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

Why the PBS?

- 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

Two strata

Agricultural <u>and nutrition</u> interventions (RING Districts)

Agriculture only interventions (Non-RING Districts)

SADA AREA PBS OF 2012

Where & Who the PBS?

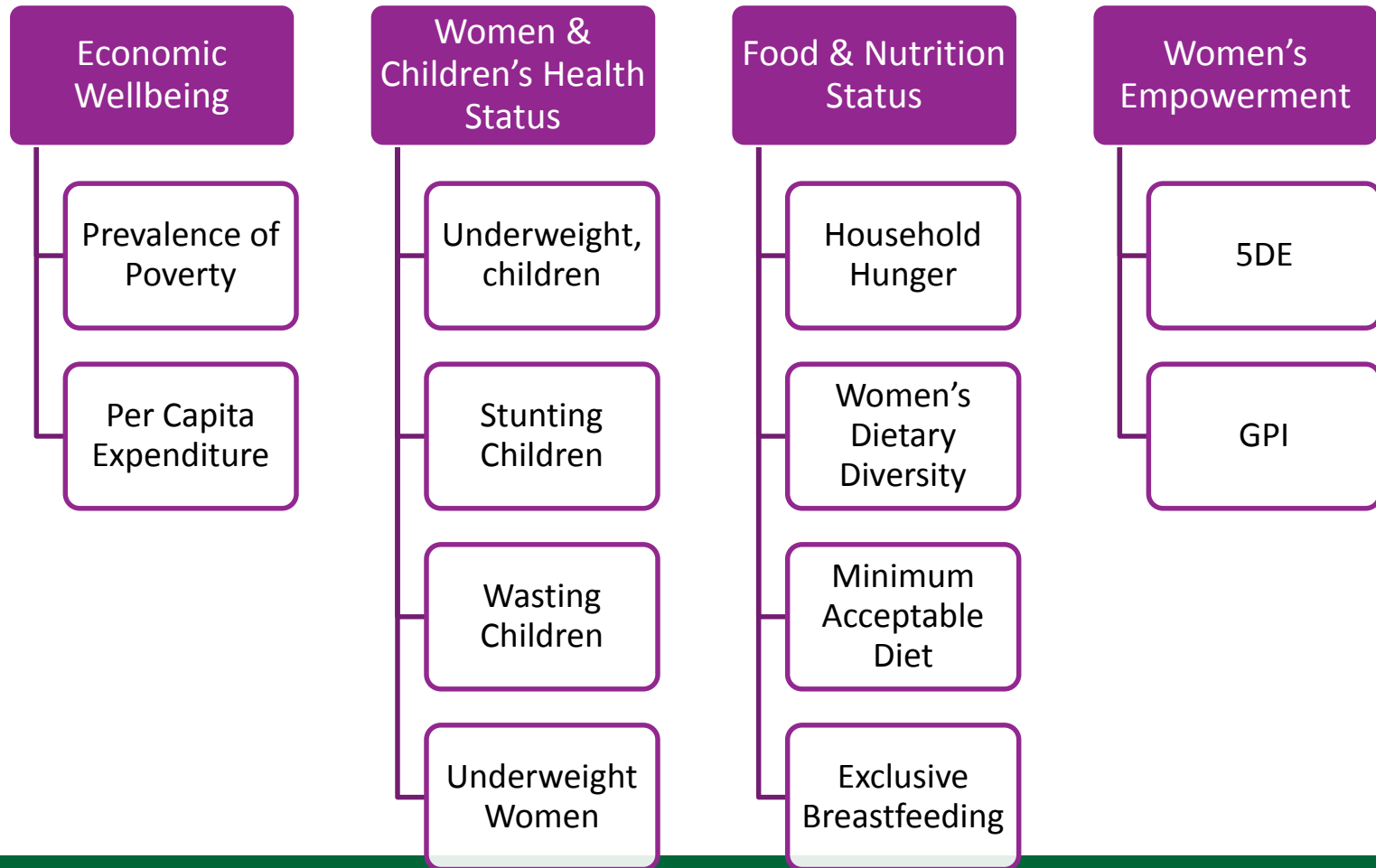|			
The SADA Area, excluding Northern Volta Region, with ~5.2 million	45 districts, 7 northernmost BA districts plus all districts in the remaining three regions	About 25,000 total respondents – adults and children in 4,410 households	Three focus crops – maize, rice and soya

SADA AREA PBS OF 2012: THE WHAT

Economic Wellbeing
- Prevalence of Poverty
- Per Capita Expenditure

Women & Children's Health Status
- Underweight, children
- Stunting Children
- Wasting Children
- Underweight Women

Food & Nutrition Status
- Household Hunger
- Women's Dietary Diversity
- Minimum Acceptable Diet
- Exclusive Breastfeeding

Women's Empowerment
- 5DE
- GPI

DISTRIBUTION OF POPULATION BY AGE GROUP
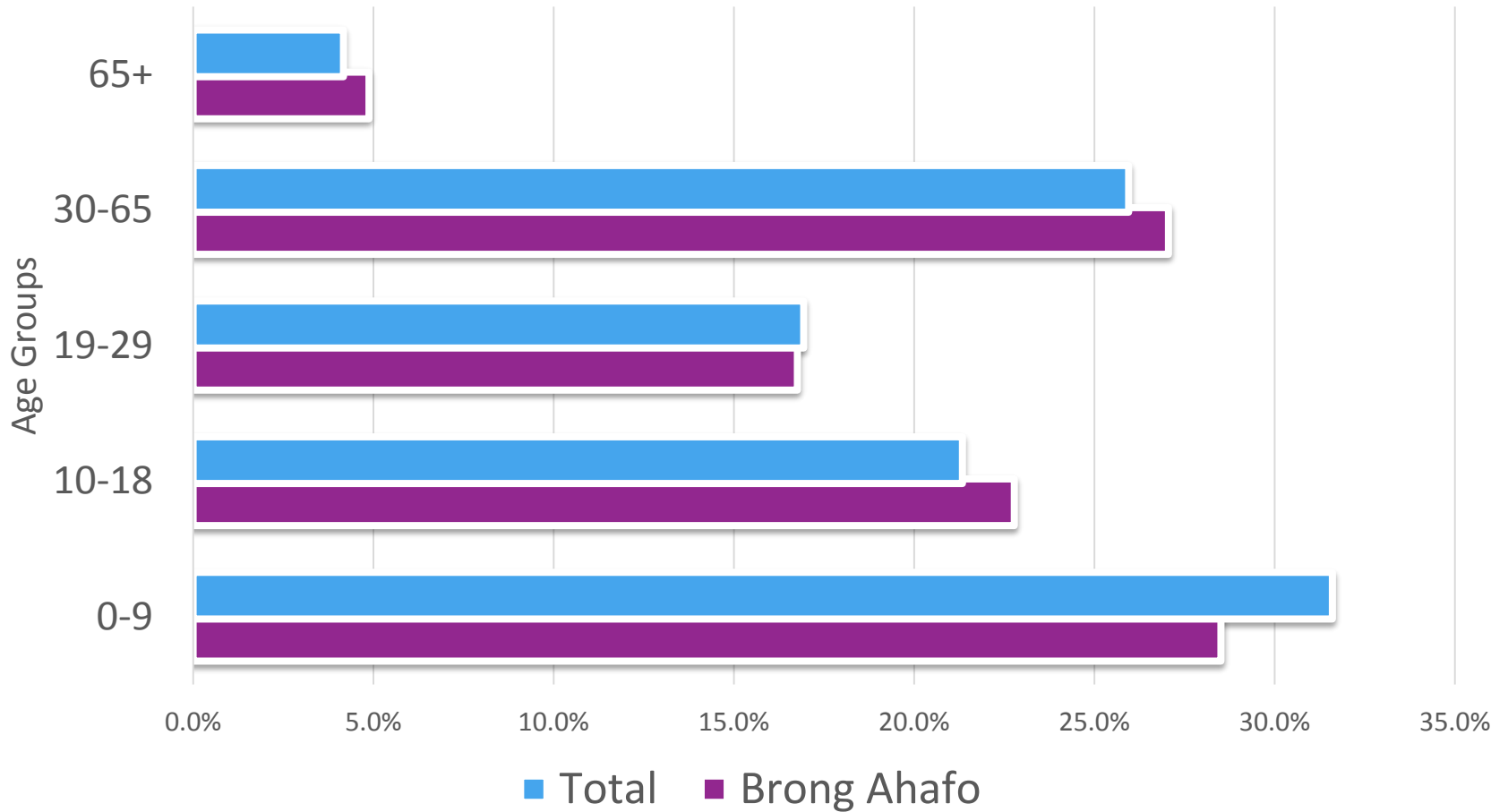
DISTRIBUTION OF HOUSEHOLDS BY HOUSEHOLD SIZE

