

Evaluation of agro-inputs dealers' commitment to the Growth Enhancement Support Scheme (GESS) in Delta State, Nigeria

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ABSTRACT

The study evaluated agro – inputs dealers' commitment to the Growth Enhancement Support Scheme (GESS) in Delta State, Nigeria. Data were collected with the aid of questionnaires from 30 agro – input dealers purposively sampled across the State. The collected data were analyzed using descriptive (frequency, percentage, mean and standard deviation) and inferential (multiple regression and Friedman's test) statistics. Results of data analysis revealed that average age and business experience were 36 and 14 years respectively, majority (70%) were males, married (90%) and a high proportion of them (96.3%) were educated. The respondents are very committed and carry out various advisory roles to the farmers. Socio – economic characteristics like age, gender, marital status, education and business experience significantly influence agro-input dealers' level of commitment in the scheme. Also, Friedman's test showed that there is significant difference among needs required for the effective operation of GESS. Based on findings, the study recommends that efforts should be intensified by the government and the input suppliers in planning and delivery of inputs ahead of the planting season and that the biometric card reader can be used in the verification of farmers' data instead of relying on the epileptic network coverage of the GSM providers.

Keywords: dealers, commitment, poverty, livelihood, fertilizer, improved seeds

INTRODUCTION

Poverty is one of the challenges facing our society and the greatest obstacle to the pursuit of sustainable socio-economic growth. According to Olaolu, *et al.* (2013), lack of food is the most critical dimension of poverty, reflected in the popular saying that “when hunger is excised from poverty, the burden of poverty is light”. Thus, poverty alleviation is a major thrust of national policies, many of which have come in the form of agricultural revolution programmes aimed at providing adequate food for the populace and the use of the food system to empower the people (Okwuokenye and Ikoyo

– Ewoto, 2016). The authors acknowledged that some of the programmes include River Basin Development Authority, National Agricultural Land Development Authority, Tree Crop Development and Marketing Company, Live Stock Development and Marketing Company, Operation Feed the Nation Agricultural Development Programme, Green Revolution Programme, Special Rice Programme, Agricultural Component of the then President Yar' Adua's Seven Point Agenda, Fadama III, among others, and most recently the Growth Enhancement Support Scheme (GESS) of President Goodluck Jonathan's regime.

The GESS is a component of the Agricultural Transformation Agenda (ATA), introduced in 2012 by the then President (FMARD, 2012).

The programme's aim is to provide subsidized farm inputs such as fertilizer and seeds to farmers. The scheme is designed to deliver government subsidized farm inputs directly to farmers through GSM phones. The basic aim/mission of GESS according to FEPSAN (2013) is to ensure that Nigerian farmers have easy access to high quality fertilizer for their use in an efficient and cost effective manner to increase agricultural production and ensure food security, and to enhance the quality of life of rural farmers. To ensure the realization of this goal, the department has five divisions, namely: Fertilizer use and Growth Enhancement Support Division, Inspectorate (Quality Control and Monitoring Support) Division, Organic Fertilizer Promotion and Development Division, Technical Support Services Division, and National Fertilizer Development Centre.

As part of Federal Government's commitment to the success of GESS, she has so far released ₦22.6m as loan made available to agro input dealers at 7% interest rate through commercial banks in partnership with NIRSAL (The Nigerian Incentive-Based Risk Sharing for Agricultural Lending) (FEPSAN, 2013). Sadly, Aderebigbe (2013) reported that only 11% of Nigerian farmers benefited from the old system (distribution of inputs such as fertilizer which was subsidized at 25% by government agencies to farmers) while political elites diverted bulk of inputs purchased by the federal government to neighboring countries. Similarly, FEPSAN (2013) reported that Nigerian farmers use less than 20kg of fertilizer per hectare compared to the world's average of 100kg per hectare, thus resulting to the poverty condition of the farmers. The report stated that Fertilizer distribution in Nigeria is highly politicized, thus, farmers at the receiving end usually experience delay in getting this important farm input and sometimes pay the market price of a supposedly subsidized input.

