Poverty and Expenditure in Northern Ghana in 2015

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Presented at the 2016 PBS Meeting
Alisa Hotel, Accra
March 17, 2016

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Context

- Feed the Future Initiative is USG food security and poverty alleviation program driven by country strategic plans
- FTF Initiative tracks intervention investments' performance using a number of indicators
- Ghana's baseline indicators established in 2012 and midline study tracking progress conducted in 2015
- This conference is about our tracking progress

2015 Survey Structure

- Reporting changes in the indicators from 2012 based on original 4,410 households
- These households were sampled using a 2-stage probability sampling approach
  - Stage 1: Probability proportional to size approach to select EAs
  - Stage 2: Systematic sampling approach to select 20 households per EA

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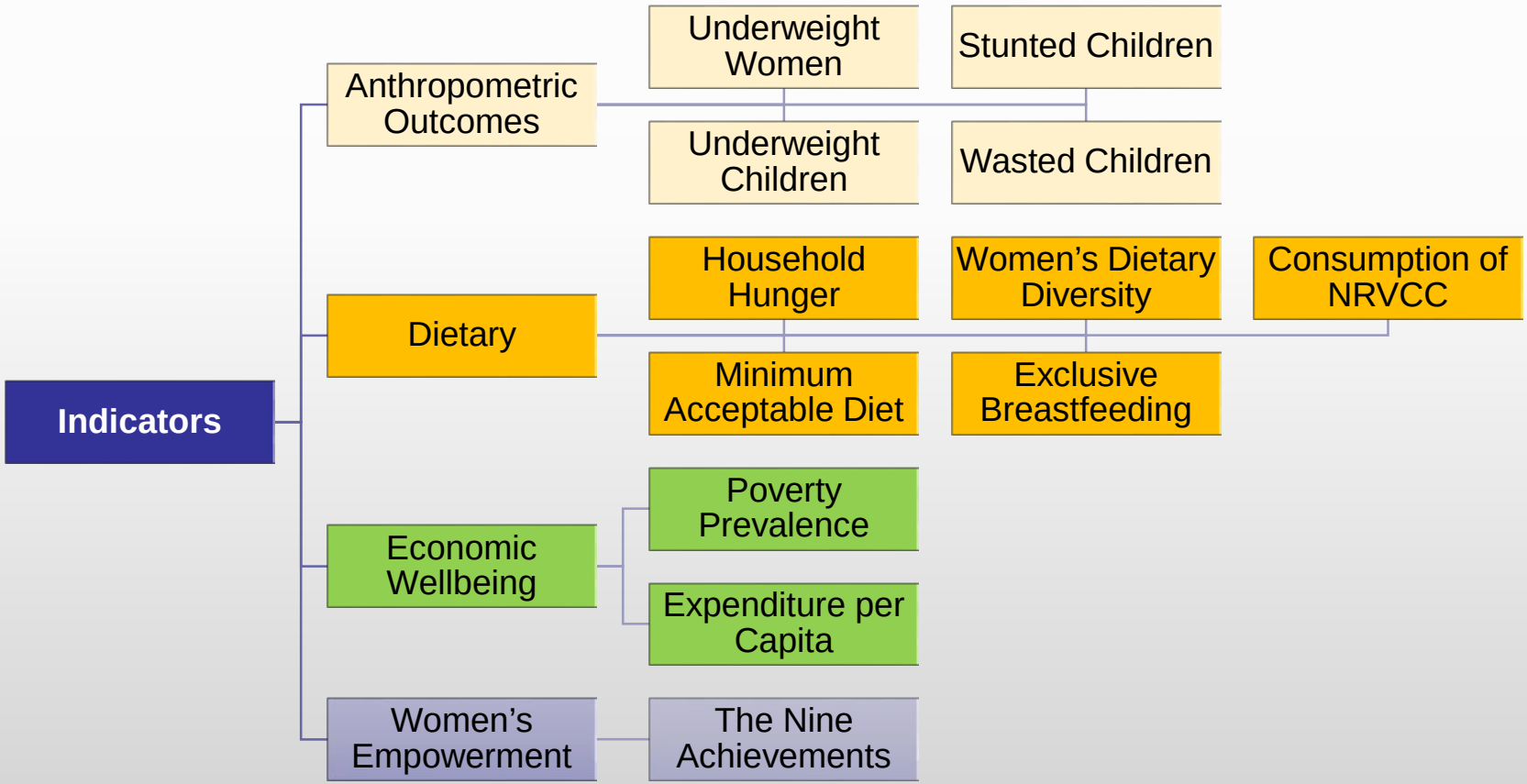
The Feed the Future Indicators



Discussing Progress: PBS 2015

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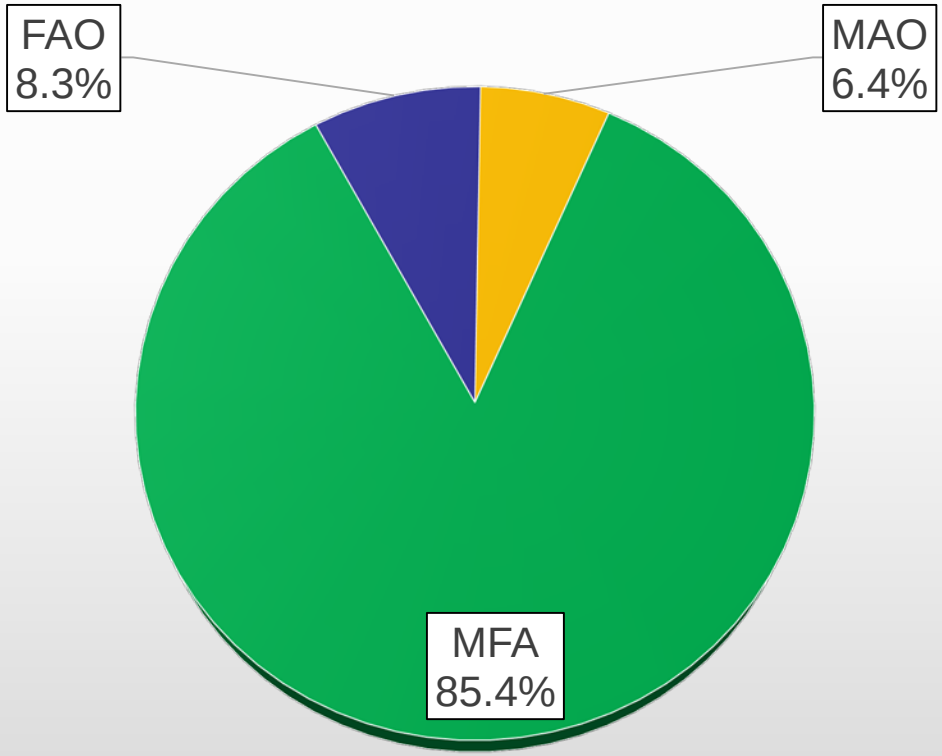
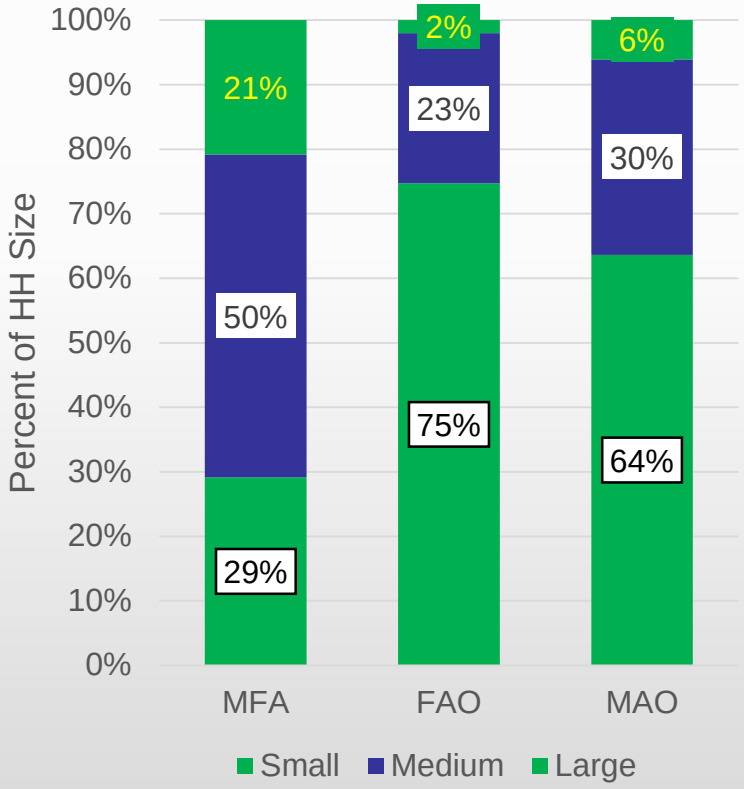
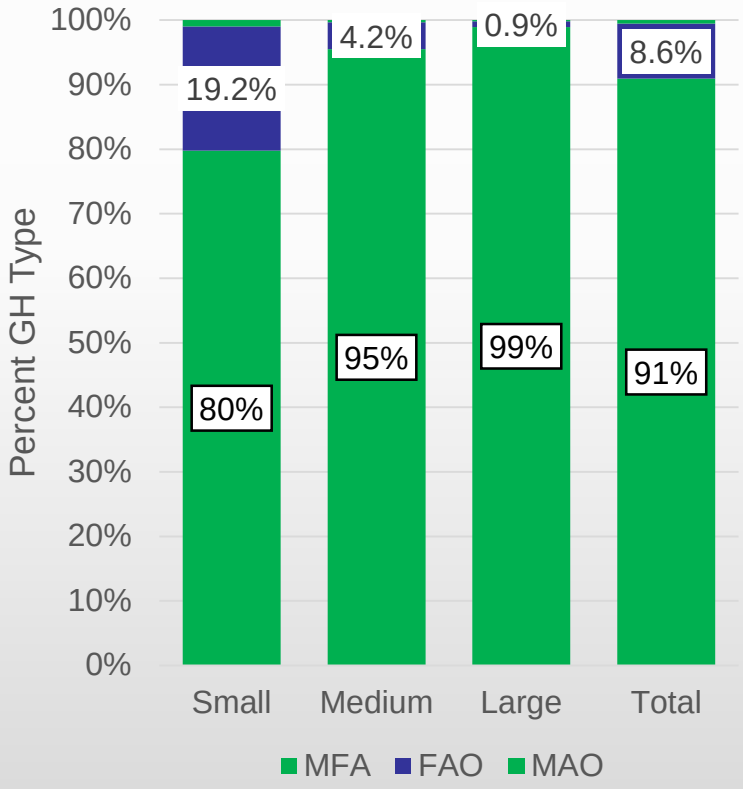
Summary Demographics

