)	All (%)
CHSPs reporting labor shortages	**21**	**18**	**18**
Type of Labor Shortage			
Operators	100	80	83
Mechanics	0	8	7
Casual labor	0	12	10
Perceived reasons for labor shortage			
Outmigration of skilled labor	67	69	69
Security concerns or conflict	44	18	22
Higher wages offered elsewhere	11	10	10
Transport or access difficulties	22	0	3
Available labor lacks necessary skills	0	31	26

Sources: Combine Harvester Service Provider Survey (January 2026)

The considerably lower shortage rate among CHSPs relative to TSPs likely reflects several factors. The harvest season is shorter and more concentrated than land preparation, requiring operators for a more limited window. The larger number of TSPs competing for a similar pool of operators may also intensify shortages in that sector. Additionally, combine harvester operation requires more specialized skills, which may encourage CHSPs to invest more in retaining experienced operators across seasons — a dynamic consistent with the finding that skill gaps among available labor were a notable constraint for those who did face shortages.

Financial Support for Farmers

Despite declining nominal service charges this season, requests for financial assistance became more common, with 71 percent of CHSPs reporting being asked for credit more frequently than in the previous year (Table 3). Nearly half of CHSPs (45 percent) said farmers asked frequently, suggesting that access to deferred payment is a common feature of how mechanized services are accessed rather than an exceptional arrangement. Credit requests were notably more prevalent in the Dry Zone, where 64 percent of CHSPs reported being asked frequently compared to 42 percent in the Delta, likely reflecting the deeper financial strain on farmers in areas affected by conflict, insecurity, and the aftereffects of the recent earthquake (van Asselt et al., 2026).

Most CHSPs were willing to provide assistance when asked, and 74 percent reported providing more financial assistance than in the previous year. Twenty-nine percent said they always provided help and a further 37 percent did so most of the time, meaning nearly two thirds of CHSPs were consistently willing to support farmers. The primary form of assistance was extending services on credit, reported by 91 percent of those providing support, and all CHSPs allowing late payment did so without charging interest. Credit was extended broadly, with 37 percent of CHSPs allowing more than 75 percent of their customers to pay late, and a further 27 percent extending credit to between half and three quarters of their customers.

Table 4. Financial assistance provided by CHSPs to farmers during the 2025 monsoon season, by agro-ecological zone

	Dry Zone (%)	Delta (%)	All (%)
Received more requests for financial assistance compared to the previous year	78	71	71
Provided more financial assistance compared to the previous year	80	73	74
Frequency of requests for financial assistance			
Frequently	64	42	45
Sometimes	21	40	37
Rarely	10	9	10
Never	5	9	8
Frequency of assistance provided when asked			
Always	36	28	29
Most of the time	36	37	37
Sometimes	12	18	17
Rarely	12	8	9
Never	5	9	8
Types of assistance provided			
Service on credit	93	91	91
Reduced service fees	17	11	11
Accepted in-kind payments	0	4	3
Share of customers allowed to pay late			
Greater than 75%	45	36	37
51 – 75%	29	27	27
25 – 50 %	5	17	15
Less than 25%	14	11	12
None	7	9	9

Sources: Combine Harvester Service Provider Survey (January 2026)

These patterns underscore that mechanization service providers have become an important source of informal credit for farmers, enabling access to mechanized services even when cash is scarce. However, this also exposes CHSPs to significant financial risk, extending interest-free credit to the majority of customers while simultaneously absorbing rising costs and declining revenues.

Financial Health of CHSPs

The financial health of CHSPs continued to deteriorate during the 2025 monsoon season, with most reporting a combination of declining revenues and rising costs (Table 5). Seventy-one percent of CHSPs reported lower revenues compared to the previous year, with 30 percent reporting a decline

of more than 10 percent. At the same time, 73 percent reported higher operating costs, with 29 percent reporting an increase of more than 10 percent. The most common outcome — experienced by 30 percent of all CHSPs — was a modest revenue decline of less than 10 percent alongside a cost increase of less than 10 percent, while a further 19 percent faced a more severe combination of revenue declining by more than 10 percent alongside rising costs. Only 10 percent of CHSPs reported stable revenues and costs, and just 9 percent saw revenues and costs move in a favorable direction.

