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# Compounding stresses confront rural households in Southern Malawi

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Southern Malawi has historically been less food secure than the rest of the country, and the current lean season will be no different. The Malawi Vulnerability Assessment Committee expects 2,460,000 people in the Southern Region (29% of its population) to require humanitarian assistance at the peak of the lean season in February and March 2024, compared to 1,560,000 people in the Central Region (18% of its population) and 388,000 people in the Northern Region (15% of its population) (MVAC 2023). The Southern Region is home to 44% of Malawi's population, but to 56% of those in need of humanitarian assistance. More people in the Southern Region are in danger of going hungry in the coming months than in the Central and Northern regions combined. But who are these people, what is behind their vulnerability, and what does the future have in store for them?



#### Figure 1. Food security (HHS) comparing years

Source: RFMS data collected since August 2020 in Balaka, Chikwawa, Chiradzulu, Mangochi, Phalombe, and Zomba districts. Note: The Household Hunger Scale (HHS) is a weighted indicator of the frequency, over the past month, with which households report having no food of any kind in the household, going to bed hungry, or going a full day and night without food (see Ballard et al. 2011). It ranges from 0 - 6, with 1-2 typically considered "stressed", 3-4 "food insecure", 5 "crisis," and 6 "catastrophe." Note that the average monthly value of HHS (left panel) falls in the "stressed" range, while a significant percentage (right panel) are classified as "food insecure" (or worse) with values >= 3.

#### Deteriorating food security

We use high frequency panel data collected by Catholic Relief Services in 6 southern districts (450 households per district, representative at the district level in rural areas) to investigate food insecurity trends and patterns in these vulnerable areas.<sup>1</sup> Figure 1 shows the overall disturbing nature of the current situation (using the Household Hunger Scale to reflect food insecurity) – that, while the seasonal trend dominates, with improvement around harvest time followed by a steady decline thereafter, the overall situation has been generally worsening over the past two years.

The confluence of several challenges in the 2022-2023 growing season, as well as macroeconomic conditions, have contributed to this situation. In particular, a number of factors have resulted in poor overall production of maize, and hence households are running out of their homeproduced stocks earlier than usual and relying on markets.

#### Low maize production

Very few households grow enough food to satisfy their own needs. Figure 2 shows that in the 2018/19 growing season, only 12 percent of households living in rural parts of the 6 studied districts grew at least as much maize as they consumed. The lower panel in that same figure shows a strong wealth gradient. Among the poorest 20% of households practically none grew enough maize to satisfy their own needs, while 36% of those in the wealthiest quintile did. The 2018/19 agricultural season was an average one by most measures. In years with below-average production, the share of self-sufficient households is likely to be even lower.

## Figure 2. Households by maize production



Source: Fifth Integrated Household Survey, 2019/20. Data from rural parts of Balaka, Chikwawa, Chiradzulu, Mangochi, Phalombe, and Zomba districts

#### Figure 3. Percentage of households purchasing all staple foods from the market



Source: RFMS data collected since August 2020 in Balaka, Chikwawa, Chiradzulu, Phalombe, Mangochi, and Zomba districts

<sup>&</sup>lt;sup>1</sup> RFMS data collection started in August of 2020 in the six districts of Balaka, Chikwawa, Chiradzulu, Mangochi, Phalombe, and Zomba. It expanded to an additional four districts (Machinga, Mulanje, Nsanje, and Thyolo) in July 2021, and in turn to Blantyre Rural and Karonga in December 2022. For consistency of inter-annual trends, our analyses are limited to the six initial districts. However, analysis of the more recent period using the 10 southern districts is similar. More detailed information about the data can be found in the RFMS Methodology Report, which is available upon request.

Households typically consume home-produced food right after harvest in May and June, but most eventually run out of their stocks and must turn to the market to purchase their staples. Figure 3 shows that over the past 3 years this has been happening increasingly early in the season.





Source: RFMS, calculated from sources of maize consumed.

Whereas at the peak of the lean season in 2021/22 (February 2022) 82% of households relied entirely on the market to buy their maize, that same share of households was reached between September and October in this 2023/24 lean season.

Figure 4 shows, for each enumeration area on which we have data, the share of households consuming any maize from their own production, first, on the left, in July/August just a few months after the harvest, and then, on the right, in December/January, as households enter the lean season. The figure shows a trend of increased reliance on the market for consumption of maize over the three vears considered. This trend is visible both in the months after the harvest (left hand side panels). and upon entering the lean season (right hand side panels). Comparing the bottom left and top right panels in Figure 4, we see that the distribution of households consuming from own stocks in the months immediately after the harvest in 2023 looks very similar to that of the lean season in 2021. This is indicative of a very stressed food security situation in 2023, even ahead of the lean season.

#### High prices

Unfortunately, as an increasing number of households turn to the market to buy maize, this puts further upward pressure on its price. And, while such seasonal price movements are, to some extent, expected, there has been an unprecedented and sustained increase in maize prices over the past two seasons.



