CONTRIBUTION OF GROWTH ENHANCEMENT SUPPORT SCHEME ON RICE FARMERS IN BAYELSA STATE, NIGERIA

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ABSTRACT
The study analyzed contribution of Growth Enhancement Support Scheme on rice farmers in Bayelsa State. Purposive sampling technique was used in the selection of Yenagoa agrozone and Sagbama zone. A sample of 170 rice farmers were randomly selected from ten communities. Data were collected using structured questionnaire, and were analyzed with descriptive statistics such as mean, frequency and table. The results reveal that the mean age of the respondents was 44.5±11.1. Majority 54.7% of the rice farmers were males and 52.9% of the rice farmers were married. Majority 89.9% had one form of formal education or the other, household ranged from 1-5 persons. The result also indicates the mean years of farming experience 35.3±8.1 of the rice farmers. Majority (x = 3.8) of the rice farmers indicated increased in food production as the major benefit of the scheme. From the findings, the major constraints with mean were; telecommunication problem (x = 2.0), Late arrival of inputs (x = 2.0) low limited input allocation (x = 1.7) and distance from redemption centers (x = 2.0). The study concluded that growth enhancement support scheme had very low performance indices in redemption of input; although there is yearly increase in farmers' participation and service delivery in the scheme. The study recommended that the scheme should be sustained by successive government, improvement in participation of farmers through proper and effective communication and provision of fertilizers with other agro-inputs should be sufficiently supplied to farmers appropriately to enhance production.

Keywords: Contribution, Enhancement scheme, Growth, Rice farmers, Support.

INTRODUCTION

Agriculture is an important sector of the economy with high potentials for employment generation, food security and poverty reduction cannot be overemphasized. However, the potentials have remained largely unharnessed, which has led to the dwindling performance of the agricultural sector both domestically and internationally over years (Akinwunmi, 2013). Growth Enhancement Support Scheme (GESS) is a component of the Agricultural Transformation Agenda (ATA). It is a smart innovative approach to fertilizer subsidy and other inputs disbursement through an electronic system (e-wallet) that ensures that only registered farmers would benefit from the scheme. It is meant to change the mentality of Nigerians to agricultural activities. It is expected that the scheme will boost food production, the income of farmers as well as the value accorded to locally produce agricultural products. Nigeria spent about ₦1.3 trillion annually to import basic food, ₦635 billion on wheat, ₦356 on importing rice; ₦271 billion on sugars and ₦71 billion importing fish. This constitutes a huge loophole on the nation's income with its untold negative effect on the balance of trade. GESS is therefore

targeted to produce 20 million tons of food by 2015, which will help to reduce government spending on importation (FMARD, 2011 and Akinwumi, 2011).

However, government distribution system is not only ineffective, it also wastes government resources due to abuse by the involved stakeholders and other parties involved (Acha, 2013). These are reflected through persistently late supplies, high transaction costs, non-agricultural use of fertilizers, inadequate supplies and artificial induced scarcities through hoarding and smuggling activities (Thisdayonline.com, 2013). The continuous presence of these features always keeps the benefits of the fertilizer subsidy programme away from the reach of farmers who are the intended beneficiaries while unrecognized and unsolicited middlemen, transporters and other unintended beneficiaries prospers (Acha, 2013).

There is, however, very little tangible practically useful result that has emerged from the implementation of the past programs, since according to Iwuchukwu and Igbokwe (2012) changes in Nigerian agricultural policies and programs vary only in nomenclature and organigram. According to them, the new policies and programs emphasize almost same objectives like the provision of food for the inhabitants of the nation (food security and sufficiency) and exportation of the anticipated excess food to other countries; the provision of rural dwellers and farmers with extension services, agricultural support and rural development services, concluding that agriculture has continued to suffer from inertia associated with these policies and program reformation that pervade Nigeria. The specific objectives were to: describe the socio-economic characteristics of rice farmers; ascertain the accessibility of GESS services by rice farmers, examine the benefits derived from GESS by rice farmers and identify the constraints encountered in GESS by farmers in the study area.