K-State *Agribusiness*
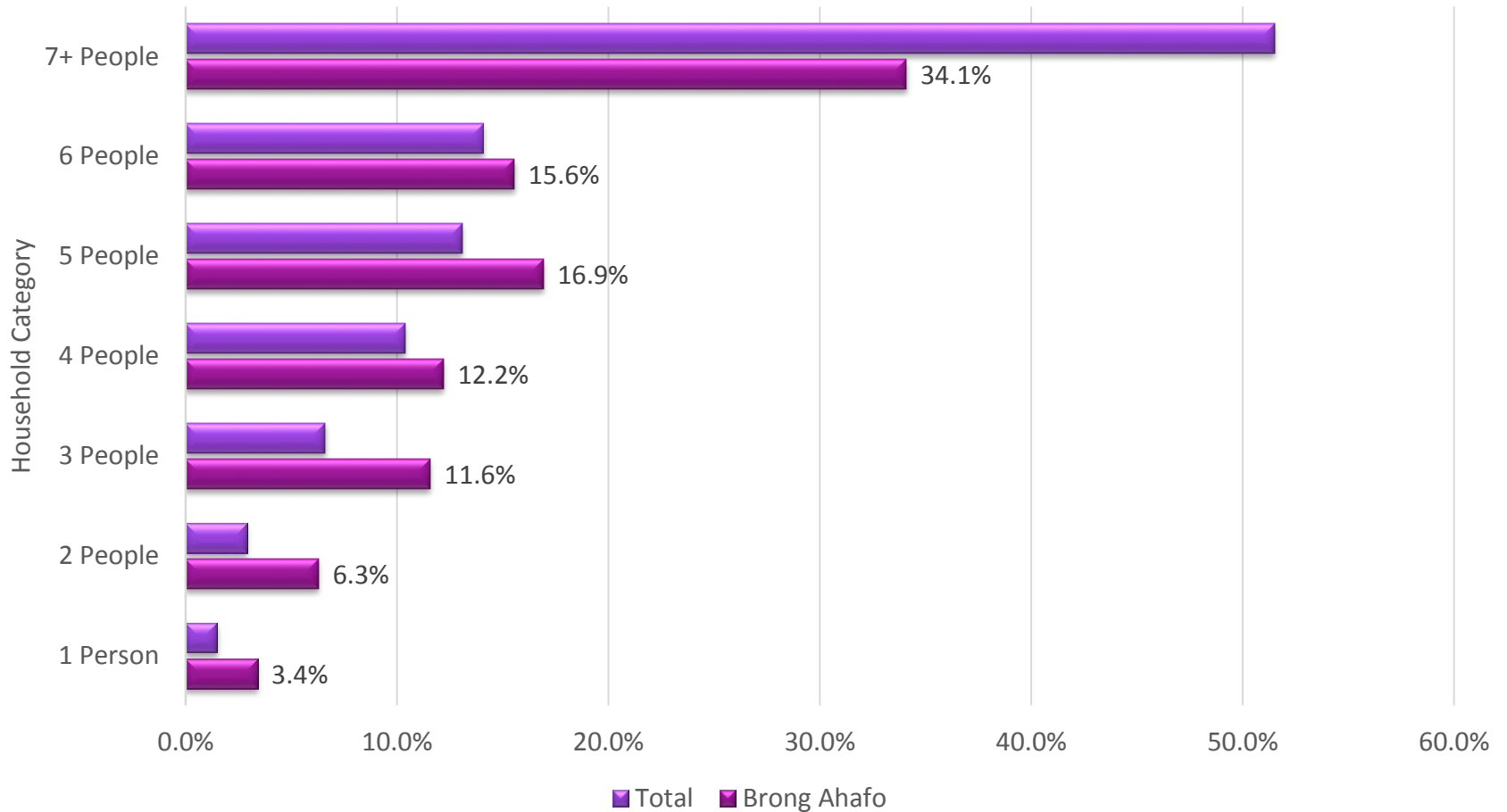
DISTRIBUTION OF HOUSEHOLDS BY GENDER

Total — Female 49.5%, Male 50.6%

Brong Ahafo — Female 52.0%, Male 48.0%

■ Female ■ Male

K-State *Agribusiness*
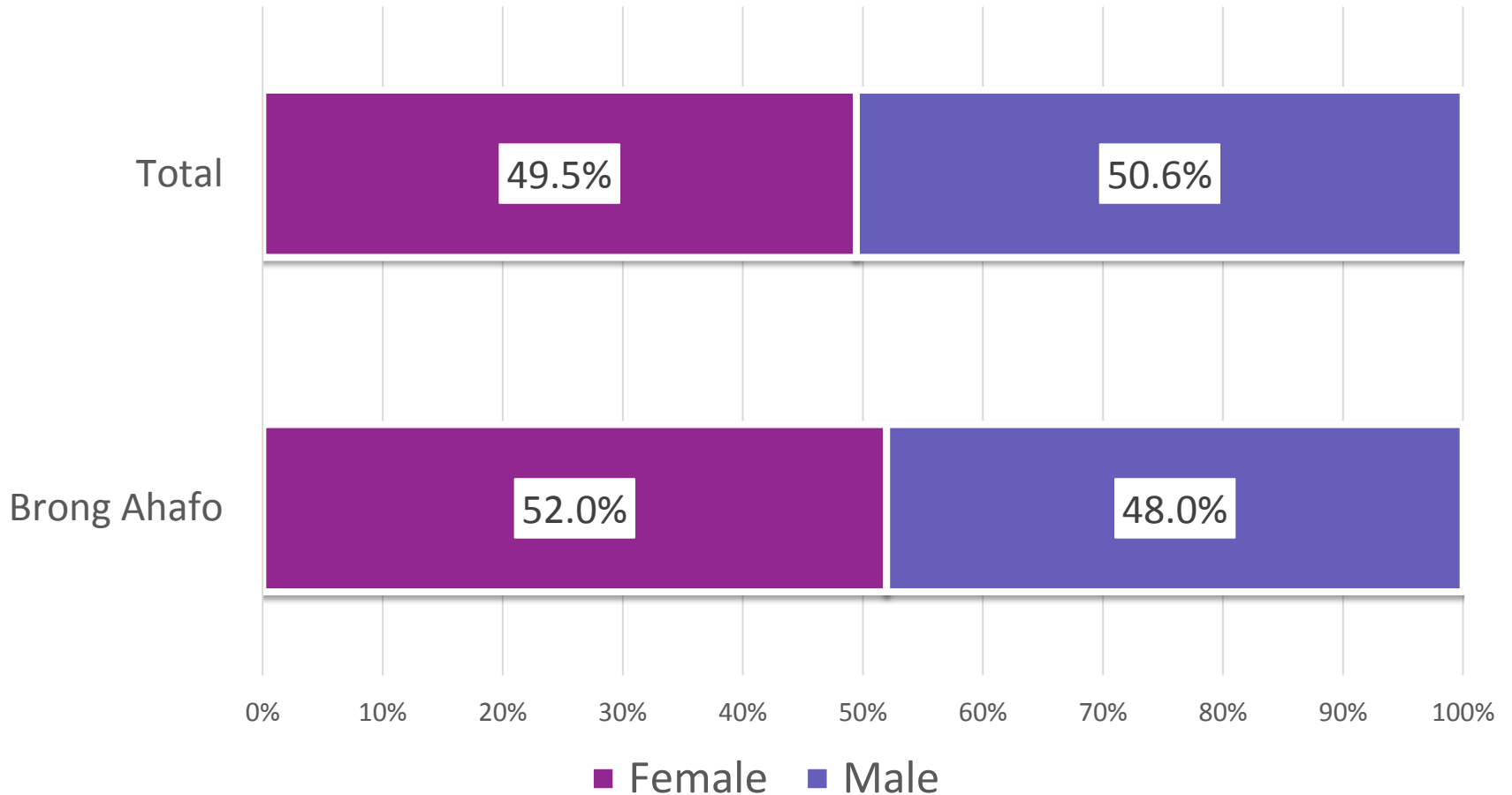
DISTRIBUTION OF HOUSEHOLD HEADS BY EDUCATION

