



Food and Agriculture Organization
of the United Nations



World Food
Programme

Data in Emergencies

Monitoring the Impacts of Shocks to Agricultural Livelihoods and Food Security in Myanmar

Round 6

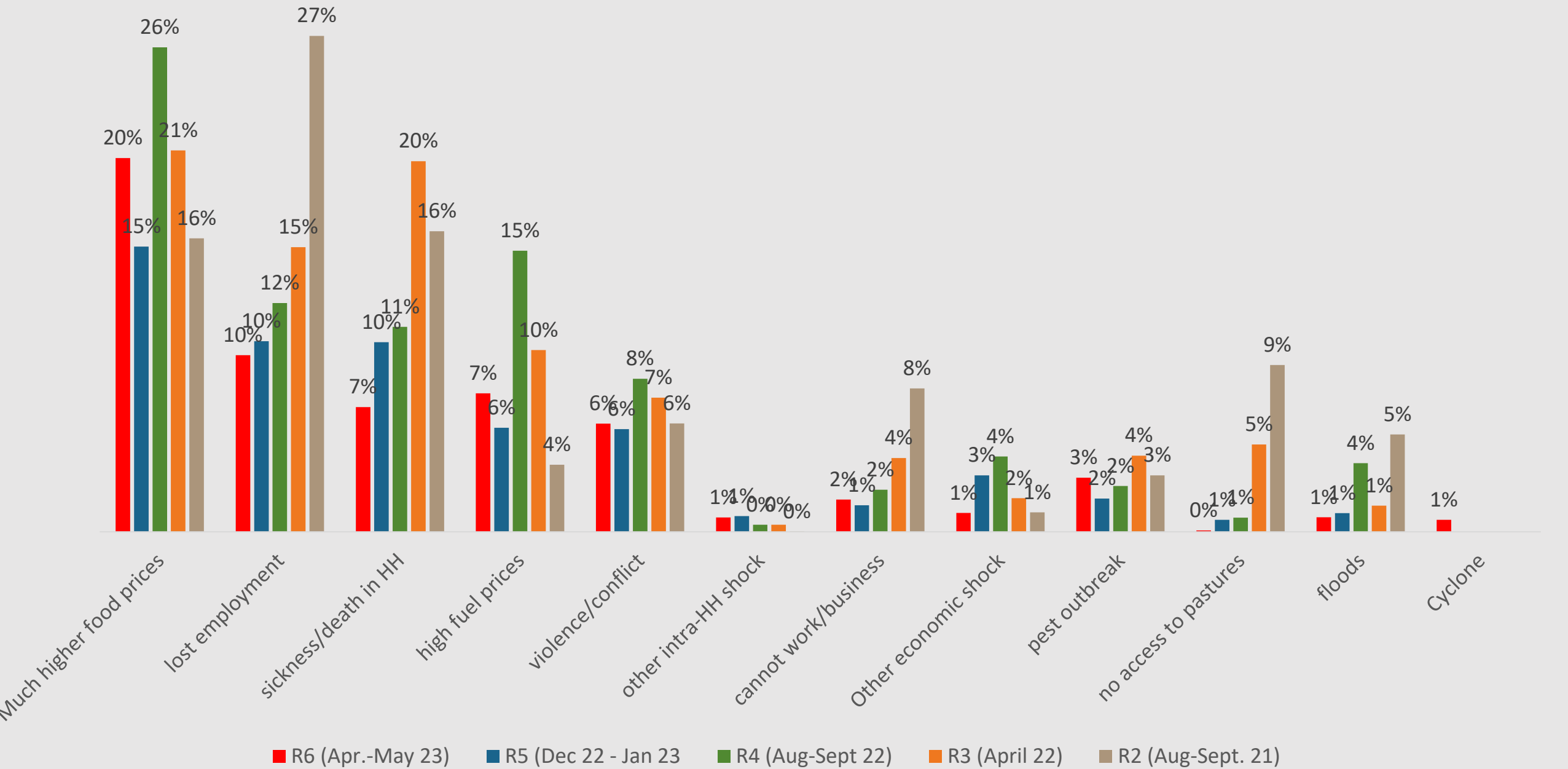
April – May 2023 Survey Reach

	Target	Total Sample	Agric. HH	non agric. HHs
Ayeyarwady	300	299	192	107
Bago	300	300	194	106
Chin	300	136	88	48
Kachin	300	299	158	141
Kayah	300	177	46	131
Kayin	300	273	126	147
Magway	300	299	202	97
Mandalay	300	298		
Mon	300	300	154	144
Rakhine	300	241	163	137
Sagaing	300	300	135	106
Shan	300	300	196	104
Shan	300	299	159	140
Tanintharyi	300	227	84	143
Yangon	300	300	117	183
TOTAL	4200	3748	2014	1734

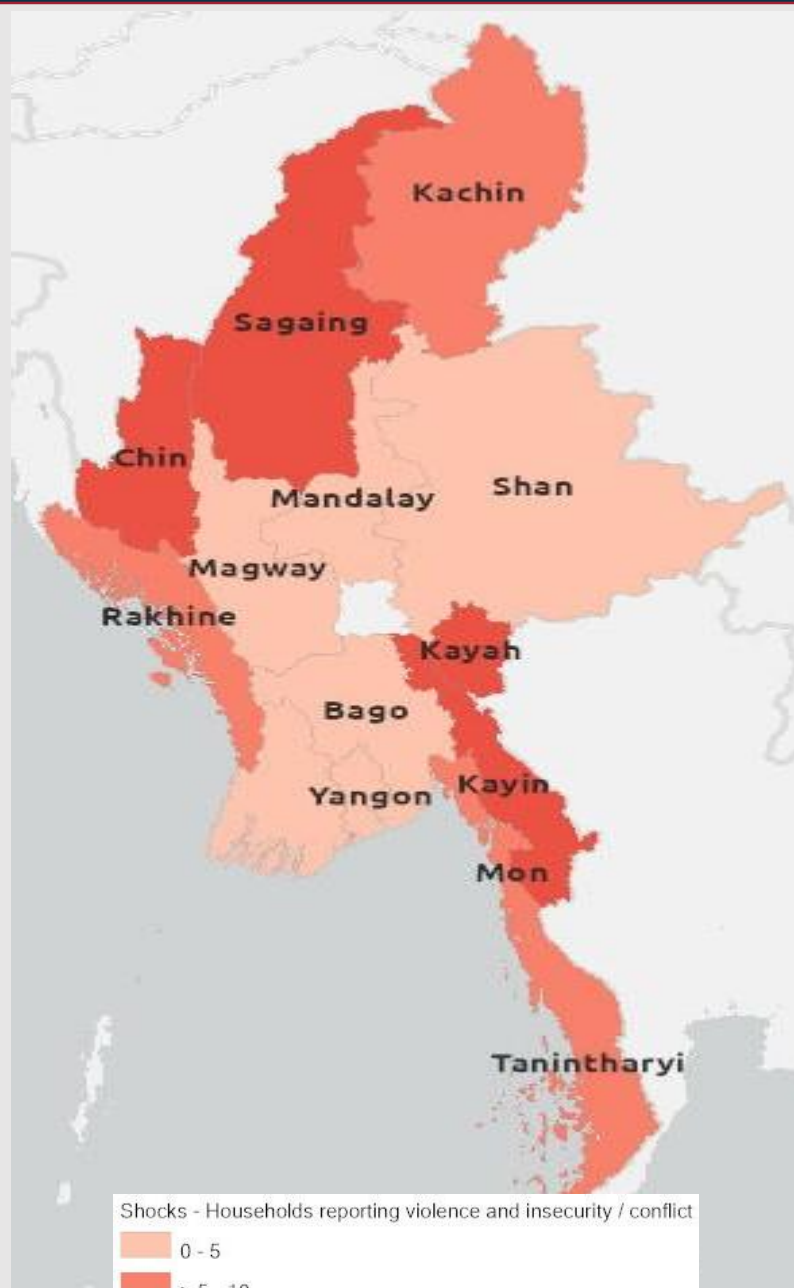
- Data collected via CATI from 3,748 households
- Representative at state/region level; lower number of completes in Kayah, Tanintharyi, Chin
- Still representative with CI $\pm 6\%$
- Results weighted by demographics, engagement in agriculture, wealth proxy (education)

