

Fuel subsidy, agricultural sector, petroleum, budgetary allocation

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ABSTRACT: *This study empirically examined the impact of fuel subsidy removal on Agricultural sector output. The study employed spearman's rank correlation and observed the existence of positive correlation between fuel subsidy removal and prices of agricultural output. This then, imply that the removal of fuel subsidy would increase the budgetary allocation to the agricultural sector thereby increasing Agricultural production. It was also observed that this removal of fuel subsidy will have a negative effect on the cost of agricultural produce. We therefore recommend that a cushioned effect should be introduced by the government through the proper use of savings from fuel subsidy removal on agricultural sector. The government is also advised to fast track the maintenances of four refineries and encouraged the building of new ones before it finally removes the fuel subsidy.*

I. INTRODUCTION

The issue of fuel crisis has become a common phenomenon in Nigeria that is, richly endowed with large crude oil deposit and a greater exporter of the God-given commodity. It is pathetic to observe that no other OPEC member or even country that does not produce oil, share similar ugly experience with Nigeria (Badmus, 2009:25). Prior to this situation, there were moments of joy among Nigerians, when the four refineries were working at full capacities. But according to Badmus, the local refineries could not be managed properly and they produced below the installed refining capacities, thereby making it imperative for demand to be met through importation. The import dependency which constituted over 82 percent of the total supply of petroleum products consumed locally invoked protests from different quarters in the country. The undesirable situation led to the introduction of the controversial issue of subsidy in the downstream oil sector, which nearly tore the country into pieces, and is still threatening the peace and the existing democratic structure in Nigeria.

Subsidy, in economic sense, exists when consumers of a given commodity are assisted by the government to pay less than the prevailing market price of same. In respect of fuel subsidy, it means that consumers would pay less than the pump price per litre of petroleum product. On the other hand, fuel subsidy could be described as the difference between the actual market price of petroleum products per litre and what the final consumers are paying for the same products. Today, the difference, which is borne by the government, is caused by eight 'import-induced costs'. These Costs, according to Afonne (2011:18) have been discovered to be responsible for the high prices of petroleum products in present day Nigeria. But since the petroleum become the dominant sector, both the range and volume of agricultural export has declined sharply and the production of agricultural products in Nigeria has declined drastically. Consequently, agricultural import has increased dramatically.

In the light of this background, the paper aims at examining the impact of fuel subsidy removal on output in Nigeria.

The rest of the study is structured as follows:

Section 2 deals with the selected existing literature. Section 3 dwells on the stylized facts of the fuel subsidy removal in Nigeria. Section 4 presents the data and analyzes the results based on empirical findings. The last section conclude the study and proper recommendations.

II. SELECTED EXISTING LITERATURE

Detailed and historical validation has provided empirical evidence on the impact of fuel subsidy removal on the agricultural output.

The extensive study carried out by the could bank (1997) on the value subsidies payment was nothing less than 10 billion dollars annually on fossil fuels in OECD countries.

Greenpeace International (1998) stated that 90 percent of direct subsidies European countries targeted to energy industry (63% in fossil and 28% in nuclear energy sectors) so that only 9 percent (1.5 billion dollars) directed to the renewable energies. Myers and Kent (2001) estimated that the amount of global energy subsidies may be more than 131 billion dollars for each year which 100 billion dollars have error of diversion from main goals.

Demor (2001) stated that the global energy subsidy was about 240 billion dollars which approximately 151 billion dollars of them allocated to fossil fuels. Riedy and Diesendorf (2003) measured 6.54 billion dollars for the fossil fuels in Australia. European Environment Agency (EEA) 2004 demonstrated that whole devoted subsidies were stand at 29 billion dollars in 2001. So that fossil fuels, oil, nuclear energy and renewable energies gained 13, 8.7, 2.2 and 5.3 billion Euros respectively.

Their findings show that 220 billion dollars of that sources, for the period of 2005 only 170 billion dollars allocated to fossil. IEA'S report (2008) illustrated that those subsidies in Non OECD countries inclined to 310 billion dollar in 2007 so that the main parts of those concerned to consumption subsidies.

