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Assessment of Budgetary Allocation to Agricultural Sector and its effect on Agricultural Output in Rivers State, Nigeria (1999-2010)

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ABSTRACT
This research focused on the assessment of budgetary allocation to the agricultural sector and it effect on agricultural output in Rivers state, between (1999-2010). The research only utilized secondary data generated by the Rivers state government of Nigeria through the ministry of agriculture. The objectives of the research was to examine the agricultural output of some selected crops such as cassava, yam, oil palm and plantain, and to examine the relationship between the budgetary allocation to the agricultural sector and the various output mentioned above as well as investigate the entire budgetary allocation to agricultural sector for a period of 12 years. Simple regression, percentages, and tables, were used as analytical techniques. The coefficient of determination,[R^2] showed a very poor relationship between budgetary allocation to agricultural sector and output, meaning R^2, was not significant for the four different equations. This is because allocation to agricultural sector was miss-applied.
Keywords: Budget, Allocation, Agricultural Output

1.1 INTRODUCTION

Jhingan (2004). The term budget was derived from the French word "Bougette" which means a leather bag or a wallet. The chancellor of exchequer in England used to carry the financial proposal for the year in a leather bag to the house of commons. The term budget relates to the paper containing Walpole's financial plans. The term was used for the first time in 1733 by a member of house of commons of England.

Today, budget is seen as a document which contains an estimate of the expected government revenue and expenditure for a period of time-say one year.

Uchenna (2004). Budget could be divided into two parts -The capital budget and the recurrent budget. The recurrent budget is made up of expenditure on overhead and salaries and overall running of government, while capital budget is made up of expenditure on capital projects such as Agriculture, health, roads, electricity, pipe borne water etc. Bulk of the money used to finance the budget comes from fiscal operation (policy). This means the budget is regulated through taxes and careful spending. Beardshaw (1988) that if government spends more money than it collects in taxes, then the government runs a deficit. In which case, the budget will be financed through borrowing this will result in 'crowding out'. Crowding-out is a situation in which increase in government borrowing, prevents individuals from borrowing due to increase in interest rate. Conversely, a situation in which government collect more money than it spends is referred to as budget surplus. Both budget deficits and budget surplus have expansionary or inflationary effect on the economy as well as contractionary or deflationary effect. Henderson and Pool (2005) that the major objective of budget is to create full employment, control inflation, promotion of economic growth. These are a achieved through the operations of the monetary policy. (Okuneye, 2002) that budgets are formulated to achieve certain prime objectives such as reducing inflationary pressures, sustainable growth and development, reduce poverty and enhance rural development.

1.2 PROBLEM STATEMENT

It is no longer controversial that in central Africa, about nine million people are faced with sever food crises due to famine (FOA 2010) the situation is not just in Central Africa alone. The Rivers state government of Nigeria due to the presence of hydrocarbons has left up to 50-60 percent of its fertile arable land uncultivated in-spite of the huge budget. Ministry of Agriculture (2010) That the sum of twenty one [21] billion naira has been budgeted since the last 12 years by successive government in Rivers state for the agricultural sector, yet people are still not sufficient in food production. In 1999, 7.3% was budgeted for agriculture, in 2005, 9.56% was allocated to agriculture, in 2008, 8.9% was allocated to agriculture, yet there is shortage in output. Allison- (2006) that the industrialist have conspired against the agricultural sector by attracting factors of production away from agriculture, factors of

production such as land and labour migrate out of rural agricultural sector to the urban industrial sector for better wage.

But nevertheless, so many governments have boastfully maintained that they have transformed the agricultural sector, yet there is still food insecurity. It is against this premise that this research is being conducted to ascertain the very reasons why there is so much food insecurity in-spite of the huge budgetary allocation.

