

# Results and Opportunities of the 2012 SADA Area PBS

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To the 4,410 households and community leaders who facilitated their participation, we want to start by expressing our sincerest gratitude

**THANK YOU**

# ROAD MAP

Why, what, when and how the PBS

The indicators and their summaries

The indicators and their revelations

At your service: Making the most of the PBS in your district

# SADA AREA PBS OF 2012: THE WHY

Feed the Future  
objectives of poverty  
reduction and nutrition  
improvement

Deep-dive and Ghana's  
economic and socio-  
political progress

Disparity in the  
progress towards the  
MDG

Evidence-driven  
programs and the need  
for baseline indicators



# SADA AREA PBS OF 2012: THE HOW

- Two-stage stratified sampling approach
- Stage I: Enumeration Areas (230)
  - Stratification by RING (118 EAs) and Non-RING (112 EAs)
  - Ag & nutrition intervention in the RING and ag-only intervention in the non-RING
  - Completion rate: 229 EAs (99.56%)

# SADA AREA PBS OF 2012: THE HOW

- Stage II: 20 households in each sampled EA
  - Completion rate:  $4410/4600 = 95.9\%$
  - CAPI Approach used in the interviews
  - Efficient and effective but challenging because of electricity and network access

# SADA AREA PBS OF 2012: THE WHERE AND WHO

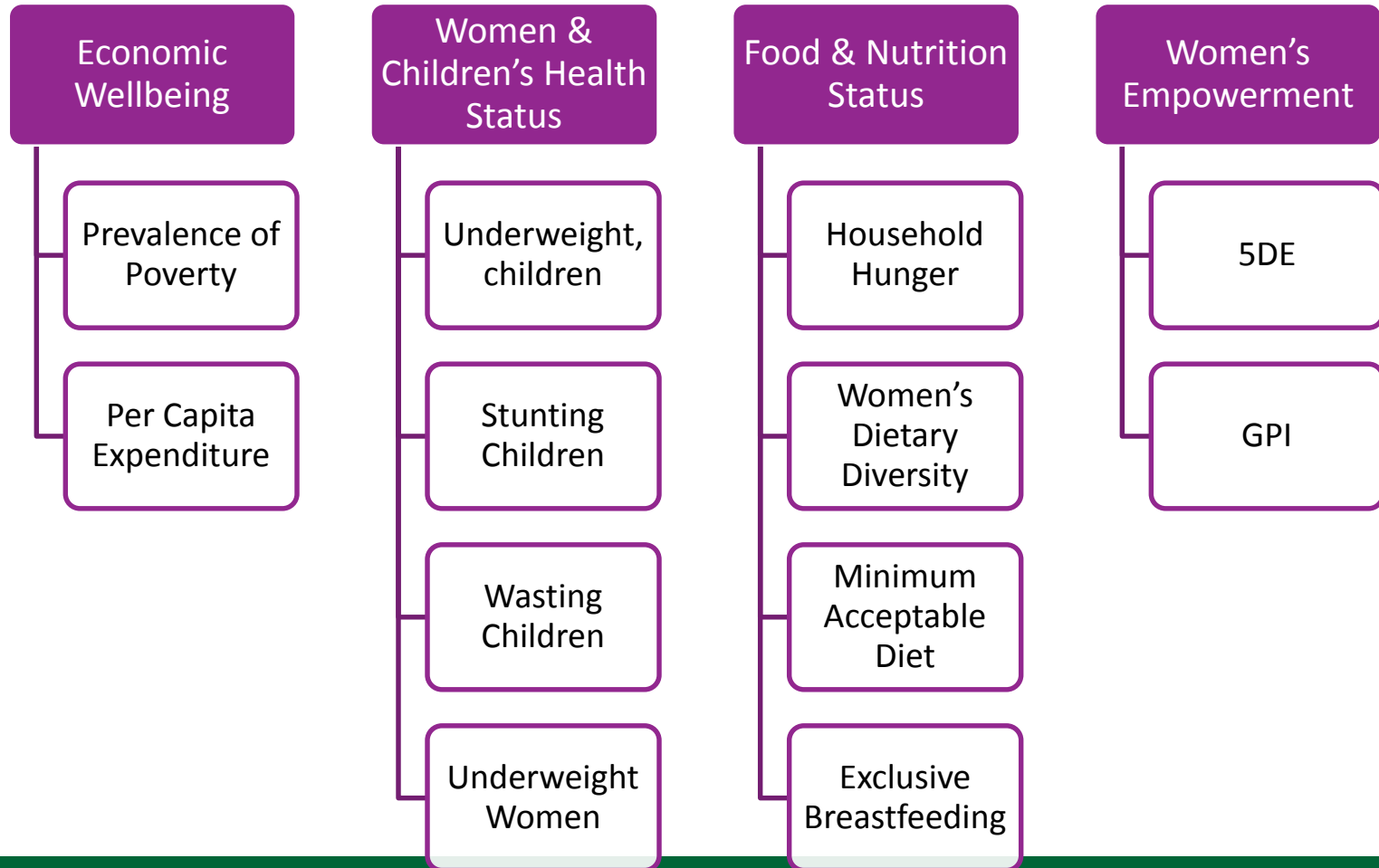
Excluded the northern Volta Region of the SADA Area

**45** districts: 7 northernmost BA districts plus all districts in the remaining three regions

About **25,000** total respondents – adults and children in **4,410** households

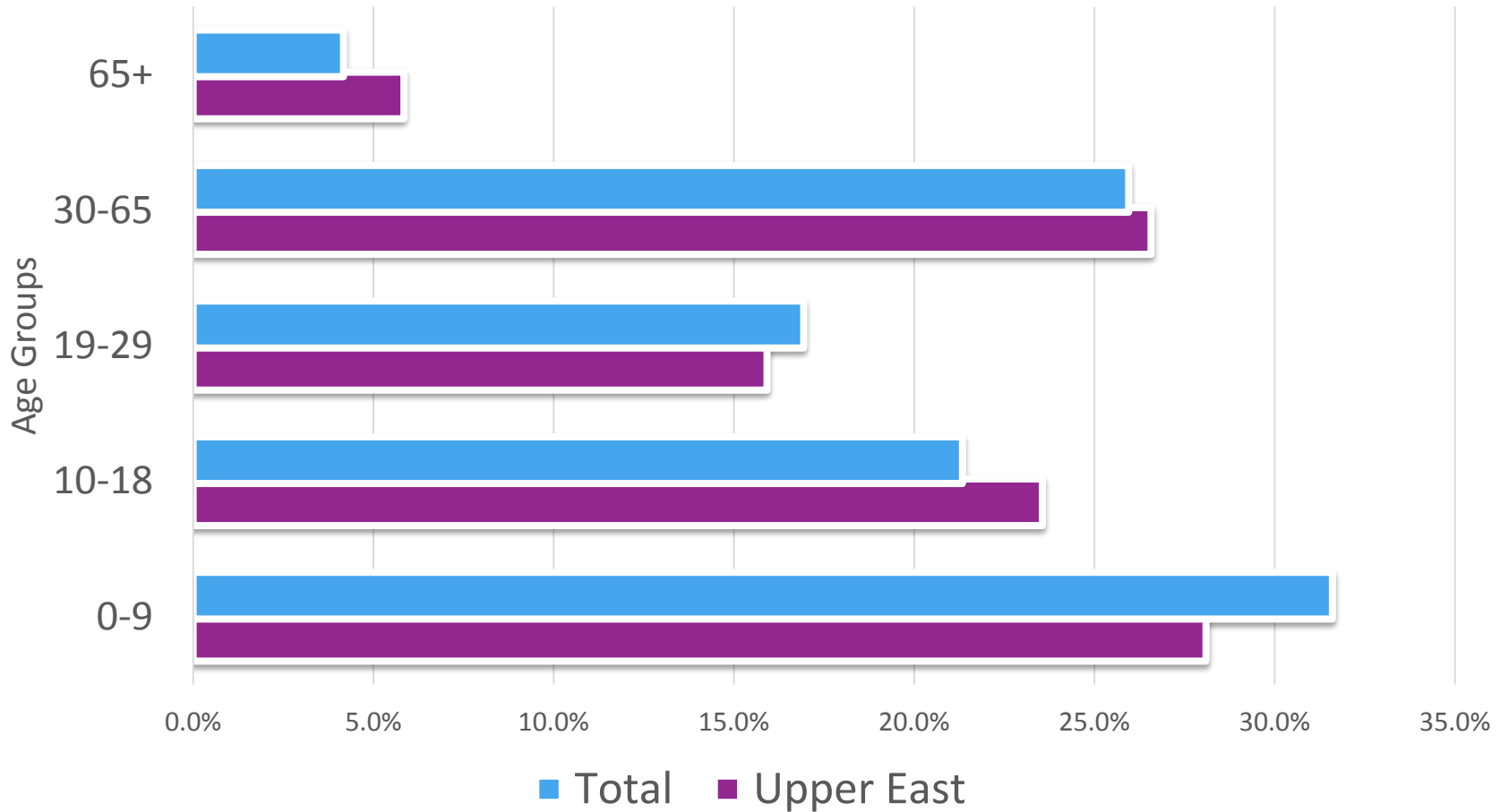
# SADA AREA PBS OF 2012:

