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## Patterns of social safety nets, weather shocks, and household food security status in Malawi

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### Key Messages

- A large share of Malawian households faces multiple shocks which affect their welfare.
- There is a need to develop programs that increase household resilience against the recurring weather-related disasters and adversities such as promotion of climate smart technologies and practices.
- As a coping mechanism, most households resort to using own savings, while a significant number of households do nothing.
- Social safety nets and farm input subsidies play a significant role in cushioning households against shocks, but the current programmes are hampered by poor targeting hence not fully benefiting the intended poor households.
- The government and development partners should develop better ways of targeting of the existing social safety nets and input subsidy programmes so as to benefit the deserving and intended poor households.

### Introduction

The Malawi 2063 development agenda aims to transform Malawi into a wealthy and self-reliant nation by the year 2063. To achieve this, the agenda recognizes the need for social protection both as a human right and a means of ensuring shared prosperity with marginalized and vulnerable groups. The long-term goal is to reduce the number of people in need of social protection by creating wealth for all Malawians. Thus, the strategy of the Government of Malawi is that, going forward, social protection programmes will embrace a longer-term approach of building the resilience of households to shocks which include recurring natural disasters and weather adversities related to climate change<sup>1</sup>.

The Government of Malawi has come up with the National Resilience Strategy (2018-2030) with the aim of transitioning from “recurrent humanitarian appeals to protective and productive investments in complementary interventions targeting chronically food insecure and poor households supported by effective institutional coordination and multi-sectoral planning and implementation”<sup>2</sup>.

An in-depth understanding of the effectiveness of existing programmes and household-level shocks is key to reprogramming of social protection programmes to strengthen resilience to shocks. This includes exploring food security trends, understanding the patterns of the types of shocks faced over time, the coverage of the existing

programmes, and who the beneficiaries of these programmes are.

### Data and methodology

The study uses nationally representative data from the integrated household surveys (IHSs) conducted by the National Statistical Office (NSO) in collaboration with the World Bank. Three cross-sectional rounds of IHSs with approximately 12,000 households each are used, namely IHS3 (2010-11), IHS4 (2016-17), and IHS5 (2019-20). These surveys collect information on agriculture and the various aspects of welfare and socio-economic status in Malawi<sup>3</sup>.

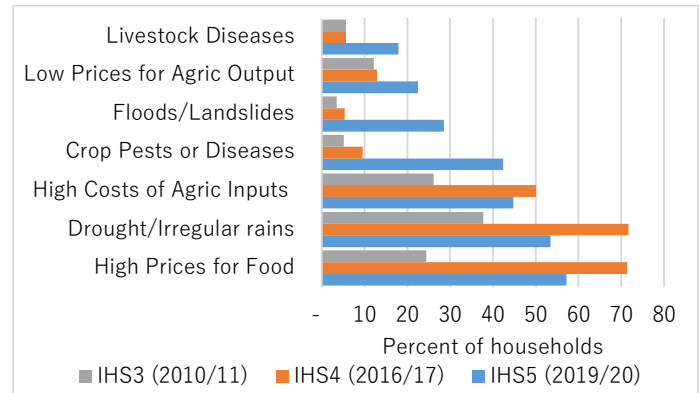
To assess the food security situation of households, we compute food consumption scores using the frequency of consumption of different food groups by a household seven days prior to the survey. Furthermore, we compute a food security coping strategy index (CSI) as a proxy indicator for food insecurity based on coping mechanisms used by households to mitigate against reduced access to food. These include relying on less preferred or less expensive foods, limiting portions at meal times, reducing the number of meals eaten in a day, restricting consumption by adults and, borrowing food or relying on help from relatives and friends. For each of the cross-sectional survey years, poverty status categorizes households as poor if they fall below a consumption expenditure poverty line and non-poor if above the line. The poverty lines are specific to each survey round.

### Types of shocks faced by households

Data shows that large shares of households face multiple shocks each year and the incidence of the shocks has increased since 2010/11.

The most significant shocks include unusually high food prices (57 percent in 2019/20), and unusually high costs of agricultural inputs (45 percent in 2019/20).