INCOME AND SHOCKS

SHOCKS



SHOCKS

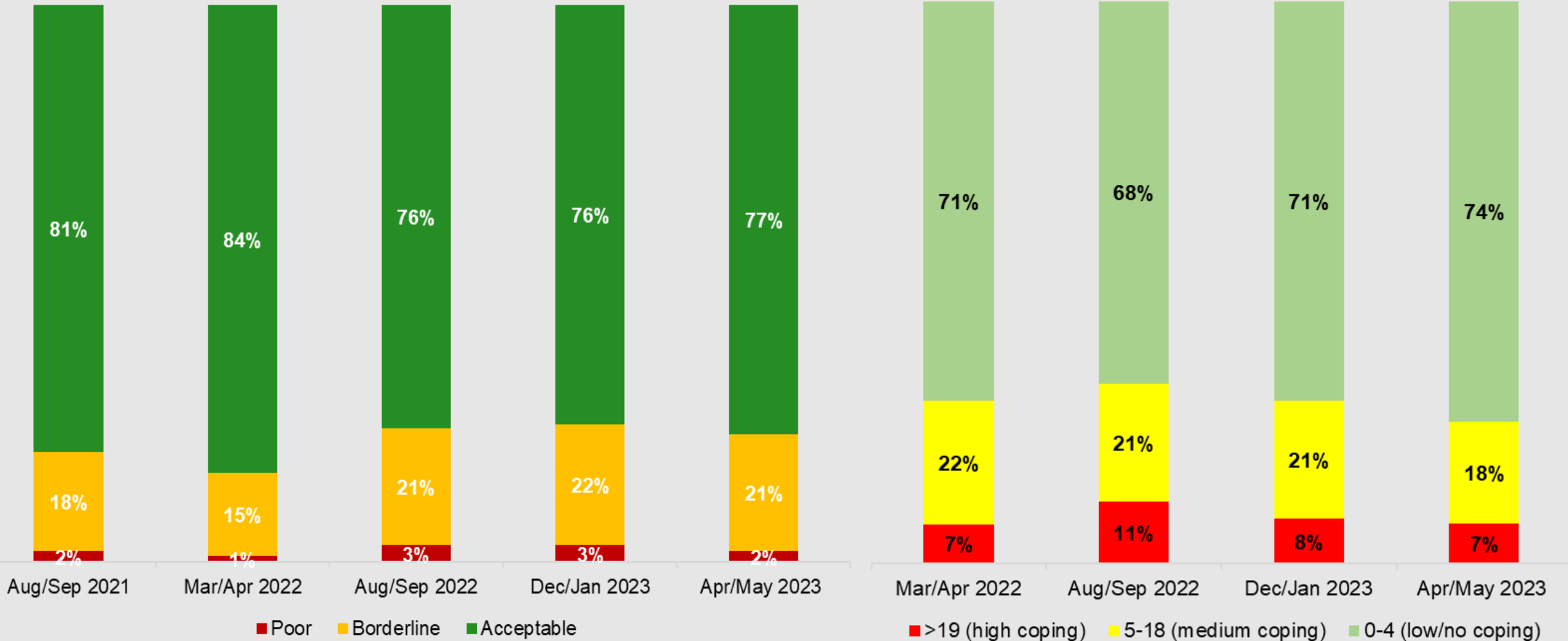


FOOD SECURITY

FOOD SECURITY

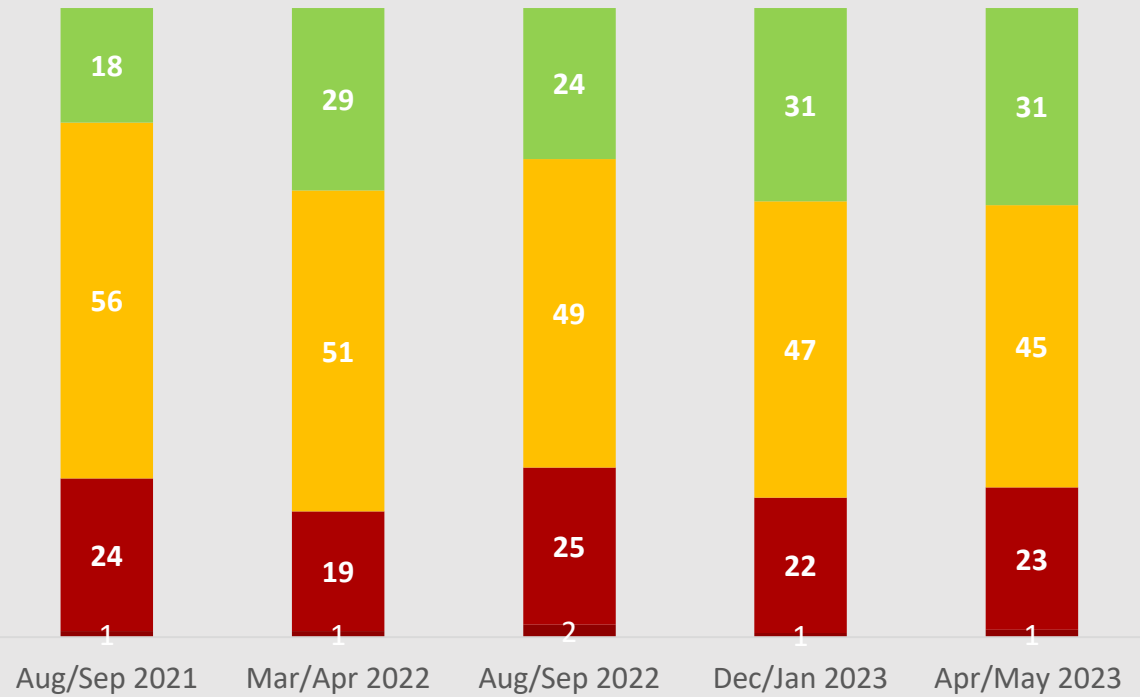
FCS

rCSI

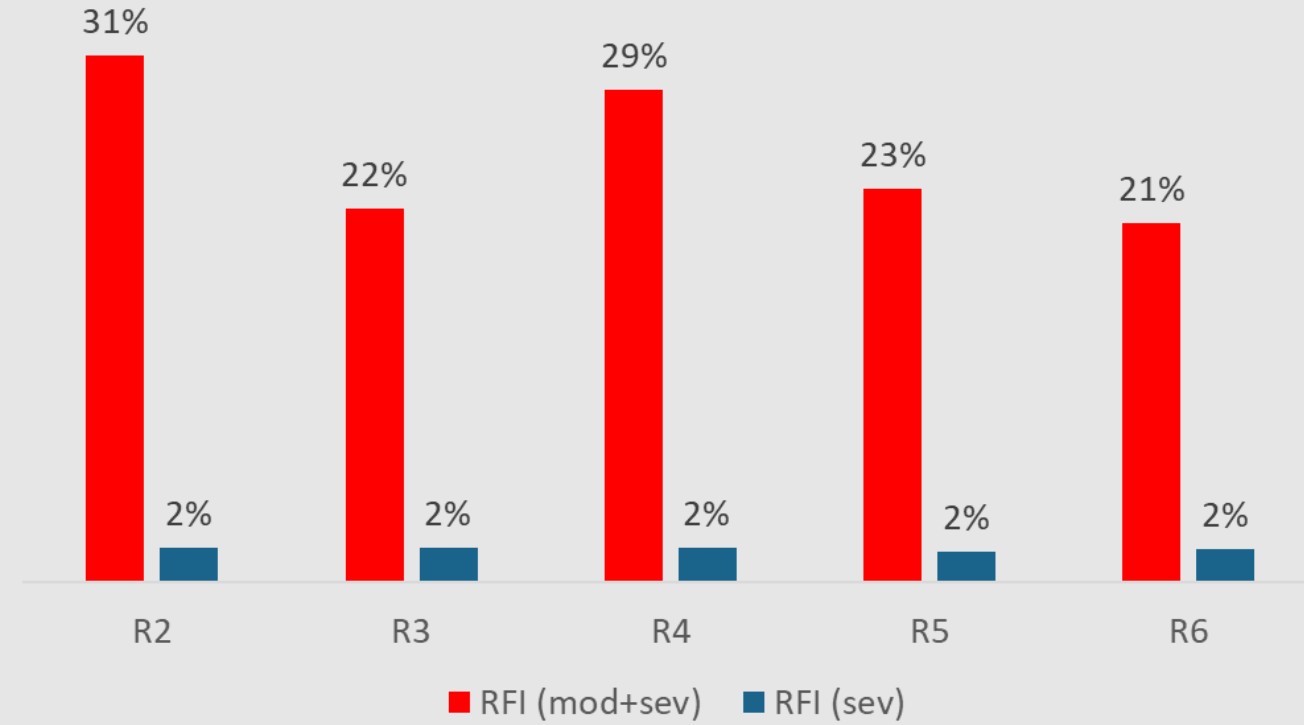


FOOD SECURITY

rCARI



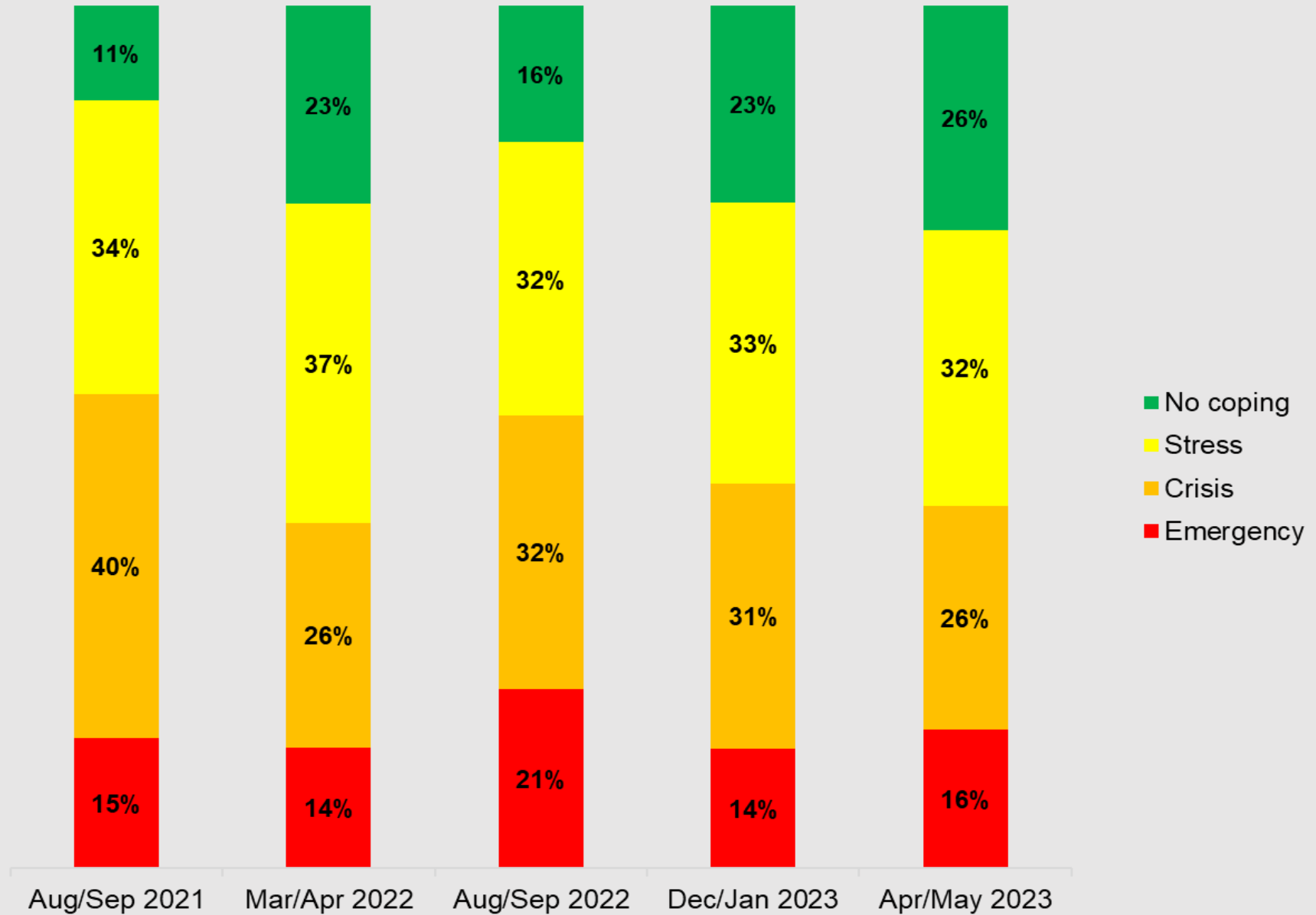
FIES



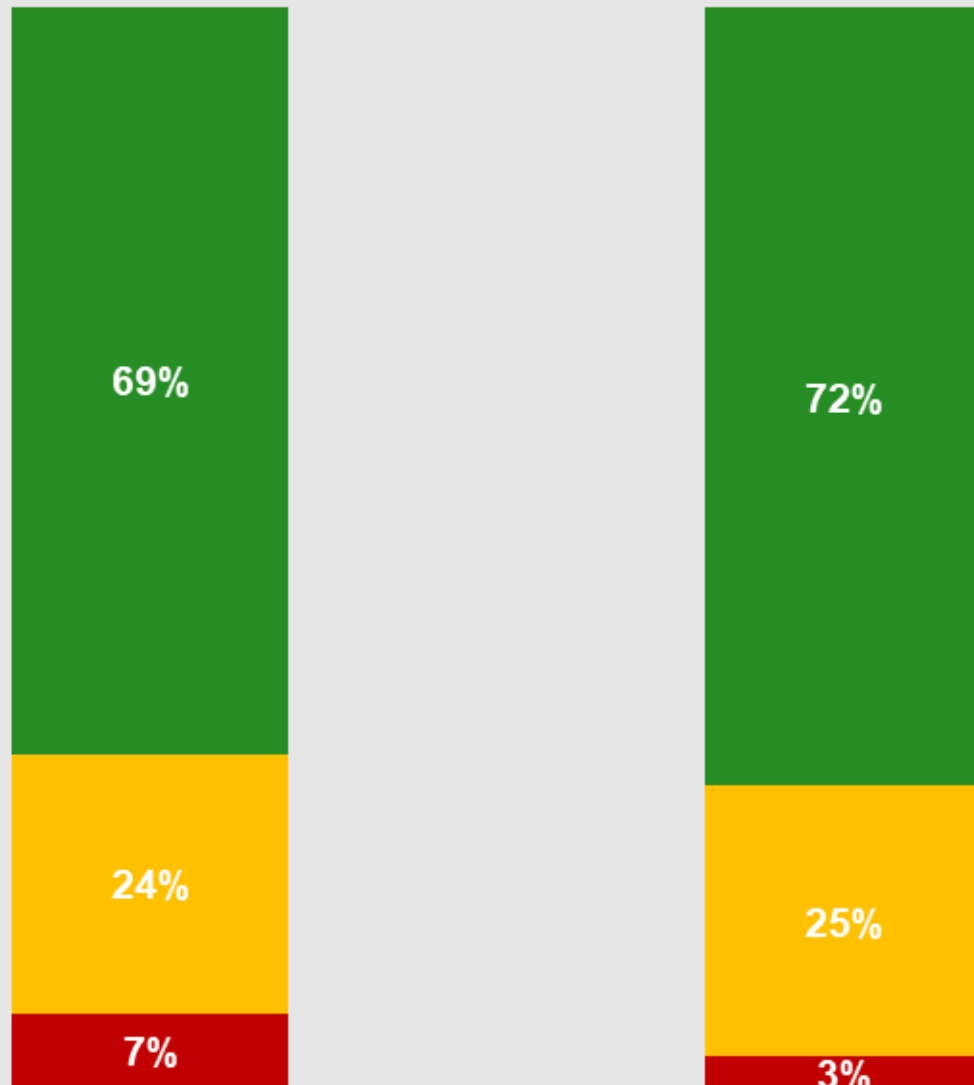
■ Severely food insecure ■ Moderately food insecure
■ Marginally food secure ■ Food secure

■ RFI (mod+sev) ■ RFI (sev)