## THE WHAT

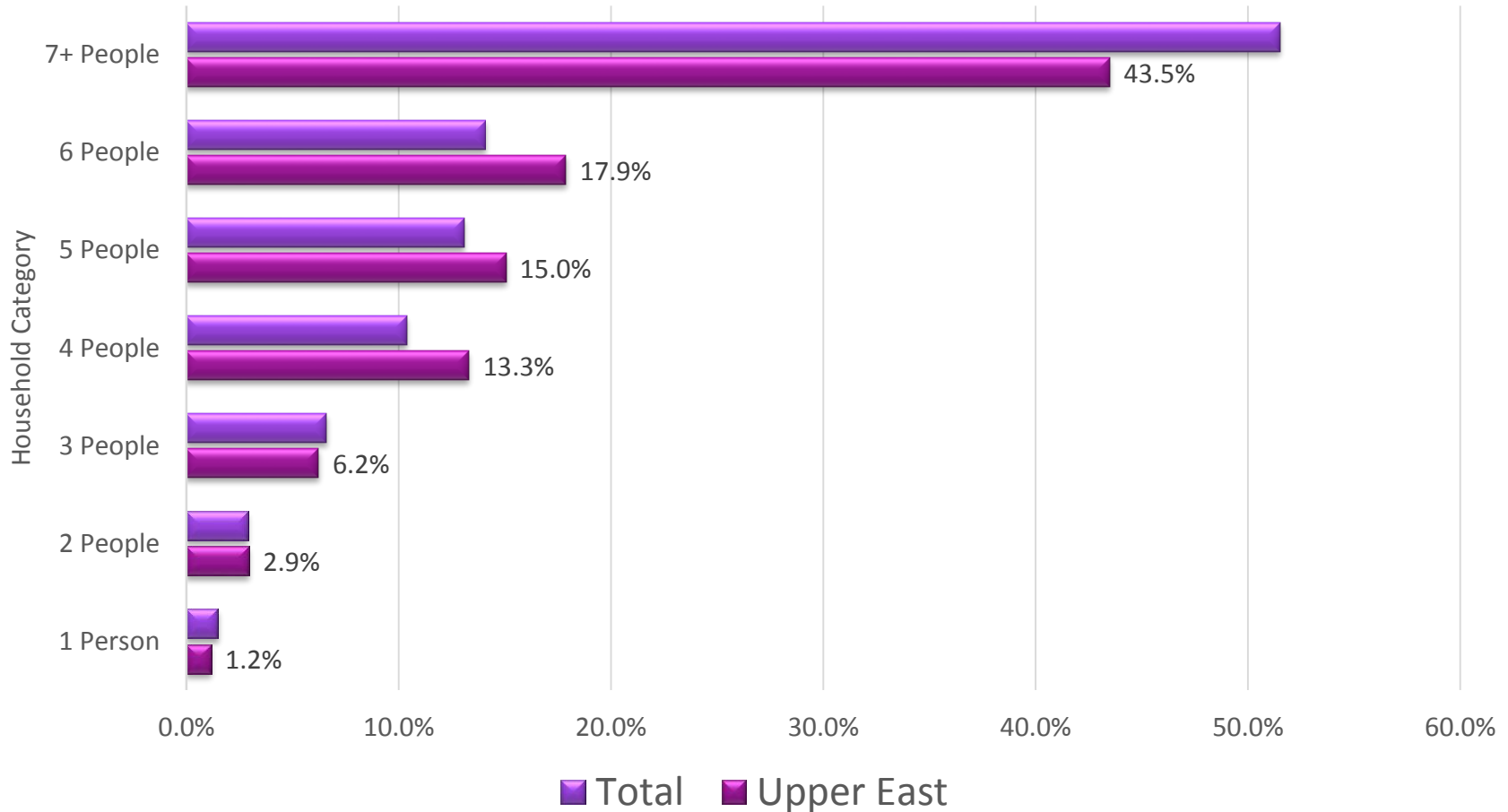




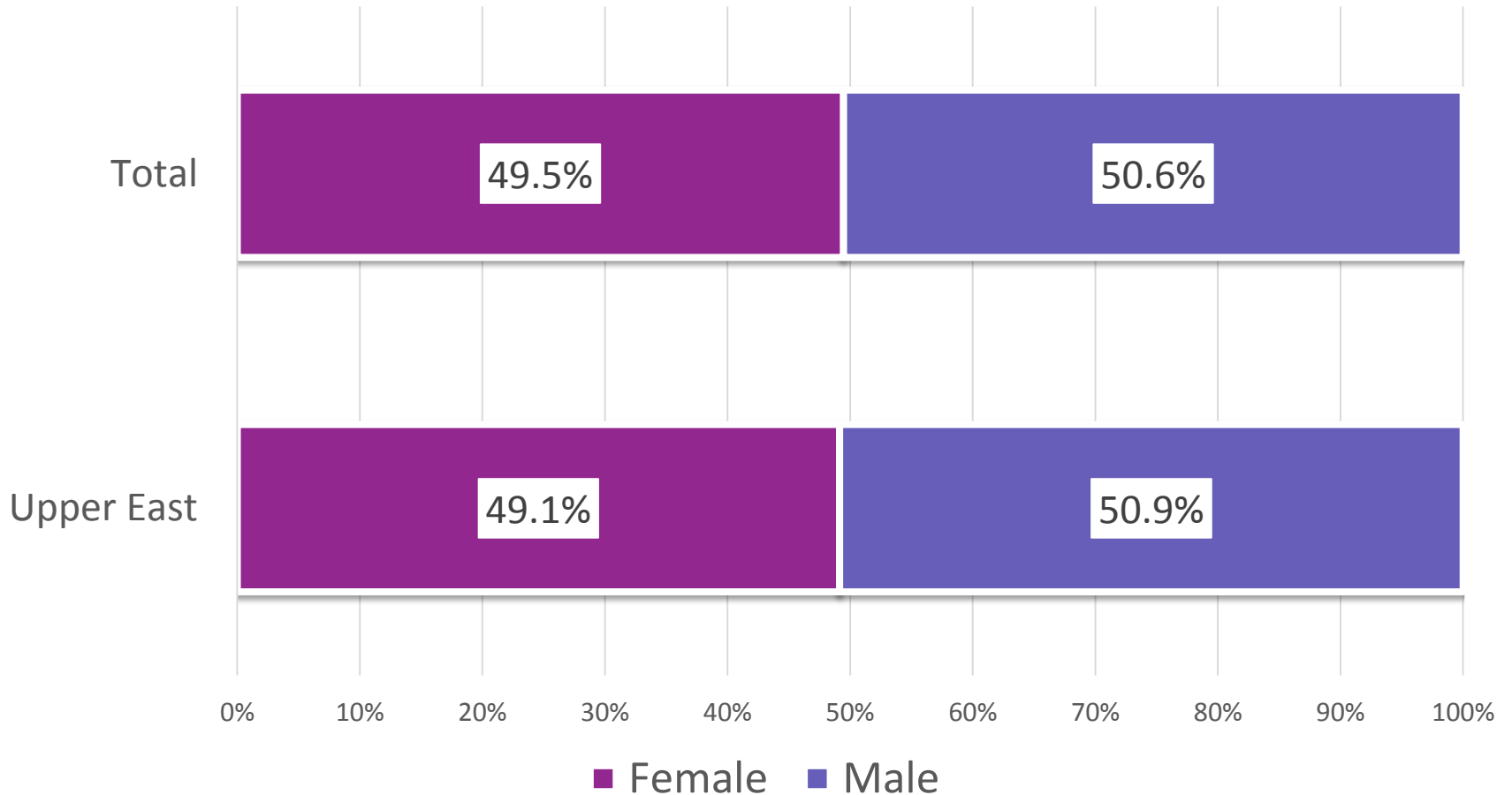
# DISTRIBUTION OF POPULATION BY AGE GROUP