MATERIALS AND METHODS
The Study Area
The study was carried out in Bayelsa state, Nigeria. Bayelsa state is an oil producing state with over 40% of its population directly or indirectly engaged in agriculture. It has an area of approximately 21,110 sqkm and falls in the latitude 4^0 15'North and 5^0 23' to the south. It has a population of 1703,358 and a population density 188 people/km^2 (NPC, 2006). Bayelsa state is bounded in the north by Delta State, on the East by Rivers state and the Atlantic Ocean on the West and South. The State has tropical vegetation that is made up of mangrove rain forest in the south and lowland rain forest towards the north. Two geographical seasons are identifiable in the state. The raining season, starts in March and ends mid-November and the dry season stretching from late November and end about late march annually. The climate coupled with fertile soils favours cultivation of wide range of food and cash crops and the growth of valuable tropical trees. Farmers in the State grow food and cash crops such as vegetables, yam, cassava, oil palm, plantain, rice and fish farming. Other livelihood activities are palm oil milling, lumbering, palm wine tapping, local gin making, carving and weaving.

Sampling Procedure
Purposive sampling procedure was used in selection of Yenagoa local government area and Kolukuma/Opukuma in Yenagoa Zone and Sagbama Local Government Area in Sagbama Zone. In the first stage, Stratified sampling was used in selection of the sample size of 170. While, in the second stage simple random sampling technique was used in selection of ten (10) communities. In the third stage, seventeen rice farmers, giving us a sample size of one hundred and seventy rice farmers. Data were collected through well-structured questionnaire and were analyzed with descriptive statistics such as frequency, mean and percentage. The questionnaire was on a 4-point rating scale of strongly agree, agree, disagree and strongly disagree to which

numerical values 4, 3, 2 and 1 were assigned, respectively. The scores up to 10 and a mean of 2.5 when divided 4. Hence, the cutoff point of 2.55 as upper limit was used to determine the positive response (i.e., 2.5 + 0.005).

RESULTS AND DISCUSSION

Table 1 shows that 54.7% of the rice farmers were males while 45.5% of them were females. This result is in line with the findings of Ahmed *et al.* (2016) where majority of the farmers that participate in GESS program are males, an indication that males make themselves readily available to all opportunities that is available to them through the scheme. The result further showed that a little above one- third proportion 36.5% of rice farmers were within the age bracket of 35-44 years. This result corroborates the findings of Ahmed *et al.* (2016) where it was established that average age of beneficiaries of growth enhancement support scheme is 40 years, an indication that beneficiaries (farmers) of this program are young and agile.

The result in Table 1 still shows that 52.9% of rice farmers were married. This result implies that married individuals are more engaged in rice farming. This result is an indication that an individual can engage in rice farming irrespective of their marital status though been married might have an influence on the production rate and cost of production because a married farmer might engage his family in the labour to be used on the rice farm and this will reduce the cost of production. This result is in line with the findings of Ugwoke*et al*. (2005) who discovered in their finding that above average (53.0%) of the respondents were either married or widowed. The result in Table 1 still showed that 55.9% of rice farmers had household size of 1-4 person eating from the same pot. The mean of the household size in the study area was found out to be 4.7 members. This result implies that rice farmers in the study area have a fair size of members in their household. This result corroborates the findings of Nwosu and Okringbo (2016) who reported a significant proportion of (59.2%) of rural farmers in Bayelsa state have household size between 1-5 members.

