



NADOWLI - KALEO

Feed the Future Ghana District Profile Series - February 2017 - Issue 1

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Nadowli is one of the districts in Ghana's Upper West Region. It is bordered to the South by Wa Municipal, West by Burkina Faso, North by Jirapa and Lambussie-Karni Districts and to the East by the Daffiama-Bussie-Issa District. The district has a total area of 1,132.02 square kilometers and a total population of 66,975, out of which 35,693 are females and 31,282 males. The average household size in the district is 5.3 persons. The boxes below contain relevant economic indicators such as per capita expenditure and poverty prevalence for a better understanding of its development.

Poverty Prevalence 29.8 %

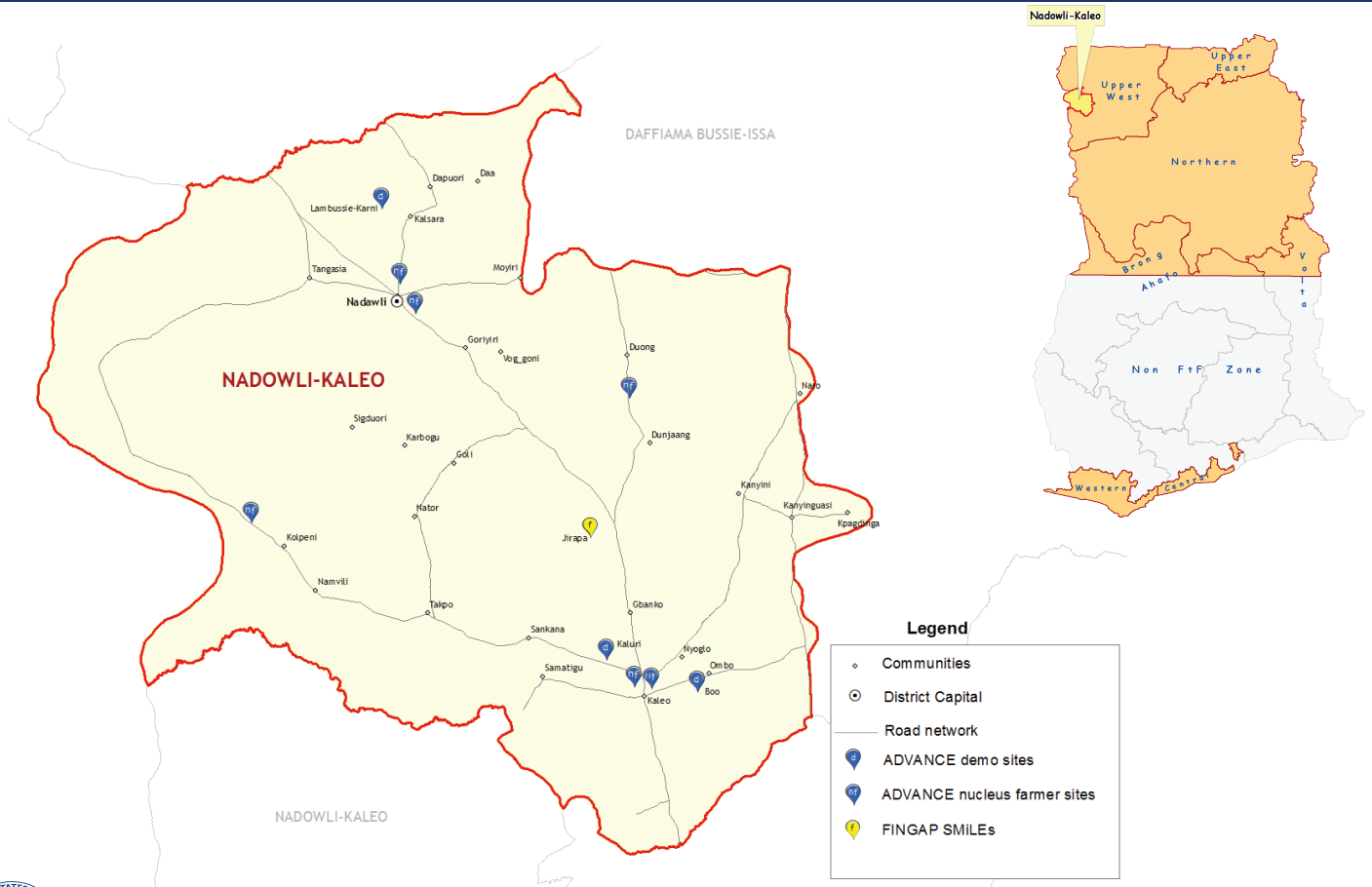
Households with moderate or severe hunger* 40.9%

