


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

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

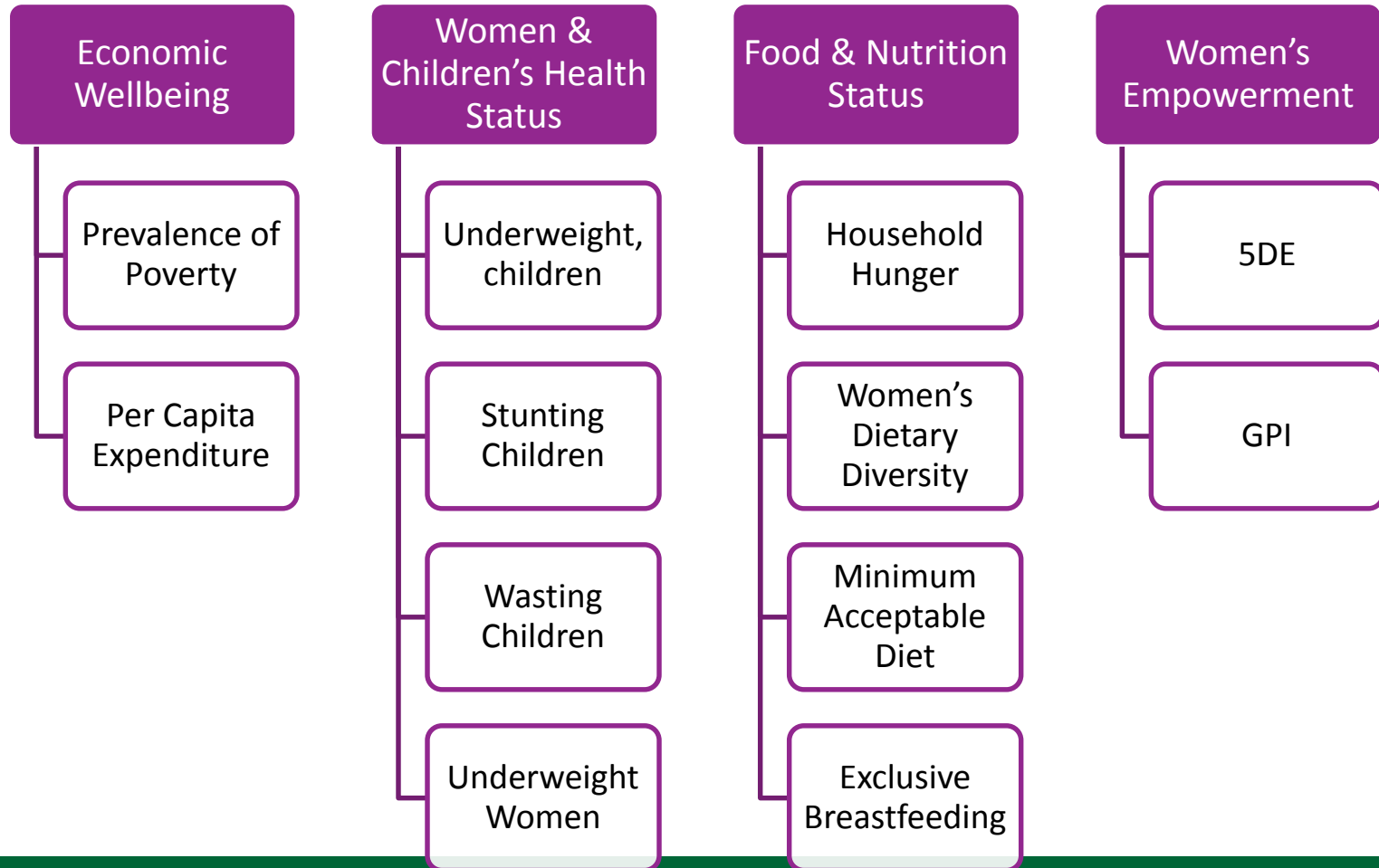
Excluded the northern Volta Region of the SADA Area

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

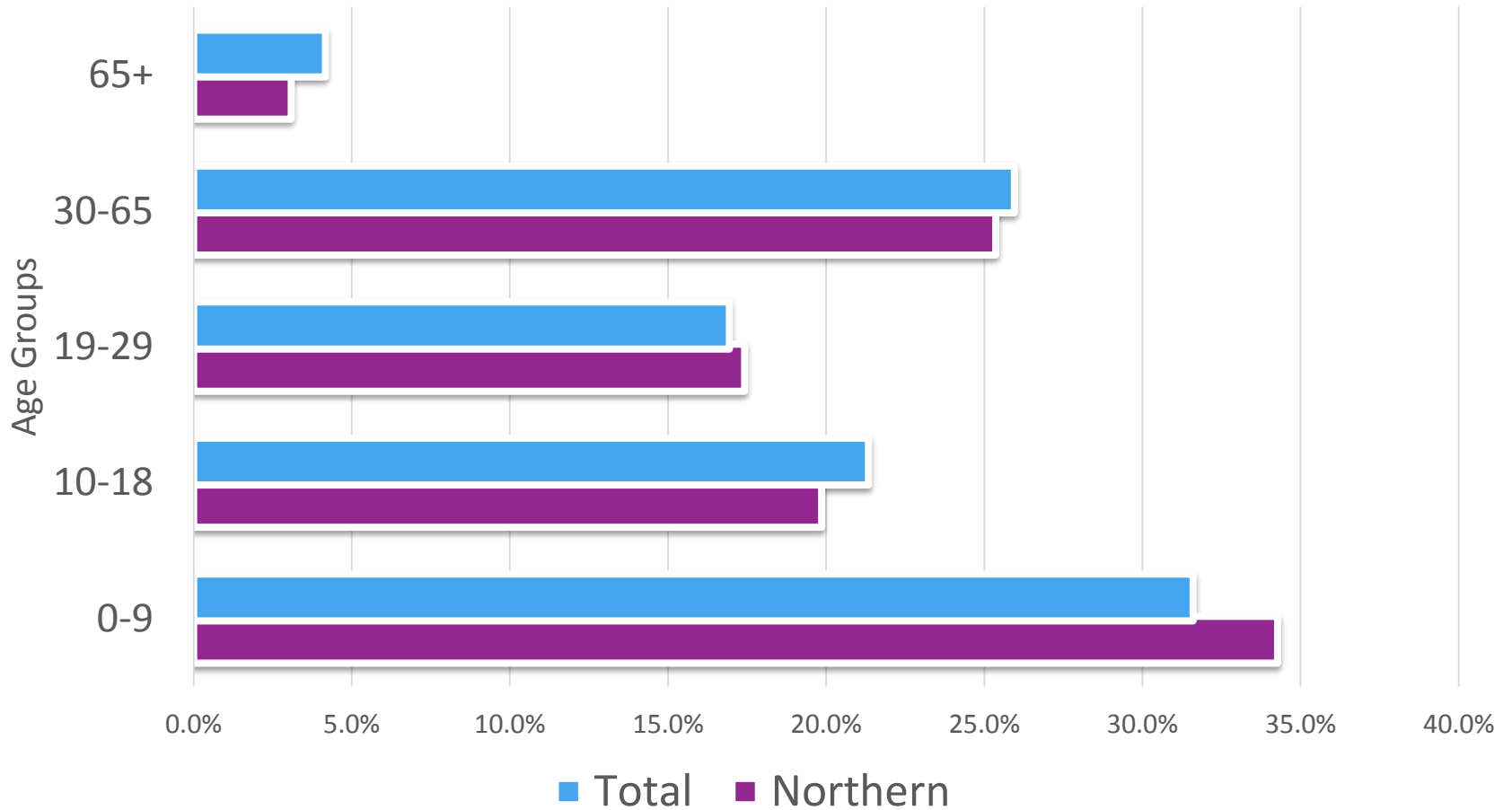
About **25,000** total respondents – adults and children in **4,410** households

SADA AREA PBS OF 2012:

