

Effect of Growth Enhancement Support Scheme (GESS) On Cassava Production among Cooperative Farmers in Ekiti State

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Abstract: *The study examined the effect of Growth Enhancement Support Scheme (GESS) on cassava production among cooperative farmers in Ekiti State. The specific objectives of the study were to assess the effect of growth enhancement support schemes on cooperative farmers' productivity of cassava in Ekiti state, as well as to determine the effect of growth enhancement support schemes influence cooperative farmers' revenue in Ekiti state. A survey method was used for this study, through the use of structured questionnaires. Data were obtained from 240 farmers who are members of cooperative societies that have experienced the GESS support services and was analyzed with ANOVA regression analysis. The results revealed that farmers who participated earned more income after they had accessed GESS facilitation; evidence of significant difference in cooperative farmers' productivity before and after they got GESS support services during the farming season was found. There is a significant difference in the amount of income earned from cassava production during the farming season before and after the farmers benefited from GESS Support Services received on the farm earned. The study recommended that women should be encouraged to take part in the GESS programme.*

Keyword: *Growth Enhancement Support Scheme (GESS), Cassava production, Income, cooperative farmers.*

1.0 INTRODUCTION

Nigeria now has poor agricultural input consumption and ranks towards the bottom of the global agricultural input consumption index. Similarly, Coker (2015) reports that Nigerian improved seeds were used by 5% of farming households, compared to 25% in East Africa and 60% in Asia. Between 1961 and 2008, Nigeria's annual crop output growth rate was 1.2 percent, compared to 2.3 percent for Indonesia and 3 percent for Malaysia. Cassava is a key food crop in Nigeria, with a productivity index ranging from 12.3mt/ha to 28.4mt/ha between 1999 and 2010 (FMARD 2011), making it the crop with the highest current and potential output in the country. According to Adebayo (2009), cassava is one of the most important food crops in Africa because of its high resilience and tolerance to a wide range of ecological circumstances, which has allowed it to be produced for many generations in Sub-Saharan Africa since its introduction in the 16th century. The trend of cassava production cannot be disregarded, since FAO (2012) estimated global cassava production in 2008 to reach 232,950,180 tons. From this total, 51 percent came from Africa, 34 percent from Asia, and 15 percent from America, particularly South America. According to the survey, the top five cassava producers in the world are Nigeria, Thailand, Brazil, Indonesia, and the Congo Democratic Republic. Nigeria is currently believed to be the world's largest grower of cassava, with production of two main types of cassava cultivars Manihot palmate and Manihotaipi (bitter and sweet cassava), respectively Etudaiye, Nwabueze, and Sanni (2009). Ohimain's (2014) In recent times, President Obasanjo's administration introduced the 10% cassava inclusion in wheat flour policy as a prominent agricultural program in 2004-2005, President Umaru Yaradua's administration in 2007-2010 reduced it to 5% cassava inclusion in wheat flour policy, and President Goodluck Jonathan's administration (Nigeria's immediate past president) 2010-2015 increased it to 40% cassava inclusion in wheat flour policy, which became effective in 2015.

Nigeria intended to increase cassava production from 35 to 51 million tonnes per year by following the policy. Regardless of all of these policies, each one has its own set of requirements for implementation. According to UNIDO/FGN (2006), Falade and Akingbola (2008) reported that 10% cassava inclusion in wheat created a demand of 300,000 tonnes of High Quality Cassava Flour (HQCF) but was only able to access 200,000 metric tonnes/year, and it was expected that 40% inclusion should access at least 800,000 metric tonnes/year but the policy failed to access it because the majority of HQCF processors are small-scale, producing less than 5 tonnes daily, While a few medium-scale processors produce 5-30 metric tonnes per day, they are unable to deliver HQCF to flour mills on a constant basis.