Poverty Depth 9.2 %

Daily per capita expenditure 3.28 USD

Household Size 5.3 members

Total Population of the Poor 19,959



This section contains data and information related to USAID sponsored interventions in Nadowli

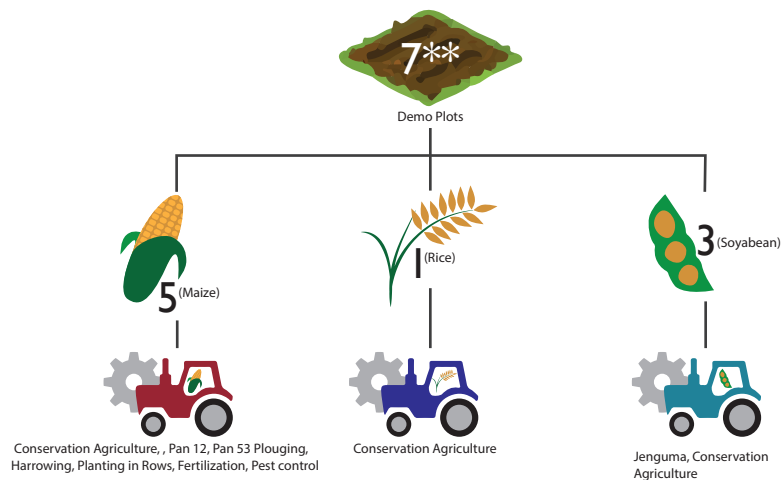
Table 1: USAID Projects Info, Nadowli, 2014-2016

Beneficiaries Data	2014	2015	2016
Direct Beneficiaries	216	784	1,751
Male	156	332	573
Female	60	452	1,178
Undefined			
Nucleus Farmers	3	5	n/a
Male	2	4	
Female	1	1	
Undefined			
Demoplots	3	4	n/a
Male	3		
Female			
Undefined		4	
Production			
Maize Gross Margin USD/ha		886.7	n/a
Maize Yield MT/ha		2.95	n/a
Rice Gross Margin USD/ha		174.7	n/a
Rice Yield MT/ha		3.54	n/a
Soybean Gross Margin USD/ha		773.7	n/a
Soybean Yield MT/ha		1.64	n/a
Investment and Impact			
Ag. Rural loans	30,000		1,744
USAID Projects Present			3
Beneficiaries Score	1.0	1.0	1.0
Presence Score 2014-2016			1
District Flag 2014-2016			Yellow

Source: USAID Project Reporting, 2014-2016

The number of direct USAID beneficiaries* increased in 2016 by eight-fold compared to 2014. Also as observable in Figure 1, the majority of beneficiaries in Nadowli are females. Five nucleus farmer are currently operating in the district and seven demonstration plots have been established to support beneficiary training. See Infographic 1 for the demonstration plot disaggregate. Small agricultural loans were facilitated by USAID intervention as shown in Table 1. Direct beneficiaries yields and gross margins for the district are also available in Table 1. The presence of USAID development work is below average, with the small number of beneficiaries in comparison to other districts, small number of demo plots and small agricultural loans during 2014-2016. This resulted in a USAID presence score*** of 1 out of 4. The district is flagged YELLOW**** indicating that while the project presence or intervention is average, the impact indicator values have improved as compared to 2012. Find more details on USAID Presence vs. Impact scoring on page 7.