GTZ (2007) estimated the amount of fuel subsidies on transportation sector under the data of 2004 to be 90 billion dollars which 28 and 61 billion dollars have been devoted to gasoline and diesel respectively. GSI (2009) founded, that allocated subsidies in fossil fuels are about 100 billion per year.

In a study by, Lin and Jiang (2009) they concluded that implementing subsidies programs have not brought desired result. This is because those energy subsidies have not impact positively on the pour, Chatto Padliyag (2007) observed that cross tariffs tend to decline as well as the effect of reducing energy subsidies as a basic way for optimization goal.

Burniaux et al (2002) founded that removing energy subsidies will decline the pressure on fossil fuels. Anders and MCKibbin (2007) showed that inspite of the potential impact of subsidies reforms they concluded that it has not increased the efficiency in the economy.

IEA (1999) examined the effect of energy subsidy on the consumption and CO₂ emission in eight OECD countries. Their findings revealed that 13 and 16 percent decrease in initial energy consumption and CO₂ emission, respectively. OECD's study (2000) examined the impact of subsidy reforms on industry and electricity sectors and observed that it caused the CO₂ emission to decrease by about 6 percent. Saunders and Schneider (2000) employed GTEM model to verify if there will be increased energy prices for the energy producers immediately after removing subsidies? Their findings revealed a sudden fall in the energy consumption. Burniaux et al (2009) employed ENV – linkages model to forecact the effect of gradual removal of energy subsidy in OECD for the period of 2013 to 2020. They concluded that if consumption subsidies in 20 non-OED countries phased out CO₂ and Green House Gas emission will reduce by 2012.

Meh Abadi (194) examined the subsidy policies of oil product on these Ivanian Economy by using Input – Output Pattern. His results revealed that subsidy policy effect positively on the consumption sector.

Kiyavar and Nahid (2010) employed ARDL approach to examine the relationship between energy process and energy consumption in Iranian industries sector. Their results revealed that energy price affects consumption negatively.

III. STYLIZED FACTS

The history of fuel subsidy removal in Nigeria is rather a long one particularly with the negative effects it has on the polity. The story of fuel subsidy removal dated back to 1978, when the then military government, General Olusegun Obasanjo reviewed the pump price of fuel, from 8.4 kobo to 15.37 kobo. The concern was for government to generate enough money to run the administration particularly when it was preparing for the 1979 democratic elections and to cater for the social needs of Nigeria.

In January 1982, the civilian regime of Alhaji Shehu Shagari also raised the pump price to 20 kobo from 15.37 kobo. Money realized from the fuel increase was used by members of the regime to buy properties in major capitals of European nations (USA, UK, Spain, France and others), as against using same to put in place social services that Nigerians badly needed then. The inept leadership of the then NPN national government and the corruption that bedeviled the administration led to its Overthrown. Then the military junta of General Babangida came in who also Increased the pump price of fuel to 39.50 kobo in March 31", 1986. This regime was notorious for numerous pump price increases. On April 10th, 1988, the regime increased it to 42 kobo from 39.50 kobo per litre and then again to 60 kobo for private cars on January 1st, 1989. These increases came at the time the regime chose to adopt a home grown Structural Adjustment Programme (SAP) as against external borrowing. His decision was met with massive protests by Nigerians. The economic down turn coupled with the increases made life unbearable and Nigerians reacted angrily. Again, on the 6th of March 1991, the Babangida administration raised the pump price from 60 kobo to 70kobo. Not too long, the Nigerian nation was subjected to another round of fuel increase, when in November 8, 1993, the pump price was raised to N5.00 and confronted with mass protests across the length and breadth of Nigeria, the price was reduced to N'.25 on

November 22, 1993. A year later, on October 2nd, 1994, it was again raised to N15.00 only to be reduced two days later to N11.00 by the Gen. Abacha's regime.

