



# KASSENA NANKANA WEST

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

## DISTRICT PROFILE CONTENT

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Kassena Nankana west is one of the districts in Ghana's Upper East Region. It has a total land area of 1,004 square kilometers and shares boundaries with Burkina Faso to the north, Bongo District to the north-east, Bolgatanga Municipal to the east, Kassena Nankana Municipal to the south, Balsa District south-west and Sissala East District to the west. The district has a total population of 76,504 out of which 37,617 are males and 38,887 females with an average household size of 5 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 39.6 %

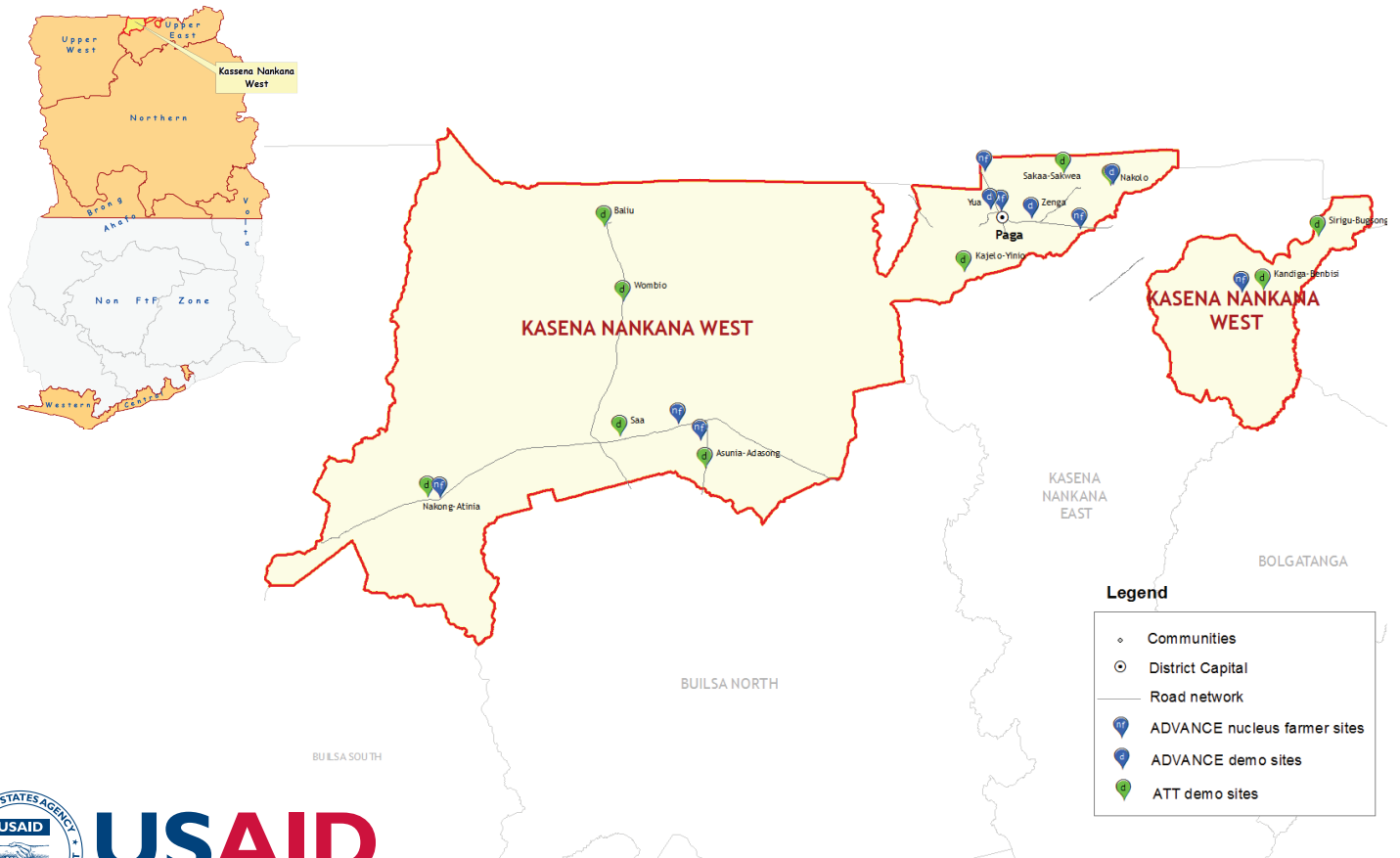
Households with moderate or severe hunger 51.1%