Infographic 1: Demo Plots in Nadowli, 2014-2015



Source: USAID Project Reporting, 2014, 2015

* "Direct Beneficiary, an individual who comes in direct contact with a set of interventions" FTF Handbook, 2016, ** number of demoplots by commodity is higher because of conservation agriculture*** and ****Presence and Flag Ranges are explained in page 7

The presence calculation includes the number of direct beneficiaries and Agricultural Rural loans.

All data and information including full citations can be accessed at www.ghanalinks.org

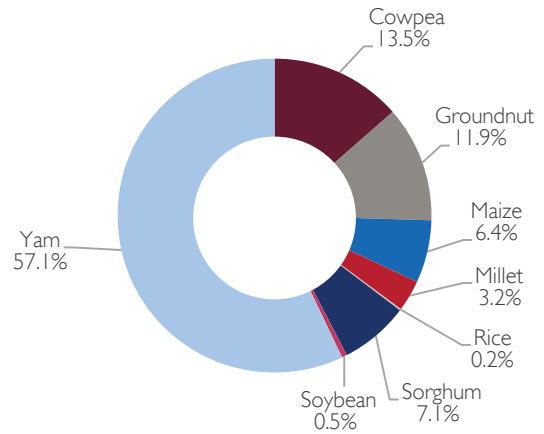
This section contains agricultural data for Nadowli, such as production by commodity, gross margins and yields.

Agricultural production in Nadowli is represented mainly by the production of Yam, which accounts for the largest share, 57.1%. Other commodities produced which account for much lower shares to the total quantity produced during 2014-2015 are groundnuts, cowpea and other commodities as shown in Figure 1. Nadowli contributed the largest share to the overall agricultural production in the Region in 2015, accounting for 20.6% of total production.

Figure 2 contains gross margins for three commodities supported by USAID intervention in 2015. These could not be compared with APS values for this district for the same commodities.

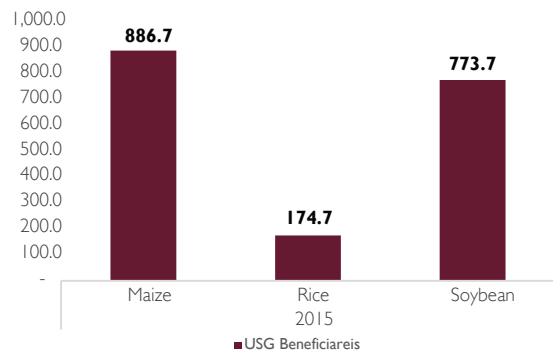
Yield data, presented in Figure 3, contain values of yields of these three commodities in 2015, 2014 and 2013 from two sources: USAID beneficiaries and MOFA. The figure captures better yields of the direct beneficiaries in 2015 compared to the district average yields captured by the other source.

Figure 1: Share of Agricultural Production, by Commodity, in Nadowli, 2014 - 2015



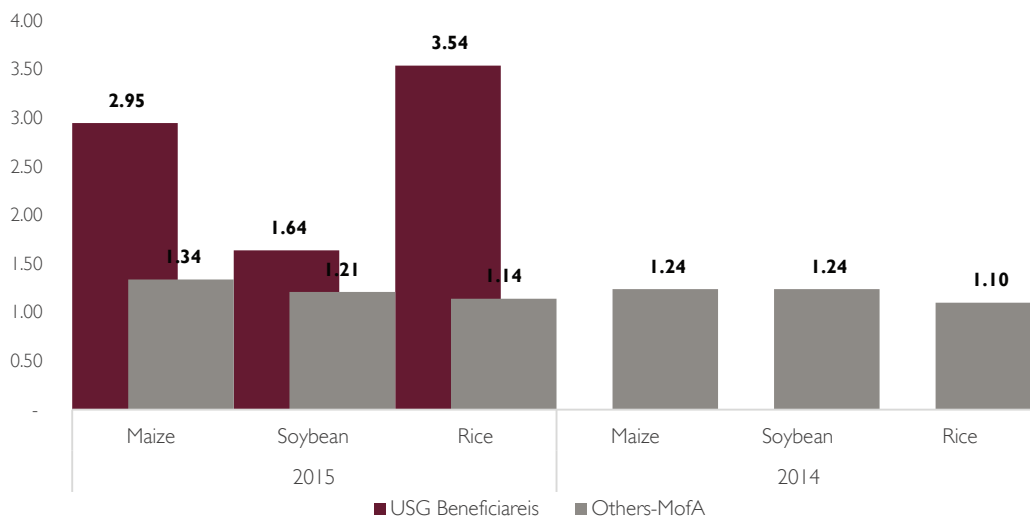
Source: Agriculture Production Reports 2011 - 2015, MOFA