The reduction was because of mass protests and coupled with the need to win the support of Nigerians. December 20, 1998, the pump price was also increased to N25 but again reduced to N20 on January 6th, 1999 just a month later. This was during Gen. Abdulsalam Abubakar brief transitional reign as a military ruler. He like others before him did not spare Nigerians the pains of fuel price increase. The decision witnessed sustained protests by Nigerians, the organized labour and the Civil Society Organizations (CSOs). It is necessary at this point to place on record that it was only the military junta of buhari / Idiagbon and Umaru Shehu Yardua that Nigerians were spared the ordeal of fuel price increase. Others before them and after them inflicted enormous pains on Nigerians, because of the increases in fuel price. This however may ,be because of the brief tenure of the regime and ill health of Buhari and Yardua respectively, and its focus on fighting corruption and indiscipline in the Nigerian society. Gen. Olusegun Obasanjo second coming, as a civilian president did not help matters. In his eight years reign; the nation witnessed several rounds of fuel price increases. The first started on June 1st, 2000, where the petrol price per litre was raised to N30.00 but only to be reduced to N25 one week after due to massive protests by organized labour, civil society organizations and the ordinary Nigerian. Five days later, on June 13, 2000, the pump price was further adjusted to N22.00 per litre. On January 1st, 2002, Obasanjo regime increased the price from N22.00 to N26.00 and to N40.00 on June 23, 2003 just one year after. In June 2007, the same regime raised the price of fuel per litre to N70, but the Yaradua's regime later reviewed it downward to N65 on assumption of office in May 2007. This was how it remained until President Goodluck Jonathan regimes decision at an outright removal of fuel subsidy. Interestingly the then Nigeria Labour Congress, President, Comrade Adams Oshiomole who had led several fights against fuel subsidy removal including fighting Olusegun Obasanjo, and as a sitting governor of Edo State, joined his fellow governors and the Federal Government to argue strongly for the complete removal of fuel subsidy. The issue was that, while the nationwide consultations and discussion on fuel subsidy removal was still going on, the Petroleum Product Pricing Regulatory Agency (PPPRA) on January 1st, 2012, announced the outright removal of fuel subsidy. This decision by the Goodluck Jonathan administration did not go down well with the masses of Nigerians. It resulted in massive strike actions and protests by the Nigeria Labour Congress (NLC), Trade Union Congress of Nigeria, PENGASAN, Civil Society Organizations, Academic Staff Union of Universities (ASUU) and the generally of Nigerians. The mass protects almost transformed into the “Nigerian spring” which would have brought down the regime. The regime quickly entered into a negotiation with the organized labour and rescinded its decision of an outright removal to a partial removal and reduced the pump price to N97 thus, it remains so until date.

Table 1 provides a clearer picture of the different pump prices by the
Different administrations from 1978 to Jan. 2012.

Table 1: Data on petroleum prices/Adjustments in Nigeria (1978-2012)

S/N	Date	Administration	Price	Percentage
1	1978	Gen Olusegun Obasanjo (as military ruler)	15.3k	
2	1982	Gen Shehu Shagari	20k	
3	1990	Gen Ibrahim Babangida	60k	300%
4	1992	Gen Ibrahim Babangida	70k	17%
5	1992	Gen Ibrahim Babangida	3.25k	364%
6	1993	Gen Ibrahim Babangida		54%
7	1994	Chief Ernest Shonekan	5	120%
8	1994/98	Gen Sani Abacha	11	-
9	2000	Gen Olusegun Obasanjo (as civilian ruler)	20	82%
10	200	Gen Olusegun Obasanjo (as civilian ruler)	22	10%
11	2001	Gen Olusegun Obasanjo (as civilian ruler)	26	18%
12	2003	Gen Olusegun Obasanjo (as civilian ruler)	40	54%
13	2004	Gen Olusegun Obasanjo (as civilian ruler)	45	13%
14	2007	Gen Olusegun Obasanjo (as civilian ruler)	70	56%
15	2007	Alhaji Umaru Shehu Yaradua	65	0.07%
16	2012	Dr Ebele Goodluck Jonathan	141	117%

Sources: Communique by South -South Leaders 2012

Data in table 1 show that Nigerian public has been subjected to a number of fuel increases since 1978, when General Olusegun Obasanjo regime effected a change upward in the pump price of gasoline from 8.4 kobo to 15.37 kobo.

However, General Babangida and Chief Obasanjo are reputed to have made the most increases within each of their eight years in office.