Poverty Depth 15.6%

Daily per capita expenditure 2.76 USD

Household Size 5 members

Total Population of the Poor 32,352



**Legend**

- o Communities
- ⊙ District Capital
- Road network
- 📍 ADVANCE nucleus farmer sites
- 📍 ADVANCE demo sites
- 📍 ATT demo sites



*This section contains data and information related to USAID sponsored interventions in Kassena Nankana West*

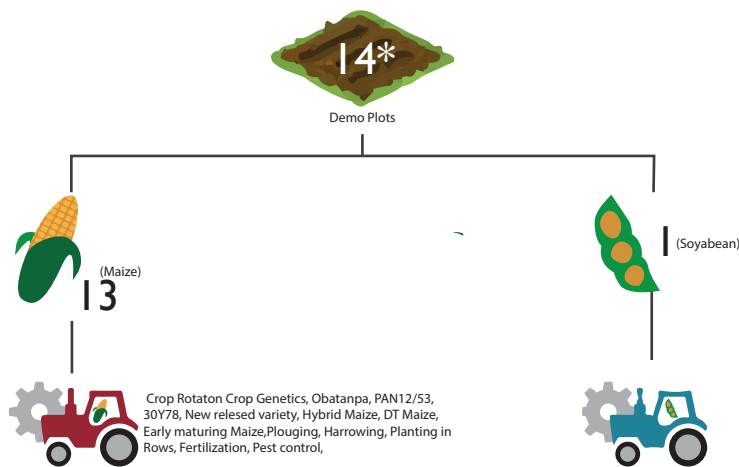
Table 1: USAID Projects Info, Kassena Nankana West, 2014-2016

Beneficiaries Data	2014	2015	2016
Direct Beneficiaries	1,517	2,703	4,899
Male	912	1,267	2,274
Female	586	1,436	2,625
Undefined	19		
Nucleus Farmers	4	7	n/a
Male	4	7	
Female			
Demoplots	3	11	n/a
Male	1	10	
Female	1		
Unknown	1	1	
Production			
Maize Gross Margin* USD/ha	n/a	721.4	n/a
Maize Yield* MT/ha	n/a	3.24	n/a
Rice Gross Margin *USD/ha	n/a	1,058.6	n/a
Rice Yield* MT/ha	n/a	3.98	n/a
Soybean Gross Margin* USD/ha	n/a	n/a	n/a
Soybean Yield* MT/ha	n/a	n/a	n/a
Investment and Impact			
Ag. Rural loans		10,070	29,727
USAID Projects Present			2
Beneficiaries Score	3	3	3
Presence Score 2014-2016			2.4
District Flag 2014-2016			Green

Source: USAID Project Reporting, 2014-2015

The number of direct USAID beneficiaries\*\* increased three fold in 2016 as compared to 2014 . Half of the direct beneficiaries in this district are women. Seven nucleus farmers are currently operating in the district and only 11 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 above average, represented by a decent number of beneficiaries, small number of demo plots and agricultural loans during 2014-2016. This resulted in a USAID presence score\*\*\* of (2.4 out of 4). In addition, the district is flagged GREEN\*\*\*\* indicating that while the project presence or intervention is above 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 Kassena Nankana West 2014-2015



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

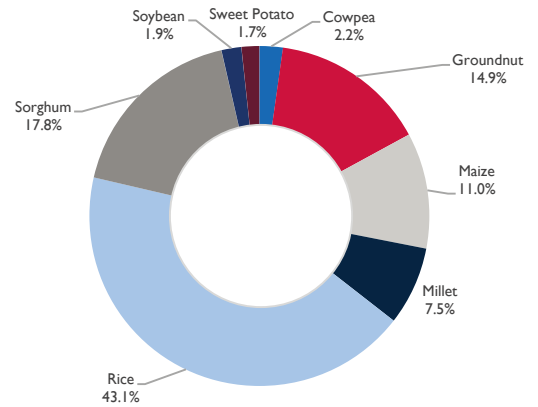
Source: USAID Project Reporting, 2014, 2015

\* Gross Margin & Yields data are the same as for Kassena Nankana East, Please note that the number of demoplots is smaller than the sum of separate plots by crop because crop rotation has been exercised in the same demo, \*\* "Direct Beneficiary, an individual who comes in direct contact with a set of interventions" FTF Handbook, 2016 , \*\*\* and \*\*\*\* Presence and Flag Ranges are explained in page 7

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

Agricultural production in Kassena Nankana West involves several commodities with rice constituting the highest share with 43.1% followed by sorghum, groundnut and maize. Kassena accounted for only 7.5% of the regional agricultural production in 2015.

