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PERCEIVED EFFECTIVENESS OF VALUE CHAIN DEVELOPMENT PROGRAMME IN ENSURING FOOD SECURITY IN CASSAVA PRODUCTION IN ANAMBRA STATE AND STRATEGIES FOR IMPROVEMENT

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ABSTRACT

The purpose of the study is to determine the perceived effectiveness of Value Chain Development Programme (VCDP) in ensuring food security and strategies for improvement as perceived by farmers and VCDP Unit staff. Two research questions and one null hypothesis guided the study. The study employed descriptive survey research design. The target population of this study consist of all VCDP unit staff and cassava farmers in all participating local government areas. The population of the study consisted of 366 (60 VCDP staff and 306 cassava farmers). The data for the study was obtained using questionnaire. The questionnaire was divided into two parts, A and B. Part A focused on the personal data of the respondents while Part B focused on items addressing the research questions. Part B was divided into two sections. Each of the items has 4-point response categories as follows: Very Effective (VE), Effective (E), Slightly Effective (SE) and Ineffective. The instrument was validated by a cassava farmer, VCDP unit staff and three experts from the Departments of Educational Foundations, Science Education and Adult and Continuing Education in Nnamdi Azikiwe University, Awka. The Cronbach alpha approach of estimating reliability was used to ascertain the reliability coefficient of the instrument. A correlation index of 0.86 was obtained for ensuring food security and 0.88 for strategies for improvement of VCDP. The analyses showed that the instrument has a reliability of 0.86 which indicated high reliability. Mean and t-test statistics were adopted for answering the research questions and testing the hypothesis respectively. Data analysis showed that the VCDP was effective in ensuring food security in cassava production. It was also revealed that the VCDP staff and cassava farmers differed significantly in their mean ratings on the effectiveness of VCDP in ensuring food security in cassava production. This means that there is a discrepancy between the VCDP Unit staff and cassava farmers on the perceived effectiveness of the programme. Accordingly, it was recommended that the Anambra State Government and VCDP funding agency (IFAD) should scale up their efforts by extending their functions to other Local Government Areas and that the Anambra State VCDP should invest more in infrastructure such as transportation, storage facilities, and processing centers to enhance the cassava value chain's efficiency, more productivity and accessibility.

Keywords: Effectiveness; Value Chain Development Programme; Food Security; Farmers.

Introduction

Agriculture is an applied science which encompasses all aspects of crop and livestock production. It is a major driver of economic growth in Nigeria with the involvement of 75% of the rural population. Agriculture contributes about 45% to the Gross Domestic Product in Nigeria in the year 2020 (National Bureau of Statistics/Federal Ministry of Agriculture & Rural Development, 2020/21). Agriculture covers areas such as horticulture, livestock rearing, fisheries, and forestry among others. It is defined by Harris and Fuller in 2014 as the art, science and business of producing crops and livestock for business purposes. Globally, agricultural sector plays a key role in improving the availability of food and achieving food security (Wegren and Elvestad, 2018). This is to say that food supply and its adequacy in any nation are tied to the effectiveness of agricultural efforts. In Africa, agriculture is a vital economic sector in terms of food production, employment generation, production of raw materials for industries and generation of foreign exchange (Mhoja, Mtae and Haule, 2021). It is one of the most vital sectors of the Nigerian economy.

Hassan, Onwunali, and Ibrahim (2020) noted that successive governments established several Agricultural Programmes to revamp the sector with limited success. According to Nwajiuba (2018), Nigeria's national agricultural policy aims to attain food security; increase productivity, generate employment and income; expand exports and reduce food imports to make resources available for economic development and delivery of social services. The Federal Government of Nigeria has taken several policy initiatives to provide food security and reduce poverty. They did this through the liberalization of different agricultural input delivery systems, the introduction of measures to involve the private sector in agricultural production, the launching of special programmes on food security (SPFS), Fadama I, II, III, strategic grain reserves, and increased budgetary allocation to agriculture (Olayemi, 2016). However, though efforts have been made by successive governments to provide food and income to the majority of people in rural areas, some challenges still exist. Challenges of the high cost of farm inputs, low productivity, poor access to the market, poor processing technology, inadequate credit facilities, and a vicious cycle of poverty seem to have restrained small-scale farmers from increasing their productivity (Ityokumbul, 2020). Nigeria has about 94.3% volatility for Agricultural production and yet does not contribute up to 20% in the Global Agro-Production Index (Abutu, 2014). This shortfall in agriculture in 2017 cuts across all states in Nigeria, including Anambra State which is the focus of this study.

