



Effect of Agricultural Promotion Policy on Rice Production Output among Smallholder Farmers in Adani Uzo- Uwani Local Government Area, Enugu State.

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ABSTRACT

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Several agricultural policies have been enacted and implemented over the decades in Nigeria, but the agricultural sector is yet to maximize its potential and bring about the desired development to the nation. The current policy known as Agricultural Promotion Policy (APP) is expected to unlock the sectors potentials, reduce dependence on crude oil export and ignite the growth of the Nigerian economy. This study assessed the APP effect on rice production output among smallholder farmers in Enugu State, Nigeria. This study was carried out in Adani Uzo- Uwani Local Government Area. It was designed to assess the effects of the Presidential Initiative on Rice Production and Export on the Output of Rice in the study area. The study focused mainly on output effect of the initiative. This was carried out by comparing the level of rice output before and after the commencement of the initiative in 2015. Two stage random sampling method was used to select 80 respondents from a sample frame of rice farmers. The study revealed that most rice farmers (participant and no-participant) were male (60%) with an average household size of six. The estimated output moved 650 tons in 2016-2017 to 737 in 2018-2019. There was a small increase in the output of rice before and initiative. The study therefore recommends that government and its agencies should make improved planting materials available, always target credit facilities to the rice farmers, provide processing machines like rice destoners, rice threshers, rice millers to improve the quality of the local rice to meet with the standard of foreign rice. Framers should be given opportunities to attend workshop/training designed for this initiative.

Introduction

Agricultural Promotion Policy (APP) also known as the green alternative was developed by Federal Government of Nigeria under Buhari Led Government as the national policy framework for driving the growth and development of agricultural sector in Nigeria (PRACU, 2015). Agriculture is the engine that stimulates economic processes when it comes to national development. Historical facts show that before the oil boom in 1970s, agriculture was the mainstay of Nigeria's economy (Ayodele, Obafemi, and Ebong, 2013). Each region was known for a particular agricultural produce- The Northern region was known as groundnut pyramid; Western region for cocoa, one of the world best commercial viable seeds; the Eastern region was the home of palm nut and cassava, and collectively, the proceeds from these

agricultural products made Nigeria the beauty of Africa.

Though Nigeria's economy is blessed with various natural resources, yet the citizens suffer in the midst of plenty. Nigeria has a high poverty rate in comparison with other African countries despite its higher Gross Domestic Product (GDP). Currently, Nigeria has over 80% of its land arable but unfortunately less than 40% of the land is cultivated despite the country's teeming population and level of unemployment (Fatokun, 2015). In a bid to put Nigeria's agricultural sector on a path to growth requires action to solve two major problems: produce enough fresh, high- quality foods for the Nigerian market; and serve the export market successfully and earn foreign exchange. The Federal Agricultural Promotion Policy (APP) is a strategy that focuses on

solving the core issues at the heart of limited food production and delivery of quality standard produce. The Presidential initiative is another agricultural promotion policy on rice production of the current administration. It is a PPP-type initiative to improve crop production and yields by making inputs available to farmers at significantly reduced prices, by leveraging private sector support for the Administration's priorities. Rice production in Nigeria is dominated by small holders, cultivating between 0.5 and 1.5 hectares per farmer, using largely manual labour for most operations (Emodi *et al*, 2018). The demand for rice in Nigeria has risen very rapid rate over the years from a capital consumption of about 3.0 kilograms in the 1960s to 22.0 kilograms in 1998/99 and 35 kilograms in 2006 (Idiong, I.C, 2007). The annual average demand was estimated at 5.0 million tons of milled rice in 2017 (FAO, 2018). Rice is a major commodity and an important cereal in world trade, It is widely cultivated throughout the tropics; and where flood controls are effective as in Enugu State and production is high (Nwaeli *et al*, 2014). Rice production in Nigeria is important because farmers find it more adaptable than a high input staple like maize when there is declining soil fertility because of the huge array of varieties they can switch over to every few years. Since it is becoming a staple crop, farmers seem to be willing to grow it all the time no matter the constraints they are facing. In a move to achieve self –sufficiency in rice production, processing and export, and reduce Nigeria’s massive dependence on imported rice and

boost its rice production, the Federal Government in 2015 started a Presidential Initiative on Rice. The project focuses on supporting small-scale rice producers to improve production and their household incomes through the transfer of relevant technologies (Ministry of Budget and National Planning, 2017). This study therefore, assesses the effect of presidential initiative (APP Policy) on rice output among smallholder farmers in the study area.