Basic Household Characteristics

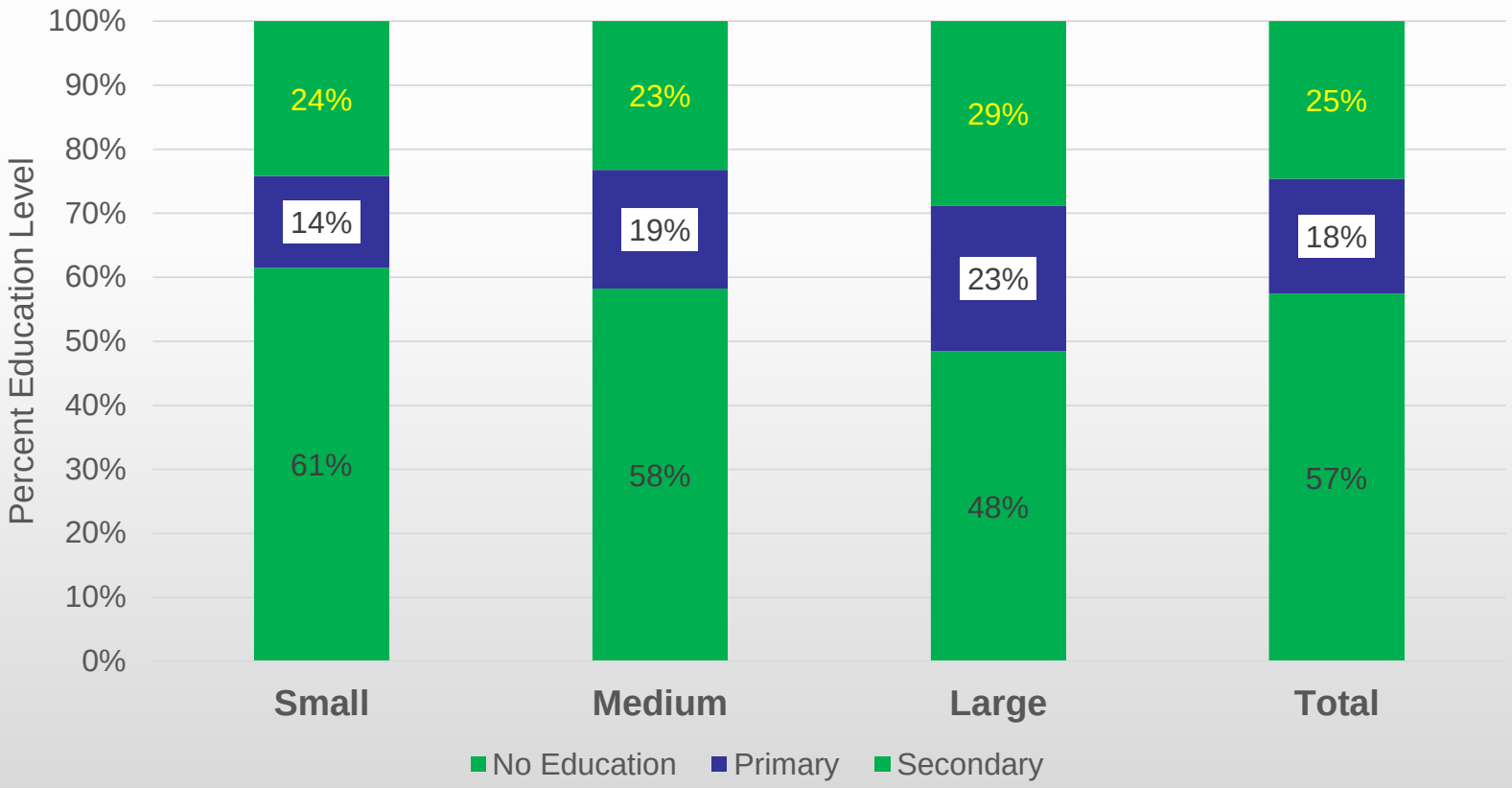


Household Size and Gendered Household Type

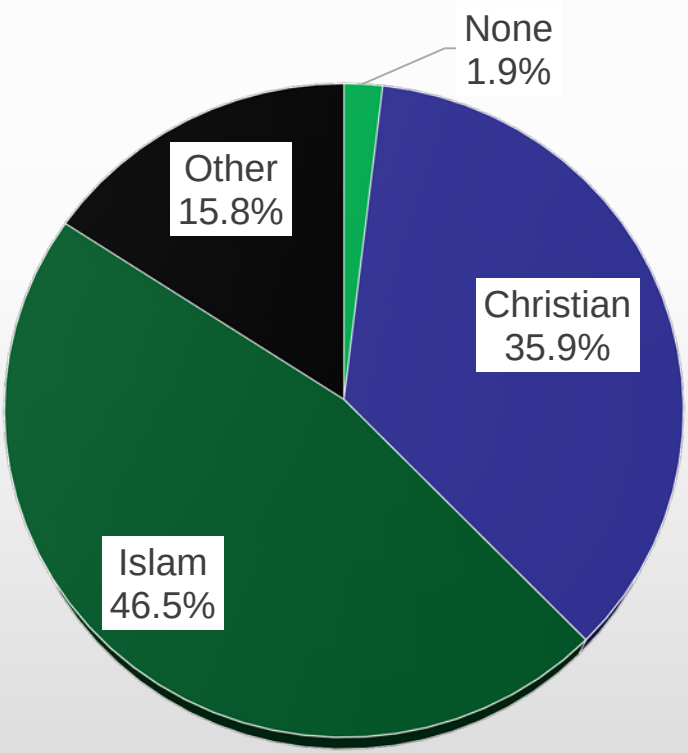




Household Size and Education