1.3 OBJECTIVES OF THE STUDY

The general objective of this study is to assess the budgetary allocation to the agricultural sector and its effects on agricultural output in Rivers State. While the specific objectives are to;

(1) examine the agricultural output of some selected food crops from 1999-2010

(2) investigate the total budgetary allocation to agricultural sector between 1999-2010

(3) examine whether or not, there is a relationship between agricultural output and budgetary allocation in Rivers State

1.4 METHODOLOGY

Study Area

Rivers State is one of the 36 States of the Federal Republic of Nigeria. The state was created in May 27, 1967 by Yakubu Gowon. The state has boundaries with Abia, Bayelsa, Delta, Akwa-Ibom as well as Imo States. Rivers State has 23 local government council, with about 5 million people (2006 census). With Port Harcourt, as its capital. The state is rich in crude oil, although the major occupation of the people is fishing and farming. The study utilized secondary data and focused mainly on the Rivers state government and ministry of agriculture an ministry of finance between 1999 to 2010. Analytical technique used in the research work includes simple regression as well as descriptive statistics such as tables and simple percentages.

The following simple models were built to represent the real world

$Y_1 = F(x) + U$ -----equ. 1

$Y_2 = F(x) + u$ ----- equ. 2

$Y_3 = F(x) + u$ ----- equ.3

$Y_4 = F(x) + u$ ----- equ. 4

(Domodar 2009)

Where

X = budgetary Allocation (independent variable)

Y_1 = Output of plantain

Y_2 = Output of yam Dependent

Y_3 = Output of oil palm Variable

Y_4 = Output of cassava

These outputs were purposively selected since the state seems to have a comparative advantage over other states in term of their production.

Results and discussion

Table1shows output of selected crops (1999-2010) this is in line with the analysis of objective one (1) which is examining the total agricultural output in Rivers State, between (1999-2000). The table shows that output was poor compared to the budgetary allocation, during the period under review. For instance, in 1999 about 6 billion was the state budget. Only 50 million was allocated to agricultural Sector i.e only 7.3% was actually released.

The analysis of the selected food items revealed that there was no remarkable increases in the whole of the output. From 1999-2010 output revolved around 11 and 16 tons for cassava, in 1999 cassava was 11.36 tons, twelve years later (2010) it was still 11.22 tons. This shows a decrease of 0.14 tons. The conclusion is that cassava did not show any appreciable growth in output. In oil palm, there was increase between 1999 to 2000. Oil palm output increased from 25 tons in 1999 to 60 tons in 2000, and dwindled between 94 tons in 2001 to 95 tons in 2010 this shows that within the period of 12 years output of palm oil was very poor. The same goes to plantain and yam with a stagnated growth of 9 to 11 tons respectively.

The entire output of yam, cassava plantain and oil palm were abysmally poor between 1999-2010.

Table 2 shows the budgetary allocation to agricultural sector. In line with objective 2 of this study which is to investigate the total allocation to the agricultural sector from 1999 to 2010. The table shows that about NGN 2.9 trillion have been budgeted by the state within the period of 12yrs, out-off this amount about NGN 21 billion was allocated to the agricultural sector within the period of 12 years. A breakdown of this shows that in 2005 agriculture received about 9.56% representing about NGN900 million which is the highest so far within the 12 years period in terms of percentage, followed by 8.9% in 2008. In 2010, about 2 billion naira was allocated to the agricultural sector while the entire budget for the state stood at 154.534 billion. Apart from 2009, when the allocation to the agricultural sector was 472 million, in 2002, 2003, 2006, 2007, 2008 and 2010 the agricultural sector received more than a billion naira each of the above years respectively.