Method of the study

Sampling procedure and data

Two stage cluster sampling technique was used to select the community and respondents in the following way. Adani Uzo –Uwani was purposively chosen because the inhabitants were small holder farmers with the majority producing rice. A list of rice farmers who were members of rice growers association, and non-members was prepared with the assistances of the agricultural superintendent, and the association’s chairman in the community chosen. From the lists provided 50 rice farmers who were members of the growers association and 50 rice farmers who were not members of rice growers association were randomly selected, thereby giving a sample size of 100 respondents. Primary data was employed for this work. Pre-tested questionnaire was developed to elicit information from the respondents with also oral interview. Data was analysed using descriptive tools, such as frequency tables, percentages, means and Histogram.

Results and discussion

Sources and Level of Awareness Among Farmers of Presidential Rice Initiative

Table 1 showed the level of Awareness among rice farmers of the existence of the Presidential Rice Initiative.

Response	Participants Frequency	%	Non-Participants Frequency	%	All Participants Frequency	%
Yes (aware)	40	100	38	95	78	97.5
No (Not aware)	-	-	2	5	2	2.5

Survey, 2019

Table 1 showed that majority of the farmers were aware of the presidential rice Initiative. Hundred percent (100%) of the participants and 95% of non-participants were aware of the Rice Initiative. On the whole, 97.5% of the rice farmers interviewed said they had heard about the initiative while 2.5% had not.

Farmers Sources of Information on the rice initiative Project

There were various information channels through which the farmers accessed information about this government programme. A careful perusal of table 2 showed that, for the participant group, 50% heard about the initiative through contact with extension agents and 40% through neighbours/relatives. Multiple sources of information were available to them.

Distribution of farmers' Source of information

Response	Participants Frequency*	%	Non-Participants Frequency*	%	All Participants Frequency*	%
Radio	10	25	5	12.5	15	18.8
Neighbour/Relative	16	40	14	35	30	57.5
Poster/fliers	12	30	-	-	2	25.5
Extension agents	20	50	25	62.5	45	56.3
Church	14	35	11	27.5	25	31.3
T.V.	3	7.5	3	7.5	6	7.5

Multiple responses were observed
Survey, 2019

The more important source of information for non-participant were also extension agents, 62.5% and Neighbour/relative. The church (31.3%) and radio (18.8%) were relatively important sources. On the whole, extension agents and neighbours relative were the most prominent sources through television, radio and posters/fliers during the study were not effective. The main reason was because there was no electricity in the area of study, Adani, during the study

Membership of Rice Growers Association

Participants years of enrolment in the rice growers association

Table 3 presented the number of enrolment of participants over years in the rice growers association.

Distribution of Participants According to year of Enrolment

Years of Enrolment	Frequency	%
2012-2013	7	17.5
2014-2015	8	20
2016-2017	10	25
2018-2019	15	37.5
Total	40	100

Table 3 showed an increase in the number of enrollments over the years, before 2015 and after 2015 when the initiative was launched. The year 20017-2018 witnessed the highest percentage of enrollment (37.5%).

Participants Reason for Joining the Rice Growers Association

Table 4 indicated a higher number of farmers enrolled in the association to make more money from rice production (50%), followed by the reason that they (farmers) wanted to produce more rice (37.55)

Table 4: Distribution of Participants According to Reasons for Joining the Rice Grower Association

Reasons	Frequency	%
To learn new farming method	6	15
To produce more rice	15	37.5
To be self-sufficient	20	50
To engage in large scale farming	10	25

*Multiple responses were obtained
Survey, 2019

Non-Participants Reason for not joining the Rice Growers Association

Table 5 showed that government inconsistency in its programme ranked tops (62.5%) as reason for non-participation. This is so because, over the years, government programme have been inconsistent that most times they are not implemented and expected purpose for the policies are not met. Also, 30% said that the methods used were laborious

Table 5: Distribution of Non-participants According to Responses

Response	Frequency*	%
Government inconsistency in its programme	25	62.5
The programme is complex and expensive	4	10
It is purely educated	10	25
I'm too old to attend regular meeting	6	15
Method used/taught is laborious	12	30

*Multiple responses were obtained
Survey, 2019

Participation in workshops (Training organized on the Rice Project)

There were many workshops/training organized by government agencies and institutions in order to enhance rice productivity under the Presidential Initiative.

Table 6: Distribution of Farmers’ Response (participant group) to training and Workshop on Rice Project

Response	Frequency	%
Yes (have attended)	34	85
No (have not attended)	6	15
Total	40	100

Survey, 2019

Table 6: indicated that most of the rice farmers (85%) did not attend workshop/training on the project.