Agriculture in Anambra State is characterized by small-scale production which culminated in low income and consequently, low output for farmers (Ezeh, Anyiro, Ogbonnaya and Obioma, 2013). To address this low productivity trend and improve the performance of the agricultural sector, Governments at all levels, over the years, introduced and implemented several policies and programmes aimed at revamping the sector. These programmes were inaugurated at the national level but cut across states. Prominent amongst these programmes were the National Economic Empowerment and Development Strategy (NEEDS), National Special Programme on Food Security (NSPFS) and Root and Tuber Expansion Programme (RTEP) which were respectively introduced in 1999, 2002, and

2003. The programmes were equally inaugurated in Anambra State in the same years as stated.

NEEDS was set up by former President Olusegun Obasanjo in 1999. The vital elements of the programme included poverty eradication, employment generation, wealth creation, and value reorientation (Ozoani, 2019). NEEDS offered succour to agriculture, industry, small and medium scale enterprises as well as oil and gas. NEEDS helped farmers improve irrigation, machinery and crop varieties which would help boost agricultural productivity and address poverty since a good number of Nigerian poor people are engaged in agriculture.

Following the NEEDS programme was the commissioning of NSPFS in 2002 by the Obasanjo's regime. The programme was aimed at the attainment of food security and alleviation of rural poverty in Nigeria. It was tailored towards assisting farmers to increase output and income; strengthen extension service delivery and promote simple farm technologies. Furthermore, it was targeted to utilize land, water and other resources for food production (Ozoani, 2019). The NSPFS was further challenged by insufficient knowledge of credit used by farmers, poor extension agent contacts with farmers, unavailability of labour to carry out essential farming activities, lack of modern storage facilities and high cost of farm input (Iwuchukwu and Igbokwe, 2012).

After the introduction of the NSPFS came the introduction of the Root and Tuber Expansion Programme (RTEP) in 2003. The programme was limited to 26 states of the Federation and was initiated to tackle the twin challenges of food production and rural poverty. According to Ozoani (2019), the programme hoped to achieve economic growth, improve access of the poor to social services and carry out intervention measures to protect poor and vulnerable crops at the local level, it was geared towards achieving food security and stimulating demand for cheaper staple food such as cassava, garri, yam, potatoes against more expensive carbohydrate such as rice at the national level.

According to Iwuchukwu and Igbokwe (2012), the aforementioned programmes achieved food production and poverty eradication in rural areas. However, in the view of Okoruwa, Ogheneruemu, and Adeniran (2015), poverty did not abate during this period. To enhance the involvement of youths in agriculture, the Federal Government of Nigeria in collaboration with some foreign agencies and private sectors initiated various agricultural projects, policies and programmes (Nwalieji, Okeke, Uzuegbunam, and Udemezue, 2018), among which was the International Fund for Agricultural Development (IFAD) which is the funding agency for Value Chain Development Programme (VCDP).