	No Education	Some Education
Total	59.3%	40.7%
Brong Ahafo	53.9%	46.2%
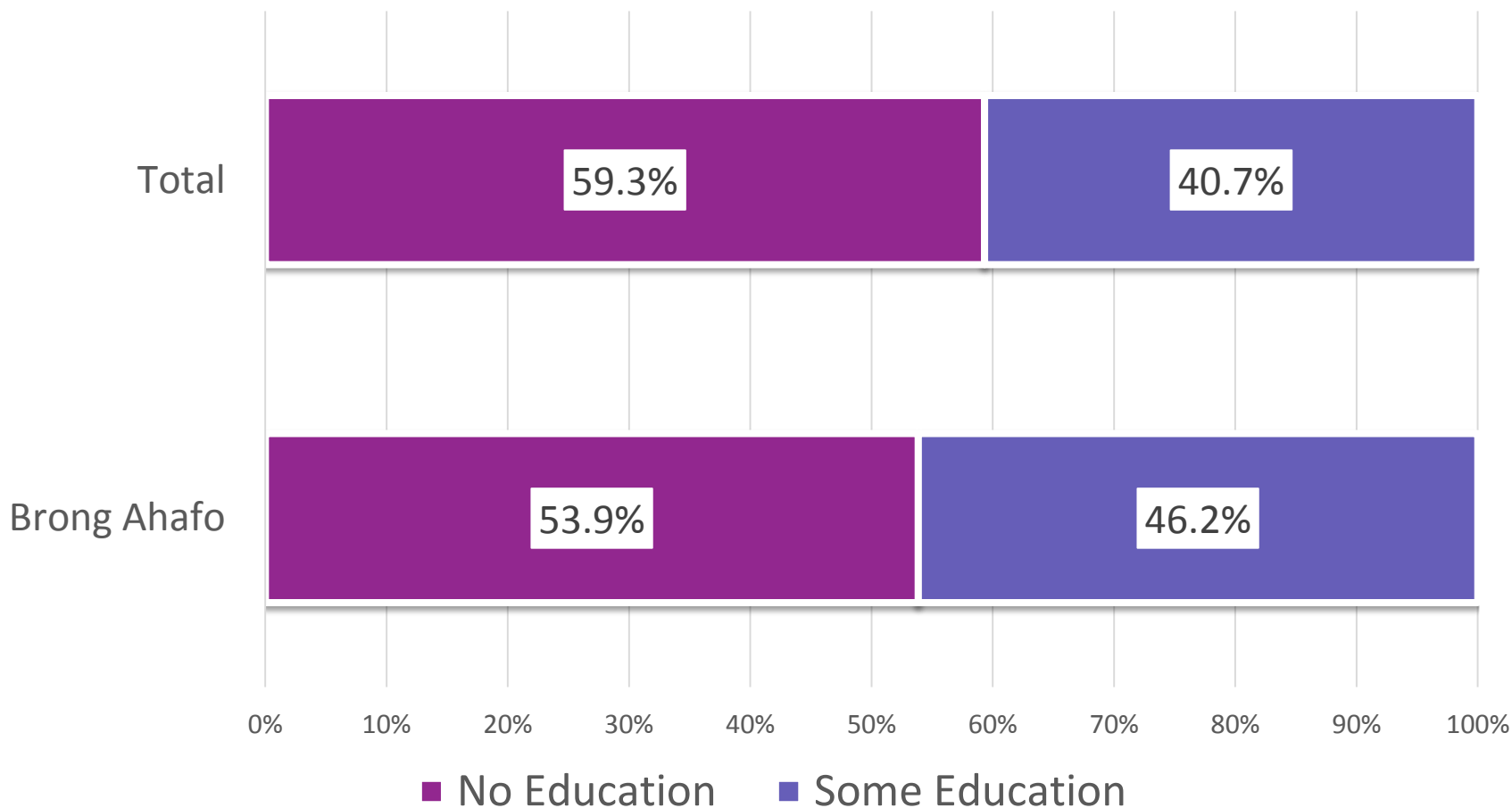
ECONOMIC WELLBEING

- Economic Wellbeing Indicators
  - Defining poverty
  - Measuring poverty
- Poverty exists when <u>resources</u> 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
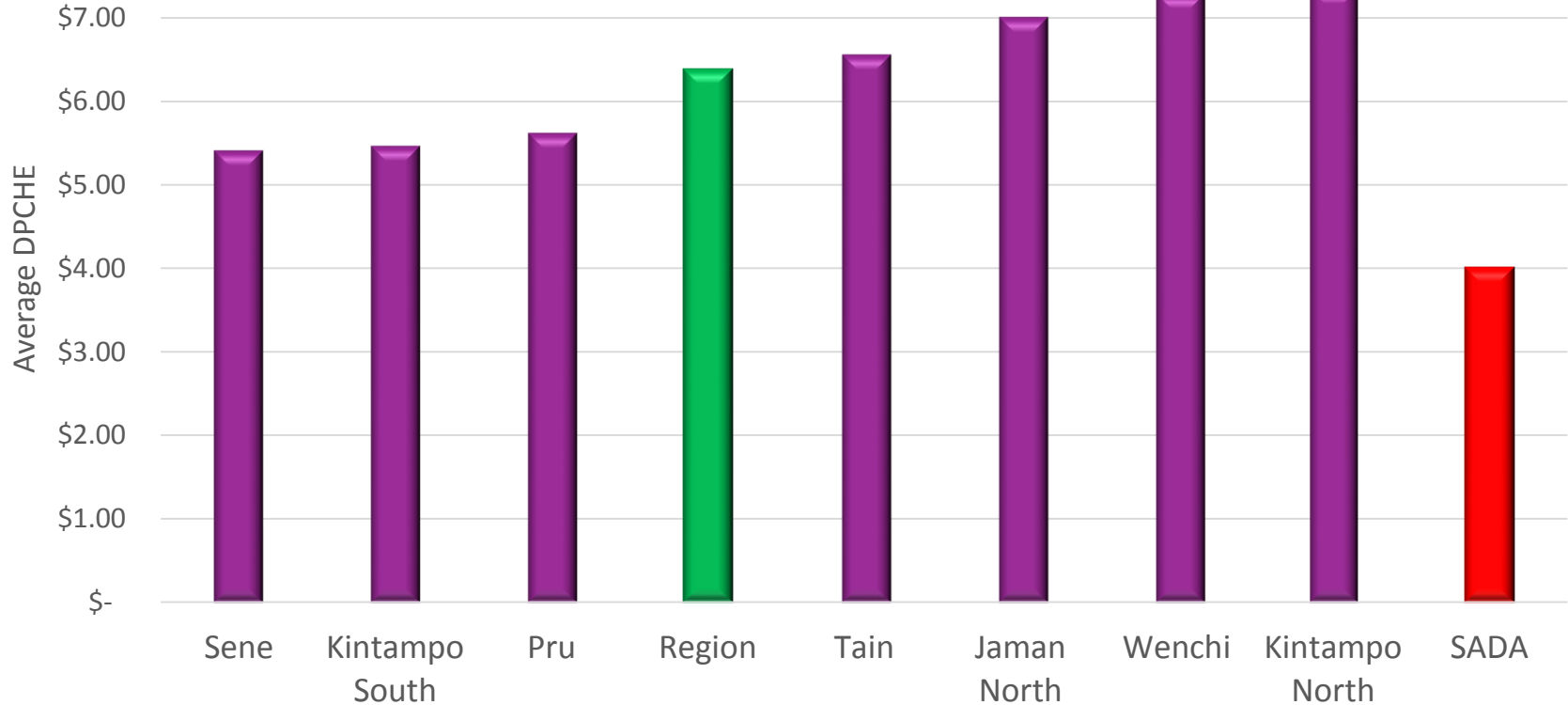
ECONOMIC WELLBEING: AVERAGE DPCHE

Average DPCHE

BA higher than SADA by about 60%

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

Poverty Prevalence

BA lower than SADA by about 73%

Prevalence of Poverty

- Tain: 1.3%
- Jaman North: 2.0%
- Sene: 2.6%
- Kintampo South: 3.0%
- Region: 6.0%
- Kintampo North: 7.3%
- Wenchi: 12.6%
- Pru: 13.4%
- SADA: 22.2%