Religion



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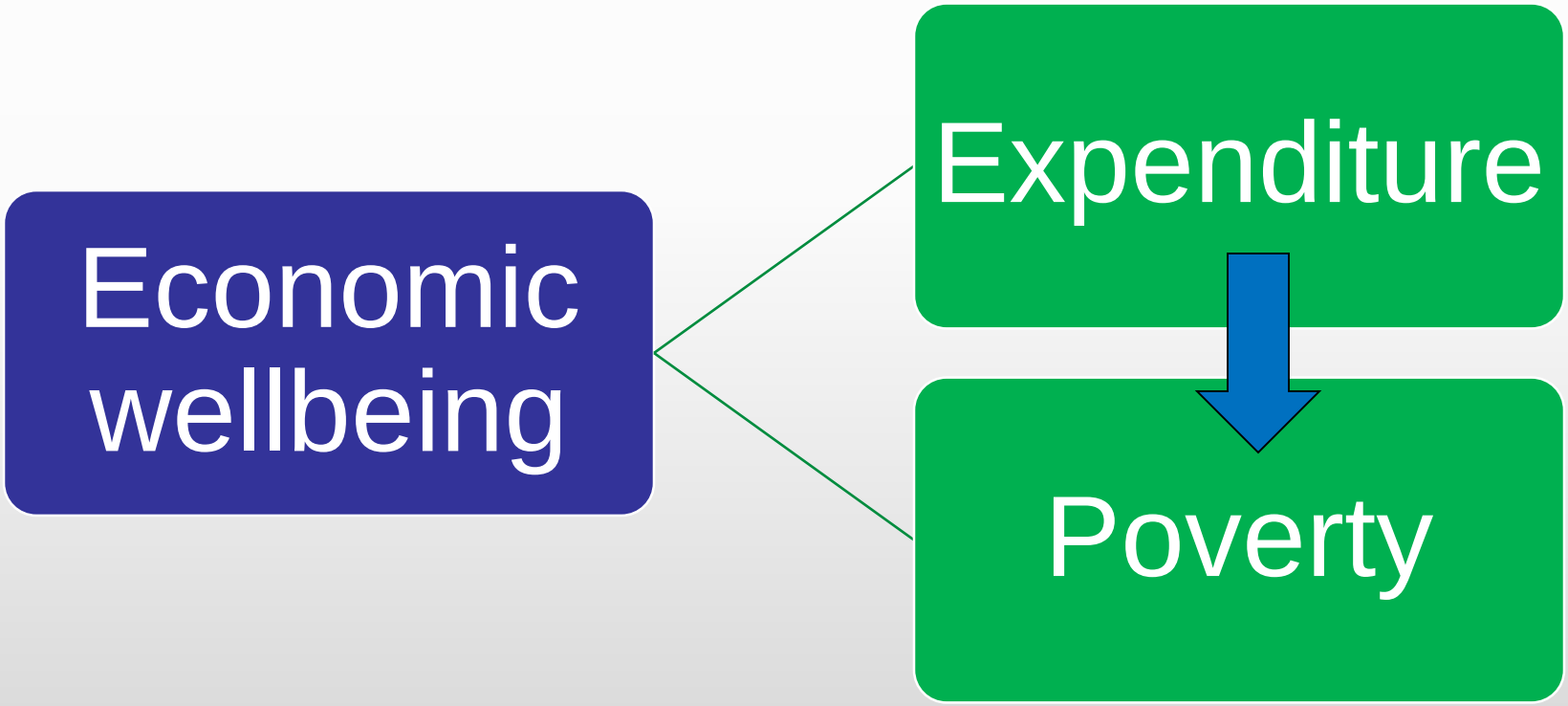
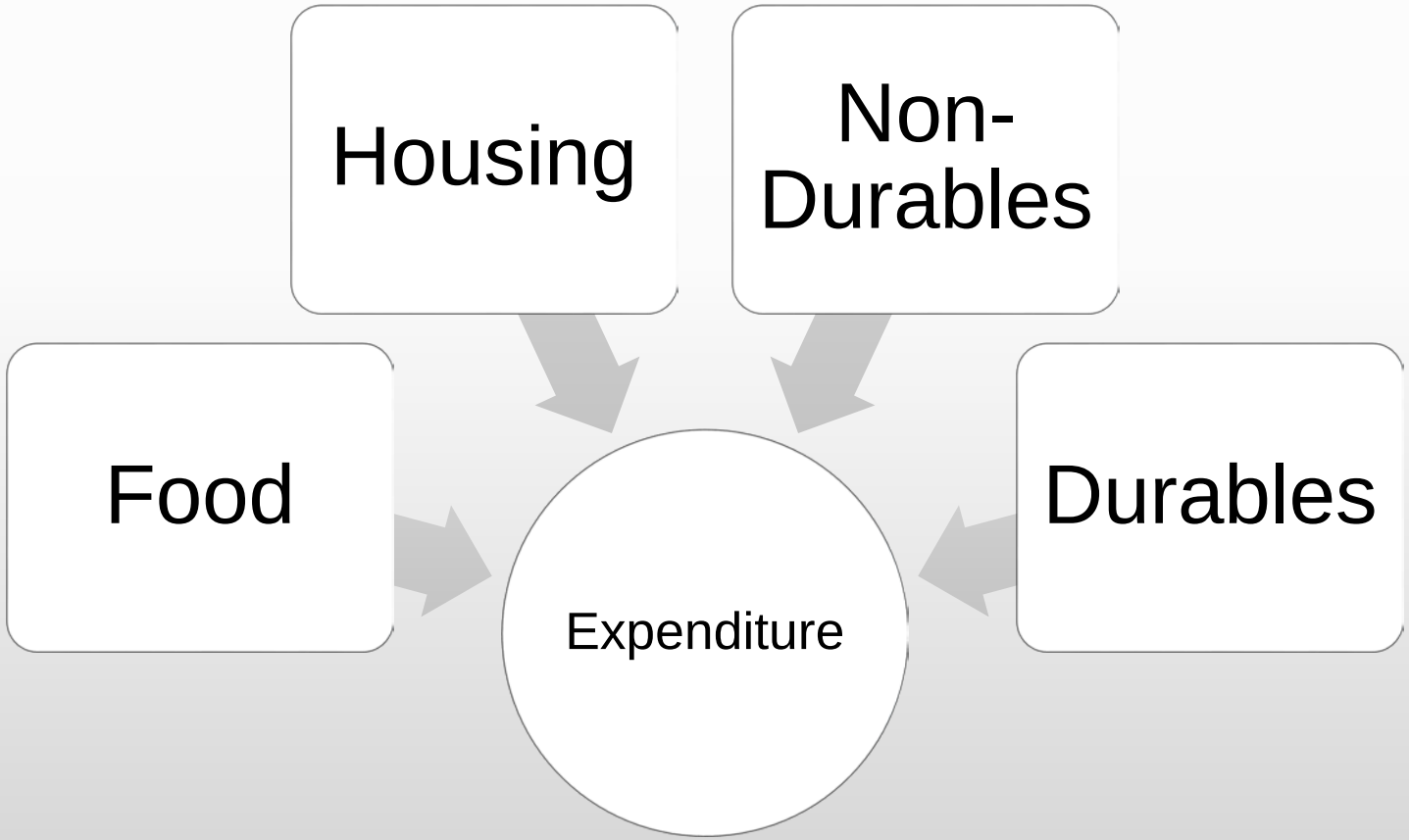
Our Focus = Households