The VCDP emerged from the International Fund for Agriculture Development (IFAD, 2014). It is a development initiative of the Federal Government of Nigeria (FGN) inaugurated in 2014 to improve the cassava and rice value chain for small farmers in six states Anambra, Benue, Ebonyi, Niger, Ogun, & Taraba (VCDP Nigeria, 2020). Anambra State keyed into the VCDP programme on 26th October 2014. Since then, programme implementation has progressed at all levels (Obianefo, Nwigwe, Meludu and Anyasie 2020). The VCDP Unit is coordinated by the Anambra State Ministry of Agriculture. As part of the responsibilities of the Ministry of Agriculture, it embarks on programmes and projects such as

Agricultural Development Programme (ADP), FADAMA I II III, Rural Finance Institution Building Programme (RUFIN), National Special Programme on Food Security (NSPFS), Root and Tuber Expansion Programme (RTEP), Value Chain Development Programme, (VCDP), among others. However, VCDP is the most current programme which was launched by Governor Obiano in 2014 to improve farmers' access to land, utilization of agricultural information, technology, marketing platforms, and infrastructure to support increased farm income, profitability, and enhance the productivity of farmers who are involved in cultivation, processing, and marketing of rice and cassava (Madubueze, Dike, and Okpalibekwe, 2018). The involvement of Anambra State in the programme is understandable because the state involves in the cultivation of rice and cassava on a long-term basis under VCDP. VCDP Unit is a Unit in the Ministry of Agriculture in Anambra State saddled with the roles and responsibilities of carrying out day-to-day activities towards achieving the objectives of the VCDP.

Value Chain Development Programme in this study, therefore, encompasses a wide range of activities organized for farmers such as; disseminating information and knowledge; training on production and processing technologies as well as assisting farmers with inputs. Furthermore, it is a programme set up to ensure food security, generate employment, promote cultivation, processing and availability in cassava production. The essence of this programme is to improve productivity, job creation, generate income, contribute to economic growth and ensure food security (Ugbe, 2017).

The initiation of VCDP serves the dual purpose of enhancing the productivity and profitability of farmers who are involved in the cultivation, processing and marketing of cassava and rice value chain (Okeke, Nwalieji and Nenna, 2021). The authors noted that the government seeks to achieve this purpose by increasing access to improved inputs, modern technologies, machines, equipment, road, irrigation, water, processing and marketing infrastructure financed by the actors in the rice and cassava value chain. The potential beneficiaries of the VCDP are poor rural farmers who form co-operative groups and are engaged in the cassava value chain by cultivating cassava in not more than five hectares of land as well as small-scale processors of cassava who have a processing capacity of an average of two metric tonnes (MT) per day for cassava and 4MT per day for rice (Anambra State Value Chain Development Programme, 2016). Agricultural cooperatives are a form of cooperative society owned by farmers who pool their resources to produce and market their products (Nwankwo 2017). To increase the effectiveness of their production, sale of goods and benefits to members both financially and economically, they pool their resources to obtain equipment, product and services. Some of these services and products include obtaining loans, farm inputs such as fertilizer, professional guidance, financial education, mobilizing savings, extension services, credit management, and securing government assistance.

The VCDP Unit aims to promote cassava production and processing by providing cutting-edge machinery, modern equipment, sensitization, training, and cassava processing facilities. Improved methods of processing are required to add value, reduce cost and minimize

waste (VCDP, 2015). In other words, VCDP Unit trains farmers in processing products to add value to the produce. This makes the products available to marketers and consumers in a variety of ways, which appeal to the thirst of the consumers. A value chain is a network that connects the various phases of a product's life cycle, from production, processing, distribution and to the final consumer (Ugonna, Jolaoso and Onwualu, 2015). It implies the process or activities by which value is added to an article through production and processing. The processing alters the texture, flavour and nutritional value to appeal to consumers. The authors explained that in a value chain system, farmers are linked to customer expectations, working closely with suppliers and processors to produce specialized goods in response to market demand. The exchange of knowledge and goods also connects consumers with farmers' needs. This approach and ongoing innovation can help cassava farmers in Anambra State increase income and improve their yield and ensure food security.

