Journal of Agricultural Extension Vol. 20 (2) December, 2016 ISSN(e): 24086851; ISSN(Print); 1119944X http://journal.aesonnigeria.org http://www.ajol.info/index.php/jae Email: editorinchief@aesonnigeria.org

#### Attitude of Women Cassava Farmers Towards Participation in Growth Enhancement Support Scheme in Oyo state, Nigeria

http://dx.doi.org/10.4314/jae.v20i2.7

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#### Abstract

The study examined attitude of women cassava farmers towards the Growth Enhancement Support Scheme (GESS) in Oyo state. Three LGAs were purposively selected while random sampling was used to select 4 communities in each LGA with five respondents each using snowball method to give sample size of 180 respondents. Interview schedule was used for data collection and analysed using descriptive and inferential statistics. Results reveal that most of the respondents (67.8%) were within 31-50 years of age, married (90.0%), literate (57.8%) with open market ( $\bar{x}$ =1.98) and middlemen  $(\overline{x}=1.78)$  being the preferred sources of inputs. More than half (52.7%) had over ten years of farming experience, 52.3% cultivated above 6 acres, 68.3% had high level of participation in GESS while 63.3 had favourable attitude towards GESS. Inadequate finance ( $\overline{x}$ =1.94) and high illiteracy ( $\overline{x}$ =1.93 were the constraints to participation. Significant relationship exists between education ( $\chi^2=2.315$ , p=0.040), level of participation (r=0.258, p= 0.000), sources of input (r=0.223, p= 0.003), constraint to participation (r=0.424, p=0.000) and attitude towards GESS. Though, many respondents were unable to access agricultural inputs from redemption centers yet they had favourable attitude towards GESS. Proper inputs distribution mechanism to eliminate diversion and financial institution with minimum interest rate and collateral should be employed.

Keywords: Growth enhancement support scheme, women cassava farmers, participation

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#### Introduction

Agriculture is an important sector of the economy with high potentials for employment generation, food security and poverty reduction. It is argued that women account for 70 – 80% of household food production in sub-Sahara Africa. Women farmers grow more than half of all the food in developing countries and up to 80% in parts of Africa, generally in the form of small-scale crops for household consumption (Obiora, 2013). In the agricultural sector of the country, women play a vital role from direct production to value addition (in terms of processing and storage) and in marketing of agricultural produce (Ogbonna and Okoroafor, 2004). Agriculture has not fulfilled its potential, suffering from a lack of investment to insufficient attention by policy makers. One of the key hindrances to agricultural development as noted by World Bank (2014) is the wide and pervasive gender gap in agricultural productivity. Food development programmes are often focused in the designing of effective packages for the production of surpluses in agriculture without any particular focus on the women, (Ogbonna and Okoroafor, 2004); hence, the need to restructure the sector to achieve its potentials.

In the bid to achieve the above goal, the Federal Government of Nigeria initiated the Agricultural Transformation Agenda (ATA) in 2011 to boost local food production thereby unlocking the country's huge agricultural potentials. The government sees its agriculture transformation agenda (ATA) as a critical tool for driving rural income growth, accelerating the achievement of food and nutritional security, generating employment, and transforming the country into a leading player in global food markets (Porter, Raewyn, Zouighian and Daine, 2014). The ATA sets out to create over 3.5 million jobs along the value chains of the priority crops such as rice, sorghum, cassava, horticulture, cotton, cocoa, oil palm, etc. for Nigeria's teeming youths and women, in particular (Feeral Ministry of Agriculture and Rural development (Federal Ministry of Agriculture and Rural Development, (FMARD) 2013).

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Cassava is one of the priority crops promoted by ATA of which Nigeria happens to be the World largest producer and has the most advanced cassava transformation in Africa. Literature has it that cassava is cultivated by over 30 million farmers in the country, with an estimate produce of about 37.5 million tonnes harvested in 2010 (FAO 2012). Cassava is considered a God-given crop against acute food insecurity (Koyenikan and Edeoghon, 2010) and tolerant to low soil fertility, drought, most pests and diseases with no critical date of harvest and can thrive on marginal soils where other crops fail.