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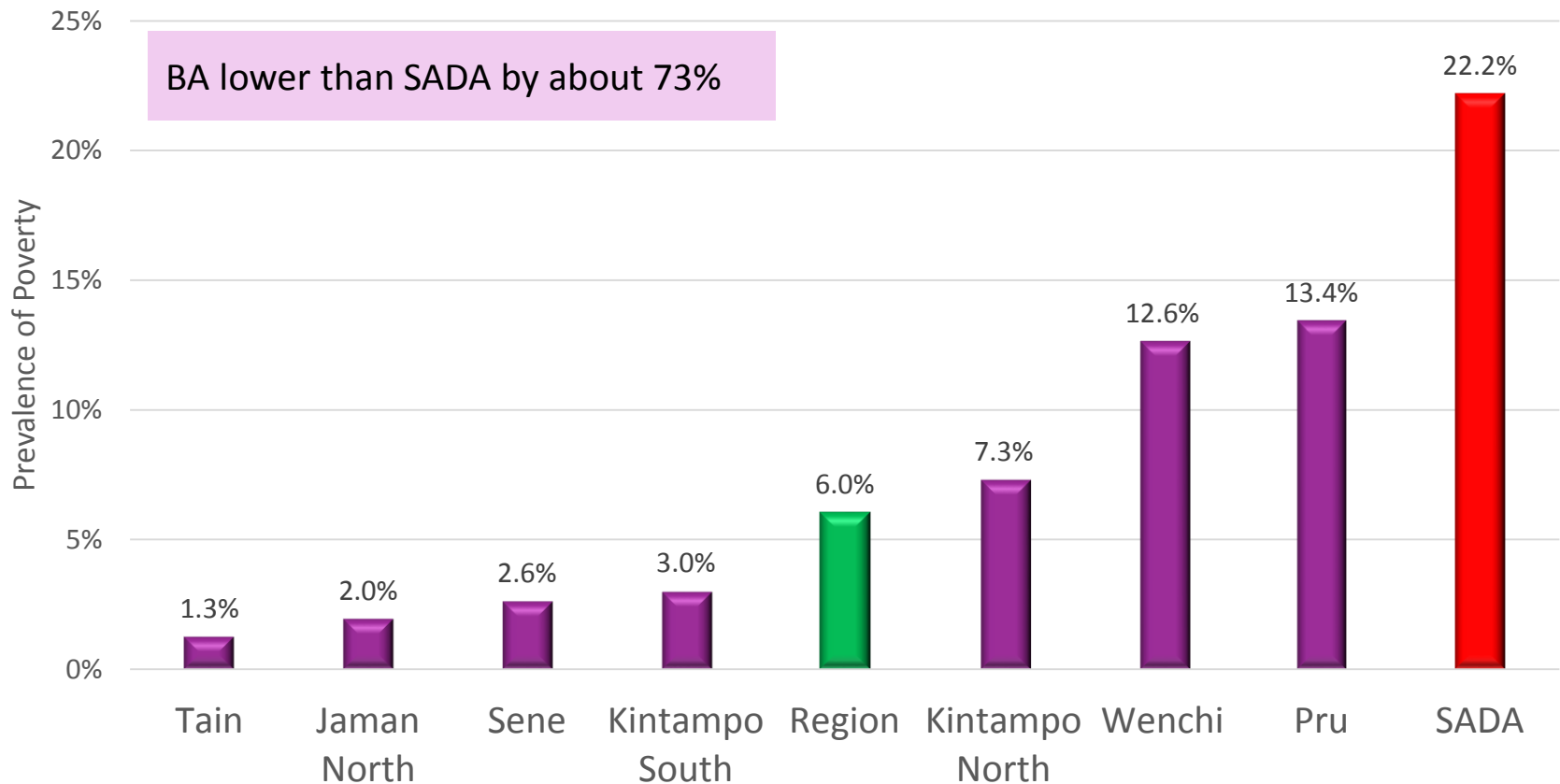
POLICY QUESTIONS

- 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?

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Research Opportunities: Women & Children's Health

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

Wasted	No	Yes	No
Stunted	No	No	Yes
Underweight	No	Yes	Yes
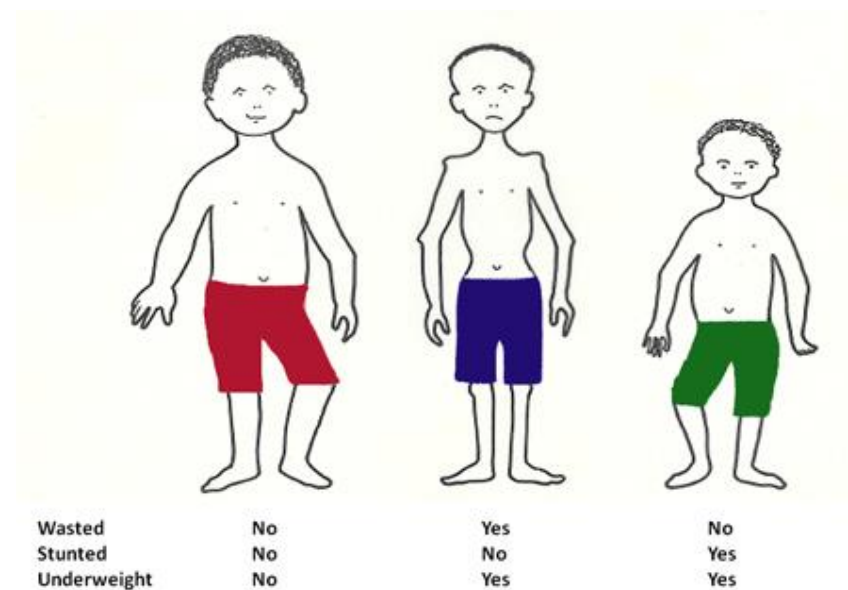
WOMEN & CHILDREN'S HEALTH

- 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

Prevalence of Underweight Children
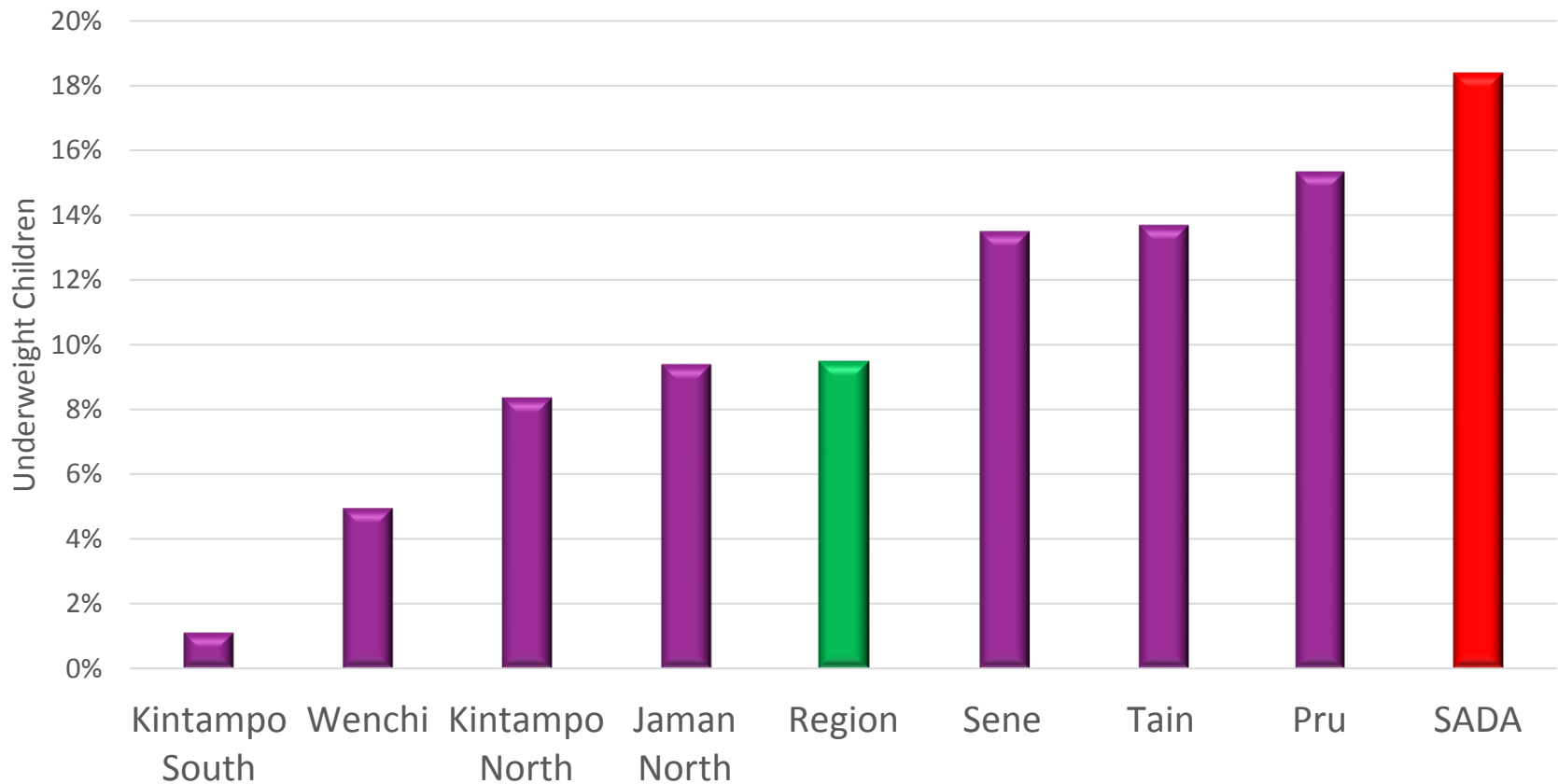
STUNTED CHILDREN

