

# SNAPSHOT OF FARMERS' PERSPECTIVES: PADDY AND WINTER CROPS (OCT. 7-13, 2020)

## Mercy Corps - Market Analysis Unit

November 12<sup>th</sup>, 2020

*Local agricultural production is critical to livelihoods and food security in Rakhine State. In order to better understand production challenges, Mercy Corps' Market Analysis Unit (MAU) interviewed farmers about the July-November 2020 paddy growing season and upcoming winter crop season. Data collection included phone interviews during October 7-13, as well as a small number of key informant interviews (KIIs) the following week. The study used a convenience sample of 198 farmers (82% paddy farmers and 97% winter crop farmers) from six townships, including Kyauk Taw, Minbya, Mrauk U, Pauktaw, Ponnagyun and Sittwe.*

### Key Highlights

- **Eighty-seven percent of respondents expected livelihood challenges in October**, including difficulty selling goods (74%), acquiring inputs (67%), accessing transportation (66%) and retaining workers (48%).
- **Respondents expect a mixed but generally good paddy output this year**, although a quarter expect lower output than last year.
- **Many paddy growers expect movement / transportation limits to impact paddy sales this year**, on top of challenges related to price (73%) and demand (77%).
- **Traveling to find buyers if paddy prices are low may prove difficult this year**, given the impacts of conflict and COVID-19 on movement and transportation.
- **Winter crop cultivation may appear more attractive to farmers this year**, if conflict or COVID-19 interrupts crop imports into Rakhine State.
- **Access to winter crop inputs like seed may prove more difficult this year** if movement limits and transportation disruptions affect local travel and/or input supply chains.

### I. Challenges and Expectations

**Seventy-nine percent of respondents said they faced significant challenges from COVID-19 and/or conflict in September, and half of all respondents expected these challenges to increase in October.** Sixty-four percent said COVID-19 was a significant challenge, and 54% expected this to worsen (only 12% expected it to improve). Meanwhile, 49% said conflict was a challenge, most of whom felt the situation would worsen (by contrast, those for whom conflict was not a recent challenge did not expect conditions to worsen). Only 3% expected reduced challenges from conflict in October. Reported challenges from weather and pests stood at 38% and 41%, respectively, with less than a quarter of respondents expecting the situation to worsen. KIIs with farmers suggest that COVID-19 may be to blame for rising labor costs (e.g. curfew makes it hard to hire workers who commute long distances) and fieldwork challenges (e.g. limiting early-morning work). Another farmer tied labor challenges to conflict, saying recent landmine incidents in Minbya and Kyauk Taw had made some workers wary of fieldwork.

**Eighty-seven percent of respondents said they expected to face at least one significant livelihood-related challenge in October.** This included difficulty selling goods (74%), acquiring inputs (67%), accessing transportation (66%), and retaining workers (48%). KIIs with farmers

suggest that some farmers believe transportation interruptions may reduce access to winter crop seed. This may be because purchasing seed often requires travel to town-based suppliers (already a challenge for some due to longstanding restrictions on Muslim villages), but also because seed is often imported from outside Rakhine State. KIIs also suggested that rising labor prices may be a challenge. One Kyauk Taw farmer said labor costs for men and women had risen from 7,000 to 10,000 MMK/day and 3,500 to 5,000 MMK/day, respectively, since 2019.

## Respondent Characteristics: 2020 Paddy Farmers

Data collection involved interviews with 163 farmers who currently cultivate monsoon paddy. The following summary of their cultivation and marketing practices offer context for data in this snapshot.

