HOUSEHOLD SURVEY (JUNE 2022)

MARKET ANALYSIS UNIT

# Vegetable Oil Consumption

*In late-May / early-June the MAU conducted a household phone survey to better understand vegetable oil consumption and responses to rising prices during the past year. Data are based on four convenience samples in Chin State, Kayin State, Rakhine State, and Magway Region. Reports are available online at* ***www.themimu.info/market-analysis-unit****.*

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## KEY FINDINGS

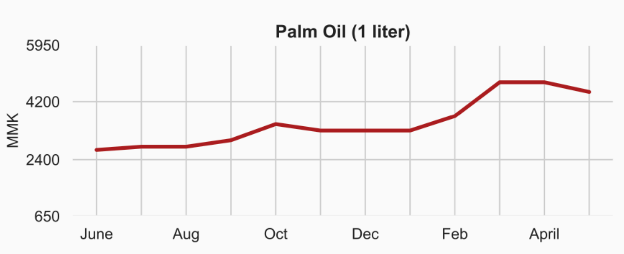
- **More than 70% of respondents reduced oil use in the past year due to rising prices**, and 46% in Chin and Rakhine States shifted to a cheaper oil type;
- **Palm and peanut oil were most commonly consumed by households**, but respondents in different regions relied on very different types and sources of oil;
- **More than 40% of households changed their diet or cooking method to reduce oil reliance** in the past year;
- **Magway Region respondents were most likely to seek out cheaper oil sellers as prices climbed**, and 51% now buy directly from local producers;
- **41% of respondents in Rakhine State reported less vegetable oil available to buy in recent months** compared to 15-19% in Magway Region and Kayin State;
- **Most respondents consume unbranded oil**, and much of this may be of a mixed type as well.

## BACKGROUND

**Vegetable oil prices have risen dramatically in the past year, and there is evidence of reduced availability of vegetable oil as well.** Palm oil prices in central Rakhine State increased 74% between May 2021 and May 2022, according to MAU Market Price Reports. In just three months (Feb. 2022 to May 2022), oil prices increased 24% in central Rakhine State and 19% in Kayin State. There is also evidence of reduced availability and consumption of vegetable oil in the past year. A recent study found that roughly 50% of food vendors in Myanmar reported less oil availability from March 2021 to March 2022.[1] In the same study, more than 60% of food vendors said their customers reduced their oil purchases in the past year.

**There is some evidence that rising vegetable oil prices may affect certain groups in Myanmar more than others.** The above study found that food vendors in conflict-affected areas more often reported reduced availability of oil compared to food vendors in non-conflict areas. Moreover, as the study also points out, households with higher typical expenditure on oil (e.g., such as the Dry Zone) may be more affected by rising prices than households that spend less of their food budget on vegetable oil. On the other hand, Myanmar's Dry Zone is also the primary production region for oilseed crops, potentially offering households more access to vegetable oil amid changes in the national market.

**FIGURE 1. Palm Oil Price in Rakhine State (2021 - 2022)**
Palm oil prices in Rakhine State rose 74% in the past year.




*Source: MAU Market Price Reports. May 2021 - May 2022.*

**This study surveyed groups in four states/regions to better understand the impact of rising oil prices on households in Myanmar.** The study surveyed one group each in Rakhine State, Chin State, Kayin State and Magway Region. The groups differed by location as well as other characteristics (see Box 1). The survey focused on the availability and consumption of vegetable oils, including perceptions of changes in the market and adaptation in behavior in response to these changes.

## OIL TYPES AND SOURCES

**Type of Oil – The type of oil most often consumed by households was different among groups in Rakhine, Chin, Magway and Kayin.** Palm and peanut oil were the oil types most often consumed overall, but a different oil type predominated within each group. In Kayin State the most widely reported oil was peanut oil (47%) followed by palm oil (24%). In Rakhine State the most widely re-

[1] Monitoring the Agri-food System in Myanmar. International Food Policy Research Institute (IFRRI). April 2022.