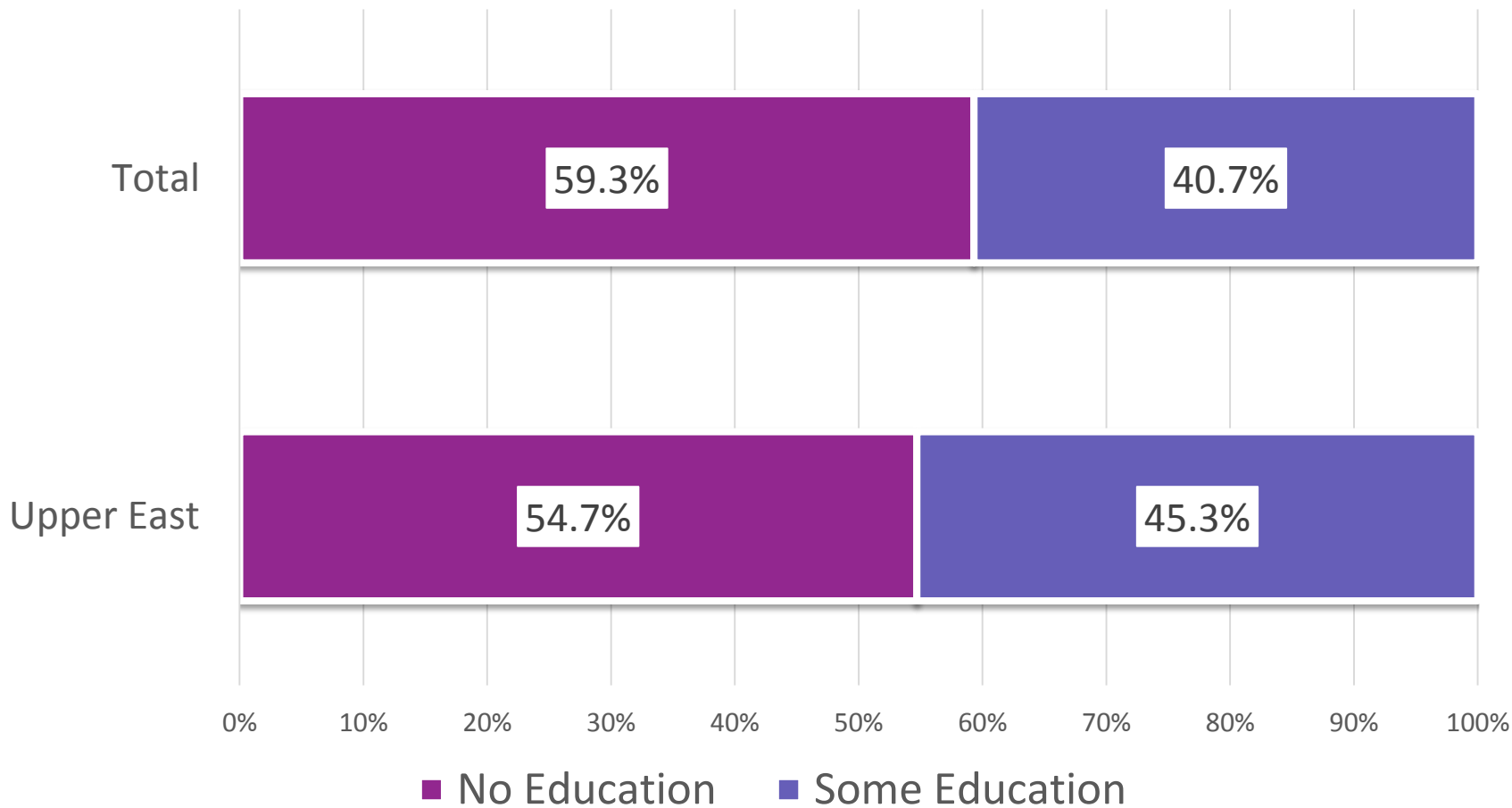
# DISTRIBUTION OF HOUSEHOLDS BY HOUSEHOLD SIZE



# DISTRIBUTION OF HOUSEHOLDS BY GENDER



# DISTRIBUTION OF HOUSEHOLD HEADS BY EDUCATION



# ECONOMIC WELLBEING

- Economic Wellbeing Indicators
  - Defining poverty
  - Measuring poverty
- Poverty exists when resources shared within a household do not meet household members' basic needs
  - What resources must be counted in “basic needs”?
  - How do we estimate “basic needs”?



# ECONOMIC WELLBEING

## Expenditure Categories

Household Food Consumption

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Consumer Durables

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Housing

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Non-Food Consumption



# ECONOMIC WELLBEING

World Bank daily  
expenditure per person  
of \$1.25 used to  
establish poverty line

# ECONOMIC WELLBEING

Average  
Daily Per  
Capita  
Household  
Expenditure  
measured in  
2012 U.S.  
dollars

