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Myanmar Agricultural Performance Survey (Dry Season 2024):

Farm Commercialization and Farm Services

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ABSTRACT

- The security situation in Myanmar continues to negatively impact commercialization for crop farmers. During the monsoon season interview period (July–September 2024):

  a) Thirty-one percent of farmers reported feeling 'very insecure' or 'insecure'.

  b) Twenty-three percent expressed serious security concerns to move around in their village tract or township.

  c) Seven percent stated that conflict prevented the cultivation of some agricultural fields in their area.

  d) One percent reported land confiscation as a problem in their community.

  e) Eleven percent indicated fear of storing produce at home due to the risk of confiscation or destruction.

- Security challenges for farming vary across states and regions, with the Delta area - the country's rice bowl - experiencing relatively better conditions.
- Limited access to fuel, crucial for irrigation and mechanization among others, poses a significant constraint to farming. Nationally, about one-fifth and 40 percent of farmers reported either no or rare availability of fuel in their communities during the dry season and monsoon season of 2024 respectively. This situation during the monsoon is exacerbated in almost all of the states and regions, especially in the conflict-affected areas of Kayah, Shan, and Chin, with around 60 percent of the farmers reporting fuel scarcity.
- Agricultural inputs were generally accessible during the 2024 dry season, indicating the resilience of the private sector in delivering these inputs. However, 5 percent of farmers reported unavailability of chemical fertilizers and seeds - a higher share than in the 2023 dry season - while 16 percent reported problems in securing agricultural labor.
- Farmers in conflict-affected areas face more obstacles in farm commercialization, with agricultural inputs being much less available.
- Input prices rose during the 2024 dry season compared to the same period in 2023. Mechanized plowing costs increased by 29 percent, while hired labor costs saw a rise of 33 percent for men and 32 percent for women. Urea prices experienced a modest increase of 3 percent. In the 2024 monsoon season, wages surged further compared to the preceding dry season, with men's wages rising by 16 percent and women's by 17 percent. These recent increases may be partly attributed to the introduction of the new Military Service Law.
- Agricultural service delivery continues to decline, with fewer farmers able to access credit and agricultural extension services compared to previous years during the dry season of 2024.
- All crop prices increased substantially compared to the previous dry season. While paddy prices increased by 14 percent, non-paddy crop prices increased significantly more.

1. INTRODUCTION

This Working Paper presents the results from an assessment of farm commercialization and farm services during the dry season of 2024 (the post/pre-monsoon season). The results are based on data from a phone survey – the Myanmar Agriculture Performance Survey (MAPS) – that was conducted with 4,740 crop farmers in all states/regions of the country in Q3 of 2024. The paper assesses the perceived security situation of crop farmers, agricultural input availability and prices, farm services, prices of major crops at the farm level, changes in income from crop sales, and overall crop marketing challenges.

2. DATA AND METHOD

The MAPS is a sub-sample of households interviewed during the seventh round of the Myanmar Household Welfare Survey (MHWS), fielded in the beginning of 2024. In the MHWS, information was collected on the background of these households, welfare indicators, and livelihoods (MAPSA 2024a). The follow-up MAPS focused on the agricultural activities of crop farmers during the dry season of 2024.[1] The survey was implemented from July 30th until September 17th, 2024. The numbers of crop farmers interviewed in MAPS are reported by state and region in Table 1 and are shown by township in Figure 1.

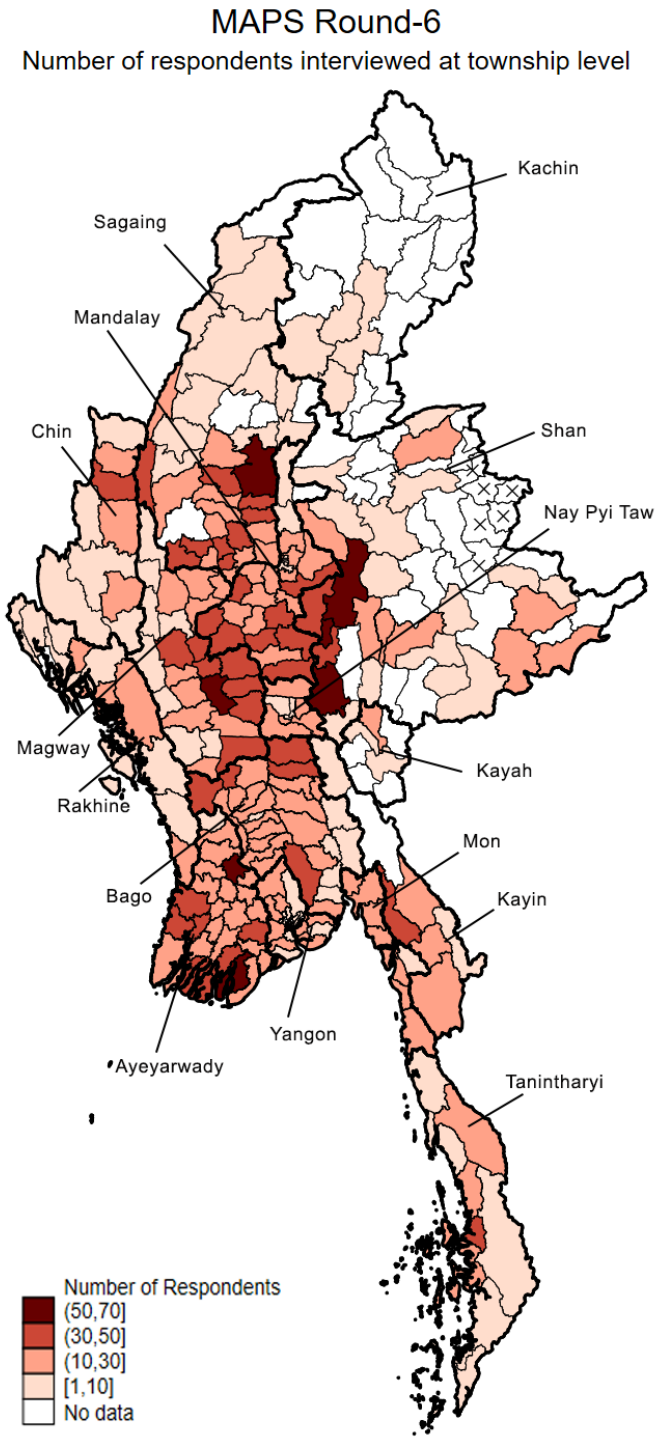
Table 1: Sample of crop farmers, MAPS dry season 2024

	MAPS R6
Kachin	12
Kayah	24
Kayin	108
Chin	115
Sagaing	684
Tanintharyi	131
Bago	566
Magway	553
Mandalay	568
Mon	171
Rakhine	127
Yangon	203
Shan	591
Ayeyarwady	776
Nay Pyi Taw	111
Total	4,740

Source: Authors' calculations based on MAPS, dry season 2024.

[1] Covering the dry season period, typically crops that are harvested between February and July 2024.

Figure 1: Sample of crop farmers, MAPS dry season 2024



Source: Authors' calculations based on MAPS, dry season 2024.