Table 1: Distribution of respondents based on their personal characteristics (n = 170)

Variable	Category	Frequency	Percentage	Mean
Sex	Male	93	54.7	
	Female	77	45.3	
Age	25-34	31	18.2	44.5
	35-44	62	36.5	
	45-54	47	27.6	
	55 and above	30	17.6	
Marital status	Single	28	16.5	
	Married	90	52.9	
	Widow	30	17.6	
	Divorced	22	12.9	
Highest education	No formal	17	10.0	
	primary	36	21.2	
	secondary	68	40.0	
	tertiary	49	28.8	
Primary occupation	Civil servant	83	48.8	
	Agricultural enterprise	75	44.1	
	Trading	10	5.9	
	Artisan	2	1.2	
Farming experience	< 4yrs	56	32.9	8.1
	5-8yrs	60	35.3	
	9-12yrs	26	15.3	
	>13yrs	28	16.5	
House hold size	1-4	95	55.9	
	5-8	62	36.5	2.8
	9 and above	13	7.6	
Membership of association	Yes	115	67.6	
	No	55	32.4	
Monthly income	less than 20,000	1	0.6	
	21,000-40,000	39	22.9	
	41,000-60,000	58	34.1	
	61,000-80,000	63	37.1	
	81,000 and above	9	5.3	

Source: Field survey, 2021.

The result in Table 2 shows the level of accessibility to Growth Enhancement Scheme by rice farmers. The table shows the services of GESS accessible by rice farmers had the following means: Accessibility to hybrid (x = 2.6); accessibility to agro dealers (x = 2.5), accessibility to input (x = 2.4), accessibility to extension services (x = 2.6), accessibility to chemicals (x = 0.8) and accessibility to (x = 2.2).This implies that farmers in the study area have a very minimal access to these services through GESS scheme though they have access to it through other agricultural scheme or membership of organization/cooperative societies because it was established that they enjoy this services also. This result indicates that the farmers have access to these services on a varied level which might be due to the bureaucracy attached to each service that may be hindering their access to it. This result corroborates the

findings of Ibrahim (2015) where majority (60%) of the farmers indicated that they have access to services rendered through the GESS scheme.

Table 2: Respondents based on their level of accessibility to growth enhancement scheme services (n = 170)

GES services	Always Accessible (4)	Sometimes (3)	Rarely (2)	Not Accessible (1)	∑fx	Mean
Accessibility to fertilizer	42(168)	117(351)	8(16)	3(3)	538	3.2
Accessibility to hybrid	118(472)	44(132)	0.0	8(8)	612	3.6
Accessibility to livestock	9(36)	15(45)	6(12)	140(140)	233	1.4
Accessibility to chemical	14(56)	39(117)	13(26)	104(104)	303	1.8
Accessibility to seminar	2(8)	13(39)	23(46)	132(132)	225	1.3
Accessibility to Extension service	91(364)	59(177)	0.0	20(20)	561	3.3
Accessibility to Agro dealers	102(408)	56(168)	0.0	12(12)	588	3.5
Accessibility to Input	96(384)	58(174)	4(8)	12(12)	578	3.4
Accessibility to Tractor and other implement	4(16)	20(60)	12(24)	134(134)	234	1.4
Accessibility to market	112(448)	37(111)	9(18)	12(12)	589	3.5
Grand Mean						2.5
Decision cut off point						2.6

Source: Field survey, 2021.

The result in Table 3 shows the benefits derived from GES by rice farmers in the study area. The table shows the benefits farmers derived from the accessibility of GESS services which had the following means: higher income (x = 2.7); increased in food production (x = 2.8); provision of employment (x = 2.6); farmer's registration (x=2.0); access to subsidize fertilizer (x = 2.4) and Access to improved seeds (x = 2.5).This is an indication that GES services not only provide seedlings for the farmers but also provide farmers with agrochemicals and drugs needed with seminars on how to efficiently use it for maintenance and optimal production in their agribusiness and this will have a positive effect on their wellbeing and welfare based on optimum profit that will be guaranteed. This result indicates that farmers have greatly benefit from the services rendered by the GES scheme though varied level of benefit has been derived from the different services rendered. This result is in line with the conclusion of Nwalieji*et al.* (2015) that the scheme brought great changes in increase in yield, access to fertilizers at subsidized rate and access to improved seeds which are benefits that the farmers have access to through the scheme.