SADA Area: \$4.01

Rural Areas: \$3.38

Urban Areas: \$5.88



# ECONOMIC WELLBEING

Poverty prevalence is the proportion of households with DPCHE below \$1.25

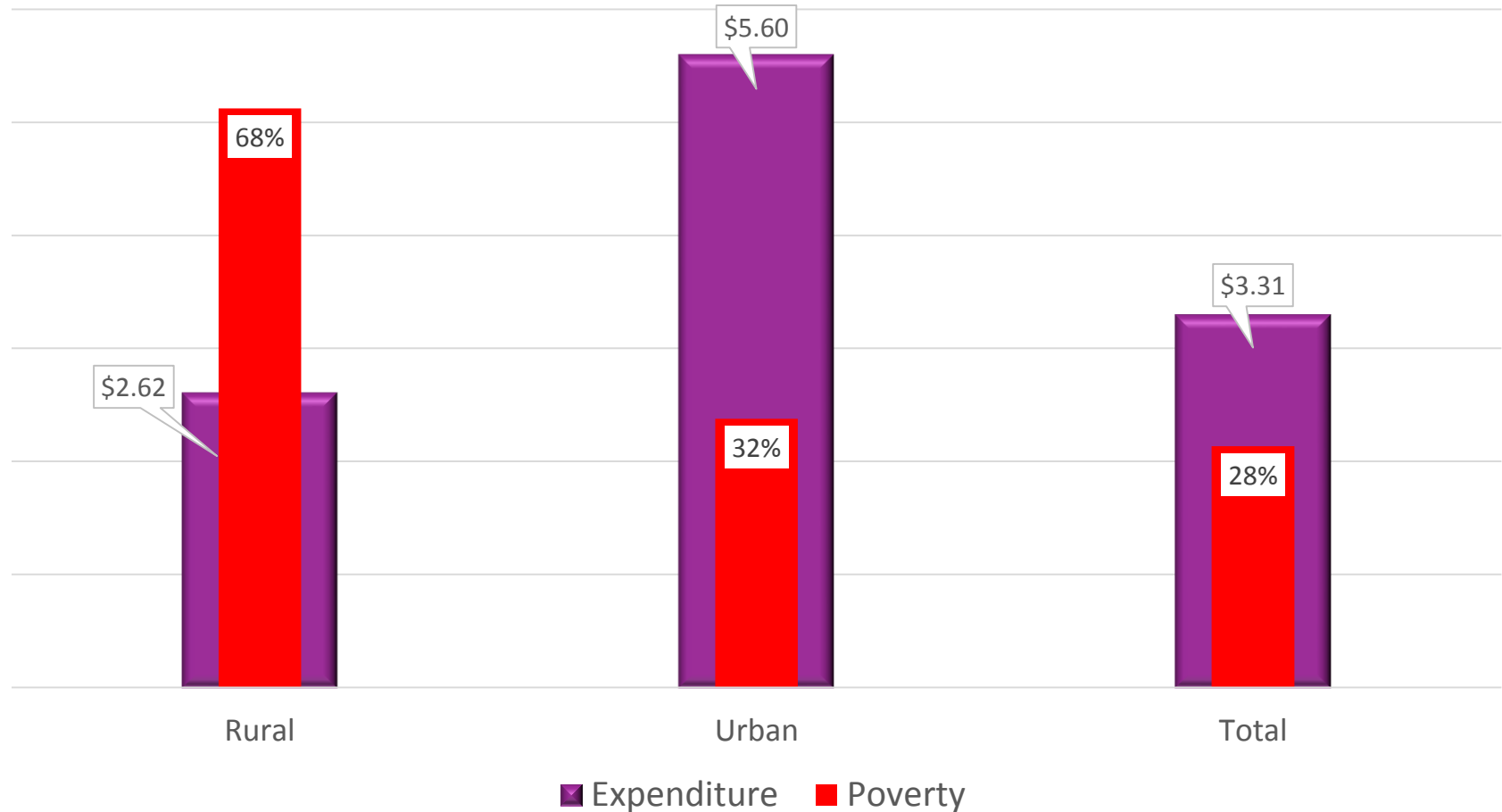
SADA Area: 22.2%

Rural Areas: 25.9%

Urban Areas: 11.1%

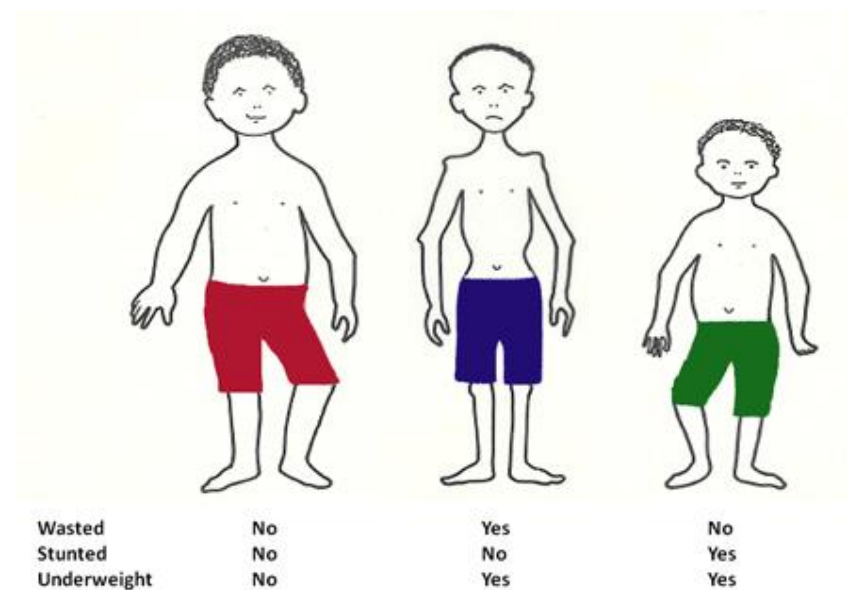


# ECONOMIC WELLBEING: AVERAGE DPCHE & POVERTY RATE



# Research Opportunities: Women & Children's Health

- Children's anthropometry indicators used to measure the prevalence of growth retardation
  - Stunting
  - Underweight
  - Wasting