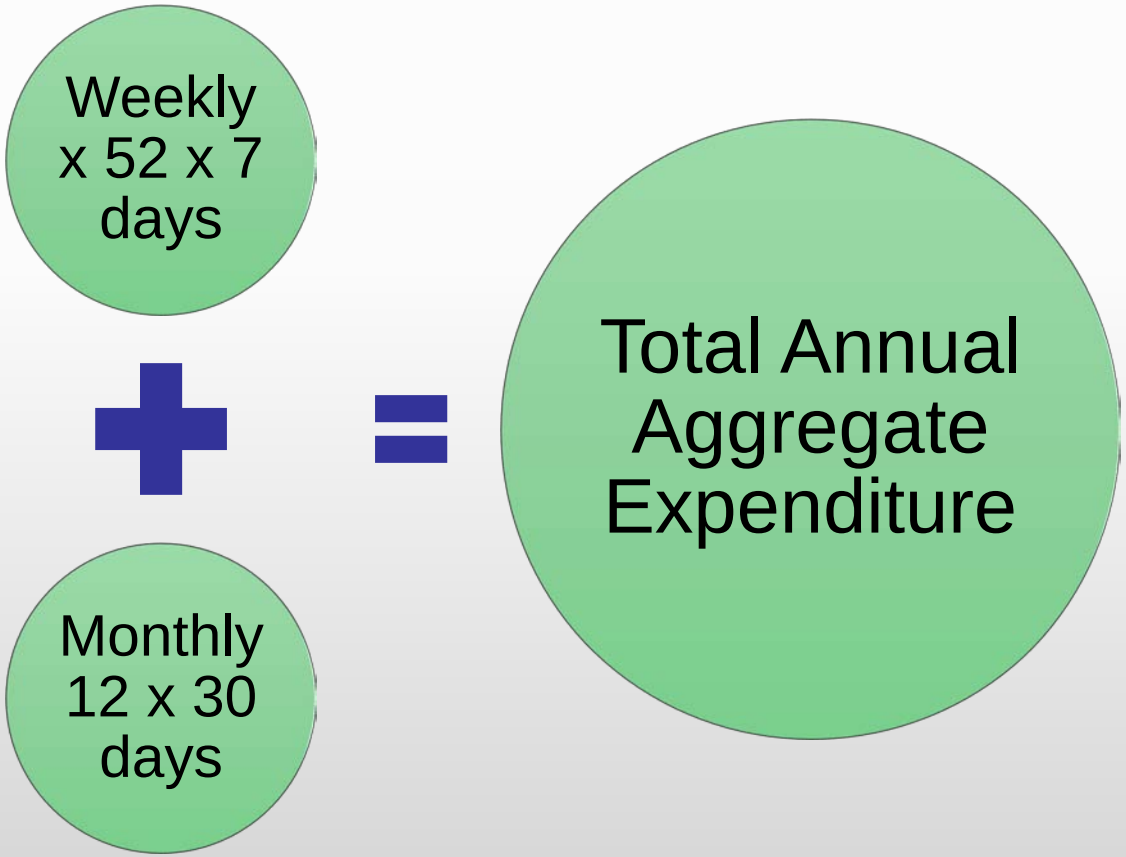


Basic Assumption

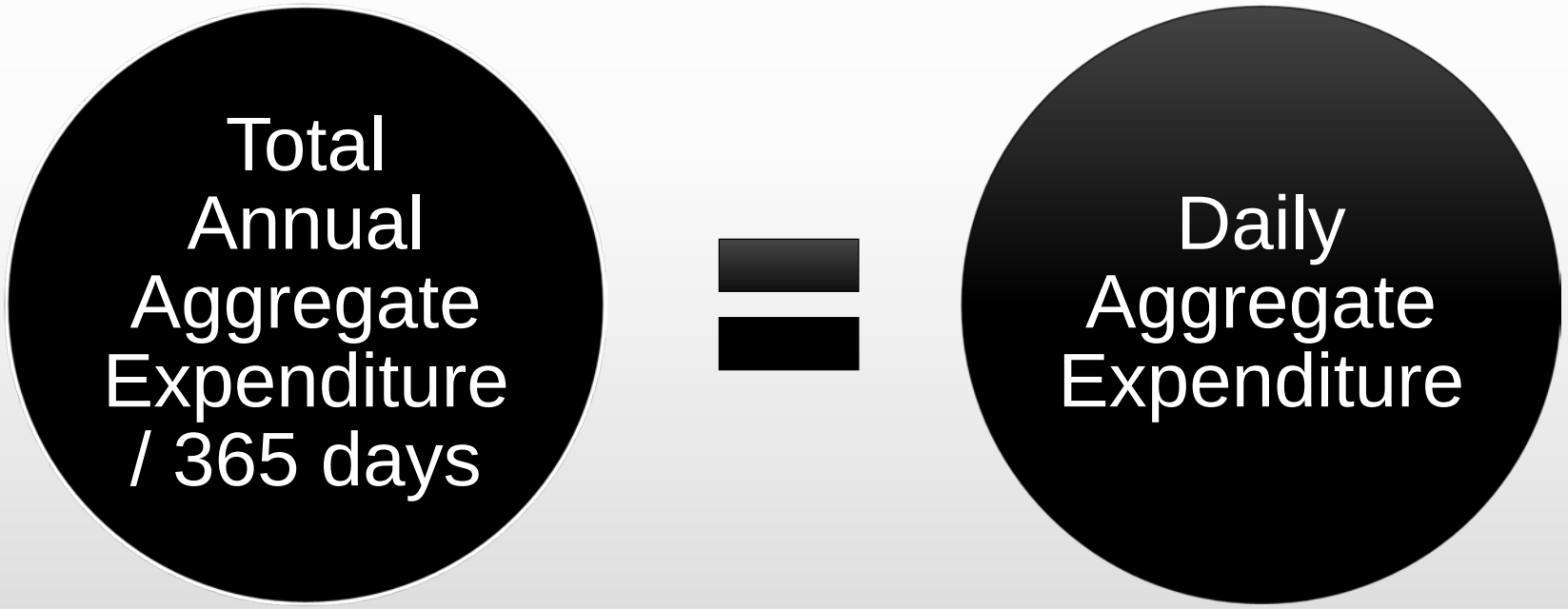
Components of Expenditure = 256 items with different recall times