Figure 2: Average Gross Margin* in Nadowli by Commodity, USG Beneficiaries, 201 - 2015, USD/ha3



Source: Agriculture Project Reporting 2015, Agriculture Production Survey, 2013, Kansas State University

Figure 3: Average Yields by Commodity in Nadowli, USG Beneficiaries and district's average, 2013 - 2015, MT/ha



Source: Agriculture Production Reports 2011 - 2015, MOFA, APS 2013, USAID Project reporting 2015

All data and information including full citations can be accessed at www.ghanalinks.org

This section contains agricultural data for Nadowli including production by commodity (MT/ha), yields (MT/ha) and average land size.

Table 2: Agricultural Production and Yields by commodity in MT and MT/ha, 2014-2015, Nadowli—Kaleo

Commodity	2015	2014	Total
Cowpea	31,004	30,096	61,100
Groundnut	27,209	26,625	53,834
Maize	15,125	13,950	29,075
Millet	7,213	7,220	14,433
Rice	377	364	741
Sorghum	14,928	17,195	32,123
Soybean	1,135	1,178	2,313
Yam	132,406	125,045	257,451
Yields in MT/Ha	2015	2014	
Cowpea	1.18	1.15	
Groundnut	0.94	0.92	
Maize	1.34	1.24	
Millet	0.95	0.95	
Rice	1.14	1.10	
Sorghum	0.76	0.88	
Soybean	1.21	1.24	
Yam	23.56	22.25	

Source: Agriculture Production Reports 2012- 2015, MOFA

Table 2 above provides detailed information on specific commodities in respect of the overall annual production in Nadowli as well as average yields for the years 2014-2015.

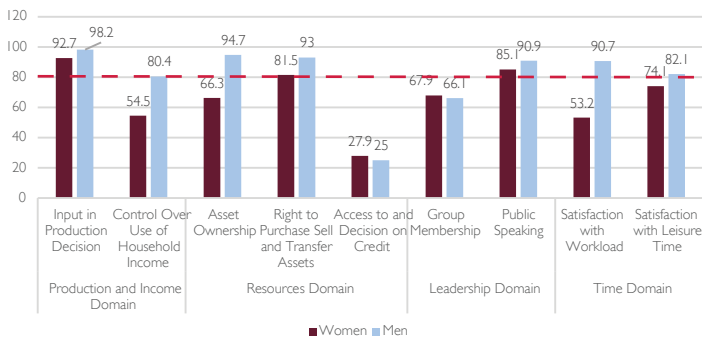
What is the Women Empowerment in Agriculture Index?

Women play a prominent role in agriculture. Yet they face persistent economic and social constraints. Women’s empowerment is a main focus of Feed the Future in order to achieve its objectives of inclusive agriculture sector growth and improved nutritional status. The WEAI is comprised of two weighted sub-indexes: Domains Empowerment Index (5DE) and Gender Parity Index (GPI). The 5DE examines the five domains of empowerment: production, resources, income, leadership and time. The GPI compares the empowerment of women to the empowerment of their male counterpart in the household. This section presents the results from these empowerment indicators of the 5DE for Nadowli, part of a bigger survey conducted by Kansas State University.

The Domains: what do they represent?

The *Production domain* assesses the ability of individuals to provide input and autonomously make decisions about agricultural production. The *Resources domain* reflects individuals’ control over and access to productive resources. The *Income domain* monitors individuals’ ability to direct the financial resources derived from agricultural production or other sources. The *Leadership domain* reflects individuals’ social capital and comfort speaking in public within their community. The *Time domain* reflects individuals’ workload and satisfaction with leisure time.