Table 3 shows relationship between budgetary allocation to agricultural sector and agricultural output-This is in line with objective three (3) of this research work. In 1999 the budgetary allocation was NGN 50,751,000 this was about 7.3% of the entire budget. Output of cassava was 11.36 tons, oil palm 25 tons, plantain 9.25 tons and budgetary allocation to agricultural sector was 133 million almost triple the previous year (1999) yet the output did not increase proportionally, only output of palm increased. Yam, plantain, cassava recorded stagnated growth in output.
50 million was allocated to the agricultural sector. This represents 7.3% of the total budget while the total output of cassava, oil palm, plantain, yam, was 53.82 tons. In 2000, the budgetary allocation to agric sector was NGN133.551 million which was almost 200% increase compared to the 1999 allocation while the output was 93.73%. This shows almost a hundred (100) percent increase in output. This increase is not proportional to the agricultural budgetary increase which was about 200%. In 2002, the allocation was about NGN 1.378 billion. A breakdown of the output shows that oil palm decreased in output, from 94 tons to 84 (10 tons decrease) plantain, cassava and yam showed some abysmal output. This very poor output was not a true reflection in the whooping 1.378 billion allocated to the sector, between 2006 to 2008, there were no visible increases in agricultural output, yet agricultural allocation continued to increase, in 2010 the allocation to the agricultural sector increased astronomically to 2.7 billion but the agricultural sector experienced the worst growth in output.This analysis shows that there was a negative relationship between budgetary allocation to agricultural sector and agricultural output. Within the period of 12 years (1999-2010) the sum of 2.9 trillion naira had been allocated to Rivers State, by the Federal Government, but only 21.507 billion naira was allocated to the agricultural sector, further investigation into why there was poor performance of the sector, revealed that huge part of the budget was normally used to service staff and personnel of the Ministry of agriculture (14.6%) 9-8% was used for international donations. While the greatest part (108%) for consultancy. Only 4.7% was given to farmers as loan.

Summary of Regression Result

$Y_1 = B_0 + B_1 x_1 + U$ equ…5
$Y_2 = B_0 + B_1 x_1 + U$ equ…6
$Y_3 = B_0 + B_1 x_1 + U.$ equ…7
$Y_4 = B_0 + B_1 x_1 + U.$ equ…8
$Y_1 = 10.66 + 3.13\ x_1$ equ… 9
(0.489)
* $R^2 = 0.36$
$Y_2 = 9.482 + 5.22\ x_1$ equ…10
(0.293)
* $R^2 = 0.36$
$Y_3 = 70.96 + 1.21\ x_1$ equ…11
(8.956)
$R^2 = 0.024$
$Y_4 = 13.14 – 3.9\ X$ equ…12
[0.88]
$R^2 = 0.033$
Standard errors in parentheses

The regression results showed that there was a positive relationship between Y and X. Budgetary allocation (X) and various output (Y) as revealed by the appriori signs, except the estimate of equation 8 ($Y_4 = 13.14 – 3.9X$) that showed a negative relationship. This means cassava and the budgetary allocation to the state showed negative relationship.

Even though there were positive relationships in equations 9, 10, 11, these relationships were not significant. This was confirmed by the coefficients of determination (R^2) of the four equations. It shows that very little of the variation in the various output Y_1, Y_2, Y_3, Y_4, were explained by (X) which is the budgetary allocation. This mean that a reasonable fraction in [Y] which is output of plantain, cassava, oil palm, and yam) was not explained by X (budgetary). the objective three of this study seeks to examine the relationship between budgetary allocation and selected output, but the coefficient of determination (R^2) revealed that there was a no significant relation this was because budgetary allocation was not actually applied in the production of agricultural output, rather the budget was miss-applied throughout the twelve (12) years of study since there was no correlation between the budgetary allocation and output.

CONCLUSION

Considering the objective three of this study, it can be concluded that the volume of the budgetary allocation to the agricultural sector did not produce the expected output. This was revealed in table 3 which shows the relationship between budgetary allocation to agricultural sector and output of agriculture. The findings showed that while budgetary allocation continued to increase within the period of 12 years, output of various crops (yam, plantain, cassava, palm oil) were abysmally poor.

RECOMMENDATIONS

Based on the evidence of this study, the following recommendations were proffered. That government should set up a monitoring body to evaluate how the budgetary allocation to the agricultural sector is being applied periodically.

That even though the actual figure allocated to agricultural was not actually used for its purpose, there is a need to still increase the allocation.

That government should use this budgetary allocation to make agriculture an attractive industry so as encourage attract employment

REFERENCES

Okuneye, B. (2001). The Rising Cost of Food and Food Insecurity in Nigeria and *its Implication for Poverty Reduction: CBN Economic and Financial Review*. Vol. 39 No.4 pp 92-98

Uchenna, A. W. Obara, L. C. (2004). *Public Sector Accounting, Principle and Practice*. Base 5 Communication Ltd. Nkpor, Onisha

Jhingan, M. L. (2000). *Macro economic theory,* Vrinda Publication Ltd, India

Ministry of agriculture publication ,Rivers State, 2010. Rivers State

Henderson, V and Poole, W (1992) *Principle of economics*. Dc Heath and Company, Lexington, Toronto.
Domodar, N. G and Down, C. P (2009). *Basic Econometrics*. macGraw-hills, New York, U.S.A.