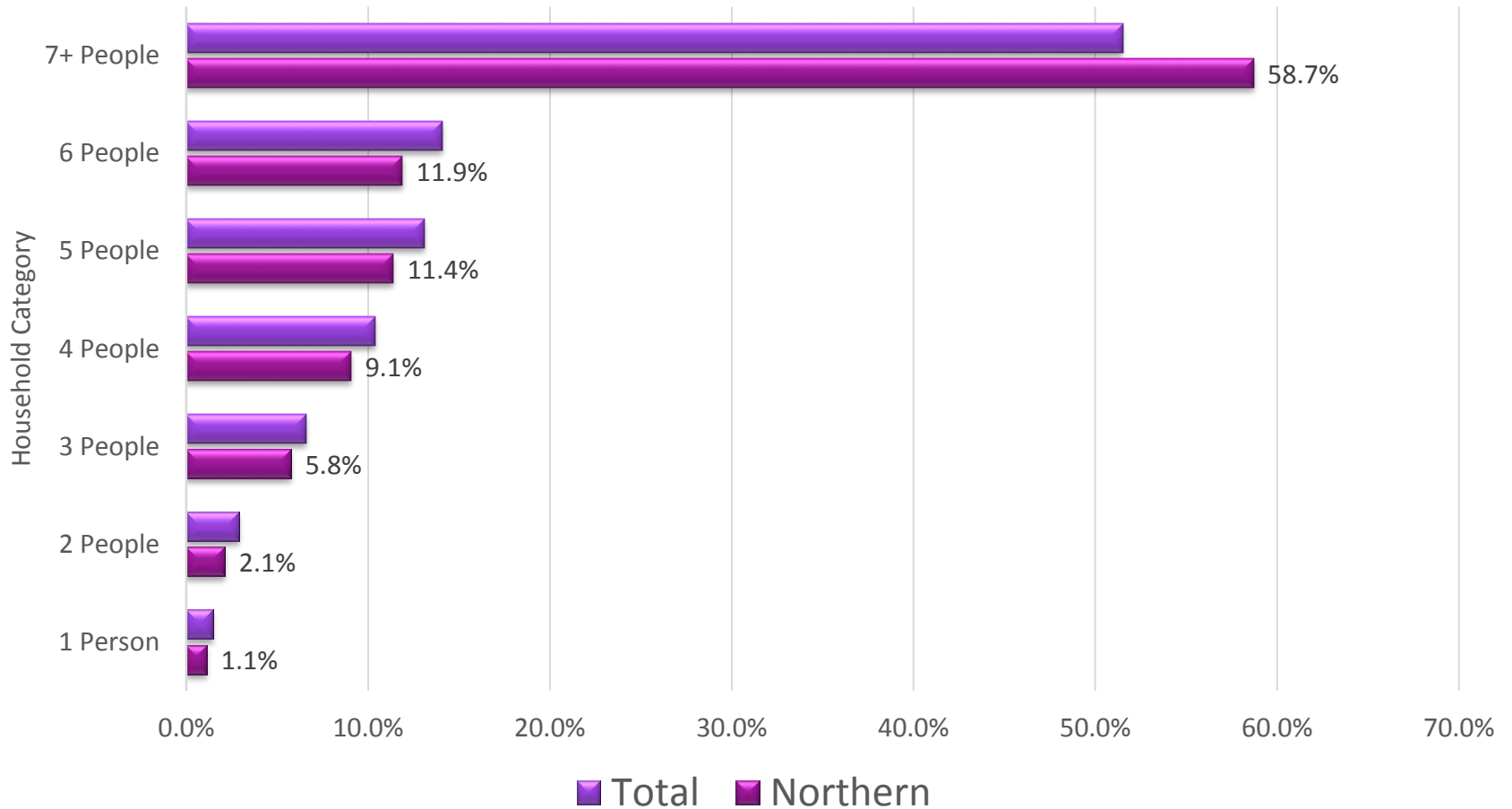
THE WHAT



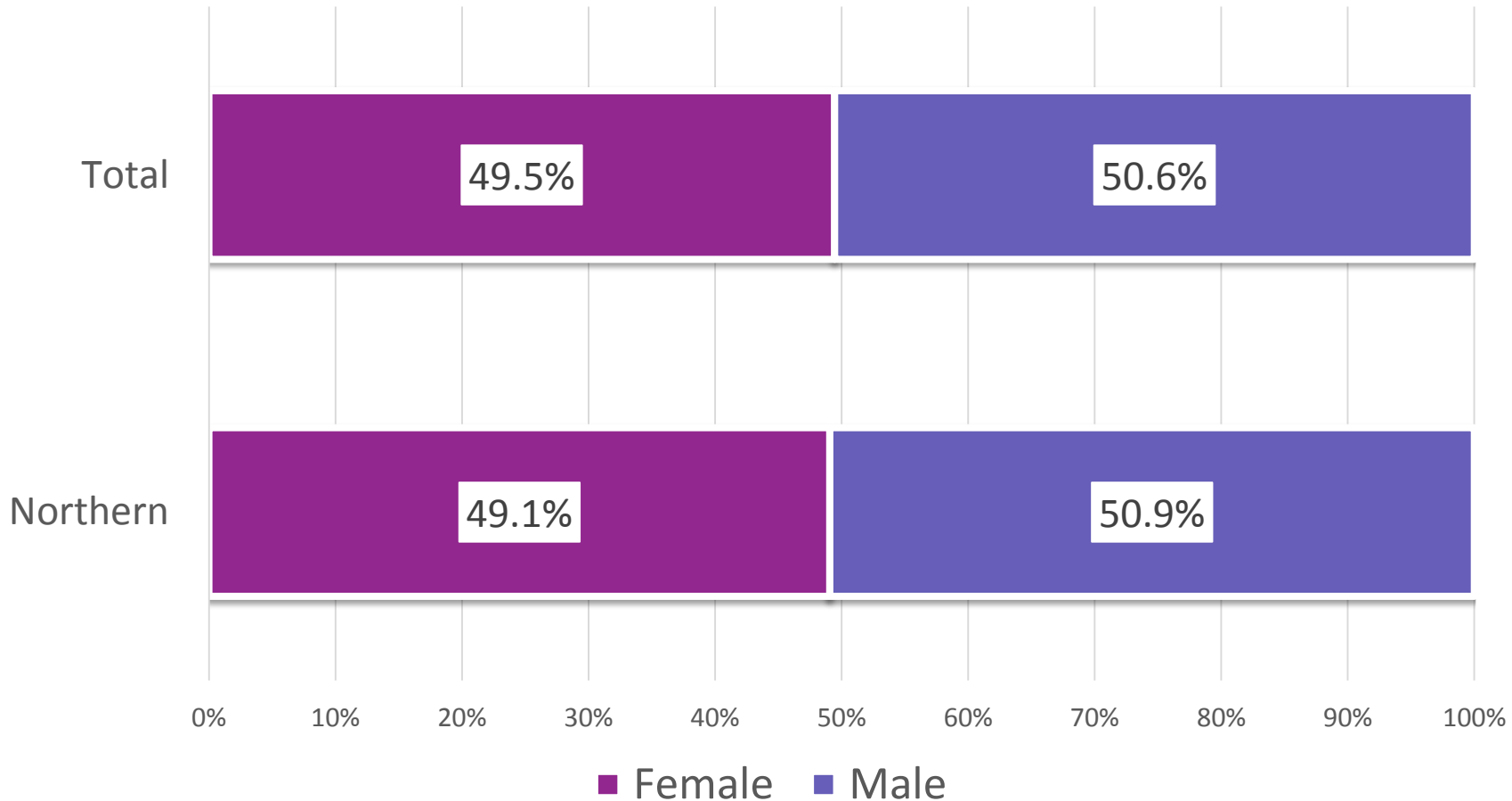
DISTRIBUTION OF POPULATION BY AGE GROUP



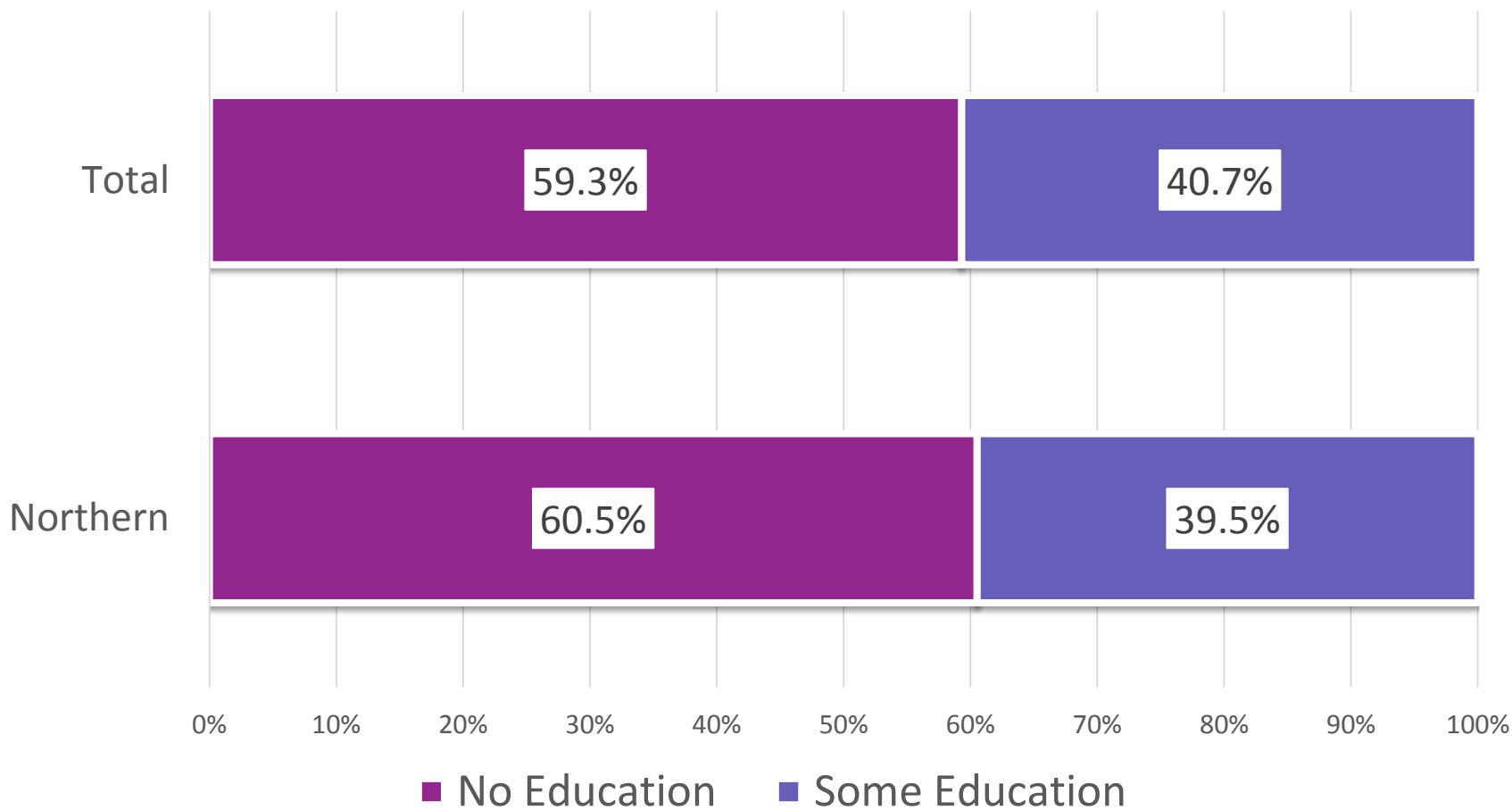
DISTRIBUTION OF HOUSEHOLDS BY HOUSEHOLD SIZE



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

Consumer Durables

Housing

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

