

## **Impact of Growth Enhancement Support Scheme on Sustainable Agricultural Production System in Kwande Local Government Area of Benue State, Nigeria**

Otene, V.A., Attah, A.J., Ejeh, Z.S. and Zarmai, D.U.

*Department of Agricultural Extension and Communication  
Federal University of Agriculture, Makurdi*

---

**Abstract:** *This study was carried out to assess the Growth Enhancement Support Scheme (GESS) of the Federal Government of Nigeria, and Kwande Local Government Area. Farmers in the Local Government formed the population of the study, and a sample of 148 respondents were selected by using simple random sampling technique, representing 7% of the population. Data were collected by using a structured questionnaire. The obtained data were analyzed by using descriptive statistics. The levels of participation, attitude and the perceived effects of GESS on agricultural production were measured by using a Likert scale. It was found that 50% of the respondents had medium level of participation in the scheme, and 43% had high level of use of mobile phones to communicate with the farmers. The analysis of the attitude of the farmers revealed that they felt neglected at the planning stage of the programme ( $\bar{X}=3.1$ ), but were of the opinion that the scheme had reduced the sharp practices associated with the distribution of farm inputs to farmers ( $\bar{X}=2.8$ ). The effect of the scheme was felt more in the area of easy access to agricultural inputs by farmers ( $\bar{X}=2.21$ ). The major challenges associated with the operation of the GESS were high transaction costs incurred by the farmers in the use of mobile phones, delay in delivery of mobile alert messages and late supply of inputs. Based on these findings, it was recommended that farmers be consulted at the planning stage of the scheme, and the required infrastructure for effective mobile communication be put in place by service providers. Also, the bureaucratic bottle-necks associated with the delay in delivery of inputs to farmers should be addressed by the appropriate authorities, as this will lead to sustenance and improvement of the country's agricultural production and food security.*

**Key words:** *Sustainable agricultural production, Growth enhancement, Perceived effect, Agricultural inputs, Participation, Attitude*

---

Date of Submission: 13-01-2020

Date of Acceptance: 29-01-2020

---

### **I. Introduction**

Agriculture is a major occupation in Nigeria, but the sector has been bedeviled with several challenges, principal of which is related to availability and accessibility of the inputs required for production (Tiri, Ojoko and Aruwayo, 2014). While availability of agricultural inputs is a problem, ability of farmers to access same is another challenge. The Growth Enhancement Support Scheme (GESS) was introduced in 2012 by Nigerian government to facilitate the distribution of agricultural inputs to farmers using the e-wallet platform (Adesina, 2012).

The expectation is that GESS would enhance the production capacity and yield of farmers all over the country (Nigeria), with full commitment of the three tiers of government viz Federal, State and Local councils (Federal Ministry of Agriculture and Rural Development (FMARD) Nigeria, 2013). After four years of launching the scheme, it is necessary to assess the scheme and identify the challenges that farmers have with the operation of the scheme. The study was carried out to assess the Growth Enhancement Support Scheme in Kwande Local Government Area of Benue State, Nigeria. The specific objectives of the study were:

1. To determine farmers' level of participation in GESS;
2. To find out farmers' attitudes towards GESS;
3. To assess farmers' perceived effect of GESS on their level of agricultural production and standard of living;
4. To identify challenges associated with the use of e-wallet platform of GESS.

### **II. Materials and Methods**

The study was carried out in Kwande Local Government Area of Benue State, Nigeria. Benue State is located in the Middle Belt region of Nigeria, also known as North-Central Nigeria. Farmers in the Local Government Area registered for the e-wallet platform of GESS constituted the population of the study. The data

were collected by using a pre-tested structured questionnaire. The sampling frame of the study was obtained from the Federal Ministry of Agriculture and Rural Development, out of which a sample of 148 respondents were selected by using simple random sampling technique, representing 7% of the population. The research instrument (questionnaire) was tested for validity and reliability and confirmed suitably.

The data obtained were analyzed using descriptive statistics. The level of participation, attitude and level of effect of GESS on agricultural production were measured by using a Likert scale. Farmers' attitude towards GESS was measured on a 4-point Likert scale with responses ranging from "strongly agree" (assigned a score of 4) to "strongly disagree" (assigned a score of 1). The score were reversed for negative statements. Farmers' perceived effect was measured on a 4-point scale with responses ranging from "no effect" (assigned 0) to "great effect" (assigned 3).