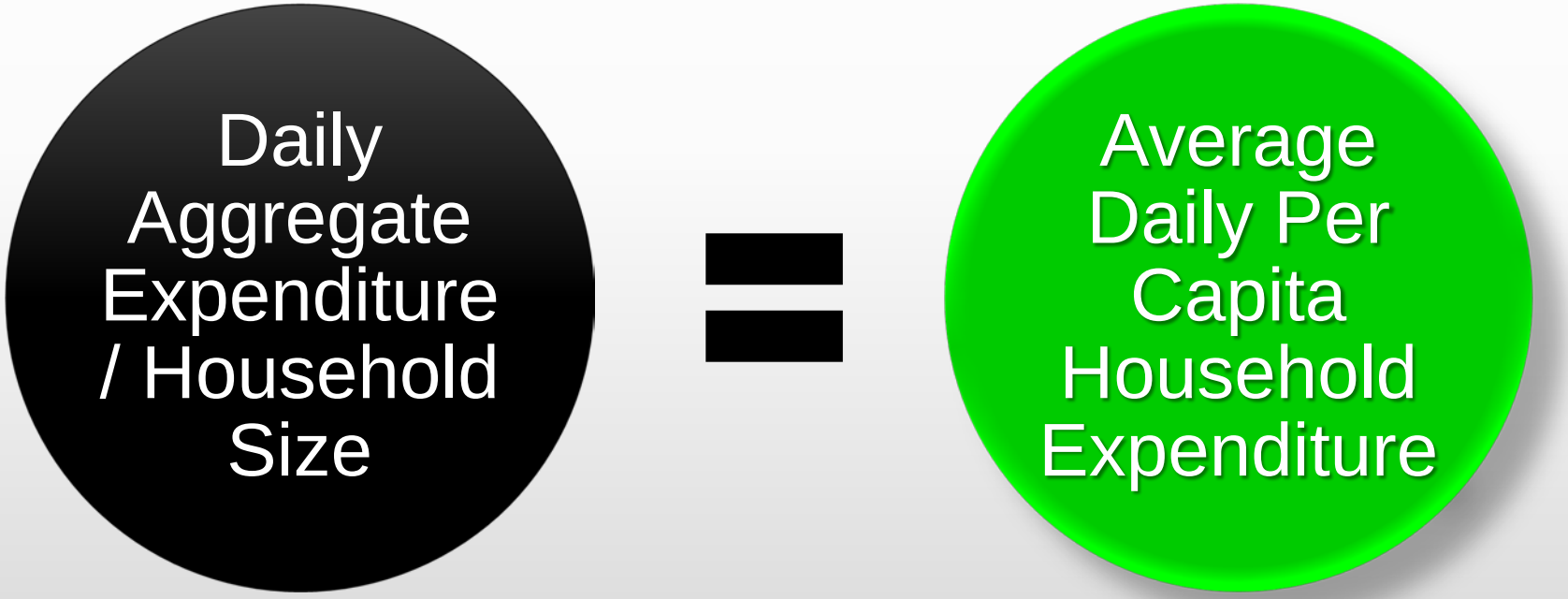
Expenditure



Expenditure



Expenditure



Expenditure in PPP

- Estimate is in 2015 Cedi value and has to be converted into international currency (PPP) for comparison
- Conversion addresses inflation and exchange rates using the following formula

$$X_{2005}^{PPP} = \frac{X_{2015}^{GHS} I_{2005}}{I_{2015} \rho_{2005}}$$

Where I is the CPI, X is the expenditure, ρ is the PPP conversion factor & subs are ref years & sups are currencies

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Establishing the Poverty Threshold

X≥$1.25

X<$1.25

Poverty is determined by per capita expenditure, which is dependent on household size

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Expenditure and Poverty

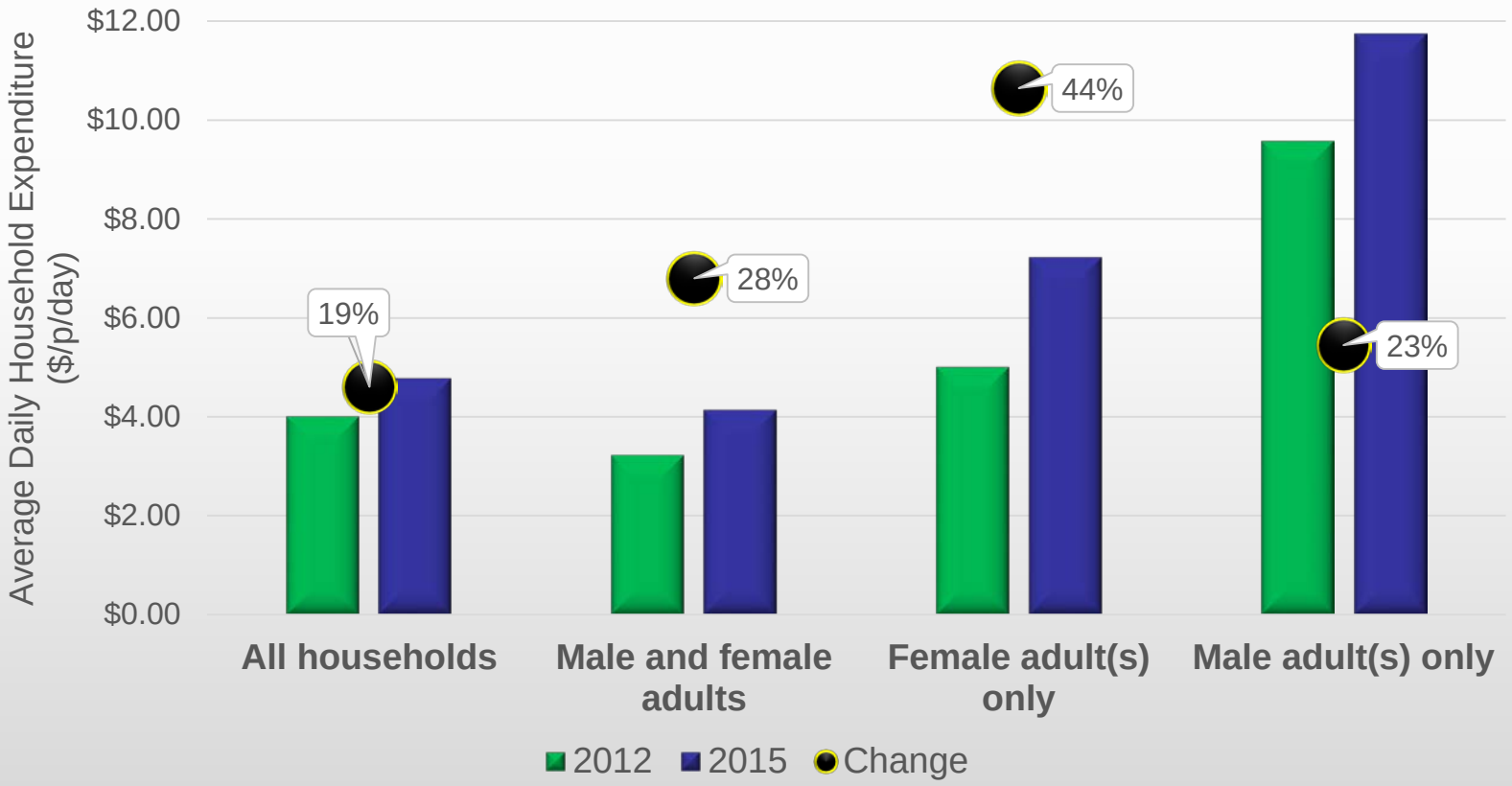
Take two households, same total expenditure but different sizes

- Household I = 10 people; Household II = five people; total daily household expenditure = $10 each
- Average per capita expenditures are respectively $1 and $2
- Prevalence of poverty at the household level (poverty line = $1.25) is 50%
- At the individual level, the prevalence of poverty is 67%
- If HH I has 12 members, then individual headcount poverty rate is now 70.6% but remains unchanged under household level estimates

Expenditure and Poverty

- So, how many variables can affect the estimate?
  - The poverty threshold used
  - The calculation of expenditure and assumptions about prices, etc.
  - Time of year data are collected given vulnerability of poor to cyclical consumption patterns
  - The inflation rates used – determined by period of data collection and reference periods
  - The PPP conversion factor used
  - How the incidence is measured
  - The weights that are applied, which is determined by the sample size and the reference population being used
  - How outliers are treated

