



MALAWI

Measuring Resilience

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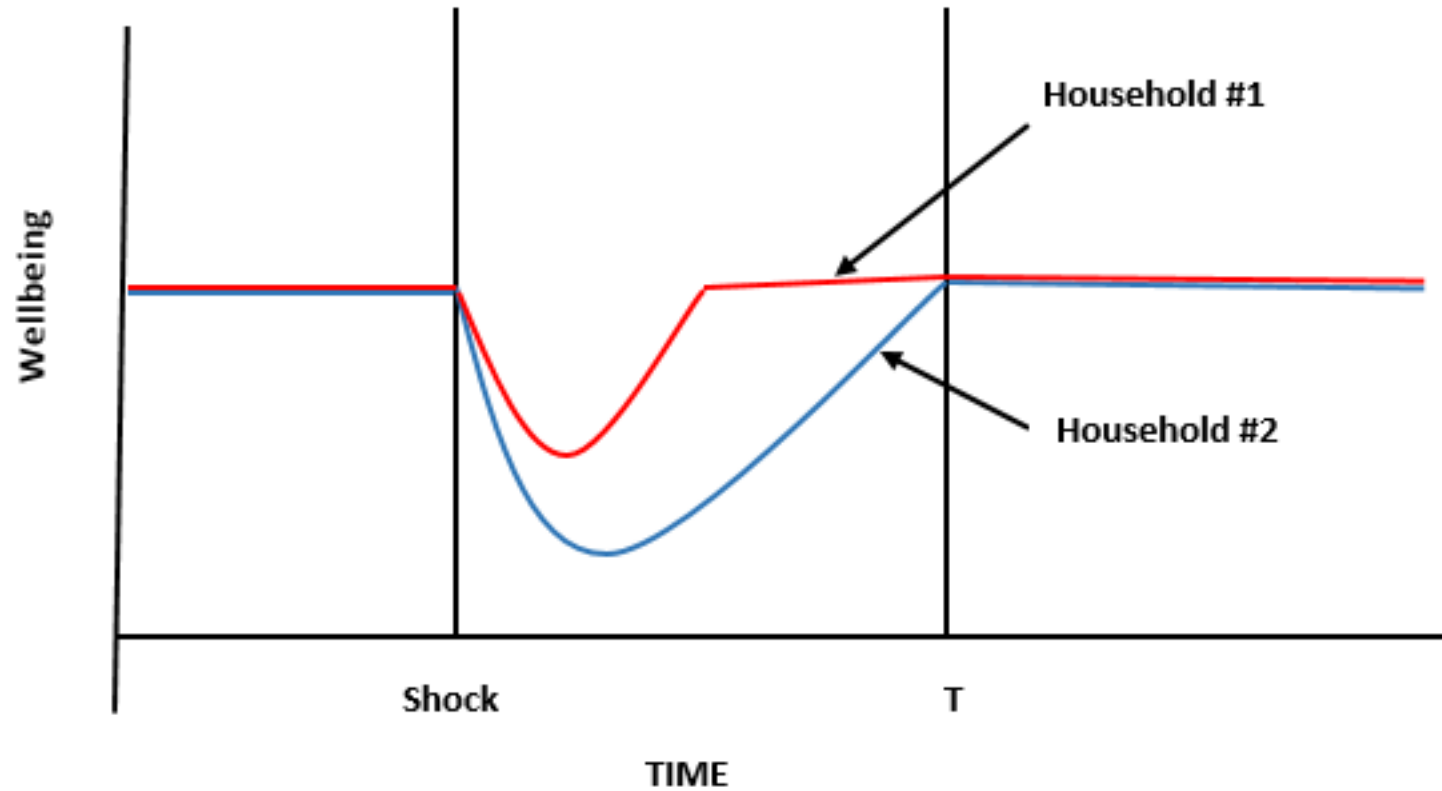
What is resilience?

