

Empirical Analysis of Challenges to the Implementation of Root and Tuber Expansion Programme (RTEP) in Rivers State, Nigeria: A Further Study.

¹Nwanyanwu H. Dennis, Ph. D and ²Okowa I. Okowa

Department of Banking & Finance,
Kenule Beeson Saro-Wiwa Polytechnic,
P. M. B. 20, Bori, Rivers State, Nigeria.
E-mail: nwanydennism@yahoo.com

Abstract:

This study examined the interactive constraints to Government Agricultural Projects in Rivers State with specific emphasis on Root and Tuber Expansion Programme Programme (RTEP) in Emohua, Ahoada-West and Gokana local government areas. A sample population of 90 randomly selected registered farmers were used for the analysis. Responses were elicited through well structure questionnaire, in-depth discussion, direct field inspection and camera pictures. Descriptive statistics of frequencies and corresponding percentages were used to establish socio-economic characteristics of the respondents while mean rating at criterion cut-off of 2.5 was adopted in analysing the data. Findings revealed that youths mostly ladies within ages 18-30 participated more in the programme, indicating that RTEP implementation was design in favour of women folks hence, performed below expectation in Rivers State. The study further found that constraints such as training and re-training of farmers, technology: storage, pesticides, research etc were to a "High Extent" in the programme while insecurity and land acquisition were of "Low Extent." The paper recommends for training and re-training of registered farmers, installation of automated modern processing and storage systems machines, provision of farming tools, improved seedlings and credit facilities.

Keywords: Empirical, Analysis, Challenges, Implementation, RTEP, Study.

Introduction

The interest of federal government to resolve the crisis of food scarcity and poverty has remained paramount through her efforts in agricultural development. The history of rural development, poverty alleviation and economic growth programmes have always been tied to agriculture due to its possible benefits of generating income, providing food the households, employment, exchange rate and reduction of high cost of food prices. Before 2003 when the Root and Tuber Expansion Programme was launched, several other agricultural programmes were implemented since 1st October, 1960 when Nigeria secured independence (Ngene, 2013). Beyond policies on agriculture came programmes and projects designed to touch the on the lives of the rural poor. According to Ngene, (2013), up till 2003 when RTEP was effectively financed and implemented, federal government was still implementing the “National Special Programme for Food Security (NSPFS) which was launched in 2002. It is worthy to note that the introduction of these herald of agricultural programmes were either as a result of benevolence of foreign donor agencies or born out of non-actualization of targets of earlier programmes. Convincingly, one would state categorically that every agricultural programme is poverty alleviation targeted. No doubt the international organisations are not relenting in assisting less and developing nations through agriculture and health programmes (Ogwumike, 2002).

Agriculture which is considered as the oldest occupation of man is believed to have contributed immensely to the survival of households and countries in general. Mgbakor, Ochiaka and Ani, (2013) pointed out that the growth of industries round the world today is based on agriculture due to their agricultural raw-material base with about 70 – 80% of Africa’s population employed in agriculture. This means that agriculture does not end in crop production but transcends to involve extractive activities that provide primary raw-materials for industries. In the economy of Nigeria, as an essential sector, the contributions of agriculture has continued to grow especially in the face of food scarcity and global export demand for farm produce

Sanni, Onadipe, Ilona and Mussagy, (2009) in their IITA Ibadan report quoted that through RTEP, greater 18 per cent cassava was produced in 2006 compared to 2004 yields as a result of federal government of Nigeria and other Development Agencies’ increased commitment to cassava production. Sanni *et al*, (2009) anchored their assertion on the commitments of International Institute for Tropical Agriculture (IITA), National Root Crops Research Institute (NRCRI), Root and Tuber Expansion Programme (RTEP), and States’ Agricultural Development Programme (ADP) to development of agriculture. They further pointed out that the within this period, activities of IITA and Integrated Cassava Project (ICP) brought about commercialization of cassava production in the South-East and South-South Nigerian states through the distribution of high yielding cassava resistant varieties and embarked in on-farm trainings. The report also recorded that there was expansion of farms and starch processing (in large scales), siting Obasango farms and others due to discovery of 10 improved cassava varieties. The question raised by these acclaimed achievements on tubers crops productions is; were there challenges

encountered by RTEP programme in Rivers State? Providing answers to this question calls for investigation in selected local government areas where RTEP was implemented in Rivers State.

The main objective of the study is to assess the constraints to Root and Tuber Expansion Programme in Rivers State. The specific objectives of the study are to: (i) investigate the extent of training to Root and Tuber Expansion Programme registered farmers, (ii) to investigate the extent of provision of farming tools to Root and Tuber Expansion Programme registered farmers, (iii) determine the extent of supply of improved seedlings to Root and Tuber Expansion Programme registered farmers, (iv) find out the extent of provision of soft loans to Root and Tuber Expansion Programme registered farmers, (v) identify the extent of insecurity problems faced by Root and Tuber Expansion Programme registered farmers, (vi) ascertain the extent of land acquisition problems faced by Root and Tuber Expansion Programme registered farmers and (vii) determine the extent of technological provision to Root and Tuber Expansion Programme registered farmers in Rivers State, Nigeria.