Prevalence of Stunted Children
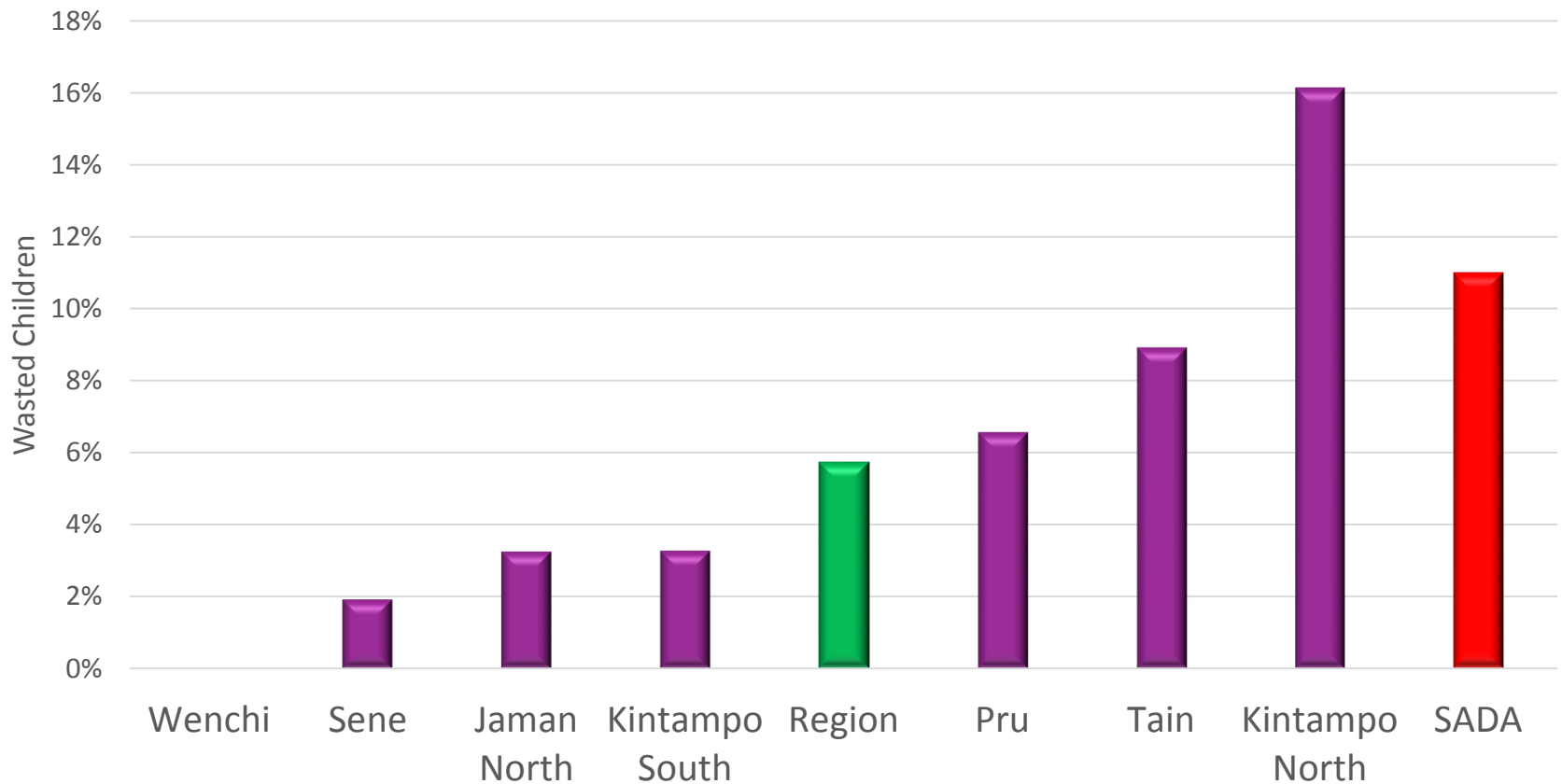
UNDERWEIGHT WOMEN

Prevalence of Underweight Women
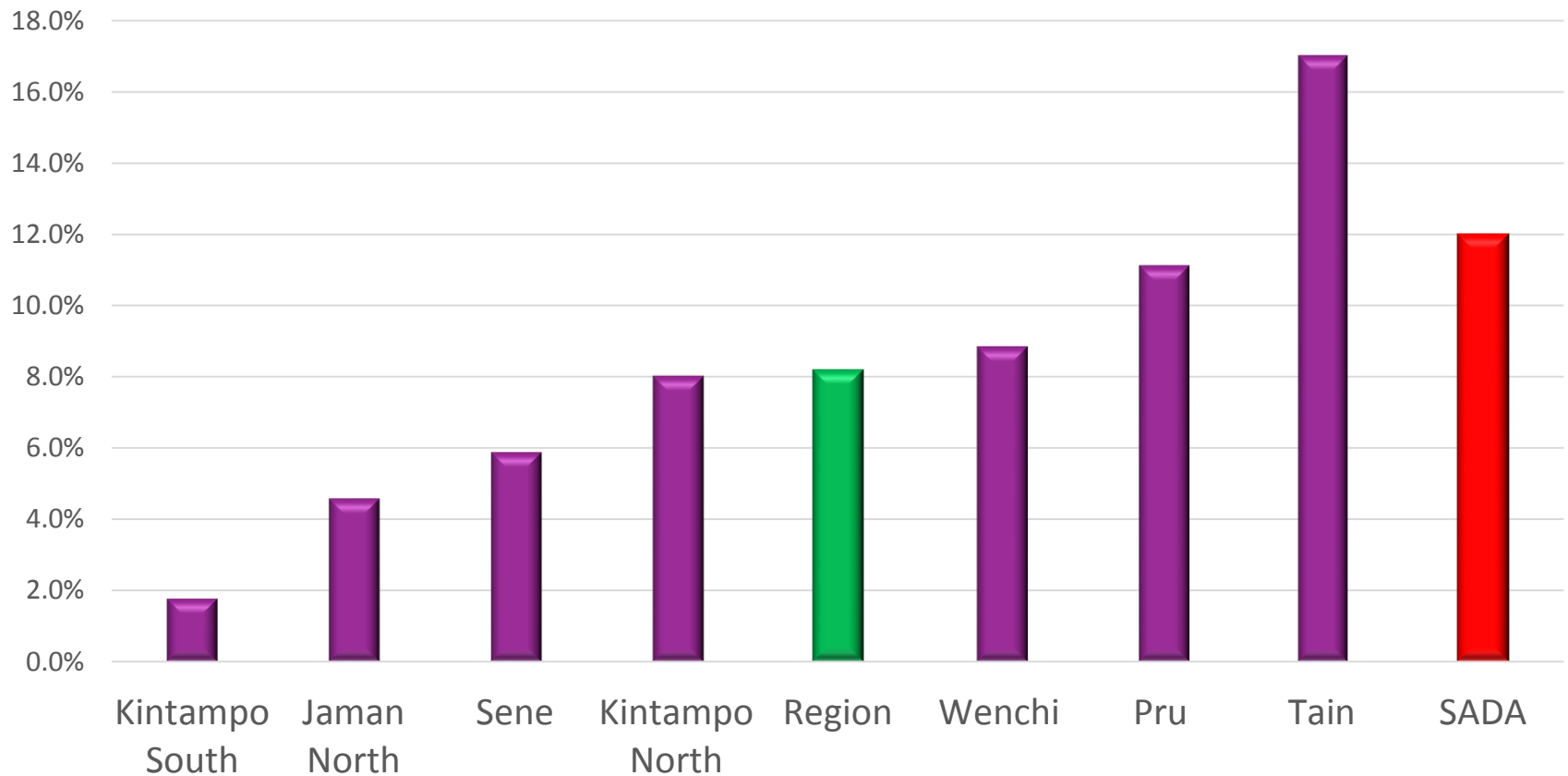
FOOD & NUTRITION