- **Ecologist:** ability of an ecological system to remain or return to dynamic equilibrium (Holling, 1973)
- **Engineer:** physical systems' ability to mitigate hazards (Tierney & Bruneau, 2007)
- **Psychologist:** adaptation to adversity (Lee et al (2013))
- **Malawi Govt:** ability of urban and rural communities, households, and individuals, to withstand, recover from, and reorganize in response to crises, so that all members of Malawian society can develop and maintain their ability to benefit from opportunities to thrive (NRS, 2017)

Broad consensus

Systems' or individuals' ability to withstand shocks or 'bounce back' after a negative shock

Defining resilience

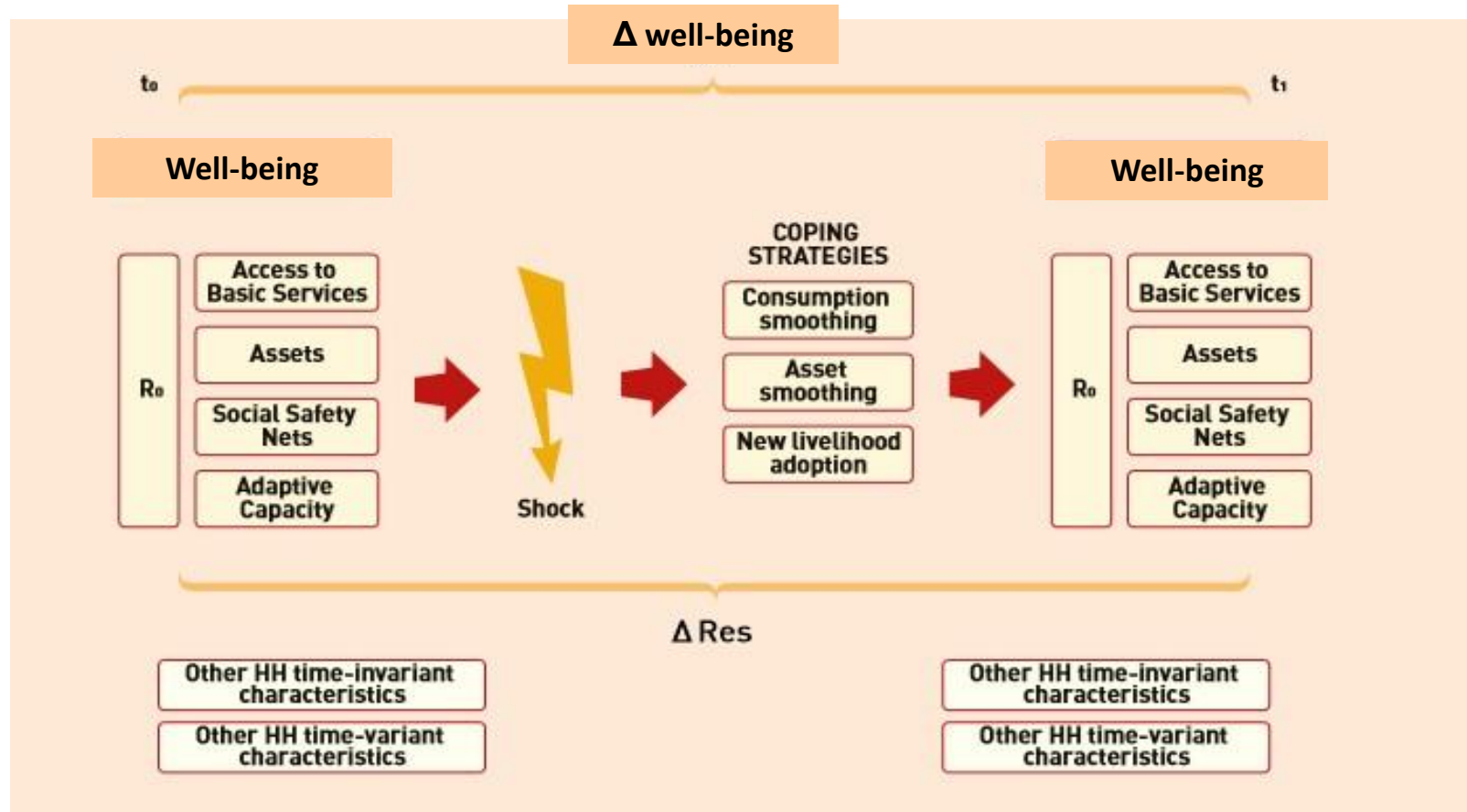


- Adapted from: Hoddinott, J. 2014. Looking at Development Through a Resilience Lens', in Fan, S, Pandya-Lorch, Yosef, S. (eds.) *Resilience for Food and Nutrition Security*, Washington, DC: IFPRI

How can resilience be measured?

- There is no single agreed upon measure of resilience. It's a black box!
- However, we can measure the following that could tell us a lot about resilience
 1. Shocks
 2. Coping strategies
 3. Well-being
 4. Determinants of resilience

What is measurable about resilience?



