



Effect of Economic and Agricultural Diversification on the Economic Growth in Nigeria

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ABSTRACT

The study examines the effect of economic and agricultural diversification on economic growth in Nigeria. The objectives were to determine the effect of government agricultural spending on Nigeria's Gross Domestic Product. Data were collected from secondary sourced using the time series data which was extracted from the Central Bank of Nigeria (CBN) annual Statistical Bulletin for the period and The Nigeria Bureau of Statistic annual reports. Data were analyzed using the Autoregressive Distributed Lag (ARDL) approach or Bound Test Method. The findings revealed that Government agricultural expenditure does not have a significant effect on Gross Domestic Product. The investigation suggested that the government at all level should increase their budgetary allocations for agriculture and also develop a functional agricultural long-term blueprint to improve the sector.

Key words: Agriculture, Government expenditure, Gross domestic product.

INTRODUCTION

Governments all over the world explore the economic potentials of their nations to improve the standard of living of their citizens. Currently, most developing countries endowed with diverse natural resources are often confronted with the problem of selecting the best investments that would engender economic growth and development (Jhingan, 1984). While many countries use innovative approaches to diversify their economies based on available options, others focus on specific sectors they seem to have a comparative advantage to improve the well-being of their citizens. The comparative advantage theory urges countries to focus more on the creation of products and services in which they are blessed via nature to proficiently deliver at lower opportunity cost (Ricardo, 1917). This has, now and again, driven governments to concentrate on a specific area of the economy to the detriment of others. This could lead to under-utilization and under-development of other sectors of the economy. The overall objective of economic diversification is to sustain economic stability and engender balanced and sustainable national development.

Globally, agriculture has assisted in promoting the total welfare of its nationals within the purview of economic growth; reduced poverty level, enhancing free market and upholding accountability in governance. Adequately harnessed agricultural sector creates wealth, increases employment opportunities and enhances food security. Hence, the agricultural sector has enhanced economic growth. Many developing and developed countries that are endowed with arable land for crop production diversify their economy through agriculture thereby enhancing economic growth and Gross Domestic Product. The importance of the agricultural sector to economic growth can be witnessed in other economies like Malaysia, Tanzania, Venezuela and Angola, to mention a few.

Malaysia embarked on economic diversification to

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enhance national development by exploiting her agricultural sector. In 2015, Malaysia shipped out over 19.5 million tons of palm products which amounted to \$16.8 billion of export earnings (MPRC, 2015). Malaysia is currently ranked as the largest producer and exporter of palm oil in the world. Hence, Malaysian agricultural sector has yielded positive results which contributed immensely to economic growth.

Tanzania diversified her sources of revenue toward achieving national development by exploiting the agricultural sector. According to Megan (n.d) Tanzania is a democratic republic of over 53 million people, with an average annual gross domestic product growth rate of nearly 7 percent over the past decade. Despite recent economic growth, over 46 percent of the population lives below the extreme poverty threshold of \$1.90 a day (2011). Agriculture is the mainstay of the economy, contributing over 30 percent of GDP and employing 67 percent of the labor force, with women contributing more than 70 percent of the labour. Thus, economic diversification was enhanced through the steady progress experienced in the agricultural sector of Tanzania's economy which impacted significantly on her growth.

Venezuela's economy witnessed an increase of 30% on her GDP around the 1920s through improved agricultural activities which employed about 60% of the total workforce of the nation (Mellor, 2011). However, the discovery of crude oil in the year 1928 led to the abandonment of the agricultural sector. In 2011 as recorded by FAO (2016), agriculture hardly accounted for 4.2 % of the GDP and engaged 10% of the total workforce. Another good example of economic diversification is that of Angola this country is said to be the fastest growing economy on the continent of Africa in the agricultural sector. The Agricultural Development Bank in 2015 opined that the country witnessed a rise in the revenue generated GDP from the agricultural sector from 11% to 17.5 % while the crude oil sector witnessed a decrease of 13%. No doubt, Angola is really experiencing rapid national development through economic diversification (ADB, 2016).

Despite the colossal benefits of the agricultural sector, Nigeria still engages in massive food importation to the extent of becoming the second biggest importer of rice. Also, Six hundred and thirty billion naira was spent on food importation to Nigeria in 2015 while sadly 70% of Nigerian farmers operate at a subsistence level of agriculture. However, 40% of these agricultural products perished due to poor storage facilities. The agricultural sector accounts for only 11% of the GDP while the crude oil sector accounts for a whopping 80% of the revenue. Therefore, the oil sector remains the lifeblood of the national economy.

Various programmes had been put in place by successive government in Nigeria to grow the agricultural sector; those programmes have not accomplished the ideal outcomes. This might be the result of conflicting agricultural projects, low budgetary designations and frail institutional

game plans for its execution (Obinne, 2010). Nigeria has kept on depending dominantly on raw petroleum income while the farming part is completely misused and underused regardless of its tremendous financial possibilities for upgraded national improvement.