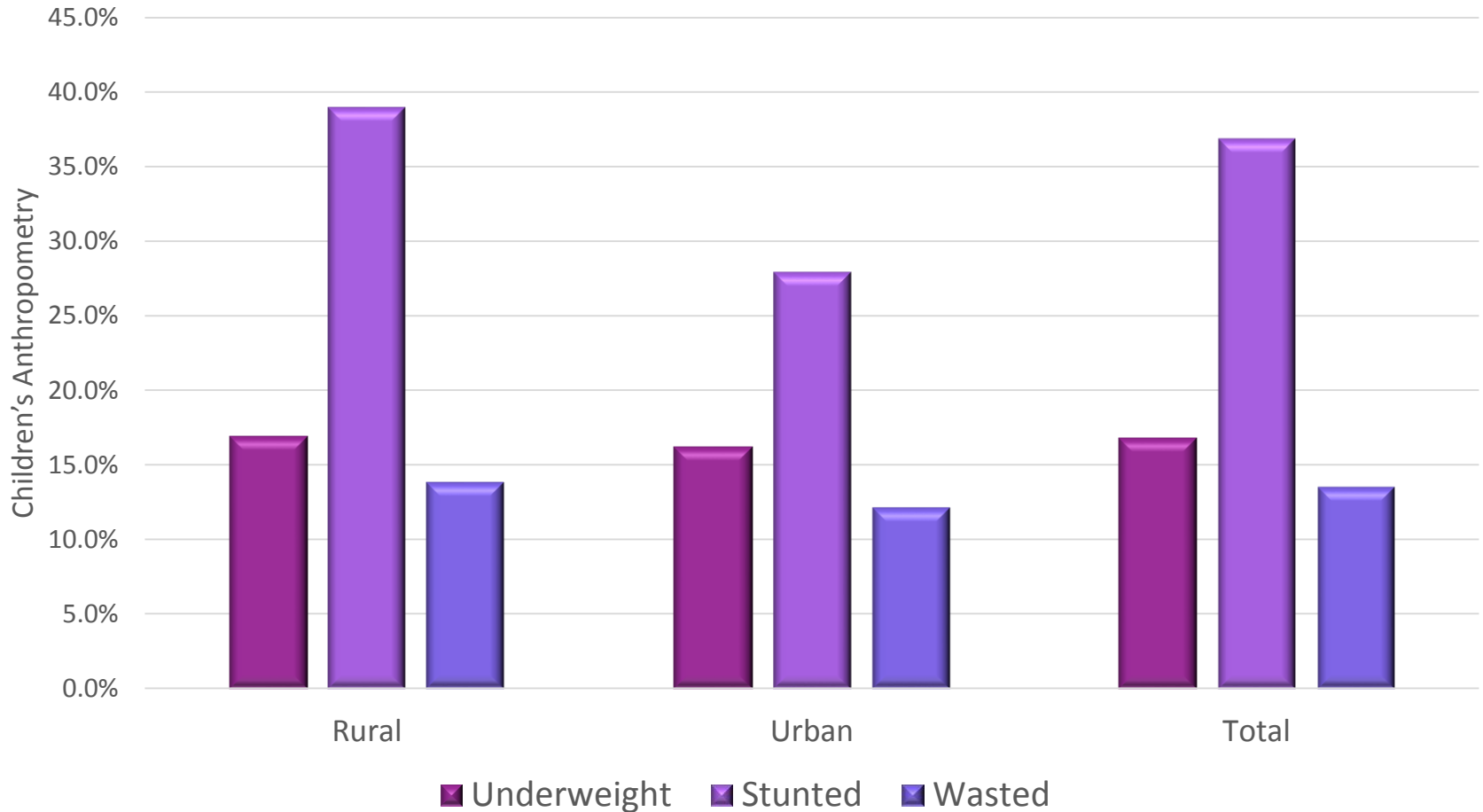
# WOMEN & CHILDREN'S HEALTH

- Prevalence of underweight children
  - SADA Area: 18.4%
  - Rural Areas: 19.3%
  - Urban Areas: 14.5%
- Prevalence of stunted children
  - SADA Area: 36.1%
  - Rural Areas: 38.1%
  - Urban Areas: 27.5%

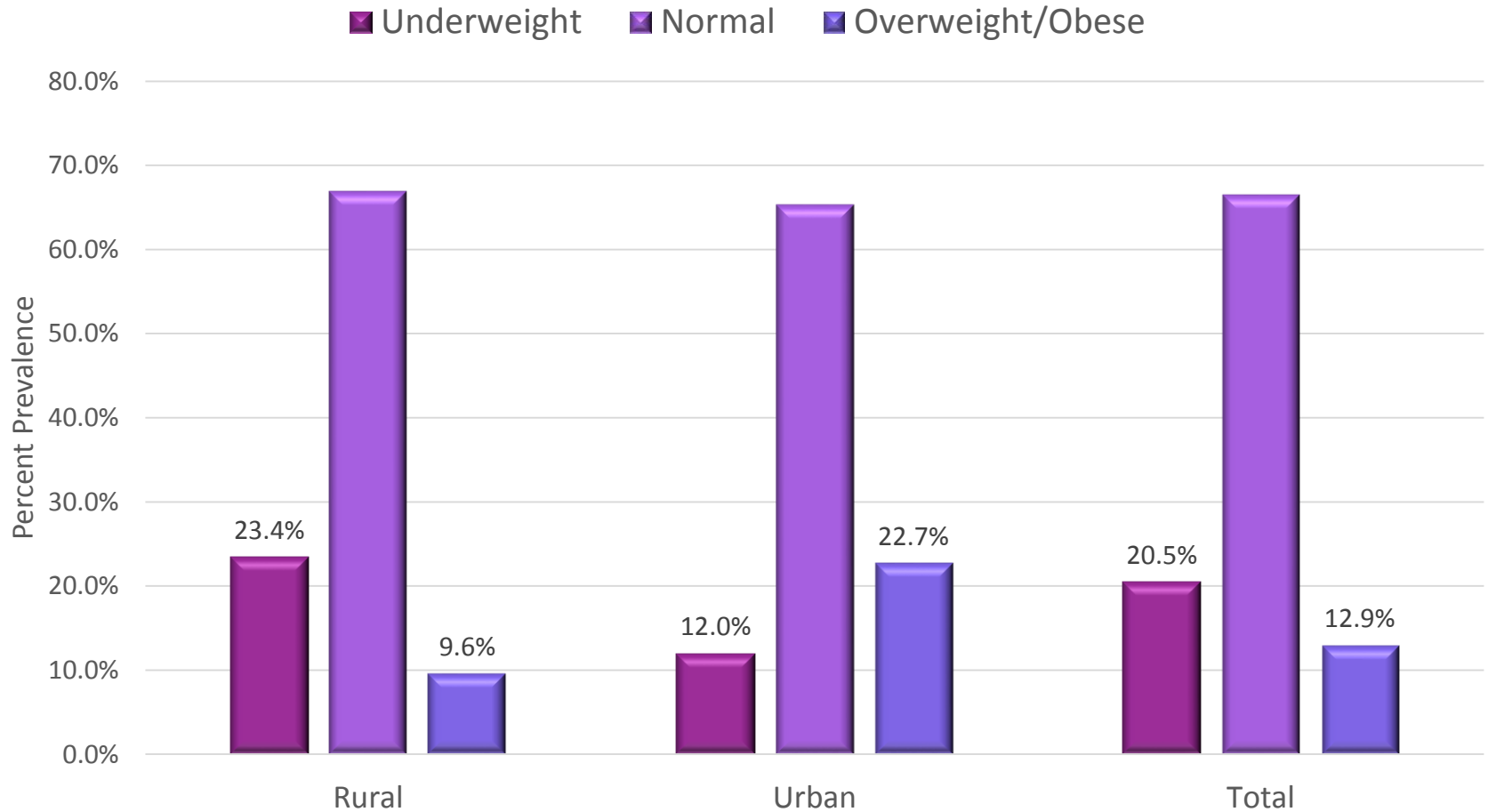
# RESEARCH OPPORTUNITIES: WOMEN & CHILDREN'S HEALTH

- Prevalence of wasting children
  - SADA Area: 11.0%
  - Rural Areas: 10.8%
  - Urban Areas: 12.0%
- Prevalence of underweight women
  - SADA Area: 12.0%
  - Rural Areas: 12.9%
  - Urban Areas: 10.6%

# CHILDREN ANTHROPOMETRY



# WOMEN'S ANTHROPOMETRY



# FOOD & NUTRITION: HOUSEHOLD HUNGER

Based on questions seeking to if three particular events occurred, and if so, their frequency