Food security means ensuring that sufficient quantities of food are available and accessible to all in the population (FAO, 2018). Food security, in this study, is the capacity of the people of Anambra State to cultivate and have physical, social and economic access to sufficient, safe, and nutritious foods processed from cassava which meet their dietary needs for a healthy life. To this effect, the VCDP unit is expected to ensure food security in cassava production by supplying improved varieties of cassava cuttings to farmers to ensure high productivity; providing support to farmers by making motorized grater machines available for garri production; organizing seminars on how to produce Vitamin A flour. organizing seminars on how to use vitamin A flour for the production of vitamin A bread, chin-chin, combo-bite, cas-moi, cassava chips and cake; organizing training on improved methods of processing cassava, among other products in the value chain of cassava. This paper is focused on cassava because it forms a greater chunk of the menu of Anambrarians. It serves as a staple diet to most families and by extension, a commercial farm produce. Staple food crops are those that are consumed frequently and are readily available to the majority in a defined environment (FAO, 2010). Staple food crops make up the majority of a typical diet and provide a significant amount of the energy needed as well as the majority of the other nutrients that are regularly consumed (FAO, 2012). Cassava's significance cannot be overstated because it plays a significant role in the diets of more than a billion people worldwide as food for human use. Rural farmers who rely on seasonal rainfall for their crops typically produce cassava. The availability of cassava is year-round as a significant local staple and cash crop could help rural communities in the cassava-growing regions achieve food security (Saediman Rosmawaty, Arimbawa and Indarsyin, 2016). In Nigeria 24 out of the 36 states produce this crop. Nigerians consume cassava and its end product in their daily meals, making it a staple crop for Nigerians (Onyenwoke and Simonyan, 2014). In Anambra State, the effectiveness of the VCDP in providing food security in cassava is still doubtful because there seems to be underproduction and limited availability of the food crop and its valuable products in the market. In addition, the prices of the available ones are still soaring.

Effectiveness refers to the capacity for achieving the desired result. The effectiveness of VCDP in this study implies

the capacity or the potential of the VCDP Unit in Anambra State to promote food security in cassava production.

The VCDP Unit consists of staff such as, State Programme Coodinator (SPC) programme coordinator; State Nutrition Officer (SNO) incharge of producing Vitamin A cassava stem and supply of end products such as cake, combo-bite, Vitamin A cassava flour, among others; State Business and Market Development Officer (SBMDO) who links the farmers with off takers and makes sure that every product is sold at normal price; Agricultural Production Officer (APO) incharge of ensuring availability of improved cuttings, fertilizer, water pump, pesticides, herbicides and training farmers on agronomic practices, among others. The respondents to this study will be VCDP Unit staff who are the organizers of this programme and cassava farmers who are the beneficiaries of the VCDP. They will be required to respond to how effective VCDP has been in achieving the stated objectives in Anambra State. The VCDP Unit staff and cassava farmers may differ in their perceptions of how effectively the VCDP has achieved their mandate. They could equally proffer strategies for improvement of the programme in Anambra State. This will facilitate evidence-based decision-making, the right policies and planning towards effective management and coordination of the laudable programme for the ultimate reduction of hunger, poverty, and unemployment in Anambra State. It is against this backdrop that this study is predicated.

Statement of the Problem

In Nigeria as in other developing countries such as Senegal, Liberia, and Zambia, among others, agricultural development programmes are set up to ensure food security thereby reducing hunger for the vast population. VCDP in Nigeria was initiated to ensure food security in cassava production. However, in Anambra State, it is doubtful whether the VCDP is achieving this objective because there appears to be a relatively high incidence of food insecurity and hunger in the State.

The issues of food insecurity and hunger in Anambra State are quite disturbing and unsatisfactory. There is also an increase in food prices of cassava end products such as garri, fufu, abacha, among others in Anambra state. This is worrisome to the researcher and some well-meaning citizens of Anambra State; hence, the researcher seeks to determine the effectiveness of VCDP in ensuring food security and strategies for improvement to provide evidence-based information towards reducing the scourge of poverty and hunger in the state.