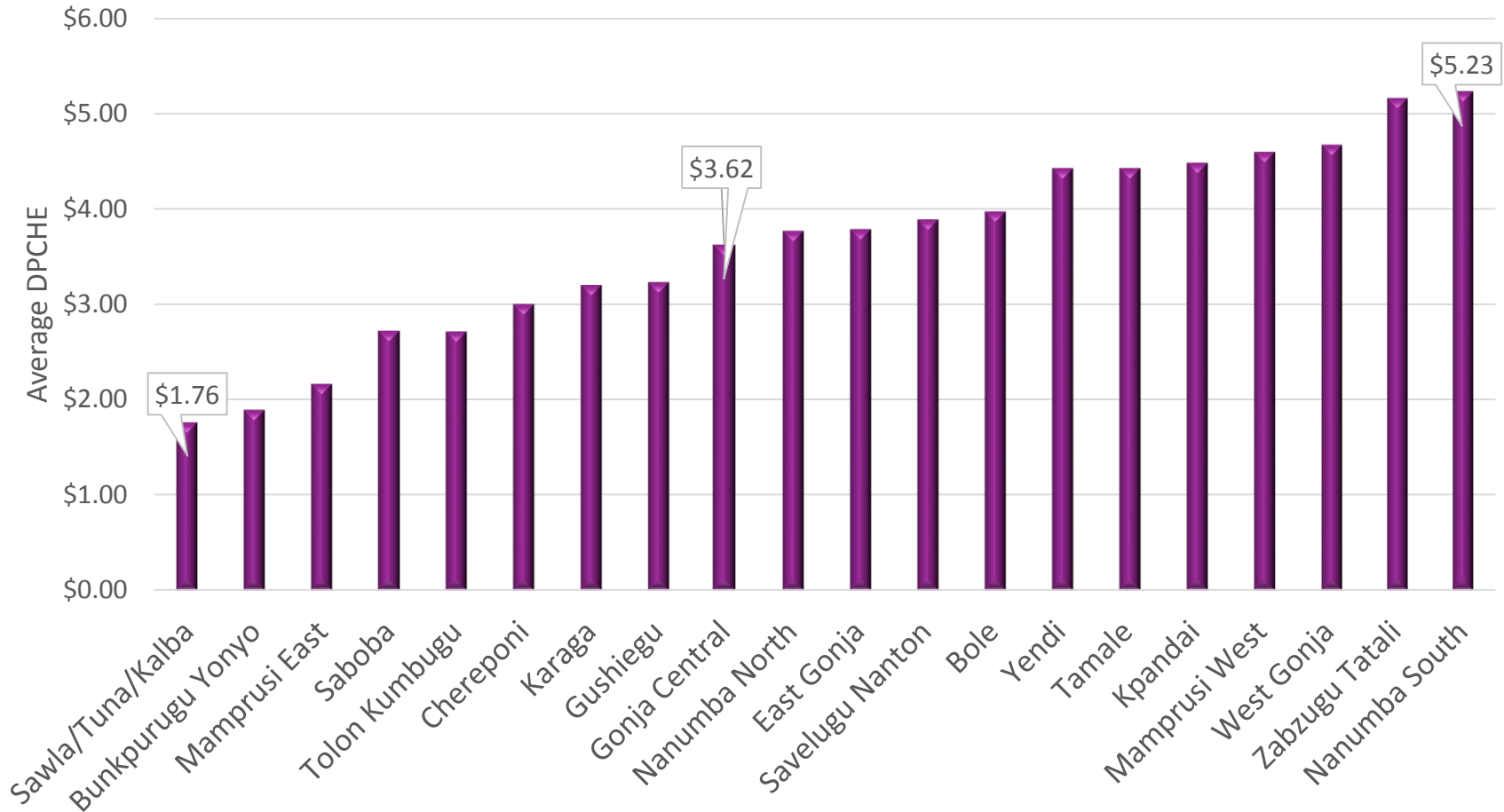
Urban Areas: \$5.88

Because districts were not the focus of the sampling process, it is important to interpret the results of the district-level analysis ONLY for their informational content and *not as inferential* of the statistical valid situation in the districts.