Table: 1 Output of selected Food Crops (1996-2010)

Year	Cassava output	Index	Oil palm output	Index	Plantain output	Index	Yam output	Index
1999	11.36	116	25	27	9.25	39	8.21	43
2000	14.30	126	60	33	10.11	34	9.32	14
2001	12.29	137	94	39	11.20	35	9.75	32
2002	14.30	142	84	45	9.30	38	10.18	39
2003	15.32	145	94.4	38	10.52	39	10.23	57
2004	16.35	147	87	39	11.02	36	9.92	57
2005	11.28	148	96	36	12.54	44	9.90	45
2006	11.22	234	97	46	11.76	84	10.4	47
2007	11.28	236	89	29	11.87	37	10.31	46
2008	12.10	239	90	30	11.84	40	10.37	58
2009	11.87	149	93	32	11.54	43	10.91	59
2010	11.22	152	95	47	10.83	41	10.98	44
Total	130.30		1004.4		131.76		120.68	

Source; ministry of Agriculture, Rivers state, Nigeria

Table 2: Budgetary Allocations to Agriculture (1999-2010)

S/No.	Year	Rivers State appropriations	Ministry of agriculture	Percentage allocation	Rate of allocation
1.	1999	6,998,819,875	50,751,000	7.3%	0.73
2.	2000	29,822,509,102	133,051,350	1.9%	0.19
3.	2001	46,854,000,000	135,551,641	2.9%	0.29
4.	2002	63,931,135,583	1,330,337,996	2.1%	0.21
5.	2003	69,124,299,624	1,378,635,897	2.0%	0.19
6.	2004	79,369,776,180	865,807,592	0.1	1.09
7.	2005	96,750,000,000	9,250,896,251	9.56%	0.95
8.	2006	160,000,000,000	1,857,446,457	1.0%	0.010
9.	2007	142,717,681,034	1,955,940,662	1.3%	0.0104
10	2008	142,208,134,096	1,264,392,080	8.9%	0.09
11.	2009	146,458,951,772	472,500,00	3.2%	0.032
12	2010	154,534,327,119	2,703,750,000	1.8%	0.018
	Total	2,908,556,613,285	21,507,020,471	3.5%	0.35

Source; ministry of Agriculture Rivers State, Nigeria,

Table 3: Relationship between Budgetary Allocation And Agricultural Output

	Ministry of agriculture	Rivers State appropriations	Cassava output	Index	Oil palm output	Index	Plantain output	Index	Yam output	Index
1999	50,751,000	6,998,819,875	11.36	116	25	27	9.25	39	8.21	43
2000	133,051,350	29,822,509,102	14.30	126	60	33	10.11	34	9.32	14
2001	135,551,641	46,854,000,000	12.29	137	94	39	11.20	35	9.75	32
2002	1,330,337,996	63,931,135,583	14.30	142	84	45	9.30	38	10.18	39
2003	1,378,635,897	69,124,299,624	15.32	145	94.4	38	10.52	39	10.23	57
2004	865,807,592	79,369,776,180	16.35	147	87	39	11.02	36	9.92	57
2005	9,250,896,251	96,750,000,000	11.28	148	96	36	12.54	44	9.90	45
2006	1,857,446,457	160,000,000,000	11.22	234	97	46	11.76	84	10.4	47
2007	1,955,940,662	142,717,681,034	11.28	236	89	29	11.87	37	10.31	46
2008	1,264,392,080	142,208,134,096	12.10	239	90	30	11.84	40	10.37	58
2009	472,500,00	146,458,951,772	11.87	149	93	32	11.54	43	10.91	59
2010	2,703,750,000	154,534,327,119	11.22	152	95	47	10.83	41	10.98	44
Total	21,507,020,471	2,908,556,613,285	130.30		1004.4		131.76		120.68	

Source; ministry of Agriculture, Rivers state, Nigeria.