- **Land Use** – The respondents are generally land-owning smallholder farmers. Ninety-three percent grow paddy on land they own, while 7% grow only on rented land. The median area devoted to paddy in 2020 was five acres, with 75% of respondents cultivating eight or fewer acres. A significant portion of respondents cultivate in remote areas. While 63% said they only cultivate paddy land “near a village”, 37% cultivate land “far from a village.”
- **Inputs** – More than 85% of respondents employ paid male labor for paddy cultivation, and 65% employ paid female labor. Twenty-eight percent purchase paddy seed (rather than strictly recycling existing seed).
- **Variety and Yield** – Most respondents grow just one (29%) or two (41%) varieties of paddy. These include both long- and short-duration varieties. The most common varieties are *pawsanhmwe* (71%) and *thiridon* (39%), although other common varieties include *shwewartun*, *sinthwelat*, *indiachai*, *sarpazi* and *kauknyin*. The median expected yield in 2020 is 54 baskets per acre.
- **Products and Sales** – Eighty-seven percent of respondents plan to monetize their 2020 harvest, while the remainder will grow only for consumption. Most will market paddy (79%), but some will sell rice (22%) or even bran (12%). The primary sales channel for many respondents is traders (56%), although some sell primarily to other households (14%) or directly to millers (13%). Only 4% use paddy primarily to repay creditors (e.g. land owners or input suppliers). The median price received for the 2019 harvest was around 5,000 MMK/basket for short-duration paddy and 7,000 MMK/basket for long-duration paddy.

## II. Expectations: Paddy Output and Sales

Among 163 respondents growing paddy in 2020, 94% also grew in 2019 and offered some comparisons which offer insight into expected paddy output and sales.

**Paddy Output** – Respondent expectations for the 2020 paddy harvest show a mixed but generally optimistic picture. Roughly speaking, respondents were split into thirds among those expecting their output this year to be smaller, larger, or the same as last year. Among those expecting lower output, most respondents estimated a 5-20% reduction from last year. KIIs point

to weather and conflict as possible explanations. One farmer cited lower than expected rainfall, which he said could hurt yields if it did not improve. However, other explanations due to conflict are not so easily remediated. One farmer said the presence of armed actors had prevented sufficient land preparation (he ploughed only once, instead of three times), therefore he hedged against possible losses by reducing fertilizer investment and is now concerned the land will not yield well. Another farmer said labor shortages at planting time (due to conflict, not COVID-19) could hurt yields.

**Paddy Sales – Respondents expect both demand-side challenges and a difficult business environment when they sell paddy this year.** Based on recollection, 69% of respondents said they faced challenges from low prices last year and 63% reported poor demand. Movement restrictions, transportation and market closures were each a problem for less than 25% of respondents. When asked about their expectations for selling their 2020 harvest, a slightly larger proportion expected challenges related to demand (77%) and price (73%) this year, however a much larger proportion now expect challenges from movement restrictions (77%) and lack of transportation (57%). One farmer in Mrauk U explained this by saying that transportation disruptions to Paletwa in Chin State could prevent farmers from capitalizing on demand there.<sup>1</sup>

**The adaptation strategies used by farmers to deal with challenges last year may or may not prove effective for selling the 2020 harvest.** Based on recollection, respondents said the most common adaptation strategies last year included selling at a discount (64%) and storing for later until prices rise (49%). Forty percent of respondents also said they traveled to reach new buyers. KIIs suggest that some farmers view storage as an ineffective strategy because paddy can lose 5% of volume over two-to-three months, reducing revenue. Traveling to seek new buyers may prove more difficult for future sales, given the impacts of conflict and COVID-19 restrictions on movement and transportation.

### III. Expectations: Winter Crop Cultivation

Interviews with 191 farmers who expect to grow winter crops in 2020 provide a snapshot of expectations for the coming season which begins in November.

**Winter Crop Expectations – Respondents suggest possible new entrants into the winter crop market.** Only 86% of respondents who said they will grow winter crops in 2020 also grew last year, pointing to a possible increase in growers. Furthermore, 97% of those who plan to grow this year say they also plan to sell (i.e. not just for consumption), and 62% say they will sell “most” of their output. Among those who grew last year, the primary sales channels were traders (43%), town markets (30%) and village markets (21%). To be sure, increased interest in winter crops may be strictly idiosyncratic, yet KIIs pointed to a few explanations related to conflict and COVID-19. For example, one farmer said COVID-19 had reduced crop imports into Rakhine, increasing prices and making cultivation more attractive. Another Mrauk U farmer said he felt more comfortable growing this year because there are fewer armed clashes near his land.