To ensure that crop farmers are representative of the crop farming population in their state or region, a weighting factor was calculated building on the method used for the MHWS (for details, see MAPSA 2022). The MAPS collected information on household characteristics, overall area cultivated, crops grown, security problems, input use and farm management practices, yields, sales, output prices, and marketing behavior. Table 1 provides background statistics on those surveyed

farmers. We divide the country into four major agro-ecological zones that are commonly used in Myanmar and present our results at this level.[2]

During the 2024 dry season, 3,751 farmers of the contacted farmers reported cultivating crops. The average cultivated area during the dry season for the interviewed farmers was 4.1 acres (the median was 3.0 acres). In the dry season of 2024, 19 percent of crop farmers in Myanmar grew paddy, with as many as 38 percent doing so in the Delta region. Other important crops grown during the dry season are black gram (12 percent of farmers), green gram (7 percent), sesame (8 percent), chickpea (7 percent), and groundnut (6 percent). Sesame, chickpea, and groundnut were especially important in the Dry Zone where 19, 18, and 12 percent of the farmers grew those crops, respectively. In addition to paddy and pulses, betel nuts were important in both the Delta, where 8 percent of farmers grew them for their leaves, and the Coastal areas, where 16 percent of farmers cultivated betel.

Table 2: Descriptive crop farmers, MAPS dry season 2024

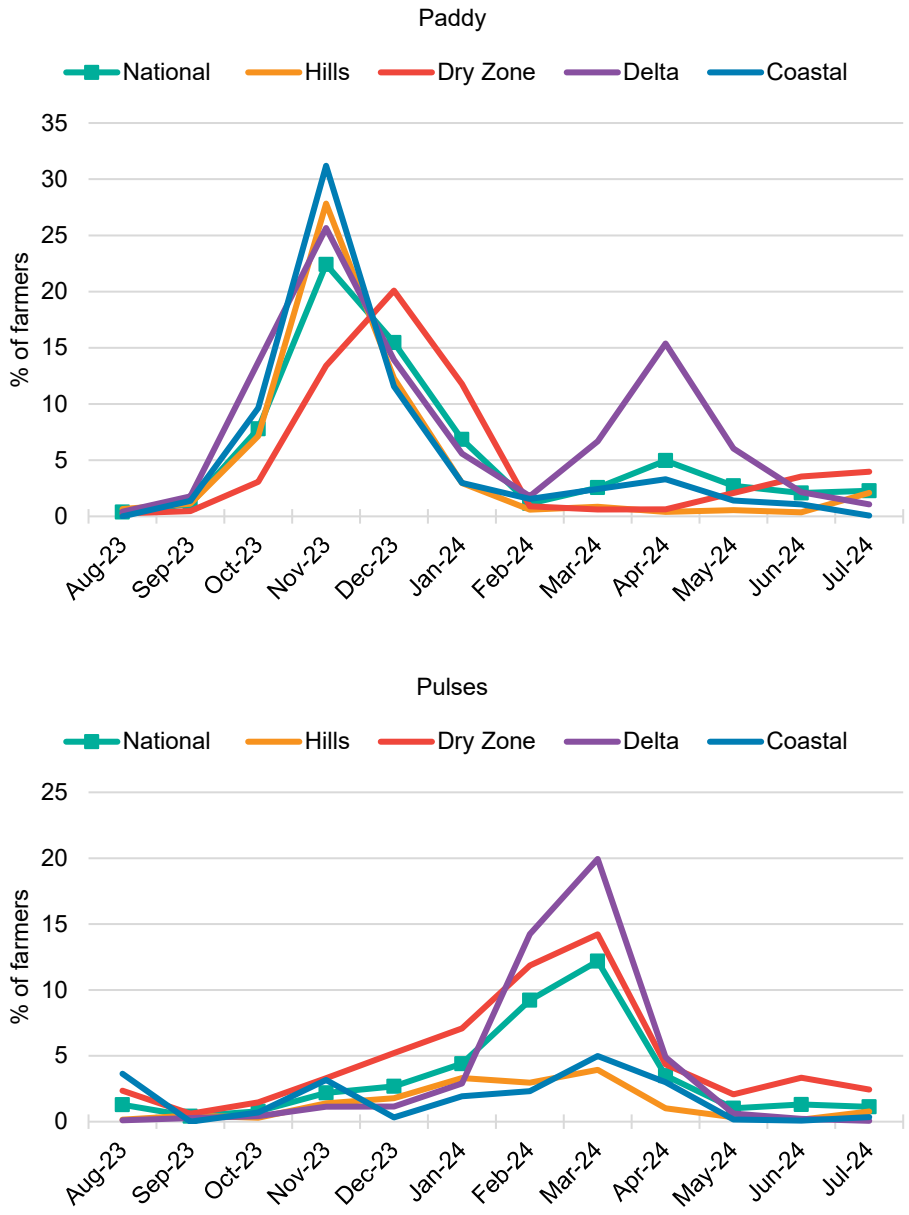
	Unit	National	Hills	Dry	Delta	Coastal
Total number of farmers*	Number	3,751	628	1,485	1,325	313
Area cultivated - acres	Mean	4.13	2.97	3.85	5.44	3.81
Area cultivated - acres	Median	3.00	2.00	3.00	5.00	3.00
Crops grown in dry season 2024						
Rice	% of farmers	18.7	5.0	14.1	37.7	8.7
Black gram	% of farmers	11.8	0.2	3.9	32.1	4.9
Green gram	% of farmers	7.4	0.3	8.7	11.6	7.2
Sesame	% of farmers	7.6	1.5	18.9	1.4	0.4
Chickpea	% of farmers	7.3	2.2	17.5	1.3	0.7
Groundnut	% of farmers	6.4	2.3	12.0	2.3	8.7
Betel Leaves	% of farmers	5.3	0.4	6.4	7.6	5.6
Pigeon pea	% of farmers	5.6	5.9	11.4	0.3	0.0
Onion	% of farmers	5.4	7.2	10.0	0.2	0.2
Tomato	% of farmers	5.2	14.7	2.4	0.9	6.0
Garlic	% of farmers	4.5	16.8	1.4	0.0	0.0
Chili (fresh)	% of farmers	4.2	2.9	2.7	4.4	12.6
Betel Nut	% of farmers	2.9	0.1	0.1	4.1	16.0
Rubber	% of farmers	1.6	1.5	0.0	0.3	11.5

*: 3,751 farmers were interviewed but about 20 percent of these farmers did not cultivate crops during the dry season of 2024. The final number of observations is therefore slightly smaller than the number contacted and reported in Table 1.
Source: Authors' calculations based on MAPS, dry season 2024.

Farmers were asked about the months in which they harvested crops, highlighting the pronounced seasonality of crop cultivation in the country. Paddy, the staple crop in Myanmar, is significantly more prominent during the monsoon period, with November being the main harvest month. The peak harvest month for paddy during the dry season is April. Harvest times in the Dry Zone during the dry season are later compared to other regions. In contrast to paddy, pulses are predominantly grown in the dry season, with March being the peak harvest month across all agro-ecological zones. This Figure underscores the importance of pulses as a dry season crop nationwide.

[2] Delta (Ayeyarwady, Bago, Yangon); Coastal (Rakhine, Tanintharyi, Mon); Central Dry (Mandalay, Magway, Nay Pyi Taw, Sagaing); Hills and Mountains (Chin, Kachin, Kayah, Kayin, Shan).

Figure 2: Seasonality in production of different food groups (% of crop farmers harvesting by month)



Source: Authors' calculations based on MAPS, dry season 2024.