Comparison on Rice Yields before and after the Commencement of the Rice Project

Table 7 below presents the farmers yield before and after the commencement of the rice initiative

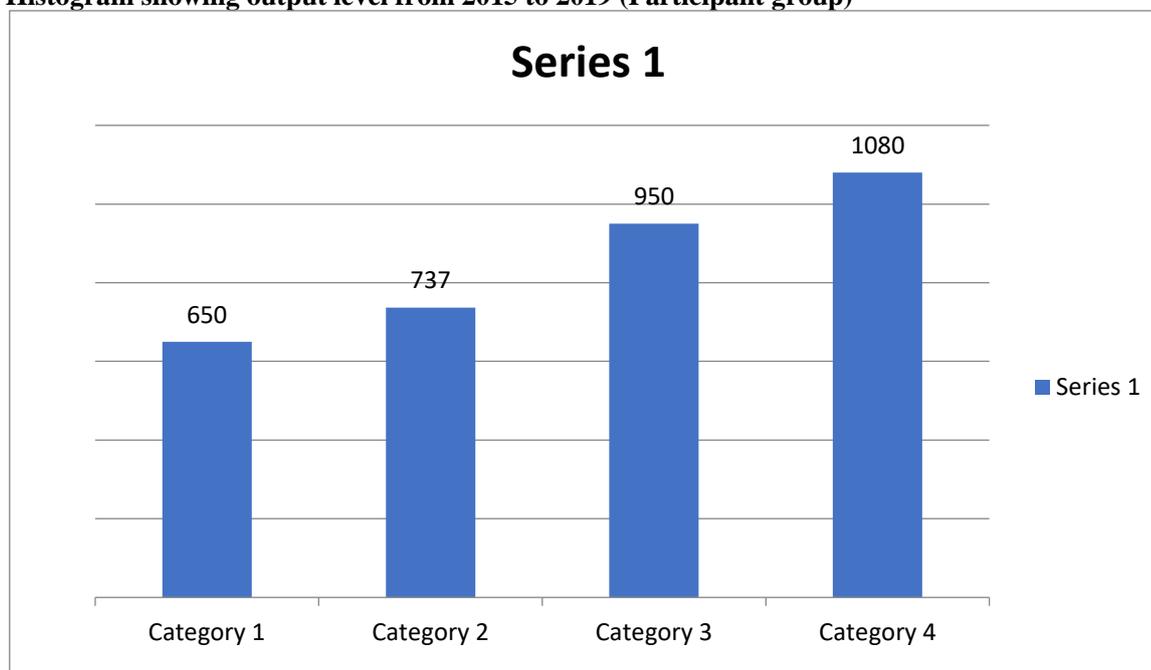
Table 7: Estimated Rice Output before and after the Rice Initiative

Years after the Commencement of rice initiative	Estimated Output in tons (X ₁)	X ₁ -X	(X ₁ -X) ²	Years before the rice initiative	Estimated Output in tons (X ₂)	X ₂ -x ₂	(X ₂ -x ₂) ²
B/W 2016-2017	950	-65	4225	B/F 2015	650	-43.5	1,892.30
B/W 2018-2019	1080	65	4225	B/F 2016	737	43.5	37845
Total (ΣX ₁)	2030	0	8450	Total (ΣX ₂)	1387	0	37845
Mean	1015			(x ₂)Mean	693.5		

Survey, 2019

The table showed that the total output of rice after the commencement of the initiative was higher than output before.

Histogram showing output level from 2015 to 2019 (Participant group)



Survey: 2019.

Farmers reason for Differences in the Rice Yield before and after the Commencement of the Initiative

Table 8 presented the responses based on the total number of farmers interviewed

Table 8: Respondents reason for Differences in output

Response	Frequency*	%
Increase in land area cultivated	39	48.6
Use of improved varieties	37	46.3
Use of local varieties	11	13.8
Better management skills	30	37.5
Poor management	28	35.0
Use of chemical fertilizer	15	18.8
Low income from previous sale	17	21.3
Disease attack	26	32.5

*Multiple responses obtained
Survey, 2019

In table 8, increase in land area and use of improved varieties ranked highest of all the reasons given. This accounted for 48.6% and 46.3% respectively. Some of the farmers that witnessed decline in output on their farmland individually that disease attacked was the main cause of low output.

Farmers Perception of the initiative and advice to Government

This section sought to ascertain farmers' perception and approval of the initiative and also, farmers' suggestion and advice to government and policy makers with regards to the Rice Initiative.

Table 9: Farmers' Reaction to the Initiative

Table 9 showed that both participant and non-participants believed that the rice Initiative had positive impact on their farming activities.

From the result, it could be seen that the initiative had been of effect in the areas of study.

Sources	Participant Frequency*	%	Non-Participant Frequency*	%	All Respondents Frequency*	%
Initiative has had positive impact	32	80	34	85	66	82.5
Initiative has had no impact at all	8	20	6	15	14	17.5
Total	40	100	40	100	80	100

Survey, 2019

Respondents Reason for approval of the initiative

Table 10 pinpointed the various reasons for the acceptance and implementation of the rice project in the area of study

Table 10: Response on Reasons for the Acceptance of the Rice Project

Response	Frequency*	%
The project will increase rice output	30	37.5
Income and standard of living of farmers will increase	28	35.0
Enough output to meet local and expert needs	20	25.0
Promote consumption of local rice in our country Nigeria	32	40.0
Will help engage youths profitably	11	13.8

*Multiple response were obtained
Survey, 2019

Table 10 showed that 37.5% of the farmers surveyed felt that the project would increase the output of rice and once the output was increase the output of rice and once the output was increased the income and standard of living of the farmers would rise (35%). This would help to engage the youths profitably (13.8%).