This decrease in supply expectations is due to the fact that 99 percent of Nigerian cassava farmers are small holders with farm sizes ranging from 1 to 5 ha, and their crops are frequently intercropped with yam, maize, or legumes. The majority of these farms are farmed manually with primitive equipment and without the use of fertilizers or other agrochemicals. Empirical evidence suggests that the availability of farm inputs such as fertilizer, improved stem and seed is critical to increasing cassava production capacity in Nigeria (Adekanye, Ogunjimi, and Ajala, 2013; Fadairo, Orbunde, and Olayinka, 2014; Onu and Edon, 2009; Anyaegbunam, Okoye, Asumugha, Ogbonna, Madu, Nwakor and Ejechi, 2010). Meanwhile, empirical evidence from earlier research produced a void

(vacuum) since they failed to analyze the effectiveness of GESS services on cassava production and its impact on small scale cooperative farmers from cassava production, which is the topic of this study. Despite the obvious fact that Ekiti state contributes to cassava production in Nigeria and is also one of the states where GESS is currently operating, previous studies, to the best of my knowledge, failed to evaluate the impact of the scheme on the cassava production capacity of the state's cooperative members.

Thus, this study arose from a desire to contribute to knowledge, as it was determined to analyze the impacts of GESS on cassava output among cooperative farmers in Ekiti State, the study's emphasis. The study was specifically designed to assess the extent to which growth enhancement support schemes affect cooperative farmers' productivity of cassava in Ekiti state, as well as the extent to which growth enhancement support schemes influence cooperative farmers' revenue in Ekiti state, Nigeria.

Objectives of the Study

The board objective of this study is to determine the Effect of Growth Enhancement Support Scheme (GESS) on cassava production among cooperative participating farmers in Ekiti State, Nigeria.

The specific objectives are to:

- i. Evaluate the influence of socio-economics characteristics of respondents on Fertilizer access;
- ii. Assess the extents of GESS E-wallet on the ease of procuring fertilizer by the cooperative farmers;
- iii. Determine the effect of quantum of fertilizer obtained as a result of GESS facilitation on cassava yield;
- iv. Assess the effects of cost of fertilizer obtained as a result of GESS facilitation on cassava yield; and
- v. Determine the effect of fertilizer obtained as a result of GESS facilitation on cooperative farmers' income.

Research Questions

This study seeks to address the following questions.

- i. What are the socio-economic characteristics of the cooperative farmers in Ekiti State?
- ii. To what extent are the GESS E-wallet ease the procurement of fertilizer for the participating cooperative farmers with respect to Time and cost?
- iii. What is the effect of quantum of fertilizer obtained as a result of GESS facilitation on cassava yield;
- iv. What is the effect of cost of fertilizer obtained as a result of GESS facilitation on cassava yield?
- v. What is the effect of fertilizer obtained as a result of GESS facilitation on participating cooperative farmers' income?

Research Hypotheses

1. The growth enhancement support scheme has no significant effect on cooperative farmer's productivity of cassava in Ekiti state
2. The growth enhancement support scheme has no significant effect on the income of cooperative farmers in Ekiti state.

2.0 LITERATURE REVIEW

Conceptual Review

Cassava Production

Cassava has played and continues to play an important role in Nigeria's agricultural scene. Since its introduction into Nigeria on Portuguese trading ships from Brazil in the late 1600s, it has grown from a minor crop to a large crop that accounts for 40-50 percent of all calories consumed in Southern and Central Nigeria (Maziya-Dixon and Onadipe 2007). Nigeria is the world's largest cassava producer. In 2009, its current output was projected to be 36.8 million metric tons (FAOSTAT2010). In 2009, the total harvested area was 3.13 million ha, with an average yield of 11.7 t ha⁻¹ (FAOSTAT 2010).

The National Centre for Agricultural Mechanization (NCAM) and other relevant authorities taught local fabricators to make and sell thousands of gratings, dewatering, and drying devices. Six farm-gate primary processing centers for training extension and farmers in the production of cassava flour, chips, and pellets were created, according to the FGN (2011) Action Plan for Cassava Transformation in Nigeria. State extension personnel were also taught in new manufacturing technology. The Presidential cassava initiative elevated the profile of cassava in Nigeria and proved the country's enormous capacity to increase production in a short period of time; in 2006, cassava production reached 45 million metric tons, up from 35 million tons when the program began in 2003. During the same time period, the country also saw the establishment of two large cassava flour mills and 136 small mills.