LCSI

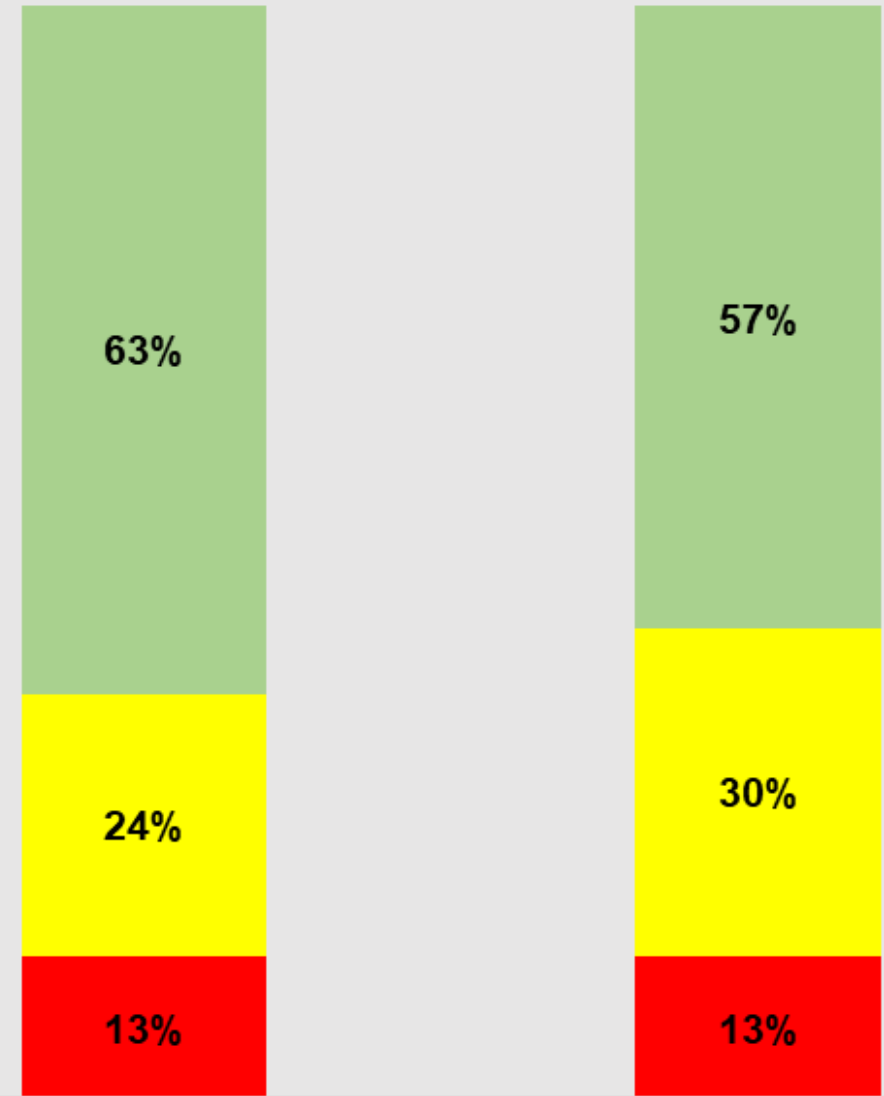


FCS comparison of HHs affected by cyclone Mocha



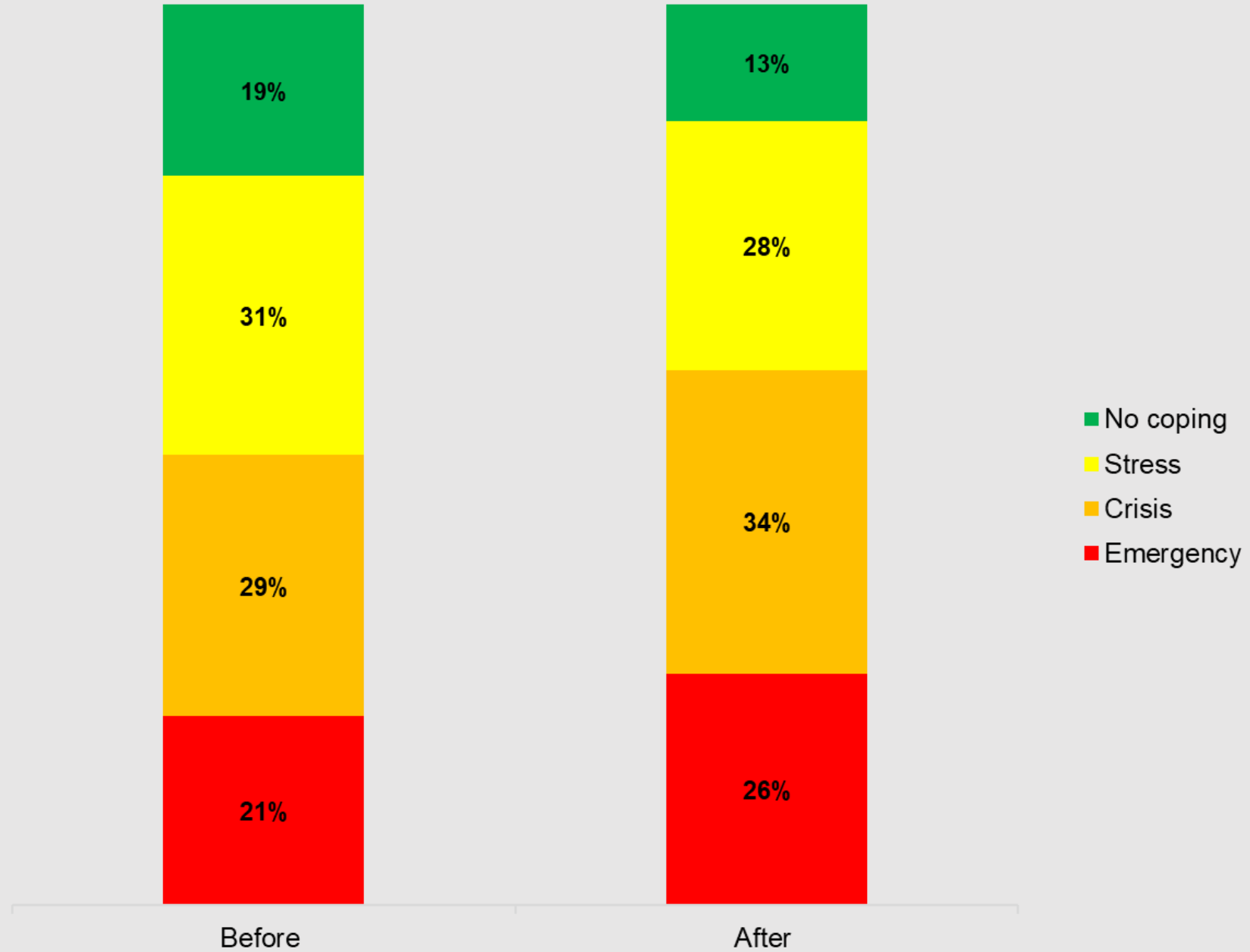
■ Poor ■ Borderline ■ Acceptable

rCSI comparison of HHs affected by cyclone Mocha



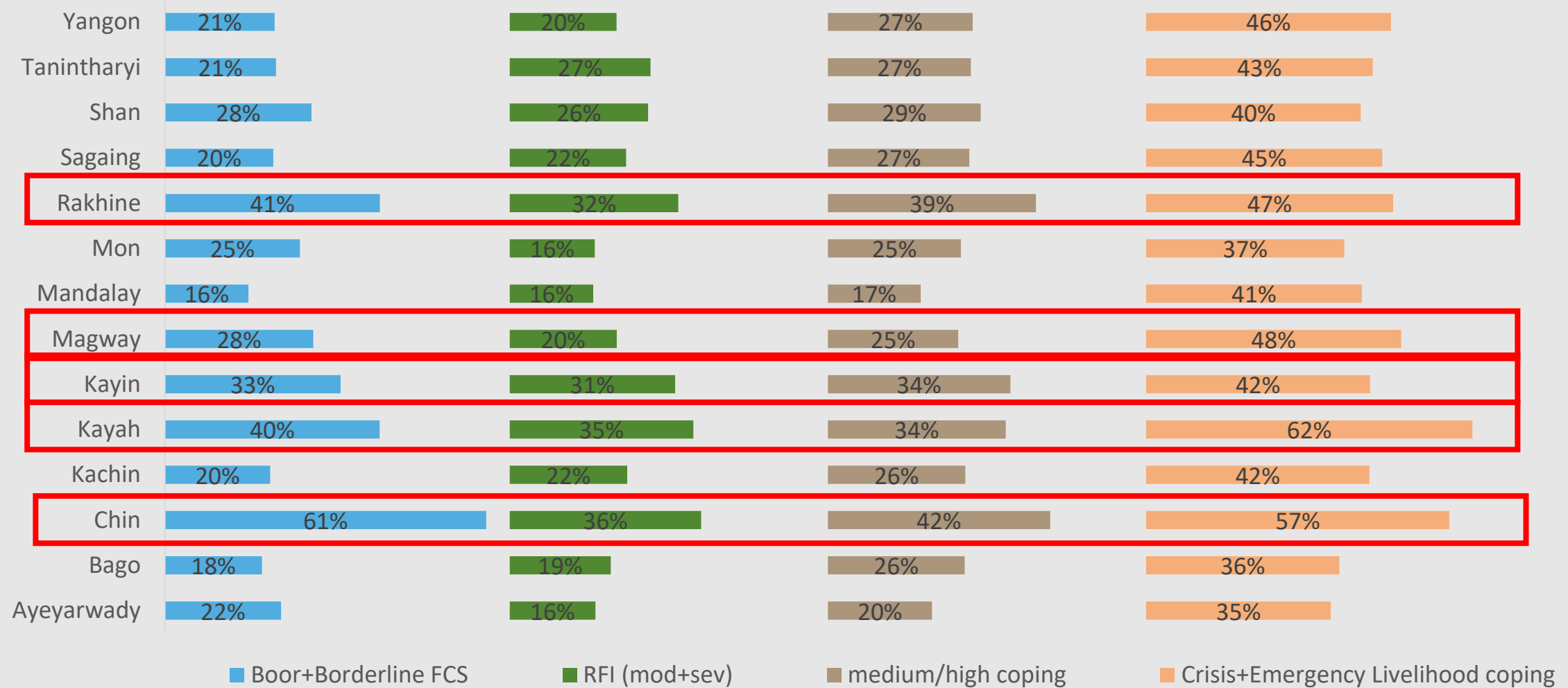
■ >19 (high coping) ■ 5-18 (medium coping) ■ 0-4 (low/no coping)

LCSI comparison of HHs affected by cyclone Mocha



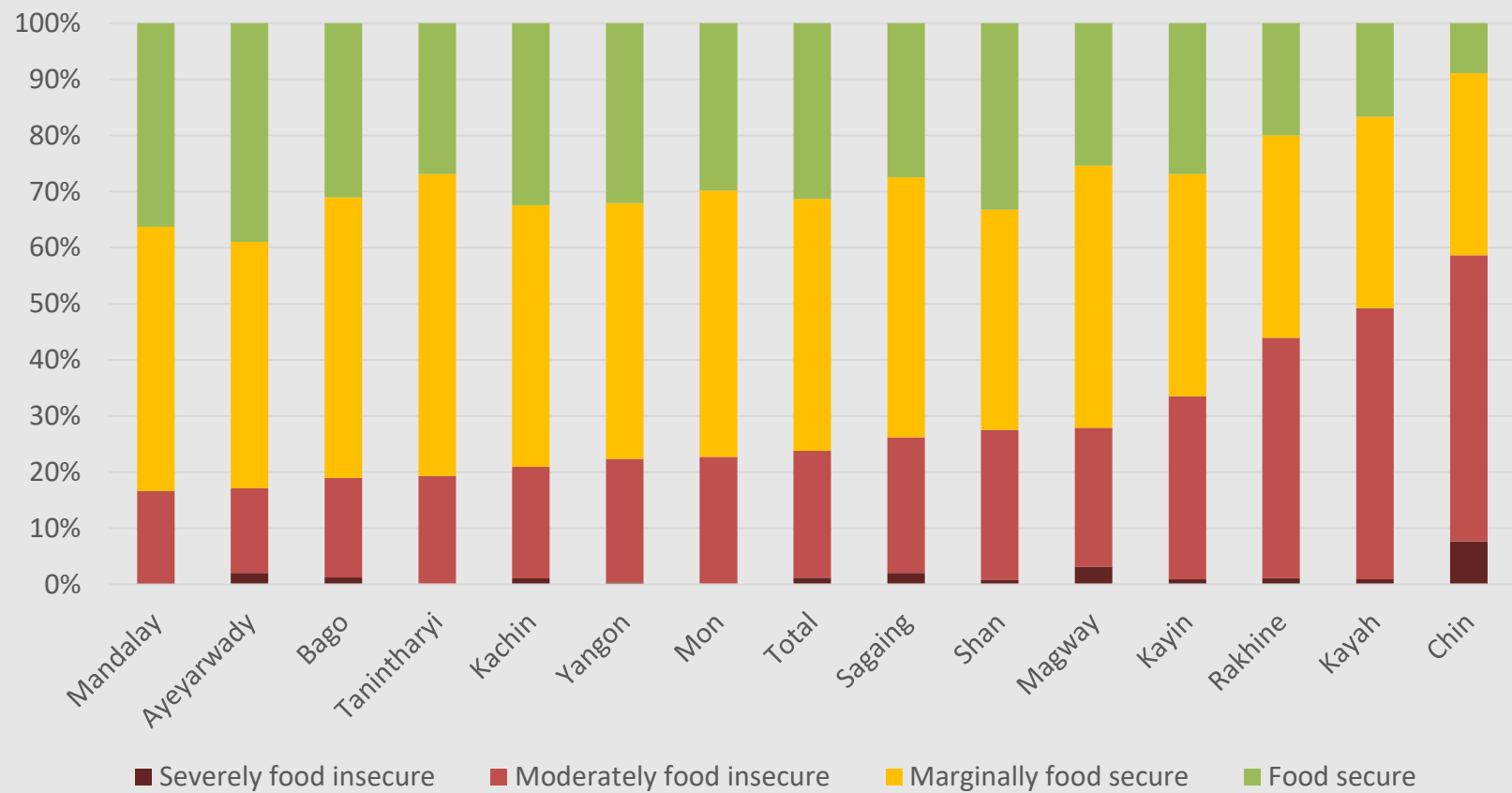
FOOD SECURITY

food security indicators by state/region





CARI by State/Region (Apr/May 2023)



FOOD SECURITY

This slight improvement, like R5, may result from:

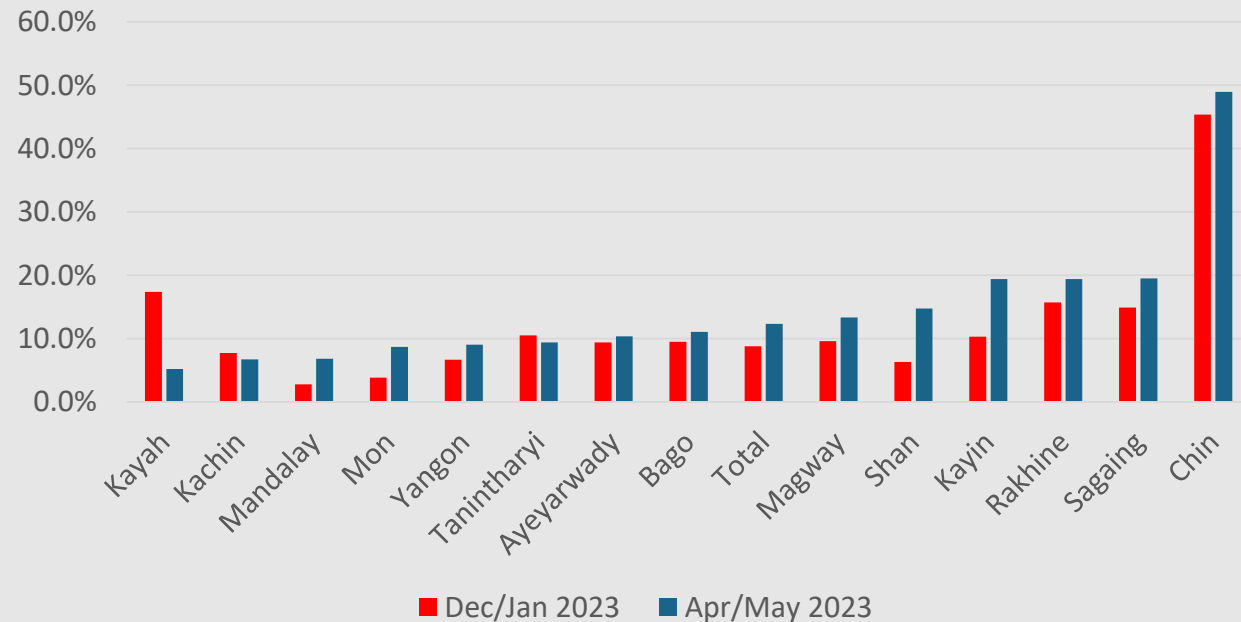
- The recent harvest: HHs engaged in farming have a generally better consumption
- Stabilisation of income: HHs reporting a large decrease are less