Change in Expenditure by Gendered Household Types



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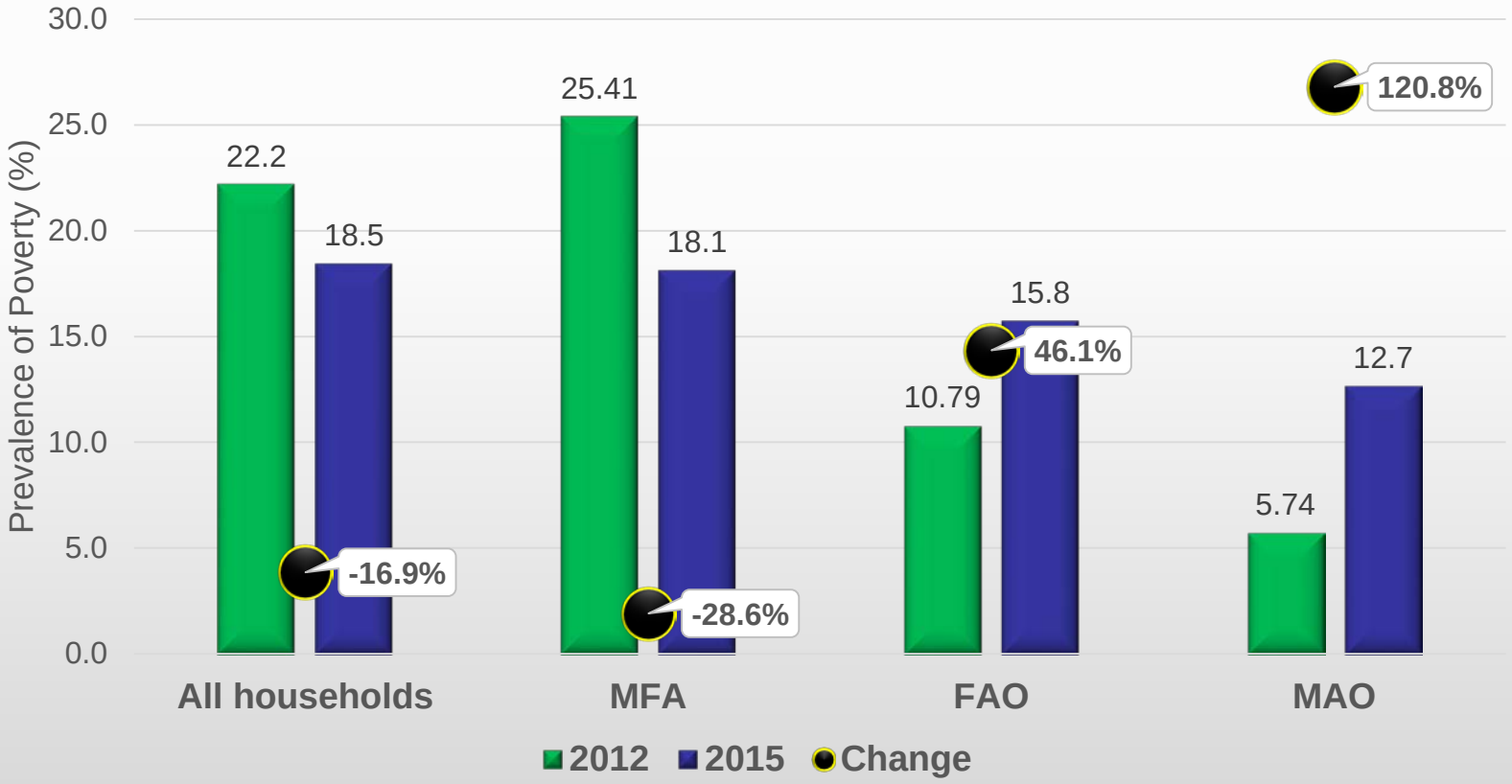
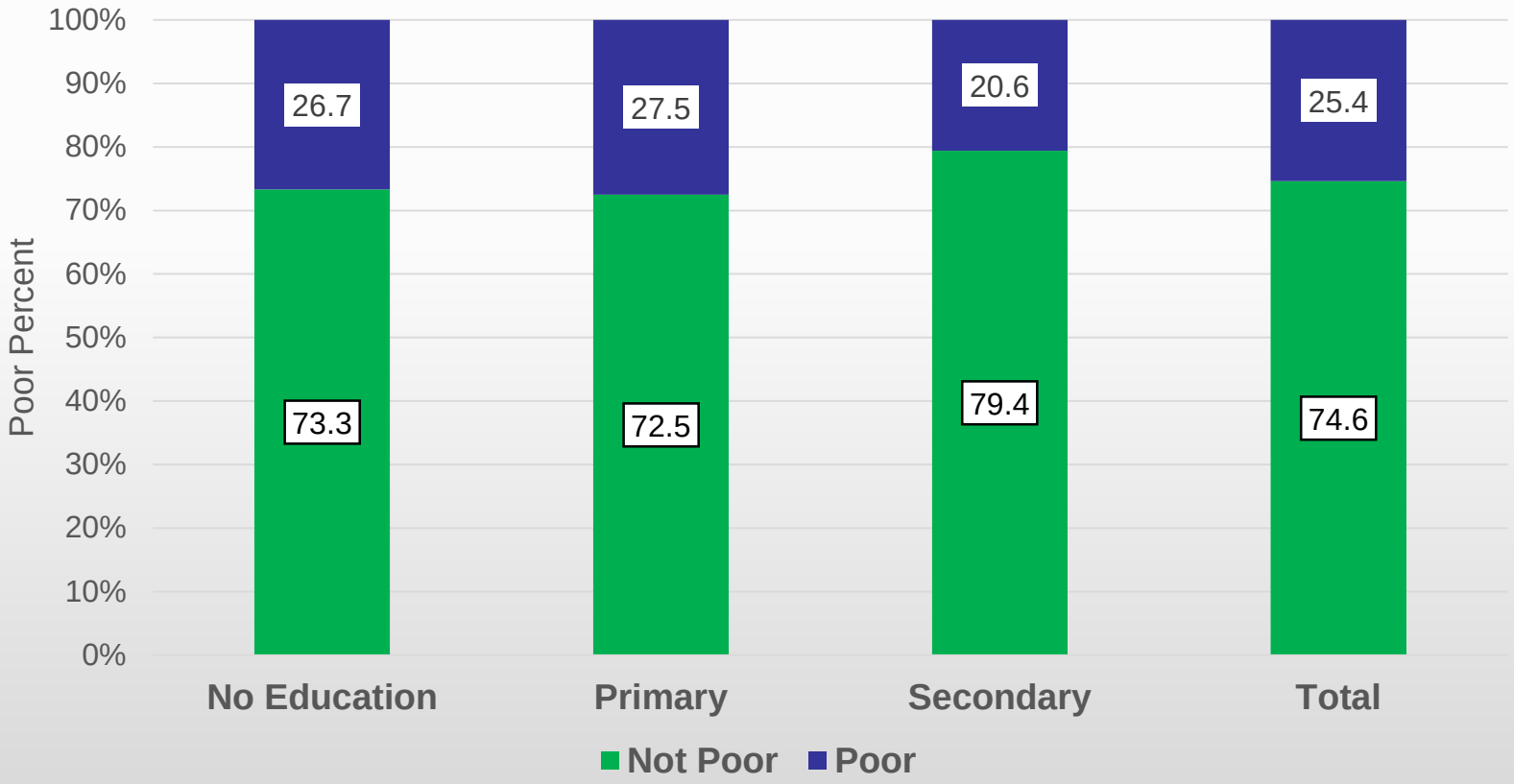
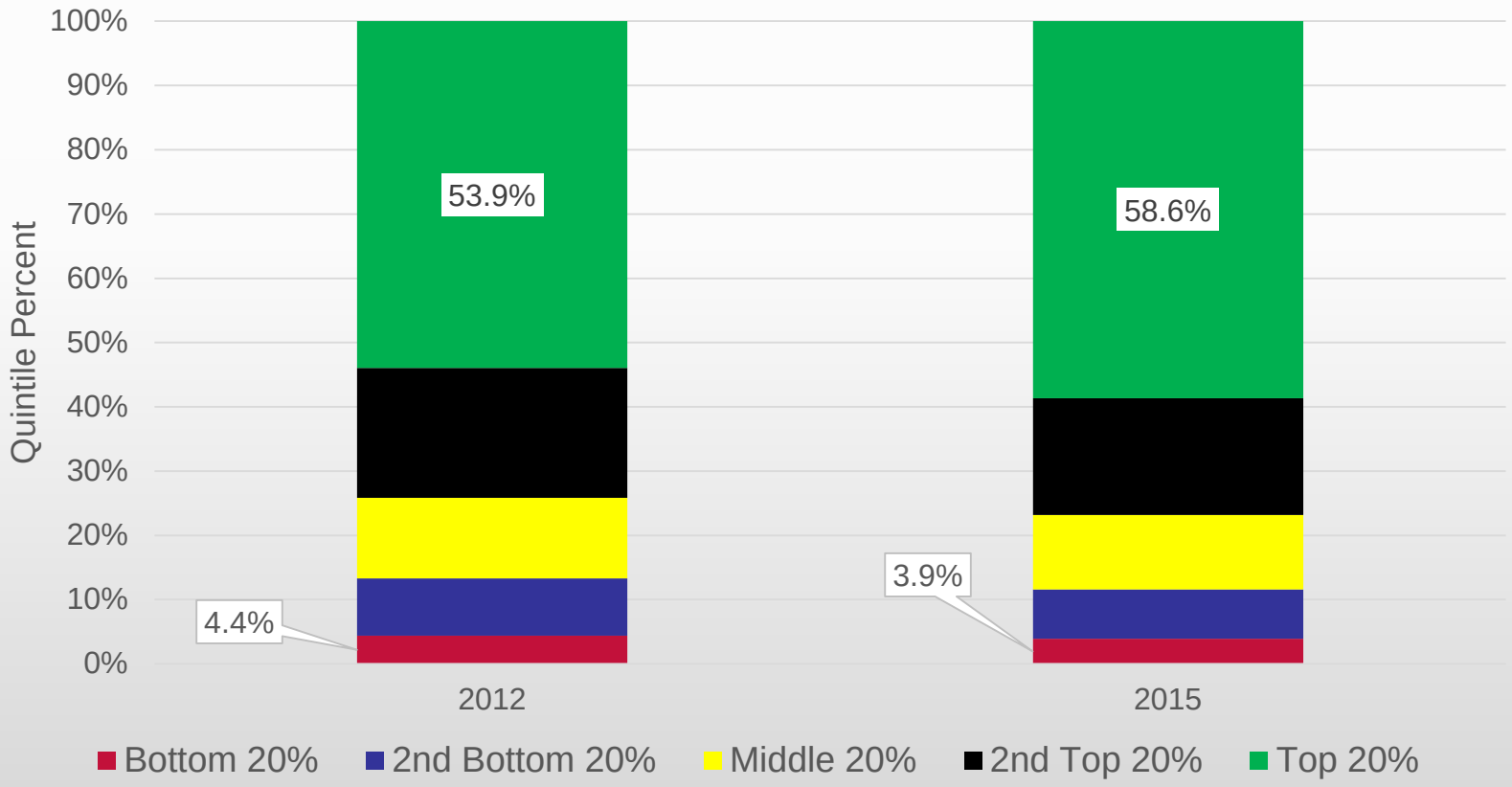
Change in Poverty by Gendered Household Types