Recently, two programs funded by USAID and the Netherlands' Directorate-General for International Cooperation (DGIS) attempted to establish cassava value-added chains for starch, sweeteners, and high-quality cassava flour (HQCF). Maximizing Agricultural Revenue and Key Enterprises in Targeted Sites (MARKETS), a USAID-funded project, began in 2005 with the goal of partnering credible cassava processors with smallholder farmers in Nigeria to build efficient value-added chains for starch and sweeteners. In order to reduce production costs, the initiative also adopted the best farming practices. In Ondo State, MARKETS is collaborating

with MATNA Nigeria Limited, one of the country's two large starch mills, and in Ogun State, MARKETS is collaborating with EKHA Agro, Nigeria's only cassava-based sweetener processing plant, to build robust supply chains. The Cassava Supply Management System (CSMS) is a computer-based system that was created to organize cassava production, harvesting, and collection from a network of around 400 farms per processing plant, allowing these plants to reach 60-80 percent of processing capacity in five years.

According to the FGN (2011) Action Plan for Cassava Transformation in Nigeria, the second project, Cassava +, was launched by the International Fertilizer Development Center (IFDC) and Dutch Agricultural and Trading Company (DATCO) with funding from the Netherlands' Directorate-General for International Cooperation (DGIS). The three-year project's goal is to transition cassava from a subsistence crop to a cash crop by collaborating with farmers in Taraba, Kwara, Kogi, Osun, and Rivers States to supply raw materials for high-quality cassava flour (HQCF). The programs aim to boost the productivity of 160,000 farm families by building sustainable and productive cassava and rotation cropping systems and connecting them to predictable demand through DATCO. Furthermore, the project aims to train agro-dealers and other farm service providers and connect them with participating farmers.

Cassava reform, which is being undertaken by the Honorable Minister of Agriculture, Dr Akin Adesina, as part of President Goodluck Jonathan's Agricultural Transformation Program, attempts to build on the gains made in all of the preceding endeavors. The new cassava transformation will drive development in the cassava sector through value-addition to capitalize on cassava potential in the industrial and export sectors. By addressing existing technological and policy barriers, the proposal will develop market and production support around farmers and processors.

Overview of the Growth Enhancement Support Scheme

Since 1960, the Nigerian government has strived to be one of the food-secure nations in terms of self-sufficiency. This, however, has yet to be accomplished because the country is still heavily reliant on imported food goods. The food self-sufficiency ratio fell from 98 percent in the early 1960s to less than 54 percent in 1986. In 1990, 18 percent of the population (14.4 million) was estimated to be critically food insecure, which increased to 36 percent (32.7 million) in 1992 and 40.7 percent in 1996 (Babatunde and Oyatoye, 2005). As a result, the country's food insecurity is worsening, with recent estimates putting the number of hungry people in Nigeria at more than 53 million, or just less than 30% of the country's total population of 160 million (Azubuike, 2012). However, things changed when the Federal Government of Nigeria (FGN) launched the Agricultural Transformation Agenda (ATA) during President Goodluck Jonathan's administration, with its core critical objectives of a value chain approach and its linkages with key changes in food and trade policies that appear to be having an impact since its inception (Osinowo, 2012). The government intends to boost efficiency through competition and to create an enabling environment for the private sector-led survival and modernization of Nigerian agriculture. The development of agricultural key value-chains—such as the provision and availability of improved inputs, increased productivity and production, the establishment of a well-established staple crop processing zone, the reduction of post-harvest losses, and the improvement of market linkages—all revolve around increased productivity.

One of the many key components of the Federal Government's Agricultural Transformation Agenda is the Growth Enhancement Support Scheme (GESS). It was created with the explicit goal of providing farmers with affordable agricultural inputs such as fertilizer and hybrid seeds in order to boost their yield per hectare and make it equivalent to world standards. It is a novel strategy that aims to eliminate the challenges that are commonly linked with the distribution of fertilizer and hybrid seeds in the country. There have been complaints in the past about diversion, high prices, and adulteration of various inputs, which has resulted in low production, increasing poverty, unemployment, and a lack of enthusiasm in farming.