No food to eat of any kind in your household

Go to sleep at night hungry

Go a whole day and night without eating anything

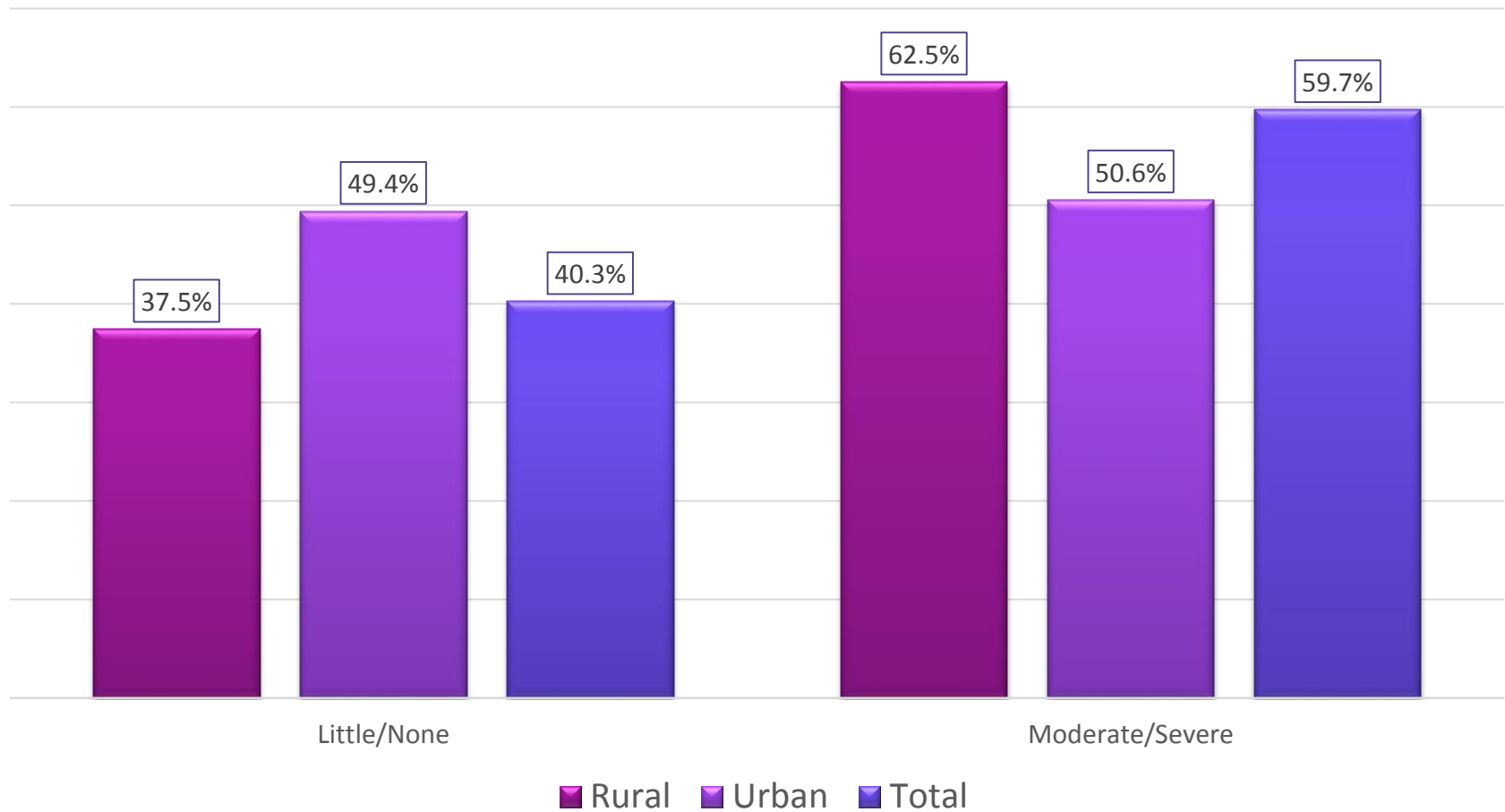




# FOOD & NUTRITION

- Prevalence of children receiving MAD
  - SADA Area: 15.5%
  - Rural Areas: 15.1%
  - Urban Areas: 17.6%
- Prevalence of moderate to severe hunger
  - SADA Area: 39.4%
  - Rural Areas: 43.3%
  - Urban Areas: 28.1%

# PREVALENCE OF HOUSEHOLD HUNGER



# 5 DOMAINS OF EMPOWERMENT

- 5DE is discussed in terms of adequacy
- Adequacy is based on specific answers to the questions posed for each of the components of the 5DE



# CRITERIA FOR (IN)ADEQUACY IN THE INDICATORS

Indicator	Adequacy Criteria
Input in Productive Decisions	A woman is adequate if she participates or feels she has input in at least two types of decisions.
Autonomy in Production	A woman has adequate achievement if her actions are motivated more by her values as opposed to her fear of disapproval or feelings of coercion.
Ownership of assets	A woman is adequate if she has joint or sole ownership of at least one major asset.
Purchase, sale, or transfer of assets	On assets owned by a household, a woman is adequate if she is involved in the decisions to buy, sell, or transfer assets.
Access to and decisions on credit	An adequate woman belongs to a household that has access to credit and when decisions on credit are made, she has input in at least one decision regarding at least one source credit.



# CRITERIA FOR (IN)ADEQUACY IN THE INDICATORS

Indicator	Adequacy Criteria
Control over use of income	A woman is adequate if she has some input (or perceived input) on income decisions provided that she participated in the income generating activity.
Group Member	A woman is considered adequate if she is a member of at least one group from a wide range of economic and social groups.
Speaking in Public	A woman is deemed adequate if she is comfortable speaking in public in at least one context.
Leisure Time	A woman has adequate leisure time if she does not express any level of dissatisfaction with the amount of leisure time available.
Work Burden	A woman is inadequate if she worked more than 10.5 hours in the previous 24 hours.



# 5DE RESULTS: SADA AREA

0.725

Proportion of women who are considered disempowered, i.e., with inadequacy score greater than 0.20 (or adequacy score less than 0.8)

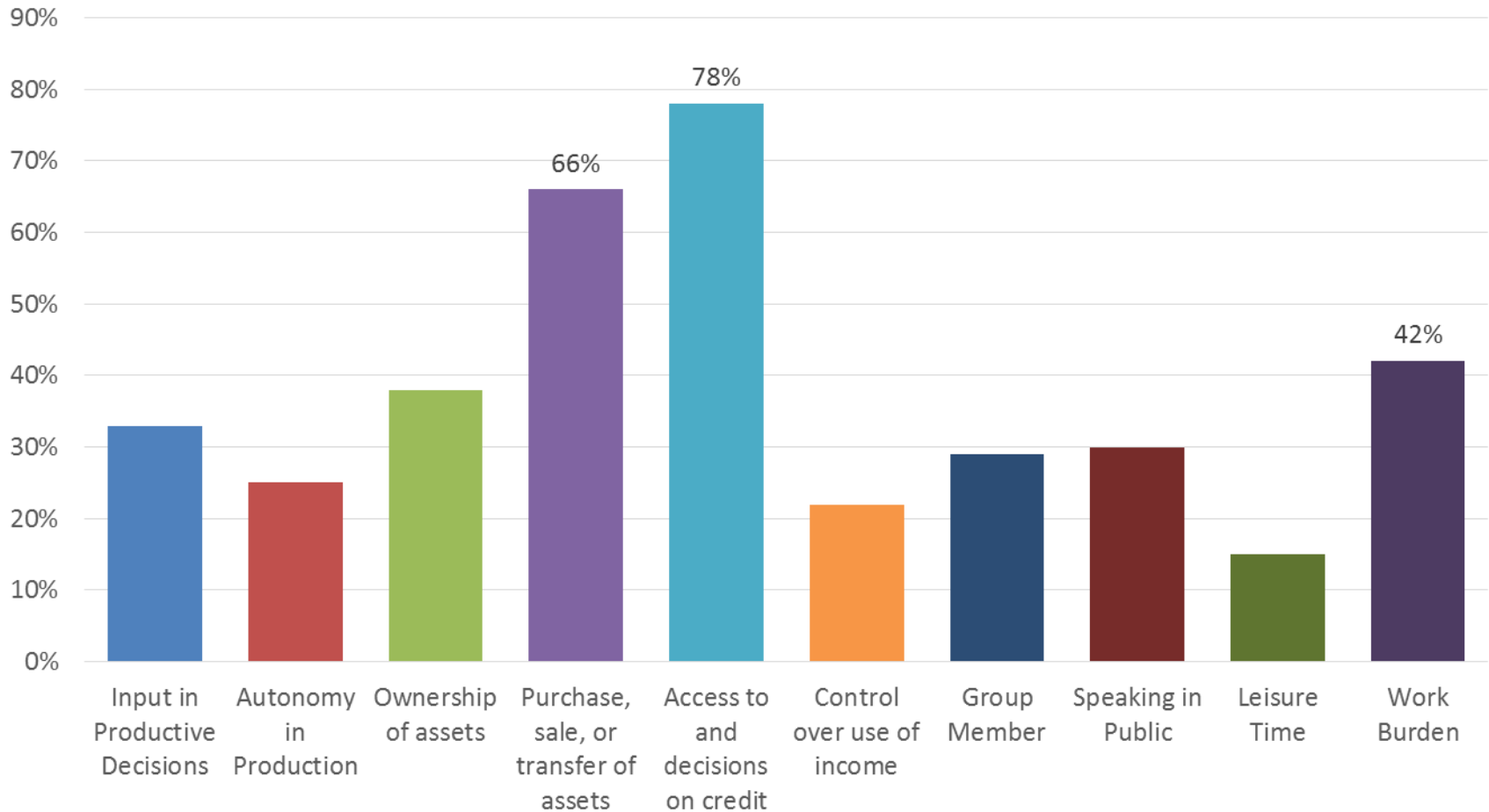
0.409

Average inadequacy score for the disempowered women, women with inadequacy in at least 2 out of 5 domains