Table 5. Share of CHSPs reporting changes in revenue and operating costs between the 2024 and 2025 monsoon seasons

Revenue	Costs: Increased by >10%	Increased by <10%	Same as last year	Decreased by <10%	Decreased by >10%	Total
Increased by >10%	3	0	0	0	0	**3**
Increased by <10%	3	4	1	0	0	**6**
Same as last year	1	6	10	0	0	**18**
Decreased by <10%	5	30	3	4	0	**41**
Decreased by >10%	19	3	2	1	5	**30**
Total	**29**	**44**	**16**	**5**	**5**	**100**

Sources: Combine Harvester Service Provider Survey (January 2026)

These pressures translated into cash flow problems for 26 percent of CHSPs overall, with the Delta (27 percent) somewhat more affected than the Dry Zone (21 percent) (Table 6). The coping mechanisms CHSPs employed differed considerably by zone. In the Delta, the most common response was drawing on income from another source (61 percent), followed by purchasing fuel or inputs on credit (32 percent) and borrowing money (28 percent). In the Dry Zone, asset sales were the most common coping mechanism (56 percent), followed by delaying fuel or input purchases (44 percent), suggesting that Dry Zone CHSPs may have less access to alternative income or credit and were more reliant on liquidating assets to manage shortfalls. Notably, among those reporting cash flow problems, 30 percent continued to provide financial assistance to farmers at least sometimes.

Table 6. Cash flow problems and coping mechanisms of CHSPs during the 2025 monsoon season, by agro-ecological zone

	Dry Zone (%)	Delta (%)	All (%)
CHSPs reporting cash flow problems during the 2025 monsoon season	21	27	26
Coping mechanisms reported			
Delay fuel or input purchases	44	7	11
Purchase fuel or inputs on credits	11	32	29
Took out a loan or borrowed money	11	28	26
Delayed payment to workers	0	1	1
Reduced service area or number of jobs	0	3	2
Sold assets	56	21	25
Used income from another source	44	61	59

Sources: Combine Harvester Service Provider Survey (January 2026)

Discussion

CHSPs faced a difficult 2025 monsoon harvesting season, operating under the combined pressures of weaker demand, rising costs, and a constrained operating environment. Acres harvested declined by 11 percent overall, consistent with the contraction in mechanized land preparation recorded during the monsoon planting season (Masias et al., 2025). Demand for harvesting services fell across both zones, associated with poor rice price incentives in the Delta and movement restrictions more prominent in the Dry Zone. Despite declining nominal service charges, driven by lower fuel costs and weaker demand in the Delta, CHSPs saw cost increases in maintenance and operator wages; meanwhile extending more credit to farmers than in the previous year. The financial health of CHSPs deteriorated further, with 71 percent reporting lower revenues alongside rising costs and a quarter facing cash flow problems that required borrowing, asset sales, or drawing on other income sources. CHSPs continued to extend interest-free credit to farmers even under these conditions reflecting how integral informal credit provision has become in the mechanized services sector, and the degree to which their financial position is tied to that of their clients. With inflation remaining elevated, nominal figures likely understate the real deterioration in both revenues and operating costs, suggesting the financial pressures facing CHSPs may be more severe than reported figures indicate.

Looking forward, the Iran conflict introduces a significant new risk for the 2026 monsoon planting and dry season harvest seasons. The conflict has disrupted Myanmar's fuel supply, with shortages already reported and rationing underway. Should these shortages persist or worsen, CHSPs may face both higher fuel costs and difficulties sourcing sufficient quantities to operate, a combination that could push service charges higher or stop operations at a moment when farmers are also contending with expected fertilizer shortages. The scale is considerable as 88 percent of rice farmers use mechanized services during the monsoon season, and rising to 97 percent in the dry season. Disruptions to mechanized service provision would have direct consequences for planting timeliness, harvest losses, and farm incomes across Myanmar's major rice-growing regions.

Maintaining the operation of combine harvester service providers is essential for the functioning of Myanmar's agrifood system, as they enable timely harvesting of paddy and provide a critical source

of informal credit for farmers. The following recommendations are offered to support the continued viability of these services.