The Growth Enhancement Support Scheme (GESS) as a Federal Government intervention programme, partners with State governments, agro-dealers and the International Fertilizer Development Centre (IFDC) to ensure that registered farmers get inputs promptly as against government involvement. Delta State is one of the states partnering with the Federal Government where GESS is concerned. The issue of concern now is if this scheme (GESS) has had positive and or significant effect on agro-input delivery to farmers since its inception. Meanwhile, Olukayode (2014) reported that between 2012 and 2014, national food production has expanded by additional 21million tons of food supply courtesy GESS, thus enabling the country to meet its millennium development goal (MDG) on hunger and malnutrition two years ahead of the 2015 target set by the United Nations. Some of the stakeholders argued that whatever increase in food supply since GESS inception is due to chance and not necessarily because of GESS.

Taking a stand from this controversy, this study will attempt to determine if increase in food production observed since 2012 in the country is due to chance or possibly because of the initiation of GESS through the supply of agro-input like fertilizer and improved seeds. Being a very recent programme, data on GESS operation, especially in Delta State are lacking or scanty. This study therefore bridges this gap by providing empirical data on the scheme. Against this background, the study seeks to:

- i. Examine the socio-economic characteristics of agro-input dealers serving in the GESS programme in Delta State;
- ii. Identify the specific inputs provided by the dealers in the scheme in the study area;
- iii. Examine the roles of the agro-input dealers in the GESS programme;
- iv. Ascertain the agro-input dealers' level of commitment and operational needs in the GESS programme; and

- v. Ascertain the constraints facing the agro-input dealers operating in the scheme within the state.

HYPOTHESES OF THE STUDY

H₀₁: There is no significant relationship between socio – economic characteristics of the agro-input dealers and their level of commitment in the scheme.

H₀₂: There is no significant difference among the needs required for the effective operation of GESS in the study area.

MATERIALS AND METHODS

STUDY AREA

This study was carried out in Delta State of Nigeria. It is located in the South-South geopolitical zone of Nigeria. The State is flanked by Edo State in the North, Ondo State to the North-West, Anambra State to the East and it is bounded in the South by the Bight of Benin and has an Atlantic coastline of 160km (MANR, 1998). Delta State is one of the richest oil producing states in the Niger Delta region and so plays host to many of the multinational Oil and Gas companies operating in Nigeria. Geographically, Delta State has three senatorial zones. They are: Delta North, Delta Central and Delta South. These zones respectively have 9, 10 and 6 Local Government Areas, thus making a total of 25 Local Government Areas. The State has a land area of 176.987km² and 2006 census figure had it that the State's population stands at 4,170,214. The major ethnic groups in the State are Urhobo, Isoko, Ijaw, Itsekiri, Ika, Ukwuani and Aniocha. The major occupation of the people is farming which encompasses fishing, cropping and animal rearing. Some of them also involve in oil prospecting, civil service, wholesale and petty trading and commerce (AWC, 2006).

POPULATION OF THE STUDY

The population of the study was drawn from the relevant stakeholders like agro-input dealers who are registered, working and are

participating in the scheme (GESS). All the agro-input dealers and programme coordinators participating in the scheme were used in carrying out the study because of their small number (30).

DATA COLLECTION INSTRUMENT

Data collection instrument was questionnaire. The questionnaire was administered to agro-input dealers because they are educated. The instrument was administered and retrieved through trained enumerators.

Both the face and content validity approach were adopted. The former involved validation by experts in the field of agricultural extension while the latter involved ensuring instruments adequacy in covering the contents it was designed to cover. The validated instruments were tested for reliability and it gave a Cronbach Alpha value of 0.85, thus indicating that the instrument was reliable. This deduction is supported by Streiner and Norman (2008) when they declared that a value > 0.70 is a good indication of instrument's reliability.