DISTRICT-LEVEL ANALYSIS: CAUTION



ECONOMIC WELLBEING: AVERAGE DPCHE



ECONOMIC WELLBEING

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

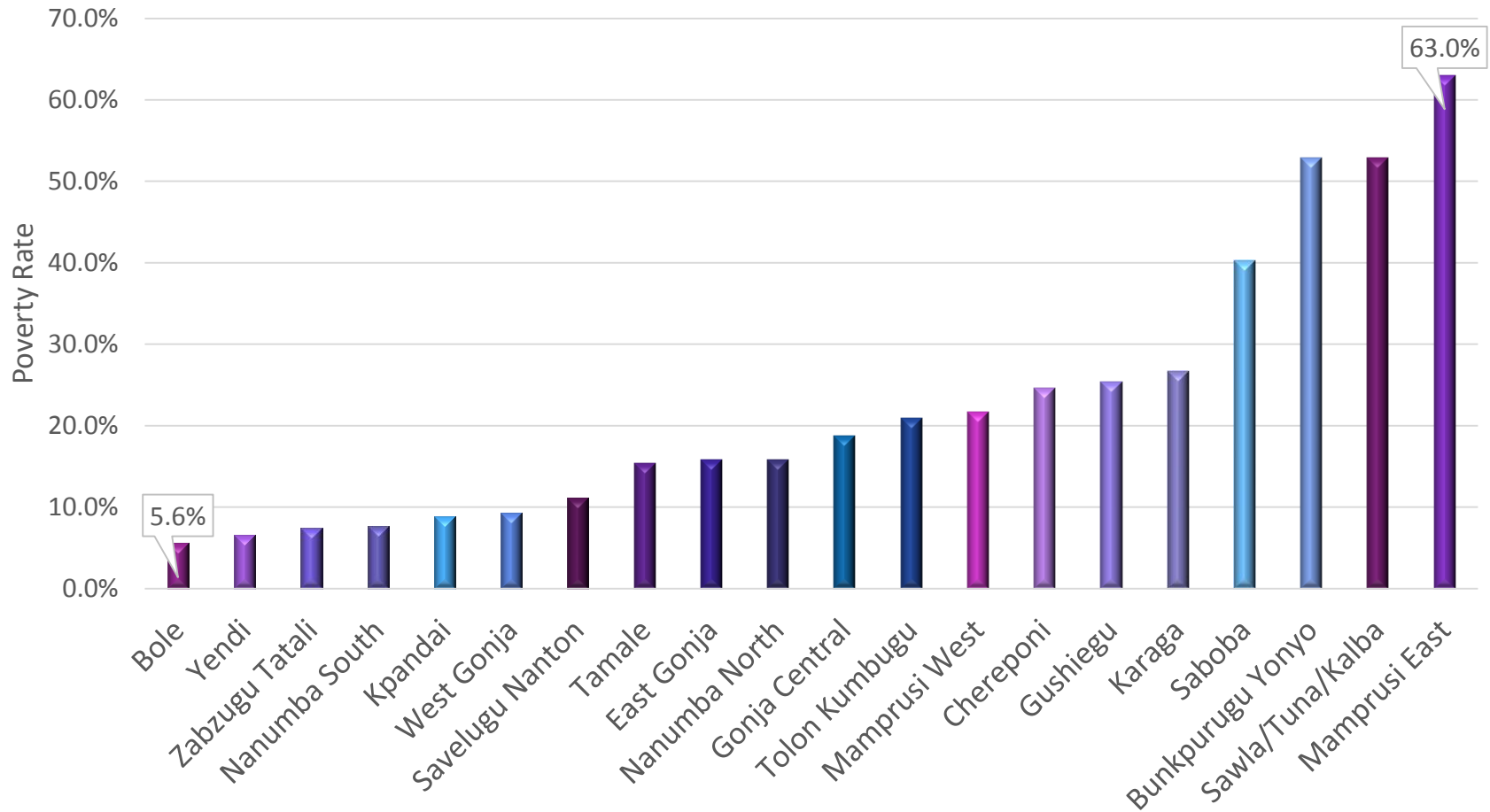
SADA Area: 22.2%

Rural Areas: 25.9%

Urban Areas: 11.1%



ECONOMIC WELLBEING: POVERTY PREVALENCE



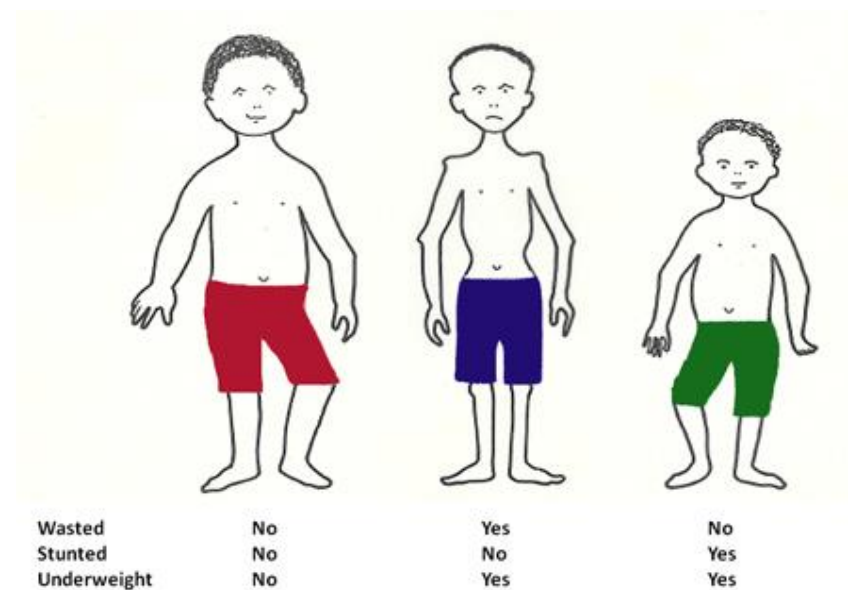
POLICY QUESTIONS

- What is happening in Tain, Sene, Jaman North, Kintampo South?
- What is happening in Kintampo North, Wenchi and Pru?
- Is there anything policymakers can learn from the economic and social environment in these low poverty areas?



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

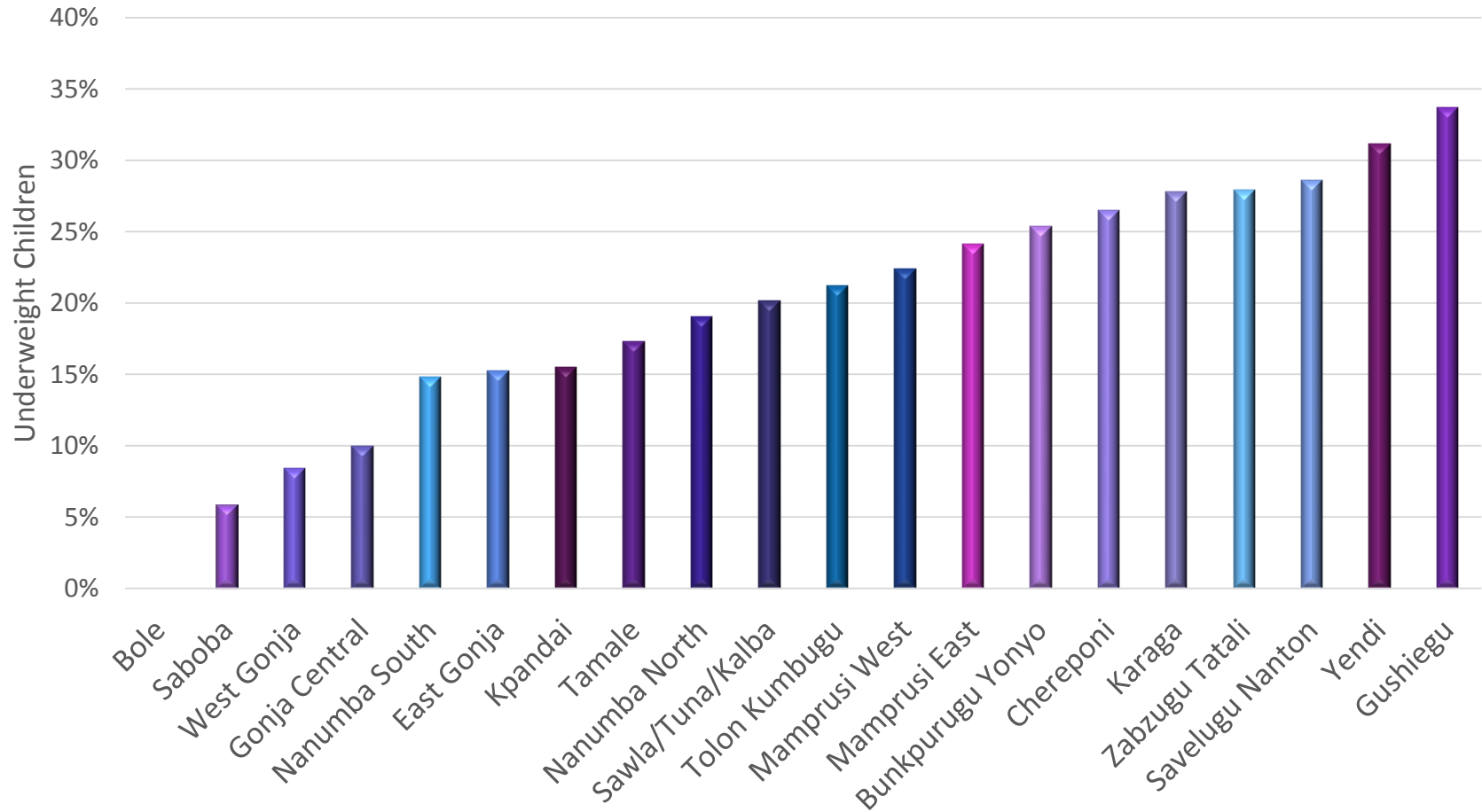
- Prevalence of underweight children
 - SADA Area: 18.4%
 - Rural Areas: 19.3%
 - Urban Areas: 14.5%
- Prevalence of stunted children
 - SADA Area: 36.1%
 - Rural Areas: 38.1%
 - Urban Areas: 27.5%