Figure 4: Results of Domains of Empowerment from WEAI 2015, in percent, Nadowli, 2015



Source: PBS 2015, Kansas State University

Adequacy & Differences

Highest differences between male and female respondents are observed within production domain: the control over use of household income and resources domain: asset ownership.

Adequacy: Together, men and women achieve adequacy in all indicators but access to and decision on credit and group membership. In addition men achieve adequacy in control over use of household income, asset ownership, satisfaction with workload and leisure time, while women do not.

Nadowli Results

The results of both male and female respondents on the four domains are displayed in Figure 4.

Production Domain: women feel comfortable with providing input related to production decisions as indicated by 92.7% of the women of the survey sample. However, they have much less control over the use of household income than men— 54.5% of women vs 80.4% of male respondents. Nadowli accounts for the highest percentage of women that provide input to production decisions in the Upper West Region.

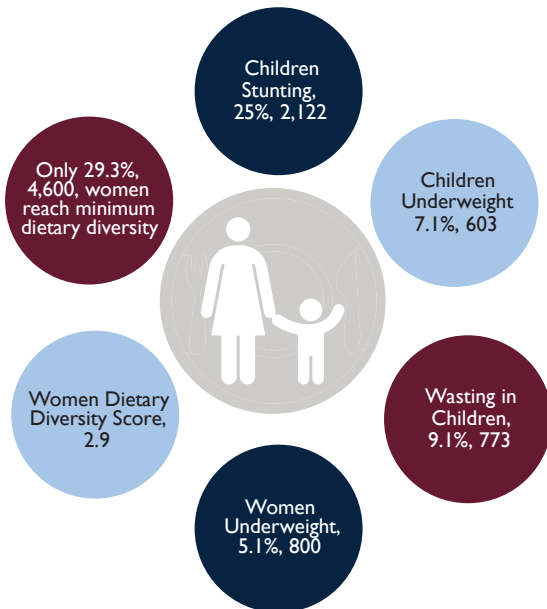
Resource Domain: A majority of the women have a right to asset ownership and the right to purchase and move assets— 66.3% and 81.5% respectively. These figures are lower than that of the male respondents. Only 27.9% of the women have the right to decide or have access to credit, compared to 25% of the male respondents. Nonetheless, Access to credit is almost equally low for both genders.

Leadership Domain: 67.9% and 85.1% of the women interviewed have a right to group membership and public speaking respectively.

Time Domain: A thin majority of the women in Nadowli are satisfied with the workload in their everyday life; 53.2% of women as compared to 90.7% of men. The values increase with respect to satisfaction with leisure time; 74.1% of women and 82.1% of men are satisfied with the amount of leisure time at their disposal.

This section contains facts and figures related to Health, Nutrition and Sanitation in Nadowli

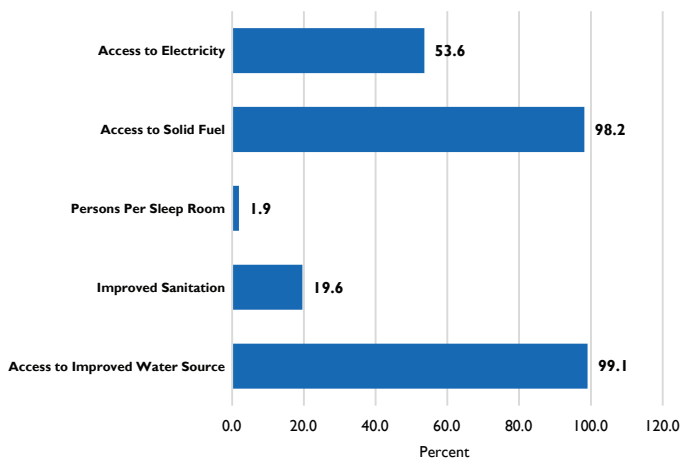
Infograph 3: Health and Nutrition Figures, Nadowli, 2015