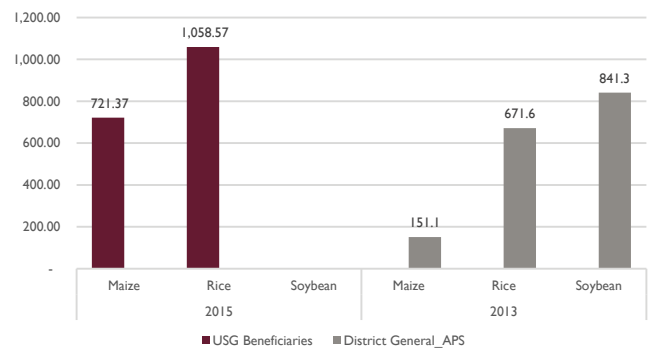
Figure 1: Share Of Agricultural Production By Commodity In Kassena-Nankana West, 2013-2015



Source: Agriculture Production Reports 2011- 2015, MOFA

Figure 2 contains gross margins for three commodities supported by USAID intervention in 2015 as well as the district average captured by APS in 2013. The gross margins of beneficiaries for the selected commodities are higher than the district average value in 2013.

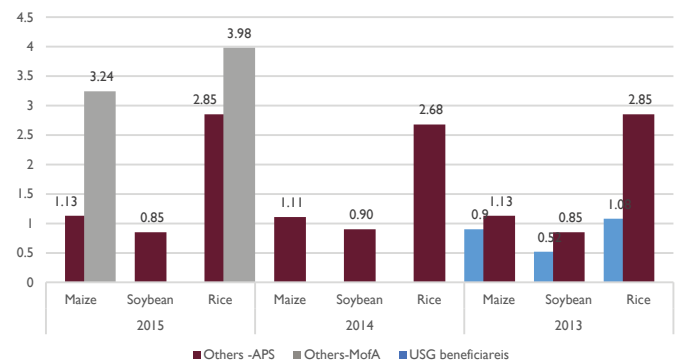
Figure 2: Gross Margins of USG Beneficiaries and district's average, USD/ha, 2013 & 2015



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

Yield data, presented in Figure 3, contain values of yields of these three commodities in 2015, 2014 and 2013 from three sources: USAID beneficiaries, MOFA and Agriculture Production Survey. The figure captures the problem in productivity of rice of the direct beneficiaries in 2015 as their yields are lower than MOFA district average for the same year.

Figure 3: Yields Of Usg Beneficiaries And Districts Average, In MT/ha, 2013-2015



Source: Agriculture Project Reporting 2015, Agriculture Report 2014, MOFA, Agriculture Production Survey, 2013, Kansas State University



