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Assessment of the Effect of Fuel Subsidy Removal Policy on Agricultural Activities in Hong Local Government Area of Adamawa State

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Abstract

The removal of the fuel subsidy is a policy that was meant to sanitize the petroleum industry and end corruption and waste to the extent of stimulating economic development. However, the unintended effect of the policy manifest on the agricultural activities in Hong local government area. Hence this study focused on the effect of fuel subsidy removal on agricultural activities in Hong local government. The study focused on two components within the framework of agronomics to assess whether each of them has affected agricultural activities. To this end, the study specifically sought to determine the extent to which the cost of farm inputs have affected activities of farmers, find out ways in which the cost of transport has affected agricultural activities in Hong local government area. The study is explained within the framework of price elasticity theory. The study used data collected through the use of questionnaires in addition to documented literatures. The findings revealed among other things that increase in the price of fertilizer has made it difficult for farmers to acquire the required quantity for their farm, many farmers have reduced the size of their farm to the limit of farm inputs they can afford, many of the farmers cannot afford to transport their agricultural produce, and the increased cost of transport has reduced the profitability of farming. The study recommended among other things that the state government should make provision for vehicles that will be offering subsidized agricultural transport services from all the major rural areas where agricultural activities are being done, and farm inputs palliatives should be prioritized above food items or cash palliatives

Keywords: Fuel subsidy removal policy, farm inputs, transport, and agricultural activities

Introduction

The level of agricultural production in any society or country is determined by the activities of farmers in the area. The challenge and measures towards effective agricultural production, although demanding, are not options, because food supply is pivotal not only to national development but also to international stability (Sheeran, 2015). To this end, Feeding the increasing population of people can be considered as the main global challenge of the modern time.

In Nigeria, which is typically an agrarian state with about 70 percent of the populace residing inside the rural areas, the people are largely farmers engaged in agriculture producing goods to be transported which are sometimes bulky and perishable. However, the removal of fuel subsidy on 29th May, 2023 by president Bola Ahmed Tinubu distorted small scale agricultural activities across the country especially rural areas in the various states of

Nigeria. Hong local government area in Adamawa state is one of the local government areas with significant number of rural areas where many small scale farmers dwell and depend on agricultural activities to earn a living. However, the removal of fuel subsidy and the attendant effect on the cost of farm inputs and transportation of agricultural produce has posed a challenge to the farmers. To this end, majority of the farmers find it difficult to purchase the essential farm inputs needed for their farm operations because the prices have increased beyond the affordability of many of the farmers. In the first quarter of 2023, a bag of fertilizer was sold for #20,000, a bottle of herbicide was sold at #3,000, a bag of chicken feed was sold at #10,000, while four weeks old broilers were sold at #1,500 but with the removal of fuel subsidy the prices has increased to #48,000, #4,000, #18,000, and #4,000 respectively.

This has made many farmers to downsize their agricultural activities and scale of production in order to measure up to the current reality of prices of farm inputs. Even at that, they are still confronted with the challenge of hike in the cost of transportation which has affected the movement of agricultural produce and invariably agricultural activities, in the first quarter of 2023, the cost of transporting a bag of maize, beans, guinea corn, and millet from Hong main town to fadaman reke was #500, #600, #750, and #400 respectively but after the removal of fuel subsidy and the attendant hike in cost of transportation it has risen to #1,000, #1,000, #1,200 and #800. Transportation is very crucial because it is a stage in production technique which get completed only when the commodity is within the reach of the final consumers. This study is therefore aimed at assessing the effect of fuel subsidy removal on agricultural activities.

Research Questions

i. To what extent has the cost of farm inputs affected the activities of farmers in Hong local government area?

ii. In what ways has the cost of transportation affected agricultural activities among farmers in Hong local government area?

Objectives of the Study

The specific objectives of the Study is to:

i. Determine the extent to which the cost of farm inputs has affected agricultural activities among farmers in Hong local government area?

ii. Identify ways in which the cost of transportation has affected agricultural activities among farmers in Hong local government area.