The scheme's approach is to target beneficiaries via an electronic system and to encourage private sector participation in the distribution and delivery of fertilizer and other vital inputs directly to farmers. With a firm determination to break free from the shackles of the past and the ineffective, inefficient, and corrupt distribution of fertilizer and other government-subsidized inputs to farmers, the President directed the Federal Ministry of Agriculture and Rural Development (FMARD) to devise a mechanism. However, the scheme's main goal is to improve the capacity of farmers who cannot buy a bag of fertilizer or seedlings.

The scheme has the following goals:

To eliminate the usual complexities associated with fertilizer distribution; to encourage critical actors in the fertilizer value chain to collaborate in order to improve productivity; to increase farmer income and promote food security; and to shift the provision of subsidized fertilizer away from the general public and toward genuine small-scale farmers.

The federal government is no longer in the business of buying and disturbing fertilizers and seeds, nor is it in the business of awarding fertilizer and seed contracts under the new system. The technology is intended to allow farmers to get fertilizer allotment notices via mobile phone, making the commodity more accessible and cutting out intermediaries.

Furthermore, fertilizer businesses regard GESS as a way to assure appropriate fertilizer supply and timely distribution in order to enhance food production in the country (FSPAN 2012). To achieve this goal, the Fertilizer Suppliers Association of Nigeria

(FESPAN) handled the scheme's planning and sensitization to key stakeholders such as farmers, agro-dealers, state and local governments to ensure early preparation of the program's activities and encourage periodic monitoring of the scheme.

Theoretical Underpinning

Cobb-Douglas production function theory was proposed by two economists, Cobb and Douglas, between 1927 and 1947. These two economists empirically examined the function using statistical analysis and found it to be appropriate in postulating the links between output and input in the production process. The idea is the foundation for modeling the link between Cassava outputs and the GESS, an input augmentation initiative. As a result, a model explaining the link between Cassava outputs and GESS is presented using the Cobb Douglas production function as follows:

$$Y=f(\text{GESS})\dots\dots\dots (1)$$

Where Y is the quantity of output produced by a farmer and GESS represents the indicators of the Growth Enhancement Support Services GESS, which is the input.

Empirical Studies

Tanko (2015) conducted a study to determine farmers' participation in the Kaduna State Growth Enhancement Support Scheme (GESS) program. Regression analysis revealed that age, extended contact, yield, and income status all had a significant relationship with level of participation. GESS individuals had a significantly greater mean output (2550kg) than non-GESS participants (857kg). Participation in the GESS program was substantially responsible for the disparity in mean output levels. The calculated Z-statistic value (246.02) for income was 5% significant. The timing of input delivery has been identified as a serious difficulty by farmers and agro dealers, and has been confirmed by state GESS coordinators.

Nwaobiala and Ubor (2015) conducted research on the influence of the Agricultural Transformation Agenda's Growth Enhancement Scheme on arable crop farmers' production in Imo State, Nigeria. The system boosted farm size, farm income, and farm output of participants at 1% probability levels after participation in the scheme, according to the results of Z-test analysis. For enhanced arable crop production in the research area, close proximity of redemption centers, development of cooperatives, timely distribution of agricultural supplies, and access to arable land for framers were advised.

Itobiye (2016) conducted a study to examine the influence of a growth augmentation strategy on rural women's livelihood in Kaduna State, Nigeria, and to compare their performance in terms of output, income, and level of education with those of non-participants. Age, marital status, and level of education were significantly related to the level of participation at a 5% level of significance, while extension contact and market access were also significantly related to the level of participation at a 10% level of significance, according to the primary source of agricultural information. There was a statistically significant difference in output and income between GES members and non-participants. Participants in the GES reported a higher income than non-participants. There was also a considerable disparity in participant income.