- Source: FAO. 2016. *Resilience Index Measurement and Analysis-II*. Rome: FAO

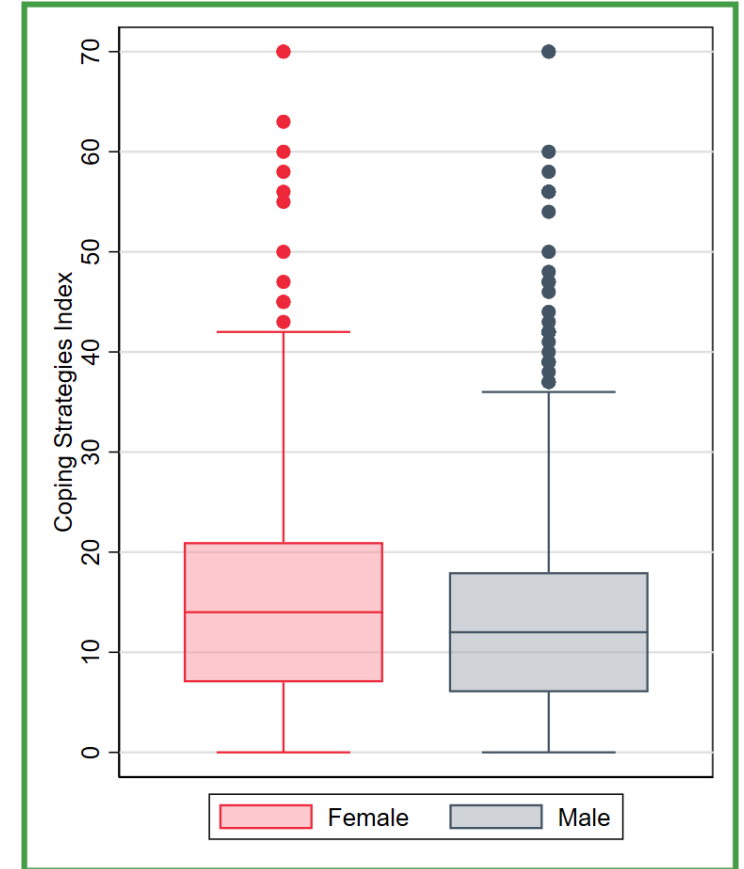
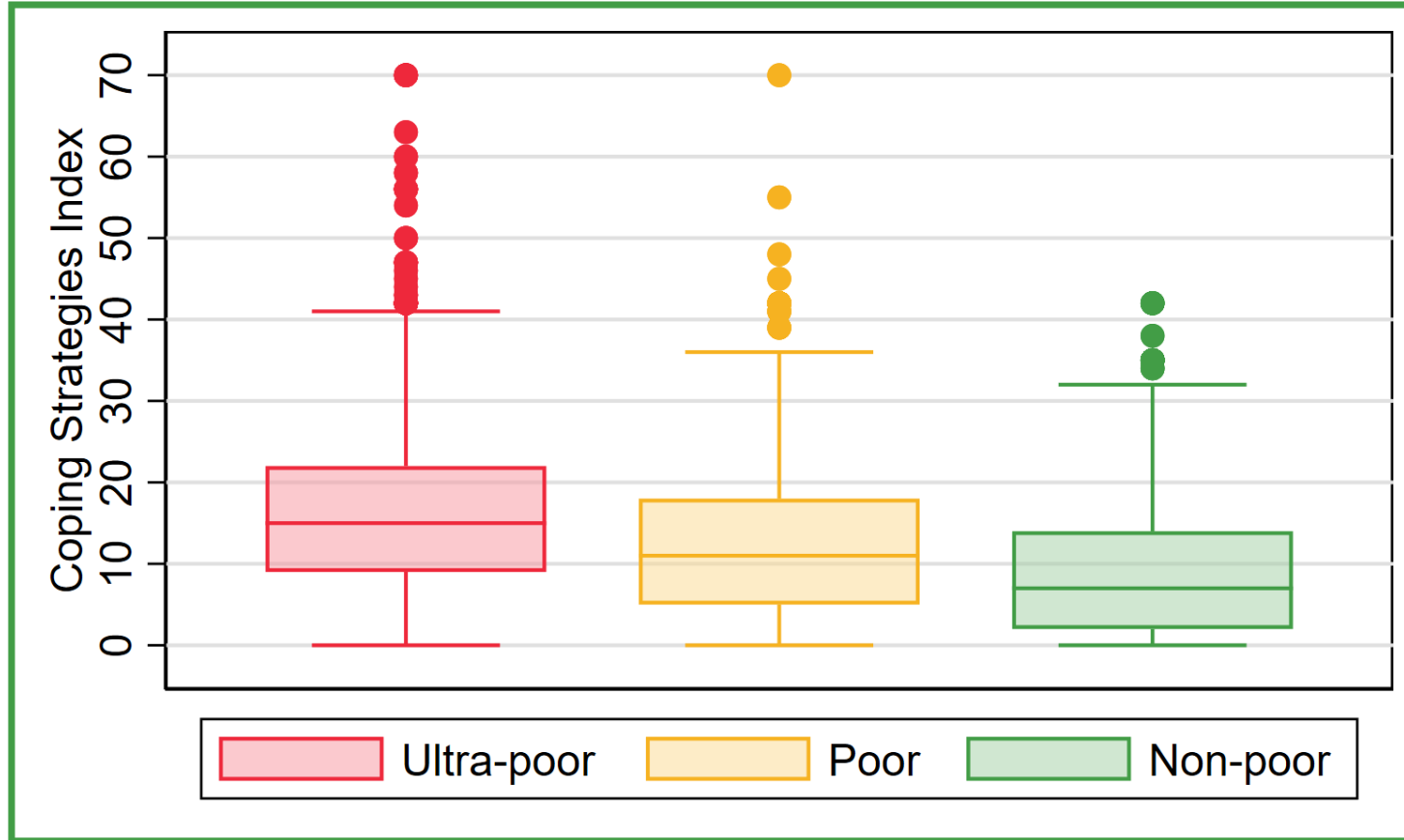
Variables measured in BRACC