3. INSECURITY AND AGRICULTURE

Farmers were asked for their perceptions on insecurity in their area of residence. The question was asked in the middle of 2024 – to crop farmers that cultivated during the dry season period – as well as during previous rounds of MAPS. At the national level, we see a worsening in the perceptions of security by farmers over the last few years. While 82 percent of the farmers indicated that they were living in a 'secure' or 'very secure' situation in the beginning of the year 2022, that share declined to 69 percent of the farmers two and a half years later – a further worsening also compared to last year when 75 percent of the farmers reported to reside in secure areas (Table 3). The share of farmers indicating that they were living in a 'very insecure' area increased, at the national level, from four to eight percent over the two and a half years period. We see a worsening in all agro-ecological zones but the biggest increase in perceptions of insecurity was noted in the Dry Zone where the share of farmers that indicated that they were residing in a 'secure' or 'very secure' area declined by 20

percentage points over the last two and a half years (Table 3). The share of farmers that report to reside in insecure areas was highest in Coastal areas (40 percent of farmers) where farmers who reported very insecurity increased by ten percent point.

Table 3: Perceptions of insecurity in the area that the farmer resides in, share of farmers

	Unit	National	Hills	Dry Zone	Delta	Coastal
December 2021–February 2022						
very insecure	%	3.7	4.8	3.5	2.1	6.6
somewhat insecure	%	14.2	19.2	11.9	11.3	20.4
secure	%	43.0	47.4	38.3	46.6	36.1
very secure	%	38.5	28.1	45.6	40.0	34.9
prefer not to answer	%	0.6	0.6	0.8	0.0	2.0
Total	%	100.0	100.0	100.0	100.0	100.0
June–July 2023						
very insecure	%	5.4	4.9	9.0	2.2	6.8
somewhat insecure	%	18.8	20.0	23.3	14.3	16.5
secure	%	35.7	37.7	34.7	34.4	42.2
very secure	%	39.7	37.0	32.6	48.8	33.8
prefer not to answer	%	0.4	0.4	0.5	0.2	0.7
Total	%	100.0	100.0	100.0	100.0	100.0
July–September 2024						
very insecure	%	8.3	8.1	9.7	3.6	16.5
somewhat insecure	%	22.4	24.5	25.3	16.4	23.5
secure	%	36.0	37.6	35.0	35.3	37.0
very secure	%	32.8	29.1	29.5	44.3	22.6
prefer not to answer	%	0.5	0.8	0.5	0.3	0.4
Total	%	100.0	100.0	100.0	100.0	100.0

Source: Authors' calculations based on MHWS, round 1 and MAPS, rounds 4 and 6.

Feelings of insecurity might have important implications on farm activities as farmers might forego travelling to buy inputs or sell outputs or cultivate land all together. Twenty-three percent of the farmers indicated that they could not move around without serious concerns for security at the time of the survey, which is worse compared to the previous year (Table 4). Concerns on mobility were the highest in the Dry Zone and Coastal areas, though it became worse compared to a year earlier in all agro-ecological zones. Farmers were also asked if fields were not cultivated in their community or if fields were burnt or destroyed or not harvested because of conflict in their area. At the national level, seven and five percent, respectively, of the farmers indicated that this was the case in their area, which was similar to last year. Not cultivating land due to conflict was most frequently reported in Coastal areas (19 percent of farmers reported this to be a problem in their community). Confiscation of land in their community was mentioned by one percent of the farmers. The problem of land confiscation is especially prevalent in the Coastal areas (2.1 percent of the farmers) and the Hills (1.7 percent of the farmers). Finally, farmers were also asked if they were afraid to store agricultural produce at their house. At the national level, 11 percent of the farmers indicated that they were indeed afraid to do so. That level was especially high in the Dry Zone (21 percent) and in Coastal areas (10 percent).

Table 4: Insecurity, mobility and agriculture, share of farmers

	Unit	National	Hills	Dry Zone	Delta	Coastal
Cannot move around without serious concern for security						
August–September 2022	%	25.0	20.9	31.4	15.7	48.4
June–July 2023	%	15.2	14.5	19.7	10.2	22.3
July–Sept 2024	%	23.0	23.2	27.7	14.2	29.9
Crops or fields were burnt or destroyed or not harvested because of conflict in the farmers' area						
August–September 2022	%	3.6	2.2	6.5	0.9	6.4
June–July 2023	%	4.9	3.7	8.5	1.4	9.5
July–Sept 2024	%	4.5	2.1	7.7	0.8	10.5
Fields were not cultivated in my area because of conflict						
August–September 2022	%	7.8	8.7	10.8	1.3	20.5
June–July 2023	%	7.3	6.1	12.2	2.5	12.2
July–Sept 2024	%	7.4	5.4	10.6	1.5	19.1
Agricultural land was confiscated in this community						
July–Sept 2024	%	1.1	1.7	1.1	0.5	2.1
Farmer is afraid of storing agricultural produce at his house because of risk of confiscation/destruction						
July–Sept 2024	%	11.2	6.1	21.5	3.6	9.9

Source: Authors' calculations based on MAPS, rounds 2, 4, and 6.

4. FARM SERVICES

Farmers were surveyed about two types of farm services: credit and extension. Table 5 focuses on the use of farm credit, revealing a significant decline in the share of farmers utilizing credit, from 45 percent during the dry season of 2022 to 33 percent in 2024—a decrease of 12 percentage points. Among those who did not take credit, the majority reported that they did not require it. For those who did access credit, the Myanmar Agricultural Development Bank (MADB) was the primary source, with 16 percent of cultivating farmers in the 2024 dry season obtaining credit from MADB. Other notable sources included input suppliers (five percent of farmers) and relatives or friends (six percent). Agricultural credit from microfinance institutions (MFIs) or NGOs was accessed by four percent of farmers.

There were important regional differences in credit usage. In the Delta, nearly half (46 percent) of the farmers used credit during the 2024 dry season, compared to only 23 percent in the Dry Zone. A significant share of farmers in the Dry Zone (19 percent) and Coastal areas (24 percent) expressed willingness to take credit but were unable to secure it. The Delta region also had the highest proportion of farmers obtaining credit from MADB (27 percent), compared to just 10 percent in the Hills and Coastal areas. In the Hills, MFIs/NGOs, and revolving funds each accounted for seven percent of agricultural credit sources, with private money lenders serving as a source for a notable five percent of farmers.

Table 5: Use of credit

	Unit	National	Hills	Dry Zone	Delta	Coastal
Farmer took credit						
Dry season 2024	%	33.5	35.2	23.4	46.3	25.1
Dry season 2023	%	41.6	43.3	31.6	51.2	34.5
Dry season 2022	%	45.4	43.0	37.3	56.1	40.2
If no credit taken, reasons						
Not needed (buy inputs in cash)	%	78.7	82.5	75.1	85.1	70.0
Tried to take credit, but could not find it	%	15.7	13.7	18.8	8.9	23.9
Conditions for credit not good (interest rates too high)	%	2.5	2.2	2.0	2.4	4.7
Did not pay back last year's credit		1.2	0.0	1.1	2.7	0.0
Lack of collateral	%	3.6	2.6	4.4	3.0	3.7
Other	%	0.1	0.0	0.2	0.0	0.0
If credit taken, sources						
Private money lender	%	2.8	5.1	1.5	3.1	1.3
Relatives/ Friend	%	5.7	5.9	5.8	5.6	4.9
MADB	%	15.5	9.7	10.5	26.6	12.9
Department of Cooperatives	%	0.3	0.3	0.1	0.2	0.8
Microfinance Institution/NGO	%	3.9	6.7	2.8	3.2	3.0
Rice or oil mill	%	0.2	0.0	0.1	0.3	0.0
Agricultural input suppliers	%	5.4	2.4	5.2	9.1	2.0
Agricultural trader (crops or crops + inputs)	%	1.3	2.9	0.4	1.2	1.4
Agricultural machinery suppliers	%	0.2	0.4	0.1	0.2	0.0
Private bank	%	0.2	0.0	0.3	0.2	0.4
Revolving fund (Mya Sein Yaung)	%	2.6	7.2	0.9	1.2	2.1
Other	%	1.1	2.5	0.3	1.3	0.4

Source: Authors' calculations based on MAPS, dry season 2024.