- 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
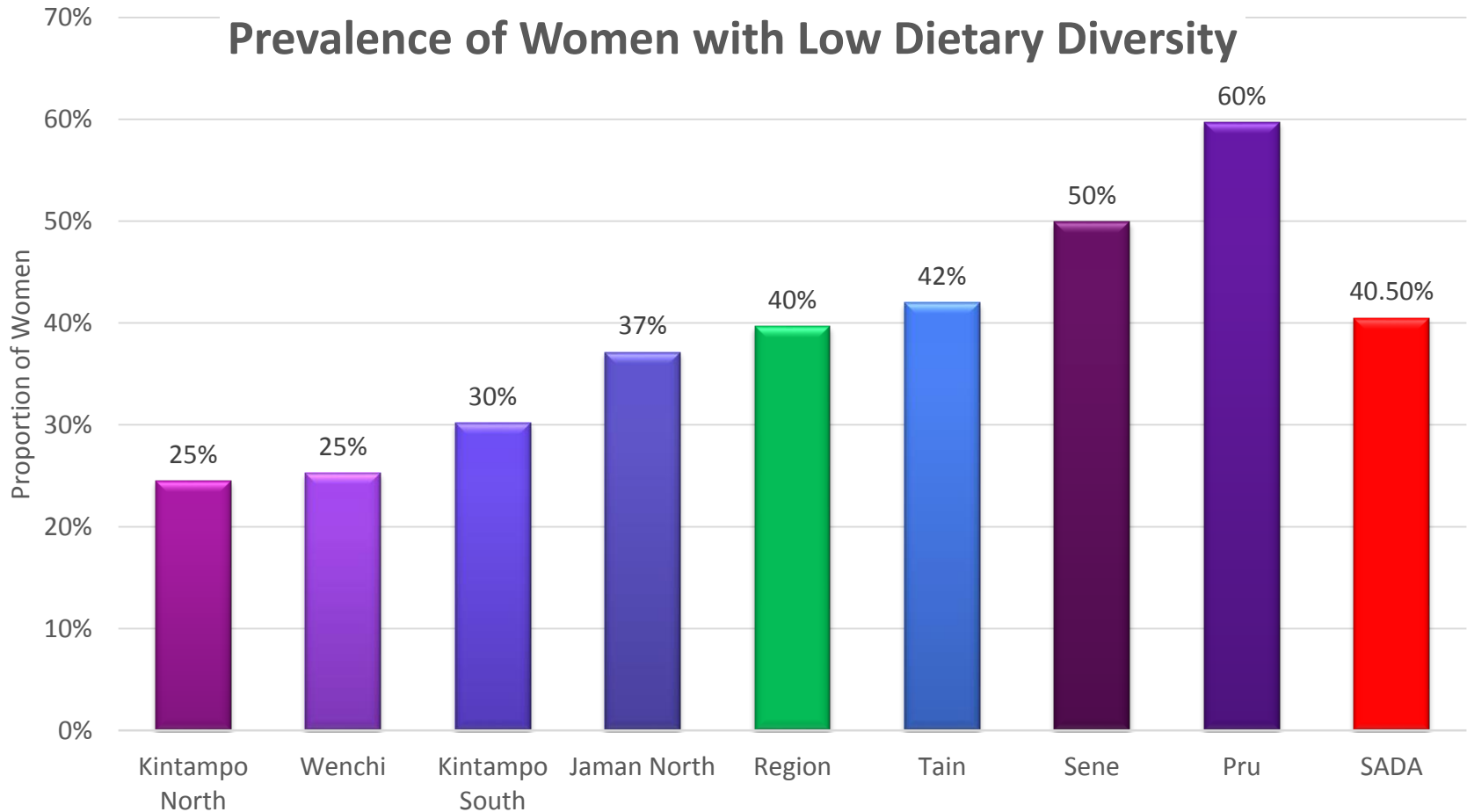
FOOD & NUTRITION: MAD & MMF

- 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%
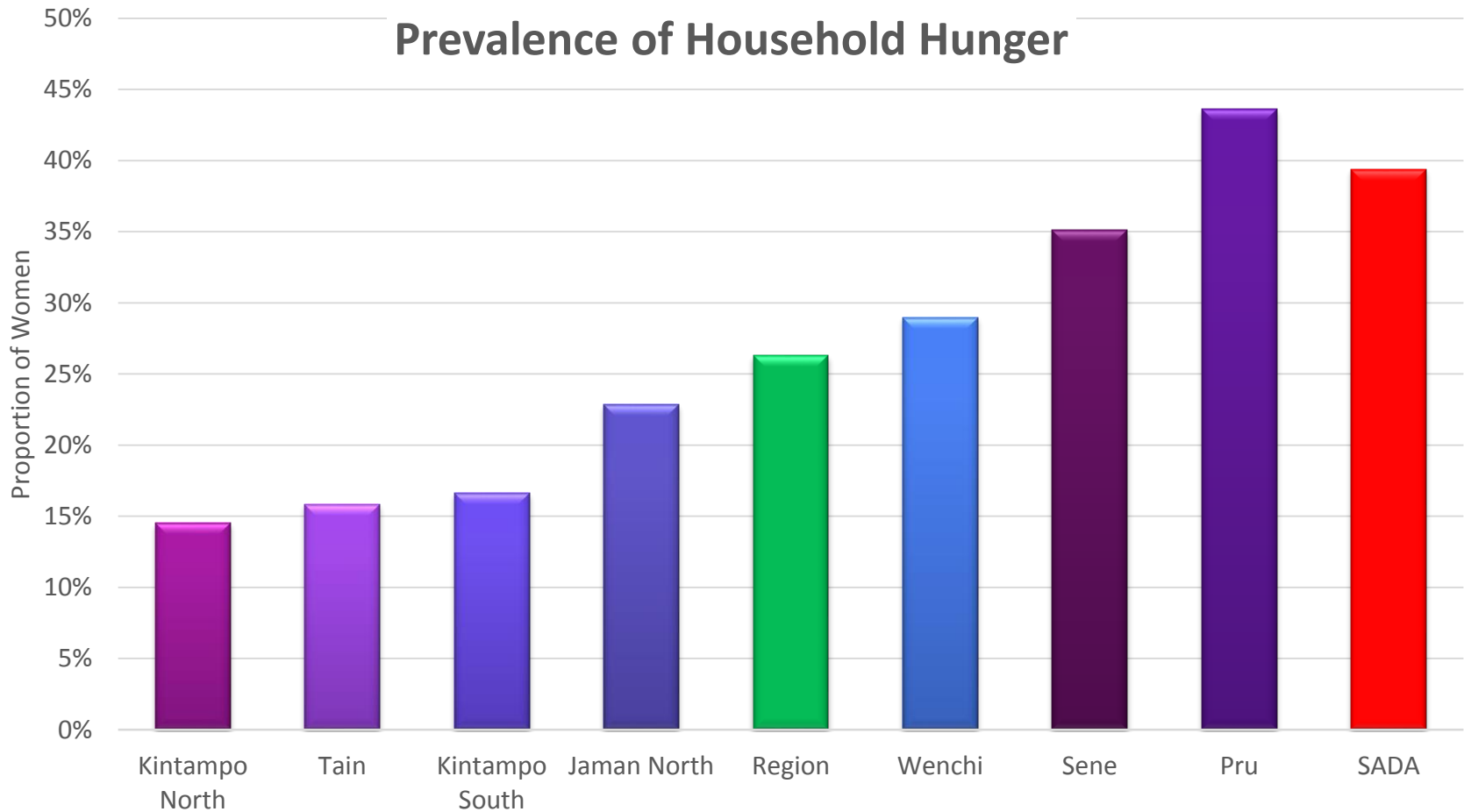 - Urban Areas: 28.1%

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 disproval 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 women 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.

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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.

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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) = **0.703**

DOMAIN INADEQUACY COUNT
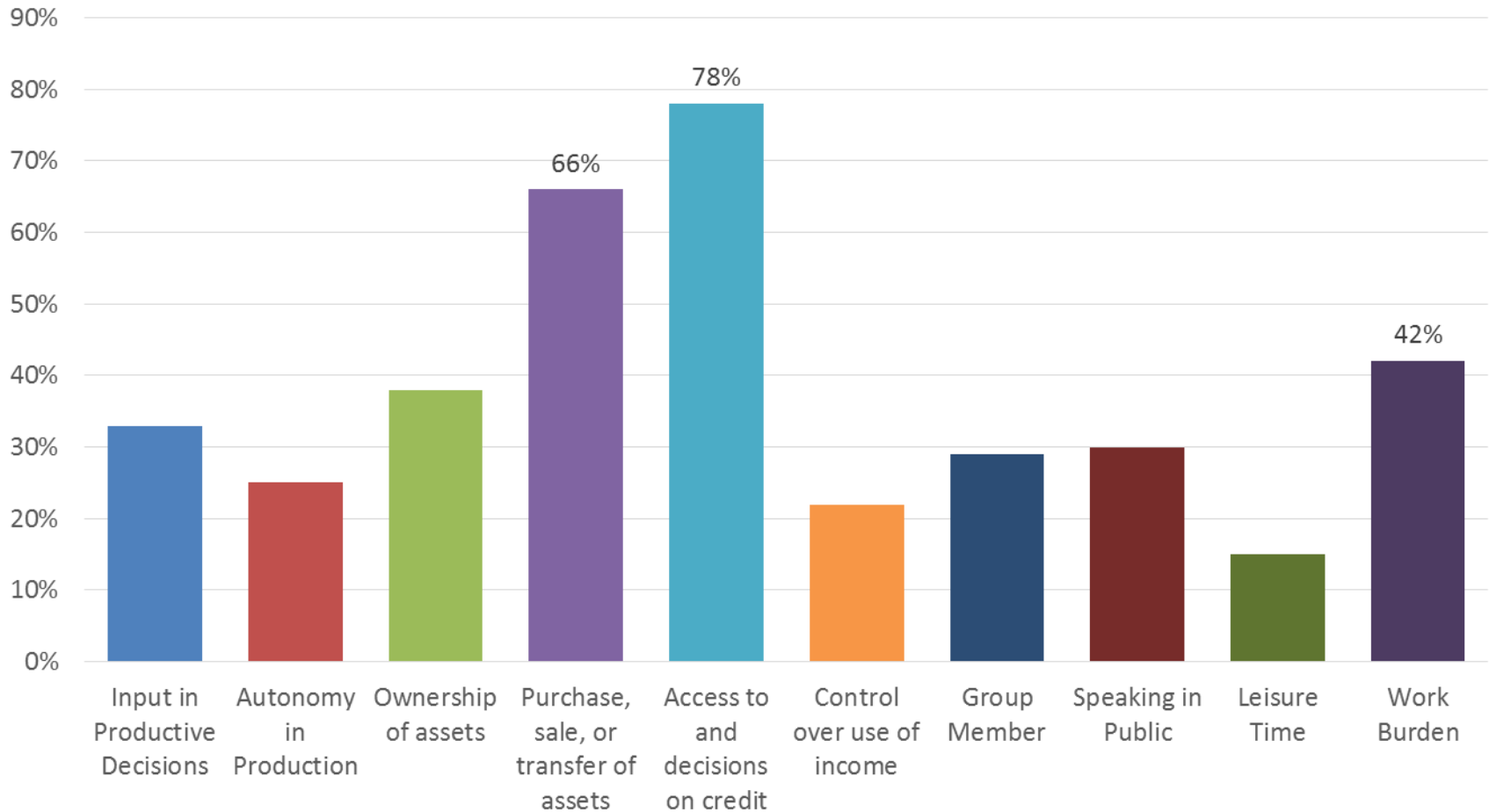
GENDER PARITY INDEX