The ATA was designed to cover all farmers throughout the federation among which are women farmers, with 60% of all agricultural funding set aside for women farmers. This bias towards women farmers is encouraging since they typically have lower output per unit land and are much less likely to be active in commercial farming due to gender differences in access to resources and services. Among the components of ATA is the Growth Enhancement Support Scheme (GESS) - designed to enhance agricultural productivity through timely, efficient and effective delivery of yieldincreasing farm inputs such as improved seeds and fertilizers. ATA is known as Greenhouse in Oyo state. Women cassava farmers are directly under the GESS programme.

Various researches conducted on the contribution of women to agricultural development in the country suggest that women's contribution to farm work is as high as between 60 and 90% of the total farm task performed. Despite their contributions, women are often excluded from certain occupational categories due to gender imbalance created by formal as well as informal barriers to entry. The formal barriers which continue to hinder the entry of women into such occupational categories include: lack of educational or technical training, labour laws and trading customs; while the informal barriers include: customs and religious practices, difficulties in combining domestic and labour market activities, and management and worker attitudes (Lawanson, 2008).

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Women rarely own land in Nigeria despite their heavy involvement in agriculture as land tenure system is largely by inheritance. This lack of title to land prevents women from exercising or improving their expertise in crop production and animal husbandry because of security of tenure. Also, the majority of them use low yielding and unimproved planting materials, primitive and labour intensive farm implements, and traditional farming practices which have adversely affected agricultural production. It has been reported that 80% of the work done on the farm in agricultural activities take place in rural areas. It is also widely demonstrated that rural women, as well as men, throughout the world are engaged in a range of productive activities essential to household welfare, agricultural productivity and economic growth. Yet women's substantial contribution continues to be under-valued in conventional agricultural and economic analyses and policies, while men's contribution remains the central, often, the sole focus of attention (Fabiyi, Danladi, Akande, and Mahmood, 2007).

Since the commencement of ATA, the attitude of women cassava farmers towards their participation in the Growth Enhancement Support Scheme has not been ascertained. The specific objectives were to:

- 1. describe the personal characteristics of women cassava farmers;
- identify the sources of information about GESS available to women cassava farmers;
- identify the sources through which women cassava farmers acquire their inputs;
- 4. determine the attitude of women cassava farmers towards GESS;
- 5. determine the level of participation of women cassava farmer in GESS; and
- 6. identify the constraints to participation of women cassava farmers in GESS.

#### Methodology

The study was carried out in Oyo state, one of the six states in Southwest, Nigeria. It is geographically located within Latitudes 5<sup>o</sup> 15N and 9<sup>o</sup> 10N, and Longitudes 2<sup>o</sup> 50E.

Food and Agricultural Organization (FAO), CABI and Scopus

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The state, which covers an area of approximately 32,241.8 square kilometers, is made up of thirty-three (33) local government areas with a population of 5.591,589 (National Population Commission, (NPC) 2006). The vegetation is dictated by the rainfall pattern of about 130mm to 150mm per annum, and ranges from rain forest to derived savannah. The climate is equatorial with notable dry and wet seasons with high relative humidity. The dry season is between November and March, while the wet season is between April and October. The target population of the study included women cassava farmers in the state. Multistage sampling was used to select respondents for the study. The first stage involved purposive selection of 3 LGAs from the 33 LGAs in the state based on their involvement in GESS. Simple random sampling was used to select 4 wards from the 10 wards in each selected LGA. Three communities were purposively selected from each of the 4 wards based on their involvement in cassava production. Snowball sampling technique was then used to select five respondents each from the selected communities to give a total of 180 respondents. Data was collected using interview schedules. Information and Input source were measured using always = 2, occasionally = 1 and never = 0. Mean for each source was computed and ranked based on the highest. Participation in GESS was measured with always = 2, occasionally = 1 and never = 0. Mean was generated from the responses and used to categorise respondents' level of participation into high and low. Constraints to participation in GESS was done using serious= 2, mild = 1 and not a constraint =0. Mean was also used to rank the constriants according to severity. Attitude towards GESS was measured using Likert type scale of strongly agree (A) = 5, agree (A) = 4, undecided (U) = 3, disagree (D) = 2, strongly disagree (SD) = 1 for positively- worded statements and vice versa for negatively-worded statements. Mean was computed from the aggregated scores and this formed the basis for classification of women cassava farmers' attitude into favourable and unfavourable

