

IFAD/VALUE CHAIN DEVELOPMENT PROGRAMME AND CASSAVA PRODUCTION IN LOGO LOCAL GOVERNMENT AREA OF BENUE STATE.

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Abstract

The study examined the contribution of IFAD/Value Chain Development Programme (VCDP) and Cassava production in Logo Local Government Area of Benue state, Nigeria. Functionalism was adopted as a theoretical framework. A sample size of four hundred (400) respondents participated in the study. The questionnaire, Key-informant interview and Focus Group Discussion (FGD) were used as data collection instruments. The study found the activities of VCDP on cassava production in the study area to include; the provision of training needs, providing funds to farmers, management and coordination of cassava farm, linking farmers to cassava market, dissemination of good agricultural practices and provision of certified cassava stems to farmers. The study also found IFAD/VCDP challenges on cassava production to include; crises, untimely provision of funds, inadequate processing equipment, illiteracy and resistance to new cassava varieties. The test of hypothesis with regression coefficient predicted a positive relationship between IFAD/VCDP activities and cassava production hence the $p\text{-value} = .000 < 0.05$, meaning that IFAD/VCDP activities have a strong positive relationship with cassava production in the study area. Based on the above, the study recommended that the programme should provide more inputs to support cassava farmers, provision of adequate security to the affected areas of the IFAD/VCDP intervention programme on cassava production, educate farmers on IFAD/VCDP programme and the programme should be extended to other wards/LGA areas in the state in order to boost cassava production.

Keywords; Contribution, IFAD/VCDP, Cassava production

Introduction

Cassava (*manihot esculenta crantz*) is a tuber crop, a non-inbred crop and propagated colonially. It is one of the few staple crops that can be produced efficiently on a small scale, without inputs, and in marginal areas with poor soils and unpredictable rainfall (Allem, 2002). Its genetic improvement a superior genotype to be fixed at any stage of the breeding scheme, even after a single cross (FAO, 2013). Cassava species originated on the southern edge of the Brazilian Amazo, cassava (*Manihot esculenta Crantz*) is one of some 100 species of trees, shrubs and herbs of the genus *Manihot*, which is distributed in northern Argentina (Alves, 2019).

Cassava production varies by continent, globally, over 303.6 million tons of cassava storage roots are harvested from approximately 28.2 million ha (FAOSTAT 2020). The African continent cultivates half of the global fresh cassava production at 79.8% on 22.5 million ha. Thailand, is the largest exporting country of dried cassava, with 77% of world exports in 2020.

The African continent cultivates half the global fresh cassava 79.8% on 22.5 million ha. However, the continent's average yield (8.6 ton/ha) falls short of the global yield (10.7 ton/ha) FAOSAT (2020) and the maximum potential experimental yield 20–50 ton/ha. Worldwide cassava production was at increased by 12.5% between 2000 and 2015. In 2021, the average yield of cassava crops worldwide was 12.5 tons per hectare. The most productive cassava farms in the world were in India, with a nationwide average yield

of 34.8 tons per hectare (FAOSAT, 2020). Nigeria is the world's largest producer of cassava. In Nigeria, the total area harvested in 2020 was 3.13 million hectares (ha), with production estimated at 36.8 million metric tons and average yield at 11.7 tons/ha–1 (Rahman et al, 2021).

The International Fund for Agricultural Development (IFAD) is an agency of the United Nations (UN). It was established as an international financial institution in 1977 as one of the major outcomes of the 1974 World Food Conference. The International Fund for Agricultural Development (IFAD) in conjunction with the Federal Government of Nigeria formed a Value Chain Development Programme (VCDP) in cassava production to address the challenges faced in cassava production. The programme was introduced in Nigeria in January 2015. The International Fund for Agriculture Development (VCDP) intervention in Nigeria is focused on the IFAD/Value Chain Development Programme (VCDP), the programme has Federal, state, Local Government and beneficiary members as principal actors in the value chain programme (Adewale et al, 2016).