Table 3: Respondents based on their level of benefit derived to growth enhancement scheme services (n = 170)

Benefits	Strongly Agree (4)	Agree (3)	Strongly Disagree (2)	Disagree (1)	∑fx	Mean
Higher income	117(468)	53(159)	0.0	0.0	627	3.7
Increased food production	129(516)	41(123)	0.0	0.0	639	3.8
Availability of feed	11(44)	20(60)	3(6)	136(136)	246	1.4
Provision of employment	120(480)	33(99)	4(8)	4(4)	591	3.5
Farmer's registration	53(212)	69(207)	44(88)	4(4)	511	3.0
Seminar/training	4(16)	29(87)	4(8)	133(133)	244	1.4
Provision of tractor for land clearing	6(24)	5(15)	2(4)	157(157)	200	1.2
Access to subsidized fertilizer	97(388)	59(177)	3(6)	11(11)	582	3.4
Access to improved seeds	100(400)	58(174)	3(6)	9(9)	589	3.5
Provision of drugs/vaccines	11(44)	7(21)	3(6)	149(149)	220	1.3
Subsidized agrochemicals	19(76)	21(63)	2(4)	128(128)	271	1.6
Solve problems of seasonality	23(92)	38(114)	13(26)	96(96)	328	2.0
Grand mean score						2.5
Decision cut off point						2.5

Source: Field survey, 2021.

The result in Table 4 shows the constraints encountered in GES by rice farmers. The table shows the constraints encountered by farmers in GESS services which had the following means; telecommunication (x = 2.0); late arrival of allocation (x = 2.0); farmers registration (x = 2.0); limited input allocation (x = 1.7); Low publicity and awareness of GESS (x = 1.5) and Incomplete farmer data base (x = 1.7); Distance of redemption centers from farmers (x = 2.0).This result corroborates the findings of Ahmed *et al.* (2016) where distance of redemption centers from farmers and lack of timely communication was indicated as constraints that hamper the smooth operation of the GES scheme. The long distance of the redemption centers might discourage the farmers from engaging themselves in the program due to security issues and additional cost of transportation that the inputs given required. Telecommunication problem might hamper them in assessing the input at due time and it makes communication with helpline staff to be difficult. Late arrival of input is line with the findings of Nwalieji *et al.* (2015) where late supply of agro-input was indicated as a major challenge faced by the farmers.

Table 4: Constraints as regards growth enhancement scheme services (n = 170)

Constraints	Very serious (3)	Serious (2)	Least serious (1)	∑fx	Mean
Telecommunication problem	27(81)	108(216)	35(35)	332	2.0
Late arrival of input	49(147)	64(128)	57(57)	332	2.0
Limited input allocation	25(75)	77(154)	68(68)	297	1.7
Low publicity and awareness of GESS	22(66)	54(108)	94(94)	268	1.6
Poor infrastructure	86(258)	69(138)	15(15)	411	2.4
Incomplete farmer data base	22(66)	70(140)	78(78)	284	1.7
Inadequate personnel at redemption	38(114)	41(82)	91(91)	287	1.7
Low level of farmers education	60(180)	55(110)	55(55)	345	2.0
Distance of redemption centers from farmers	32(96)	107(214)	31(31)	341	2.0
Poor communication from staff	23(69)	46(92)	101(101)	262	1.5
Demand for bribe farmers	28(84)	36(72)	106(106)	262	1.5
Insufficient collaboration of state government.	37(111)	39(78)	94(94)	283	1.6
Grand mean score					2.5
Decision cut off point					2.0

Source: Field survey, 2021.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, it was concluded that the scheme had very low performance indices in redemption of inputs, although there is yearly increase in farmers' participation and service delivery redemption in the scheme. The scheme brought great changes in increase in yield, access to fertilizers at subsidized rate and access to improved seeds. Farmers had high level of satisfaction on the scheme's implementation processes/activities. However, the study recommended that the scheme should be sustained by successive government, improvement in participation of farmers through proper and effective communication and provision of fertilizers with other agro-inputs should be sufficiently supplied to farmers appropriately to enhance production.

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