### III. Results and Discussion

It was found that 50% of the respondents had medium level of participation in the Growth Enhancement Support Scheme (Table 1). About 43% of the respondents had high level of use of mobile phones. This is a favourable result with the prospect of adoption of GESS, as agricultural inputs will be delivered using phones to communicate with the farmers. Nwalieji, Uzeugbunam and Okeke (2005) also found rice farmers in Anambra State, Nigeria to have an appreciable level of participation in the GESS

Research findings on the farmers' attitude towards the e-wallet platform of the scheme revealed that farmers felt neglected at the planning stage of the programme ( $\bar{X}=3.1$ ) (Table 2). The farmers were of the opinion that the programme had reduced corruption in the supply and distribution of farm input to farmers ( $\bar{X}=2.8$ ), and sustenance of the programme would lead to improvement in the country's agricultural production and food security of the nation ( $\bar{X}=2.8$ ).

The impact of GESS on productivity and rural livelihood was perceived by the farmers as quick accessibility to improved seeds ( $\bar{X}=2.21$ ) (Table 3). Nwaobiala and Ubor (2015) also found the GESS to increase the access of farmers in Imo State, Nigeria to improved seeds and fertilizers. GESS has therefore increased the access of farmers to improved seeds and fertilizers in the study area, an indication that the reasons for which the policy of GESS was formed is being achieved.

The major challenges associated with the operation of the GESS were high transaction costs incurred by the farmers ( $\bar{X}=2.4$ ), delay in delivery of mobile alert messages ( $\bar{X}=2.4$ ) and late supply of inputs ( $\bar{X}=2.3$ ) (Table 4). Suresh et al. (2014) reported that farmers in Nigeria have issues with late arrival of farm inputs and mobile alert messages. The poor state of communication (GSM) infrastructure in the study area could be responsible for the delay in delivery of the messages to the recipients, while bureaucratic bottle-necks could be responsible for the delay in the delivery of inputs to the farmers.

### IV. Conclusion And Recommendations

From the foregoing, it could be concluded that the farmers in Kwande Local Government Area of Benue State, Nigeria had appreciable level of participation in the Growth Enhancement Support Scheme. However, they felt negligence at the planning stage of the scheme. They attested to the fact that the programme had reduced the level of sharp practices in the supply of agricultural inputs to farmers. The scheme facilitated farmers' access to agricultural inputs, including improved seeds and met the prior expectation. The major challenges associated with the use of the e-wallet platform were high transaction costs incurred by the farmers and late arrival of mobile alert messages and inputs.

Based on the findings of this research, it was recommended that:

1. Farmers be consulted and included in the planning and execution of the scheme for its sustenance.
2. Infrastructure required should be provided by GSM service providers for effective communication.
3. The cost associated with the use of mobile phones should be reduced by GSM service provider to encourage the participation of farmers in the scheme.
4. The bureaucratic bottle-necks associated with the delay in delivery of inputs to farmers should be addressed by the appropriate authorities.

**Table 1: Level of participation in GESS**

Variables	Levels					
	Low		Medium		High	
	F	%	F	%	F	%
Participation in GESS	47	32.2	73	50.0	26	17.8
Use of mobile phones	40	27.4	44	30.1	62	42.5

**Table 2: Attitudes of farmers towards E-wallet**

Statement	S D		D		A		S A		Mean
	F	%	F	%	F	%	F	%	
e-wallet platform will end up in failure as past programmes	17	11.6	27	18.5	45	30.8	57	39.0	2.9
Telephone method is very suitable to access inputs	8	5.5	46	31.5	72	49.3	20	13.5	2.7
GESS, e-wallet has reduced corruption in input supply	13	8.9	42	28.8	52	35.6	39	46.7	2.8
The modus of operandi of e-wallet is suitable for rural farmers	20	13.7	55	37.7	47	32.2	24	16.4	2.5
Success would be achieved in developing agriculture if e-wallet is sustained	23	15.8	22	15.1	60	41.1	41	28.1	2.8
Benefits derived from GESS e-wallet is not worth time invested in it	22	15.1	46	31.5	48	32.9	30	20.5	2.5
e-wallet adequately addresses farmers input needs without much stress	28	19.2	43	29.5	50	34.2	25	17.1	2.4
Agro inputs distribution timing is appropriate with e-wallet	20	13.7	48	32.9	49	33.6	29	19.9	2.5
GESS could be better if farmers were consulted	11	7.5	20	13.7	58	39.7	57	39.0	3.1
Poor feedback opportunity make the e-wallet platform uninteresting	23	15.8	34	23.3	56	38.4	33	22.6	2.6
e-wallet has instilled farmers interest in further agricultural programmes	22	15.1	38	26.0	50	34.2	36	24.7	2.6
GESS, though beneficial has wasted allot of recourses that outweigh the gain	21	14.4	48	32.9	47	32.2	30	20.5	2.5
e-wallet will blossom more with more commitment from ADP staff and cellulant	18	12.3	35	24.0	62	42.5	31	21.2	2.7
More farmers will emerge if GESS e-wallet implementation is extended	8	5.5	33	22.6	52	35.6	53	36.3	3.0
General neglect of farmers perception is a major impediment for successful e-wallet scheme	8	5.5	27	18.5	56	38.4	55	37.7	3.0