Table 6 provides data on the use of agricultural extension and crop advisory services over the past three dry seasons. There was a decline of 5 percentage points in usage, from 39 percent of farmers in 2022 to 34 percent in 2024. Among those who accessed extension services, the private sector was the primary provider, serving 18 percent of farmers. The public sector supported 11 percent of farmers, while NGOs reached 5 percent. Although digital agricultural extension services are gaining traction (MAPSA 2024b), in-person services remain more prevalent. In the 2024 dry season, 17 percent of farmers reported using digital extension. The Delta region had the highest use of agricultural extension services, with 42 percent of farmers accessing them, compared to just 27 percent in the Dry Zone. The Delta and the Hills led in digital extension adoption, with 21 and 19 percent of farmers utilizing these services, respectively.

Table 6: Use of extension services

	Unit	National	Hills	Dry Zone	Delta	Coastal
Farmer used any extension service						
Dry season 2024	%	34.3	37.3	27.0	42.0	30.3
Dry season 2023	%	36.2	31.4	31.8	43.0	37.1
Dry season 2022	%	38.9	39.4	33.4	44.5	36.4
Extension service used						
Public extension	%	11.5	10.5	9.3	14.9	11.3
If received, share in-person	%	85.6	86.3	80.2	93.7	65.4
If received, share digital	%	10.6	12.9	13.5	4.6	22.3
If received, share both	%	3.8	0.8	6.3	1.7	12.3
Private extension	%	17.8	16.8	15.5	23.4	11.0
If received, share in-person	%	90.1	95.5	85.8	92.5	77.4
If received, share digital	%	4.3	3.5	5.8	1.5	18.0
If received, share both	%	5.6	1.0	8.5	6.1	4.6
NGO	%	5.0	4.8	4.2	4.4	10.2
If received, share in-person	%	86.7	92.2	86.6	87.1	79.8
If received, share digital	%	9.0	3.8	5.1	9.5	20.2
If received, share both	%	4.4	4.0	8.3	3.5	0.0
Any cellphone application and internet	%	17.0	19.5	12.4	21.1	14.8

Source: Authors' calculations based on MAPS, dry season 2024.

5. AGRICULTURAL INPUT AVAILABILITY AND PRICES

We next explore to what extent there were problems in the country related to the availability of different agricultural inputs during the dry season. We report problems for the dry season of 2023 and 2024. Farmers were asked if they could not find any or enough of several agricultural inputs. In the most recent dry season, no large problems of availability were reported nationally and in most of the country agricultural inputs were readily available, despite a slight decline compared to the dry season of 2023. This suggests the resilience of the private sector in supplying the majority of these inputs (Table 7).

At the national level, five percent of the farmers reported that they could not find - or there were not enough - chemical fertilizers, which was worse compared to a year earlier (when only two percent of the farmers reported this to be the case).[3] There were fewer problems of availability reported for mechanization and pesticides than for other agricultural inputs, though access to pesticides was worse this dry season than in the previous one. Availability of labor was a larger issue. Sixteen percent of the farmers reported having problems finding enough laborers, a similar level to a year earlier. Labor input availability problems were overall larger in Coastal areas and in the Delta compared to the rest of the country as the previous year. Note that most of the survey was fielded after the implementation of the Military Service Law, which likely has contributed to the labor availability problems. We also see a worsening in the availability of chemical fertilizer and seeds in Coastal areas and in the Hills. We are also observing a worsening in the availability of chemical fertilizers and seeds in Coastal and Hill regions. Seven to eight percent of farmers in these areas reported that these inputs were either unavailable or insufficient, marking a significant decline compared to the dry season of 2023.

[3] There is declining involvement of different ministries in the distribution of fertilizer compared to the monsoon – 8 percent of the farmers indicated that they obtained some of their fertilizers through the public sector (MOALI/GAD/Cooperative Department) as part of the farmers/agricultural assistance program (such as the Special Economic Loan) for the dry season of 2024 whereas 11 percent reported that program in the monsoon of 2023.

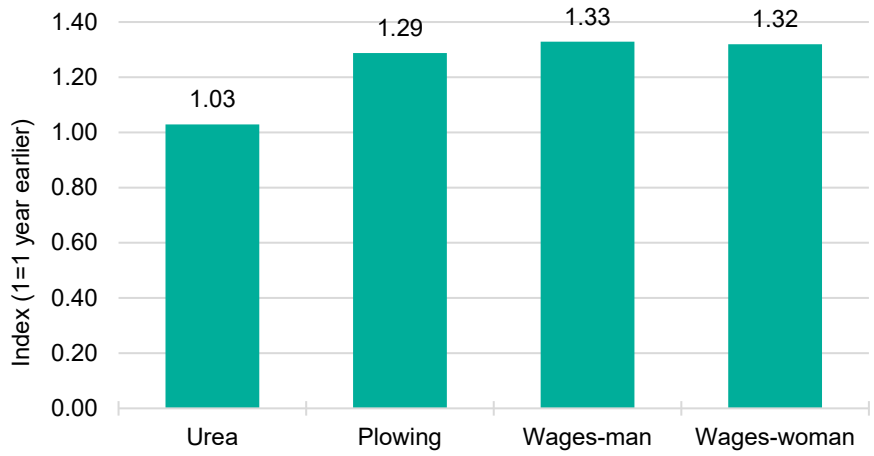
Table 7: Reported problems of availability of agricultural inputs (not available or not enough available) – Dry season 2023 and 2024

	Unit	National	Hills	Dry Zone	Delta	Coastal
Dry season 2023						
Chemical fertilizer	%	1.9	2.5	2.2	1.2	1.5
Seeds	%	3.3	5.3	3.4	2.2	2.9
Pesticides	%	1.5	2.2	1.1	1.5	1.2
Mechanization	%	3.8	5.3	2.0	4.5	4.7
Labor	%	17.1	20.1	12.7	20.0	14.3
Dry season 2024						
Chemical fertilizer	%	4.6	7.1	3.0	3.5	8.4
Seeds	%	4.5	7.9	2.9	3.0	7.4
Pesticides	%	3.4	4.3	3.5	2.0	5.4
Mechanization	%	3.8	5.4	3.4	3.9	1.1
Labor	%	16.5	15.9	14.3	18.8	18.6

Source: Authors' calculations based on MAPS, dry season 2023 and 2024.

Farmers were asked about the prices of agricultural inputs and how they evolved over the last year (comparing dry season periods). We note substantial increases in these input costs over the last 12 months. Prices of urea – the most important fertilizer used in the country – increased by three percent (Figure 3). We also see increases in the price of mechanized plowing (+29 percent), mostly driven by large fuel price increases. Wages of casual laborers also substantially increased, by 33 percent for men and 32 percent for women (in nominal terms).