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# Results and Discussion Personal characteristics of respondents

ANTEX

The age distribution of the respondents showed that the majority (67.8%) fell within the age range of 31-50 years ( $\overline{x} = 42$  years). This tells one that the majority of the women cassava farmers falls in the middle age category and would be actively involved in farming activities aimed at improving their livelihood. People within this age range constitutes the active work force and tend to make vital impact in agricultural production, processing and technological development (Akinbile, 2007; Enitan, 2010). The majority (90.0%) of them were married, with 76.7% having household sizes of 4 - 6 individuals. Hence they engaged in agriculture in order to cater for family needs since marriage, confers responsibilities. Meanwhile, their family members can serve as a source of farm labour. It was revealed that 57.8% had one form of formal education or the other, which should translate to a better understanding or favourable attitude towards the use of the components of the GESS. Education is considered the stake for developing favourable attitude (Milton and Mullan, 2010). More than half (52.7%) of them had more than ten years of farming experience, which shows they have garnered an ample farming knowledge through experience and this can have influence on their attitude towards GESS.

94

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#### Journal of Agricultural Extension

Vol. 20 (2) December, 2016 ISSN(e): 24086851; ISSN(Print); 1119944X http://journal.aesonnigeria.org http://www.ajol.info/index.php/jae Email: editorinchief@aesonnigeria.org

Table 1: Distribution of	espondents by I	personal characteristics
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Variables	Percentage	Mean
Age		
21-30	14.4	42.1
31-40	38.9	
41-50	28.9	
51-60	14.4	
61-70	3.3	
Marital status		
Single	0.6	
Married	90.0	
Divorced	0.6	
Widowed	8.9	
Educational attainment		
No formal education	42.2	
Adult education	2.2	
Primary education	27.8	
Secondary education	26.1	
Tertiary education	1.7	
Household size		
1-3	8.9	5.4
4-6	76.7	
7-9	10.0	
10 and above	4.4	
Religion		
Christianity	50.6	
Islam	49.4	
Secondary occupation		
Trading	70.6	
Artisan	5.0	
Processing agric products	24.4	
Farming experience		
1-10	47.2	14.8
11-20	33.3	
21-30	13.3	
31-40	6.1	

Source: Field survey, 2015.

#### Sources of information

Friends ( $\overline{x} = 1.89$ ) and relatives ( $\overline{x} = 1.69$ ) ranked 1<sup>st</sup> and 3<sup>rd</sup> respectively on the order of preference for sourcing information by the cassava women farmers on GESS. This shows that rural farmers rely on their friends, relatives and neighbours for information. Radio ( $\overline{x} = 1.74$ ) ranked 2<sup>nd</sup>. This emphasizes the values and

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importance of radio as source information to farmers in rural areas (Fadiji, Atala and Voh, 2005).

Information sources	Mean	Rank
Friends	1.89	1 <sup>st</sup>
Radio	1.74	2 <sup>nd</sup>
Relatives	1.69	3 <sup>rd</sup>
Cooperative society	1.08	4 <sup>th</sup>
Extension agents	0.98	5 <sup>th</sup>
Television	0.96	6 <sup>th</sup>
Bill boards	0.61	7 <sup>th</sup>
Posters	0.59	→ 8 <sup>th</sup>
Newspapers	0.50	9 <sup>th</sup>
Magazines	0.22	10 <sup>th</sup>
Source: Field survey, 2015		

#### Table 2: Distribution of respondents by sources of information on GESS

Source: Field survey, 2015.