Purpose of the Study

The purpose of the study is to determine the perceived effectiveness of Value Chain Development Programme (VCDP) in ensuring food security and strategies for improvement as perceived by farmers and VCDP Unit staff. Specifically, the study seeks to determine from the perceptions of VCDP Unit staff and cassava farmers how effective VCDP is in:

1. Ensuring food security in cassava production in Anambra State.
2. To determine strategies for improvement of VCDP

Research Questions

The following research question was posed to guide the study; from the perception of VCDP Unit staff and Cassava farmers in Anambra State:

1. How effective is VCDP in ensuring food security in cassava production?
2. What are the strategies which could be used to improve the effectiveness of VCDP?

Research Hypothesis

The following null Hypothesis was tested at 0.05 level of significance

1. There is no significant difference between the mean ratings of VCDP staff and Cassava farmers on the effectiveness of VCDP in providing food security in Anambra State.

Research Method

The study employed descriptive survey research design. The target population of this study consist of all VCDP unit staff and cassava farmers in all participating local government areas. The population of the study consisted of 366 (60 VCDP staff and 306 cassava farmers). The data for the study was obtained using questionnaire. The questionnaire was divided into two parts, A and B. Part A focused on the personal data of the respondents while Part B focused on items addressing the research questions. Part B was divided into two sections. Each of the items has 4-point response categories as follows: Very Effective (VE), Effective (E), Slightly Effective (SE) and Ineffective. The instrument was validated by a cassava farmer, VCDP unit staff and three experts from the Departments of Educational Foundations, Science Education and Adult and Continuing Education in Nnamdi Azikiwe University, Awka.

The Cronbach alpha approach of estimating reliability was used to ascertain the reliability coefficient of the instrument (see attached appendix B, p. 23). A correlation index of 0.86 was obtained for ensuring food security and 0.88 for strategies for improvement of VCDP. The analyses showed that the instrument has a reliability of 0.86 which indicated high reliability. Mean and t-test statistics were adopted for answering the research questions and testing the hypothesis respectively. The hypothesis was tested using t-test at 0.05 level of significance. Using the true limits of numbers, the decision rule stipulates that any items which scores 2.50 mean value and above was regarded as effective and 2.49 below as ineffective similarly, null hypothesis was rejected if the P-value is less than or equal to alpha value; otherwise it was accepted.

Presentation of Results

Research Question One: How effective is VCDP in ensuring food security in cassava production?

Table 1: Mean Ratings of the Respondents on the Perceived Effectiveness of VCDP in Ensuring Food Security in Cassava Production; (N=366)

S/N	Items on Food Security	VCDP Staff (N=60) $\bar{X}$	Cassava Farmers (N=306) $\bar{X}$	Total $\bar{X}$	Remark
1	Supplying improved cassava cuttings to farmers in order to ensure high productivity of cassava tubers.	3.88	3.52	3.70	Effective
2	Producing Vitamin A cassava stem for production of Vitamin A cassava flour.	3.47	3.46	3.47	Effective
3	Organizing seminar for farmers on how to use Vitamin A flour for production of Vitamin A bread.	3.70	3.41	3.54	Effective
4	Organizing seminar for farmers on how to use Vitamin A flour for production of Vitamin A cake.	3.62	3.49	3.56	Effective
5	Organizing seminar for farmers on how to use Vitamin A flour for production of Vitamin A combo-bite.	3.90	3.57	3.74	Effective
6	Organizing seminar for farmers on how to use Vitamin A flour for production of chin-chin.	3.95	3.52	3.74	Effective
7	Organizing seminar for farmers on how to use Vitamin A flour for production of cass-moi.	3.78	3.46	3.62	Effective
8	Organizing seminar for farmers on how to use Vitamin A flour for production of cassava chips.	3.80	3.47	3.64	Effective
9	Providing support for farmers by making motorized grater machine available for garri production.	2.93	3.36	3.15	Effective
10	Training farmers on cassava production to enhance the availability of animal feed.	3.28	3.39	3.34	Effective
	Aggregate mean			3.55	Effective

Table 1 indicates a grand mean of 3.55. Following the decision rule of 2.50 as the criterion mean, VCDP was effective in all the 10 items on ensuring food security.

Research Question Two: What are the strategies which could be used to improve the effectiveness of VCDP?