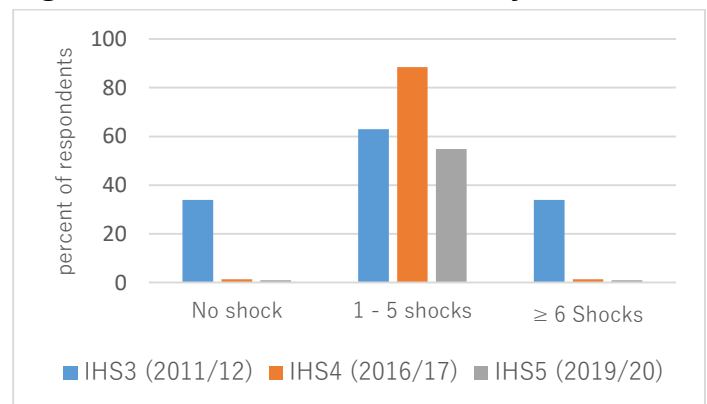
**Figure 1: Main shocks faced by households**



Source: Authors' computation from IHS data

Weather shocks related to climate change such as drought, irregular rains, floods, and landslides are significant and have registered increases between 2010/11 and 2019/20. Some research suggests that climate change increases the risk of pests (a huge problem in Malawi, especially the Fall Armyworm first reported in 2016) spreading in agricultural and forestry ecosystems<sup>4</sup>.

**Figure 2: Number of shocks faced by households**



Source: Authors' computation from IHS data

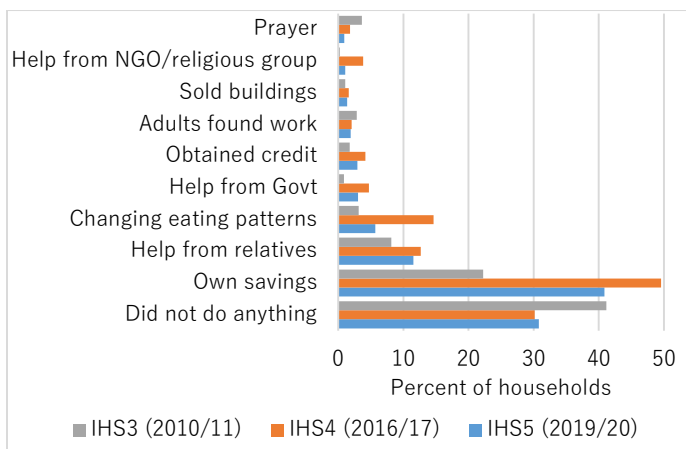
In addition to the persistent nature of shocks, data also shows that households face multiple shocks, with the majority of households facing between 1

to 5 shocks over the past 12 months (Figure 2), with some of the households facing more than 6 shocks over the past 12 months. While 34 percent of households reported having experienced no shocks during 2010/11, almost all households reported that they experienced some form of shock in 2016/17 and 2019/20.

### Mechanisms for mitigating against impact of shocks

The main mechanisms for mitigating against the negative impacts of shocks include using own savings (40.9 percent in 2019/20) and receiving assistance from others.

**Figure 3: Mechanisms for mitigating against shocks**

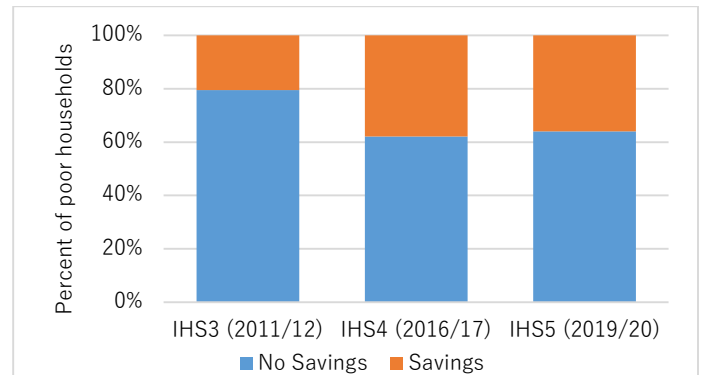


Source: Authors' computation from IHS data

While this is the case, at least 30 percent of households reported that they did not do anything when faced with a shock in each of the survey years, suggesting that the households either did not have the means to mitigate against shocks or were able to overcome the shocks without any challenges.

Data shows that poor households are more likely to have no savings to fall back on than non-poor households (Figure 4), and are therefore more susceptible to shocks.