Farmers' advice to government and policy makers on more achievements of the Presidential Rice Initiative goals

Farmers gave several suggestions on what the government should do to ensure more commitment to actualize goals of the rice project.

Table 11: Rice Farmers Suggestions on what Government and policy Makers should do to achieve more of the goals of the Rice Project

Response	Frequency*	%
Timely availability of improved seed to farmers	41	51.3
War against Fulani herdsmen attack	78	97.5
Farmers' friendly insurance coverage against natural disasters	55	68.75
Target relevant inputs to real farmers (like tractors, processing machines, destoners)	34	42.5
Easy access of credit facilities to farmers	36	45.0
Provision of fertilizers at subsidized rate	18	22.5
Organizing more workshops/training on the initiative	11	13.8

*Multiple response were obtained
Survey, 2019

Table 11 clearly showed all the relevant suggestions given by the respondents. Of particular interest among these is the attacks of these farmers by the Fulani herdsmen which has forced so many farmers to quit farming activities which accounted for 97.5% of the respondents recognizing it as a major challenge they have been facing though on the table of the government but need to be properly addressed. About 69% of the respondents also recognized the importance of farmers' friendly insurance coverage against natural disaster. Others include timely provision of improved seed varieties to the farmers, easy access to credit facilities to the farmers and mechanized tools to enhance production and processing of rice and to organize more workshops and training of the rice project. These suggestions accounted for 51.3%, 45%, 42.5% and 13.8% respectively.

Conclusion and Recommendation

The Presidential initiative on rice production and export, no doubt is a serious programme of the past administration geared towards giving rice production (and of course agriculture) its pride of place in the Nigerian economy. In a move to achieve this self-sufficiency in rice production, processing and export and reduce massive dependency of Nigeria on imported rice and boost its production, the government collaborated with many agencies and institutions like West African Rice Development Association (WARDA) and National Cereals Research Institute (NCRI) to ensure the success of this project. To address the negative trend, a lot still needs to be done in order to ensure rapid increase in rice output. The Adani Rice Project needs assistance from the state

government by ways of repairing irrigation infrastructures to help the farmers grow irrigated, lowland rice. Also, rapid extension intervention in the areas of training and general education, coupled with careful supervision of the implementation of the policy objectives of the initiative is encouraged.

The study therefore recommends that government should come up with small-holder producer friendly policies which will make them produce local rice to compete with foreign rice and also institutional support for agricultural development such as credit facilities, co-operative organizations and insurance need to be improved.

References

- Ayodele, O.S; Obafemi, F.N; & Ebong F.S. (2013). Agricultural promotion Policy 2016 to 2020 and rural development in Nigeria: Challenges and prospects. *Global Advanced Research Journal of Social Sciences*, 27, 143-157.
- Fatokun, A. (2015). The Importance of Agriculture towards development of Nigerian economy. *Journal of Humanities and Social Sciences* Vol 23, Issue 2 pp. 24-29.
- Nwalie, H.U; Madukwe.M.C; Agwu, A.E; & Umerah, M.I. (2014). Adoption of rice technologies introduced by the United States Agency for International Development in Anambra and Ebonyi States, Nigeria (2014). *Journal of Agricultural Extension* Vol18 No.1. doi 10.4314/jae.v18i1.13.



- Idiong, I.C. (2007). Estimation of farm level technical efficiency in small scale swamp rice production in cross river State of Nigeria: A Stochastic frontier approach. *World Journal of Agricultural Science* 3(5), pp.653-658.
- Imolehin, E.D.; Wada, A.C. (2000). Meeting the rice production consumption demands in Nigeria with improved technologies. *International Rice Commission Newsletter*, 2000, Vol.49, pp.33-41.
- Emodi, I.A.; Madukwe, M.C. (2018). A review of policies, acts, initiatives in rice innovation system in Nigeria. *Journal of Agricultural Extension*, vol.12No.2 doi10.4314/jae.v12i2.47052.
- Ministry of Budget and National Planning (2017). Economic recovery and Growth plan 2017-2020.
- Food and Agricultural Organization (2018), the rice commodity, <http://www.fao.org/state>
- International Institute of Tropical Agriculture (2017), Resources and crop management: IITA 2019, Annual Report, Ibadan.
- Presidential Research and Communication Unit (PRACU), feature 2015. <http://www.Nigeria.fort/org/article4301.shtml>.