Literature Review

Agricultural activities

According to Ighodo (2004), agricultural activities involves the cultivation of crops and rearing of animals for man's use. He also emphasized that agriculture is also the production of fibres for industries, processing of farm produce, packaging and marketing of farm products. This perspective is quite embracing as it covers all activities that ensure man's survival. However, the aspect of research and training that is so vital in production was conspicuously missing in the definition. In recent time, agricultural research and training has become more paramount as a sine qua

non for high yield or productivity as well as improved seedlings and other inputs and this cannot be left out in any intellectual conception of agriculture.

Rimando (2004) views agricultural activities as the processes that involves systematic raising of useful plants and livestock under the management of man. This view is anchored on the science of agriculture; agriculture involves technical know-how and principles that are sacrosanct and necessary for any endeavor in it if the desired output is to be gotten. Agriculture is not just an art of practice that can be delved into without mastering the systematic knowledge and invariably the technical know-how. However, the perception of Rimando is to the extent of its myopic content not comprehensive; agriculture is not limited to systematic rising of useful plants and livestock under human management, it goes beyond that to include the immediate value chain that follows it. The definition did not cover aspects such as marketing of agricultural products and research. To this end, Ben (2014) sees agricultural activities within the context of art and science of growing plants and other crops and the raising of animals for food, other human needs or economic gain.

Fuel subsidy Removal

According to Ovaga and Okechukwu (2022), fuel subsidy is a government discount on the market price of fossil fuel to make consumers pay less than the prevailing market price of fuel. When subsidies are in place, consumers would pay below the market price per litre of the petroleum product. However, some literatures abound that promote the cause of fuel subsidy removal.

Omitogun *et al* (2021) assert that the removal of fuel subsidy might reduce the amount of carbon emission in the Nigerian economy. Similarly, Adekunle and Oseni (2021) argue that fuel subsidy removal could reduce the growth in carbon emissions through low energy consumption even though it could lead to higher energy prices. However, the views of Omitogun et' al (2021) and Adekunle and Oseni (2021) are not within the economic context of purpose that made the Federal government of Nigeria to remove the subsidy. To this end, Asare et al (2020) argue that the revenue gained from removing fuel subsidy could provide additional resources for the government to shift resources into more productive spending.

The cost reduction advantage the fuel subsidy gives to the fiscal policy of the government at the detriment of the monetary policy. To this end, the fuel subsidy removal affects the micro economic units as it blows hot on the monetary aspects of economic operations in the country. Accordingly, Umeji and Eleanya (2021) argue that Nigerian oil wealth has not translated to improved standard of living despite the introduction of fuel subsidy, and that fuel subsidy removal could have severe consequences.

According to Houeland (2020) the fuel subsidy removal has led to increase in price of essential goods and services. As a result, there is fewer disposable income in the hands of individuals and small businesses across the various sectors of the economy due to rising prices, stagnant wages, and a fixed national minimum wage. This will lead to a reduction in consumption expenditure and would act as a drag on

aggregate demand. The reduction in consumption would translate to weak consumer demand for the goods and services produced by firms. This, in turn, could decrease economic output and gross domestic product, and slow the rate of economic growth.

Mohammed, Ahmed and Adedeji (2020) opined that the removal of fuel subsidy has led to a rise in the price of petrol from a subsidized price of ₦190 in May 2023 to an alleged unsubsidized price of ₦537 in June 2023 and ₦617 in July 2023 in Abuja. Meanwhile, the price of petrol could rise above ₦617 in the far North such as in Borno State due to high transportation cost. The implication is that the price of most consumer and industrial goods, which are produced or transported with petrol, has increase sharply. The cost of transportation has also increased, making it expensive to afford for poor individuals and lowi ncome earners.