**BOX 1. Sample Description**

The samples in the study were drawn from four states/regions, yet each also differs in other potentially significant ways. The samples should not be interpreted as representing those regions, rather they are meant to offer a rough snapshot of possible differences.

**Chin State – The Chin State sample consisted of village- and town-based households in Hakha and Thantlang Townships, many of whom are displaced and earn income as laborers.** One-quarter of respondents were displaced (most of whom resided in a displaced site), and the rest lived in villages and towns. Ninety percent had less income than one year ago, and 63% recently received cash or voucher assistance. Roughly half earned income from casual labor, one-quarter earned income from farming, and 17% received remittances.

**Kayin State – The Kayin State sample consisted largely of village-based farmers in Hpa-An and Hlaingbwe Townships.** Just 2% of respondents were displaced (none lived in a displaced site), and 99% lived in villages. Sixty-four percent had less income than one year ago, while 28% said their income was unchanged and 8% said it was higher. Six percent recently received cash or voucher assistance. Eighty-nine percent earned regular income from farming, 42% earned income from fishing, and 13% received remittances.

**Magway Region – The Magway Region sample consisted of village-based farmers in Salin Township.** Just 2% of respondents were displaced (none lived in a displaced site), and 97% lived in villages. Fifty-nine percent had less income than one year ago, while 30% said their income was unchanged and 11% said it was higher. Almost none recently received cash or voucher assistance. Ninety-five percent earned regular income from farming, 31% earned income from fishing; almost none received remittances.

**Rakhine State – The Rakhine State sample consisted of households in towns and villages in Sittwe and Mrauk U Townships, many of whom are displaced and earn income as laborers.** Seventy-one percent of respondents were displaced, one-third lived in a displaced site, and two-thirds lived in either villages or towns. Eighty-three percent had less income than one year ago, while 15% said their income was unchanged. Seventy-five percent recently received cash or voucher assistance. Seventy-three percent earned regular income from casual labor, 5% earned income from farming, and 8% received remittances.

| | Chin State | Kayin State | Magway Region | Rakhine State |
|---|---|---|---|---|
| **Sample Size** | **155** | **139** | **157** | **204** |
| **Township** | **Hakha, Thantlang** | **Hlaingbwe, Hpa-An** | **Salin** | **Sittwe, Mrauk U** |
| **Displaced** | **24%** | **2%** | **5%** | **71%** |
| **Residence** | | | | |
| Displaced Site | 16% | 0% | 0% | 34% |
| Town | 58% | 1% | 3% | 24% |
| Village | 26% | 99% | 97% | 42% |
| **Female HOH** | **19%** | **2%** | **7%** | **20%** |
| **HH Income Source** | | | | |
| Trade/Retail | 16% | 9% | 8% | 12% |
| Farming | 25% | 89% | 95% | 21% |
| Casual Labor | 48% | 23% | 15% | 73% |
| Remittances | 17% | 13% | 1% | 8% |
| Fishing | 7% | 42% | 31% | 5% |
| **Less Income (1yr)** | **90%** | **64%** | **59%** | **83%** |
| **CVA Recipient** | **63%** | **6%** | **1%** | **75%** |

**FIGURE 2. Change in Household Income (Past Year)**

Most respondents said their household income was lower now than one year ago, especially in Chin and Rakhine States.