Table 2: Mean Ratings of the Respondents on Strategies which could be used to improve the effectiveness of VCDP; (N=366)

S/N	Items on Strategies	VCDP Staff (N=60) $\bar{X}$	Cassava Farmers (N=306) $\bar{X}$	Total $\bar{X}$	Remark
11	Creation of awareness on the activities of VCDP to encourage participation by youths	3.63	3.62	3.63	Effective
12	Organizing sensitization programmes for extension workers on their roles in VCDP	3.72	3.58	3.63	Effective
13	Establishing research institute for enhancing VCDP activities	3.73	3.63	3.68	Effective
14	Early distribution of farm inputs to farmers by the VCDP Unit	3.95	3.68	3.82	Effective
15	Expansion of VCDP to other communities	3.98	3.67	3.82	Effective
16	Providing farmers with tractors to reduce fatigue	3.95	3.68	3.82	Effective
17	Linkage of farmers to more cassava off-takers	3.95	3.70	3.83	Effective

18	Scaling up VCDP to potatoes production	3.77	3.63	3.70	Effective
19	Scaling up VCDP to yam production	3.78	3.67	3.73	Effective
20	Scaling up VCDP to plantain production	3.73	3.71	3.72	Effective
21	Scaling up VCDP to vegetable crops production	3.60	3.70	3.65	Effective
22	Scaling up VCDP to livestock production	3.60	3.65	3.63	Effective
23	Provision of more cassava processing centers in various clusters	3.90	3.67	3.79	Effective
24	Provision of regular information on the best varieties and qualitative cassava stem	3.97	3.70	3.84	Effective
25	Land development in various clusters (towns) to encourage farmers cultivating cassava	3.98	3.74	3.86	Effective
	Aggregate mean	3.56			Effective

With reference to the decision rule, Table 2 shows that all the strategies could be used to improve the effectiveness of VCDP. The aggregate mean of 3.56 corroborates this remark.

Hypotheses Testing

H01: There is no significant difference between the mean ratings of VCDP staff and Cassava farmers on the effectiveness of VCDP in providing food security in Anambra State.

Table 3: The t-test Analysis on Mean Responses of VCDP Staff and Cassava Farmers on the Effectiveness of VCDP in Providing Food Security in cassava production

Variable	N	Mean	SD	t-value	df	p-value	α-level	Remark
VCDP Staff	60	3.63	.24	2.125	364	.034	0.05	Significant
Cassava Farmers	306	3.48	.55					

Table 2 shows that VCDP Staff (M = 3.63, SD = .24) had a significant (t (364) = 2.125, p <.05) higher mean score on perceived effectiveness of VCDP in providing food security than Cassava Farmers (M = 3.48, SD = .55) Hence, the hypothesis that there is no significant difference between the mean ratings of VCDP Unit staff and Cassava farmers on the effectiveness of VCDP in providing food security in Anambra State is rejected. This means that there is a significant difference in the mean ratings of VCDP staff and Cassava farmers on the effectiveness of VCDP in providing food security in cassava production.

Discussion of Findings

Analysis in Table 2 showed that the VCDP was effective in ensuring food security in cassava production. This finding is in line with Tenabe, Nwadihi, and Olayide (2018) who stated that 100% of cassava farmers in Anambra State have had access to improved cassava stem variety with the support of VCDP. The authors noted that as a result, farmers had high productivity and the Government's goal of ensuring food security was accomplished. Similarly, Obianefo, Meludu and Onah (2018) asserted that the VCDP trained farmers on the production of confectionaries such as chips, cake, bread, chin-chin, Cassi-moi and combo-bite using Vitamin A cassava flour. To buttress this point, IITA reported in Nigerian Tribune (2018) that Anambra State VCDP collaborated with International Institute for Tropical Agriculture to train female

cassava farmers on the use of Vitamin A cassava flour for the production of cassava recipes and other by-products. Thus, the availability and sales of these by- products will enhance income and food security of small holders' farmers. To support this view, Nwabachili cited in Guardian (2021) that capacity-building training was organized for farmers to improve cassava production and improved varieties cuttings were distributed as a basis for achieving cassava sufficiency and ensuring food security in Anambra State.