Poverty is still a major driver of food insecurity: proxies for poverty concentrate the worst outcomes + expenditures <59,000 MMK and high food expenditures (>80%)

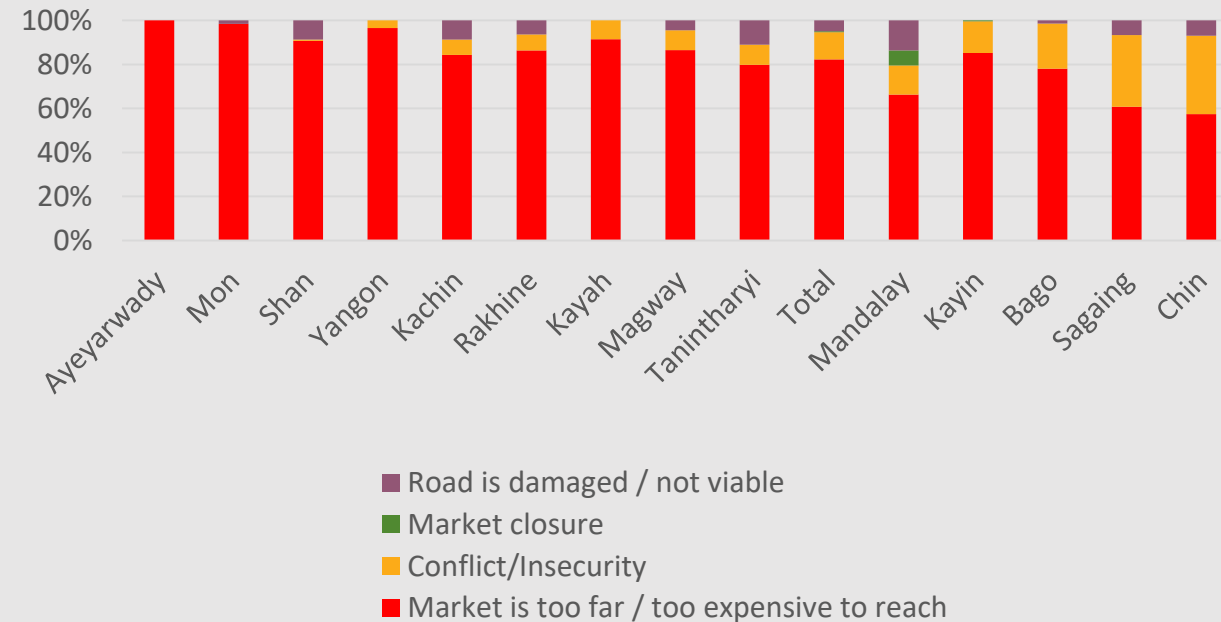
Shocks have an impact, mainly: high food prices, lost employment, sickness/death, conflict and high fuel prices + debt (associated with shocks)

The 12% with no **access to market** has also a higher prevalence of food insecurity

Challenges to access market by Region/State



Reasons why difficulties to access markets

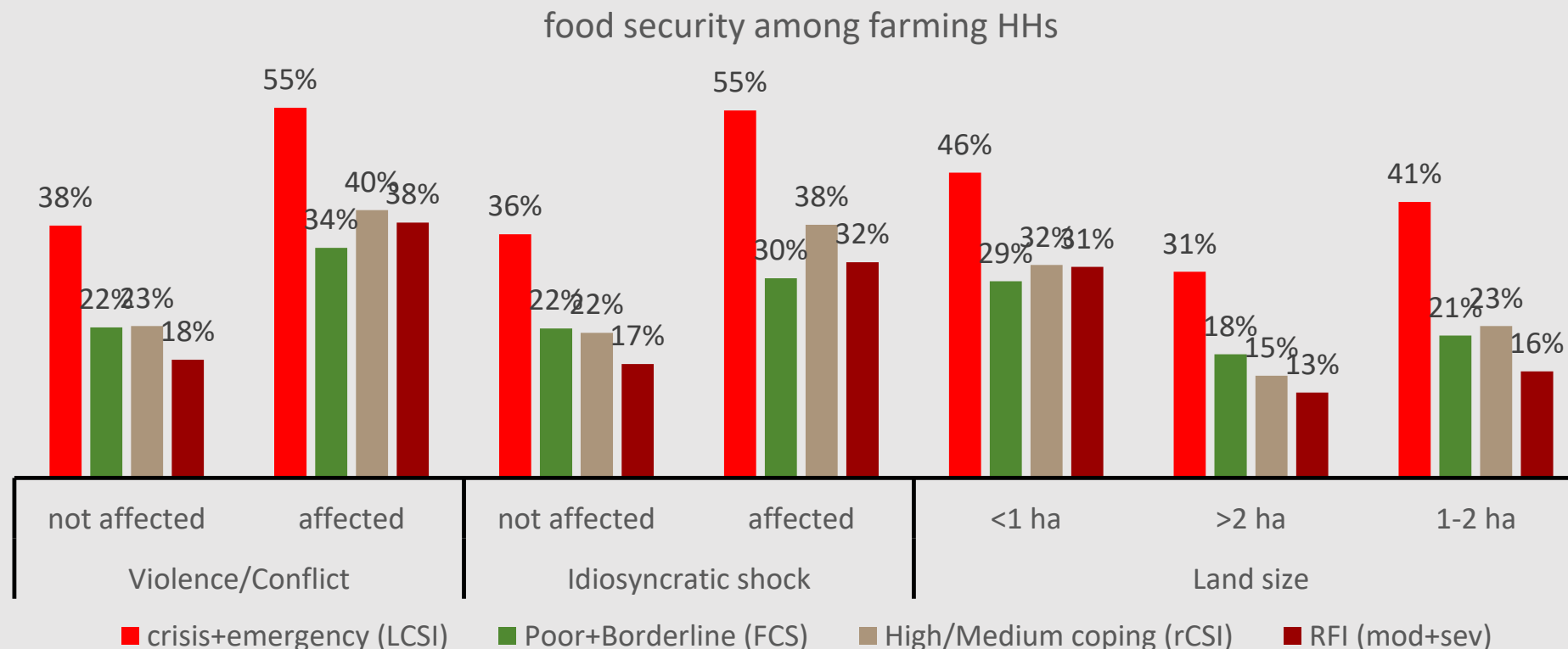


To sum up:

	More likely to be food secure	More likely to be food insecure
Gender of HHH	Male	Female
Setting	Urban	Rural
HH size	3-4	≥ 7
Dependency ratio	≤ 1	> 1
Children U5	No	2 or more
Children 5-15		2 or more
Adults	3-4	2 or less
PwD	0	1 or more
Education HHH	Completed secondary or higher	None or primary
# Income earners	≥ 2	< 2
Main income source	<ul style="list-style-type: none"> • Crop sales • Non-agricultural safe-employed/liberal profession • Stable employment agriculture and non-agriculture • Public employment 	<ul style="list-style-type: none"> • Casual labour (Agriculture and non-agriculture) • Income not from work (charity, welfare pension, humanitarian aid, from other rents, savings/debt)
Water source	<ul style="list-style-type: none"> • Access to drinkable water • Water sources: Privated tap from piped water, protected well, bottled water 	<ul style="list-style-type: none"> • No access to drinkable water • Water sources: Public tap, unprotected well, spring water, surface water
Shelter	<ul style="list-style-type: none"> • Wooden houses, semi-pucca, bungalows/brick houses, apartments. 	<ul style="list-style-type: none"> • Bamboo houses, huts, tents

FOOD SECURITY

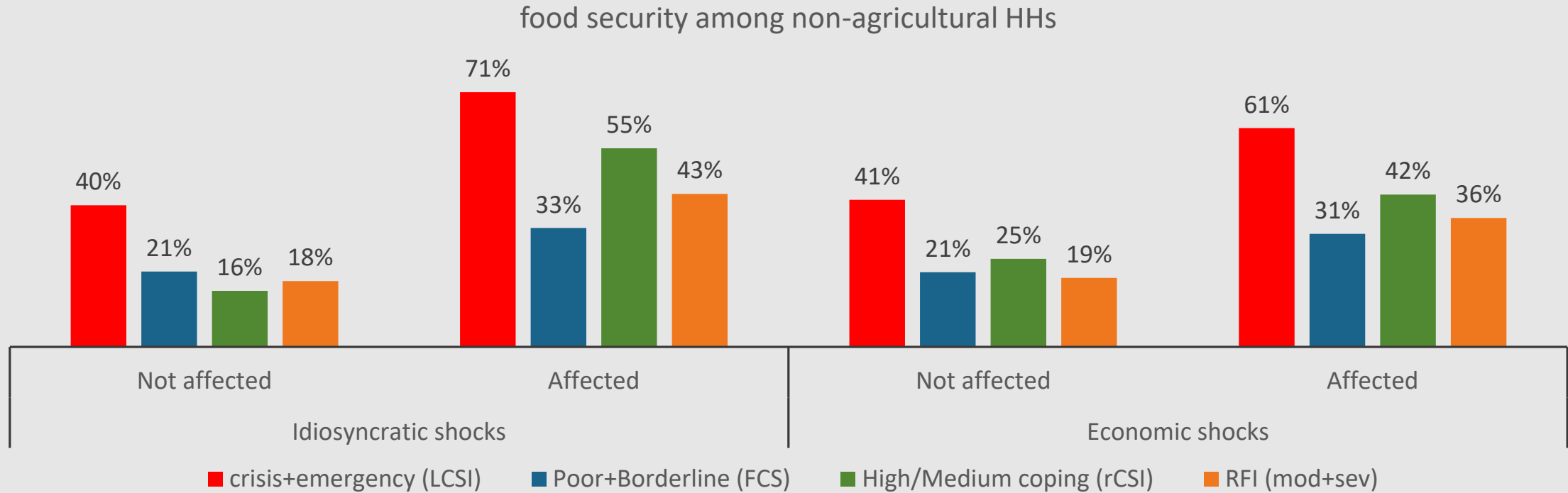
For the **farming households**, the worst outcomes are found among those who were affected by violence/conflict and idiosyncratic shocks, and among smallholders. The main crop seems to be less important, with the exception of those whose main crop was another cereal (than rice).



Among **livestock producers**, the worst outcomes are found among those whose main animals are poultry, most likely to have reduced the flock size due to higher mortality and depend from the market for feeds. The RFI (mod+sev) among poultry producers was 27%, 21% among swine producers and 15% among cattle.

FOOD SECURITY

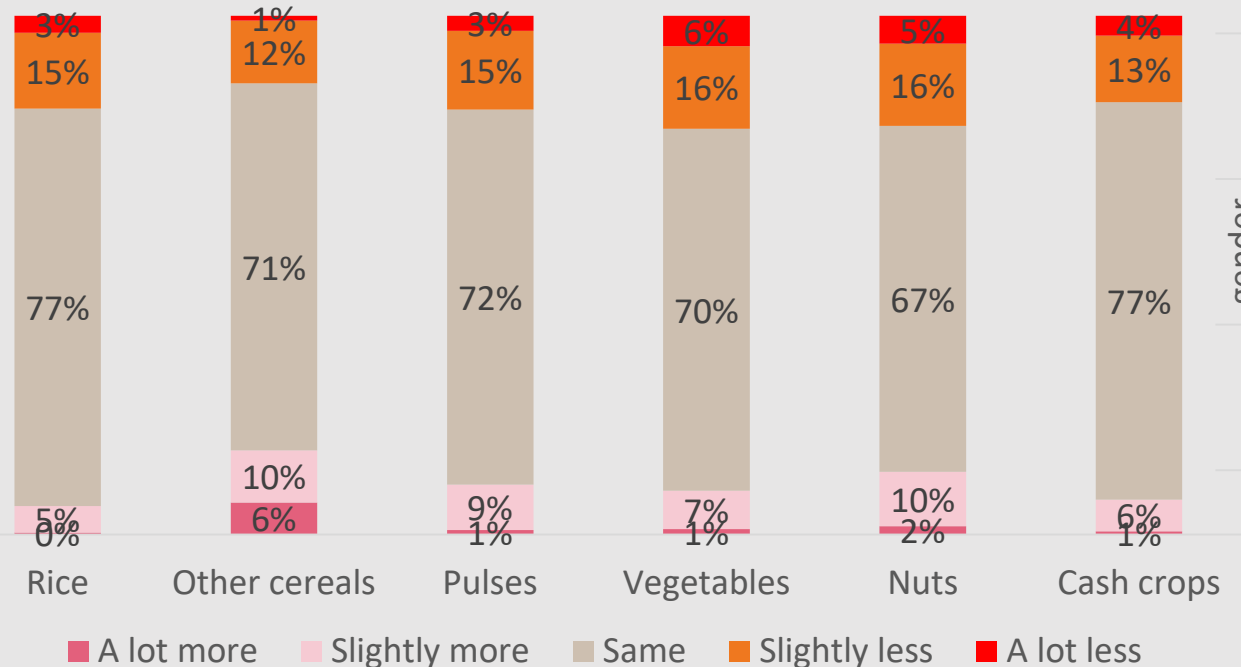
For the **non-agricultural households**, the impact of idiosyncratic and economic shocks resulted in the worst food security outcomes.