Figure 3: Price changes of agricultural inputs in the dry season of 2024 (price one year earlier = 1)

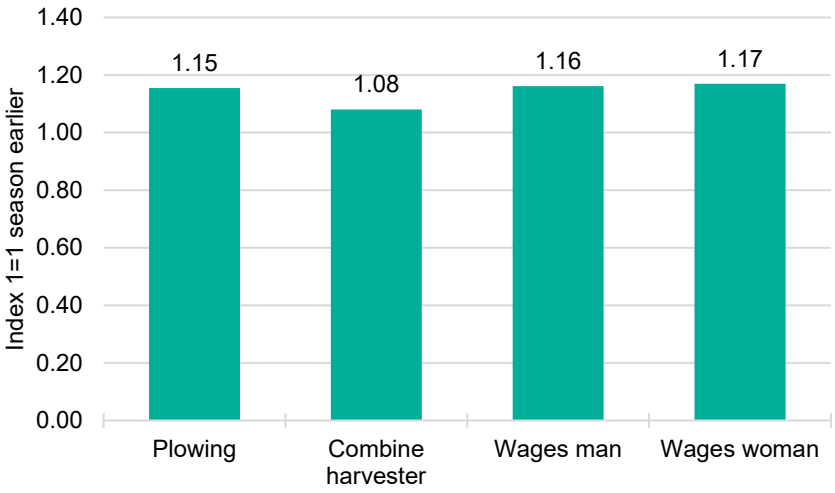


Source: Authors' calculations based on MAPS, dry season 2024 and 2023.

We also asked how the situation evolved for a number of these inputs between the dry season and the time of the survey (in the middle of the monsoon of 2024), a period of approximately 6 months (Figure 4). Wages rose further, possibly partly due to the impact of the Military Service Law (which was announced in the beginning of February 2024). Wages of men and women increased by 16 and 17 percent respectively. We also see substantial increases in the prices of mechanization which increased by 15 percent for plowing and 8 percent for combine harvesting. These increases seem partly linked to increases in fuel prices (petrol and diesel prices increased, on average, by 44

percent and 31 percent respectively over the last half year), the problems of accessibility of fuel, as well as insecurity to travel for mechanization service providers.

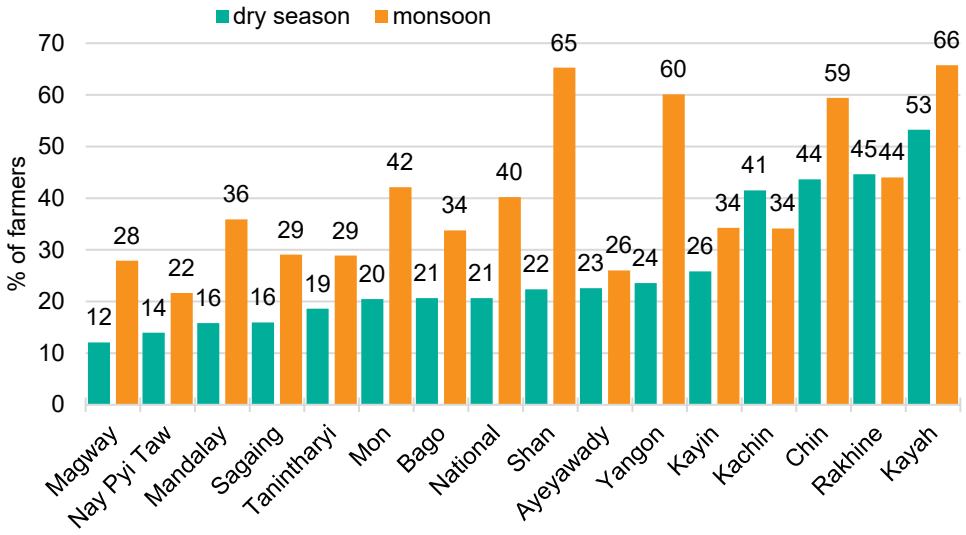
Figure 4: Price changes of agricultural inputs in the monsoon of 2024 (price of dry season = 1)



Source: Authors' calculations based on MAPS, dry season 2024.

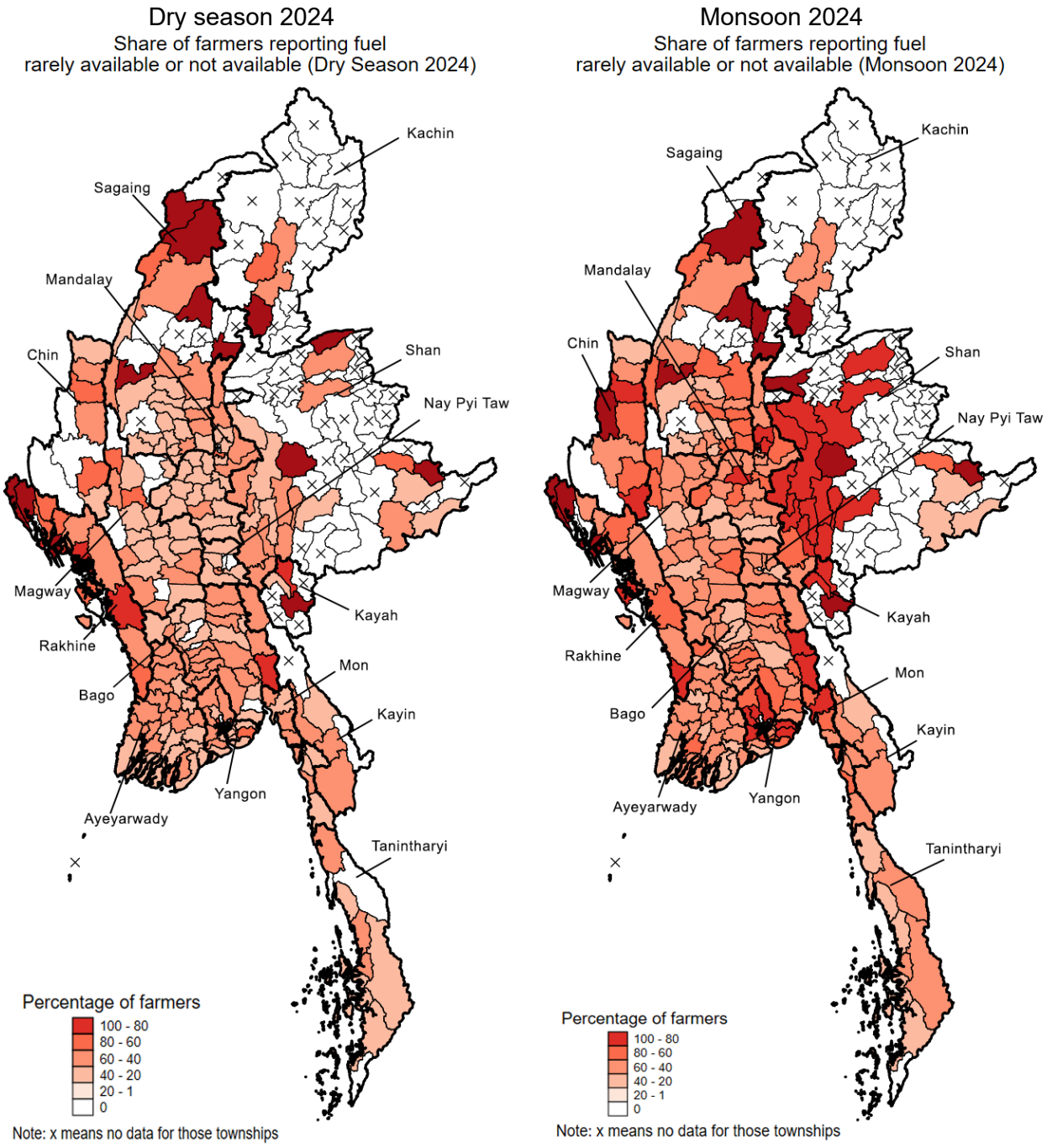
At the national level, 21 percent (40 percent) of the farmers reported that there was no or rarely fuel available in their community during the dry season 2024 (monsoon 2024), complicating mechanization use and irrigation among others. We see strong heterogeneity in the availability of fuel and in fuel prices in the country (Figures 5 and 6). High fuel prices and problems with fuel availability are especially problematic in the conflict-affected and remote areas of the country. We see high prices and a large share of farmers reporting that fuel was rarely or not available in Kayah, Rakhine, Chin, Kachin and Kayin during the dry season. In the monsoon, the situation worsened in almost all states and regions, especially in Kayah, Shan, Yangon and Chin, with 66, 65, 60 and 59 percent of the farmers reporting that fuel was not or rarely available respectively.