Table 2: Petrol Prices in Selected Oil Producing Countries as at 2012

S/N	Countries	Pump Price in US dollars
1	Algeria	0.41
2	Bahrain	0.27
3	Brunei	0.39
4	Egypt	0.31
5	Iraq	0.38
6	Kuwait	0.22
7	Libya	0.17
8	Nigeria	0.87
9	Oman	0.31
10	Qatar	0.22
11	Saudi Arabia	0.16
12	UAE	0.49
13	Venezuela	0.023

Source: Compiled by Germans Technical Cooperation (GTZ) and Published by Wikipedia, 2012

While it will be difficult to get a comprehensive list of countries and their fuel pump prices a few instances as captured by the German Technical Cooperation are analyzed here (see table 2).

The table clearly shows that fuel price in Nigeria are more expensive. The argument here is that Nigerians have no business to pay the price they are subjected to by the corrupt members of the political elite. This is because of the lack of than in other countries similarly placed. The seriousness and endeavor among the ruling elite which had made it difficult to summon the enterprise, political will required to build the future on the template of the future. Just as the appalling lack of enterprise manifested in the inertness that crippled the building of power stations for the future, this attitude also manifested even more cynically in the deliberate refusal to build refineries or maintain the existing ones.

Early December last year, President Jonathan noted that the nation was faced with the danger of youth revolt in its hands unless government provides jobs for the teeming unemployed youths roaming the streets of the country. He promised that his government was poised with the provision of 50, 000 jobs in the New Year. How much he would be able to do this is another matter, as Nigerian had seen government after government make promises in the past, which they never kept.

President Jonathan has repeatedly said that subsidy withdrawal is necessary to safeguard Nigeria's future. He said the total deregulation of the downstream sector would open the oil industry for foreign investments; which will lead to massive jobs creation and development. For instance, the government's Subsidy Reinvestment and Employment Programme (SURE), under which it listed among other projects, the construction or completion of eight major roads and two bridges, provision of health care for three million pregnant women, six railway projects, youth employment, mass transit, 19 irrigation projects, rural and urban water supply (Ofikhenn, 2011:4).

In her own version, the Minister of Finance, Dr. Ngozi Okonjo-Iweala, claimed that the removal of fuel subsidy was aimed at saving the country from bankruptcy, as the funds being currently spent in subsidizing the petroleum products seem too huge. According to her, in a couple of years, Nigeria would be short of funds, if the Federal Government continues the fuel subsidy.

Iweala tried to substantiate her claim by a fact that, the subsidy was going into the wrong hands, made up of some cartels in the oil business who are the ones really enjoying the subsidy. The question is, are these cartels above the government that government turn the hammer on the masses instead of facing the identified cartels?

While many Nigerians are not happy with these developments, some have given a total support, with a third group seeking a balance. Gen. Buhari has openly distanced himself from supporting such plans. Rather, he reveals that most of the elements that goes into what is called subsidy is the cost of corruption in the opaque business of oil importation.

Governor Muazu Babangida Aliyu of Niger State, rolling behind the federal government claims that the policy was the best measure to regenerate the country's ailing petroleum sector. Aliyu is of the opinion that if fuel subsidy is removed, measures must be put in place at local, state, and federal government levels to cushion its effects, adding that not all of Nigeria's refineries were functional. He agreed that there was a cabal in the country enjoying the subsidy being paid by the federal government at the detriment of Nigerians. This cabal, he said, does not want the refineries to work.

Labour said its response to the planned palliative measures mentioned by president goodluck Jonathan is that "out of the projected N1.134 trillion to be saved from the subsidy removal, the local government allocation is N202.23 billion, states is N411.03 billion and the Federal Government N478.49 billion and concluded that even if the Federal Government alone were to spend entire N1.134 trillion, it cannot execute even a fifth of the projects it had listed" (Ofikhenn, 2011:4).

Anti-Subsidy removal thesis concludes by positing that the presidency's palliative presentation was simply a repetition of the presentations made by the Babangida, Abacha and Obasanjo regimes, and that more of those promises were not kept.