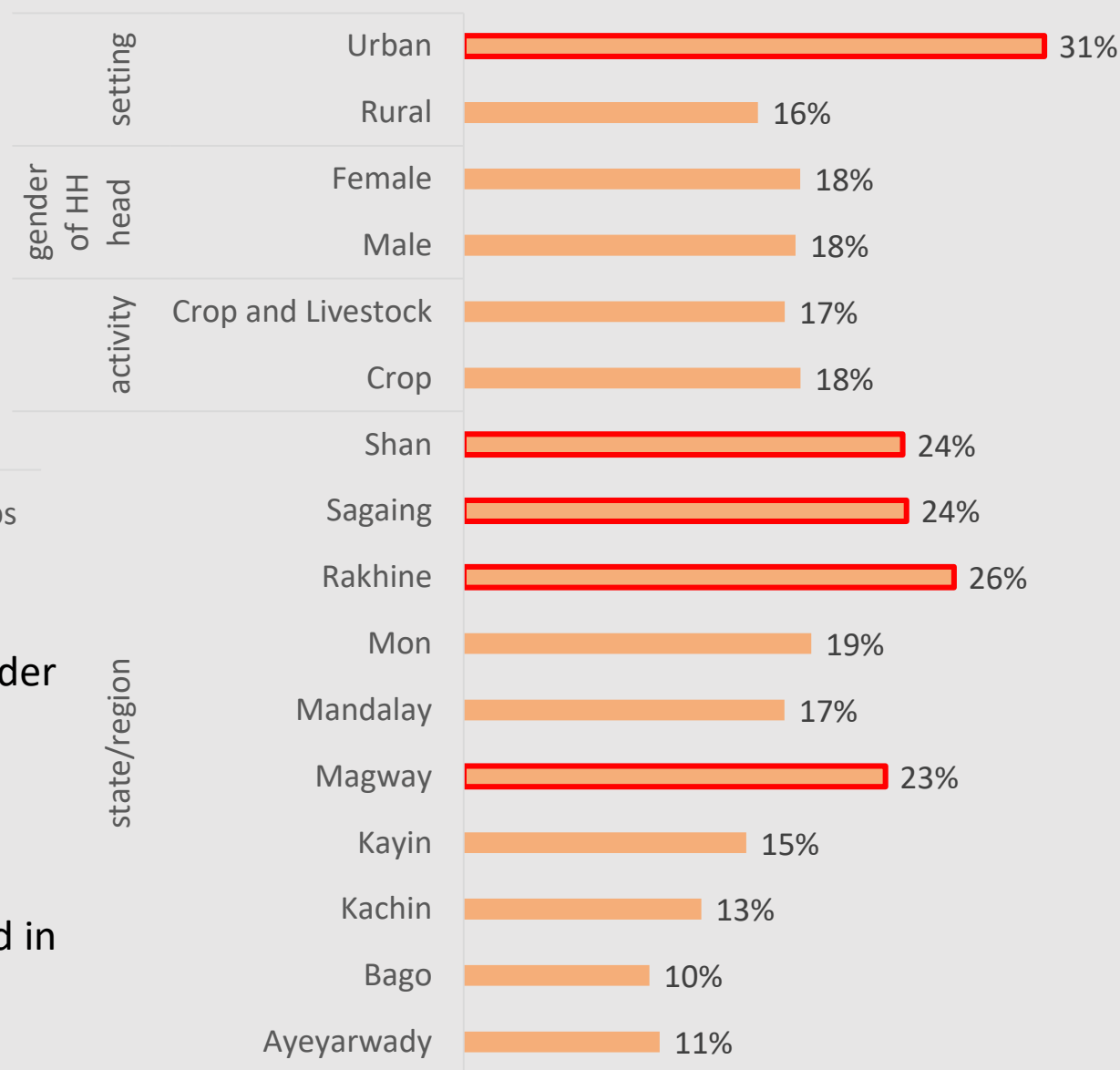
CROP PRODUCTION

MAIN CROPS AND AREA PLANTED

area planted by crop



% farmers reducing area



A lower share of farmers report a drop in area planted (But consider seasonality!)

For rice the reduction of area planted was more frequent among larger farmers.

This retrenchment of area was more common in urban areas, and in the states/regions of Magway, Rakhine, Sagaing and Shan.

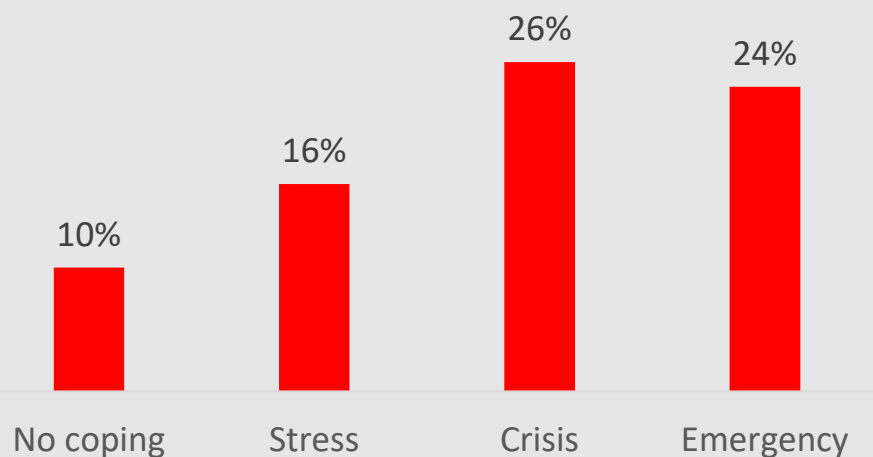
MAIN CROPS AND AREA PLANTED

Chi-squared tests revealed an association between a reduction of area and mentioning **violence/conflict** (particularly for other cereals, with a Phi coeff. of 0.295) and with the difficulties in obtaining **enough seeds** (particularly for rice, with a Phi of 0.190).

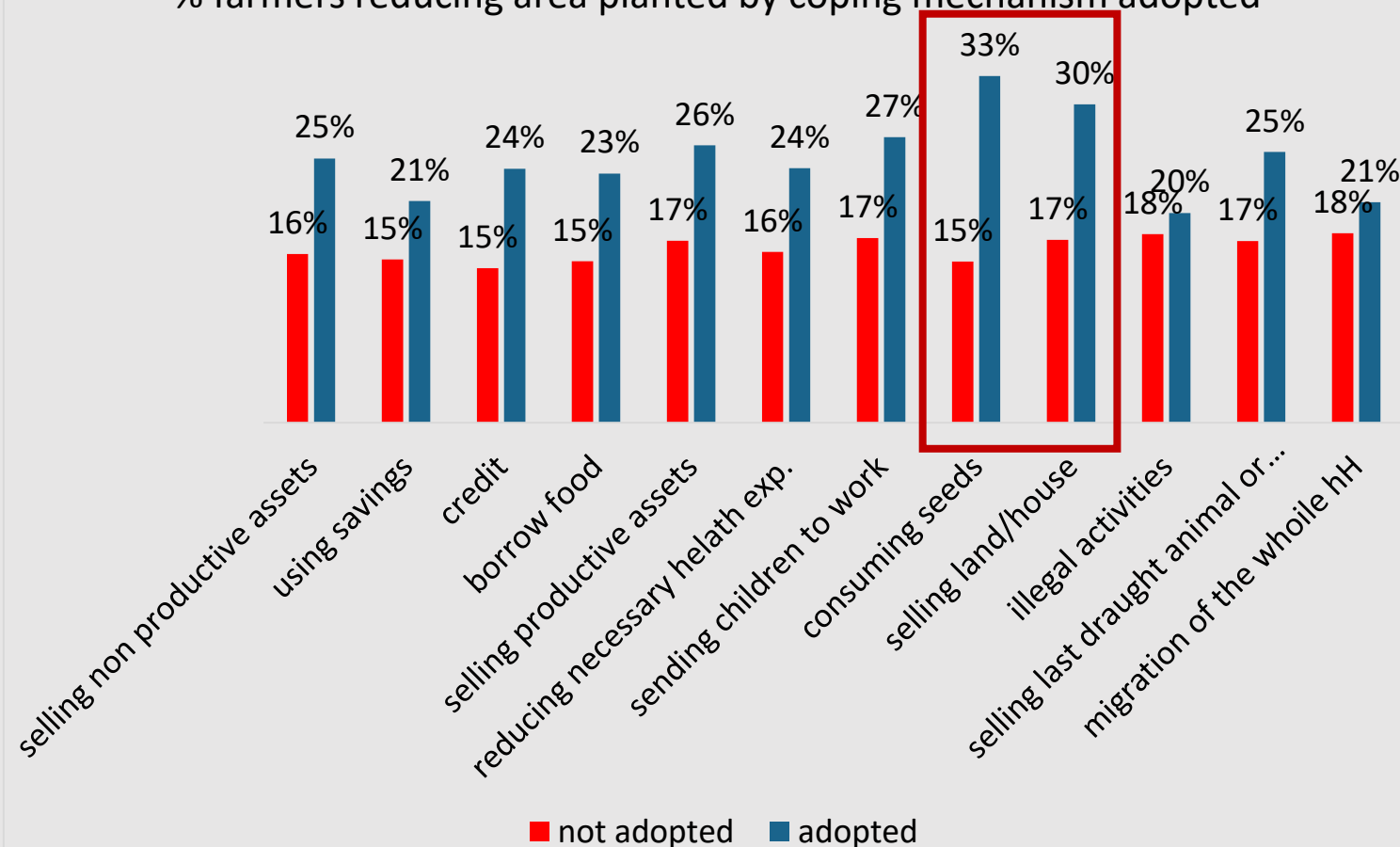
In the previous round the hypothesis that farmers planted less because they can't afford was advanced.

This is confirmed. In particular, the difference is wide with the adoption of seeds consumption

% farmers reducing area by LCS class



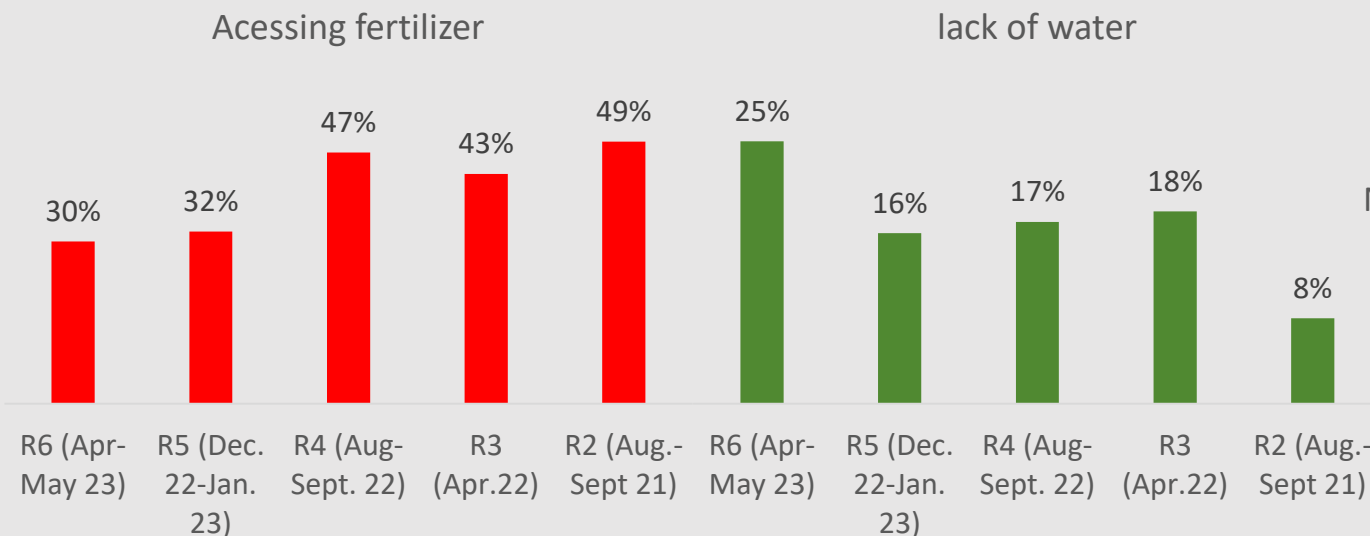
% farmers reducing area planted by coping mechanism adopted