Akwo, Eze, and Nwaiwu (2018) used a two-stage random sampling technique to select 64 respondents within the study area to examine the market share of High Quality Cassava Flour (HQCF) in comparison to wheat flour, ascertain the marketing channels and strategies of the HQCF, and identify the constraints militating against HQCF marketing in the study area. The market share index was calculated using panel data from the study. According to the results, HQCF was competitive in the study area, with a market share index of 25.2%. The majority of flour is now sold to local customers, and marketers typically wait to satisfy consumer wants rather than creating demand for flour through advertising.

Oradilo (2018) examined the impact of the Growth Enhancement Support Scheme on local farmers in the FCT's Bwari Area Council as a case study, as well as the importance of information and communication technology (ICT) in increasing food output. According to the study, ICT positive impart in agriculture is 76.92 percent among respondents, while non-impart is 15.38 percent. According to the figure's breakdown, 54 percent of respondents had increased yield, 18 percent had increased income, and 14 percent had a higher standard of living.

Tiri, Mlay, and Roselyne (2020) investigated the productivity impact of Kano State's Growth Enhancement Support Scheme on maize farm households. The two-stage least square estimator revealed that GESS subsidies increased participants' yield by 32.3 percent, and the difference was statistically significant (P0.05), whereas the total factor productivity index revealed that participants were more productive) and had an average of 14.1 percent net gain from production costs in the 2016 farming season. The size of the predicted treatment effect reflects a moderate improvement in participant productivity results. The study shows that increasing maize output through input use alone is insufficient; improved input use efficiency through integrated crop management strategies is also required.

Oten, Attah, Ejeh, and Zarmai (2020) investigated the impact of the Growth Enhancement Support Scheme on a sustainable agricultural production system in Benue State's Kwande Local Government Area. The analysis of farmers' attitudes found that they felt neglected during the program's development stage ($X = 3.1$), but that the scheme had reduced the harsh practices related with the delivery of farm inputs to farmers ($X = 2.8$). The scheme's impact was seen most strongly in the area of farmers' simple access to agricultural inputs ($X = 2.21$). The key obstacles related with the GESS's operation were the high transaction costs experienced by farmers in the usage of mobile phones, the delay in transmission of mobile alert messages, and the late supply.

3.0 METHODOLOGY

This study used a survey method. The target population of interest is all individual cassava farmers in Ekiti state who are members of FADAMA groups that have evolved into cooperative societies. Thus, the study's population comprises of all 930 individual members of Ekiti state's 93 registered and working cooperative societies. The proportionate sampling technique was utilized, and the results were determined using Slovin's Formula. Because of the variety in responses from respondents, this formula is deemed most appropriate. The sample size is estimated in the table below.

n = Sample size

N = Population

E = error term/ confidence interval

$$n = \frac{930}{1 + 930(0.05)^2}$$

$$n = 280$$

Furthermore, the 280 respondents for the study were chosen using stratified random selection. Furthermore, the 280 samples were drawn at random from the local governments of Oye, Gbonyin, Ekiti-west, and Ikere. The primary research tool was a questionnaire, which was gathered in accordance with the study's objectives.

Analysis of Variance is used to analyze data (ANOVA). The study contains two hypotheses: I to identify the influence of fertilizer cost received as a result of GESS facilitation on cassava yield; and (ii) to determine the effect of fertilizer quantity obtained as a result of GESS facilitation on cassava yield in Ekiti state. Inferential statistics are used to test these hypotheses. It used statistical tools such as the paired sample t-test to compare the cost of fertilizer at market pricing and GESS redemption center, productivity of farmers before and after the scheme's implementation, and revenue of farmers from the 2012 to 2016 farming seasons.

4.0 RESULT AND DISCUSSION

4.1 Result

The effect of quantum fertilizer obtained (Number of Bags) as a result of GESS facilitation on cassava yield

Table 1: Distribution of Responses based on the quantum of fertilizer (Number of Bags) obtained Before and After accessing GESS facilitation on cassava yield.