#### Sources of inputs

Availability, affordability and accessibility are three key factors that usually determine extent of patronage, and since agricultural practices are time bound, getting the right input at the right time is very vital to the success of agricultural activities. Open market ranked first among the sources of agricultural inputs available to the respondents ( $\overline{x} = 1.98$ ). Olaleye, Ibrahim and Ojo (2009) observed that farmers source agricultural inputs such as fertilizers, improved seeds and others from the open market. Giving that the respondents were registered farmers in the GESS, with the benefit of obtaining subsidized and unadulterated inputs, one would have expected they procure inputs provided by the scheme thus making the source rank high. However, findings showed that the GESS redemption centres ( $\overline{x} = 0.50$ ) was the penultimate source of input procurement. A reason for this, according to Fadairo, Olutegbe and Tijani (2015), is that the bureaucratic bottlenecks at the redemption centres always resulted in long queues which usually frustrate the farmers. They opined that the proximity to the redemption centres also pose a serious challenge to

1

the farmers. Extension agents ( $\overline{x} = 0.03$ ) ranked last, this gives an indication of the ineffectiveness of the Nigerian extension system.

Table 3: Distribution of res	spondents by s	sources of input	procurement
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Information sources	Mean	Rank
Open market	1.89	1 <sup>st</sup>
Middlemen	1.78	2 <sup>nd</sup>
Cooperative society	1.66	3 <sup>rd</sup>
Government institutions	1.01	4 <sup>th</sup>
GESS redemption centre	0.50	5 <sup>th</sup>
Extension agents	0.03	6 <sup>th</sup>
0 E'.L		

Source: Field survey, 2015.

# Attitude towards components of GESS

Table 3 reveals that 63.3% of the respondents had favourable attitude towards the components of GESS as against 36.7% who had unfavourable attitude. This favourable inclination of the respondents infers they consider GESS a viable means of enhancing the productivity of farmers. There is the need for GESS organizers to harness the respondents' enthusiasm by intensifying the activities of the various components of the scheme the result of which would translate to increase in agricultural production thus ensuring food security for the nation.

#### Table 4: Distribution of respondents by attitude towards components of GESS

Category	Percentage	Maximum	Minimum	Mean	SD
Favourable	63.3	130	89	119.19	8.61
(119-130)					
Unfavourable	36.7				
(89-118)					
Source: Field	survey, 2015.				

### **Participation in GESS**

The respondents' level of participation in GESS shows that majority (68.3%) had high participation, while 31.7% had low participation. The high participation level exhibited by the majority of them could be attributed to their favourable attitude towards the scheme. A significant correlation has been observed between attitude and motivation towards a chosen profession (AI-Rawahi and AI-Yarabi, 2013).

### Table 5: Distribution of respondents by level of participation in GESS

Category	Percentage	Maximum	Minimum	Mean	SD
High	68.3	22	1	14.4	4.0
(14-22)					
Low	31.7				
(1-13)			` \`	\$	
Source: Field	survey, 2015.				

#### **Constraints to participation in GESS**

As indicated in Table 6, inadequate finance ( $\overline{x} = 1.94$ ) and high illiteracy amongst women farmers ( $\overline{x} = 1.93$  ranked 1<sup>st</sup> and 2<sup>nd</sup> among the constraints to participation in the GESS). These findings corroborate a report that women constitute nearly 70% of the world's poor and 65% of the world's illiterate (This Day Newspaper, 2010). Access to finance is a challenge to women, especially rural women (Hiscox and Goldstein, 2014). Gender inequality ( $\overline{x} = 1.88$ ) ranked 3<sup>rd</sup>, as there are occasions of gender differences against women which are evident in property right, control over resources, access to inputs and services (Croppenstedt, Goldstein, and Rosas, 2013). Complexity of registration process ( $\overline{x} = 0.48$ ) and too many middlemen ( $\overline{x} =$ 0.44) were not regarded as serious constraints to participation in GESS as they ranked 13<sup>th</sup> and 14<sup>th</sup> respectively.