Poverty & Education Level



Inequality Indicator: Distribution of Consumption by Quintiles



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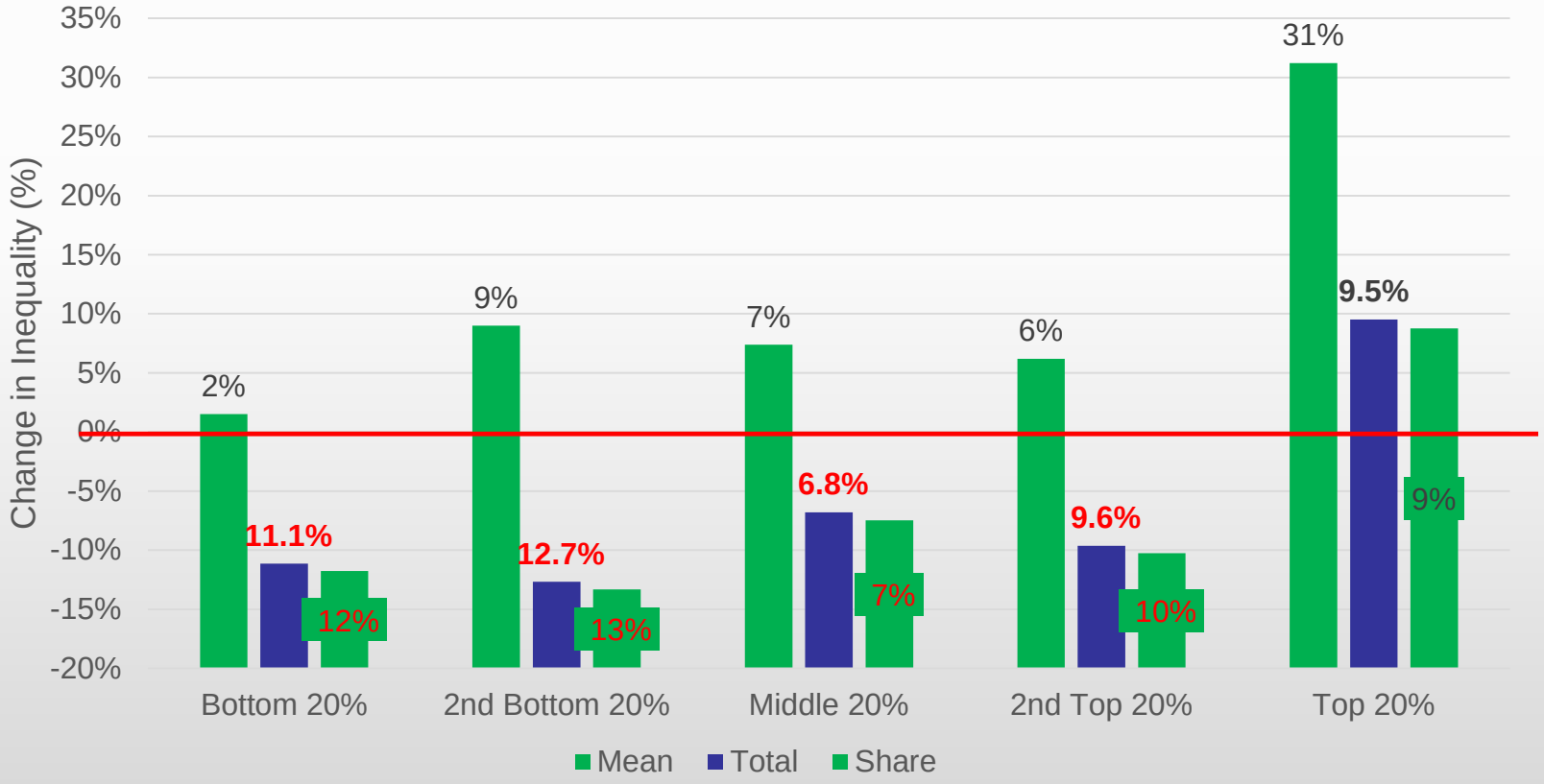
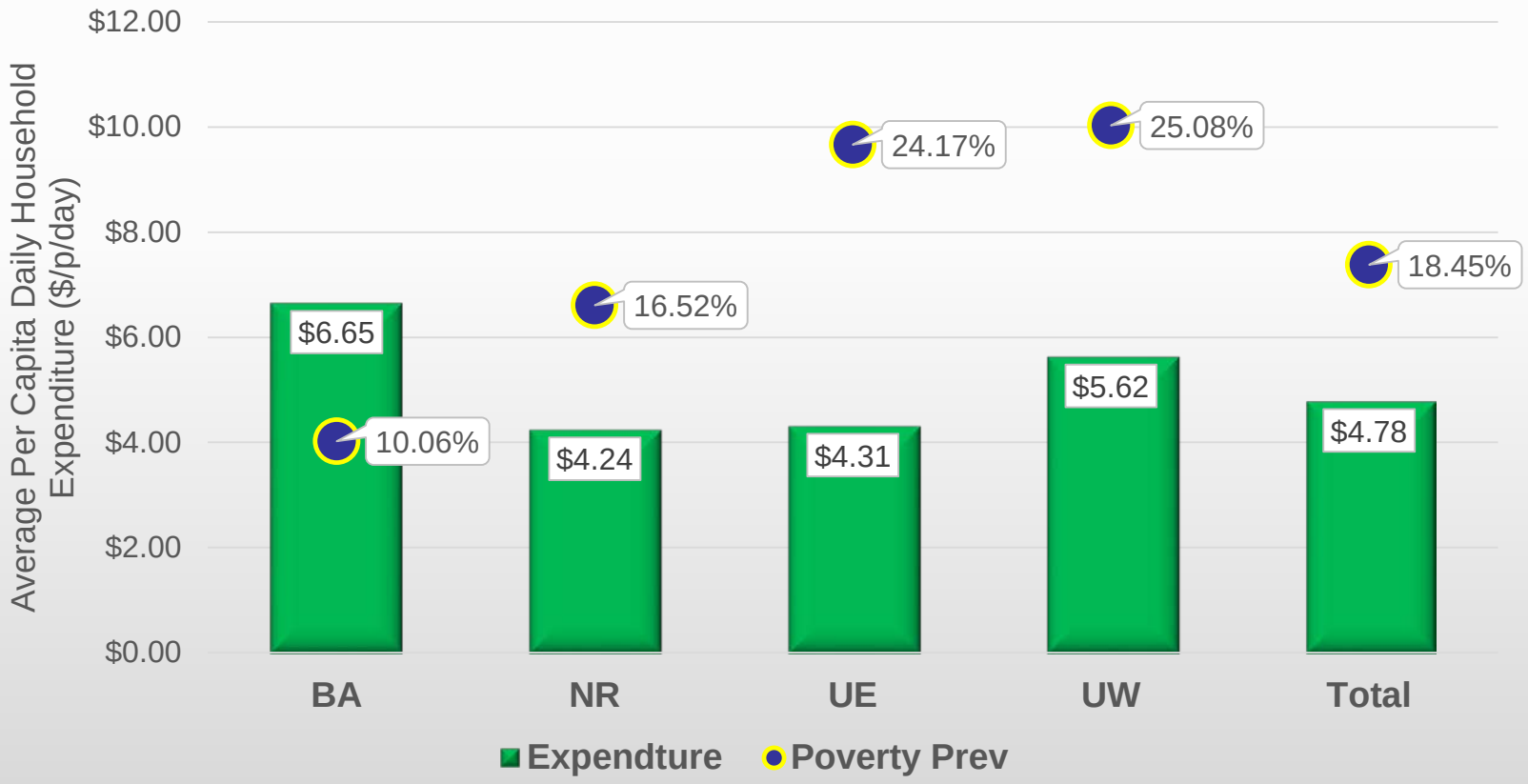
Change in Inequality 2012-2015