**Resource Allocation – Most respondents who grew last year do not plan to change land allocation for winter crops in 2020.** Seventy-two percent of respondents grew winter crops in a separate plot last year, while 20% grew strictly in a home garden. Among these, 71% said they had no immediate plans to change the acreage used for winter crops in 2020. Of course, events

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<sup>1</sup> Despite recent market closures from COVID-19, only 18% said they expect local market closures to affect sales of their 2020 harvest, likely because paddy (unlike winter crops) is not commonly sold at town and village markets.

such as conflict may change this. KIIIs suggest that ongoing conflict may be a major cause as farmers must determine which land can be reliably prepared, cultivated and harvested without interruption throughout the duration of the winter season.

**Fifty-four percent of respondents who grew winter crops last year plan to change their crop portfolio in 2020, although the net effect of this is unclear.** Last year, the most common winter crops among respondents were chili (34%), eggplant (26%) and long bean (22%), followed by cucumber, bitter melon, bottle melon and tomato (among many others). KIIIs suggest that crop portfolio changes may not be simply to promote soil health, but also to adapt to challenges from weather, conflict and COVID-19. One farmer said he will plant later this year—possibly with crops with shorter maturation—after September rains damaged his nursery (43% of respondents said they may change planting time in 2020). Another farmer said transportation limits had reduced seed availability and increased prices, causing him to reconsider the varieties he will plant.<sup>2</sup>

**Eighty-five percent of respondents expect to change their input use in some way in 2020, starting from a fairly high rate of use last year.** More than 90% of respondents purchased fertilizer, pesticide/herbicide and seed for their winter crops last year, while two-thirds also used paid labor (both male and female) and rented equipment. By contrast, credit use for winter crops was just 40% (compared to 74% credit use for paddy among the same group that year).

#### **IV. Implications**

**Paddy Output – If grower expectations are born out, some farmers could face lower output volumes in 2020 relative to the 2019 harvest.** A minority of growers currently expect smaller overall output relative to the 2019 harvest, which may prove challenging for household income.

**Paddy Sales – Transportation limits and movement restrictions from conflict and COVID-19 may limit adaptation strategies if prices are low.** If growers cannot easily travel to find buyers, alternative solutions like selling at discount could lead to overall lower paddy revenue.

**Winter Crop Volumes – Fewer imports and rising prices could lead to increased local winter crop cultivation.** On the one hand, increased local production—if it were to materialize—could impact winter crop prices. On the other hand, new growers attracted to winter crop cultivation could face uncertain success due to rising labor and fertilizer costs.

**Winter Crop Inputs – Transportation limits and movement restrictions from conflict and COVID-19 may limit seed availability and/or increase prices.** Winter crop farmers may struggle to access or afford seed if there are difficulties with village-town travel or regional imports.