**Figure 4: Share of households facing poor consumption status with and without savings**

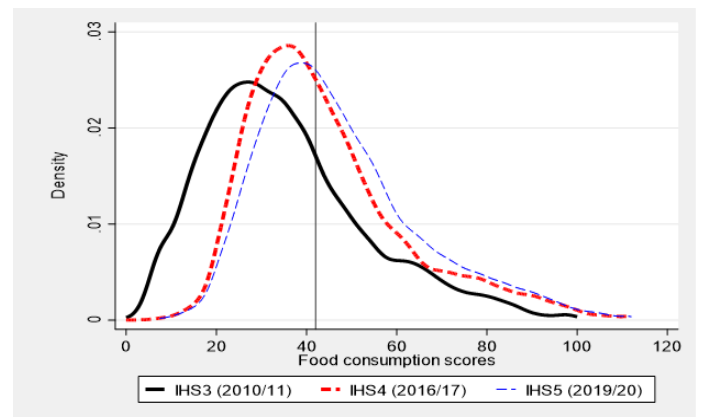


Source: Authors' computation from IHS data

### Food security status and coping strategies

The outward shift in the density estimates for food consumption scores suggests an improvement in the household food security situation between 2010/11 and 2019/20. Scores above 42 (the vertical line) signify acceptable food consumption.

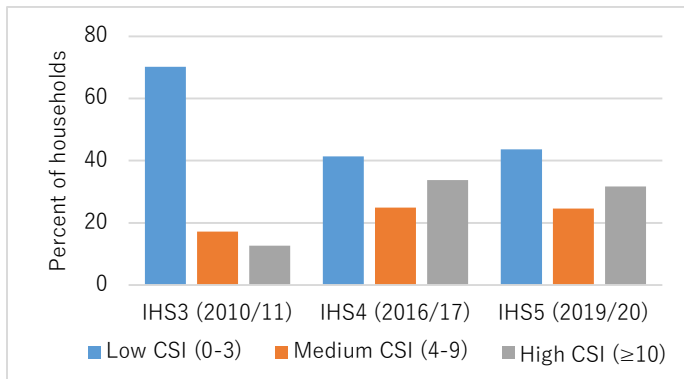
**Figure 5: Temporal patterns of food security**



Source: Authors' computation from IHS data

In line with the observed improved food security situation (Figure 5), data shows that the percentage of households with low coping (scores between 0 and 3) declined between 2010/11 and 2019/20. Similarly, the percentage of households with high coping (scores greater than or equal to 10) increased over the same period (Figure 6).

**Figure 6: Patterns of coping strategy index**



Source: Authors' computation from IHS data

### Social safety nets and poverty status

Social safety nets are non-contributory transfer programs implemented by Government and civil society aimed at assisting poor and vulnerable households<sup>5</sup>. These include social cash transfers, feeding programmes, public works programmes, and scholarship programmes (Table 1).

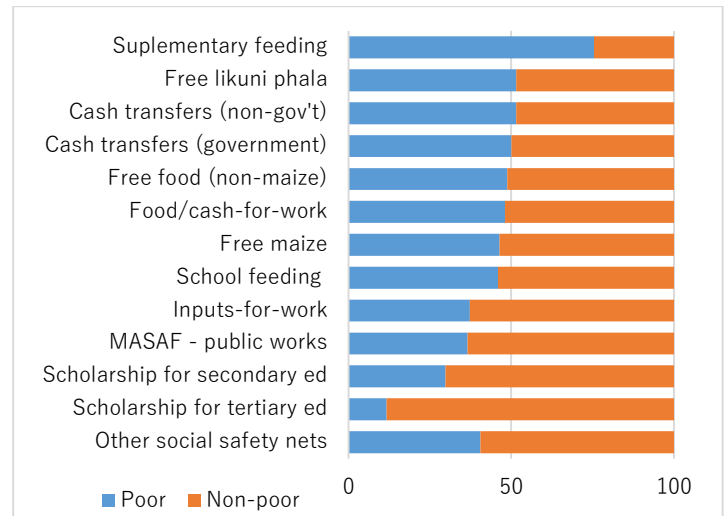
**Table 1: Percentage share of households that reported benefiting from social safety nets**

Social safety net group	IHS3 (2010/11)	IHS4 (2016/17)	IHS5 (2019/20)
Cash transfers	0	4	8
Feeding programmes	17	33	31
Public works programmes	0	9	5
Scholarships	0	1	1

Source: Authors' computation from IHS data

Data shows that with the exception of supplementary feeding programme for the malnourished, a larger share of non-poor households compared to poor households benefited from social safety net programmes, (Figure 7). The observed differences are particularly larger for scholarship programmes, public works and inputs-for-work. Similar patterns are observed for IHS3 and IHS4 data.