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

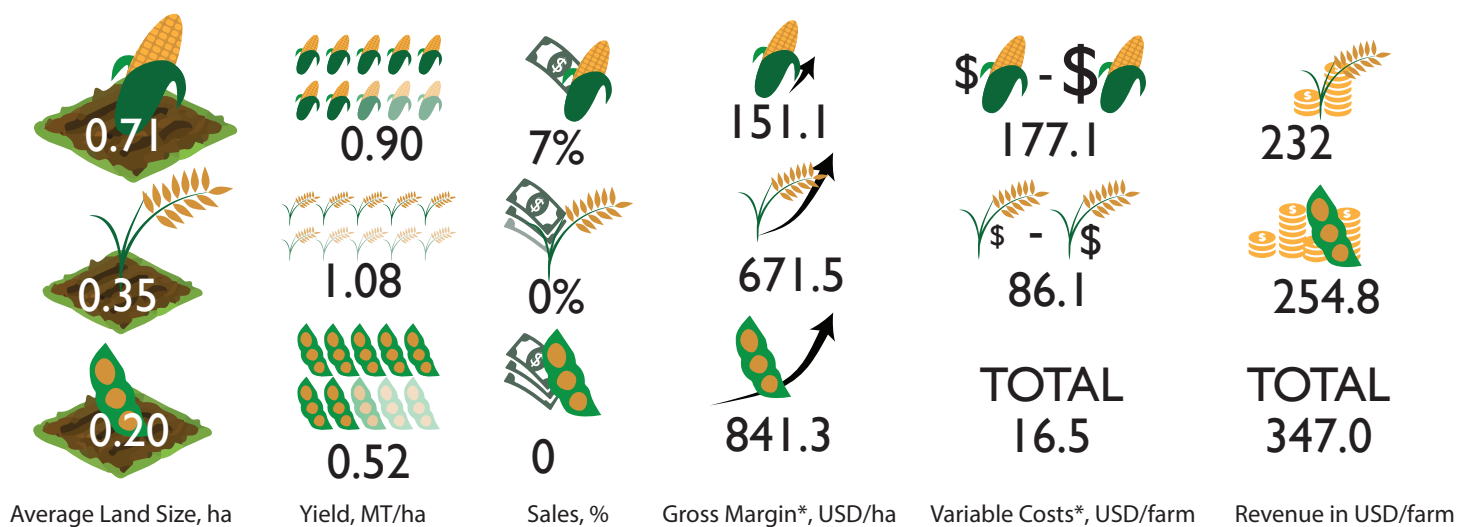
Table 2: Agricultural Production and Yields by commodity in MT and MT/ha, 2013-2015, Kassena Nankana West

Commodity	2015	2014	2013	Total
Cowpea	346	352	313	1,011
Groundnut	2,186	2,428	2,149	6,763
Maize	1,755	1,723	1,530	5,007
Millet	1,107	1,104	1,190	3,401
Rice	7,315	6,609	5,697	19,620
Sorghum	2,400	2,645	3,038	8,083
Soybean	263	281	319	863
Sweet Potato		325	448	773
Yields in MT/Ha	2015	2014	2013	
Cowpea	0.69	0.70	0.60	
Groundnut	0.51	0.57	0.50	
Maize	1.13	1.11	1.00	
Millet	0.56	0.56	0.60	
Rice	2.85	2.68	2.79	
Sorghum	0.80	0.89	0.90	
Soybean	0.85	0.90	0.95	
Sweet Potato		6.50	8.00	

Source: Agriculture Report 2011, 2012, 2013, 2014, MOFA

Table 2 above provides detailed information on specific commodities in respect of the overall production output in Kassena Nankana West, as well as the average yields for the period 2010-2015. The infographic below shows a summary of agricultural statistics including average land size per farm, yields, variable costs per hectare and commodity, as well as farm revenue. Please note that Agriculture Production Survey 2016 is underway and this dataset will be re-viewed very soon.

Infographic 2: Average Land size, Yields, Sales and other Farm indicators in Kassena Nankana West, 2013



Source: Agriculture Production Survey, Kansas State University, 2013 \*Gross margin, variable cost and farm revenue captured from the APS in infographic 2 have been converted to USD using 2012 exchange rates (1.88 GHC to \$1 USD) to align with the 'farmer recall' survey methodology deployed.

All data and information including full citations can be accessed at [www.ghanalinks.org](http://www.ghanalinks.org)





## 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 Kassena Nankana West, 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.

## Kassena Nankana West Results

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

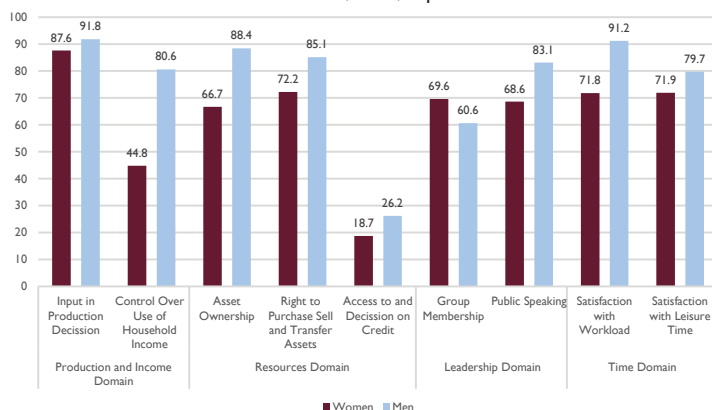
**Production Domain:** women feel comfortable with providing input related to production decisions as indicated by 87.6% of the women of the survey sample. However, they have much less control over the use of household income than men— 44.8% of women vs 80.6% of the male respondents.