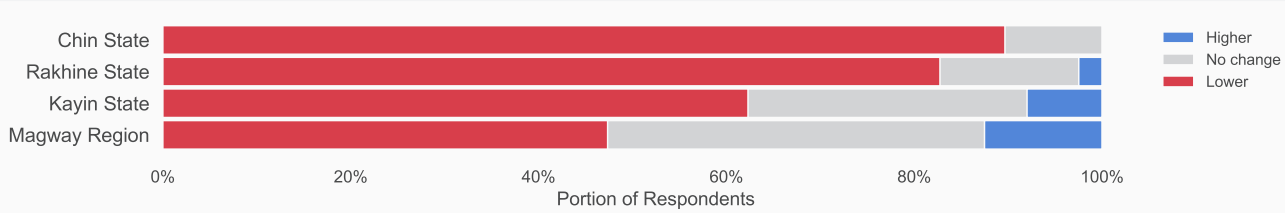
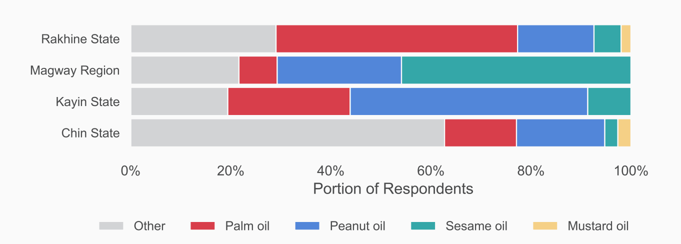


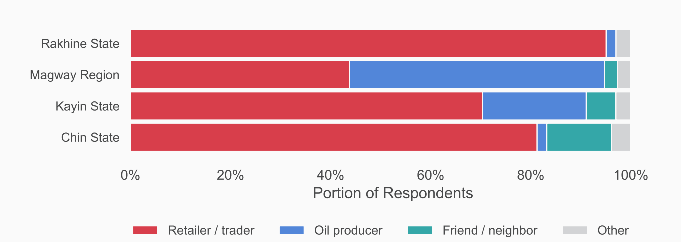
**FIGURE 3. Type of Oil Primarily Consumed**
The primary oil used by households varied greatly by group.




**BOX 2. Frequency of Oil Types, by Region**

**Palm oil** was consumed most often in Rakhine State (48%) and least often in Magway Region (8%). **Peanut oil** was consumed most often in Kayin State (47%) and least often in Rakhine State (15%). **Sesame oil** was consumed most often in Magway Region (46%) and least often in Chin State (3%). **Sunflower oil** was consumed most often in Chin State (30%), but it was not measured elsewhere.

**FIGURE 4. Source of Oil Consumed**
Buying oil direct from producers was common in Magway Region.




ported oil was palm oil (48%) followed by peanut oil (15%). In Magway Region the most widely reported oil was sesame oil (46%) followed by peanut oil (25%). In Chin State the most widely reported oil was sunflower oil (30%) followed by peanut oil (18%). Mustard oil was rare in Chin and Rakhine State and unreported elsewhere.

**Other oil types typically accounted for less than one-third of respondents in each group and likely consisted of sunflower oil and other mixed or unlabeled oils.** Sixty-three percent of respondents in Chin State reported using "other" oil not in the survey list, although half these respondents specified this to be sunflower oil. As such, sunflower oil likely also accounts for some of the 19-29% of respondents in the other three group that listed "other" (although this was not explored). It is also quite possible that many of these other oils are of a mixed type.[2]

**Brand of Oil – The vast majority of households consumed unbranded oil and/or did not know the brand of oil they consumed.** Ninety-five percent of households in Magway Region said their oil was unbranded or did not know the brand, and this was only somewhat lower in Kayin State (82%), Chin State (78%) and Rakhine State (73%). The scarcity of reports of branding is likely due in part to reliance on locally-produced, unbranded oil, particularly in oil-productive regions like the Dry Zone (see discussion of oil sources below). For example, 71% of respondents in Magway Region said their household consumed a vegetable oil that was locally produced and unbranded (compared to just 55% in Kayin State). Among the households consuming branded oil, the range of brands was broad with no evidence of any one brand controlling a notable market share.