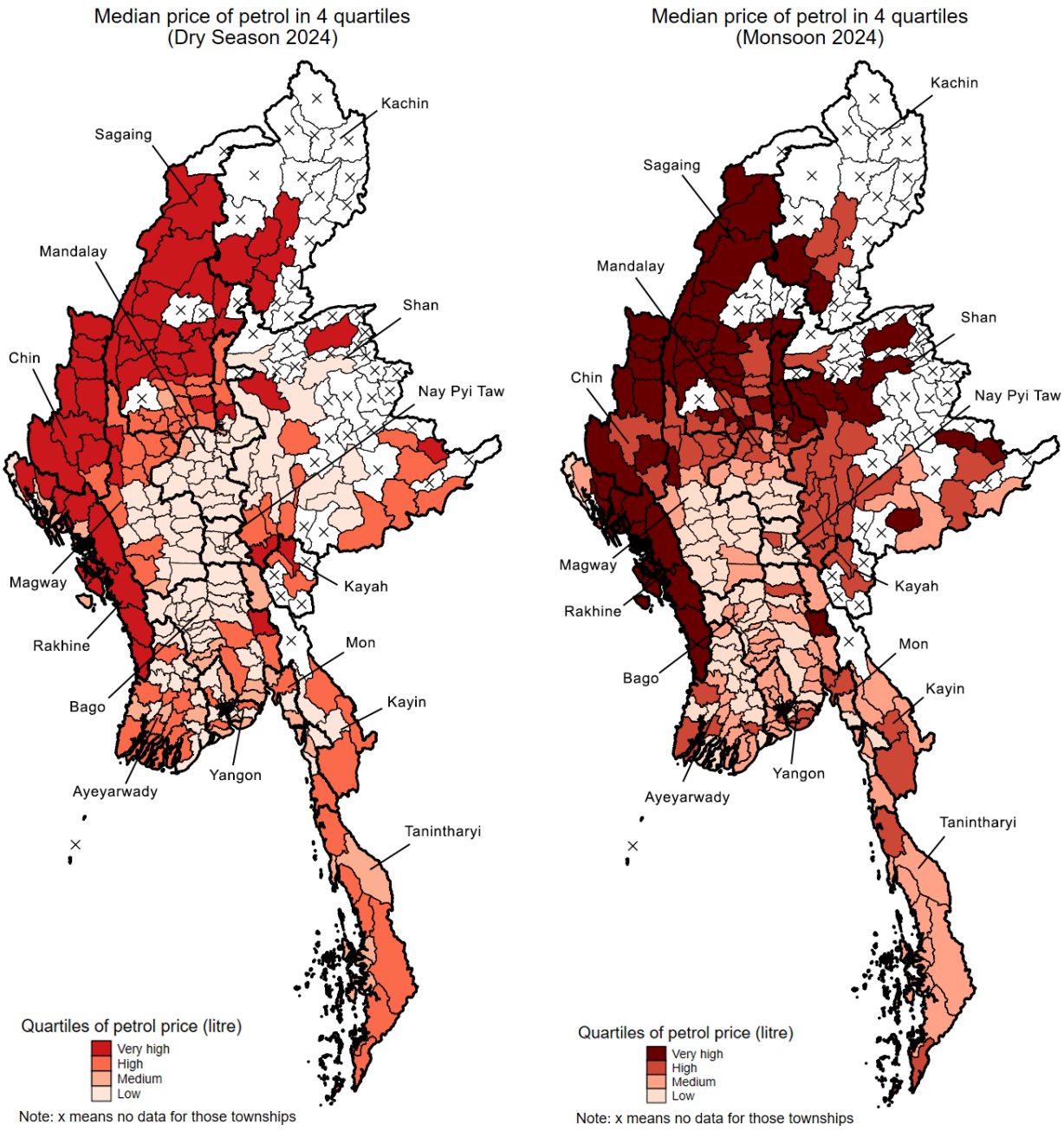
Figure 5: Share of farmers reporting that fuel was rarely or not available in their community, dry season 2024 and monsoon 2024



Source: Authors' calculations based on MAPS, dry season 2024.

Figure 6: Fuel prices and fuel availability in the dry season of 2024 and monsoon 2024

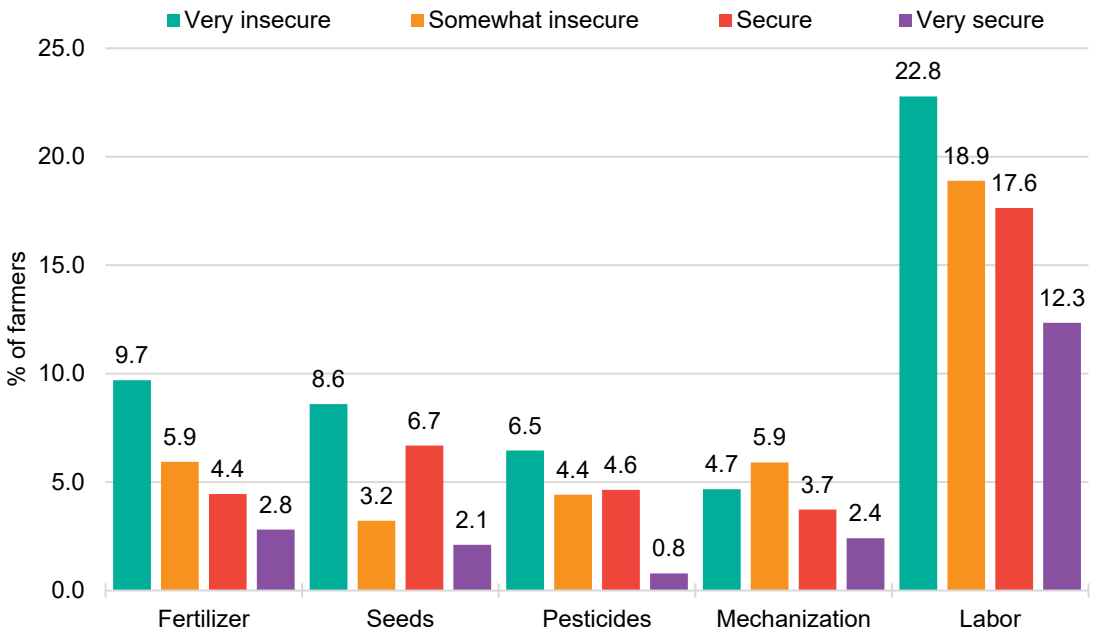




Source: Authors' calculations based on MAPS, dry season 2024.

We assess to what extent availability is linked to insecurity. We see, on average, that problems with availability of inputs were significantly worse in insecure areas. While 10 percent of the farmers in the 'very insecure' areas lacked access to chemical fertilizer, this was only 3 percent for the most secure areas (Figure 7). The biggest differences of all inputs between these insecurity categories are seen in the case of labor. While 23 percent of the farmers reported a problem of lack of labor in very insecure areas, this was only 12 percent in the very secure areas. As laborers are increasingly unwilling to work in these areas, demanding higher wages and compensation for the added risk, there is a significant labor shortage that is likely to affect agricultural productivity.