**Resource Domain:** a majority of the women have a right to asset ownership and to purchase and move assets— 66.7% and 72.2% respectively. Only 18.7% of the women have the right to decide or have access to credit, compared to 26.2% of the male respondents. Nonetheless, access to credit is almost equally low for both genders.

**Leadership Domain:** 69.6% and 68.6% of the women interviewed have the right to group membership and public speaking respectively.

**Time Domain:** A majority of women and men in Kassena Nankana West are satisfied with the workload in their everyday life— 71.8% and 91.2% respectively. The values are more or less the same with respect to satisfaction with leisure time; 71.9% of women and 79.7% of men are satisfied with the amount of leisure time at their disposal.

Figure 4: Results of Domains of Empowerment of WEAI Index for Kassena Nankana West, 2015, in percent



### { Differences }

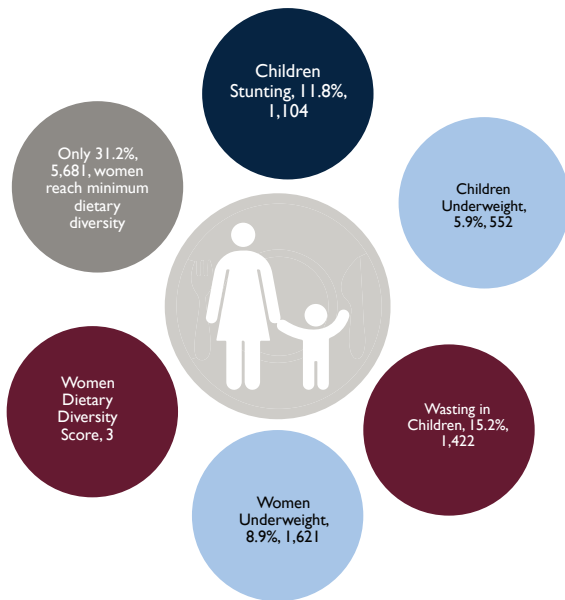
Highest differences between male and female respondents observed with production domain: the control over use of household income and resources domain: asset ownership

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



*This section contains facts and figures related to Health, Nutrition and Sanitation in Kassena Nankana West*

Infograph 3: Health and Nutrition Figures, Kassena Nankana West, 2015

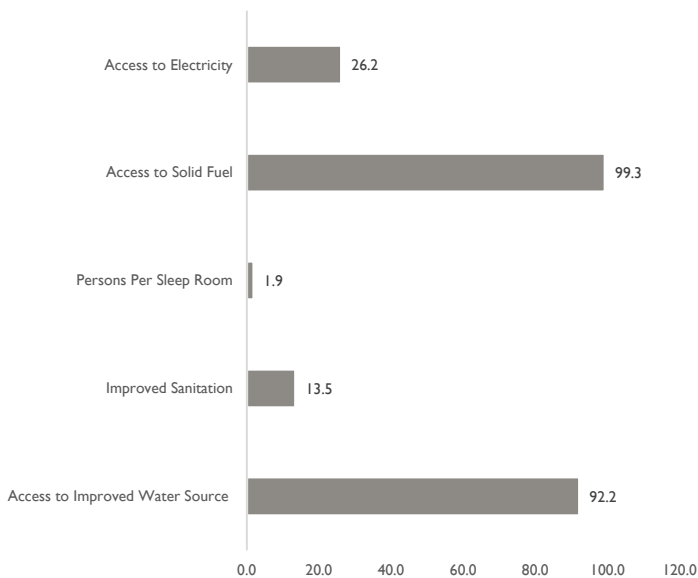


Sources: PBS 2015, Kansas State University, 2015

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 Kassena Nankana West is 4, which means that women consume on average 3 types of food out of 10. One third of women (31.2%) reach the minimum dietary diversity of 5 food groups. Kassena Nankana has the lowest rate of stunting in children and children underweight in the Upper East Region.