In Benue State, the Value Chain Development Programme (VCDP) covers eight local governments of Guma, Gwer, Logo, Okpokwu, Kwande, Gboko, Gwer East and Ogbadibo (VCDP 2018). The programme was introduced in Benue state in 2015. The programme was set to provide an opportunity to link cassava smallholder farmers to markets, ensuring the complementarity of activities with a core mandate to focus its intervention on the agricultural sector particularly on cassava production with emphasis on enhancing productivity and market access (VCDP 2018). Specifically, the study is aimed at (i) assessing the activities of IFAD/VCDP on cassava production and (ii) investigating the challenges of IFAD/VCDP on cassava production Logo Local Government Area

Statement of the Problem

Cassava has far-reaching economic importance to the socio-economic life of farmers in Logo LGA as it serves as food, and sources of income, and creates employment for a wide range of people, especially in the rural areas. It also creates employment for producers, transporters, processors, marketers, food vendors and food of great preference to the poor and the rich in Logo LGA of Benue State.

The Government has made efforts to increase cassava production to several measures to support the production, processing and marketing. These include partnerships of some NGOs like FADAMA 111, Catholic Relief Services with Benue State Agricultural and Rural Development Authority (BNARDA) and also with research institutes like the National Agricultural Research Institute (NARI), International Institute of Tropical Agriculture (IITA).

Despite these, there is an indication that cassava farmers in Logo LGA are still faced with many constraints during farming and processing cassava. Challenges faced by smallholder cassava farmers in the study area include; the challenge of the market for cassava products, lack of high technology for the processing of cassava products, poor or bad transportation network, lack of credit facilities, poor infrastructures and storage facilities for farmers among others. Another challenge is fluctuation in the market of cassava products and the high cost of planting materials. There is also the issue of acquiring fertilizer and high energy costs for cassava processing.

The Value Chain Development Programme (VCDP) was introduced to address constraints along the cassava value chain. The emphasis of the Value Chain Development Programme (VCDP) is to reduce the challenges faced by cassava farmers as well as to improve their living conditions but the activities, contribution and the challenges of IFAD/VCDP in the study area are unknown which this study seek to assess.

Philip (2016) writes on IFAD cassava production in Nigeria, report that cassava production has increase over the year. PIND, (2011), writes on cassava IFAD value chain analysis in Niger Delta, and report that the programme had improved cassava production leading to increments in the income of farmer. West Africa Vanguard, (2017) explains IFAD activities on youth's empowerment in Benue state as it improves cassava production in the area. As clearly as these studies explain IFAD/ VCDP activities on cassava elsewhere; No adequate empirical work has been done on assessing the intervention of VCDP on

Cassava production in Logo Local Government Area of Benue state. Based on the above, the study seeks to assess the intervention of VCDP on Cassava production in Logo Local Government Area of Benue state.

Hypothesis

1. Hi: There is a significant relationship between the IFAD/VCDP programme and cassava production in Logo Local Government Area of Benue state.

Literature review and theoretical framework

Activities of IFAD/Value Chain Development Programme (VCDP).

In Nigeria, IFAD and the federal government of Nigeria initiated a development plan called the Value Chain Development Programme (VCDP). At IFAD/VCDP inception IFAD was a six-year development initiative of the Federal Government of Nigeria (FGN) and International Fund for Agricultural Development (IFAD), which aims at improving cassava value chains for small farmers. According to the IFAD/VCDP manual (2016) since 1985, IFAD has been Nigeria's trusted partner for reducing rural poverty. IFAD loans help improve outreach and its impact, in building the capacity, productivity and market participation of rural people. In line with IFAD's Strategic Framework 2016-2025, IFAD's approach encourages involvement in reducing rural poverty at all levels of government; sets up and strengthens farmers' organizations; and supports the empowerment of poor rural people, especially women and young people. IFAD's current strategy, in agreement with the Nigerian government, covers the period 2016-2021. The goal is to help rural communities benefit from economic growth, in line with two strategic objectives:

- i Developing the sustainable, climate-resilient economic and financial inclusion of young people in profitable agribusiness.
- ii Strengthening institutions at state and community levels to work with private companies in key value chains. IFAD partners with the Nigerian Government in building rural institutions, establishing community-driven development initiatives, developing profitable smallholder agribusinesses, and pursuing financial inclusion for rural poor households.