Finally, before the anti-subsidy protest, it was stated that the protest would weaken the already fragile Nigerian economy. Employers of labour also warned of the implication of protests over the removal of fuel subsidy. According to the Director General of the Nigerian Employers Consultative Association (NECA), Mr. Olusegun Osinowo:

Any crisis will worsen the economic situation.' You know that salaries are paid form the daily income of the companies - the manufacturers - and it

Will be difficult for the employer to honour his salary obligations if businesses are put on hold due to labour protest (Oladesin, et al, 2011;1). For instance, Nigeria lost about 4.75 million Man-days to strike in six years.

President of National Industrial Court, NIC, Justice Babatunde Adejumo, disclosed that no less than four million, Seven Hundred and Fifty Thousand, One Hundr, and Ninety-One person-days (4,750,141) ere lost to industrials in six years in Nigeria.

3.1 Who Benefits From Fuel Subsidy

Benefiting from government's subsidy depends largely on the level of fuel consumption. The greater the amount of the fuel consumed., the more the benefit.

In Nigeria, it is the rich, and not the poor, who benefit the most from fuel subsidy. The reason for this is that rich members of society can afford several cars, which gulp quite a lot of fuel every week. As they buy fuel for their cars, they benefit from the subsidy because government pays the difference between what they would have paid and what they actually pay. In contrast, many of the poor do not own cars while middle income Nigerians can only afford small cars that consume minimal fuel. In many

IV. DATA PRESENTATION AND ANALYSIS OF RESULTS

4.1 Data Source

This consist mainly the use of questionnaires which would comprise of a number of specialized questions drawn to elicit acute and accurate responses from the respondents.

One hundred and twenty questionnaires were administered to the employees of different departments, hierarchies, employment status at the Ministry of Agriculture and that of Petroleum Resources. Sixty questionnaires were administered in each Ministry selected for this study.

4.2 SAMPLING DESIGN

The unit of study here is Government Ministries of Agriculture and Petroleum Resources within Lagos metropolis. From these units, government functionaries specifically those who responsible for the implementation of fuel subsidy removal in various department would be randomly selected, as it is quite difficult to get all the members of staffs within such limited time frame.

4.3 DATA ANALYSIS TECHNIQUES

The data collected were analyzed using the Statistical Package for Social Sciences (SPSS) version 17.0, the hypothesis were. tested at 0.05 significance level.

4.4 Data Presentation and Analysis of Research Questions

SECTION A

Personal Information

Responses		Sex Distribution			
Frequency	Percent	Valid Percent	Cumulative Percent		
Valid MALE	56	46.7	46.7	46.7	
FEMALE	64	53.3	53.3	100.0	
Total	120	100.0	100.0		

Source: field survey, 2012

The table 4.3a above reveals that 53.3% of the respondents are female while the remaining 46.7% of them are male. In a nutshell, majority of the respondents are made. Considering the percentage by which the numbers of male respondents are higher than the female, it can be said that there is a near perfect distribution as regard gender in the Nigerian society.

Table 4.1b Age Distribution

Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-25	34	28.3	28.3	28.3
26-35	60	50.0	50.0	78.3
36 and above	26	21.7	21.7	
Total	120	100.0	100.0	100.0

Source: field survey, 2012

The table 4.1b above shows that 28.3% of the respondents are between the age of 18 and 25, 50.0% of them are between 26 years and 35years, 21.7% of them fall between 36 years and above. Thus majority of the respondents are actually above 26 years old.

Table 4.31c Marital Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid OTHERS	4	3.3	3.3	3.3
SINGLE	56	46.7	46.7	50.0
MARRIED	06	50.0	50.0	
Total	120	100.0	100.0	100.0

Source: field survey, 2012

The table 4.1c above shows that 46.7% of the respondents are single; 50% of them is married. The remaining 3.3% of the respondents fall into the "other" category which include divorced, widowed and separated. Majority of the respondents are married; however this figure is just slightly higher than the singles.

Table 4.1d. Educational Qualification

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid SSCE/GCE	20	16.7	16.7	16.7
MSC	4	3.3	3.3	20.0
PROFESSIONAL	16	13.3	13.3	33.3
	10	8.3	8.3	41.6
CERTIFICATE	70	58.3	58.3	100.0
OND/NCE	120	100.0	100.0	
HND/BSC				
Total				

Source: field survey, 2012

The table 4.3d above reveals that 16.7% of the respondents are SSCE/GCE holders, 3.3% of them are M.Sc. holders, 13.3% of them have professional certificate, 8.3% of them have ONDINCE certificate and 58.3% of them are holders of HNDIBSC. Therefore, majority of them are graduates.