Figure 7: Availability of agricultural inputs and perceived insecurity, dry season 2024



Source: Authors' calculations based on MAPS, dry season 2024.

6. CROP PRICES

The survey also requested information about farmgate prices at the time of the survey. We compare these prices with the ones recorded a year earlier. Table 8 shows that average paddy prices increased by 14 percent while median prices increased by 13 percent. This lower price increase in rice markets compared to previous periods is seemingly linked to international price changes - rice prices were down by 6 percent from August 2023 to August 2024, as measured by FAO's international rice price index[4] - as well as by the depreciation of the Kyat (a 12 percent lower (MMK/USD) exchange rate in August 2023 compared to August 2024, for rice exporters) and changes in trade policies (from July 2024 onwards, export earnings were to be converted at a rate of 25 percent official rate (2,100 MMK/USD) and 75 percent at the online market trading platform). We see substantial price changes for all non-paddy crops. Very large price increases were seen for black gram (+51 percent), betel leaves (+197 percent), and betel nut (+86 percent). Moreover, there were also large price increases in green gram (+24 percent), sesame (+26 percent), and groundnut (+39 percent).

[4] https://www.fao.org/markets-and-trade/commodities/rice/fao-rice-price-update/en/

Table 8: Prices for main non-rice crops, July/September 2024 compared to one year earlier (MMK/kg)

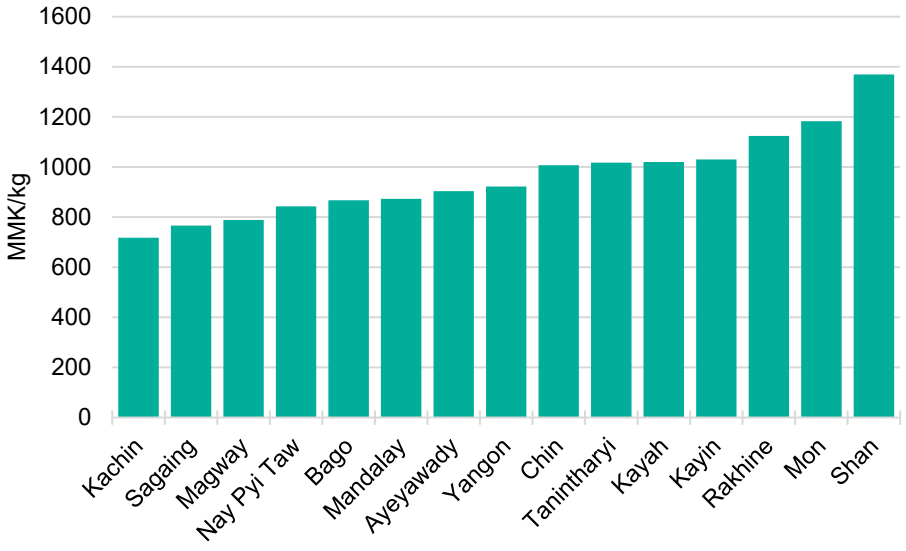
	Unit	2024	2023	% change
Paddy	Mean	902	788	14.4
	Median	861	766	12.5
Black gram	Mean	3,261	2,166	50.6
	Median	3,272	2,171	50.7
Green gram	Mean	2,240	1,813	23.5
	Median	2,141	1,774	20.7
Sesame	Mean	5,390	4,266	26.4
	Median	5,306	4,204	26.2
Groundnut	Mean	3,289	2,366	39.0
	Median	3,246	2,193	48.0
Betel Leaves	Mean	8,881	2,991	196.9
	Median	5,521	3,067	80.0
Betel Nut	Mean	9,042	4,857	86.2
	Median	8,282	4,141	100.0

Source: Authors' calculations based on MAPS, round 4 and 6.

Figure 8 illustrates the large variation that we see in paddy prices in the country. Average paddy prices at the state and region level vary from 700 MMK/kg to 1,370 MMK, 96 percent higher. These large differences are seemingly driven by high transportation costs and large mobility constraints in the country. Prices are high, and low, in conflict affected areas – low in Kachin and Sagaing and high in Shan – while the least conflict-affected areas (Ayeyarwady and Yangon) are in the middle. We also compare paddy prices at the farm level with retail prices of rice as well as paddy expressed in rice equivalent prices (Figure 9).[5] They illustrate the rapid changes in both paddy and rice prices over the last four years, as well as the widening gap between these two. This widening gap partly reflects the increasing transportation costs, mobility constraints, processing costs (linked to higher fuel prices and reduced access to electricity and labor), and the uncertainty linked to the reference price policy, as the disparity between paddy prices in rice equivalent at the farmgate and retail rice prices has increased significantly, especially during the last dry season.

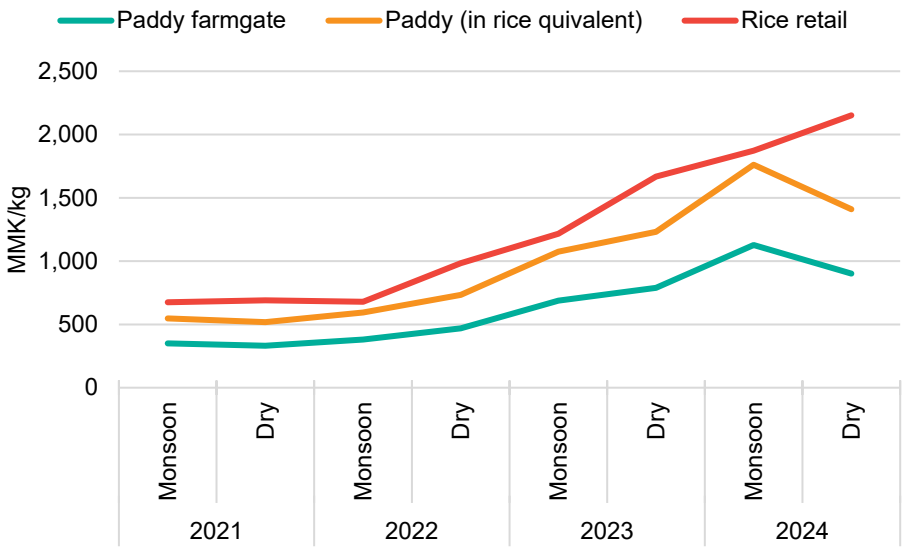
[5] Using a milling conversion rate of 0.64.

Figure 8: Paddy prices as reported by farmers, dry season 2024



Source: Authors' calculations based on MAPS, round 6.

Figure 9: Paddy prices as reported by farmers and retail prices of rice, 2021 to 2024



Source: Authors' calculations based on MAPS, round 1 to 6 and food vendor surveys.

7. CROP MARKETING AND CHALLENGES

Table 9 presents the share of farmers that tried to sell crops during the dry season of 2024 and 2023, the main crop they wanted to sell, and the challenges encountered during marketing. Most farmers tried to sell their dry season crops, and a higher percentage did so this dry season (93 percent) compared to a year earlier (88 percent). Paddy rice was the top crop that farmers wanted to sell – 16 percent of the farmers indicated that this was their main sales crop, compared to 18 percent a year earlier. Other main crops mentioned were black gram (10 percent of farmers), green gram (5 percent), and oilseeds, the most important being groundnut (4 percent), and sesame (4 percent).