DATA ANALYSIS TECHNIQUE

Descriptive statistics, t-test and multiple regression were used to analyze the objectives and hypotheses of the study. Precisely, descriptive statistics involves frequency table, percentage and mean. They were used to analyze respondents' socio-economic characteristics, identify the inputs provided by respondents and ascertain the respondents' level of commitment in the GESS programme. The roles carried out by the agro-input dealers and challenges faced in the scheme were analyzed using mean and standard deviation. Respondents' roles regularly carried out and constraints encountered by stakeholders in the GESS were measured on a 4-point Likert scale. While the former ranged from, "Very frequently" (coded 4), "frequently" (coded 3), "sometimes" (coded 2) and "Not at all" (coded 1), the latter ranged from, "Strongly agree" (coded 4), "Agree" (coded 3), "Disagree"

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(coded 2) and “Strongly disagree” (coded 1). Roles carried out by respondents’ and constraints encountered by the participants were analyzed using mean. The weighted mean score of 2.50 was used to determine if the roles were regularly carried out (i.e. if mean ≥ 2.50 , it means the roles were regularly carried out) or not (if mean < 2.50). The weighted mean was determined as follows: $[4 + 3 + 2 + 1] / 4 = 2.50$. Similar technique was used by Okwukenye and Ikoyo-Ewoto (2016) to determine the Farmers’ participation in homestead fish production and its implications for poverty alleviation in Bayelsa and Delta States.

Hypothesis one and two were respectively analyzed using multiple regression and Friedman’s test. The multiple regression equation is given as:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3, \dots, + b_n X_n + e$$

Where:

Y = Level of commitment of agro-input dealers (very committed = 1; averagely committed = 2; just committed = 3; seldom committed = 4 and not committed = 5)

X₁ = Gender (male = 1; female = 0)

X₂ = Age (years)

X₃ = Educational status (years)

X₄ = Marital status (single = 1; married = 2; divorced = 3; widow/widower = 4)

X₅ = Business experience in GESS (years)

Different functional forms were first tested to select the best fit model. They include linear, exponential, Cobb-Douglas and semi-log. The lead equation was selected based on the number of significant variables and the signs of the estimated coefficient of the independent variable (Okwukenye and Onemolease, 2010). The variables in the model were also analyzed statistically using the standard error of the variables. When standard error is less than half of the parameter estimate, it means that the parameter is significant, and not significant if otherwise. Friedman’s test was used to test the significance or detect difference in treatment

factors/variables (Bortz, *et al.*, 2010). The formular is given as:

$$X^2 = \frac{12}{nk(k+1)} \sum_{j=1}^k R_j^2 - 3n(k+1)$$

Where:

X² = chi square value

12 = constant

n = number of respondents

K = number of columns

R = the scores or rank sum

This test was used to determine the significant differences among the operational needs and constraints faced by farmers and agro-dealers.

RESULTS

Socio-economic Characteristics of the Respondents

Table 1 presents the socio-economic characteristics of agro-dealers involved in GESS. The result shows that the average age of the input dealers was 36 years. Majority (43.3%) of the agro-dealers participating in GESS fall into the age brackets of 41-50 years. There were more male (70.0%) than female (30%) agro-dealers involved in the scheme. With respect to marital status, most of the agro-dealers were married accounting for 90% of the respondents, while 6.7% were divorced and 3.3% separated.

The result for educational level reveals that almost all the respondents (96.7%) had formal education beyond secondary school level. On a precise note, the mean for educational experience was 20.3 years, indicating that they schooled up to NCE/Ordinary National Diploma. The result further showed that 33.3% (majority) of them had been in the business for 12-15 years while 30.0% had traded in agro-inputs for 16-18 years. However the average business experience of the respondents was 14 years.