Table 4.3e Years Of Working Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid BELOW 5 YEARS	20	16.7	16.7	16.7
ABOVE 15 YEARS	14	11.7	11.7	28.4
11-15 YEARS	16	13.3	13.3	41.7
6-10 YEARS	70	58.3	58.3	41.7
Total	120	100.0	100.0	100.0

Source; Field Survey, 2011

The tables 43e above shows that 16.7% of the respondents have been in their respective organizations for less than 5 year 11.7% of them have stayed there for above 15years. 13.3% of them have been in their respective organizations for between 11 and 15 years, 58.3% of them have served their organization for between 6years and 10years, majority of the respondent have spent between 6 and 10 years.

Table 4.3f Organizational Status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid LOWER MANAGERS	40	3.3	33.3	33.3
MIDDLE MANAGERS	60	50.0	50.0	88.3
TOP MANAGERS	20	16.7	16.7	
Total	120	100.0	100.0	100.0

Source; Field Survey, 2011

Table 4.3f above shows that 33.3% of the respondents are lower level managers ,50% of them are middle level managers while the remaining 16.7% are senior level managers , hence majority of the respondents are middle level managers.

SECTION B

ANALYSIS OF RESEARCH QUESTIONS AND HYPOTHESIS TESTING

Analysis of Research Questions

What effects will the removal of fuel subsidy have on agricultural output?

Table 4.4a Showing responses to relevant research Questions

S/N	STATEMENTS	SA	A	U	D	SD 1
1	Removal of subsidy has increased the cost of Agricultural products	60	40	10	7	3
2	Removal of subsidy has led to higher transportation cost for agricultural input/output.	70	26	5	5	4
3	Input cost has gone up as a result of subsidy removal.	68	28	10	6	8
4	Farmers are more affected when subsidy is removed	50	40	20	7	3
5	Fuel subsidy removal is not the only factor for persistent rise in agricultural output.	60	50	5	3	2

The table 4.2a above shows that majority of the respondents agree that fuel subsidy removal has increased cost of agriculture products and agriculture input it has also affected farmers. It can be deduced from the response of the respondents to the above statements that subsidy will have a negative effect on agriculture production.

How can we use the subsidy removal to enhance agricultural output production?

Table 4:4b: Showing responses to relevant research Questions

S/N	STATEMENTS	SA	A	U	D	SD
6	Money gain from subsidy removal will be used to increase agriculture output production.	0	4	12	56	48
7	Removal of subsidy will increase budgetary allocation to agricultural sector	60	31	21	5	2
8	Fuel subsidy removal will encourage diversity in the economy.	50	30	29	8	3
9	Subsidy itself has discouraged unemployed youth to go into farming.	35	28	20	30	7
10	Agriculture output can only increase if subsidy is removed	15	20	45	25	16

The table 4.4b above reveals that majority of the respondents agree that fuel subsidy removal may increase budgetary allocation, allows diversity in the economy however majority disagree that money gain from subsidy removal will be used to increased agricultural production. From the responses, it can be deduce that subsidy removal may likely increase budgetary allocation to agricultural sector. Is there a long term relationship between the output of agricultural produce and fluctuation in production price in the economy?

Table-4.4c: Showing Responses to Relevant Research Questions

S/N	STATEMENTS	SA	A	U	D	SD
11	Is there a long term relationship between the output of agriculture sector and fluctuation in petroleum in the economy?	64	25	20	4	7
12	Proper use of subsidy monies will in the long run boost agricultural products.	75	30	5	0	0
13	There is a positive relationship between subsidy removal and increase in farm produces.	47	39	20	14	0
14	Subsidy removal will in the long run encouraged youth to go into farming.	50	25	30	10	5
15	Fluctuations in petroleum prices are as a result of the mono-product economy of Nigeria.	36	38	20	20	6

Source: Field Survey, 2011

Presentation and Analysis of Data According to Test of Hypothesis

Hypothesis One:

Ho₁ There is no long term relationship between the output of agricultural sector and fluctuation in petroleum prices.