**Table 3: The impact of GESS scheme on productivity and rural livelihood**

variables	No extent		Little extent		Some extent		Greater extent		mean
	F	%	F	%	F	%	F	%	
Quick accessibility to improve seeds	15	10.3	25	17.1	53	36.3	53	36.3	2.21
Access to fertilizer	17	11.6	61	41.8	60	41.1	8	5.5	1.72
Access to subsidized farm inputs	10	6.8	53	36.3	68	46.6	15	10.3	1.49
Increase in production	18	12.3	81	55.5	31	21.2	16	11.0	1.49
Increase in annual income	24	16.4	57	39.0	55	37.7	10	6.8	1.61
Increase in yield	18	12.3	76	52.1	44	30.1	8	5.5	1.47
Increase in standard living	57	39.0	43	29.5	39	26.7	7	4.8	1.60

**Table 4: Constraints faced by the respondents in the use of E-Wallet platform of the GESS**

Statements	No constraint (%)	Medium Constraint (%)	Severe Constraint (%)	Mean
Stress farmers go through in order to get inputs	26.7	48.3	29.5	2.0
Long queues at the redemption centres	26.0	34.9	39.0	2.1
High transaction cost incurred by farmers	12.3	34.9	52.7	2.4
Sharp practice by input distributors/dealers	26.0	50.7	23.3	1.9
Late supply of inputs	13.0	40.4	46.6	2.3
Long distance covered from home to redemption centre	32.9	41.1	26.0	1.9
Interference in operation by Government agents/officials	21.9	54.8	23.3	2.0
Mobile alert messages come late	9.6	39.0	51.4	2.4
Non commitment of ADP staff	32.9	44.5	22.6	1.8
Less quantity of agro-input allocation	22.6	45.2	32.2	2.0
Agro inputs supplied are not suitable for production	15.8	45.9	38.4	2.2
Interference in the operation by influential people	23.3	42.5	34.2	2.1

### References

- [1]. Adesina, A. (2012). Growth enhancement support scheme. Save Agricultural sector. Retrieved from <http://www.punch.ng.com/business/industryGESS>.
- [2]. Federal Ministry of Agriculture and Rural Development (FMARD), Nigeria (2013). GES live data dashboard. Retrieved from <http://www.fmard.gov.ng/ges-live-data-dashboard>.
- [3]. Nwalieji, H. U., Uzuegbunam, C. O. and Okeke, M. N. (2015). Assessment of Growth Enhancement Support Scheme among rice farmers in Anambra State, Nigeria. *Journal of Agricultural Extension* 19(2): 71-81.
- [4]. Nwaobiala, C. U. and Ubor, U. V. (2015). Effects of Growth Enhancement Support Scheme of the Agricultural Transformation Agenda on arable crop farmers' production in Imo State, Nigeria. *Nigerian Journal of Agriculture, Food and Environment* 11(4): 130-135.
- [5]. Suresh, C. B., Kwabena, G. B., Manson, N. and Hyacinth, O. E. (2014). Capacity assessment for achieving the Agricultural Transformation Agenda in Nigeria. International Food policy Research Institute Working Paper No. 26. 55pp.
- [6]. Tiri, G. D., Ojoko, E. A. and Aruwayo, A. (2014). Growth enhancement support scheme (GESS) and the challenges of food security in Nigeria: A review. *Journal of Agricultural and Biological Science*, 9(7): 226-232.

*Otene, V.A., et.al. "Impact of Growth Enhancement Support Scheme on Sustainable Agricultural Production System in Kwande Local Government Area of Benue State, Nigeria." IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS), 13(1), 2020, pp. 51-54.*