Table 1: Socio-economic Characteristics of Agro-dealers (n=30)

Characteristics	Categories	Freq.	%
Age range (years)	30 & below	1	3.3
	31-40	5	16.7
	41-50	13	43.3
	51-60	7	23.3
	>60	4	13.3
	Total	30	100.00
Sex	Male	21	70.0
	Female	9	30.0
	Total	30	100.0
Marital status	Married	27	90.0
	Divorced	2	6.7
	Separated	1	3.3
	Total	30	100.0
Educational level	Primary education	1	3.3
	Secondary education	15	50.0
	NCE/OND	8	26.7
	HND/B.Sc	4	13.3
	Postgraduate	2	6.7
	Total	30	100.0
Business experience (years)	4-7	2	6.7
	8-11	6	20.0
	12-15	10	33.3
	16-18	9	30.0
	>18	3	10.0
	Total	30	100.0

Source: Field Survey, 2015

Agro-inputs provided and sold

Table 2 shows the type of inputs sold by the agro-dealers and the result revealed that all the farmers requested for fertilizer, 83.3% requested

for herbicides, 73.3% supplied improved seeds while 46.7% sold fungicides. The proportion of input sold is an indication of the level of demand for such input by farmer.

Table 2: Agro-inputs sold by the suppliers

Inputs	Yes	
	Freq*	%
Fertilizer	30	100.0
Improved seeds	22	73.3
Herbicides	25	83.3
Fungicides	14	46.7

*Multiple responses

Field Survey 2015

Agro-input Dealers' Role in the GESS Programme

The agro – input dealers' role in the GESS scheme is shown in Table 3. The result shows that, advisory role (mean = 2.87) and training

farmers on input use (2.71) are roles regularly carried out by the agro-input dealers. Other roles include providing farmers with new agricultural information (mean = 2.56) and input distribution to the farmers (2.51).

Table 3: Agro-input dealers' role in the GESS programme

Role	Total	
	Mean	SD
- Advisory role	2.87*	0.68
- Farmer training on input use	2.71*	0.73
- Providing farmers with new agricultural information	2.56*	0.83
- Input distribution	2.51*	0.57
- Demonstrating on input use	1.97	0.51

*Multiple responses

Field Survey 2015

Agro-input Dealers' Level of Commitment in the GESS Programme

The level of commitment of the agro-input dealers was also sought. The findings revealed that most (63.33%) of the respondents were

very committed to the GESS programme. Few (about 27%) of them were averagely committed while only 10% were only just committed to the course expected of them.

Table 4: Agro-input dealers level of commitment in the GESS programme

Category	Frequency	Percentage
Very committed	19	63.33
Averagely committed	8	26.67
Just committed	3	10.00
Seldom committed	-	-
Not committed	-	-
Total	30	100.00

Source: Field survey, 2015

Perceived Operational Needs of GESS

The operational needs of GESS as perceived by participants are shown in Table 5. According to the respondents, they include the right type of

fertilizer, provision of cell phones to farmers, use of card readers instead of relying on network coverage and incorporation of extension agents into the scheme.

Table 5: Perceived operational needs

Operational needs	Freq.	Percentage
Right type of fertilizers	30	100.00
Provision of other farm chemicals	30	100.00
Provision of improved seeds	30	100.00
Provision of cell phones for farmers	30	100.00
Use of card reader instead of network	30	100.00
Incorporation of extension agents	30	100.00

Field Survey, 2015

Constraints encountered by the Agro-input Dealers

As stakeholders in the implementation of GESS, agro-dealers encountered some constraints (see Table 6). From the Table, it is clear that the most serious constraint encountered by agro-input dealers with regards to GESS was late

arrival of fertilizers and seeds (Mean = 2.87) from suppliers. Equally serious was the high cost associated with transporting the inputs (Mean = 2.63) to dealers' warehouse, as well as poor telecommunication network (Mean = 2.63).

Table 6: Constraints Encountered by Agro-dealers with GESS

Constraints	Mean	SD
Late arrival of fertilizers and seeds from suppliers	2.87*	0.86
Transport problem	2.63*	1.03
Poor telecommunication network	2.63*	0.67
Lack of access to finance	2.43	0.90
Delayed payment of commission	1.53	0.68
Poor linkage between Agro dealers, Farmers and input suppliers	1.53	0.73
Harassment from community youth asking for gratification	1.20	0.48

**Serious (mean > 2.50)*

Field Survey, 2015

However, constraints such as lack of access to finance (mean=2.43), delay in payment of commission to agro-input dealers (mean=1.53), poor linkage between agro-input dealers, farmers and inputs suppliers (mean=1.53) as well as harassment by community youth asking for gratification (mean=1.20) were not considered serious.