It must be said that several efforts have been made by past governments to revamp the agricultural sector through economic programmes like Operation Feed the Nation (OFN), Green Revolution (GR) and National Fadama Projects. However, due to the lack of continuity after a change of government and lack of commitment on the part of the government, the programmes did not yield the desired results. Nigeria still depends on crude oil for revenue and made marginal efforts to diversify the economy (FGN, 2016). The effects of these efforts are yet to be felt in Nigeria despite the introduction of these agricultural programmes. From the theoretical purpose of examination, it is projected that the rate of the commitment of agricultural sector to the general economy will decrease while food importation (sustenance import bill) in the meantime would decline (Xinshen, 2007). Be that as it may, this hypothesis isn't relevant to Nigeria economy circumstance where there has been non-stopping rising sustenance import charge prompting the tireless gigantic shortage in the balance of payment throughout the years (Ugwu, 2007). Additionally, Food and agriculture organization (2012) revealed that Nigeria's food imports are developing at an unsustainable rate of 11% per annum. This suggests unfriendly impacts on the Nigeria economy and GDP development probably won't be economical.

The objective of the study is to determine the effect of government agricultural expenditure on Nigeria's Gross Domestic Product.

Author's Name/ Year	Title	Methodology	Finding
Udah, Nwachukwu, Nwosu, Mbanasor and Akpan (2015)	the contributions of agricultural sub-sectors and various policy from 1961 to 2010	Time series optional date was utilized regimes in Nigeria	demonstrated that the crop sub-sector contributed about 86 percent to add up to agrarian GDP development mirroring a disproportionate example of development in Nigeria economy
Ebere and Osundina (2012)	Government spending on agribusiness on financial development in Nigeria.	Secondary sourced	The investigation uncovered that agriculture spending, government and GDP are absolutely related
Ademola, Olaleye, Olusuyi and Edun (2013)	normal commitment of the agricultural sector to the national income of Nigeria	Time series optional date was utilized	that a huge relationship exists between government spending in the agribusiness and the financial development of Nigeria

MATERIALS AND METHODS

To examine the impact of the overall government agricultural spending on a Gross Domestic Product, one variable considered as the independent variables is Government Expenditure on Agriculture for every year, while Gross Domestic Product (GDP) is the dependent variable. All information relating to an autonomous variable and that of the reliant variable were sourced from the Central Bank of Nigeria factual release, Nigeria spending office and the Government Authority of the measurement. The time arrangement information spread 10 years extending from 2008-2018. The reason for picking this period is to experimentally test the noteworthiness or the degree to which government farming consumption division adds to the GDP in spite of quite a long while of Government disregard, poor assignment and the recharging of exertion towards the broadening of the economy by the administration through agribusiness since 1991 till date. The measurable plan of the model can, consequently, be introduced as pursuits.

Model specification

The hypothesis states that the government expenditure on the agricultural sector has a significant effect on Gross

Domestic Product; the relevant model was represented as:

$$\text{LOGTAGDP} = \beta_0 + \beta_1 \text{LOGTAGEXP} + \beta_2 \text{EXR} + \beta_3 \text{CPI} + \beta_4 \text{EXPR} + \beta_5 \text{IMPR} + \mu \dots \dots \dots (\text{vi})$$

where:

LOGTAGDP	=	Log of Total Agricultural Gross Domestic Product
LOGTAGEXP	=	Log of Total Agricultural Government Expenditure on Fishery
EXR	=	Exchange rate
CPI	=	Consumer price index
EXPR	=	Export Rate
IMPR	=	Import Rate

RESULTS AND DISCUSSION

From Table 1 in appendix it can be observed that actual government expenditure on the agricultural sector (LOGTAGEXP) has a positive and non-significant effect on agricultural sector contribution to Nigeria's Gross Domestic Product (LOGTAGDP). This was explained by the positive coefficient value of our main independent variable (LOGTAGEXP) and its corresponding probability value (0.1594), which is higher than the 0.05 significant level. The

Table 1: Autoregressive Distributed Lag (ARDL) Model Estimation Results.

Dependent Variable: LOGTAGDP
 Method: ARDL
 Date: 11/15/18 Time: 12:54
 Sample (adjusted): 2000 - 2017
 Included observations: 18 after adjustments
 Maximum dependent lags: 1 (Automatic selection)
 Model selection method: Akaike Info Criterion (AIC)
 Dynamic regressors (1 lag, automatic): LOGTAGEXP LOGEXR CPI
 LOGEXPR LOGIMPR
 Fixed regressors: C
 Number of models evaluated: 32
 Selected Model: ARDL(1, 1, 0, 0, 1, 0)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOGTAGDP(-1)	0.267406	0.201505	1.327046	0.2172
LOGTAGEXP	0.099628	0.064945	1.534046	0.1594
LOGTAGEXP(-1)	0.150835	0.072012	2.094586	0.0657
LOGEXR	0.562120	0.179679	3.128470	0.0122
CPI	-0.000242	0.002908	-0.083385	0.9354
LOGEXPR	0.292042	0.079781	3.660554	0.0052
LOGEXPR(-1)	-0.115314	0.095656	-1.205505	0.2587
LOGIMPR	-0.049980	0.173435	-0.288175	0.7797
C	-0.223840	0.455784	-0.491110	0.6351
R-squared	0.852690	Mean dependent var		3.948500
Adjusted R-squared	0.786192	S.D. dependent var		0.348266
S.E. of regression	0.040924	Akaike info criterion		-3.247349
Sum squared resid	0.015073	Schwarz criterion		-2.802163
Log-likelihood	38.22614	Hannan-Quinn criteria.		-3.185964
F-statistic	152.7706	Durbin-Watson stat		2.348788
Prob(F-statistic)	0.000000			