Transportation in Agricultural Activities

Affordable and effective rural-urban transportation serves as one of the means for enhancing the value chain in agricultural production. To this end, Owen (2018) observed that immobility of goods from an area of production to an area of need causes set back to economic growth and expansion of sectoral activities. Effective transportation is pivotal to the agricultural sector and invariably farmers' activities as it is essential for accessibility to areas which could be harnessed for the development of the economy. In other words, effective transportation in agricultural production and activities forms an inherent part of agricultural development strategies. It is a linking pin and catalyst for rural-urban transformation through the reinforcement of agricultural development.

According to Adedeji (2014) the issue of transportation in agriculture has continued to be of national importance because most of the rural roads are in poor condition. This has significantly increased the cost of production logistics in the national economy especially to the agricultural activities as a result to increased vehicle operating costs and travel times (Akintola, 2019). In the views of Aloba (2023), the problems of rural accessibility in relation to agricultural activities exist not only in the aspect of linkage between settlement, but also exit within the agricultural settlement as well as link roads from rural settlement to urban center in term of daily trips.

According to Ademiluyi (2019), the major farm settlement in Nigerian rural areas are geographically dispersed, there is need to link this settlement with the consumption center through an efficient rural-urban transport services that will bridge the gap between activity site and consumers of the agricultural produce. Apart from the infrastructural aspects that affect agricultural transport, Olayiwola & Adeleye (2005) maintain that the cost of transporting agricultural produce at a particular time and season and the changes vis-a.vis cost of fuel also determine the trend of agricultural activities. In view of this UNDP (2021) asserts that in a situation where agricultural activities become less profitable and easy, there is a high tendency of rural-urban drift in an attempt to abandon agriculture for other non-agricultural activities.

Farm inputs in Agricultural Activities

Farm inputs are essential motivators that promote on-farm agricultural activies. This is to the extent that it determines the output of agricultural activities and overall productivity of the agricultural sector. Accordingly, Abubakar and Abubakar (2014) observed that where farm inputs are not available or not affordable for farmers it brings about low levels of production and productivity, especially among small scale farmers. Small farm holders individually sell small quantities in output markets and this increases costs of commodities for buyers from numerous smallholder farmers. This is one of the factors which impede smallholder farmers' access to markets.

Taiwo (2009) argued that increasing cost of input has the propensity to reduce the productivity of farmers in the short run and if it continues unabated can push out some farmers from farm practices. The view of Taiwo (2009) is tenable in the light of what is being experienced among farmers in Nigeria due to the removal of fuel subsidy. The level of affordability of farm inputs among farmers often affect agricultural activities in the aspect of crop output. Ajayi (2017) observed that additional kilogram (kg) of subsidised fertilizer increases maize production between the range of 1.82 kg and 3.16 kg.

Accordingly, studies by Chibwana, et al., (2010); Holden and Lunduka, (2010); Ricker-Gilbert and Jayne, (2011) all found statistically significant positive effects of farm input subsidies on maize production and productivity. To this end, Dorward et al. (2013) observed that direct or indirect subsidies is essential in promoting agricultural activities in a developing economy.

Theoretical Framework

The theory of price elasticity of demand propounded by Marshal (1890) was used to underpin this study. According to the theory, the elasticity of demand in a market is great or small depending on how the amount demanded increases much or little for a given fall in price and diminishes much or little for a given rise in price. This implies that the Elasticity of Demand is the statistical explanation of the proportional change in demand due to the factors that affect it. It is the responsiveness of demand due to change in price. Price elasticity of demand theory explains both the conditions of whether an increase in price or decrease in it has its effect on the quantity demanded less and more as the case may be.