Parameter Estimation of the Agro-input Dealers in the GESS Programme

Hypothesis one states: There is no significant relationship between socio – economic characteristics of the agro-input dealers and their level of commitment in the scheme.

The parameter estimation of the determinants of the agro-input dealers in the GESS programme is shown below (see Table 7). The linear regression function was selected as the lead equation based on its R^2 which was 82.5%, computed F-statistics = 91.451 (which was found to be significant at the 5% level) and the number of significant variables. All the variables were found to be significant at the 5% level thus denoting the collective influence of the socio-economic characteristics of agro-input dealers on their level of commitment in GESS.

The results are presented in their order of importance and this is based on their standardized coefficient.

However, business experience with GESS status ($b = 0.727$, $B = 305.636$ and $SE = 72.560$) is the first major determinant of the commitment of the agro-input dealers in the scheme. It has a t-value of 4.832; it is positively signed and significant at the 5% level. Sex ($b = 0.620$, $B = 92.024$ and $SE = 7.540$), the second major determinant has a t-value of 12.205, it is positively signed and significant at the 5% level. The third determinant is age ($b = -0.463$, $B = -0.290$ and $SE = 0.100$), its t-value is -2.907 and significant at the 5% level. Educational status of the respondents has a standardized coefficient of 0.181, an unstandardized coefficient of 0.005 and a standard error of 0.002 together with a t-value of 2.943. The parameter is positively signed and significant at the 5% level. The last determining variable was marital status ($b = 0.179$, $B = 10.499$, $SE = 2.302$ and $t = 4.561$). It was positively signed and statistically significant at the 5% level.

Table 7: Parameter estimation of the determinants of the agro-input dealers

Explanatory variables	Unstandardized Coefficients (B)	Standard Error (SE)	Standardized Coefficients (b)	t -value
Constant	-204.644	64.506		192.261
Business experience with GESS	350.636	72.560	0.727	4.832
Sex	92.024	7.540	0.620	12.205
Age	-0.290	0.100	-0.463	-2.907
Educational status	0.005	0.002	0.181	2.943
Marital status	10.499	2.302	0.179	4.561

Adjusted R² = 782.5%; F – Statistics = 91.451; Significant at 5% level; Critical F = 6.63

Test of Difference among Needs required for GESS Operation

Hypothesis two states: There is no significant difference among needs required for the effective operation of GESS. Friedman test was used to analyze the hypothesis. The result is presented in Table 8. The Friedman test result ($X^2 = 50.641$, $df = 6$; $P < 0.050$) is significant at the 5% level, since the estimated value ($X^2 = 50.641$) is greater than the critical value of 12.59. This means that a significant difference existed among the operational needs required for the smooth implementation of GESS.

However, based on the mean separation, there was no significant difference in the need of the

following factors for the effective implementation of GESS: supply of right type of fertilizer (mean = 5.08), timely supply of inputs (mean = 4.90), increased number of bags of fertilizer (mean = 4.82), provision of cell phone to farmers (mean = 3.97), the use of card readers, (mean = 3.42) and incorporation of extension agents into the scheme (mean=3.55). Apart from the last factor, that is incorporation of extension agents into the scheme (mean = 2.55), the need for the other five factors mentioned above was significantly higher and different from the need for loans to farmers (mean = 2.27).