Figure 5: Household Dwelling Characteristics, Kassena Nankana West, 2015



Sources: PBS 2015, Kansas State University, 2015

Figure 5 displays specifics of household dwelling, evaluated based on sources of water, energy, waste disposal, cooking fuel source, and the number of people per sleep room as measured from the PBS Survey, 2015. Kassena Nankana has the lowest access to electricity in Upper East region.



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## PRESENCE VS. IMPACT MATRIX

This section provides an analysis of USAID presence vis-a-vis impact indicators in Kassena Nankana West

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 Kassena Nankana West. Both key impact indicators, 'prevalence of poverty' and 'per capita expenditure', have improved. See Figure 6 and 8. In 2015, poverty decreased by 26.3 percentage points to 39.6% compared to 2012, decreasing the population of the poor to 30,296 persons. In addition, the 2015 per capita expenditure increased by 56.8 percent to 2.76 USD. This is accompanied by an above average USAID presence score of 2.4 out of 4. Therefore, the district is flagged GREEN (satisfactory presence and improving impact indicators).

Kassena Nankana West is still the poorest district in Upper East, with the highest poverty rate and lowest per capita expenditure. However, it has shown clear signs of improvement during this period, accompanied by intervention from USAID. That said, the GOG or other donors interventions are not captured in the calculation. Efforts should thus focus on at least keeping the development pace and keeping the flag green.

### 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,Kassena Nankana West

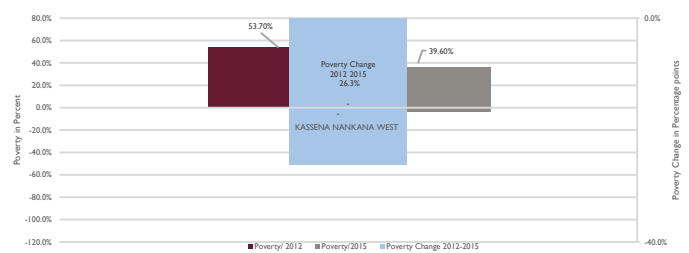


Figure 7: Population of Poor, Non-Poor Kassena Nankana West, 2015

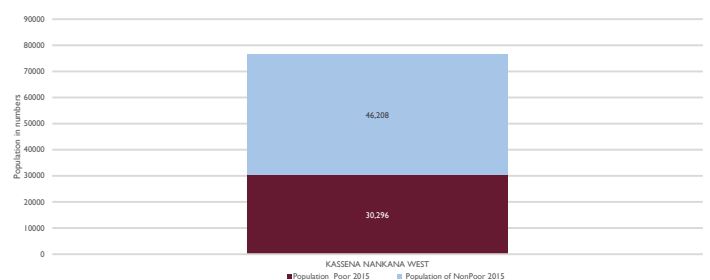
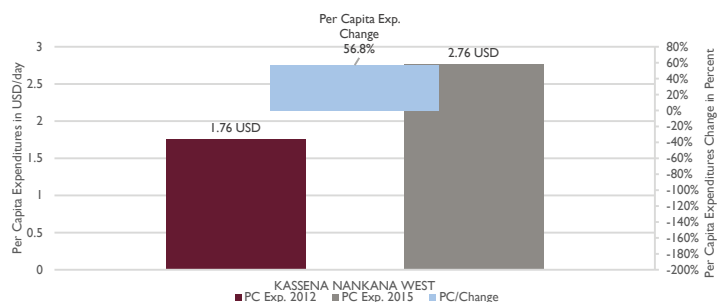


Figure 8: Per Capita Expenditure in 2012 and 2015, in USD/day; Per Capita Expenditure Change in percent, Kassena Nankana West



Source: Figure 9,10,11 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](http://www.ghanalinks.org)