The theory explains the effect of fuel subsidy on agricultural activities from the stand point of changes in prices of farm inputs and cost of transporting agricultural produce among farmers in Hong local government. To this end, the economic dynamics that ensued as a result of the removal of fuel subsidy is anchored on three elements which include increase in the price of fuel, the ripple effect of the price increase, and the resultant decrease in the affordability of farmers in the area of farm inputs and transportation of agricultural produce. In application, the increase in the pump price of petroleum motor spirit (PMS) is such that had bearing on all areas of the agronomics of agricultural practices in Hong local government. This is to the extent that it engendered general inflation which

affect farm inputs and transport, and since these two variables are essential for effective agricultural practices it affected the farmers greatly as farm inputs is a necessity and the need to transport the produce from the farm is also inevitable. In an effort to cope with the situation, many farmers have cut down their agricultural activities.

Methodology

The study adopted the documentary and survey research design whereby existing literatures we're sourced and questionnaire was used as the instrument of data collection. 231 questionnaires were administered to farmers in Hong local government area and 228 were returned and used for presentation and analysis. To this end, the linear regression was used to test the hypotheses formulated.

Results and Discussion

Table 1: Responses on farm inputs

	Items	Level of responses				
		S/A	A	U/D	D	S/D
1	The high cost of fertilizer has made you unable to afford the quantity you need for your farm	75 (32.9%)	144 (63.2%)	4 (1.1%)	5 (2.2%)	1 (0.4%)
2	The increased cost of herbicides has made you unable to afford the quantity you need on your farm.	86 (37.7%)	134 (58.8%)	2(0.9 %)	6 (2.6%)	26 (7.4%)
3	The price of animal feed has made livestock rearing difficult	96 (42.1%)	120 (52.6%)	8 (3.5%)	4 (1.8%)	-
4	The increased price of fingerlings has made it difficult for fish farmers to buy desired quantity	106 (46.5%)	114 (50%)	5 (2.2%)	3 (1.3%)	-
5	You have reduced the size of your farm to meet your financial ability	95 (41.7%)	120 (52.6%)	7 (3.1%)	6 (2.6%)	-

Source: Survey, 2024

Table 1 above illustrates the responses of farmers on the statement that high cost of fertilizer has made you unable to afford the quantity that you need on the farm. Out of the 228 respondents, a significant majority, 63.2%, agreed, and 32.9% strongly agreed with the statement, together comprising 96.1% of the valid responses. A small fraction disagreed (2.2%) or strongly disagreed (0.4%), while 1.3% were undecided. These results suggest a strong consensus among the respondents This implies that fertilizer is no longer affordable to many farmers. 58.8% agreed that the increased cost of herbicides has made them unable to afford desired quantity and 37.7% strongly agreed, amounting to a combined total of 96.5% in favor. Only 2.6% disagreed, and 0.9% were undecided. These findings imply that the majority of the farmers can no longer purchased the desired quantity of herbicides due to high cost.

The responses of the farmers regarding the cost of animal feed and the rearing of livestock also shows that a majority of 52.6% agreed and 42.1% strongly agreed, totaling 94.7% of valid

responses in support. A small percentage of respondents, 1.8%, disagreed, while 3.5% were undecided. This suggests that the high cost of animal feeds has reduced the practice of livestock farming. The table also presents the responses of farmers on price of fingerling. 50.0% agreed and 46.5% strongly agreed that the price has gone up and fish farming has become difficult.

The table showed that concerning the size of farm, a majority of 52.6% agreed and 41.7% strongly agreed that they have had to reduce the size of their farms to match their financial ability. A small portion of respondents, 2.6%, disagreed, while 3.1% were undecided. These findings imply that majority of the farmers find it difficult to expand their farm operations due to high cost of farm inputs.

Table 2: Responses on Transportation of Farm Produce

	Items	Level of responses				
		S/A	A	U/D	D	S/D
1	The cost of transporting grains to urban areas has hindered many rural farmers.	84 (36.8%)	136 (59.6%)	5 (2.2%)	3 (1.3%)	-
2	Getting appropriate means of transport for grains is scarce	96 (42.1%)	122 (53.5%)	4 (1.8%)	6 (2.6%)	-
3	Most farmers have resorted to joint effort to afford transport cost.	91 (39.9%)	122 (53.5%)	9 (3.9%)	5 (2.2%)	1 (0.4%)
4	The high cost of transporting grains sometimes reduce the profitability of farm practices.	97 (42.5%)	123 (53.9%)	3 (1.3%)	5 (2.2%)	-
5	The cost of transporting livestock to urban areas discourage small scale farmers.	84 (36.8%)	137 (60.1%)	5 (2.2%)	2 (0.9%)	-

Source: Survey, 2024.