The following questions are fundamental; (i) what is the extent of training to Root and Tuber Expansion Programme registered farmers, (ii) to what extent is the provision of farming tools to Root and Tuber Expansion Programme registered farmers, (iii) what is the extent of supply of improved seedlings to Root and Tuber Expansion Programme registered farmers, (iv) to what extent is the provision of soft loans to Root and Tuber Expansion Programme registered farmers, (v) what is the extent of insecurity faced by Root and Tuber Expansion Programme registered farmers, (vi) to what extent is acquisition problems faced by Root and Tuber Expansion Programme registered farmers and (vii) what is the extent of technology provision to Root and Tuber Expansion Programme registered farmers in Rivers State, Nigeria?

Study Scope

This paper as a further study conducted to validate a work done by (Nwanyanwu & Abraham, 2015). The paper empirically, took a swipe on selected challenges to agricultural programme implementation with specific emphasis on Root and Tuber Expansion Programme. It covers between 2008 when the first counterpart fund was paid by Rivers State covered 2000 to 2010 the period which RTEP programme functioned in Rivers State.

Conceptual Framework

Approaches to understanding the constraints to agricultural productivity are divers. The underlying factor is that agricultural activities are confronted with numerous setbacks which inculcate equipment/tools, researches, technology and credit facilities and inputs such as fertilizer, improved seedlings and other socio-economic factors in successfully implementing government agricultural programmes. Besides, there exist land acquisition and insecurity. It based on handling possible constraints that government agricultural projects are adjudged successful or unsuccessful. Several agricultural programmes have either been replicated, adopted or new ones initiated as a follow-up to Federal Government efforts towards boosting performance of the agricultural sector and impact on rural development by the Rivers State

government. The Root and Tuber Expansion Programme is a tripartite funded project formulated by the Food and Agricultural Organisation (FAO) investment centre in 1995, appraised by the World Bank the same year, negotiated by International Fund for Agricultural Development (IFAD) Executive Board in 1999 and launched by Federal Government in 2002. The payment of RTEP counterpart funds by Rivers State government in 2008 gave a renewed vigour to the project, with the state ADP providing the technical support, (ADP, 2010). The institutional framework for cassava production in Nigeria includes the National Root Crops Research Institute (NRCRI), Umudike, IITA, Ibadan, and RTEP. The program was implemented in 27 cassava-producing states and recently recommended to include processing and marketing components. Strong collaboration exists between NRCRI and IITA in several cassava projects in Nigeria. NRCRI has a national mandate for root crops research in Nigeria, while IITA has international mandate that covers cassava development. The programme was initially conceived as a root and tuber multiplication scheme, but later included a post-harvest component as a result of anticipated production expansion. Objectives of RTEP include:

- (i) Sufficiently improve food security, income and livelihoods of rural poor through improved root and tuber crops production.
- (ii) Processing and marketing in the southern and north central regions of Nigeria.

It was charged to achieve the following goals;

- (i) Accelerate production-driven root and tuber crops supply response by breeding and distributing high-yielding disease and drought resistant and early maturing varieties, cultivated under best agronomic practices and,
- (ii) Create marketing pull through the commercialization of production and processing activities in order to achieve sustainable increase in value addition to all RTEP mandate crops namely, cassava, yams sweet potatoes, Irish potatoes, and cocoyam.

The long-term objective of the programme is to commercialize root and tuber production to improve the living conditions, income, food security and nutritional health of the poorest smallholder households in the programme area. It particularly targets small-scale farmers with less than 2 hectares of land per household. The programme uses the existing extension service system to introduce improved varieties of roots and tubers and better cultivation techniques.

However, RTEP was mandated to operate within the framework of five mutually reinforcing components;

- Diversification of improved roots and tuber production technologies
- Multiplication and distribution of improved planting materials
- Improved adaptive research and expansion.
- Diversification of processing options and products
- Programme management and evaluation (ADP, 2009).

On the issue of lack of land as a major resource to agricultural performance, Famoriyo, (1973) defined land as the sum total of the natural man-made resources over which possession of

the earth's surface gives control. Within this broad conception, land includes the ground, water, ice, forest and mineral deposits. It also includes natural phenomena such as sunlight, wind, rain and temperatures as well as man-made improvements like farm fixtures attached to the surface of the earth. According to (Bohannon, (1966), in the cultural context, land is defined as a measurable entity divisible into thing – like parcels by means of mathematical and technical processes of surveying and cartography or a specific area of the earth's surface: its characteristics embrace all reasonably stable, or predictably cyclic attributes of the biosphere vertically above and below the earth surface area including those of the atmosphere, soil and the underlying rocks, the topography, the water, the plant, animal populations etc

It is a vital input-resource and a policy against land affects the farming population and agricultural performance. The concept of land tenure has been described as a systemization of the rules which function by specifying what different classes of persons may or may not must or must not do, with reference to the occupancy, use, abuse or disposition of land. Such rules define the privileges and obligations, the rights and duties of persons in relation to each other, with reference to land (Parsons, 1975). He pointed out a number of problems that have risen which have not helped the course of agricultural development in Nigeria: lack of defined policy, insecurity of tenure, unclear titles to land, litigation, duplicity of rights, succession, fragmentation, excessive subdivision, compensation problems, land grabbing and speculation. Ijere (1974) rigorously questioned the basis of the belief that African Land Tenure poses insurmountable obstacles to modern agricultural development. To support his argument, he cited the case of East Africa where the African land tenure system in question has been modified to make for modern agricultural nationalization.