Before GESS			After GESS		
Quantity Produced	Frequency	Percentage %	Quantity Produced	Frequency	Percentage %
Less than 10 Bags	156	65.2	Less than 10 Bags		
11 – 20 Bags	83	34.75	11 – 20 Bags		
21 – 20 Bags			21 – 30 Bags	81	33.7
31 – 40 Bags			31 – 40 Bags	127	52.9
41 – 50 Bags			41 – 50 Bags	32	13.2
Above 50 Bags			Above 50 Bags		

Source: Researcher computation

Note: The respondents' cassava production was measured in "Sack Bags," which are often used to package 50kg of rice. This was done because it was what the respondent farmers used to quantify their productivity.

According to the results in Table 1, prior to GESS facilitation, 65.2 percent of respondents were only able to produce less than ten (10) bags of cassava; few of them then used fertilizer, while many could not afford it. 34.75 percent of those polled produced between 11 and 20 bags of cassava, implying that they can only afford one (1) bag of fertilizer, severely limiting their productivity. Table 1 further demonstrates that after GESS facilitation, 33.7 percent of respondents produced between 21 and 30 bags of cassava, whereas 52.9 percent produced between 31 and 40 bags of cassava. 13.2% of those polled produced between 41 and 50 bags of cassava. Notably, many of the respondents had a capacity of fewer than 10 bags prior to GEES, but a sizable number of respondents have been able to produce up to 50 (Number of bags) of fertilizer. Following access to GESS facilitation on cassava yield. This implies that GESS facilitation on cassava yield aids in cassava yield production. The findings of this study support the findings of Amurthy, Tashikalama, and Maurice (2018), who found that the Nigerian government started the Growth Enhancement Support Scheme (GESS) to enhance agricultural productivity by providing 'smart subsidies' on some farm input to small-scale farmers.

The differences in farmers' income of fertilizer obtained Before and After GESS facilitation on participating respondent income

Table 2: Distribution of Responses based on the income of fertilizer Before and After accessing GESS facilitation

Before GESS			After GESS		
Annual Income level on Cassava production	Frequency	Percentage %	Annual Income on Cassava Production	Frequency	Percentage %
Less than ₦100,000	97	41.0%	Less than ₦100,000	18	22.9
₦101,000 - ₦300,000	129	54.8	₦101,000 - ₦300,000	90	31.2
₦301,000 - ₦500,000	11	4.5	₦301,000 - ₦500,000	83	35.0
₦501,000 - ₦700,000			₦501,000 - ₦700,000	41	17.2
₦701,000 - ₦1 million			₦701,000 - ₦1 million	15	7.2
Above ₦1million			Above ₦1million	03	1.28

Source: Researcher computation

According to the results of Table 2, prior to GESS facilitation, 41.0 percent of respondents earned less than \$100,000 from sales of their cassava produce, 54.8 percent earned between \$100,000 and \$300,000, and 4.5 percent earned between \$300,000 and \$500,000. The table also showed that after participating in the GESS programme, 22.9 percent of respondents earned less than \$100,000 from sales of their cassava produce, 31.2 percent of respondents earned between \$100,000 and \$300,000, 35.0 percent of respondents earned between \$300,000 and 500,000, 17.2 percent of respondents earned between 501,000 and 700,000, 7.2 percent of respondents earned between 700,000 and one million, and 1.28 percent of respondents earned more than one million naira all from their sales of their cassava produces. It is also important to note that some of the respondent farmers who earned more than others did not use only the two (2) bags of fertilizer given to them at the GESS redemption center, but because they brought half the price they normally brought from the market, they brought extra bags from the market because they had more money with them as a result of the GESS price, which is half the market price.

N134, 538.01 was the respondent's average annual income level before GESS facilitation, and N788, 824.5 was the respondent's average annual income level after GESS facilitation. This means that the annual income of cooperative farmers increased from N134,538.01 before GESS facilitation to N937,076 after GESS facilitation on farmers income. This study's findings support the findings of Tanko (2015), which also show that the Growth Enhancement Support Scheme (GESS) has had a significant impact on farmers' farm income in Nigeria.