The null hypothesis revealed that the VCDP staff and cassava farmers differed significantly in their mean ratings on the effectiveness of VCDP in ensuring food security in cassava production. This means that there is a discrepancy between the VCDP Unit staff and cassava farmers on the perceived effectiveness of the programme. Thus, from the researchers' observation it seems there could be a problem on the implementation of the VCDP or some of the expectations of the cassava farmers were not met. This requires the VCDP staff and farmers to engage in discussion and synergize to find out what gaps are yet to be filled to ensure food security in cassava production in Anambra state.

Conclusion

Based on the findings, it was concluded that the VCDP was effective in ensuring food security in cassava production. The poverty, penury and hunger in the state may be attributed to food insecurity in other staple food production. The study further concluded that the VCDP Unit staff and cassava farmers differed significantly in their mean rating on the effectiveness of VCDP in ensuring food security in cassava production

Recommendations

Based on the findings of the study, the following recommendations were made

1. The Anambra State Government and VCDP funding agency (IFAD) should scale up their efforts by extending their functions to other Local Government Areas.
2. The Anambra State VCDP should invest more in infrastructure such as transportation, storage facilities, and processing centers to enhance the cassava value chain's efficiency, more productivity and accessibility.
3. The Anambra State VCDP should develop monitoring and evaluation mechanisms to track progress and assess the programmes impact. This can be done using research data and feedback to make decisions and adjustments.
4. The Anambra State Government should provide more mechanized equipment such as tractor and rasper machines. This will help cassava farmers reduce drudgery that they face in cassava cultivation and processing and increase productivity.
5. There is need for training and retraining of farmers on the use of rasper machine and other technologies used for cultivation and processing of cassava.
6. The Government should double their effort by focusing on various aspects of the cassava value chain and implementing strategies that VCDP can employ to enhance the achievement of its objectives.
7. All cassava farmers in Anambra State should integrate themselves into farmers' cooperative society for better bargaining with the

government, improved quality of products, services and supplies.

REFERENCES

Abutu, O.(2014). Challenges of Agriculture in Nigeria Economy: A Bane to Food Security. IOSR *Journal of Agriculture and Veterinary Science.* 7. 18-21. 10.9790/2380-07511821.

Anambra State Value Chain Development Programme (ANSVCDP, 2016). IFAD VCDP infrastructure needs assessment study – study approach, 2016 Anambra State Value Chain Development Programme

FAO (2010). Food and agricultural commodities production. In: http://faostat.fao.org/

FAO (2012). Food and agricultural commodities production. In: http://faostat.fao.org/

FAO, (2018) Food outlook-biannual report on global food markets-November 2018. Rome. 104 pp. License: CC BY-NC-SA 3.0 IGO. http://www.fao.org/3/ca2320en/CA2320EN.pd

IFAD (2014) How to do commodity value chain development projects. Available at: https://www.ifad.org/documents/38714170/40311826/Commodity+value+chain+development+projects.pdf/504a1102-7bc7-47e8-a46c-003333fe9335 [accessed 17 March 2019]

International Institute for Tropical Agriculture IITA (August 6, 2018) IITA trains 30 Anambra female farmers on use of Vitamin A cassava. *Nigerian Tribune*. Retrieved from https://tribuneonlineng.com/iita-trains-30-anambra-female-farmers-on-use-of-vitamin-a-cassava/ on June 22, 2023 *ISSN: 2319-706.*

Iwuchukwu, J.C. and Igbokwe, E.M. (2012). Lessons from agricultural policies and programmes in Nigeria. *Journal of Law, Policy and Globalization, 1* (1), 11-21.