Relating agricultural performance to land acquisition, in Nigeria, Federal Government being aware of conflicting issues in land tenure and acquisition, constituted a major change in the structure of the country's land use. Cited as the Land Use Decree of 1978 now Land Act 1990 as amended which considered the public interest that the rights of all Nigerians to land be asserted and preserved by law. The Act vested all Land comprised in the territory of each State (except land vested in the Federal government or its agencies) solely in the Governor of the State, who would hold such Land in trust for the people and would henceforth be responsible for allocation of land in all urban areas to individuals resident in the State and to organisations for residential, agriculture, commercial and other purposes while similar powers will with respect to non-urban areas are conferred on Local Governments. Subject to the provisions of this Act, all land comprised in the territory of each State in the Federation are hereby vested in the Governor of that State and such land shall be held in trust and administered for the use and common benefit of all Nigerians in accordance with the provisions of this Act. As from the commencement of this Act; –

- (a) all other land shall, subject to this Act, be under the control and management of the Local Government, within the area of jurisdiction of which the land is situated.
- (b) all land in urban areas shall be under the control and management of the Governor of each State. and

They shall be established in each State a body to be known as "the Land Use and Allocation Committee" which shall have responsibility for:

- (a) determining disputes as to the amount of compensation payable under this Act for improvements on land.
- (b) advising the Governor on any matter connected with the resettlement of persons affected by the revocation of rights of occupancy on the ground of overriding public interest under this Act; and
- (c) advising the Governor on any matter connected with the management of land to which paragraph (a) of subsection (1) above relates;

In modern times, lands land is compulsorily acquired in Nigeria by Federal, State, Local Government Authorities or statutory bodies vested with the powers of compulsory acquisition. The process of compulsory acquisition has been defined as the coercive taking of private lands (individual or communal) or estates and interest in those lands for public purposes. From the 1999 constitution as amended, the Federal Government is empowered to exercise these powers all over the federation. But the object of acquisition must be for public purposes which were defined to mean land required for rural or urban development generally. The effect of compulsory acquisition on land owners are: -

- (a) it dislocates their production programmes on the land.
- (b) it is disruptive on the social life of farmers' families.
- (c) the farmer may have to be moved to less-fertile lands thus affecting his level of productivity per acre/hectare.
- (d) delay in payment of compensation money is detrimental to the welfare of farmers.
- (e) even when compensation has been paid, its inadequacy constitutes a major income problem for the farmer.

Again, the onshore and offshore dichotomy and forceful acquisition of lands the government mostly in favour of oil exploration and exploitation has endangered farming activities and resulted to;

- (a) Resultant high cost of living for families.
- (b) Danger of oil-wells.
- (c) Accelerated perishability of crops.
- (d) Inadequate maintenance of lands carrying pipelines
- (e) Depleted fertility in some rural areas.
- (f) Unemployment of aged farmers

The resultant effect of land Act laws have been attributed to the reason for youth restiveness and agitations in the Niger Delta region of Nigeria.

Brief History of Root and Tuber Expansion Programme

The launching of Root and Tuber Expansion Programme (RTEP) in Nigeria on the 16th of April, 2003 during the administration of president Obasanjo with the core mandate of solving the

problem of rural poverty and food scarcity, marked a new down on the efforts of federal government in improving the production of tuber crops (Ngene, 2013). It was a tripartite funded programme that was implemented in twenty-six states of Nigeria, implemented by Federal Ministry of Agriculture through federal department of agriculture agencies. In the financing arrangement, International Food for Agricultural Development (IFAD) was to contribute USD 23.6 million, while co-financiers had USD 7.18 million defrayed. Jaji, Yusuf-Oshoala and Issa, (2013) pointed out that RTEP was officially funded by loan from IFAD. The programme which officially ended March, 2010 had a targeted cost of thirty-six, nine-hundred thousand dollars (USD 36.09 million). The project had a loan number 525-NG with identification number 1016 (Project Completion Digest, 2010). The underlying fact is that RTEP was sponsored with borrowed funds supervised by World Bank.