Month

2023-24

Hist avg, 2016-202

movements across the months.<sup>2</sup> The grey line shows the historical average be tween 2016 and 2021. The 2021/22 growing season followed this trend, roughly. During the 2022/23 growing season the price was an order of magnitude higher during all months and the price peak persisted much longer. In the current 2023/24 growing season the price levels were higher again. Already in Au-

dented levels since.

Figure 5 shows nominal maize price

gust 2023 they were on par with the peak lean season prices of the previous year,

and they have moved up to unprece-

2021-22 Source: IFPRI (2024).

2022-23

200

Such high prices, combined with a trend of increased reliance on the market for maize consumption, make for an increasingly precarious food security situation, as shown in Figure 1.

High food prices are linked to low productivity, but also exacerbated by Malawi's weak macroeconomic condition. A long-standing and growing balance of payments deficit necessitated a series of devaluations of the Malawi Kwacha, which in turn put upward pressure on prices of all imported goods, including agricultural inputs and food. As a result, households need to not only spend more on inputs to grow their food, but also sell more of their harvest earlier to meet other needs, contributing to the dearth of food at home and as such to high food insecurity.

<sup>&</sup>lt;sup>2</sup> The prices depicted are not adjusted for inflation; but, as maize makes up 45% of the consumption basket used to calculate inflation, these nominal prices are reflective of what households experience.

## Cyclones

The major cyclones in 2022 (Ana) and 2023 (Freddy) have received a great deal of attention. While the cyclones have had severely negative impacts on households whose dwellings, fields or livestock were damaged, they are only one of many food security challenges that households face.



Figure 6. Food security (HHS) by weather or not households were affected by cyclones

Source: RFMS data collected since August 2020 in Balaka, Chikwawa, Chiradzulu, Phalombe, Mangochi, and Zomba districts. Note: Vertical lines indicate timing of cyclones Ana (2022) and Freddy (2023).

Figure 6 shows the evolution of the average household hunger scale over the past three years for all households (solid black line) and then separately for households that reported having been affected by at least one of the cyclones (solid orange line) and those not affected by either (dashed orange line). The graph shows that cyclone-affected households were less food secure not just after both cyclones but also ahead of them. In other words, these households tend to be *chronically* worse off than the unaffected ones.

These combined factors are reflected in households' reported experience of shocks (Figure 7). During the cyclone years of 2022 and 2023, there was a notable rise in households reporting incidents of flooding and strong winds. However, in each year many more households reported being affected by dry spells and high food prices.



### Figure 7. Shocks reported by households

Source: RFMS data collected since August 2020 in Balaka, Chikwawa, Chiradzulu, Phalombe, Mangochi, and Zomba districts.

#### More shocks to come

The damage wreaked on the lives and livelihoods of those directly affected by the floods brought about by cyclones Ana and Freddy showed how vulnerable many Malawian households were last year. Unfortunately, the compounded stresses of low production and high prices have since further eroded resilience, and there is little hope for improvement in the near future. Like in previous years, the distribution of subsidized fertilizer to smallholder farmers was delayed in the 2023/24 growing season (Times 2023), which will limit its effect on maize production. If the ongoing El Niño climatic event brings prolonged dry spells to southern parts of Malawi as it often did in the past, maize production will drop even further (Stige et al. 2006, Anderson et al. 2023). The 2023/24 South-West Indian Ocean cyclone season has thankfully been benign so far, but it could still produce damaging storms in the coming months. On the economic front, the spread between the official and black-market exchange rates suggest that the Kwacha is still overvalued, so further currency devaluation and price increases could be in the offing. Whichever one of these shocks may materialize, it will hit a population whose ability to withstand it has been heavily eroded.

## Way forward

What to do? In the short term, policy makers should closely monitor the food security situation and stand ready to promptly and flexibly respond to it. Preparations can be made in advance to facilitate maize imports in the event of a domestic shortfall. Given Malawi's fragile macroeconomic and fiscal condition, it may be necessary for the international community to provide financial backing for essential food imports. A sizeable part of Malawi's population may require food or cash transfers and plans for identifying and reaching those in need can already be put in place now.

Looking further ahead, agricultural productivity must improve. Ways to do that have been discussed at length and include investment in soil health, agricultural extension, and research, as well as timely delivery of inputs and a more predictable, rules-based regulatory environment (Chadza and Duchoslav 2022, Duchoslav et al. 2023). Investment into irrigation will be especially important to reduce Malawi's dependence on the whims of the weather.

However, higher productivity can take smallholders only so far. Most Malawian smallholders, and especially those in the Southern Region, farm on land holdings that are too small to be the sole source of their livelihoods even with improved productivity (Benson and De Weerdt 2023). They must supplement their income from off-farm sources, which are typically limited to *ganyu*, low-wage day-labor or piecework (Van Cappellen and De Weerdt 2023). Policies to promote rural employment are less researched than those aimed at improving agricultural productivity, but promising strategies are emerging (De Weerdt et al. 2023) and should be further explored and tested. Until such time that rural dwellers can rely on off-farm employment for their livelihoods, many will remain food insecure, vulnerable to shocks, and reliant on external assistance.

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