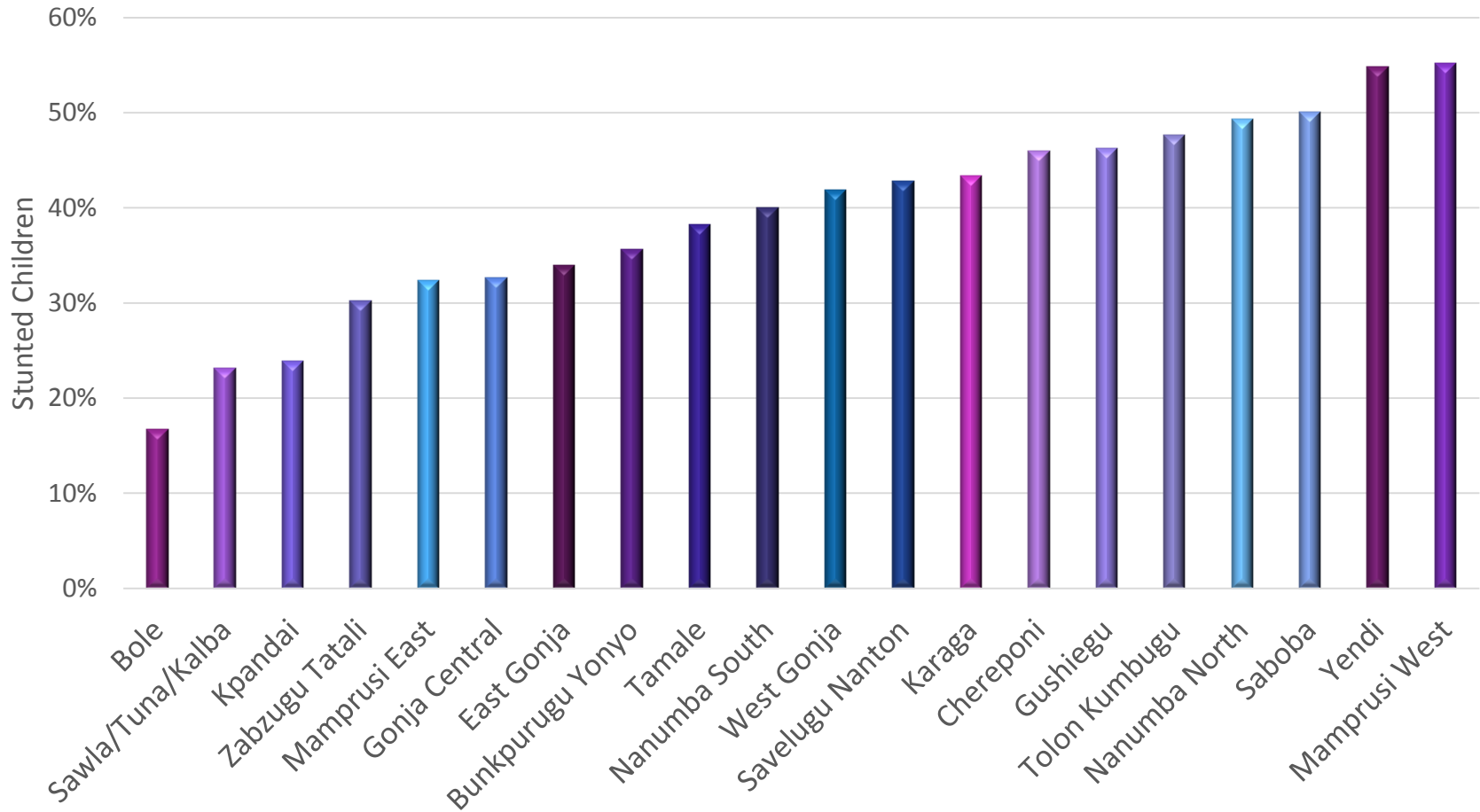
RESEARCH OPPORTUNITIES: WOMEN & CHILDREN'S HEALTH

- 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%

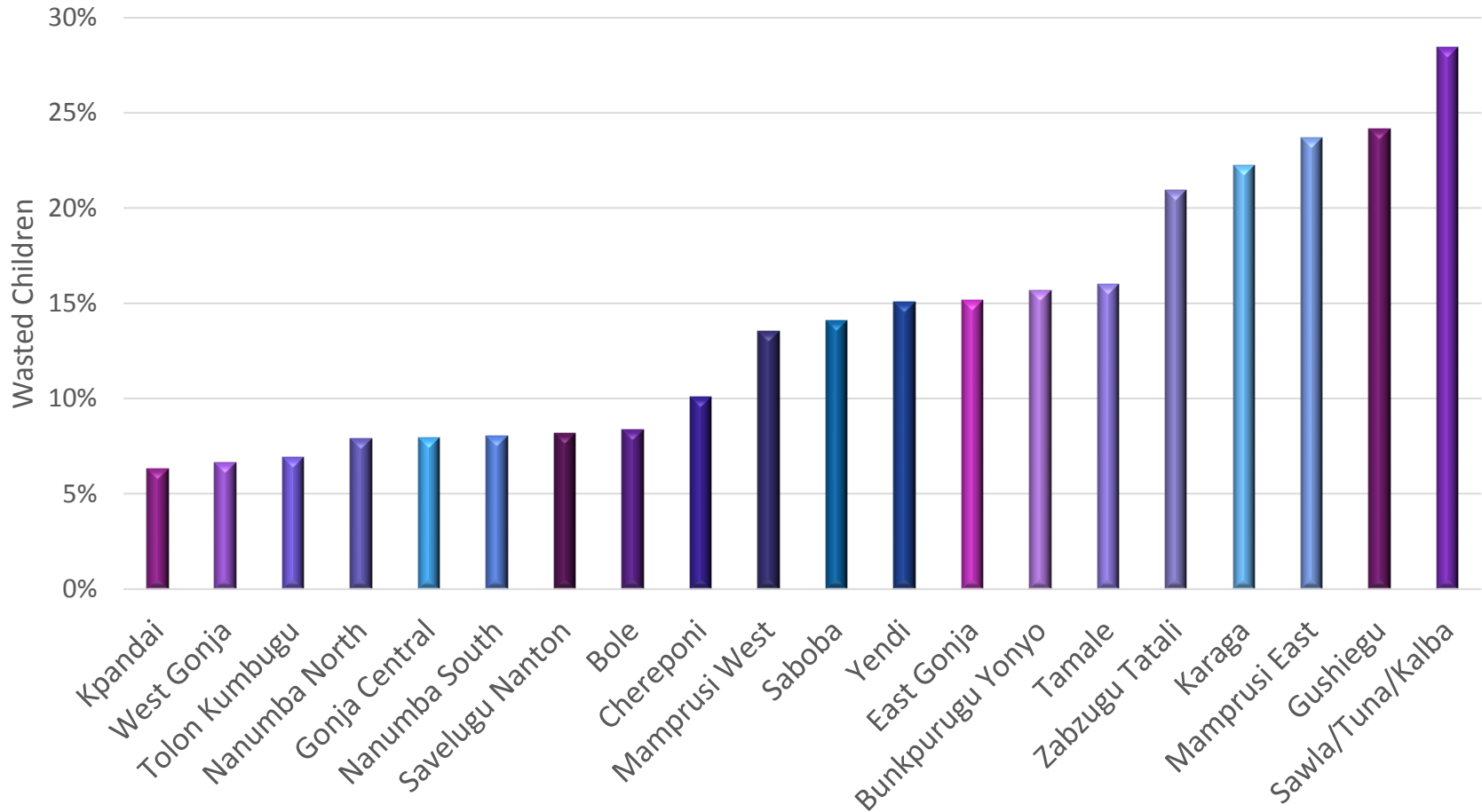
UNDERWEIGHT CHILDREN



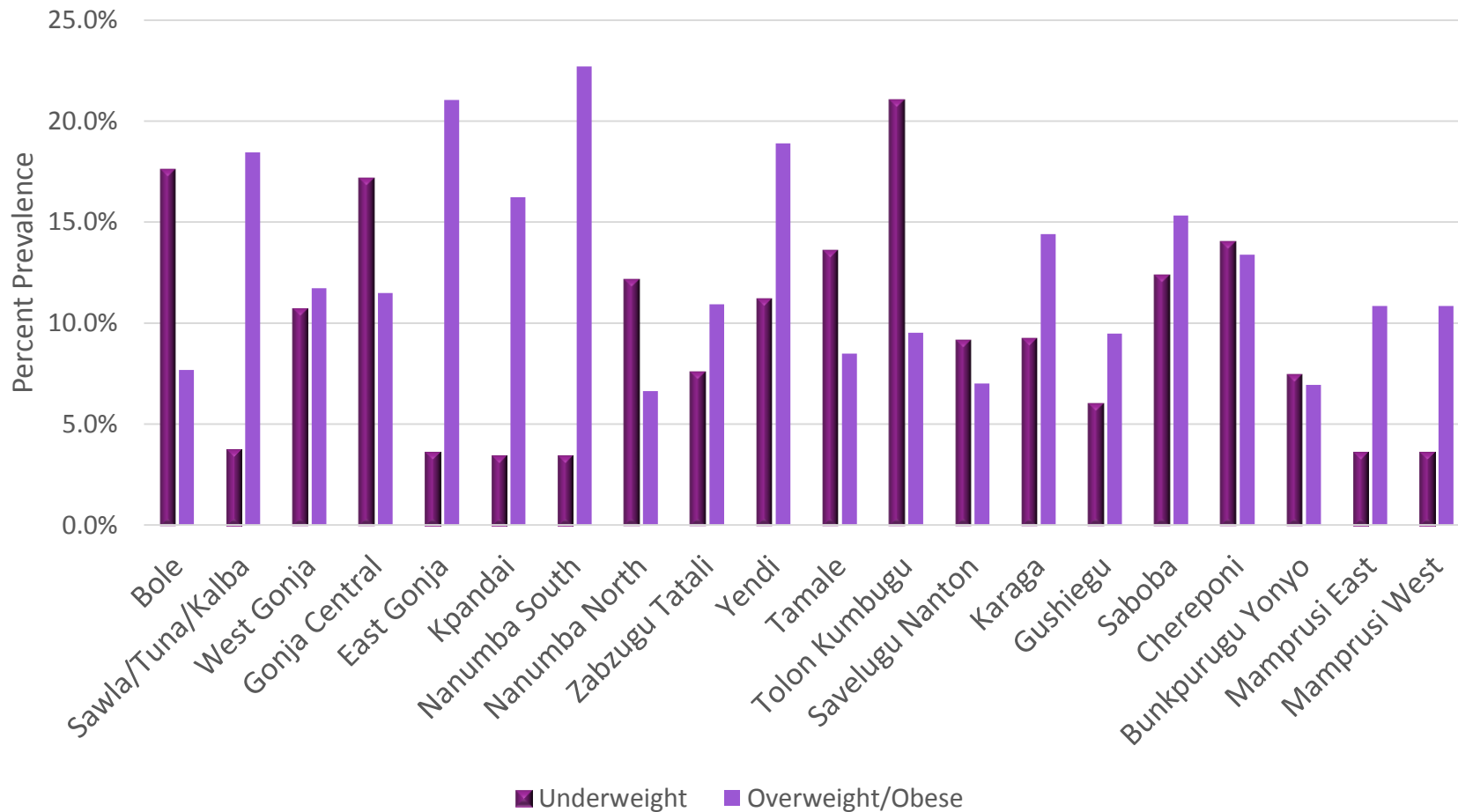
STUNTED CHILDREN



WASTED CHILDREN



UNDERWEIGHT & OVERWEIGHT/OBESE WOMEN