results reveal that 1% increases in government agricultural expenditure are associated with about 9.96% increases in contribution to Nigeria's GDP. On the other hand, exchange rate and export ratio have a positive effect on LOGTAGDP while CPI and import ratio are negatively associated with LOGTAGDP during the period.

The R² is the summary measure that discloses to us how well the example relapse line fits the information. From the model above, R² of 0.85 implies that 85% variety in agricultural sector contribution to Nigeria's Gross Domestic Product was explained by changes in actual government expenditure on the agricultural sector and the remaining 15% was clarified by factors excluded in the model. The adjusted R² assess progressively the number of repressors whenever included, regardless it clarifies 79% variety in the dependent variable. The F-esteem (152.7706), with a probability value $0.000000 < 0.05$ indicated that the overall regression is critical. The Durbin Watson measurements (DW) estimated estimation of 2.0 hints at there is no sequential autocorrelation, inferring that our outcome is solid or reliable.

The (LOGTAGEXP) result showed a positive and non-significant impact on agricultural sector contribution to Nigeria's Gross Domestic Product (LOGTAGDP). The results revealed that 1% increases in government agricultural expenditure are associated with about 9.96% increases in contribution to Nigeria's GDP. ARDL Bound/Cointegration Test confirms that a long-run relationship exists between agricultural sector contribution to Nigeria's Gross Domestic Product and the independent variables. The finding revealed that the spending of government on the agribusiness does not significantly affect rural Gross Domestic Product inside the time of this investigation. This lines up with Abula and Ben (2016) that the spending of government has a significant negative effect on agrarian output. However, the finding of this study and that of Abula and Ben (2016) and the finding of Ishola, Olaleye, Ajayi and Femi (2013) showed that significant relationships exist between government spending in the agricultural sector and the growth of the economy. Cletus and Sunday (2018) affirmed that there exists a positive and significant relationship between government expenditure on agriculture and economic growth in Nigeria. Umaru and Zubairu (2012) stated that the agricultural sector contributes higher than the petroleum sector and contributes a positive impact on economic growth and development of the economy. Eberé and Osundina (2014) stated that a significant relationship exists between government expenditure on agricultural sector and the growth of Nigerian economy. Eberé and Osundina (2012) expressed that agricultural outputs, government expenditure and GDP are decidedly related and that critical connections exist between government spending in the agriculture sector. Ademola, *et al* (2013) considered Nigeria and found a noteworthy connection between government spending in the Agric sector and financial growth. Olurankinse and Bayo (2012) uncovered that the non-oil sector positively affects the development of the Nigerian economy. Adebile and

Amusan (2011) concluded that inclusion in the non-oil export part is a key to genuine development and economic improvement. Okezie, *et al* (2013) stated that agricultural contribution to GDP and total government expenditure on agriculture were cointegrated.

CONCLUSION

It is important to take note that before oil became a significant wellspring of national income, the economy of Nigeria has been basically agriculture based; the agricultural sector has remained a huge supporter of the Nigeria economy, particularly in the area of employment generation, foreign earning through exporting of agricultural product and national output. Between 2001 to 2018 government agricultural expenditure has increased with 4.4%. Despite these laudable efforts of government spending on the agricultural sector, the outcome since independent does not have a significant contributory effect on Nigeria's Gross Domestic Product. This affirms that government agricultural expenditure did not have a noteworthy impact on the Gross Domestic Product in Nigeria. This development creates an unwarranted situation that could lead to the reduced output of agricultural produce which up to this point filled in as foreign trade income for the nation. Correspondingly, the discoveries affirm that the positive advancement seen in the agricultural sector is growing quickly, making the sub-sector become exceptionally energetic in the economy. The relative advancement could be credited to the nation's policy arrangement audits, the accentuation set on agriculture by the global network and specialized help by such associations as FAO, the United Nations Millennium Development Goals (MDGs) and cooperation with countries like China, Israel, etc. This study, therefore, concluded that the contribution of agriculture to Nigeria's Gross Domestic Product depends on the rate of allocations of government agricultural expenditure and its implementation. The study recommended that government at all levels should increase its budgetary allocation for agricultural expenditure and develop a functional long-term strategic plan to improve the sector.

Like every investigation, the study has some limitation that needs to be mull over in evaluating the finding. The study focused on Nigeria as a nation which is relatively too large without considering the Federal Government allocation to State government and state internal generating revenues, thus this limited the generation of the findings. It is therefore recommended that further study should be done in each state in Nigeria since their federal statutory allocation and internal generating revenues differ.

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