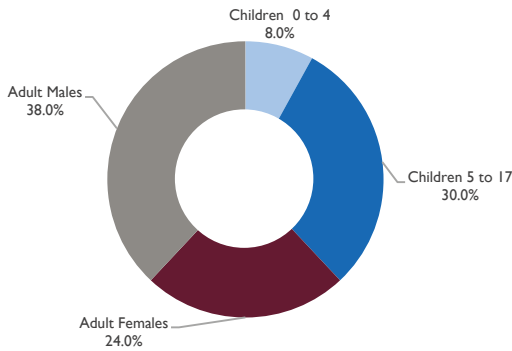


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**DEMOGRAPHICS & WEATHER**

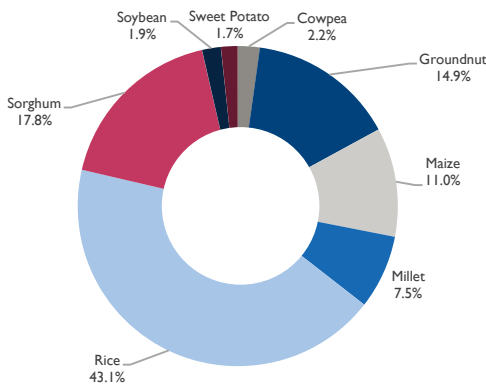
*This section contains facts and figures related to Kassena Nankana West demographics, religious affiliation, literacy and weather indicators*

Figure 9: Household Composition by groupage, Kassena Nankana West, 2015, in %



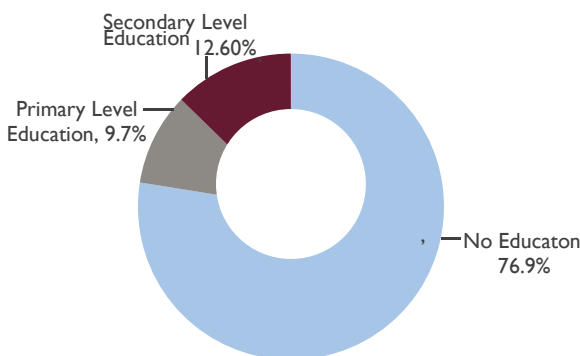
Source: PBS 2015, Kansas State University

Figure 10: Share Of Agricultural Production By commodity in Kassena-Nankana West, 2013-2015



Source: Kassena Nankana West District Analytical Report, GSS, 2014

Figure 11: Education Attainment in Kassena Nankana West, 2015, in %



Source: PBS 2015, Kansas State University

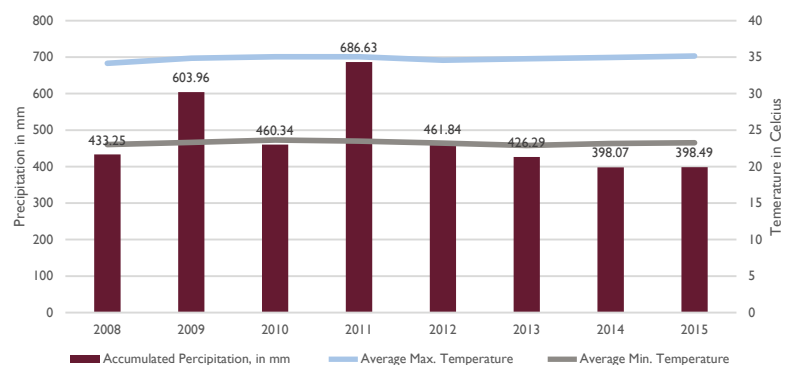
Kassena Nankana West has a total population of 76,504 out of which 37,617 are males and 38,887 are females with an average household size of 5 persons. The total surface area of the district is 1,004 square kilometers.

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

38% of the population in Kassena Nankana West fall in the age range: 0 to 17 years old. While adult males constitute 38% of the household, adult females make up 24%. For more details refer to figure 9.

In terms of religious affiliation, the majority of the population in the district are Christians (52.6%) followed by Traditionalists, who account for 30.5% of the population and Muslims (12.3%). For more details refer to figure 10. The district accounts for a high adult illiteracy rate with 76.9% of adults having received no education. 9.7% went through primary school only while 12.6% made it further to secondary school.

Figure 12: Average Precipitation in mm and Average Temperatures in Kassena Nankana West, 2008-2015



Source: *awhere Weather Platform, AWhere, 2016*

All data and information including full citations can be accessed at [www.ghanalinks.org](http://www.ghanalinks.org)



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## DISCUSSION QUESTIONS

*This section contains discussion questions and potential research topics as a result of the data and analysis presented on Kassena Nankana West*

### QUESTION 1

Given Kassena Nankana West'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 Kassena Nankana West to keep the district light green?

### QUESTION 2

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 Kassena Nankana West's development?

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