Design and Implementation

Positive impacts of previous programmes on agriculture formed the track on which RTEP rod on. Based on that, RTEP's cumbersome and complex design of utilizing seven agencies to implement its programme was also to cover extensive geopolitical zones of the federation both at the fragmented central and state levels. The design of RTEP was largely Supply Driven (SD). However, a change in design was adopted between 2004 and 2005 which focused on "Beneficiary-driven, Community-based Participatory and Market-led approaches. It further adopted specificity-eligibility criteria by shifting focus on the interested community groups in beneficiary local government areas of the twenty-six states of the federation. The re-designing of the programme in 2005 ushered more implementations participation and implementation seriousness as a result of loan amendment. In line with the RTEP work-plans, community self-monitoring activities were carried out during the period with the objective of monitoring development at the community level where RTEP activities are being implemented to ensure involvement of beneficiaries in project assessment, problem identification, help in proffering solutions and participation in RTEP programmes (ADP, 2010). The enhanced focus dwelt on the selection of five (5) communities from five (5) local government areas where the programme was implemented. This adopted approach between 2002 and 2007 was under the supervision of World Bank and later directed by International Fund for Agricultural Development (IFAD) from 2007 to 2010. In the design, RTEP was billed to achieve both micro and macroeconomic objectives. Apart from increasing economic growth, social services and participation of vulnerable groups on poverty alleviation programmes through agricultural skills was targeted. It was believed that this will reduce food scarcity mostly yam, garri, potato, cassava etc.(PCD, 2010). Secondly, farming households occupying little hectares of farm lands were targeted and women who are assumed to play important roles in agriculture all in a bid to increase their ability to produce, process and market more farm produce.

Social Inclusiveness of RTEP

Root and Tuber Expansion had no strategy clearly targeted at addressing issues of gender but as a programme intended to increase production of tuber crops, processing and marketing, did not include all shades of gender hence there was no designed process of empowerment for the physically challenged persons. In real empowerment settings, less privileged individuals that are found more among the deformed, are usually considered and accorded priorities within a programme design. Unfortunately, there was no clear plan of all-inclusiveness in RTEP as it was strategized to accommodate the women gender. Evident was its mode of sensitization and empowerment process tailored towards membership of community women group (Oke *et al*, 2014).

Empirical Literature

In discussing challenges facing agricultural performance, studies have been conducted by scholars to relate agricultural performance to different problems (Mgbakor, Ochiaka & Ani, 2013; Eme, Onyishi, Uche, & Uche, 2014). Most of these studies were empirically analysed to prove facts behind their assumptions. Ojo, (2008) investigated the “Effects of Land Acquisition for Large Scale Farming on the Performance of Small-Scale Farming in Nigeria. Using gross margin and stochastic frontier production function in their analyses revealed that farmers who cultivated on long distant fragmented lands mainly produce arable crops while their counterparts produced more farm produce due to their technical efficiency in farming methods. Allocation of fallow land along the high ways to farmers for large scale farming was advocated. Studying “the benefits from agricultural research and development, innovation, and productivity growth” by Alston, (2010) using descriptive method, assessed critically, the approaches adopted in discovering new innovations to agricultural development. The study found that there was a high rate of return on investment in agricultural Research and the rate of returns is dependent on the nature of research and market for the produce.

In another study by Eze, Lamchi, Ugochukwu, Eze, Awulonu & Akon, (2010) which examined “Agricultural Financing Policies and Rural Development in Nigeria,” and descriptively analysed their secondary materials to discover that government agricultural policies in Nigeria are not backed by adequate budgetary allocations which has hindered targeted deliverables in that sector. The study recommended for more investment in agriculture for sustained productivity. Iyagba and Anyanwu, (2012) in examining the problems and benefits of cassava farming in Niger Delta, implored the technique of descriptive statistics in their analyses. The result showed that more of the farmers were elderly farming on leased lands and cultivated old cassava stems while the extension agents were irregular in their visits to farm sites. The study recommended that government should provide farm enabling infrastructure such as electricity, good roads to discourage out migrations of youths to urban metropolis.

Oni, (2013) in his study on “Challenges and Prospects of Agriculture in Nigeria: The Way Forward,” adopting as descriptive approach, found that enormous investment and export

diversification potentials for generating higher growth in the economy have remained unlocked and unexploited in the agriculture due to a host of constraining factors. Further study on “RTEP technology adoption impact on Food Security in Southern part of Nigeria” conducted by Obisesan & Omonona (2013), using Propensity Matching Score and Foster-Green Thorbecke model revealed that RTEP beneficiaries produced more food than non-beneficiaries. It was discovered that RTEP “cassava production technology” enhanced cassava output. The study recommended for more sensitization on the RTEP technology to improve productivity. A work carried out by Jaji, Yusuf-Oshoala & Issa, (2013) on “RTEP technologies and farmers’ productivity in Lagos and Ogun States, using inferential statistics, revealed that no significant relationship existed between genders of farmers and productivity level while there was significant relationship between use of RTEP technologies and level of farm productivity in Lagos State.