Welfare	Coping strategies	Shocks	Non-agric assets
consumption per capita	Begging	Floods	Durables
Carolic intake	Selling assets	Droughts	Housing
HDDS	Taking more work	Other covariate shocks	
FCS	Restricting/reducing food consumption	Idiosyncratic shocks	
Access to basic services	HH demographics	Adaptive capacity	Social safety nets
Distance to market	Dependency ratio	Employment	Private transfers
Distance to schools	Gender of household head	Education of household head	Government transfers
Distance to water	Age of household health	Max education in the household	NGO transfers
Access to safe water		Health insurance	
Distance to health facility			
Agricultural assets	Economic connectivity		
Land ownership	Market reliance for food		
Land holding size	Financial assets		
Livestock ownership	Access to credit		

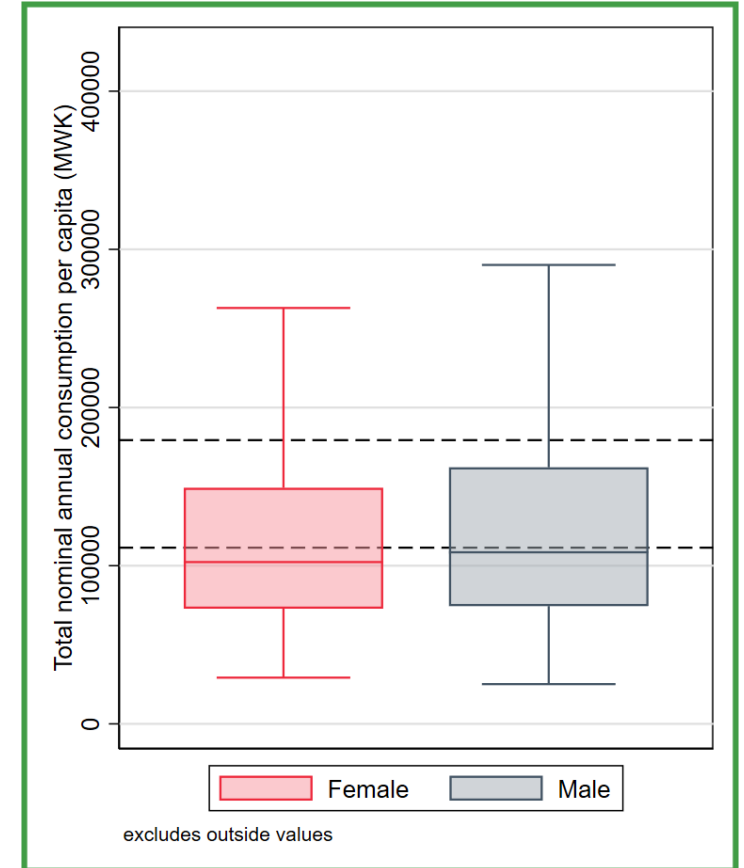
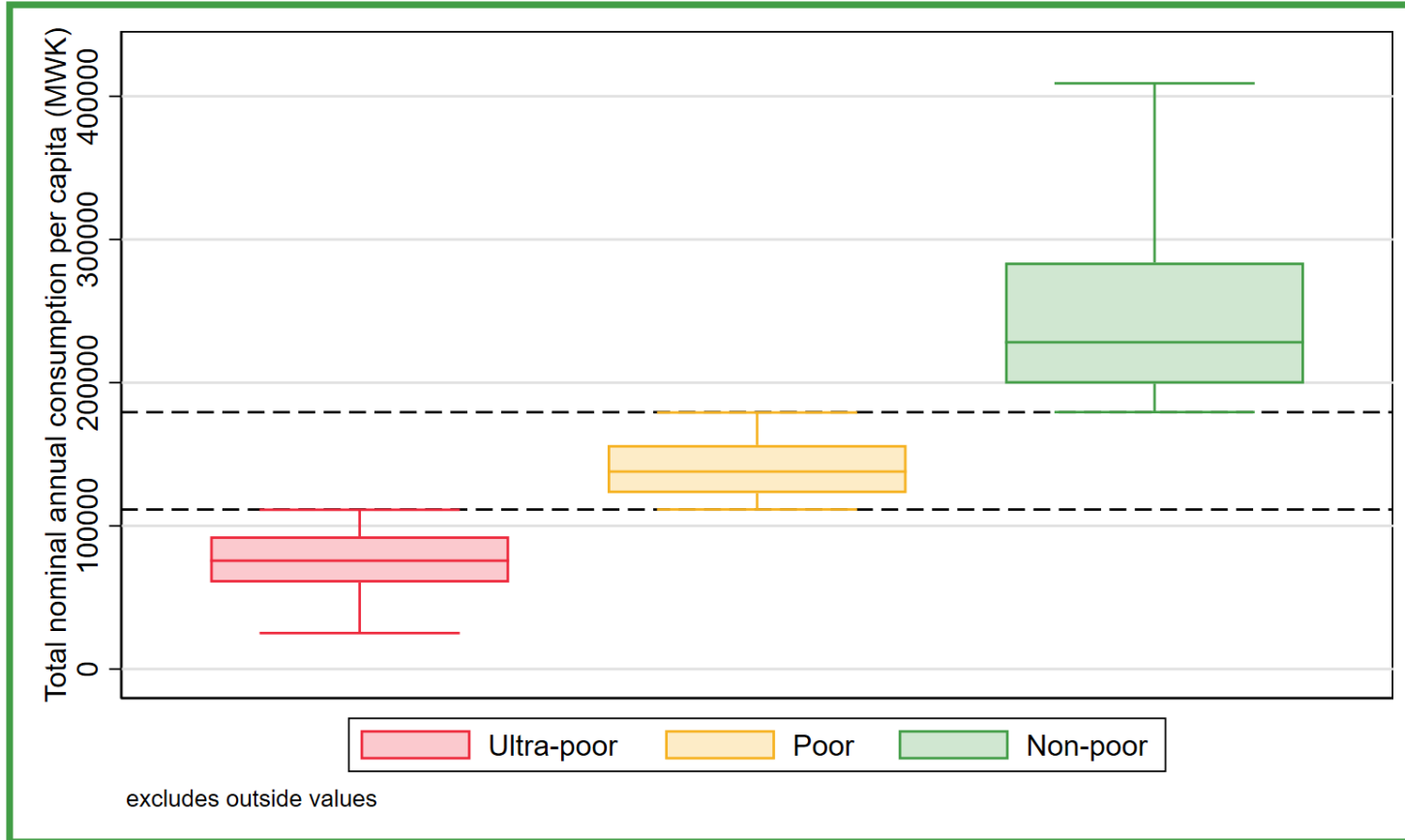
Proxy measures of resilience

- Being not easily measurable, resilience is usually quantified using the following proxies
 - CSI (e.g. MIRA project in Malawi)
 - RIMA-II
 - Household resilience index

Coping strategies (1 month)



Consumption expenditure



Thank you!