Table 8: Difference in operational needs of GESS (Friedman test)

Needs	Mean Ranks
Right type of fertilizers supply	5.08 ^a
Timely supply of inputs	4.90 ^a
Increased bags of fertilizer	4.82 ^a
Provision of cell phones for farmers	3.97 ^a
Use of card readers instead of network	3.42 ^{ab}
Incorporation of extension agents	2.55 ^{ab}
Loans to farmers	2.27 ^b

$\chi^2 = 50.641$; $df = 6$; $p < 0.050$; *Means with different superscripts are statistically different.
Field Survey, 2015

The result also showed that there was no significant difference among the following need: use of card readers (mean = 3.42), incorporation of extension agent (mean = 3.55) and granting of loan to farmers. The least significant need was granting loans to farmers (mean = 2.27). The null hypothesis was therefore rejected while the alternative hypothesis was accepted.

DISCUSSION

The average age of the respondents was 36 years, implying that the agro-input dealers are in their active ages and would be better placed to work rigorously with both input supply companies and farmers, thereby boosting the chances of success of GESS implementation. This finding is supported by reports of Fakoya and Daramola (2008) who found that people of active age are more predisposed to participating in agricultural programmes of which GESS is one. The scheme is found to be dominated by males. The most advanced reason is the fact that the work seems too tedious for women, hence they choose to leave it for the men. Male dominance in GESS programme has been

reported by FEPSAN (2013). The report acknowledged that this business requires high capital, and women are incapacitated by inadequate capital and limited access to credit, hence the dominance of male. Most of the respondents are married people. Participating in the scheme may be perceived by them as a means of supporting their families. Findings of Akinbile *et al.* (2008) supported this finding as they stated that married people mostly participate in this kind of programme in order to improve their livelihood.

The educational mean value of the respondents was 20.3 years. It implies that most of them had formal educational up to the level of NCE/ Ordinary National Diploma. The high level of education among the respondents is expected to help them fair well and to be able to explain the application of the fertilizers and/or seeds to the farmers. Supporting this assertion, Taiye, *et al.* (2006) stressed that having formal education equally enhances individual capacity to handle agricultural innovations. Respondents' average business experience was 14 years, suggesting that respondents had extensive experience in trading agro-inputs. This finding implies that

the experienced agro-dealers are partnering with GESS. Such experienced agro-input dealers would be able to identify quality inputs when supplied by the input providers before distributing to the farmers.

On inputs provided and sold, findings revealed that fertilizer and herbicide were in greatest demand. However, excessive use of chemical fertilizer in agriculture results in a large number of environmental problems because some fertilizers contain heavy metals (such as Cadmium and Chromium). Nevertheless, Bahman and Sona (2014) opined that inputs such as fertilizers should be used based on desired crop pattern after conducting soil test. Based on the above submission, it is recommended that organic fertilizers should be used instead of chemical fertilizers. Result revealed that the agro-input dealers perform numerous roles to the farmers in the GESS programme. Those roles regularly carried out by the dealers include advisory role, farmer training on input use, providing farmers with new agricultural information and input distribution.

On the level of commitment of the agro-input dealers, it could be deduced that the agro-input dealers were very committed to the scheme, hence the huge success so far recorded. Confirming their level of commitment, Olukayode (2014) reported that between 2012-2014, national food production has expanded by additional 21 million tons of food supply courtesy GESS. The respondents' preference for card reader, instead of relying on network, to verify farmers' information before they can redeem their input, is a reflection of the poor network coverage of the service providers. This finding is in agreement with Aigbeakaen *et al.* (2007) who reported that the major constraint to the use of GSM by farmers in South-west Nigeria was network coverage.

The need to provide cell phones to farmers, identified as a major need is because

respondents believed that the low financial status of farmers may limit their capacity to own the device (cell phone). Ownership of phone is useful in communicating or sharing information with operators of the scheme. The respondents wanted the incorporation of extension agents into the scheme. Extension agents' participation in programmes can help strengthen research-extension farmer linkage, thus facilitating farmers' adoption of technologies (Ogunsumi and Abegunde, 2011).