An “assessment of land acquisition and type of crops cultivated” was studied by Adamu, (2014) using Chi-Square analysis. Findings show that positive association between types of crop planted, education and land acquisition method. Crop type planted was influenced by farm land size. The study suggested for government removal of “land use act” to encourage acquisition more lands by farmers to motivate large scale farming. In another study conducted by Ojeku, Effion & Eze, (2016) on “Agricultural Development Constraints in Nigeria from 1970 to 2010’ using “Unit Root, Co-integration and Error Correction method revealed that there was low diffusion in agricultural technology and method, high exchange rate and food imports posed constraints to agricultural development. More exposing is another research conducted by Ndubueze-Ogaraku, Etowa, Ekine & Familusi, (2017) on “insecurity shocks and farmers’ performance level in Niger Delta.” Descriptively the study analyzed selected insecurity issues and observed that posing more insecurity to farmers were youth restiveness, improve input supplies, farming technology were among the identified resilient issues confronting farmers. It was advised that government needs to improve security and provide farm supports.

Why RTEP Failed in Nigeria

Failure of RTEP in Nigeria has been attributed to poor “design, implementation, effectiveness, efficiency, IFAD flaws, attitudes of cooperating institutions and government. Validating the above claims, Project Complain Digest, 2010 pointed out that;

- Root and Tuber Expansion Programme (RTEP) had complex design which made project monitoring by supervisors cumbersome and extensive.
- Funding of the programme had almost a frustrated start though delayed loan disbursement, payment of initial deposit, loan amendment, insufficient funds, and frustrated counterpart-fund contributions etc.
- Under the effectiveness of the programme, “slow actions and bureaucratic bottlenecks” where unfriendly in facilitating targeted objectives of RTEP.
- Project Completion Digest, 2010 reported that RTEP estimated value of Economic Rate of Return (ERR) was greater than projected ERR.

- Another failure factor was IFAD's weak and delay in guiding project implementation from 2003 to 2008 which occasioned further delay of World Bank's takeover of RTEP project follow-up supervision of only about three to four states.
- Inconsistent payment of counterpart funds by participating states left the programme with what was being received from federal government and IFAD which consequently affected research and training of farmers, personnel, provision of improved seeds and seedlings etc. The end result was low manpower to manage the vast programme.

Methodology

The work is a survey design and utilized data from primary investigation generated from selected local government areas where RTEP was implemented in Rivers State. Port Harcourt is the capital of Rivers State. It has a total land mass of 11,077 sqkm, located on latitude 40 32' and 50 53' North and longitude 70 75' and 80 25' East of the equator. It is bounded on the South by the Atlantic Ocean, to the North by Imo and Abia States, to the East by Akwa Ibom state and to the West by Bayelsa and Delta states. The inland part of Rivers State consists of tropical rainforest. Towards the coast, the tropical Niger Delta environment features many mangrove swamps. Temperature range is between 23 – 31°C and vegetation found in the state includes the saline water swamps, mangrove swamp and the rainforest. Major seasons are the dry (November – February) and wet seasons (October – March). The climate and soil condition of the study areas favour the extensive production of various crops such as yam, cassava, maize vegetable, plantain and cocoyam. Specifically, the study was carried out in three local government areas. The selected L.G.As includes Emohua, Ahoada-West and Gokana local government Areas.

Sampling Procedures and Sample Size

A multistage sampling procedure was adopted in the selection of three (3) local government areas that participated in the programme. First, because the state has three senatorial districts; (Rivers South East, South West and Rivers East), one local government area was selected purposely from the three senatorial districts. Randomization procedure was adopted in the selection of two blocks from the selected local government area. Two cells were later selected from each of the local government areas, bringing it to a total of six cells from the three selected L. G. As. Households were selected using systematic random technique. Using serial number option, every third household were selected. In all, a total sample population of ninety (90) were selected and used for the analysis. Well-structured questionnaires and personal interviews were used to elicit information from the respondents. Data analysis was based on the ninety retrieved questionnaires which were sorted, and coded for analysis. Descriptive statistics of frequencies and corresponding percentages were used to establish socio-economic characteristics of the respondents while mean rating at criterion cut-off of 2.5 was adopted in analysing the data through the use of Statistical Packages for Social Sciences (SPSS) version 17.0 software.

While Nwanyanwu and Abraham, (2015) brought to reality the activities of RTEP in the three local government areas they conducted their study, this paper is a validating study as it further inquired into the reactions of participated farmers of the programme to ascertain salient reason the farmers acknowledged as impediments to RTEP success.

Data Analysis and Empirical Discussion of Results

In addressing a further study on “Empirical Analysis of Challenges to the Implementation of Root and Tuber Expansion Programme in Rivers State”, this study analysed the socio-economic characteristics of RTEP farmers and went further to investigate considered selected challenges to activities of the programme within the period reviewed.