Table 2 shows that a majority of 59.6% agreed and 36.8% strongly agreed that the cost of transporting grains to urban areas has hindered many rural farmers, totaling 96.4% in favor. Only 1.3% disagreed, and 2.2% were undecided. These findings suggest that the vast majority of farmers do not find it easy to transport their grains. A majority of 53.5% agreed and 42.1% strongly agreed that getting appropriate means of transport for grains is scarce, resulting in a combined total of 95.6% in favor. Only 2.6% disagreed, and 1.8% were undecided. This implies that the farmers find it difficult to get means of transporting their produce to desired destination as a result of the hike in cost of transportation. A majority of 53.5% agreed and 39.9% strongly agreed with the statement that most farmers have resorted to joint effort to afford transport cost, making up a combined total of 93.4% in favor. Only 0.4% strongly disagreed, 2.2% disagreed, and 3.9% were undecided. This imply that the farmers have resorted to contributing their resources together to enhance transportation of their farm produce.

The table also presents the responses of the farmers regarding the profitability of agrii activities in relation to the price factor caused by fuel subsidy removal, a majority of 53.9% agreed and 42.5% strongly agreed that the high cost of transporting grains sometimes reduce the profitability of farm practices, amounting to a combined total of 96.4% in favor. Only 2.2% disagreed, and 1.3% were undecided. Furthermore, the table presents the responses of the farmers regarding transporting of livestock. A majority of 60.1% agreed and 36.8% strongly agreed with the statement that the cost of transporting livestock to urban areas discourage small scale farmers, resulting in a combined total of 96.9% in favor. Only 0.9% disagreed, and 2.2% were undecided. This imply that majority of those that are into livestock do not find it easy transporting livestock for sale in other places.

Table 3. Responses on Agricultural Activities in Hong Local Government Area.

	Items	Level of responses				
		S/A	A	U/D	D	S/D
1	Majority of the people in your area are farmers.	101 (44.3%)	116 (50.9%)	5(2.2%)	6 (2.6%)	-
2	Crop farming is the major farm practice in your area	82 (36.0%)	132 (57.9%)	10 (4.4%)	4 (1.8%)	-
3	Farming activities are largely practised in the rural areas.	92 (40.4%)	119 (52.2%)	8(3.5%)	9 (3.9%)	-
4	Urban settlers also have farms in the rural areas	88(38.6%)	131(57.5%)	5(2.2%)	3(1.3%)	1(0.4%)
5	There are people who are into livestock and fish farming	74(32.5%)	141(61.8%)	8(3.5%)	5(2.2%)	-

Source: Survey, 2024.

Table 3 presents the responses of farmers in Hong local government area on agricultural activities in the area. A majority of 50.9% agreed and 44.3% strongly agreed with the statement that majority of the people in your area are farmers, resulting in a combined total of 95.2% in favor. Only 2.6% disagreed, and 2.2% were undecided. This implies that agriculture is the mainstay of the people of Hong local government area. A majority of 57.9% agreed and 36.0% strongly agreed with the statement that Crop farming is the major farm practice in your area, resulting in a combined total of 93.9% in favor. Only 1.8% disagreed, and 4.4% were undecided. This implies that crop cultivation is the major activities in the area.