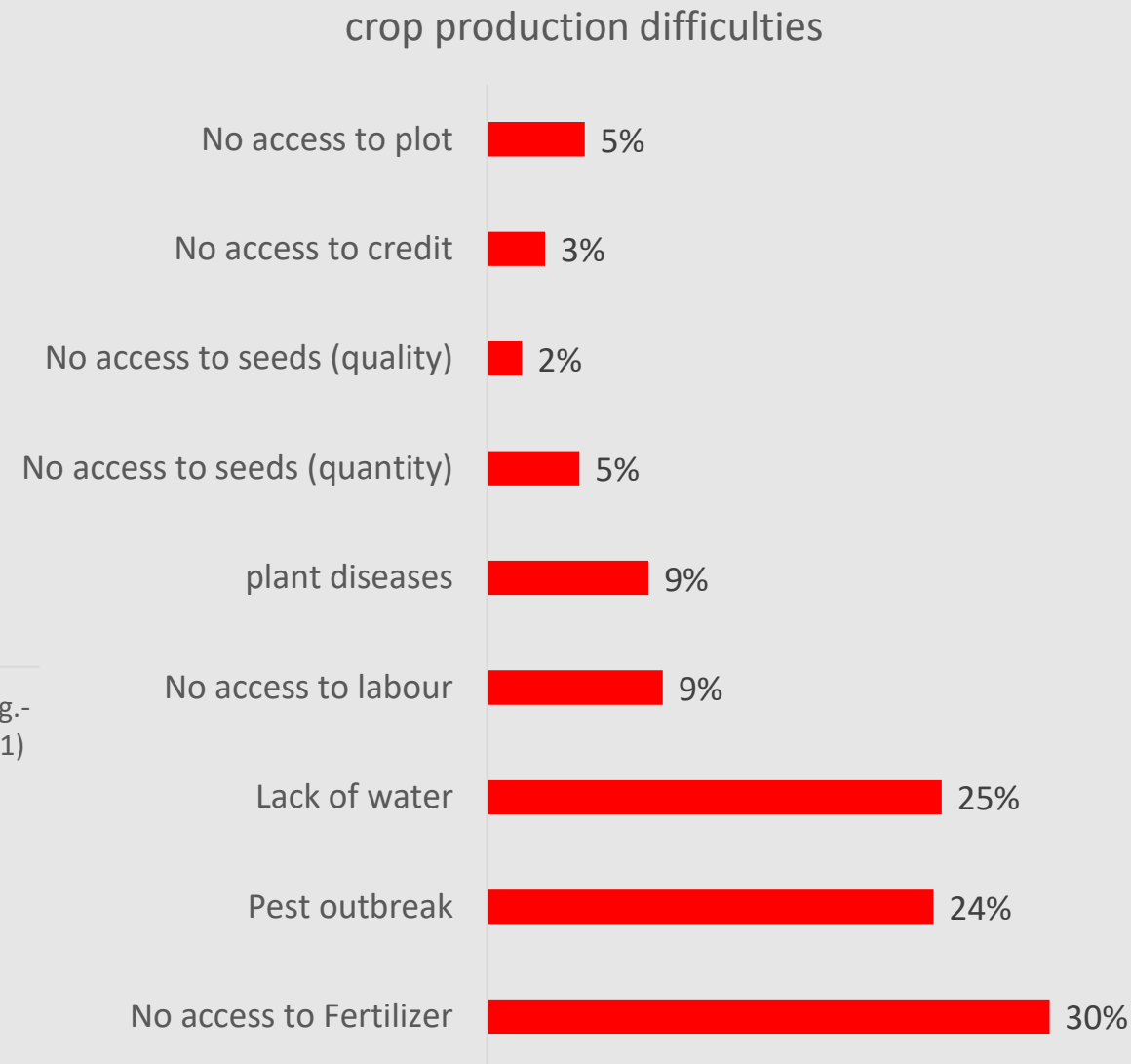
CROP PRODUCTION DIFFICULTIES AND HARVEST

Crop production difficulties in this round: the share of farmers reporting difficulties has grown in Rakhine, Mandalay, Mon and Sagaing.

Fertilizer was an issue for rice and vegetable producers; pest outbreaks affected other cereals and vegetables.



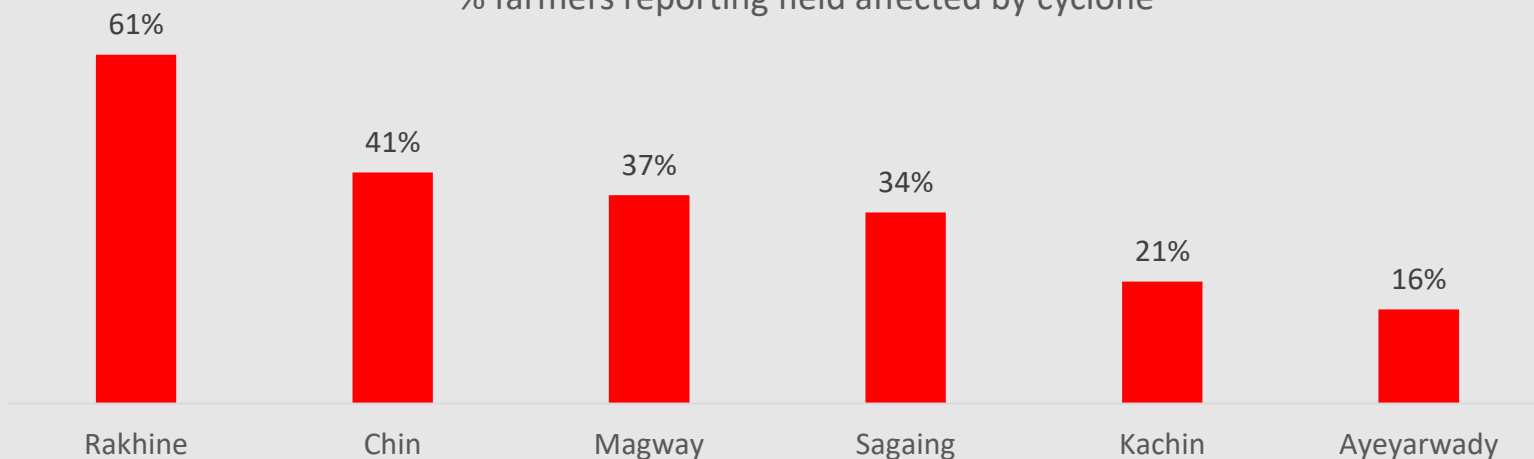
Access to fertilizer, the most common difficulty, has a similar frequency to R5. But lack of water is increasing.



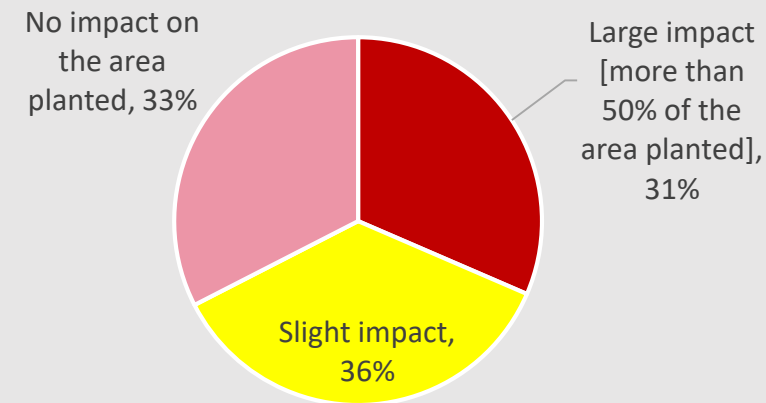
CYCLONE MOCHA

43% of farmers were affected by the cyclone in the 6 states recontacted by the follow up survey

% farmers reporting field affected by cyclone

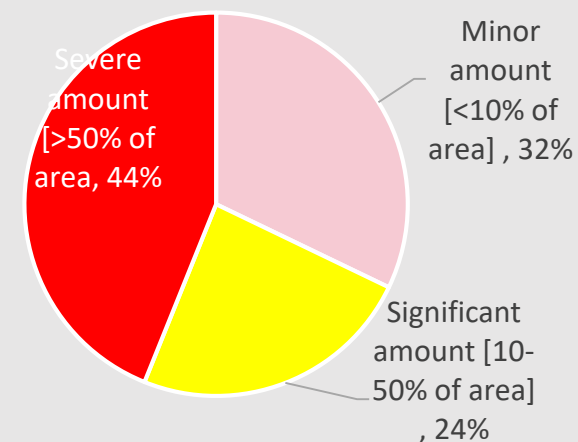


Impact on area planted among cyclone affected farmers



Farmland was lost for seawater intrusion, debris and sediments too (15% among affected farmers)

Affected by seawater intrusion



In addition:

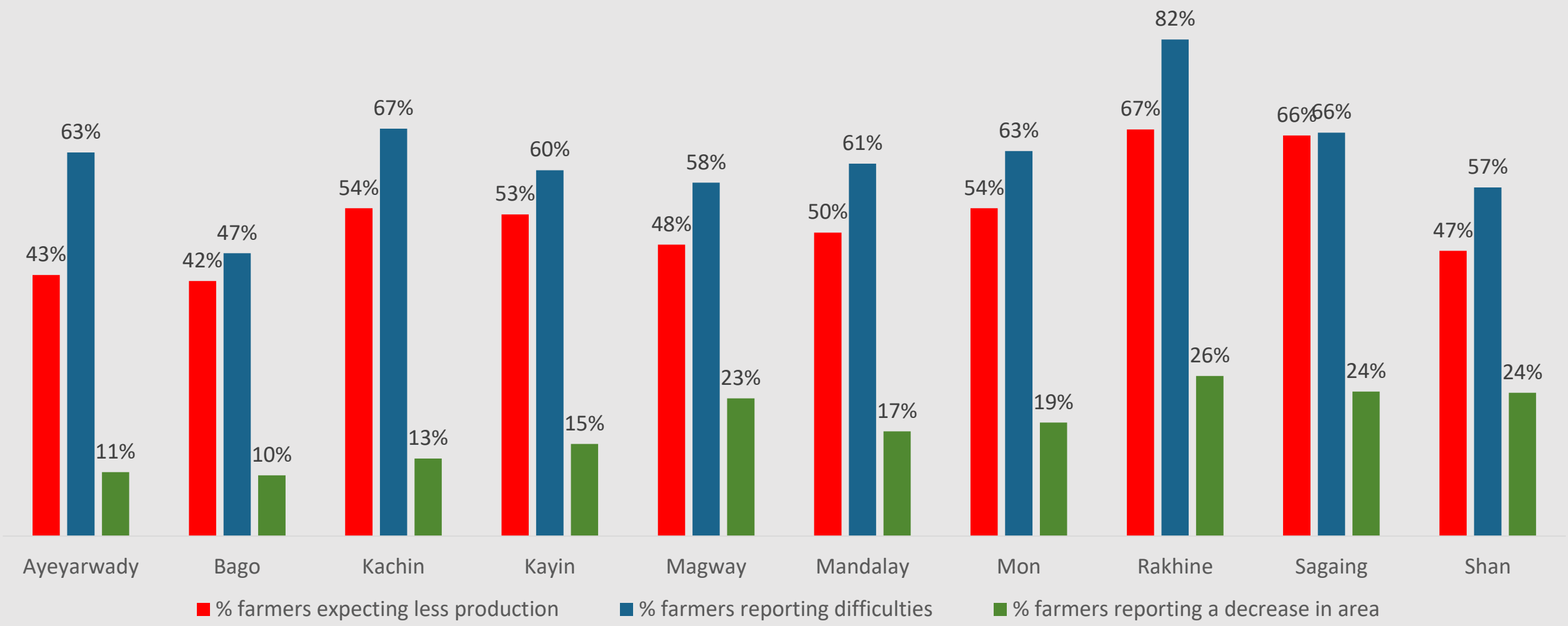
24% had damages to their irrigation infrastructure (5% lost irrigation tools)

13% lost their seeds stock

HARVEST

The frequency of farmers expecting a decrease in production by state/region has a pattern similar to the ones of difficulties in crop production and decrease in area planted, with the exception of Ayeyarwady and Shan, where despite the high share of farmers reporting difficulties and a retrenchment, less than average expect a decrease in production.

decrease in production, area and difficulties by state/region



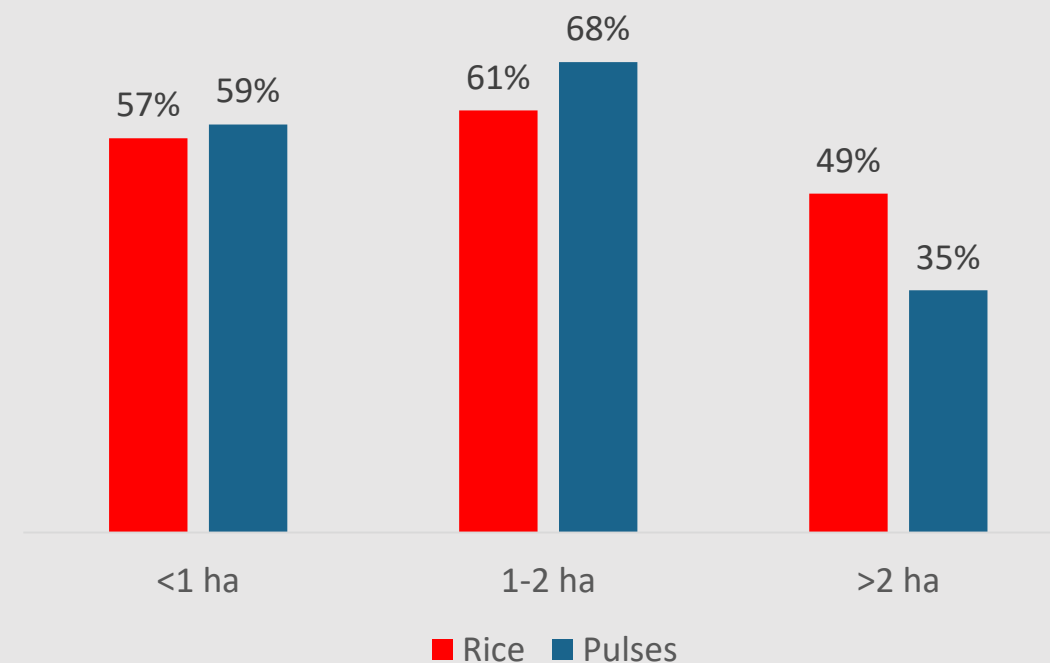
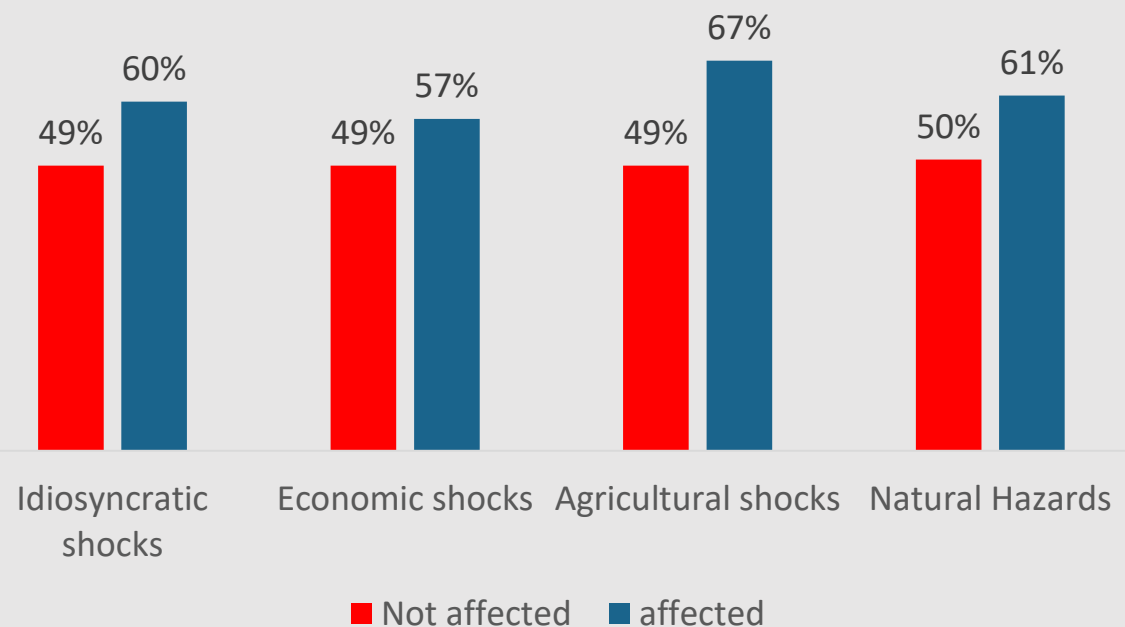
HARVEST