Table 1: Socio-economic Characteristics of the Respondents (N = 90)

Descriptions	Local Government Areas					
	Emohua		Ahoada-West		Gokana	
	Frequency	(%)	Frequency	(%)	Frequency	(%)
<u>Gender</u>						
Male	18	60.0	14	46.6	13	43.3
Female	12	40.0	16	53.3	17	56.6
<u>Age</u>						
18 – 30	10	33.3	12	40.0	14	46.6
31 - 40	8	26.6	7	23.3	5	16.6
41 – 50	11	23.3	5	16.6	7	23.3
51 and Above	5	16.6	6	20.0	4	13.3
<u>Educational Qualification</u>						
Higher Degree	4	13.3	6	20.0	7	23.3
First Degree	3	10.0	4	13.3	5	16.6
OND	5	16.6	7	23.3	3	10.0
WASC/GCE	3	10.0	4	13.3	7	23.3
FSLC	7	23.3	5	16.6	3	10.0
Non-Educated	8	26.6	4	13.3	5	16.6
<u>Household Size</u>						
0 – 5	6	20.0	5	16.6	8	23.3
6 – 10	10	33.3	9	30.0	6	20.0
11 and Above	14	46.6	16	53.3	16	53.3

Source: Computed from field data, 2014.

Socio-economic characteristics of respondents on gender result in table 1 revealed that male participants were more in Emohua L.G.A. with 18(60%) compared to their counterparts in Ahoada-West and Gokana that had 14(46.6%) and 13(43.3%) respectively. Male participants were 12(40%) in Emohua and 16(53.3%) in Ahoada-West while Gokana had 17(56.6%) participants.

In terms of age of participants, in Emohua L.G.A. 10 (33.3%) of the respondents are between 18-30 years of age. Those within ages 31-40 were 8(26.6%) while those between 41 – 50 years were 7(23.3%) and 5(16.6%) were those within 51 years and above. The result further revealed that more of the youths embraced the programme than the aged ones. In Ahoada-West L.G.A, the programme was also embraced more by the youths, reflecting 12(40.0%) by participated farmer between ages 18-30 and 7(23.3%) for those between ages 31-40 years. Registered farmers within 41-50 years of age were 5(16.6%) while farmers within 51 years of age and above were 6(20.0%). In Gokana L.G.A, 46.6% of the respondents were between the ages of 18 – 30 years. Those between ages 31-40 were 5(16.6%) while the rest were 7(23.3%) for those between ages 41-50 were 7(23.3%) respectively.

Responses to educational qualifications of the respondents revealed that about 4(13.3%) of the respondents had high degree. Those with First Degree were 3(10%). About 5(16.6) had Ordinary National Diploma (OND). A number of 3(10.0%) were people with West African School Certificate (WASC). About 7(23.3%) were with First School Leaving Certificate (FSLC) while the rest 8(26.6%) in Emohua L.G.A. In Ahoada-West local government area, about 6(20.0%) of the registered farmers had Higher Degree. A number of 4(13.3%) were with First Degree and 7(23.3%) had Ordinary National Diploma (OND). Among other categories, 4(13.3%) were farmers with West African School Certificate (WASC). Five (5) of the respondents representing 16.6% were farmers possessed First School Leaving Certificate (FSLC) while the rest 4(13.3%) were non-educated. In Gokana L.G.A, 7(23.3%) were registered farmers with Higher Degree. About 5(16.6%) possessed First Degree and 3(10.0%) had Ordinary National Diploma (OND). Respondents with West African School Certificate were 7(23.3%). The rest participated farmers 3(10.0%) had First School Leaving Certificate FSLC) while 5(16.6%) were non-educated.

For household size, 6(20.0%) of the respondents were those with 0-5 number of families. Respondents with 6-10 household size were 10(33.3%) while 14(46.6%) had family size of 11 and above for Emohua L.G.A. In Ahoada-West local government area, 5(16.6%) were respondents with family size of 0-5. About 9(30.0%) had family size of 6-10 while 16(53.3%) were those with family of 11 and above. In Gokana, 8(26.6%) were respondents whose family size fell within 0-5. Those within 6-10 family size were 6((20.0%) while participant who fell with 11 and above household size were 16(53.3%). The study reveal that people still believe in acquiring labour through the number of children they have. Also, no category of educational level dominated participation in RTEP in the L.G.As studied since non-educated participants were more Emohua, the largest number in Ahoada-West was people with OND while people with higher degree and WASC dominated participation in Gokana L.G.A. The programme was dominated by farmers within 18-30 years of age.

Table 2: Mean rating on constraints to Root and Tuber Expansion Programme (N=90).

Constraints to agriculture		Mean Response (x)			Overall	Decision
		Local Government Areas				
		Emohua	Ahoada West	Gokana		
S/N.		N = 30	N = 30	N = 30		
1.	Training	2.14	2.34	2.54	2.34	HE
2.	Farming tools	2.27	2.15	2.38	2.26	HE
3.	Improved seedlings	2.33	2.52	2.36	2.40	HE
4.	Soft loans/credit facilities	2.64	1.67	2.58	2.29	HE
5.	Insecurity	1.37	2.46	2.49	2.10	LE
6.	Land acquisition constraints	2.17	2.14	2.16	2.15	LE
7.	Technology: storage, pesticides, Research etc	1.65	2.54	2.67	2.28	HE
Grand Mean		2.08	2.26	2.45		

Source: Computed from field data, 2017.

NOTE: Any result above mean rating of 2.5 is categorized as “High Extent” while results below are adjudged “Low Extent.”