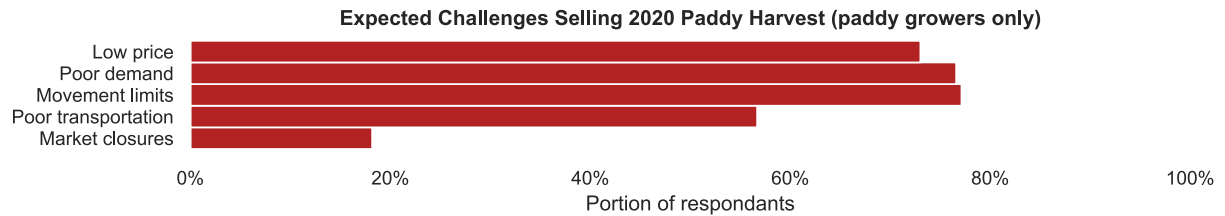
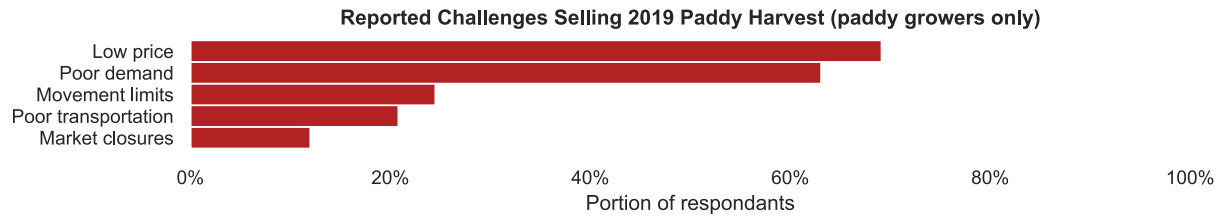
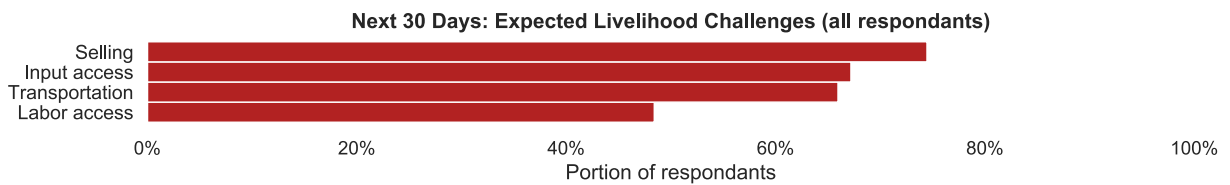
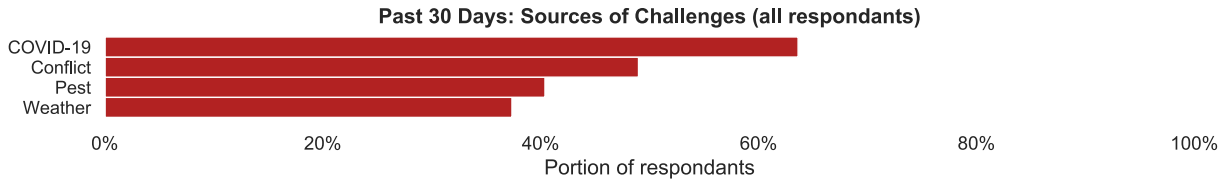
**Winter Crop Varieties – Winter crop farmers who face early challenges from weather or conflict may retreat to staple crops with reliable demand.** This may be particularly true if growers intend to substitute for reduced imports from out of state. Heavy reliance on staple crops, if yields are good, can saturate markets and lower prices.

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<sup>2</sup> One farmer reported paying 4500 MMK/pcs for seed in September 2020 which sold for 3500 MMK/pcs in 2019.

## V. Selected Charts

The below charts summarize responses pertaining to past and future expected challenges to livelihood activities overall (Charts 1 and 2) and selling paddy (Charts 3 and 4).



## **Mercy Corps' Market Analysis Unit (MAU)**

The Market Analysis Unit provides development practitioners and policymakers operating in Rakhine State with data and analysis to better understand the present and potential impacts of COVID-19, conflict and other crises on:

- **Household purchasing power, coping mechanisms and access to basic needs;**
- **Value chains**, including **trade** (ag. Inputs, machinery, supply), **cross-border dynamics**, and **market functionality** (particularly as it relates to **food systems**);
- **Financial services**, including **financial services providers**, household and business **access to finance** and **remittances**; and
- **Labor markets** (formal and informal), with a focus on agricultural labor and low wage sectors (construction, factories, food services).

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