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#### Constraints Mean Rank 1 st 1.94 Inadequate finance 2nd High level of illiteracy amongst farmers 1.93 3rd Gender inequality 1.88 4<sup>th</sup> High cost of production 1.79 4<sup>th</sup> Inadequate information on GESS 1.79 Access to land 1.41 6<sup>th</sup> 7<sup>th</sup> Poor policy formulation and implementation 1.07 8<sup>th</sup> Poor soil fertility 1.05 **9**th Lack of technical support 0.90 10<sup>th</sup> High cost of improved seeds 0.77 11<sup>th</sup> **Bureaucratic bottleneck** 0.59 12<sup>th</sup> Lack of skilled labour 0.52 13<sup>th</sup> 0.48 Registration complexity 14<sup>th</sup> Too many middlemen 0.44

#### Table 6: Distribution of respondents by constraints to participation in GESS

Source: Field survey, 2015

# Relationship between respondents' selected personal characteristics and attitude towards GESS

The level of education had significant positive relationship with the farmers attitude towards GESS ( $\chi^2 = 2.315$ , p = 0.040). It informs that the respondents' educational status can determine their attitude towards the scheme. Okwoche, Asogwa and Obinne, (2012) observed that education is crucial to one's disposition towards any change programme. Also, significant relationship was observed between farming experience and farmers' attitude towards GESS (r= 0.267, p= 0.000). It indicates that the number of years a cassava farmer is involved in farming is capable of influencing her attitude towards GESS. This can be seen from the aspect that farmers with more

farming experience can take more risk than those with less experience. This risk bearing ability might have increased the respondents' response towards GESS.

 Table 7: Relationship between personal characteristics and attitude towards

 GESS

Variable	X <sup>2</sup>	Df
Marital status	2.315	3
Education	5.494*	4
	r-value	
Age	0.009	-
Household size	0.065	-
Farming Exper	0.267*	-

\*P≤0.05. Source: Field survey, 2015

# Relationship between participation, input source, constraints and attitude towards GESS

A significant correlation was observed between sources of inputs and attitude towards GESS (r = 0.223, p = 0.003). It suggests that when inputs are accessible to farmers, there is likelihood for them to become favourably disposed towards GESS because inputs can help to boost agricultural productivity.

Respondents' level of participation and their attitude towards GESS were significantly correlated (r = 0.258, p = 0.000). It follows that how well farmers participate in GESS hinges on their disposition (favourably or unfavourably) towards the scheme. This finding is consistent with Botlhoko and Oladele (2013) who posited that farmers' participation in agricultural schemes increases if they have a favourable disposition towards such schemes.

Constraint faced by the respondents also had a significantly correlation with attitude towards GESS (r = -0.424, p = 0.000). The correlation coefficient is consistent with

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expectation in that when the respondents encounter constraints, they develop an unfavourable disposition towards GESS. The more the constraints the unfavourable the attitude and vice versa This finding agrees with Nweke (2002) that constraints faced by farmers affect the adoption of agricultural innovation.

# Table 8: Correlations between participation, input source,

constraints and	attitude	towards	GESS
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Variable	r – value
Input source	0.223*
Participation	0.258*
Constraints	-0.424*
P<0.05 Source: Field survey, 2015	

P≤0.05.Source: Field survey, 2015

### **Conclusion and Recommendations**

The majority of women cassava farmers had favourable attitude towards the GESS, though they were unable to access agricultural inputs from the redemption centers due to some factors ranging from illiteracy, gender inequality and corruption. Educational qualification, farming experience, participation, input source and constraints were significant predictors of respondents' attitude towards GESS. Registered association/groups should be used for the proper distribution of inputs in order to eliminate diversion. Credit facilities should be made available and accessible to women cassava farmers through various financial institutions with not more than 5% interest rate and identification by their registered association(s) i.e registered association that they belong to as a member should be used as collateral.

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