Some of the serious constraints encountered by agro-input dealers with regards to GESS were late arrival of fertilizers and seeds from suppliers, high cost associated with transporting the inputs and poor telecommunication network. This finding corroborates that of Aigbeakaen *et al.* (2007) who reported that network coverage was a major constraint to the use of GSM by farmers in South-west Nigeria. Through personal communication, agro-input dealers and some of the programme coordinators expressed their frustration regarding network coverage; it delays input redemption by the farmers. This is because farmers' data had to be verified electronically relying on GSM network before they could redeem their inputs. Consequently, some farmers (those whose names could not be verified) were delayed or denied access to these inputs thereby impacting negatively on their farm output, income and standard of living

Hypothesis one states that: there is no significant relationship between socio-economic characteristics of the agro-input dealers and their level of commitment in the scheme. All the variables in the model were found to be significant on respondents' level of commitment in GESS. Business experience with GESS status was the first major determinant and it has positive impact of their business experience with the GESS programme. The implication is that, the more experience the respondents have, the more committed they would be in the agro-input business. This is followed by sex of the respondents. From the

result, since most (70%) of the agro-input dealers are males; there is the likelihood that they would have been working with all level of commitment using their endowed energy to ensure the success of the programme. The third determinant, age, is negatively signed, implying that the younger agro-input dealers are, the likely they are to perform better and have more significant commitment in the scheme than their older counterparts. Educational status of the respondents is positively signed and significant. Being significant, it implies that education helps the agro-input dealers to know how to handle (use) and explain the application of the fertilizers and/or seeds to the farmers. This assertion was supported by Taiye, *et al.* (2006). They stressed that having formal education equally enhances individual capacity to handle agricultural innovations. Marital status was positively signed and statistically significant. The implication is that since most of the respondents are married, participating in the scheme could be seen as a way of meeting up with the economic needs of their household. Assertions of Akinbile *et al.* (2008) support this finding as they stated that married people mostly participate in this kind of programme in order to improve their livelihood.

Friedman test was used to analyze hypothesis two which states that, there is no significant difference among needs required for the effective operation of GESS. Results showed that a significant difference existed among the operational needs required for the smooth implementation of GESS, based on this, the alternative hypothesis was accepted. Though on mean separation, there was no significant difference among the following factors for the smooth implementation of GESS. They are, supply of right type of fertilizer, timely supply of inputs, increased number of bags of fertilizer, provision of cell phone to farmers, the use of card readers, and incorporation of extension agents into the scheme. Apart from the last factor, that is incorporation of extension agents into the scheme, the need for the other five factors mentioned above was significantly higher and different from the need for loans to

farmers. The result also showed that there was no significant difference among the following need: use of card readers, incorporation of extension agent, and granting of loan to farmers.

CONCLUSION

The study focused on the evaluation of agro-inputs dealers' commitment to the growth enhancement support scheme (GESS) in Delta State, Nigeria. It is an agricultural programme designed to transform the state of agricultural development in the country, Nigeria. The scheme reaches the farmers' with agricultural inputs through the agro-input dealers who indicated that they are very committed to the scheme. The level of commitment, they have showed through the services they render to farmers. Nevertheless, they have been constrained by some factors like late arrival of farm inputs, transportation of inputs to the farmers and poor communication network. Findings of the study also showed that socio-economic characteristics like business experience, sex, age, educational status and marital status influence level of agro-input dealers' commitment in the scheme. Also, there is significant difference among the needs required for the effective operation of GESS in Delta State.

Based on findings, the study recommends the following:

- For late arrival of inputs, efforts should be intensified by the government and the input suppliers in planning and delivery inputs ahead of the planting season;
- Poor transportation problem was one of the major constraints of the scheme. This has hindered the smooth reach-out of the dealers and the distribution of the inputs to the farmers. To this end in view, there is need for these roads to be rehabilitated so that the dealers will be better encouraged to do the work expected of them; and
- For poor telecommunication network, the biometric card reader can be used in the verification of farmers' data instead

of relying on the epileptic network coverage of the GSM providers.

ACKNOWLEDGEMENTS

The authors acknowledge their colleagues, respondents of the study and members of their households who have supported them in making this study/research a success.

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