5DE

$$1 - (0.725 * 0.409) = \mathbf{0.703}$$

# DOMAIN INADEQUACY COUNT



# GENDER PARITY INDEX

- It measures the percentage of women living in households with an adult primary male where the *women's empowerment scores* are at least equal to the men's
- Reflects the inequality in 5DE profiles of adult male and adult females in each household
- Therefore, GPI is a relative *measure of inequality* in the household





# GPI IN THE SADA AREA

**0.704** Proportion of women without gender parity

**0.268** Average Empowerment Gap (between male and female counterparts)

$$\text{GPI} = 1 - (0.704 * 0.268) = \mathbf{0.811}$$

# WEAI FOR SADA REGION

Recall that the WEAI was defined as the weighted sum of 5DE and GPI

$$\mathbf{5DE = 0.703 \quad \text{and} \quad \mathbf{GPI = 0.811}}$$

$$\text{If } \alpha \text{ is } 0.9, \text{ then the } \mathbf{WEAI} \text{ is } 0.9(5DE) + 0.1(\mathbf{GPI})$$

$$\mathbf{WEAI = 0.714}$$

# Extending the PBS: Conversations of Possibility



# AN EMPIRICAL “THOUGHT” EXPERIMENT

- People do not self-identify as poor
  - Implies they are defined by outsiders using external descriptors
  - Probably explains why problem remains so intractable
- What if, instead of poverty reduction, we focused on wealth creation?
  - Implies internal definition of objectives and independence of purpose
  - Provides a clear path to attainment – capability enhancement

# AN EMPIRICAL “THOUGHT” EXPERIMENT

- Wealth is more tractable, tangible and decision-maker driven
- It is possible to help people in their wealth-creation efforts
  - They appreciate such help
  - But they do not expect help
- Wealth-creators cultivate independent mindsets and lifestyles
  - Their relationships are purposeful



# ANOTHER APPROACH: A PROPOSAL

- Wealth creation approach focuses all efforts on a single set of activities – improving effectiveness and sustainability of outcomes
  - Because decisions are self-driven and not externally defined
  - Independent actors maximizing their self-defined objectives
- Most importantly, all intervention efforts are universal
  - Non-discriminatory
  - Benefits the whole population



# AN EMPIRICAL “THOUGHT” EXPERIMENT

- How do we operationalize this proposal using the PBS data?
- We can classify respondent households into income classes
  - Lower class, middle class and higher class
  - Assess households characteristics in each class
- Leverage the idea of “Middle Class” mobility



# THE MIDDLE CLASS

- The “middle class” may be termed the ‘consumer class’ . . .
- People in the middle class have an income elasticity for consumer durables and services that is greater than unity
  - 1% increase in their income leads to more than 1% increase in their expenditure on consumer durables and services





# MIDDLE CLASS CHATTER GETTING LOUDER

- African Development Bank (2011)
- Kharas and Gertz (2010)
- Asian development Bank (2010)
- McKinsey Global Institute (2007)



# A growing middle class is providing insurance against slippage

Africa's middle class, mostly in urban areas, is projected to exceed that of China and India by 2050

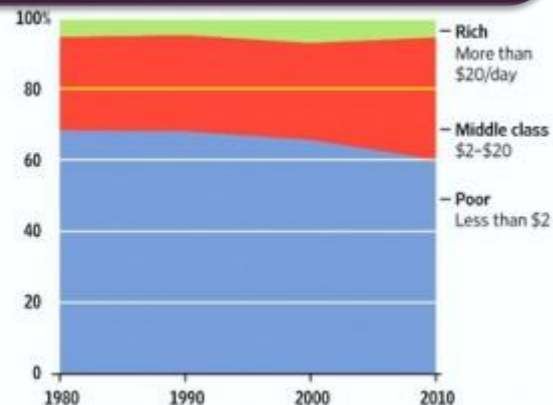


## Buying in

Africa's middle class has risen to 34% of the population, expanding to 313 million people.