Madubueze, M.H. C.,Dike, E. and Okpalibekwe, U. N. (2018) Value Chain Agricultural Development Pr ogramme and Food Security in Anambra State: *A Critical Assessment. International Journal of Advanced Research in Public policy, Social Development and Enterprise studies vol 3.*

Mhoja .L., Mtae, .H., & Haule, .C.(2021). Levels of adoption of new rice farm management technologies among smallholder farmers in Kilombero District, Tanzania. *International Journal of Agricultural Policy and Research. 9. 10.15739/IJAPR.21.020.*

Norton, R. (2014). Agricultural value chains: A game changer for small holders. Retrieved from https://www.devex.com/news/agricultural-value-chains-a-game-changer-for-small-holders-83981 on June 8, 2023.

Nwabachili,.C.March 21,2021). Anambra government pledges more support to cassava, rice, farmers. The Guardian, Retrieved from https://guardian.ng/news/anambra-government-pledges-more-support-to-cassava-rice-farmers/on on 19 June, 2013.

Nwajiuba, C. (2018). Nigeria's Agriculture and food security challenges. *Journal of Agriculture* Insecurity: Concept, Causes, Effects and

Possible Solutions. *IAR J Huma Soc Sci; 2021; 2(1): 105-113*

Nwajiuba, C. (2018). Nigeria's Agriculture and food security challenges. *Journal of Agriculture* Insecurity: Concept, Causes, Effects and Possible Solutions. *IAR J Huma Soc Sci; 2021; 2(1): 105-113*

Nwalieji HU, Okeke MN, Uzuegbunam CO, and Udemezue JC. (2018) Extent of Youths' Involvement in Agricultural Programmes and Projects in South Eastern Nigeria. *International J. Agric. Sc., Res. & Tech. in Ext. & Edu. Sys. 2018*; 8(2):95-102.2023.

Nwankwo, F. (2017) "Saving Behaviour of a Rural Community; The Cooperative Effect" in Nigerian. *Journal of Co-operative Economics and Management.* Vol. 1, No. 1, (2017). Rex Charles and Patrick Ltd. Nimo

Obianefo, C. A., Nwigwe, C. A., Meludu, T. N., & Anyasie, I. C. (2020). Technical efficiency of rice farmers in Anambra State value chain development programme. *Journal of Development and Agricultural Economics*, 12(2), 67-74.

Obianefo, C.A., Meludu, T.N., and Onah, O.G., (2018). Agribusiness Development on Provitamin A Cassava Recipes among Female Youth in IFAD- Value Chain Development Programme in Southeast Nigeria. *International Journal of Science and Research (IJSR)*

Okoruwa, O.V., Ogheneruemu, O. and Adeniran, L.O. (2015). Root and tuber expansion programme among farmers in South-West Nigeria. *Journal of Development and Agricultural Economics, 7*(10), 332-343.

Onyenwoke, C. A. and Simonyan, K. J. (2014). Cassava post-harvest processing and storage in Nigeria: A review. *African Journal of Agricultural Research, 9*(53), 3853-3863.

Ozoani, S.E. (2019). Appraisal of agricultural programmes in Nigeria. *International Journal of Innovative Agriculture & Biology Research,* 7(1):86-94

Saediman, HM. Aswar, L. Rosmawaty, Putu, A. and Indarsyih, Y. (2016). Cassava Consumption and Food Security Status among Cassava Growing Households in Southeast Sulawesi. *Pakistan Journal of Nutrition,* 15: 1008-1016. DOI: 10.3923/pjn.2016.1008.1016URL: https://scialert.net/abstract/?doi=pjn.2016.1008.1016

Tenabe, F. Nwadihi, and Olayide, O. (2018). Effect of IFAD Value Chain Development Programme on welfare of smallholder rice and cassava producers in Anambra State, Nigeria. Final report. 10.13140/RG.2.2.27240.11522.

Ugbe, U. P. (2017). Agricultural Value Chain Development Knowledge Management and Communication, 10.13140/RG.2.2.14375.06569.

Ugonna C. U, Jolaoso M. A and Onwualu A. P.(2015). Tomato Value Chain Nigeria: issues, challenges and strategies. *Research and innovation Department, National Universities Commission Abuja.*