- 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) = **0.811**

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

5DE = 0.703 and **GPI** = 0.811

If α is 0.9, then the **WEAI** is 0.9(5DE)+0.1(GPI)

WEAI = 0.714

ANOTHER APPROACH: A PROPOSAL

- People do not self-identify as poor
  - Implies they are defined by external descriptors
  - Explaining 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

ANOTHER APPROACH: A PROPOSAL

- This 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
- Most importantly, all intervention efforts are universal
  - Non-discriminatory
  - Whole population

ANOTHER APPROACH: A PROPOSAL

- How do we operationalize this proposal using the PBS data?
- Classifying respondent households into income classes
  - Lower class, middle class and higher class
  - Assessing the characteristics of households in each of these classes
- Using the idea of "Middle Class" mobility

RESEARCH QUESTION

What demographic and household characteristics have the highest probability of defining who is in the "middle class"?

The "middle class" may be termed the 'consumer class' . . . [with] income elasticity for consumer durables and services that is greater than unity."

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MIDDLE CLASS CHATTER GETTING LOUDER

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

Changing Focus

What if we changed focus from *poverty reduction* to <u>wealth creation</u>

Wealth is more tractable, tangible and decision-maker driven

Help in wealth-creation is *appreciated,* <u>not expected, i.e., wealth-creators are independent</u>

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

— Highest: Tun

— Lowest: Liberia 4.8%

SHARE OF COUNTRY THAT IS MIDDLE CLASS ▶

- Over 66%
- 33-66%
- Under 33%

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

— Rich More than $20/day

— Middle class $2-$20

— Poor Less than $2

100%

80

60

40

20

0

1980   1990   2000   2010
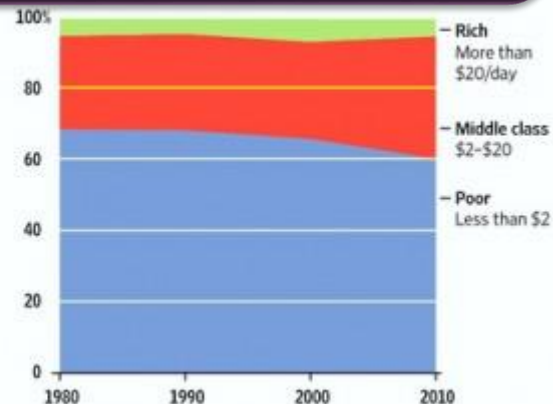
OPERATIONALIZING THE MIDDLE CLASS

World Bank	$2-$13/person/day
African Development Bank	$2-$20/person/day
Kharas	$10-$100/person/day

DISTRIBUTION IN THE SADA ZONE

Distribution of Households by AfDB Definition

- $2-20
  60%
- Over $20
  2%
- Under $2
  38%
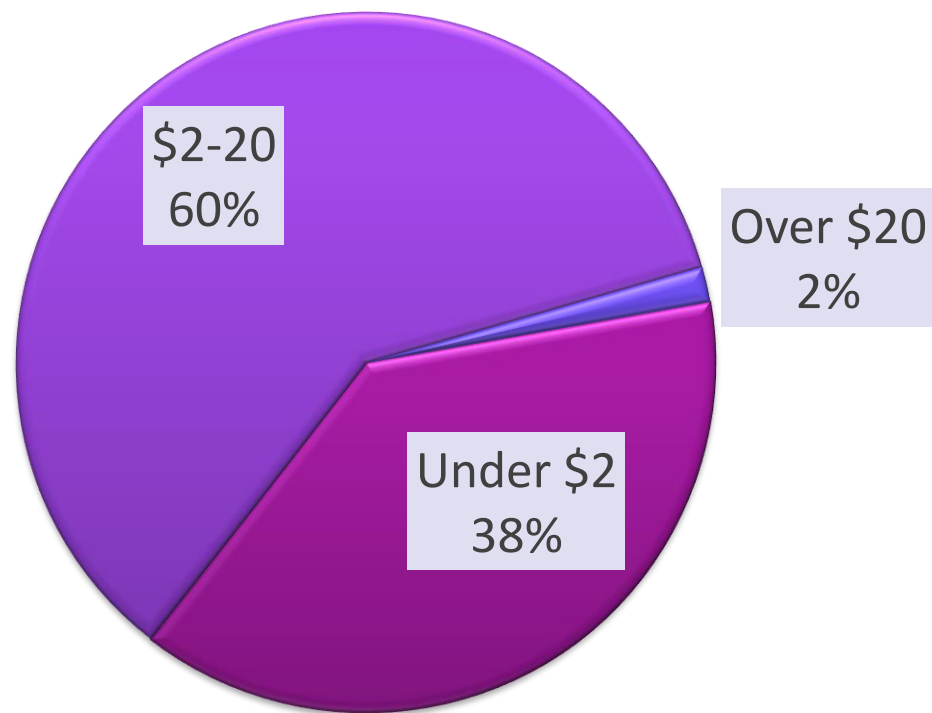
DISTRIBUTION IN BRONG AHAFO