Results of the analysis on table 2 showed constraints to RTEP. It revealed a “High Extent” to training of registered farmers with a mean rating of 2.34. This explains that training and re-training of farmers on the new agricultural practices. Availability of farming tools/equipment was a constraint to successful activities of the programme with mean rating of 2.26, indicating “High Extent.” Inputs such as improved seeds and seedlings were to a “High Extent” a constraint to the programme with mean rating of 2.40. Such a constraint does not guarantee high productivity or yield. It means that farmers were left to use unimproved seedlings to plant at each farming season. A mean rating of 2.29 was recorded for credits or soft loans. The farmers not financially empowered to ensure proper cultivation since farming encompasses purchasing of seeds and stems, clearing, tilling, planting, weeding, harvesting, processing and storage. These stages require labour if bounteous harvest must be expected. Lack of financial empowerment to farmers is an enormous constraint faced by registered farmers to the programme. This result conforms to the findings of Eze *et al*, (2010) which that government agricultural policies in Nigeria are not backed by adequate budgetary allocations which has hindered targeted deliverables in that sector. Insecurity in the communities where RTEP is implemented showed “Low Extent” to insecurity with a mean rating of 2.10. Though there have been cases of kidnapping and communal clashes within the Niger Delta, this did not jeopardize the activities of RTEP in Rivers State. Acquisition of lands for RTEP activities had a mean rating of 2.15 showing “Low Extent”. There was to a “High Extent” technological constraint with mean rating of 2.28. Technological constrains arising from lack of storage facilities, pesticides, fertilizer, and research etc, bedevilled performance of the programme. The programme failed to treat issues relating to provision of storage facilities for farm outputs, pest control chemicals, fertilizer and research programmes seriously. This result is consistent with the work of Ndubueze

et al., (2017) which discovered that among other issues, youth restiveness, lack of improved input supplies, research and farming technology were among the identified resilient issues confronting farmers.

Conclusion and Recommendations

The paper validated the work of Nwanyanwu & Abraham (2015) by taking steps further to empirically test selected constraints to the performance of RTEP in Rivers State based on data gathered through people's opinions. The multiplication of root and tuber crops has experienced great challenges in the past with government being face with more options of ensuring that adequate techniques are adopted and other challenging issues put into consideration in before designing and implementing agricultural programmes in the future. The paper in a further study, investigated selected challenges to the performance of RTEP in rivers State, Nigeria. Results show that lack of training, farming tools, lack of improved seedlings, soft loans/credit facilities were to a high extent, major challenges that impeded the performance of RTEP in Rivers State which validated earlier study conducted by Nwanyanwu and Abraham (2015). The study in overall concluded that RTEP implementation was design in favour of women folks hence, performed below expectation in Rivers State. The study recommends that; security and issues relating to acquisition of lands for farming to low extent, did not pose constraints to implementation of the programme. It is recommended that;

- 1.) Further agricultural programmes to be implemented in Rivers State should not have complex design.
- 2.) The delay in releasing funds for government agricultural project must be disbursed on time for effective expenditure implementation. This will reduce long lags within which technical and other equipment are imported to commence activities.
- 3.) Cumbersome process in the release of loan and credit facilities should be shortened as farming has season for the application of both funds and material to avoid famine or food scarcity.

Contributions to Knowledge

- This study established that security was not one of the challenges that led to non-performance of RTEP in Rivers State but was not totally absent from localities where RTEP was implemented.
- The complex implementation method design of RTEP was instrumental to its failure in Rivers State.

References

- Adamu, O. C. (2014): Land Acquisition and Types of Crops Cultivated by Farmers in Ayedaade Local Government Area, Osun State, Nigeria *Asian Journal of Agricultural Extension, Economics & Sociology*. 3(6): 738-745.
- Alston, J. M. (2010), "The Benefits from Agricultural Research and Development, Innovation, and Productivity Growth", OECD Food, Agriculture and Fisheries Papers , No. 31, OECD Publishing, Paris.
- Agricultural Development Programme (ADP) Report (2010).
- Bohannon, P. (1966): "*Land Tenure and African Agrarian Systems*". Oxford University Press.
- Cookey, A. E. & L.Ohale, (2005). "Impediments to the Flow of Credit from commercial Banks to Small-Holder Farmers in Nigeria: Some Field Observations from Abia and Rivers State of Nigeria". *NJEFR*, 1(3); 42 - 43.
- Eze, C. C., Lemchi, J. I., Ugochukwu, A. I., Eze, V. C, Awulonu, C. A. O & Akon, A. S.: Agricultural Financing Policies and Rural Development in Nigeria. The 84th Annual Conference of the Agricultural Economics Society Edinburgh 29th to 31st March 2010. https://ageconsearch.umn.edu/record/91677/files/7eze_lemich_ugochukwueta1.pdf
- Eme, O. L. Onyishi, T., Uche, O. & Uche, I. B., (2014): Challenges of Food Security in Nigeria: Options Before Government. *Arabian Journal of Business and Management Review*. 4(1):15-25.
- Famoriyo, S. (1973): "Land Tenure, Land use and Land Acquisition in Nigeria". *Journal of Agricultural Extension*. 5(7), 71-79.
- Iyagba, A. G. & Anyanwu, S. O. (2012): Problems and Prospects of Cassava Production in Rivers State, Nigeria: A Case Study of Oyigbo Local Government Area. *Agriculture and Biology Journal of North America*. 3(7): 296 – 301.
- Ijere, M. O.(1974): A Positive Approach to The African Land Tenure Question. *Agricultural Economics Bulletin for Africa*. No. 16 pp. 21-30.
- Ibrahim H. Y. & Onuk, E.G, (2010): The Impact of Root and Tuber Expansion Programme (RTEP) On Root and Tuber Crops Production In Nasarawa State, Nigeria. *PAT*. 6 (2): 26-34.
- Jaji, M. F. O., Yusuf-Oshoala, M. A. & Issa, F. O, (2013): Root and Tuber Expansion Programme Technologies and Farmers' Productivity in Lagos and Ogun States of Nigeria. *International Journal of Sustainable Development*. 6(3):95 – 102
- Land Use Act (Chapter 202) Laws of the Federation of Nigeria 1990.
- Mgbakor, M., Ochiaka, D. & Ani, N. C., (2013): Contributions of Root and Tuber Expansion Programmes to Agricultural Development in Enugu South Local Government Area of Enugu State, Nigeria. *Academic Journal of Plant Sciences* 6 (3); 122-126. DOI: 10.5829/idosi.ajps.2013.6.3.1112