Source: PBS 2015, Kansas State University, 2015

Infograph 3 focuses on the health and nutrition of women and children in the district. Percentages and absolute numbers are revealed in the respective circles for stunting, wasting, children and women underweight as well as Women Dietary Diversity: The WDDS is based on nine food groups. A woman's score is based on the sum of different food groups consumed in the 24 hours prior to the interview. Women Minimum Dietary Diversity (MDD-W) represents the proportion of women consuming a minimum of five food groups out of the possible ten food groups based on their dietary intake. The Dietary diversity score of women in Nadowli is 2.9, which means that women consume on average 2 to 3 types of foods out of 10. This is the lowest value registered in a district in the Upper West Region. Less than one third of women (only 29.3%) reach the minimum dietary diversity of 5 food groups. Nadowli-Kaelo accounts for the highest rate of stunting and the lowest rate of children and women underweight in the Upper West Region.

Figure 5: Household dwelling Characteristics, Nadowli, 2015



Source: PBS 2015, Kansas State University, 2015,

Figure 5 displays specifics of household dwelling, evaluated based on the sources of water, energy, waste disposal, cooking fuel source, and the number of people per sleep room as measured from the PBS Survey, 2015.

This section provides an analysis of USAID presence vis-a-vis impact indicators in Nadowli

Presence vs. Impact reveals in more detail the presence of the Feed the Future Implementing Partners in the field, in combination with impact indicators measured by the Population Based Survey in 2012 and 2015: per capita expenditure & prevalence of poverty. This combination aims to show relevance of the presence of key indicators measuring progress/regress in the area. The following graphs are a print screen of the Presence vs. Impact Dashboard focusing on Nadowli. Both key impact indicators, 'prevalence of poverty' and 'per capita expenditure', have improved. See Figure 6 and 8.

In 2015, poverty decreased by 33.0 percentage points to 29.8% compared to 2012, leaving the population of the poor at 19,959 persons. In addition, the 2015 per capita expenditure increased by 24.2 percent to 3.28 USD. This is accompanied by an average USAID presence score of 1 out of 4. Therefore, the district is flagged YELLOW (low project presence and intervention combined with improving impact indicators).

Nadowli is a district in which things are going well, mostly on their own. The USAID project intervention on the ground is below average. That said, the GOG or other donors interventions were not captured in the calculation. Efforts should be focused in keeping or improving the development pace, which can be supported by increased and customized interventions from USAID projects on the ground.

USAID District Presence Score

- 0** NO USAID DISTRICT PRESENCE
- 0.1 - 1** LOW USAID DISTRICT PRESENCE
- 1.1 - 1.9** BELOW AVERAGE USAID DISTRICT PRESENCE
- 2** AVERAGE USAID DISTRICT PRESENCE
- 2.1 - 3** ABOVE AVERAGE USAID DISTRICT PRESENCE
- 3.1 - 4** HIGH USAID DISTRICT PRESENCE

USAID District Presence Vs. Impact Flag

- BELOW AVERAGE USAID DISTRICT PRESENCE AND CONTRADICTIONING IMPACT INDICATORS
- ABOVE AVERAGE USAID DISTRICT PRESENCE AND CONTRADICTIONING IMPACT INDICATORS
- BELOW AVERAGE USAID DISTRICT PRESENCE AND REGRESSING IMPACT INDICATORS
- ABOVE AVERAGE USAID DISTRICT PRESENCE AND IMPROVING IMPACT INDICATORS
- BELOW AVERAGE USAID DISTRICT PRESENCE AND IMPROVING IMPACT INDICATORS
- ABOVE AVERAGE USAID DISTRICT PRESENCE AND REGRESSING IMPACT INDICATORS

Figure 6: Poverty in % and Poverty Change in percentage points, 2012,2015, Nadowli