HA₁: There is a long term relationship between the output of agricultural sector and fluctuation in petroleum price.

Table 4.4a: Showing Chi-square Test Statistics

	FOOD STUFF	PALM PRODUCE	EXPORT CROPS	TOTAL
Hi-square	41.857 ^a	28.571 ^a	34.143 ^a	104.571
Df.	4		4	
Asymp. Sig	.000		.000	

a. 0 cells (.0%) have expected frequency less than 5. The minimum expected cell frequency is 12. The decision rule is that if the X^2 -calculated $> X^2$ -tabulated (0.95, 5) reject H_0 ; if otherwise accept H_0 from table 4.3a, the calculated value is 104.571 while the tabulated value is 9.49. This means that the null hypothesis is rejected, and the alternative hypothesis is accepted. This indicated that there is a long term relationship between agricultural output and fluctuation in petroleum prices.

Hypothesis Two

H_{01} : There is no significant relationship between the removal of fuel subsidy and agricultural output in Nigeria.

H_{A1} : There is a significant relationship between the removal of fuel subsidy and agricultural output in Nigeria.

Table 4.4b showing Spearman's Correlations between Fuel Subsidy removal and Agricultural output

		Fuel subsidy removal	Agricultural Output
Spearman's rho RMP	Correlation Coefficient	1.000	713**
	Sig. (2-tailed)		.000
	N	120	120
INS	Correlation Coefficient	713**	1.000
	Sig. (2-tailed)	.000	.
	N	120	120

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.4b above showed the spearman's rho correlation between fuel subsidy removal and prices of agricultural output. The positive correlation of 0.713 showed a relative correlation between fuel subsidy removal and prices of agricultural output. This means that there is a strong positive relation between fuel subsidy removal and prices of agricultural output.

Hence the null hypothesis is rejected and the alternative hypothesis is accepted.

Agricultural sector has been neglected in recent years because of the advent of crude oil. It has also recorded low budgetary allocation from the discovery of petroleum.

It was also discovered that the removal of fuel subsidy would increase the budgetary allocation in the agricultural sector thereby increasing agricultural production.

In this research work, it was discovered that there is positive relationship between the fuel subsidy and prices of agricultural output.

V. CONCLUSION

It can be concluded based on the findings that the removal of fuel subsidy would have a huge effect on agricultural sector both negatively and positively.

Negatively in the sense that it brought about an increase in the cost of agriculture produce due to the high cost of transporting the agricultural produce and high cost in the prices of the agricultural input. Although the removal of fuel subsidy is seen as being in the best interest of transforming the economy through diversifying the economy by investing in other sectors such as the agricultural sector, thereby increasing the budgetary allocation.

The negative impact can be cushioned if the government effectively uses the savings from the removal of fuel subsidy efficiently in investing on the agricultural sector. But based on the study of the history of the fuel subsidy removal, it has shown that the government has not been efficient enough in using the savings gotten from the reduction in fuel subsidy to invest in other sectors. Instead the savings gotten has been squandered and embezzled by corrupt leaders and officials of the government.

VI. RECOMMENDATION

Based on the findings of this research, I recommend the following to tackle the problems encountered on a result of the removal of fuel subsidy that is solution to cushion the negative effect in the agricultural sector.

The first recommendation is that government should fast track turn around maintenance of the four refineries and encourage the building of new ones before it finally removes the fuel subsidy. This would enable the government to refine the petroleum here in the country which would make fuel cheaper and eliminates any cabal which the government claim is responsible for the due to not having reliable refineries to reduce.

The second recommendation is that government should shift its dependence on the oil sector and also invest more on the agricultural sector in the form of creating loans for the farmers and providing modernized tools and more enhanced ones instead of the crude implement still in use.

Thirdly, I recommend that government should revitalized the railways so that there would be an alternative to road transport which means that agricultural produce would be transported through an alternation may thereby reducing its negative effect.

Finally the government should work vigorously in achieving the policies and objectives of the subsidy reinvestment and empowerment programme (SURE-P) which was introduced by the government to cushion the negative effects the removal of subsidy might have on the economy.

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