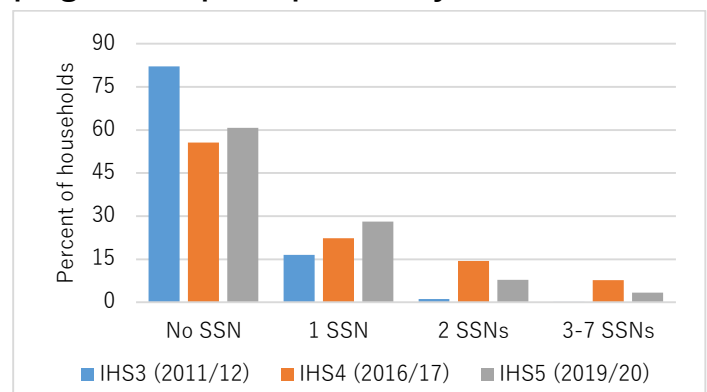
**Figure 7: Share of poor and non-poor households receiving social safety nets (IHS5)**



Source: Authors' computation from IHS data

Furthermore, some households reported that they benefited from more than 1 safety net (Figure 8). This applies to all cross-sectional survey years.

**Figure 8: Number of social safety net programmes participated in by households**

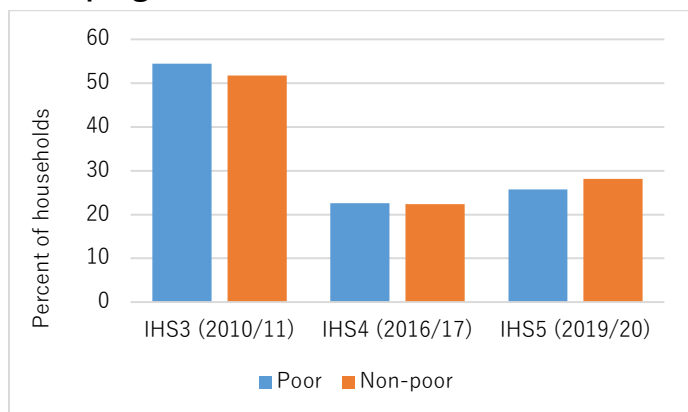


Source: Authors' computation from IHS data

### Farm input subsidy programme and poverty status

Data shows that while a relatively larger share of poor households received farm input subsidy programme (FISP) coupons (with the exception of 2010/11), the share of non-poor households also benefiting from the programme is large for all the three survey years.

**Figure 9: Share of households benefiting from FISP programmes**

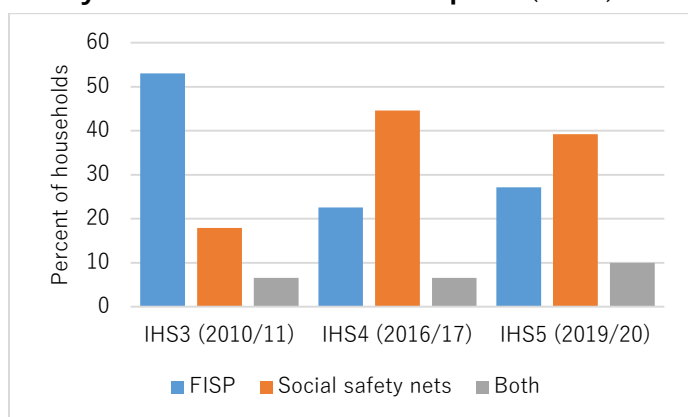


Source: Authors' computation from IHS data

### Overlaps between social safety nets and subsidized coupon

Data shows that an increasing share of households benefited from both social safety nets and subsidized coupons, suggesting some evidence of a lack of streamlining of interventions in the existing programmes.

**Figure 10: Share of households receiving social safety nets and subsidized coupons (FISP)**



Source: Authors' computation from IHS data

### Policy suggestions

A number of policy recommendations can be drawn from our findings. Firstly, given their importance in helping households cope with the impact of shocks, both social safety nets and input subsidy

programmes should be strengthened to address targeting issues which include cases of an increasing share of households benefiting from multiple social safety nets and also receiving both social safety nets and subsidized inputs. A future study could help identify how to better target these programmes, including their effectiveness. Secondly, considering the recurring incidence of weather-related shocks, programmes should be developed to increase household resilience against these shocks, with priority given to the promotion of climate-smart technologies and practices such as drought-resistant crops and livestock, improved water management technologies, crop diversification, reforestation programmes, conservation agriculture, and integrated soil fertility management practices. These sustainable agricultural intensification practices have been identified as viable options for improving agricultural productivity and household welfare<sup>6,7</sup>.

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