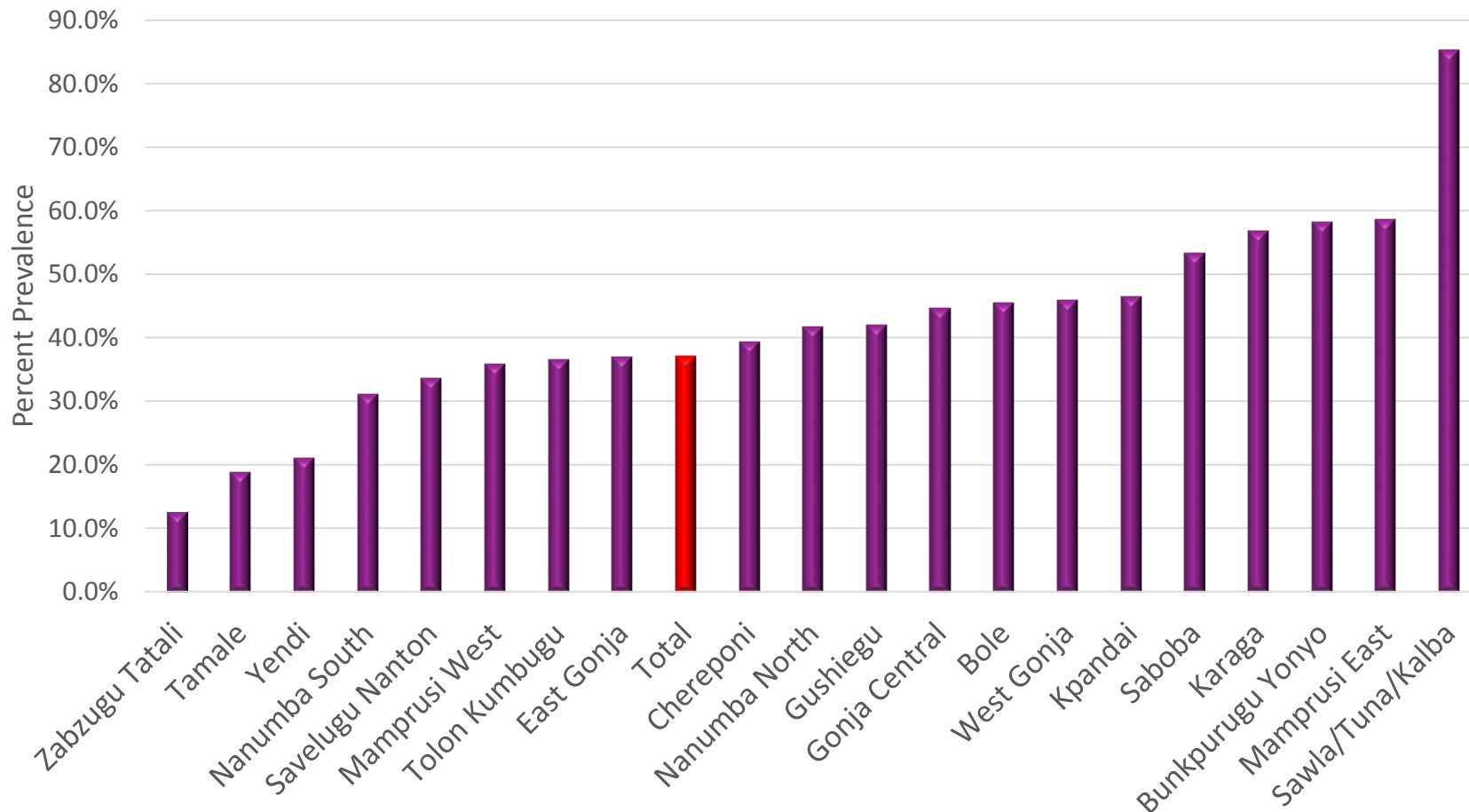


FOOD & NUTRITION

- Dietary diversity is an indicator for nutrition quality of food being eaten
- Project identifies nine food groups and collects info on 7-day recall
- Criteria of diet diversity
 - 3 or fewer = Low diversity
 - 4 – 5 = Middle diversity
 - 6 – 9 = High diversity