## SHARE OF AFRICA'S POPULATION, BY CLASS

\* Data not available for all countries; Source: African Development Bank Group



# OPERATIONALIZING THE MIDDLE CLASS

World Bank

\$2-\$13/person/day

African  
Development  
Bank

\$2-\$20/person/day

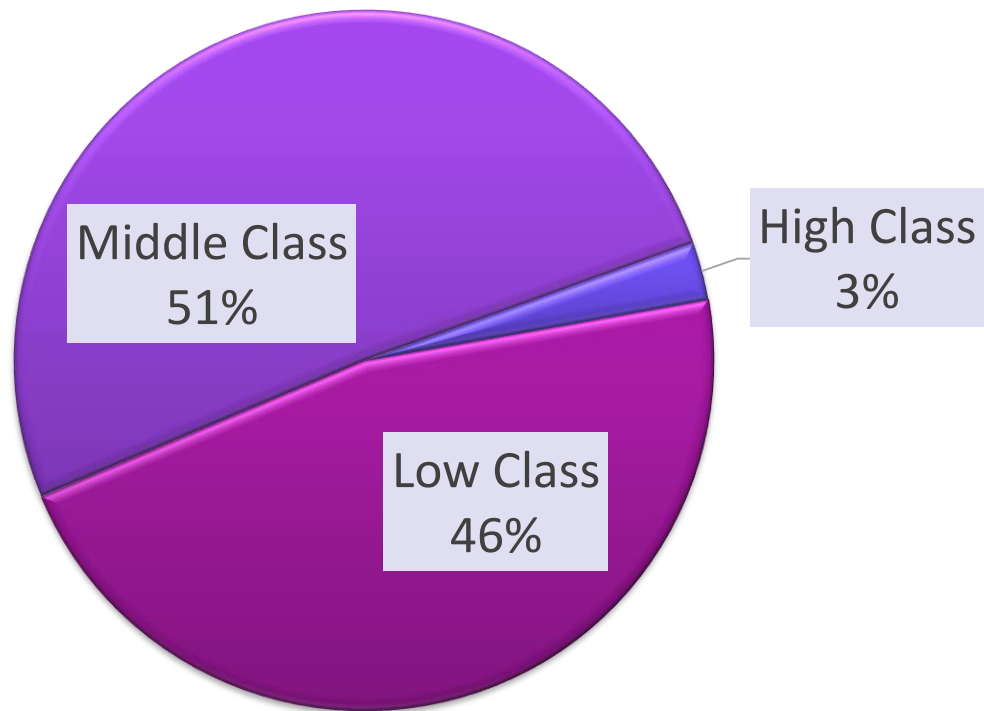
Kharas

\$10-\$100/person/day

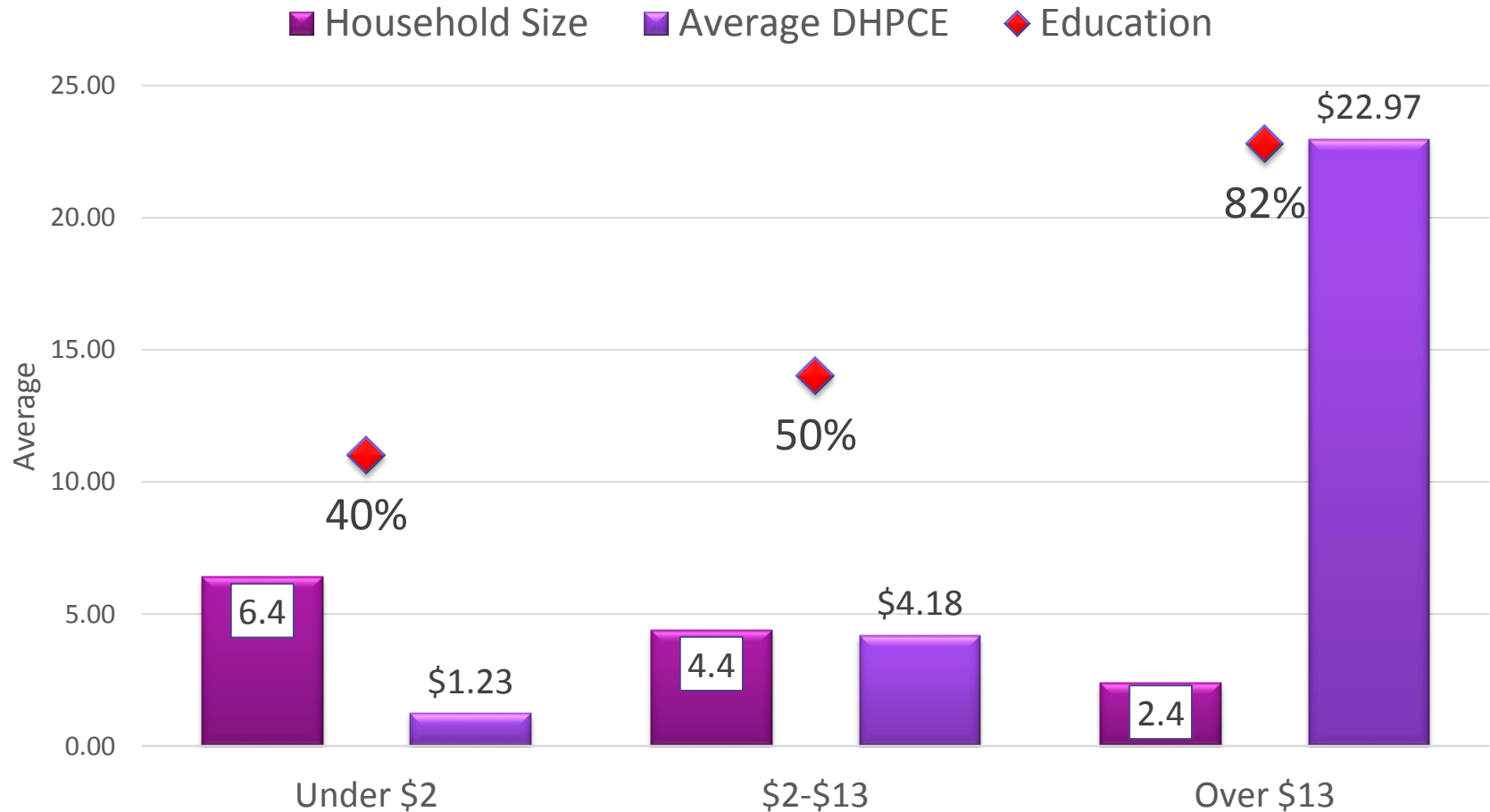


# DISTRIBUTION IN UPPER EAST REGION

Distribution of Households by World Bank Definition



# AVERAGE DHPCE & HOUSEHOLD SIZE FOR UPPER EAST REGION



# DISCOVERING SOME FORCES USING THE PBS DATA

- If we use “Locale” as a proxy for infrastructure
  - Access to electricity, water, roads, better schools, housing, medical services, etc.
- If we use educational attainment as a proxy for assets
- What factors influence probability of migrating from the low income class?



# Results of Middle Class v. Low Class

N = 4324.00  
 LR Chi-Sq (28) = 1591.30  
 Prob > Chi-Sq = 0.00  
 Pseudo-R-Sq = 0.23

Middle Class	RRR	SE	z	P>z	Sig
Household Size	0.75	0.01	-19.42	0.00	***
Age	1.00	0.00	0.30	0.76	
Married	0.76	0.08	-2.54	0.01	***
Male	1.07	0.11	0.66	0.51	
Some Education	1.47	0.11	4.97	0.00	***
Urban	1.81	0.18	5.86	0.00	***
Northern	0.56	0.07	-4.47	0.00	***
Upper East	0.27	0.04	-9.24	0.00	***
Upper West	0.20	0.03	-10.91	0.00	***
Own Ag Land	0.62	0.08	-3.85	0.00	***
Own Non-Ag Land	1.75	0.19	5.15	0.00	***
Own Transport	1.63	0.16	5.15	0.00	***
Own Cell	2.16	0.18	9.50	0.00	***
Own House	1.21	0.09	2.50	0.01	***
Intercept	8.48	1.75	10.35	0.00	

- Some Education
- Urban
- Own Non-Ag Land
- Own Transport
- Own Cell
- Own House



# Results of High Class v. Low Class

N = 4324.00  
 LR Chi-Sq (28) = 1591.30  
 Prob > Chi-Sq = 0.00  
 Pseudo-R-Sq = 0.23

	Middle Class	RRR	SE	z	P>z	Sig
	Household Size	0.35	0.03	-14.28	0.00	***
	<b>Age</b>	<b>1.01</b>	<b>0.01</b>	<b>1.03</b>	<b>0.31</b>	
	Married	0.62	0.14	-2.05	0.04	***
●	Male	2.51	0.71	3.26	0.00	***
●	Some Education	1.87	0.37	3.19	0.00	***
●	Urban	2.78	0.60	4.75	0.00	***
	Northern	0.33	0.08	-4.44	0.00	***
	Upper East	0.15	0.05	-5.98	0.00	***
	Upper West	0.22	0.07	-5.00	0.00	***
	Own Ag Land	0.31	0.07	-5.03	0.00	***
●	Own Non-Ag Land	4.18	0.96	6.19	0.00	***
●	Own Transport	2.97	0.70	4.61	0.00	***
●	Own Cell	4.44	1.11	5.95	0.00	***
●	Own House	1.86	0.39	2.97	0.00	***
	Intercept	1.23	0.62	0.41	0.68	



# Policy Implications for Sustainable Development



# WHERE TO FIND THE DATASET

- [www.data.gov](http://www.data.gov) and search for “Ghana Baseline Household Survey” OR
  - <http://catalog.data.gov/dataset/feed-the-future-ghana-baseline-household-survey-caef7>

# WHERE TO FIND THE DATASET

- [www.metts-Ghana.k-state.edu](http://www.metts-Ghana.k-state.edu) and follow Projects & Initiatives and select the PBS button

# MOVING FORWARD

- We have spent this morning exploring the data your citizens were very kind and generous and magnanimous in offering them to us free of charge
- The least we can do is to report back to you



# MOVING FORWARD

We hope the discussions have been fruitful, challenging, innovative and motivating

As you move from here to the daily chores of serving your citizens, how can we succeed in creating economic growth regardless of how any other person (institution) behaves?

**REMEMBER: Personal interest drives all human action**

# CONVERSATIONS

Questions, Comments, Ideas and  
Anecdotes



# THE IMPORTANT THING, THEREFORE, IS THIS . . .

**“To be willing at any moment to sacrifice what we believe ourselves to be, for what we could become.”**

Charles Dubois



# Thank You

Conversations Continue

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