Distribution of Households by AfDB Definition

$2-20
74%

Over $20
3%

Under $2
22%
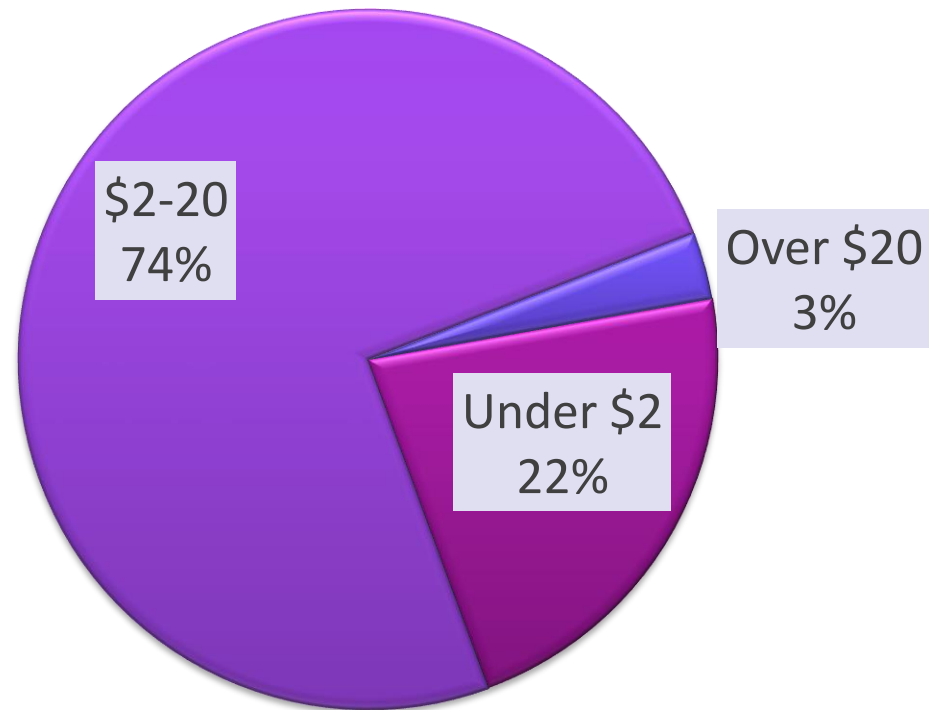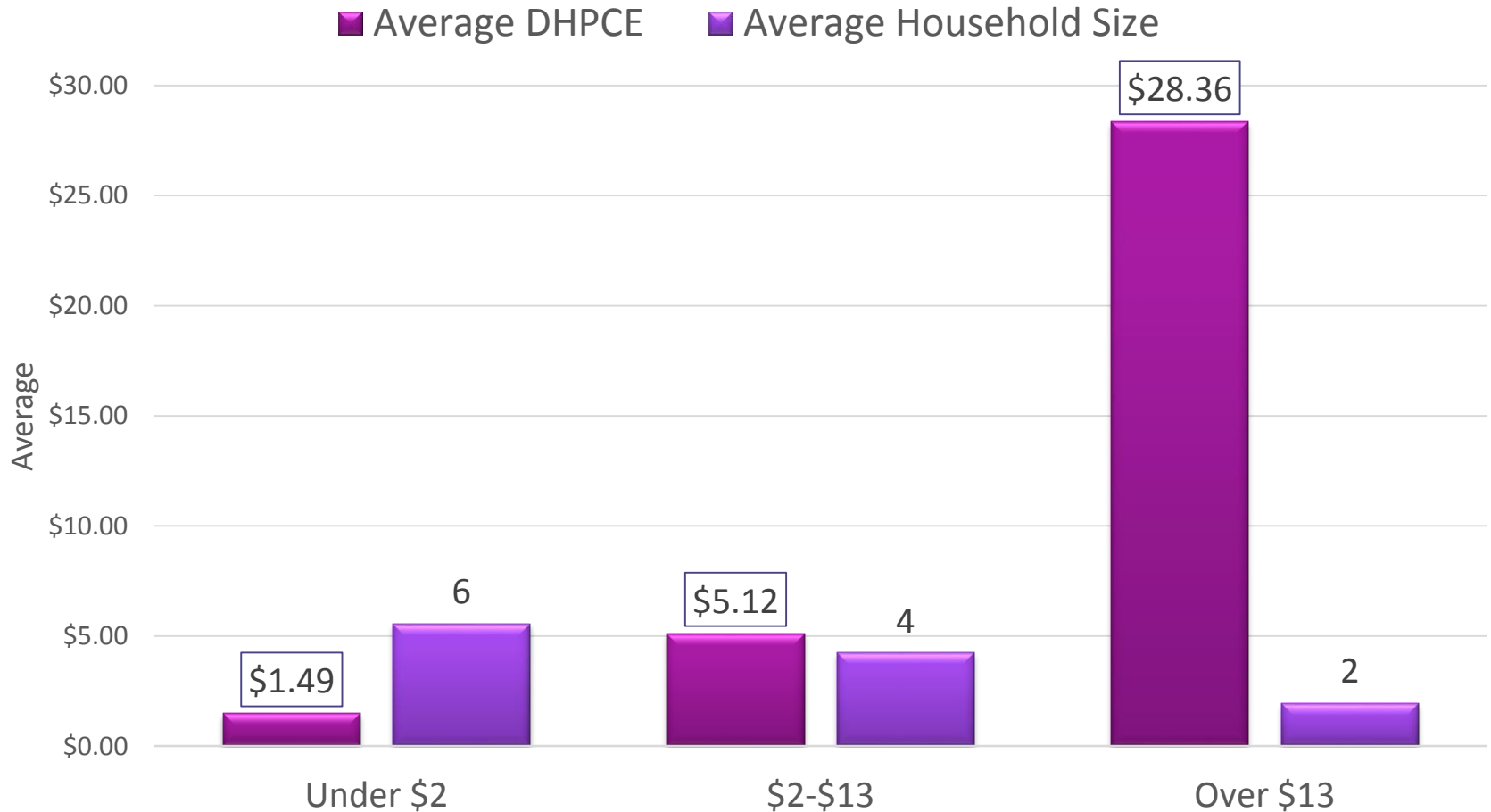
DISCOVERING SOME FORCES

- Tested the potential effects of building sustainable economic growth in our communities by shifting attention to wealth enhancement
  - Targeting education and infrastructure
- What do the PBS data reveal?

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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	

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

WEAI

5DE + GPI ➡ WEAI

5 DOMAINS OF EMPOWERMENT

Production
- Production Decision
- Production Autonomy

Resources
- Asset Ownership
- Asset Purchase, Sale, Transfer
- Access to & Decision on Credit

Income
- Control over Income Use

Leadership
- Group Membership
- Public Speaking

Time
- Workload
- Leisure

Each domain accounts for 20% of the 5DE and components in each domain have equal weights
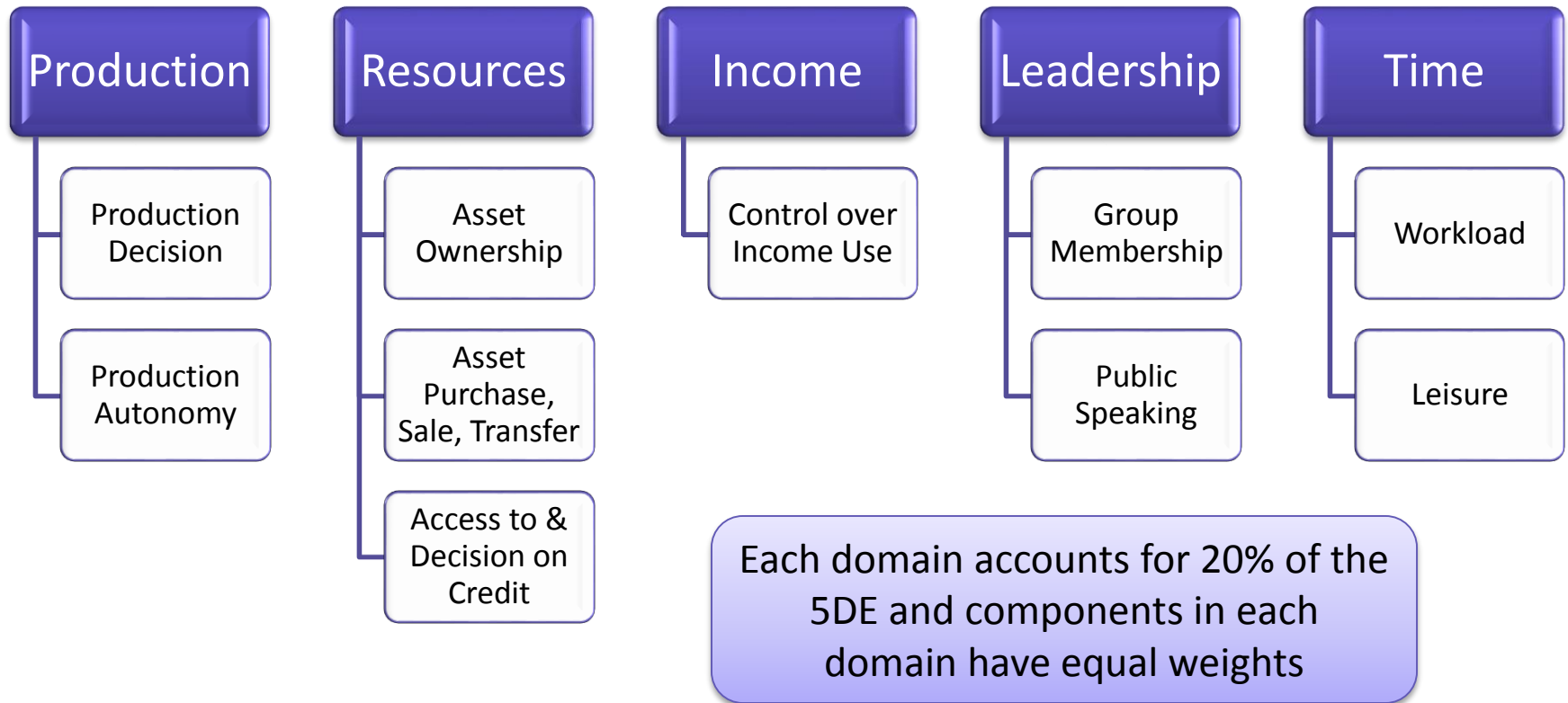
RESEARCH OPPORTUNITIES: WEAI

Average 5DE	0.703
Average GPI	0.811
WEAI (α=0.9)	0.714

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?

Personal interest drives all human action

MOVING FORWARD

So, how may we help?

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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