LOW WOMEN'S DIET DIVERSITY



FOOD & NUTRITION: MAD & MMF

- Minimum Acceptable Diet in children under 5 years
 - Breastfed: 4+ of 7 food groups
 - Non-breastfed: 4+ of 6 food groups (incl. milk)
- Minimum Meal Frequency
 - Breastfed (6-8 months): 2+ feedings
 - Breastfed (9+ months): 3+ feedings
 - Non-breastfed (6+ months): 4+ feedings



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

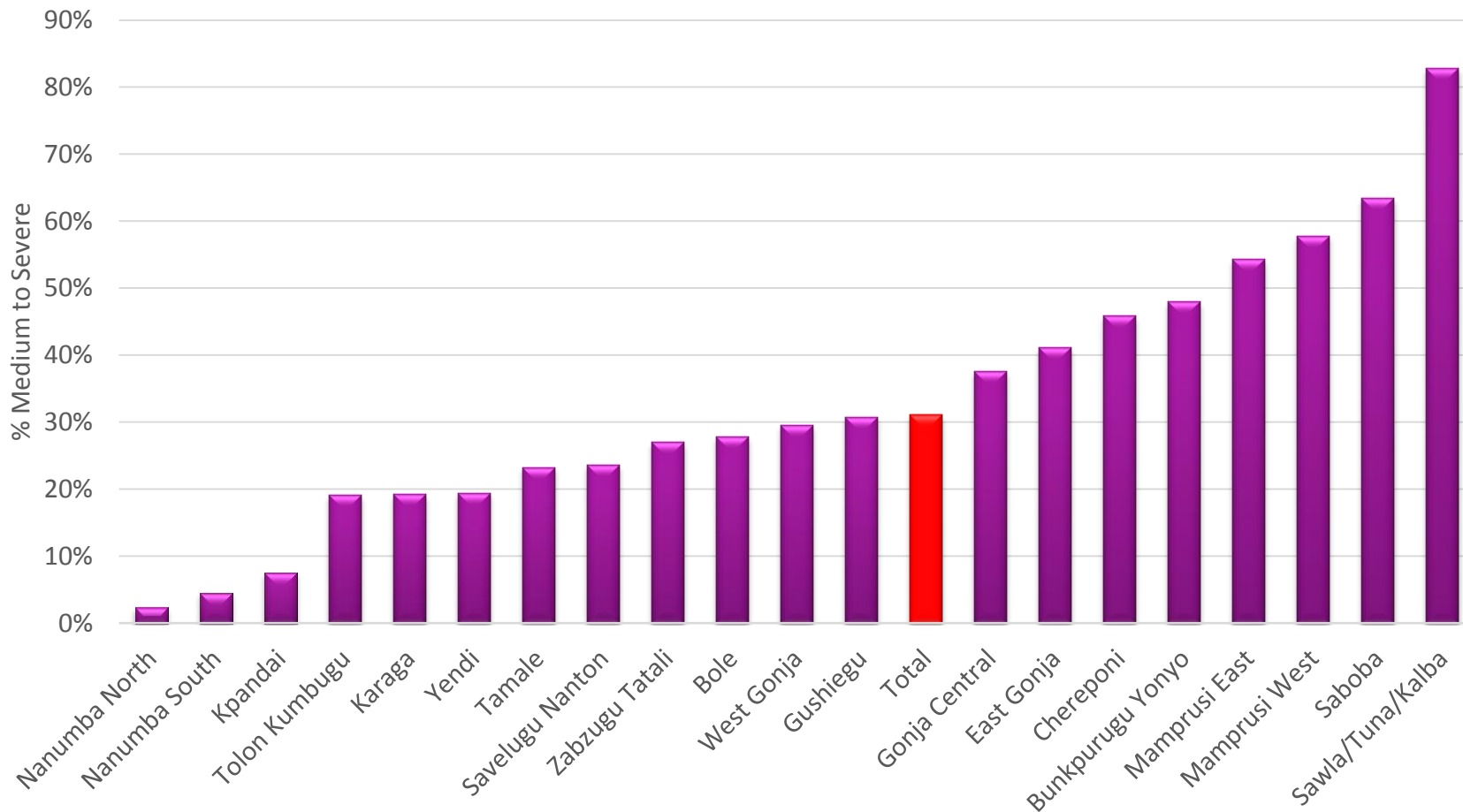
Go a whole day and night without eating anything



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%

FOOD & NUTRITION: 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)

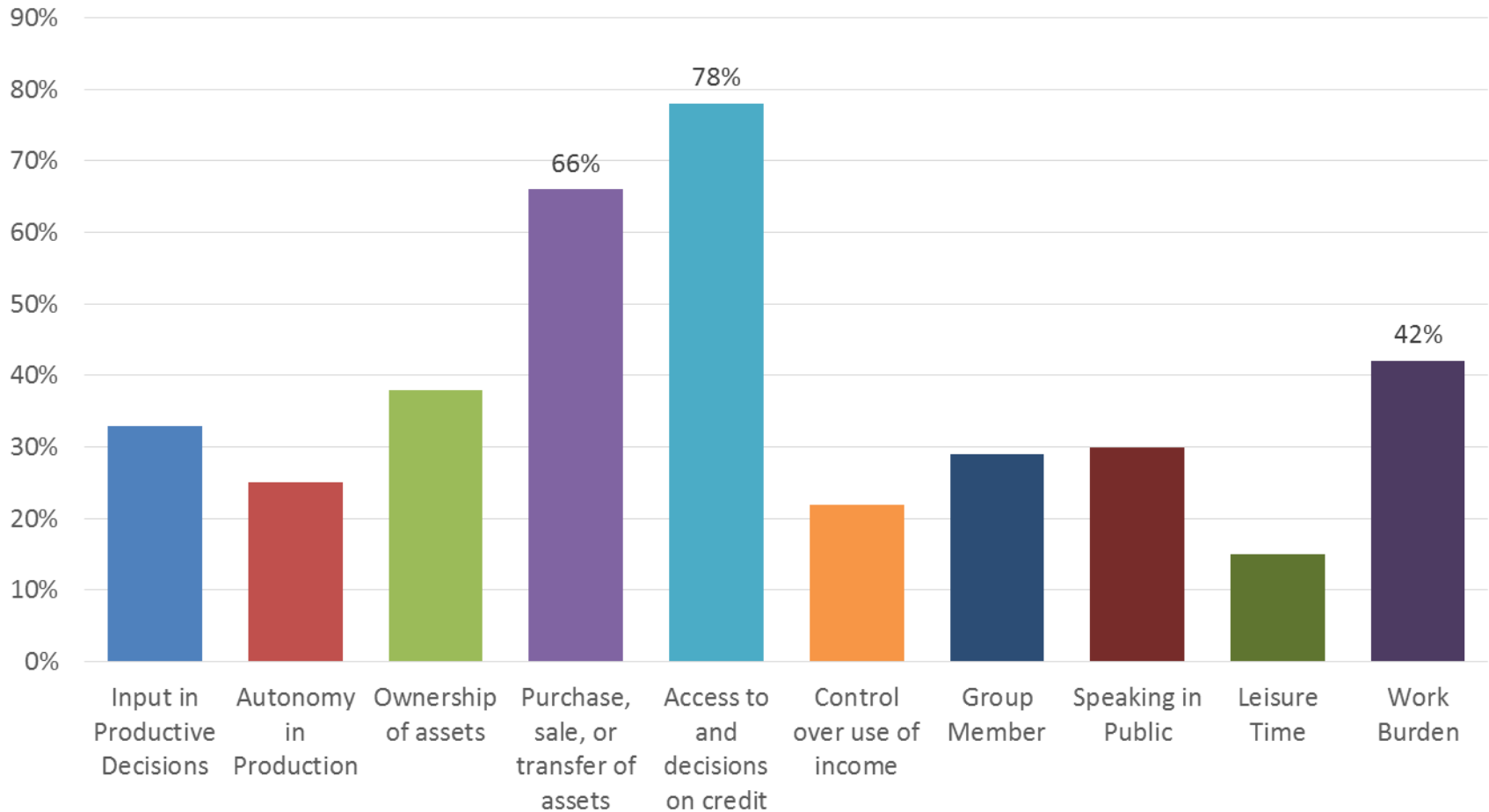
0.409

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)

