## GUSHIEGU

Feed the Future Ghana District Profile Series - February 2017(Revised Nov. 20I7) - Issue I

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Gushiegu is a district in Ghana's Northern Region.The District is located on the eastern corridor of the region and shares boundaries to the east with Saboba and Chereponi Districts, Karaga District to the west, east Mamprusi District to the north and Yendi Municipality and Mion District to the south.The total land area of the District is approximately $2,674.1$ square kilometers.The district has a total population of 124,656 , out of which 63,945 are females and 60,7 I I are males. The average household size in the district is 7.4 persons. The boxes below reveal the level of important development indicators measured by the Population Based Survey in 2015.



USAID PROJECT DATA

Table I: USAID Projects Info, Gushiegu, 2014-2016

| Beneficiaries Data | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: |
| Direct Beneficiaries | 1807 | 3,973 | 8,396 |
| Male | 976 | 1,726 | 3,138 |
| Female | 471 | 2,247 | 5,258 |
| Undefined | 360 | - | 0 |
| Nucleus Farmers | 15 | 17 | n/a |
| Male | 15 | 17 | n/a |
| Female | - |  |  |
| Undefined |  |  |  |
| Demoplots | 8 | 20 | n/a |
| Male | 7 | 9 |  |
| Female |  |  |  |
| Undefined | I | 11 |  |
| Production |  |  |  |
| Maize Gross Margin USD/ha | n/a | 712.84 | n/a |
| Maize Yield MT/ha | n/a | 3.56 | n/a |
| Rice Gross Margin USD/ha | n/a | n/a | n/a |
| Rice Yield MT/ha | n/a | n/a | n/a |
| Soybean Gross Margin USD/ha | n/a | 578.3 | n/a |
| Soybean Yield MT/ha | n/a | 1.68 | n/a |
| Investment and Impact |  |  |  |
| Ag. Rural loans* | 17,652 | - | 1,744 |
| USAID Projects Present |  |  | 6 |
| Beneficiaries Score | 2 | I | 2 |
| Presence Score 2014-2016 |  |  | 1.4 |
| District Flag 2014-2016 |  |  | Yellow |

Source:: USAID Project Reporting, 2014-2016
Infographic I: Demo Plots in Gushiegu, 2014-2015


A decent number of beneficiaries** were reported in 2014 in Gushiegu and the number doubled in 2015 and again in 2016. This was accompanied by a decent number of nucleus farmers and demonstration plots, established to support beneficiary training. There were no agricultural loans distributed in 2014 and 2016 and the value in 2015 was also low. Due to the several interventions, the presence score** for USAID development work is $I .4$ out of 4 , which means that the intervention in Gushiegu is above average when compared to other districts. When the presence score is combined with progress/regress of impact indicators, the district is flagged Yellow*** indicating that the impact indicators values (poverty prevalence and per capita expenditure) in overall have improved in an area where intervention is satisfactory. However, one of the progress indicators has stagnated (+-5\% change). Find more details on USAID Presence v. Impact scoring and on page 8.


Source: USAID Project Reporting, 2014, 2015

[^0]
## AGRICULTURAL DATA

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

Cassava and Yam are the most commonly produced commodities in Gushiegu, accounting for $67 \%$ of agricultural production during 2010-2015. Other commodities produced during this period include soybean (6\%), maize (6\%), and other commodities as shown in Figure I. In terms of agricultural production, Gushiegu is one of the districts that accounts for a low share of overall agricultural production in the Northern Region with only 3\% share.
The average gross margin calculations from USAID project reporting (2015) for maize, rice and soybean are higher than gross margins from the Agriculture Production Survey (K-State, APS 2013).
Figure 3 contains yield values from three (3) sources: USAID projects, MOFA and APS for the period 2013-2015 for three commodities: maize, rice and soybean. Beneficiaries yields for maize rice and soybean were higher than the district averages reported by MOFA in 2015.
Figure 4 below focuses on sources of income in the district. It shows that the majority of households in Gushiegu rely on the agricultural sector: 87.7 of households cited the sale of crop produce as the main source of income followed by the sale of livestock at 29.5 percent.