We see substantial variation in main crops sold over agro-ecological zones. Rice was the most important main sales crop in the dry season of 2024 in the Delta (as reported by 35 percent of the farmers). Rice was relatively much less important in the Hills - compared to other agro-ecological regions - as only 3 percent of the crop farmers reported that this was the main crop that they tried to sell. While rice was the most important crop for marketing in the Dry Zone (12 percent), sesame (11 percent), chickpea (11 percent), groundnut (7 percent), and pigeon pea (4 percent) were also relatively important. In the Coastal region, rice is very important (8 percent). Second is green gram (6 percent).

Twelve percent of farmers indicated that they faced challenges marketing their dry season crops in 2024, compared to 11 percent of farmers in 2023. Farmers in the Hills and the Coastal areas reported the most challenges of all agro-ecological zones. Of those that reported challenges, low prices for crops were mentioned as a major challenge by nine percent of farmers. Another main marketing challenge this dry season was high prices of fuel and transportation costs. The share of farmers mentioning this constraint was slightly higher compared to last year. Eight percent of the farmers reported this issue as an important challenge this year compared to six percent last year. Insecurity during travel, lack of traders, closure of markets, or inability of farmers to reach traders or traders to reach them are also becoming important issues for some, especially in Coastal areas.

Table 9: Sales of crops and challenges, share of farmers

		2023	2024				
	Unit	National	National	Hills	Dry	Delta	Coastal
Tried to sell crop of dry season harvest	% yes	87.9	93.4	96.0	90.2	94.3	96.1
Main crop that they tried to sell							
Rice	%	17.8	16.5	2.7	11.7	35.2	7.7
Black gram	%	8.9	9.6	0.2	2.7	26.0	4.7
Green gram	%	7.4	4.6	0.2	4.5	7.5	6.4
Sesame	%	3.6	4.0	0.8	10.9	0.1	0.1
Chickpea	%	2.4	4.3	1.4	10.9	0.6	0.0
Groundnut	%	4.3	3.4	1.1	6.6	1.0	5.6
Betel leaves	%	4.8	4.0	0.1	5.6	4.9	5.2
Pigeon pea	%	2.3	4.3	4.1	9.2	0.3	0.0
Onion	%	2.2	3.2	2.2	7.7	0.1	0.0
Tomato	%	2.2	2.8	9.6	1.4	0.1	0.0
Garlic	%	2.2	3.6	13.8	0.8	0.0	0.0
Chili (fresh)	%	2.4	1.9	1.5	1.1	1.9	5.3
Betel nut	%	1.5	0.9	0.0	0.2	1.4	4.2
Rubber	%	1.5	1.3	1.5	0.0	0.2	9.1
Other crops	%	36.7	35.6	60.8	26.9	20.8	51.7
Challenges faced during marketing	% yes	11.6	12.3	14.8	12.1	9.0	17.0
Type of challenge							
Low prices for crops	% yes	7.5	8.8	11.4	7.7	7.2	12.0
High price of fuel / high transportation cost	% yes	6.0	7.6	9.3	7.5	5.5	10.1
Payment problems	% yes	2.1	3.7	5.7	3.5	2.6	2.8
Have to sell crops on credit	% yes	3.0	4.0	6.4	2.8	3.3	5.1
Markets are closed	% yes	2.4	3.9	4.1	3.8	2.6	8.0
Not many traders	% yes	5.0	7.1	8.0	6.9	5.6	10.0
Buyers or traders cannot reach the farm, or I cannot reach them	% yes	5.2	6.5	7.7	6.8	4.2	9.3
Insecurity during travel	% yes	4.0	4.8	4.8	6.4	1.2	11.5

Source: Authors' calculations based on MAPS, dry season, 2023 and 2024.

Finally, we asked farmers to estimate their overall sales income from crop farming at the time of the survey compared to the same time a year earlier (Table 10). Strong heterogeneity is seen in the stated evolution of crop sales income. The majority (51 percent) of the farmers indicated that they had higher sales income this year compared to the same period last year. Twenty percent of the crop farmers reported an income that was "much higher" (more than 20 percent) while 31 percent indicated a "somewhat higher" income (between 1 and 20 percent). On the other hand, 11 percent of the farmers reported a lower income compared to last year while 26 percent indicated no change. The share of farmers indicating significantly higher incomes is especially high in the Delta, likely reflecting the relatively higher importance of paddy and pulses in crop sales in this area (because of significant price increases over the last year) as well the relatively good security situation in the Delta region. The Dry Zone also saw large increases, possibly linked to the high price increases for pulses.

Table 10: Stated evolution of sales income from crop farming, dry season 2024 compared to the dry season 2023, share of farmers

	Unit	National	Hills	Dry	Delta	Coastal
Much lower now (by 20% or more)	%	10.75	11.78	12.02	7.47	14.24
Somehow lower now (between 1% and 20% lower)	%	11.60	12.37	12.44	9.08	14.81
About the same now	%	26.25	31.18	23.36	24.45	29.96
Somehow higher now (between 1% and 20% higher)	%	31.10	30.97	28.40	34.88	28.76
Much higher now (by 20% or more)	%	20.31	13.70	23.77	24.12	12.23
Total		100.00	100.00	100.00	100.00	100.00

Source: Authors' calculations based on MAPS, dry season 2024.

8. CONCLUSIONS

Insecurity is affecting farming as shown by a substantial number of farmers feeling insecure and reporting not to be able to move around - to buy input or sell outputs - without serious concerns for their safety. 31 percent of the farmers reported feeling 'very insecure' or 'insecure' during the period of the interview. 23 percent of the farmers reported that they could not move around without serious concern for their safety while 7 percent reported that some agricultural fields could not be cultivated in their area because of conflict. Moreover, an increasing problem in rural areas is confiscation of land: 1.1 percent of the farmers reported this to be a problem in their community. Moreover, 11 percent of the farmers indicated that they were afraid to store produce at their home because of the risk of confiscation/destruction.

Limited access to fuel – essential for irrigation and mechanization – was an important constraint to farming in the most recent seasons. At the national level, about one-fifth and 40 percent of the farmers reported that there was no or rarely fuel available in their community during the dry season and monsoon periods of 2024 respectively. During the monsoon, the situation was worse in the conflict affected areas of Kayah, Shan, and Chin with around 60 percent of the farmers reporting that fuel was not or rarely available.

Despite problems with fuel and mobility, agricultural inputs were mostly available during the dry season, indicating the resilience of the private sector to supply those, even in these complicated settings. However, there is increasing scarcity of agricultural labor – seemingly linked to increasing migration and insecurity. We also note increasing problems of farmers accessing chemical fertilizer and seeds. We see price increases for all agricultural inputs with the least increase in fertilizer prices this dry season compared to the last dry season (3 percent), seemingly linked to international price developments. On the output side, we note a high price increase for nearly all non-paddy crops but only a slight increase for paddy, the most important crop grown during the dry season, affecting rice farmers' income and welfare (MAPSA 2024c).

The findings in this Working Paper suggest several implications. First, labor scarcity poses a significant constraint for a considerable number of farmers, underscoring the necessity for a well-functioning mechanization sector. However, challenges such as fuel availability issues and mobility constraints are impeding the effective functioning of this sector. Second, a pressing need exists for an improved security situation. The escalating insecurity across the country is disrupting the agricultural sector, leading to diminished availability of agricultural inputs and reduced profitability and incomes in insecure areas. Third, widening margins are observed between farm gate prices and consumer prices, driven by higher transaction costs and increasing uncertainty linked to reference price policies. This possibly highlights unintended effects of price fixing on the agricultural sector for farmers and consumers alike.

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