4.2 Test of Hypotheses

H₀₁: The growth enhancement support scheme has no significant effect on cooperative farmer's productivity of cassava in Ekiti state

Table 3: T test Statistics Result (One-Sample Test)

	Test Value = 0					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
GESS	51.065	8	.000	1.138576	1.09465	1.18568
Productivity	92.348	8	.000	1.888797	1.85976	1.93864

Significance @ 5% level of significance

According to the T test model statistics, access to GESS support services has a significant influence on cooperative farmer cassava productivity. As a result, the P-value (0.000) is less than the customary 0.05, indicating that the model is significant at the 5% threshold of significance. As a result, there is sufficient evidence to reject the null hypothesis and indicate that the growth enhancement support plan has a significant influence on cooperative farmers' cassava productivity during the agricultural season in Ekiti state.

The T test statistics model analysis was performed to establish the significant difference in cooperative farmers' productivity before and after they got GESS support services during the farming season.

H₀₂: The growth enhancement support scheme has no significant impact on the income of cooperative farmers in Ekiti state.

Table 4: T test Statistics Result (One-Sample Test)

	Test Value = 0					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
GESS	58.104	5	.000	1.708261	1.650242	1.772784
Average income	46.287	5	.000	3.013184	2.887813	3.143724

Significance @ 5% level of significance

According to the T test model statistics, accessing GESS assistance services has a considerable influence on the income of cooperative farmers. As a result, the P-value (0.000) is less than the customary 0.05, indicating that the model is significant at the 5% threshold of significance. As a result, there is sufficient evidence to reject the null hypothesis and suggest that the growth enhancement support plan has a significant influence on cooperative farmers' cassava income during the agricultural season in Ekiti state.

The T test statistics model analysis was utilized to examine whether there was a significant difference in income gained from cassava cultivation before and after benefiting from GESS facilitation on cassava yield.

Table 5: Paired Samples Statistics Result on the Significant Difference between Income Earned from Cassava Production before and after benefited in the GESS Facilitation yield

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Actual	1.83274	240	1.37772	.089842
	Standard	1.89974	240	.317146	.020268

Paired Samples Test

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair actual - standard	.0543628	1.400245	.090368	.232739	.124937	6.599	5	.000

*Significant @5% level of significance

The paired T test model statistics show that the quantity of income earned differs. The P-value (0.000) is less than the customary 0.05, indicating that the model is significant at the 5% level. There is adequate evidence to reject the null hypothesis and conclude that there is a substantial difference in the amount of money obtained from cassava output throughout farming seasons before and after farmers got GESS Support Services on the farm earned.

Discussion of Finding

The hypothesis was tested using the t-test, and hypothesis one revealed that the growth enhancement support program had a substantial influence on cooperative farmers' cassava productivity during the cropping season in Ekiti state; There are significant differences in the productivity of cassava produced by cooperative farmers before and after they have accessed the GESS Support Services available to them during farming seasons.

Hypothesis two revealed that the growth enhancement support scheme has a significant effect on cooperative farmers' income from cassava production during the farming season in Ekiti state; there is a significant difference in the amount of income earned from cassava production during the farming season before and after the farmers benefited from GESS Support Services received on the farm earned.

This study's findings back up the findings of Tiri, Mlay, and Roselyne (2020) that the Growth Enhancement Support Scheme (GESS) influences farmers' fertilizer use in rural areas.

5.0 RECOMMENDATIONS

The following recommendations were made by the study:

1: Numerous studies acknowledge the role of women in agricultural output; as a result, women should be encouraged to participate in the GESS program. This will enhance the quantity of cassava produced because if more women participate in the GESS program, more cassava will be produced, and this will also alleviate household poverty among women since they will earn revenue to meet their family's requirements.

2: As a matter of necessity, the government and the scheme's organizer should do all in their power to make bio data registration and redemption as flexible as feasible. This will alleviate the farmers' worry and problems prior to participating in the scheme. This will also motivate and entice additional farmers to sign up for the plan, increasing cassava production capacity.

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