Expenditure and Poverty by Region (2015)



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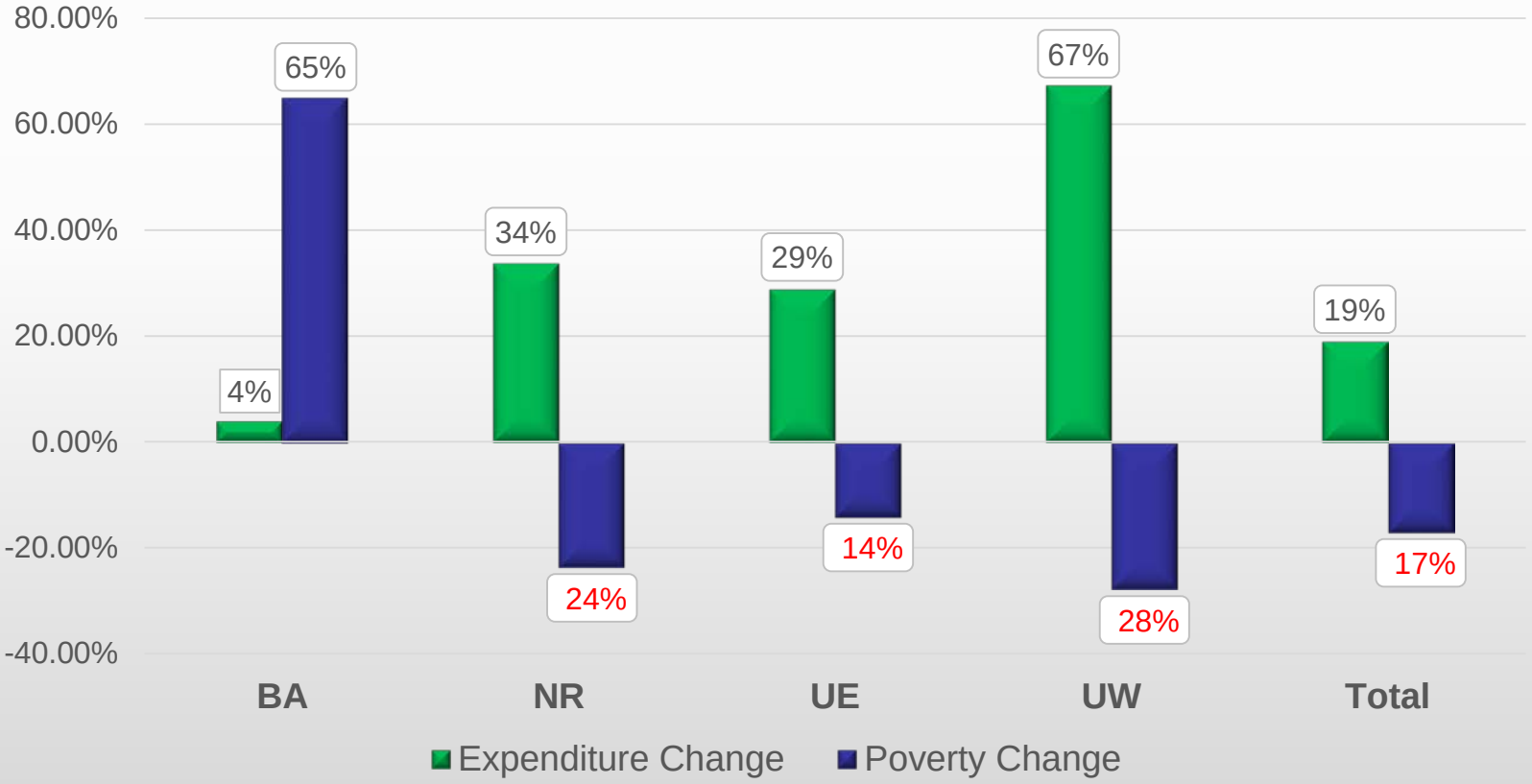
Expenditure and Poverty Change by Region (2015 v 2012)



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What Can We Learn?

- How are those counted as poor differ from those who are not?
- The probability of being among poor households is determined by education (E), gendered household type (G), household size (H), location (L), and food share of total expenditure (F)

$$P = f(E, G, H, L, F)$$

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What Can We Learn

- Compared to BA, the odds of being poor is 1.9 times higher in NR, 2.9 times higher in UE and 4.1 times higher in UW
- There is no statistically significant difference between MFA and the other gendered household types when it comes to the probability of being counted among the poor
  - FAO households differ but only at the 10% level, with a higher odds of about 1.5 times

What Can We Learn

- The odds of being poor with education is about 0.6 times the odds of being poor without education
- Every member increase in household size increased the odds of being poor by 23%
- Every increase in percent increase in food share of total expenditure reduces the odds of being poor 14%

What Can We Learn

Implications

The three northern regions are still vulnerable despite progress in poverty reduction

Investments in education very important on reducing poverty risk

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Take Aways

- Expenditures have increased
- Poverty prevalence has declined from the baseline
- However, the gap between the top and the bottom quintiles has increased
- Policymakers can help poverty alleviation by facilitating the enabling environment
- Individuals can do their part by enhancing their education and investing that of their kids

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Thank You

Questions, comments, ideas