- **De-risk credit for mechanization services**: CHSPs have become a vital source of informal credit for farmers, allowing most to pay later and without interest, even when facing their own cash flow difficulties. Mechanisms to share or reduce the risk of delayed or missed payments — such as partial guarantee schemes — or expanding farmers' access to affordable credit through formal channels would ease the burden on CHSPs while sustaining farmer access to services.
- **Improve mobility and security for CHSP operations**: Movement restrictions continue to constrain operations, particularly in the Dry Zone, where nearly half of CHSPs reported operating restrictions. Increasing transparency and reducing checkpoints, reducing the need for special permissions, and addressing insecurity on rural roads could ease operational friction and expand service coverage in areas where farmers currently have limited access to mechanized harvesting.
- **Stabilize machinery, spare parts, and repair service costs and availability**: Spare parts and maintenance services remain among the largest cost pressures for CHSPs. Facilitating imports, easing access to foreign exchange, and improving distribution networks would help contain costs. Supporting the development of local repair capacity — through mechanic training and spare parts supply chains — would reduce maintenance costs and extend machine lifespans, particularly in areas where access to repair services is limited.
- **Support the training and retention of machine operators**: Operator shortages, driven by outmigration and insecurity, remain a persistent constraint. The specialized skills required to operate and maintain combine harvesters make retention particularly important, as replacing experienced operators is costly and difficult. Training programs that build a broader pool of qualified operators, with an emphasis on machine maintenance, service quality, and safety, would reduce turnover costs and improve the resilience of CHSP operations over time.

References

Belton, Ben; Win, Myat Thida; Zhang, Xiaobo; and Filipski, Mateusz. 2021. The rapid rise of agricultural mechanization in Myanmar. Food Policy 101 (May 2021): 102095. https://doi.org/10.1016/j.foodpol.2021.102095

Masias, Ian; Htar, May Thet; and Oo, Theingi. 2025. Tractor service providers in Myanmar: Early insights from the 2025 monsoon season. Myanmar SSP Research Note 124. Washington, DC: International Food Policy Research Institute. https://hdl.handle.net/10568/176592

Minten, Bart; Aung, Zin Wai; Htar, May Thet; and Masias, Ian. 2025. Global rice price declines and expected effects on monsoon paddy farming: Insights from key informants. Myanmar SSP Research Note 121. Washington, DC: International Food Policy Research Institute. https://hdl.handle.net/10568/175338

van Asselt, Joanna; Ei Win, Hnin; and Aung, Zin Wai. 2025. Household-level impacts of the March 2025 earthquake in Myanmar: Findings from the ninth round of the Myanmar Household Welfare Survey (July-October 2025). Myanmar SSP Research Note 128. Washington, DC: International Food Policy Research Institute. https://hdl.handle.net/10568/179543

ABOUT THE AUTHORS

Ian Masias is a Program Head at the International Food Policy Research Institute, based in Oregon, USA. **May Thet Htar** is a Research Analyst at the International Food Policy Research Institute, based in Myanmar. **Theingi Oo** is a Research Analyst at the International Food Policy Research Institute, based in Myanmar. **Hiroyuki Takeshima** is a Senior Research Fellow at the International Food Policy Research Institute, based in Washington DC, USA.

ACKNOWLEDGMENTS

This work was undertaken as part of the Myanmar Agrifood System and Food Security Monitoring project led by the International Food Policy Research Institute (IFPRI). Funding support for this study was provided by the Livelihoods and Food Security Fund (LIFT) and the Local Assistance Myanmar Programme (LAMP). This publication has not gone through IFPRI's standard peer-review procedure. The opinions expressed here belong to the authors, and do not necessarily reflect those of IFPRI, LIFT, LAMP, or CGIAR.

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 | www.ifpri.org | www.ifpri.info

The Myanmar Strategy Support Program (Myanmar SSP) is managed by the International Food Policy Research Institute (IFPRI). The program is financially supported by the Australian Government, the Livelihoods and Food Security Fund, and the United Kingdom Government. 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, CGIAR, the Australian Government, LIFT, or the United Kingdom Government.