The table also presents the responses of the farmers on the extent of agricultural practices in the rural area. A majority of 52.2% agreed and 40.4% strongly agreed with the statement that Farming activities are largely practised in the rural areas resulting in a combined total of 92.6% in favor. Only 3.9%

disagreed, and 3.5% were undecided. Furthermore, a majority of 57.5% agreed and 38.6% strongly agreed with the statement that urban settlers also have farms in the rural areas resulting in a combined total of 96.1% in favor. Only 0.4% strongly disagreed, 1.3% disagreed, and 2.2% were undecided. This implies that agricultural activities is not limited to people in the rural areas alone.

A majority of 61.8% agreed and 32.5% strongly agreed with the statement that there are people who are into livestock and fish farming, resulting in a combined total of 94.3% in favor. Only 2.2% disagreed, and 3.5% were undecided. This implies that despite the fact that crop cultivation is the major agricultural practice, there are also farmers who are into livestock and fish farming. It is an indication that there are diverse agricultural practices or activities in Hong local government area.

Test of Hypotheses

H01: The cost of farm inputs has not significantly affected agricultural activities in Hong Local Government Area.

Table 4 : Simple Linear Regression Result (Model Summary) between cost of farm inputs and agricultural activities in Hong local government area.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.710[a]	.504	.502	.302

a. Predictors: (Constant), cost of farm inputs

b. Dependent Variable: Agricultural Activities

Table 4 presents the simple linear regression model summary examining the relationship between cost of farm inputs (independent variable) and agricultural activities (dependent variable) in Hong local government area. The R value is .710, indicating a strong positive correlation between the two variables. The R Square value is .504, meaning that approximately 50.4% of the variance in agricultural activities is explained by cost of farm inputs. The Adjusted R Square is slightly lower at .502, which adjusts for the number of predictors in the model. The Standard Error of the Estimate is .302, which reflects the average distance that the observed values fall from the regression line. Overall, the cost of farm inputs appears to be a significant predictor of agricultural activities in Hong local government area explaining a substantial portion of its variance.

Table 5: Simple Linear Regression Result (ANOVA) between cost of farm inputs and agricultural activities in Hong local government area.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20.960	1	20.960	229.642	.000[b]
	Residual	20.627	226	.091		
	Total	41.587	227			

a. Dependent Variable: agricultural activities

b. Predictors: (Constant), cost of farm inputs

Table 5 shows the ANOVA results for the simple linear regression model assessing the relationship between cost of farm inputs and agricultural activities in Hong local government area. The F value is 229.642, which is a measure of the overall significance of the regression model. A high F value indicates that the model provides a good fit to the data. The significance (Sig.) value is .000, which is less than the typical alpha level of .05, indicating that the relationship between cost of farm inputs and agricultural activities in Hong local government area is statistically significant. Therefore, we reject the null hypothesis.

Table 6: Simple Linear Regression Result (Coefficients[a]) between cost of farm inputs and agricultural activities in Hong local government area.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.620	.174		9.329	.000
	Cost of farm inputs	.614	.040	.710	15.154	.000

a. Dependent Variable: Agricultural activities

Table 6 presents the simple linear regression results examining the relationship between cost of farm inputs and agricultural activities in Hong local government area. The unstandardized coefficient (B) for the cost of farm inputs is 0.614, with a standard error of 0.040, indicating that for every unit increase in the cost of farm inputs, the agricultural activity is affected by 0.614. The standardized coefficient (Beta) is 0.710, reflecting a strong positive relationship between the variables. The t-value for the cost of inputs is 15.154, with a significance level (Sig.) of .000, which is below the threshold of 0.05. This indicates that the relationship is statistically significant. Based on these results, we reject the null hypothesis

(HO1) that "the cost of farm inputs has not significantly affected agricultural activities in Hong local government area.