Figure 4: Income Source in Gushiegu, 2015, in \%


Source: RING \& SPRING Survey, 2015 USAID METSS Project

Figure I: Share of Agricultural Production by Commodity in Gushiegu, 2010-2015


Source:Agriculture Production Reports 2010-2015, MOFA

Figure 2: Gross Margin by Commodity, USAID beneficareis and district average, 2013-2015, USD/ha


Source:Agriculture Report 2013-2015,Agriculture Production Survey, K-State, 2013

Figure 3: Yields of Maize, Rice and Soybean, beneficiaries and district general, MT/ha, 2013-2015


Source:Agriculture Report 2013-2015, MOFA Production Data 2013-2015, Agriculture Production Survey, K-State, 2013

## AGRICULTURAL DATA

This section contains agricultural data for Gushiegu 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 in Gushiegu, 2010-2015

| Commodity | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cassava | 55,865 | 52,824 | 49,916 | 68,627 | 62,100 | 53,995 | 343,327 |
| Cowpea | 3,818 | 3,706 | 4,124 | 5,075 | 5,075 | 4,320 | 26,118 |
| Groundnut | 7,438 | 7,457 | 6,996 | 9,545 | 8,342 | 9,240 | 49,018 |
| Maize | 7,253 | 6,777 | 6,577 | 9,356 | 7,978 | 9,114 | 47,055 |
| Millet | 2,486 | 2,414 | 2,095 | 3,461 | 3,645 | 4,896 | 1,899 |
| Rice | 5,099 | 4,727 | 5,283 | 6,894 | 7,062 | 6,900 | 35,965 |
| Sorghum | 3,661 | 4,150 | 3,733 | 5,148 | 5,354 | 5,273 | 24,024 |
| Soybean | 7,586 | 7,236 | 7,577 | 9,322 | 9,963 | 7,273 | 48,957 |
| Yam | 25,581 | 24,824 | 20,365 | 33,334 | 28,683 | 24,363 | 157,150 |
| Yields in MT/Ha | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 |  |
| Cassava | 15.20 | 14.20 | 14.46 | 13.80 | 13.80 | 12.53 |  |
| Cowpea | 1.30 | 1.26 | 1.54 | 1.79 | 1.83 | 1.63 |  |
| Groundnut | 1.49 | 1.50 | 1.32 | 1.69 | 1.72 | 2.00 |  |
| Maize | 1.91 | 1.35 | 1.23 | 1.54 | 1.32 | 1.78 |  |
| Millet | 1.03 | 1.00 | 0.89 | 1.20 | 1.35 | 1.80 |  |
| Rice | 1.86 | 1.76 | 1.98 | 2.57 | 2.67 | 3.00 |  |
| Sorghum | 1.23 | 1.40 | 1.36 | 1.79 | 1.84 | 1.85 |  |
| Soybean | 1.37 | 1.30 | 1.56 | 1.87 | 1.96 | 1.86 |  |
| Yam | 11.92 | 11.60 | 10.27 | 8.60 | 9.10 | 8.67 |  |

Source:Agricultre Report 2010, 2011, 2012, 2013, 2014, 2014 MOFA
Table 2 above provides detailed information on specific commodities in regard to overall production in Gushiegu as well as average yields for the years 20I0-20I5. The infographic below shows a summary of agricultural statistics for Gushiegu.

Infographic 2:Average Land size, Yields, Sales and other Farm indicators in Gushiegu, 2013


[^1]All data and information including full citations can be accessed at 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 index is a summation of the level of achievement in ten indicators grouped into five domains: 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 Gushiegu, 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 5: Gushiegu Results on Domains of Empowerment of WEAI 2015, by gender, in \%


Source: PBS 2015, Kansas State University

## Gushiegu WEAI Results

The results of both male and female respondents on the four(4) domains are displayed in Figure 5.
Production Domain: The majority of women feel comfortable with providing input related to production decisions, as indicated by $93.3 \%$ of the women of the survey sample. However, women have much less control over the use of household income than men- $27.3 \%$ of women versus $92.1 \%$ of male respondents.
Resource Domain: a thin majority of the women have a right to asset ownership but a large majority can purchase and move assets, $63.1 \%$ versus $94.3 \%$. Both figures are lower than the figures of the male respondents. Only $10.4 \%$ of women have the right to decide or have access to credit, followed by II.4\% of the male respondents.

Leadership Domain: a thin majority representing only $57.8 \%$ of women of the sample have the right to group membership as opposed to $68.2 \%$ of men while only $55.6 \%$ of the women get involved in public speaking as opposed to $97.7 \%$ of the male respondents.
Time Domain: $49.5 \%$ of the women and $80.4 \%$ of men in Gushiegu are satisfied with the workload in their everyday life. The percentage score is slightly higher with respect to satisfaction with leisure time; $65.5 \%$ of the women and $82.8 \%$ of the men interviewed are happy with this aspect.


Together men and women obtained an adequacy score ( $80 \%$ and above) in all indicators except for resources domain: access and decision on credit, leadership domain: group membership. In addition to that adequacy was not achieved only by women in control over use of household income, asset ownership, public speaking, satisfaction with workload and with leisure time.
The highest difference between male and female respondents was observed with the production domain: the control over use of household income and in the resource domain: asset ownership.