As expected (considering the beginning of the season), the associations with a decrease in harvest are mostly shocks. Phi coefficients for other cereal are particularly strong (0.273 with idiosyncratic shocks and 0.226 with agricultural shocks).

Violence and conflict are also associated with a decrease in (expected) production, particularly for rice (Phi coefficient 0.119).

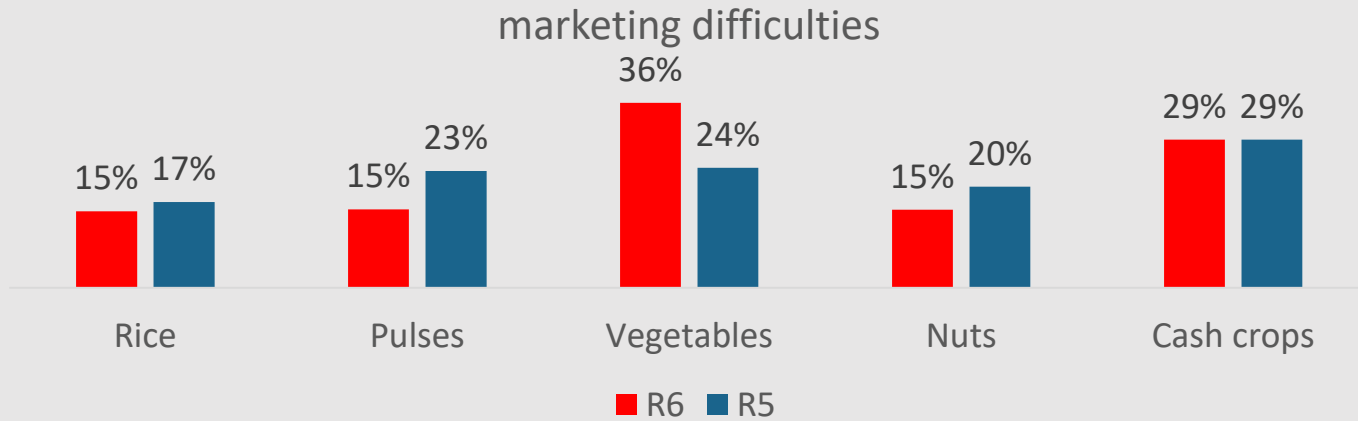
Land size is associated, but for rice and pulses, mainly.

% farmers expecting a decrease in production



CROP MARKETING

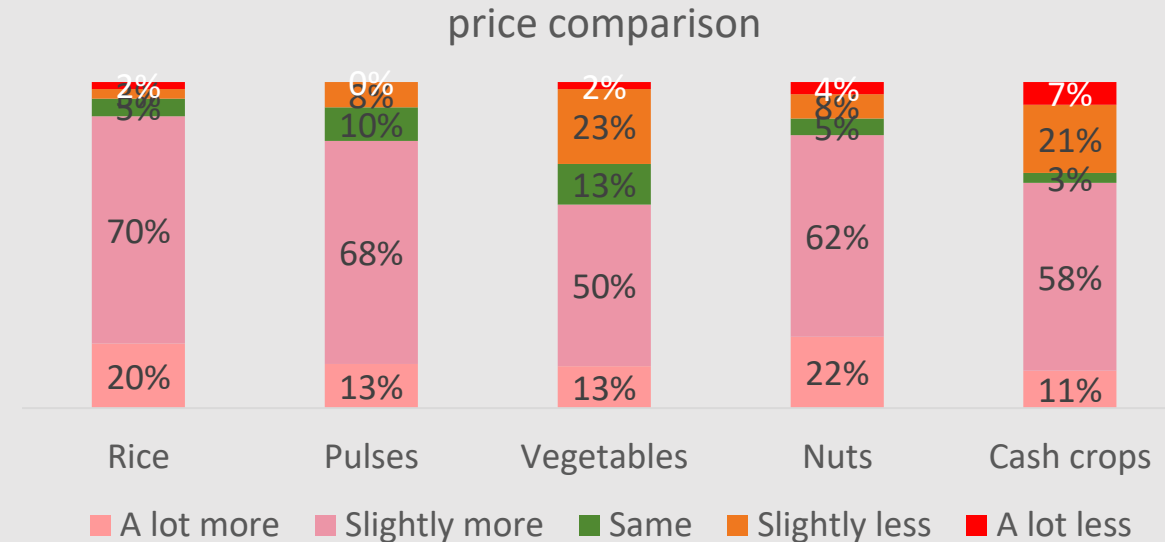
Marketing, compared from the previous round, improved slightly for nuts and pulses, was largely similar for rice and cashcrops and deteriorated for fruits and vegetables.



Less mentions of price and PHL, but there is an increase in frequency of higher marketing (transportation) costs and low demand.

However, price remains an issue for rice producers and PHL for nuts (mostly groundnuts and sesame). The high marketing cost were frequently mentioned by nuts and cash croppers.

Price good except for vegetables and cash crops.



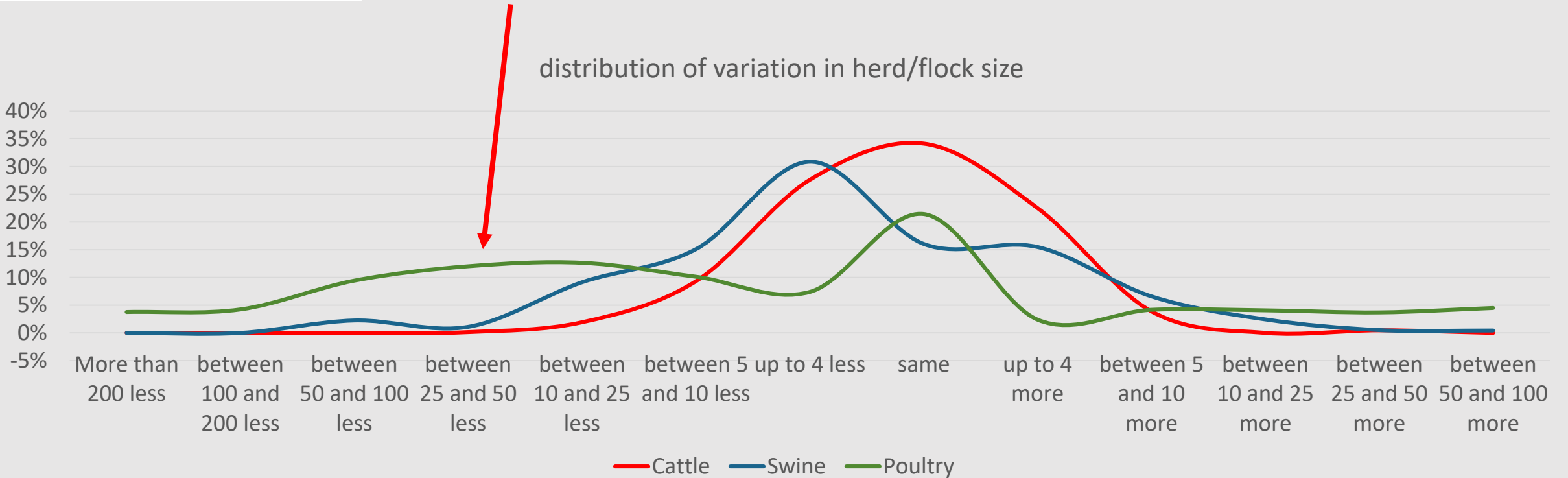
LIVESTOCK PRODUCTION

DECREASE IN ANIMAL HEADS

Share of producers with less animals than 12 months ago:

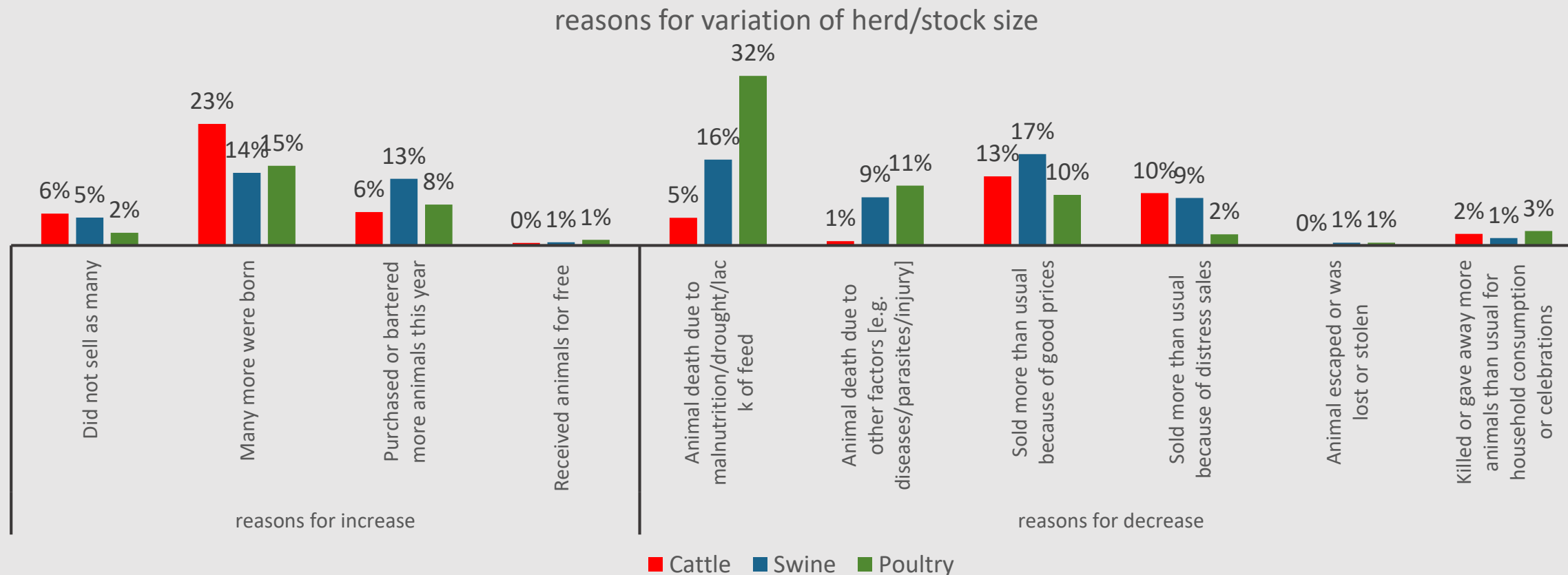
Cattle	39%
Swine	58%
Poultry	57%

But the distribution of these variation flag the situation of poultry producers as worst off....



DECREASE IN ANIMAL HEADS

Mortality was high and with an increasing trend among poultry: it passed from 20% in R3 (April 2022) to 29% in R4 (August/Sept. 2022) and 31% in R5 (Dec 22/Jan 23). But it decreased a lot for the other species.