**Source of Oil – The majority of households in Rakhine, Chin and Kayin States purchased vegetable oil from traders or retailers, while many in Magway Region purchased directly from producers.** Just 45% of households in Magway Region purchased vegetable oil from traders or retailers, compared to 70-95% of households in the other three groups. Purchasing directly from producers was most common in Magway Region (51%) and Kayin State (21%) but fairly rare in the northwest. Some respondents in Chin State (13%) and Kayin State (6%) purchased vegetable oil from a friend or neighbor who was not a formal actor in the vegetable oil value chain, but this was rare in Magway Region and Rakhine State.

## MARKET CHANGES AND ADAPTATION

**Change in Price – The vast majority of respondents in each of the four groups reported higher oil prices since March 2022.** All respondents in Rakhine and Chin States reported higher oil prices in the past three months

**FIGURE 5. Change in Oil Price (Since Feb. 2022)**
Most respondents in all groups observed recent price increases.

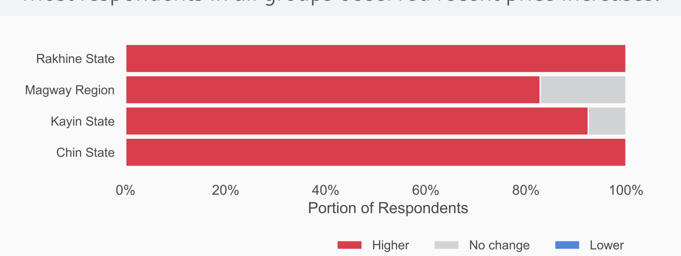
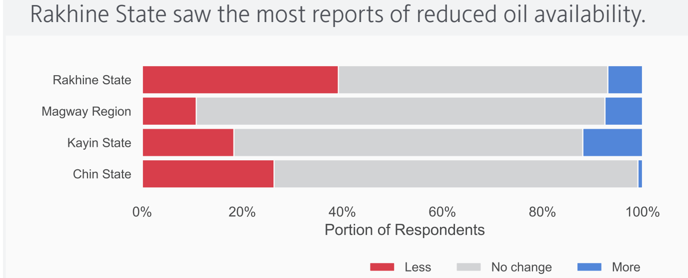



**FIGURE 6. Change in Oil Availability (Since Feb. 2022)**
Rakhine State saw the most reports of reduced oil availability.




[2] Product labeling in Myanmar can be imprecise, therefore respondents may not know or may mis-identify the oils they purchase. Very few respondents said they "did not know" the oil type, suggesting that most oils are labeled in some way. An oil labeled simply as "vegetable oil" is likely to be reported as "mixed" (other) but could be reported otherwise.

**BOX 3. Household Spending on Oil and Food**

**The share of monthly food expenditure devoted to vegetable oils may have risen in the past year even as many households consumed less oil.** Respondents provided back-of-the-envelopment estimates of the share of their household's food expenditure devoted to vegetable oil in the past month. The median household in Magway Region said vegetable oil accounted for 17.6% of their monthly food expenditure in May, compared to 14.3% in Kayin State, 11.4% in Chin State and 8.8% in Rakhine State. This is significantly higher than baseline figures from the 2015 MLCS which estimated 7.6% for households in the dry zone and 4.7% in upland areas. Data in this study is likely very "noisy" due to the rapid estimation methods used and should be taken strictly as a rough estimate.

compared to February and before, as did most respondents in Kayin State (93%) and Magway Region (83%). Some respondents reported no change in oil prices in Magway Region (16%) and Kayin State (7%), perhaps due to more access to locally-produced oil.