- Nwanyanwu, H. D, & Abraham A. (2015): Constraints to Government Agricultural Projects in Rivers State, Nigeria: The Case of Root and Tuber Expansion Programme (RTEP). *Journal of Social Sciences and Development. Department of Social Sciences. 1(5), 239 – 254.*
- Ndubueze-Ogaraku, M. E., Etowa, E. B., Ekine, I. D. & Familusi, L. C., (2017): Analysis of insecurity shocks and farmers' resilience in the Niger Delta Region, Nigeria. *Nigerian Agricultural Policy Research Journal. 2(1): 67 – 81.*
<http://www.aprnetworkng.org/Journal/Paper%206%20.pdf>
- Ngene, A A., (2013): Assessment of the Commercial Agriculture Development Project in Enugu State, Nigeria. M. Sc. Thesis. Retrieved from
<http://www.unn.edu.ng/publications/files/Ngene%20Project%20-%20Preliminary%20pages.pdf>
- Nwoke & Ezike, (2000): Agricultural Definition, Scope and Importance, in Readings in General Agriculture. Enugu Research and Development Group Publishers. 27-35.
- Oni, T. O. (2013): Challenges and Prospects of Agriculture in Nigeria: The Way Forward. *Journal of Economics and Sustainable Development. Vol. 4(16); 37 – 45.*
- Ogwumike, F. O. (2002): An Appraisal of Poverty Reduction Strategies in Nigeria. CBN *Economic and Financial Review, 9(2), p.10.*
- Obisesan, A. A & Omonona, B. T. (2013): The Impact of RTEP Technology Adoption on Food Security Status of Cassava-Farming Households in Southwest, Nigeria *Greener Journal of Agricultural Sciences. 3(6); 474-480.*
- Okeh, B.I., Atala, T. K., Ahmed, B. & Omokor, D. O. (2014): Socio-Economic Impact of Root and Tuber Expansion Programme on Rural Farmers in Plateau State. *Journal of Agriculture and Veterinary Science 7(7): 1 – 7.*
- Okoruwa, V. O., Ogheneruemu, O. & Ololade, L. A. (): Root and tuber expansion programme and poverty reduction among farmers in Southwest Nigeria. *Journal of Development and Agricultural Economics. 7(10); 332-343. DOI: 10.5897/JDAE2015.0656*
- Ojeka, G. O., Effiong, C. E. & Eko, E. O., (2016): Constraints to Agricultural Development in Nigeria. *International Journal of Development and Economic Sustainability. 4(2); 1 – 15.*
- Ojo, S. O. (2008): Effects of Land Acquisition for Large Scale Farming on the Performance of Small Scale Farming in Nigeria. *Journal of Human Ecology 24(1)1; 35 – 40.*
- Project Completion Digest, 2010. Root and Tuber Expansion Programme (RTEP)
<https://operations.ifad.org/documents/654016/5b4a5af5-a54f-4973-a890-1f0281f1e730>
- Parsons, K. (1975): "Customary Land Tenure and Development of African Agriculture". Conference Paper. University of Wisconsin, Madison, Wisconsin p.16.
- Sanni, L. O., Onadipe, O. O., Ilona, P. & Mussagy, M. D., (2009): Success and Challenges of Cassava Enterprise in West Africa: A case Study of Nigeria, Benin and Sierra Leon International Institute of Tropical Agriculture.

Titilola, S.O. & Igben, M.S., (1992): Environmental and Sustainable Agricultural Development in Nigeria: Matters Arising and the Way Forward. *International Journal of Environmental Education and Information*. 1(4): 33 – 47.