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

Infograph 3: Health and Nutrition Figures, Gushiegu, 2015


Sources: * from PBS 2015, Kansas State University, ** from RING \& SPRING Survey, 2015,

Figure 6: Household Dwelling Characteristics, Gushiegu, 2015


Figure 7: Types of Improved Water Source, Gushiegu, 2015, in \%


Infograph 3 focuses on health and nutrition of women and children in the district. Percentages and absolute numbers are revealed in the respective circles for stunting, wasting in children, women and children underweight, Women Dietary Diversity and some other indicators. The Dietary diversity score of women in Gushiegu is 4.2, which represents one of the highest values in the Northern Region. This means that women consume on average 4 to 5 types of foods out of IO. More than half of the women ( $62.2 \%$ ) reach the minimum dietary diversity of 5 food groups. This value is again one of the highest in the Northern Region. However, the value for stunting in children is quite high in relation to other districts in the Northern Region.
Figure 6 displays specifics of household dwelling, evaluated based on sources of water, energy, waste disposal, cooking fuel source, and number of people per sleep room as measured from the PBS Survey 2015.As the figure shows, access to sanitation facilities is the lowest in the Northern Region.Access to improved water source is also low. For more details refer to Figure 6.
Figure 7 and 8 provide details on the types of improved water source and sanitation used as measured by the RING \& SPRING Survey in 2015.

Figure 8: Types of improved sanitation, Gushiegu, 2015, in \%


Sources: Figure 6:from PBS 2015, Kansas State University, Figure 7,8 from RING \& SPRING Survey, 2015,
All data and information including full citations can be accessed at www.ghanalinks.org

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 Gushiegu. One of the key impact indicators, 'prevalence of poverty' has improved while the other 'per capita expenditure', has stagnated, as observed in Figures 9 and II.
In 2015 poverty decreased by 34.4 percentage points to $16.6 \%$ compared to the 2012 value corresponding with 20,693 poor people in the district. In addition, the 2015 per capita expenditure stagnated, decreasing by 5 percent to 3.07 USD.The decrease is so low (+- $5 \%$ change) which is more considered a stagnation. Because the decrease in poverty is much higher than the stagnation of per capita expenditure, the first indicator gives the tone to the overall, meaning that situation in this district has improved since 2012 . This development is accompanied by a satisfactory USAID presence, scored with 3.2 points out of 4 . This combination signifies characteristics of a light GREEN district, one that accounts for progress of impact indicators and good project presence on the ground. We say light green because the progress is not fully supported by both impact indicators as one has stagnated and the arrow sign will be confirmed by the next survey. Based on this, the situation should be observed carefully to confirm that the area is progressing and also to identify ways of accelerating the impact from the intervention.

## 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 CONTRADICTING IMPACT INDICATORS
$\checkmark$ ABOVE AVERAGE USAID DISTRICT PRESENCE AND CONTRADICTING 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
$\square$ ABOVE AVERAGE USAID DISTRICT PRESENCE AND REGRESSING IMPACT INDICATORS

Figure 9: Poverty in \% and Poverty Change in percentage points, 2012,2015, Gushiegu


Figure IO: Population of Poor, Non - Poor Gushiegu, 2015


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


Source: Figure 9, I0,II, 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

## DEMOGRAPHICS \& WEATHER

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

Figure 12: Household Composition by groupage, Gushiegu, 2015


Source: PBS 2015, Kansas State University

Figure 13: Religious Affiliation, Gushiegu 2010


Source: Gushiegu District Analytical Report, GSS, 2014

Figure 14: Adult Education Attainment in Gushiegu, 2015


Figure 15: Average Cumulated Precipitation in mm and Temperature in Celcius Degree,Gushiegu, 2008-2015


Source: awhere Weather Platform, AWhere, 2016

Source: PBS 2015, Kansas State University
All data and information including full citations can be accessed at www.ghanalinks.org

## DISCUSSION QUESTIONS

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

## QUESTION I

Why has per capita expenditure stagnated in Gushiegu while poverty has decreased? Is there a story behind this fact and how has intervention affected this outcome?

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

## QUESTION 3

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

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[^0]:    * Number of demo plots by commodity does not fit with the total because of crop rotation **"Direct Beneficiary, an individual who comes in direct contact with a set of interventions" FTF Handbook, 2016, ***and****See page 7 for more detail on presence score ranges and district flag ranges.

[^1]:    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 \$I USD) to align with the 'farmer recall' survey methodology deployed.