H02: The cost of transport has not significantly affected agricultural activities in Hong local government area

Table 7: Simple Linear Regression Result (Model Summary) between Cost of transportation and agricultural activities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780[a]	.608	.606	.269

a. Predictors: (Constant), cost of transport

b. Dependent Variable: Agricultural activities

Table 7 presents the simple linear regression model summary between Cost of transport and agricultural activities in Hong local government area. The correlation coefficient (R) is 0.780, indicating a strong positive relationship between cost of transport and agricultural activities. The R Square value is 0.608, meaning that approximately 60.8% of the variability in agricultural activities can be explained by cost of transport. The adjusted R Square value is slightly lower at 0.606, accounting for the number of predictors in the model and sample size. The standard error of the estimate is 0.269, which provides a measure of the average distance that the observed values fall from the regression line. These values suggest a robust and significant relationship between cost of transport and agricultural activities, indicating that the cost of transport significantly affected agricultural activities in Hong local government area.

Table 8: Simple Regression Result (Anova) between Cost of transportation and agricultural activities

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.289	1	25.289	350.683	.000[b]
	Residual	16.298	226	.072		
	Total	41.587	227			

a. Dependent Variable: Standard of examination

b. Predictors: (Constant), Enforcement

Table 8 presents the ANOVA results for the simple linear regression analysis between Cost of transportation and agricultural activities. The regression model has a sum of squares value of 25.289 with 1 degree of freedom (df), resulting in a mean square of 25.289. The residual sum of squares is 16.298 with 226 degrees of freedom,

giving a mean square of 0.072. The F-statistic is 350.683, with a significance value (Sig.) of .000. This highly significant F-statistic ($p < .001$) indicates that the model is a good fit for the data and that the cost of transport significantly predicts agricultural activities.

Table 9: Simple Linear Regression Result (Coefficients) between enforcement of penalties for malpractice and Standard of Senior Secondary Certificate Examination in Taraba State

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.219	.162		7.523	.000
	Cost of transport	.713	.038	.780	18.727	.000

a. Dependent Variable: Agricultural activities

Table 9 displays the coefficients for the simple linear regression analysis between the cost of transport and agricultural activities. The constant (intercept) has an unstandardized coefficient (B) of 1.219 with a standard error of 0.162, which is statistically significant ($t = 7.523$, $p < .001$). The cost of transport variable has an unstandardized coefficient (B) of 0.713 with a standard error of 0.038, and a standardized coefficient (Beta) of 0.780, which is also highly significant ($t = 18.727$, $p < .001$). This indicates a strong positive relationship between the cost of transport and agricultural activities. Based on these results, the null hypothesis (HO2) is rejected.

Conclusion

The analysis in the assessment established that fuel subsidy removal has significantly affected agricultural activities in Hong local government area. The study showed that the effects manifested as an extension of the ripple effect on the macroeconomic and microeconomics structure of the country in relation to the monetary policy and fiscal policy adjustments. To this end, the fuel subsidy removal has impacted on the cost of farm inputs and cost of transport. This effect is largely because agriculture is the mainstay in Hong local government area. Even though there are significant number of urban centers in Hong local government agricultural activities is beyond the horizon of rural settlement as urban settlers also find their ways to rural areas in search for land to cultivate.

This reveals the reason why the cost of transportation has so affected agricultural activities in the area as many of the farmers find it difficult to transport their agricultural produce and where they do, it affect the profitability of their activities. Furthermore, the cost of farm inputs like fertilizer, fingerlings, herbicides, and animal feeds among others is the consequence of fuel

subsidy removal. This has hindered agricultural expansion. To this end, some farmers have had to reduce the size of their farms and agricultural activities to meet up with financial demand.

Recommendations

In view of the aforementioned areas where in the fuel subsidy removal policy has affected agricultural activities the study made the following recommendations: The state government should make provision for vehicles that will be offering subsidized agricultural transport services from all the major rural areas where agricultural activities are being done. The transport service scheme should be such that will have different sections for grains, perishables, and livestock.

The federal government should remove import duties on the importation of farm inputs and also encourage local production by giving tax breaks and waiver to local companies with a signed memorandum of understanding to reduce the prices of their product.

The state and federal government should partner with non-governmental organizations to give out farm inputs as palliatives instead of giving only food items which cannot last a reasonable period of time.

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