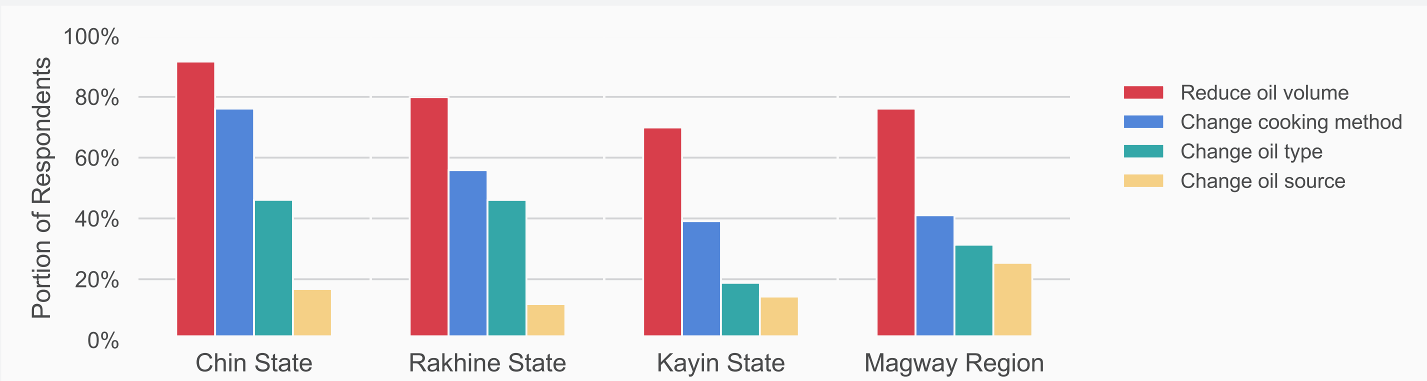
**Change in Availability – At least one-quarter of respondents in Chin and Rakhine States said vegetable oil was less available in their location, but most respondents reported no change.** Reports of reduced availability were highest in Rakhine State (41%) and Chin State (26%) but also not uncommon in Kayin State (19%) and Magway Region (15%).[3] Most respondents in each group reported no change in oil availability since March 2022. Roughly three-quarters of respondents reported no change in locally-available stocks of vegetable oil in Magway Region (78%), Kayin State (70%) and Chin State (72%), and half in Rakhine State (53%) said this.

**Adaptation in the Past Year – Respondents often adapted to higher oil prices in the past year by reducing the volume of oil used in dishes and shifting to dishes and/or cooking methods like boiling that do not require oil.** When asked how if/how they responded to rising oil prices in the past year, 92% of respondents in Chin State said they reduced the volume of oil used in dishes, as did 70-80% of respondents in other groups.[4] Shifting to foods or cooking methods that required less oil (e.g., boiling) was common in Chin State (76%) and Rakhine State (56%) although it was reported less often in Magway Region (41%) and Kayin State (40%). Forty-six percent of respondents in Chin State and Rakhine State shifted to a cheaper type of oil in the past year, although this was less frequent Magway Region (31%) and Kayin State (19%). In Magway Region where local oil production is most common, 25% of respondents changed the source from which they purchased oil, although this was lower elsewhere (12-17%). When asked how they would respond if oil prices were to double next month, even higher portions of respondents in each group said they would adopt the above measures (the order of preference for the various modes was unchanged in the scenario of prices doubling).

## IMPLICATIONS

- **Support for households with poor oil access may need to be regionally-adapted** given variation in production and purchase/consumption habits;
- **Collaboration with local oil producers may prove fruitful** in areas with significant local production (e.g., Myanmar's Dry Zone);
- **Further assessment of the health and dietary impacts of rising oil prices may be needed**, given potential shifts in food expenditure and reports of shifts in food and cooking methods.

**FIGURE 7. Adaptation to Rising Oil Prices (Past Year)**
In the past year, respondents in each group who faced higher oil prices showed slightly different adoption of adaptation measures.