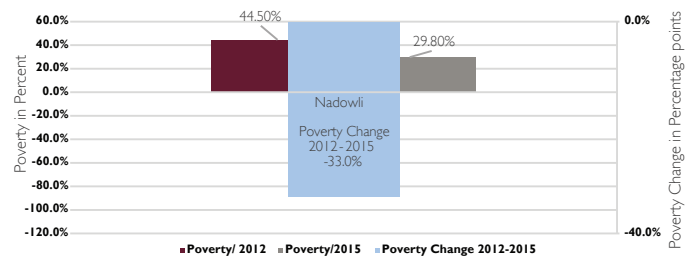


Figure 7: Population of Poor,-Non - Poor Nadowli, 2015

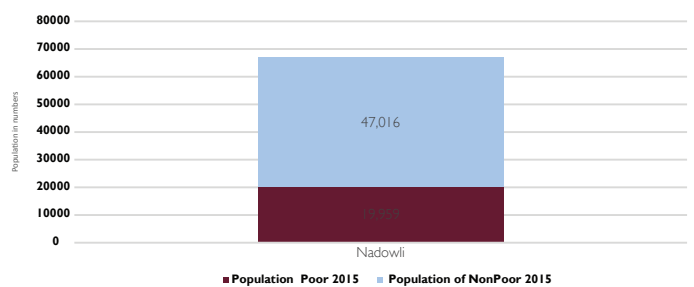
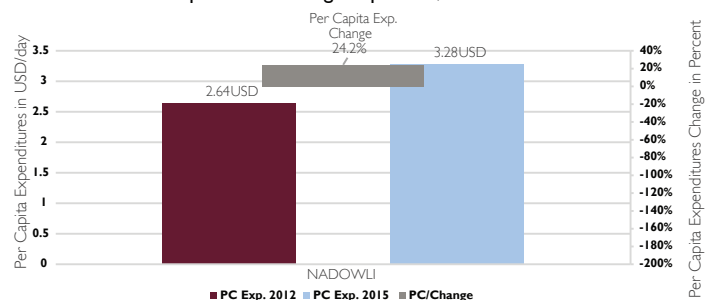


Figure 8: Per Capita Expenditure in 2012 and 2015, in USD/day; Per Capita Expenditure Change in percent, Nadowli

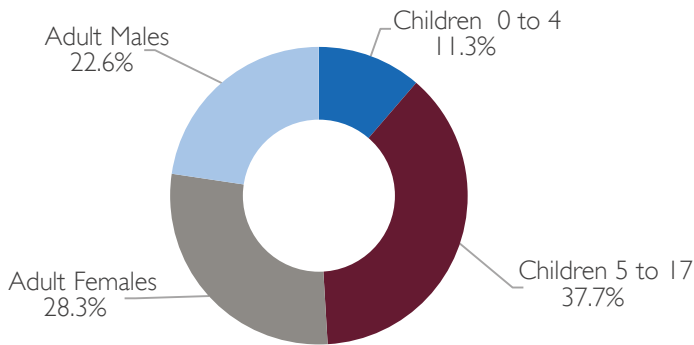


Source: Figure 6,7,8, Population based Survey, 2012,2015, Kansas State University, METSS, USAID Project Reporting 2014,2015

All data and information including full citations can be accessed at www.ghanalinks.org

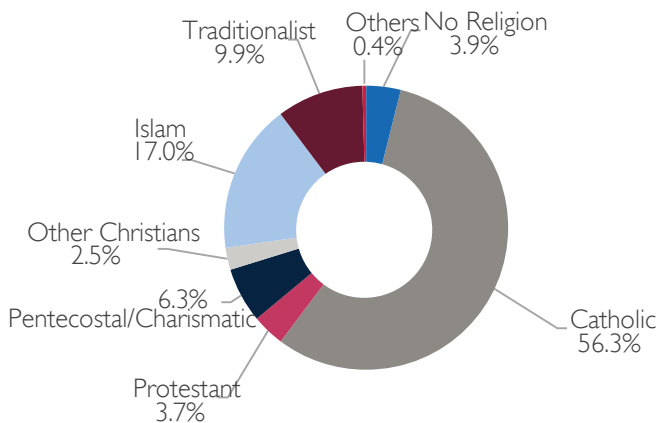
This section contains facts and figures related to Nadowli demographics, religious affiliation, literacy and weather indicators