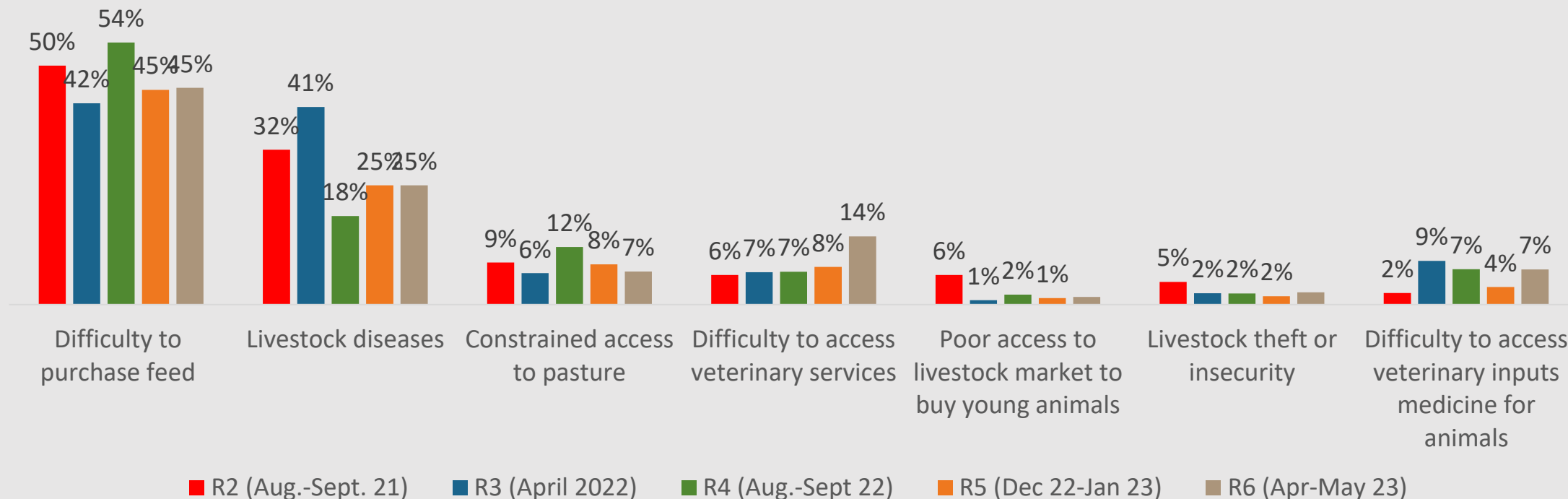


Associated with a reduction of the number of animals are not specific difficulties or shocks, but **characteristics associated to the farming system**: those producing own feed are less likely to have less animals, and depending on purchased feed is strongly associated with a reduction of herds.

LIVESTOCK PRODUCTION DIFFICULTIES

The difficulties in purchasing feed and diseases remain the most common, but have a similar frequency as in the previous round. On the other hand, the access to veterinary services was more frequent in this round.

livestock production difficulties across rounds



Swine producers had more frequently reported difficulties in production: 53% swine, 38% poultry, 33% cattle.

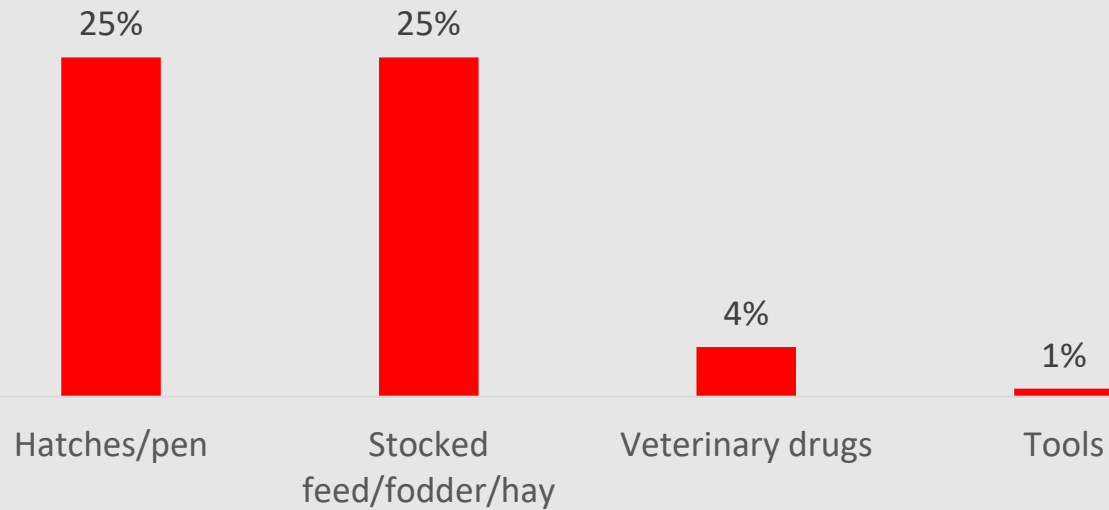
The frequency by species reveals **swine** producers had more frequently challenges in feeding animals, but other species had other issues: **poultry** mentioned diseases and difficulties in accessing veterinary services; **cattle** producers mentioned issues in accessing pastures (like in other rounds) but also in accessing water.

CYCLONE MOCHA

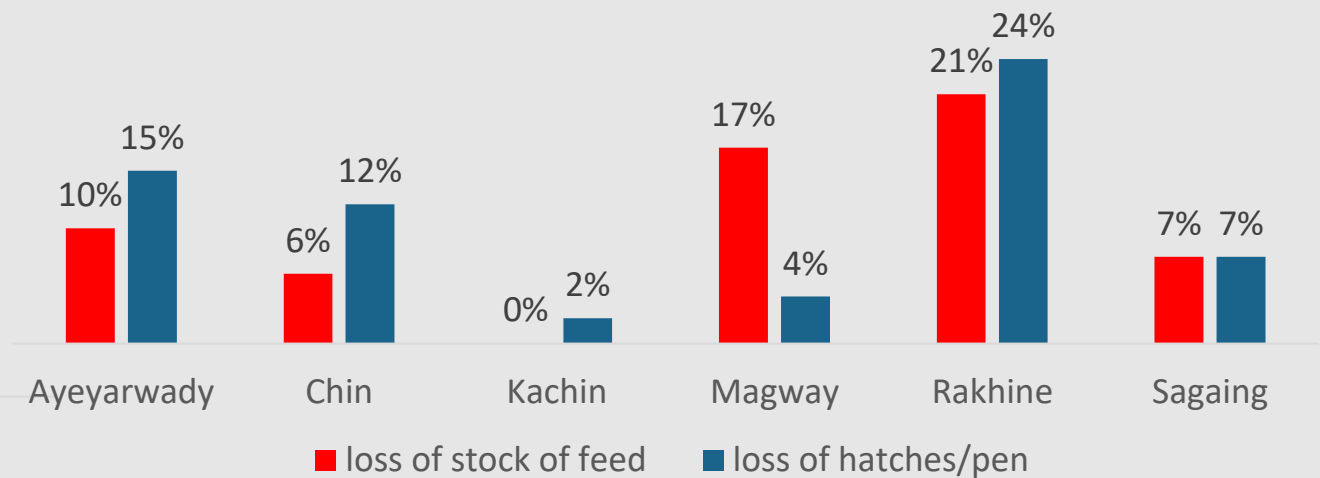
Animal losses due to cyclone Mocha were frequent for goats and poultry, and in Rakhine

39% of the livestock producers affected by cyclone Mocha lost productive assets, mostly hatches/pen and stocks of feed; particularly in Rakhine and Magway, but frequent losses in Ayeyarwadyi, too

% affected livestock producers report assets loss



% all livestock producers reporting losses due to cyclone

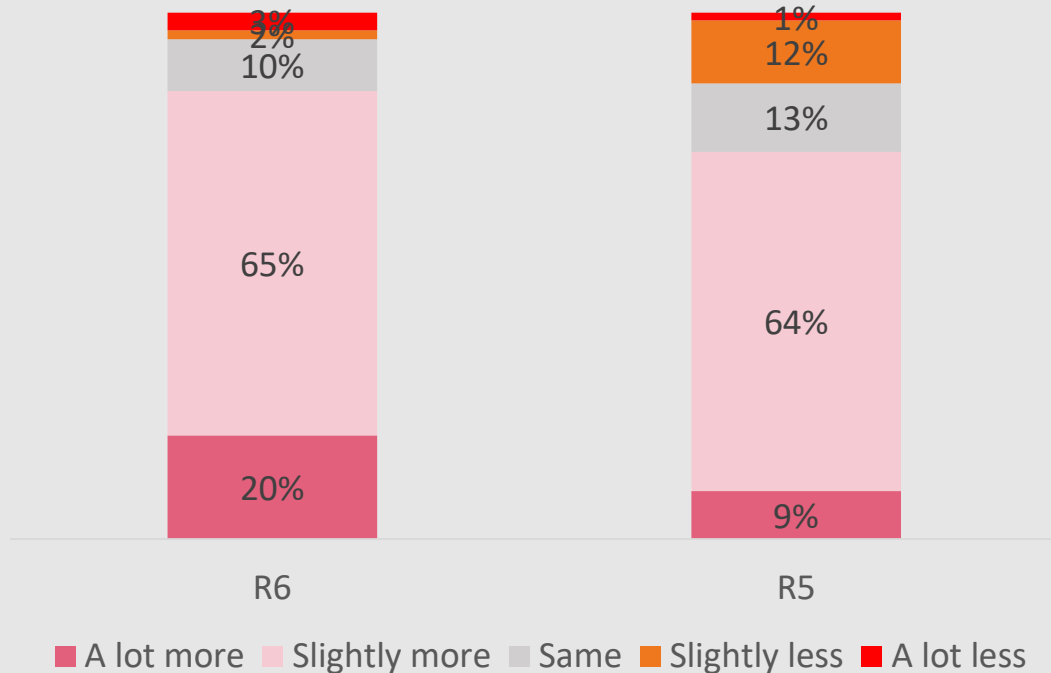


LIVESTOCK SELLING DIFFICULTIES AND PRICES

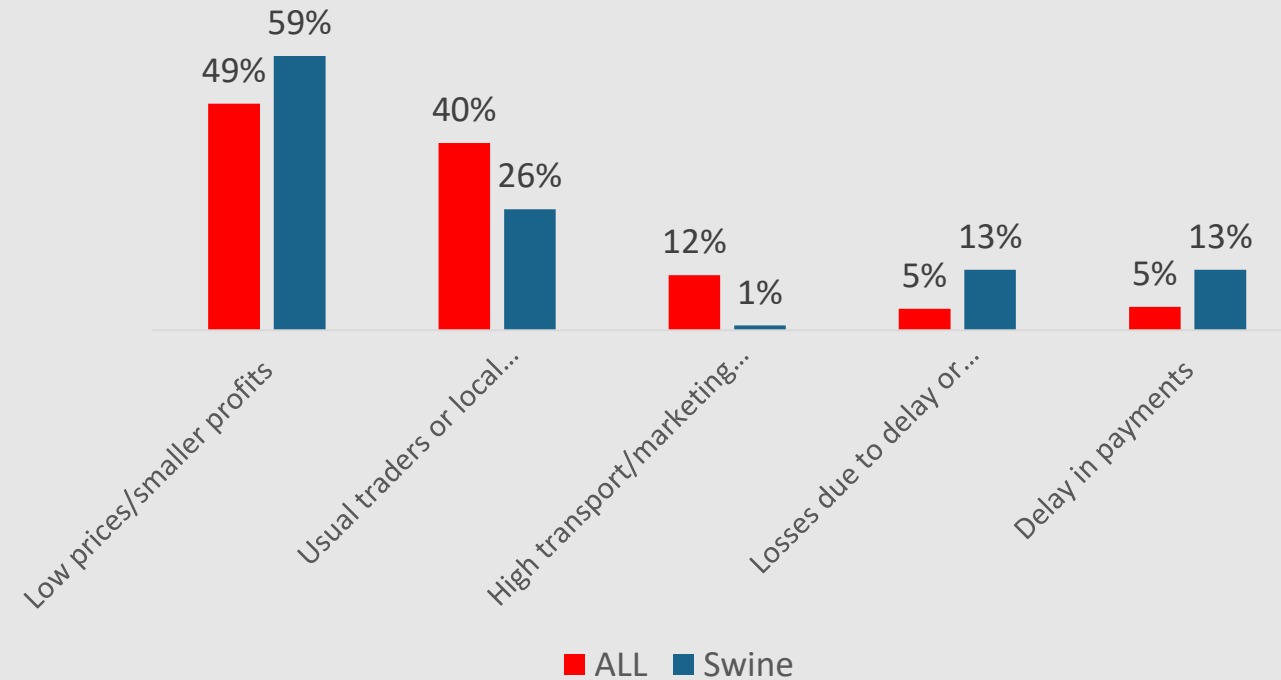
In this round, only HHs selling swine had a sufficient sample

For swine producers, higher transportation costs and lower prices were cited less frequently, but not the lower demand.

sale price of swine



livestock marketing difficulties



In the past rounds the issue of marketing and low price of cattle was identified. In this round, cattle was sold much less (low sample size). But for swine, price seems to improve, consistently with crop products.

NEEDS

NEEDS

62% of agricultural HHs and 58% of non-agric. expressed the need of humanitarian assistance. 78% of agric. HHs in Rakhine reported needs.

The most common needs were in cash, as in other rounds (61%), food (30%) and agricultural inputs (19%).

Conclusions

- **Shocks decreasing** overall, but more impactful to livelihoods and food security. **Violence/conflict** associated with a **decrease in area planted and production**, and **food insecurity among farmers**.
- **Overall food security situation: slight deterioration** from 22% food insecure in January 2023 to 24% food insecure in May 2023. Higher prevalence of food insecurity in Chin, Kayah, Rakhine, Kayin, and Magway.
- Slight improvement of food consumption (RFImod+sev from 23 to 21%), and decrease in assets-depleting strategies
- Seeds are a key need: availability of seeds is associated with area planted
- **Access to** fertilizer and water are other **main** concerns for farmers
- Crop marketing environment improving
- Poultry producers report high mortality and losses; together with swine producers, this is coupled with an increase in distress sales. Feeding remains a frequent challenge, especially for swine producers.