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

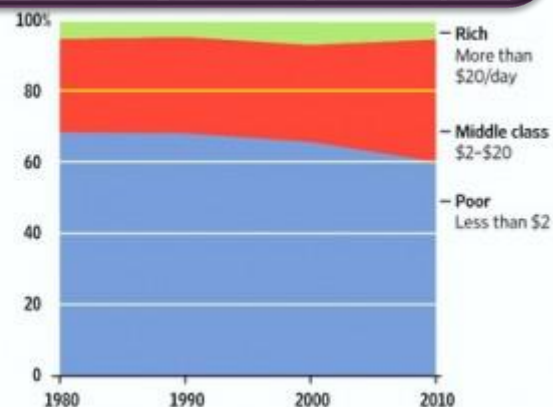


Buying in

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

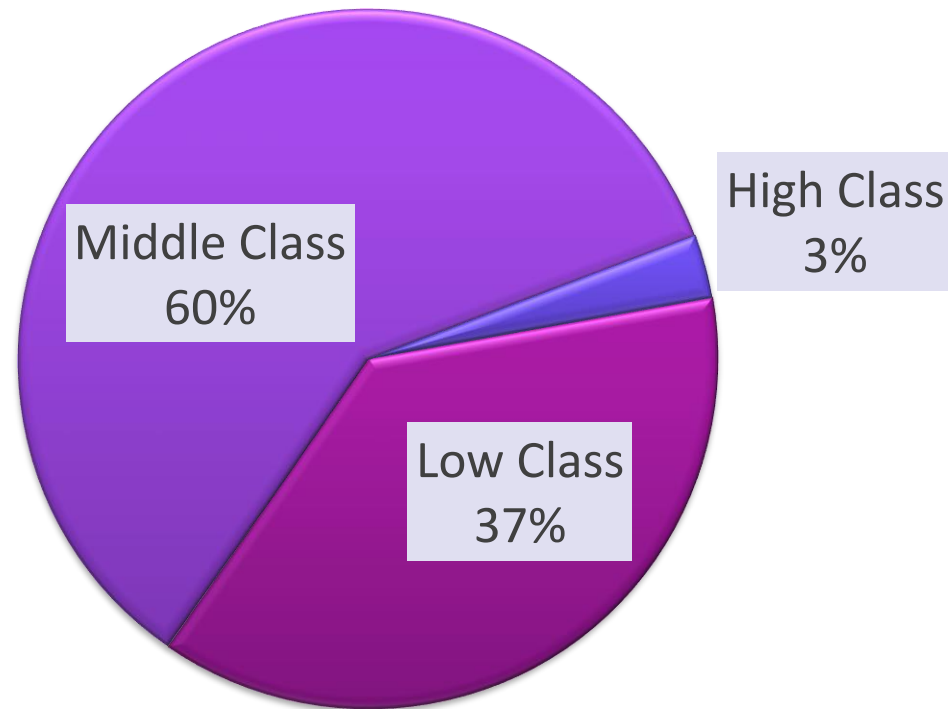
Kharas

\$10-\$100/person/day

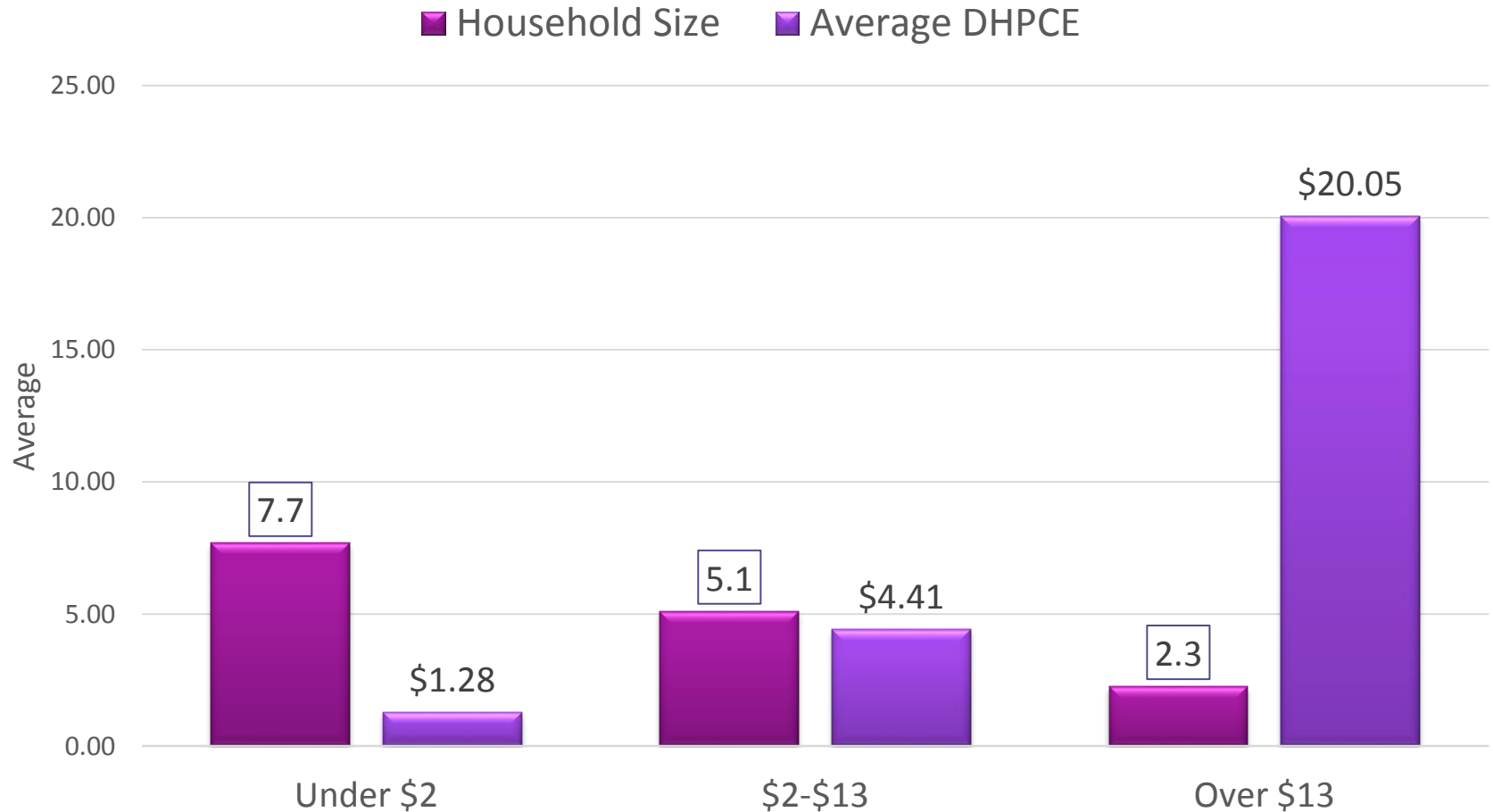


DISTRIBUTION IN NORTHERN REGION

Distribution of Households by World Bank Definition



AVERAGE DHPCE & HOUSEHOLD SIZE FOR NORTHERN 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 | *** |
| | Age | 1.01 | 0.01 | 1.03 | 0.31 | |
| | 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 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 and follow Projects & Initiatives and select the PBS button OR
 - <http://www.metss-ghana.k-state.edu/population.html>

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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