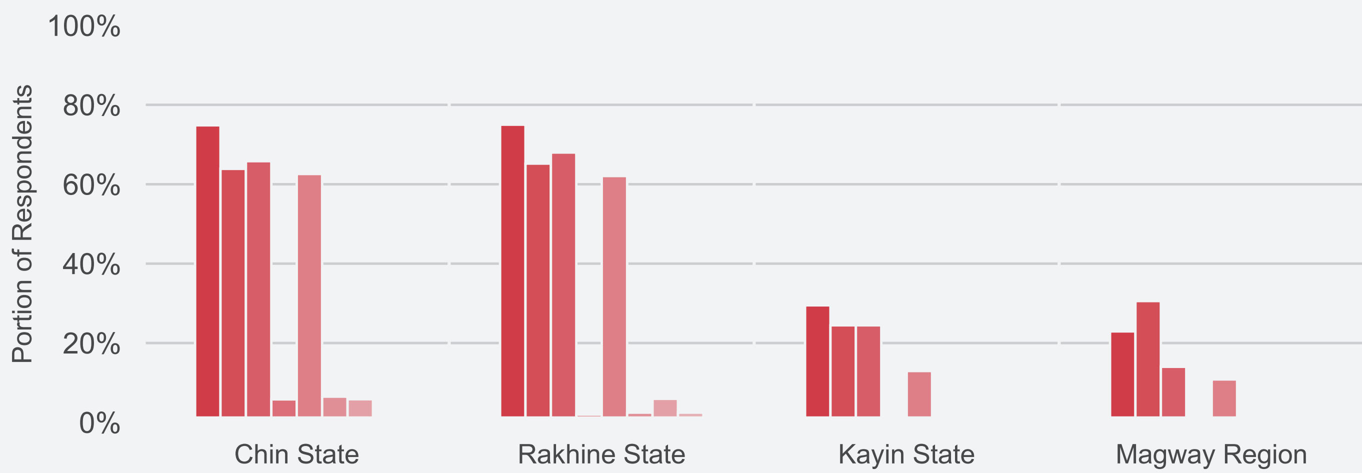



[3] Reports of both more/less oil available (e.g., Kayin State and Magway Region) is likely due in part to village-level variation and more access to local-producers who can impact supply.
[4] This question asked specifically about responses to rising prices, however changes in behavior may also be explained in part by other factors (e.g., reduced income or availability).

**BOX 4. Food Insecurity (May 2022)**

The MAU regularly collects data on eight Food Insecurity Experience Scale (FIES) indicators as part of its household surveys.

**Indicators of food insecurity were significantly higher among respodents in Chin and Rakhine State compared to those in Magway Region and Kayin State.** Seventy-five percent of respondents in Chin and Rakhine State reported worrying about not having enough food to eat in the past thirty days, compared to much lower frequencies in Magway Region (23%) and Kayin State (30%). Similarly, the portions of respondents who said someone in their household was unable to eat healthy, ate only a few kinds of foods, or at less than they thought they should were notably higher in Chin and Rakhine States (62-68%) compared to Kayin State and Magway Region (11-31%). There was relatively little disparity between the four groups with respect to the four most severe food insecurity indicators. The portion of respondents who said someone in their household skipped a meal, ran out of food or went hungry was 6% in Chin State, compared to 2-6% in Rakhine State and less than 1% in Kayin State and Magway Region.




**In the past thirty days, there was a time when someone in the household...**

- FIES 1 - Worried about not having enough food to eat because of a lack of money or other resources.
- FIES 2 - Was unable to eat healthy and nutritious food because of a lack of money or other resources.
- FIES 3 - Ate only a few kinds of foods because of a lack of money or other resources.
- FIES 4 - Had to skip a meal because there was not enough money or other resources to get food.
- FIES 5 - Ate less than you thought you should because of a lack of money or other resources.
- FIES 6 - Ran out of food because of a lack of money or other resources.
- FIES 7 - Was hungry but did not eat because there was not enough money or other resources for food.
- FIES 8 - Went without eating for a whole day because of a lack of money or other resources.

## Market Analysis Unit (MAU)

The Market Analysis Unit provides development practitioners, policymakers and private sector actors in Myanmar with data and analysis to better understand the impacts of Covid-19, conflict and other crises on:

- Household purchasing power, including coping mechanisms, safety nets and access to basic needs;
- Supply chains, including trade, 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 (e.g., construction, food service).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