Figure 9: Household composition by groupage, Nadowli, 2015



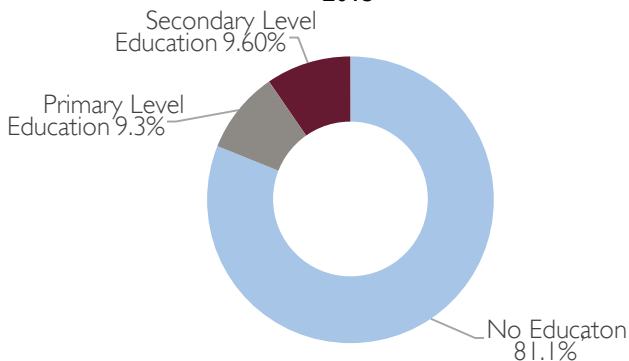
Source: PBS 2015, Kansas State University

Figure 10: Religious Affiliation, Nadowli 2010



Source: Tamale Metropolis Analytical Report, GSS, 2014

Figure 11: Education Attainment in Nadowli 2015



Source: PBS 2015, Kansas State University

Nadowli has a total land area of 1,132.02 square kilometers and a total population of 66,975, out of which 35,693 are females and 31,282 males. The average household size in the district is 5.3 persons.

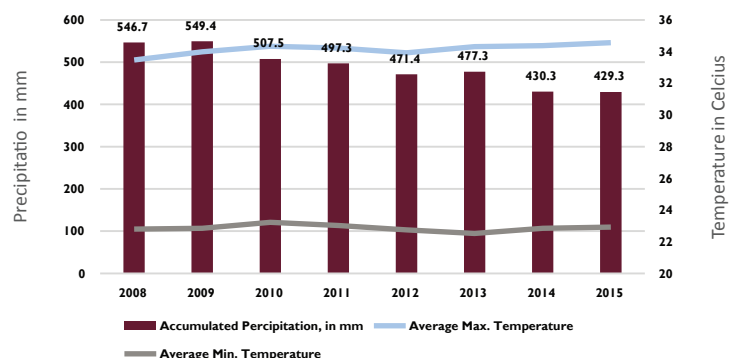
The District lies in the tropical continental climacteric zone. Average precipitation and temperature are similar to the other districts in the Upper West Region. Figure 12 shows the average maximal and minimal temperatures as well as yearly average precipitation.

Nadowli, like many other districts in the Upper West Region, has a relatively young population as shown in Figure 6, with more than 50% of the population falling in the age range: 0 to 17 years old. The female population is larger than the male population as a ratio in the household as shown in graph 9.

In terms of religious affiliation, the majority of the population are Christians (68.8%) followed by Muslims, representing 17% of the population and Traditionalist (9.9%). For more details refer to figure 10.

The district accounts for an adult illiteracy rate of 81.1%. Only 9.3% of adults went through primary school while 9.6% made it further to secondary school.

Figure 12: Average Accumulated Precipitation in mm and Average Temperature in Celcius, in Nadowli - Kaleo, 2008 2015



Source: awhere Weather Platform, AWhere, 2016

All data and information including full citations can be accessed at www.ghanalinks.org

This section contains discussion questions and potential research topics as a result of the data and analysis presented on Nadowli

QUESTION 1

Why does Nadowli have the highest value of stunting in children but the lowest value for children underweight and women underweight in the Upper West Region? The contradictory values are supported by the lowest Women dietary Diversity Score for the Upper West Region, 2.9. How do these data coexist?

QUESTION 2

Given Nadowli's agricultural production, health and sanitation figures, as well as results from the presence vs impact matrix, where should USAID development work focus on in the next two years? What future development assistance would be helpful for Nadowli to change the district flag from yellow to green?

QUESTION 3

What other agricultural or nutrition focused development partner or GoG interventions have previously been implemented, are ongoing, and/or are in the pipeline that may impact Nadowli's development?

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