The goal of the programme is to reduce rural poverty and achieve accelerated economic growth on a sustainable basis. The programme aims to contribute to the following indicators:

- i 15% reduction in households below the poverty line in target LGAs (baseline by LGAs)
 - ii 25% reduction in the number of people under-nourished in target LGAs (Children under 5 years, baseline by LGAs)
 - iii 5% increase in real agricultural GDP growth rate in target LGAs (baseline at state level)
- The programme's objectives are that the incomes and food security of poor rural households engaged in the production, processing and marketing of cassava in the programme Area is enhanced on a sustainable basis.

The following outcome is expected from the three components according to IFAD (2015).

Component 1: Agricultural market development: The expected outcome is improving access to markets of smallholder farmers and the capacity to process the selected crops by small/medium-scale agro-processors. The outcome indicator is a 50% increase in the volume of target commodities marketed by smallholder farmers and processors.

Component 2: Smallholder productivity Enhancement: The expected outcome is enhanced farmer productivity on a sustainable basis. The outcome indicator is: a 40% increase in the yield of cassava produced by smallholder farmers (by sex and age)

Component 3: Programme management and coordination: The component will ensure that the programme is efficiently and effectively managed to achieve results. The outcome indicators are satisfactory disbursement and timely financial and physical progress reports.

To make sure that the constraints of the main beneficiaries, particularly women and youths, are addressed adequately (the notion of inclusiveness), the program adopted a demand-driven approach consisting of carrying out activities emanating from the value chain Action plan at the LG Level. This inclusiveness entails strengthening the capacity of Farmer's Organizations (FOs) to enable them to serve their members

better through efficient input delivery, bargaining better input and output prices to increase profitability, and participating in policy dialogue at the local, State and federal levels. The capacity building of the FOs would contingent on the level of maturity based on a set of criteria to graduate from one level to the other. The programme rely on competent service providers who we be recruited competitively based on the national procurement system as long as it is compatible with the IFAD procurement guidelines.

Challenges of the IFAD/VCDP programme

According to the IFAD supervision report (2016), the following challenges are hampering the implementation progress of the organization. Persistent farmer/pastoralist conflicts in some states such as Benue, led to the displacement of programme beneficiaries, destruction of facilities and even loss of lives. Other problems/issues as regards the IFAD programme include:

According to IFAD (2016), the following challenges are also encountered by the IFAD programme in Nigeria.

- i. Compliance with all IFAD procedures and processes, such as the non-development of irrigation facilities until all the detailed designs and feasibility studies have been done which may lead to the loss of one full year in implementation when the state government are keen to have dry season farming full year started in 2016;
- ii. Realignment of programme implementation with government policy and political realities, such as the lower programme specification for feeder roads versus the higher specifications requested by state governments, with implications for much higher unit cost;
- iii. Low disbursement rates because of the cumbersome processes referred to above;
- iv. The inability or reluctance of participatory organizations to pay upfront the 50% counterpart contribution required for the matching grants, coupled with initiatives by some state governments to address the constraints through separate producer/off-taker arrangements for recovery of the 50% advance to be made to the farmers, requiring the farmers' produce to be sold to a specified government-nominated off-taker;
- v. Inadequate federal and state (in a few states) counterpart funding, resulting in staff salaries and allowances being in arrears for several months;
- vi. Lack of spending thresholds for the SPMUs, which makes it mandatory for even small expenditure items to be approved by the NPUM; (IFAD, 2016).

Theoretical Framework

The theoretical framework adopted for this study is Functionalism.

Functionalism

The major proponents of modern functionalism include August Comte (1798-1857) Herbert Spencer (1820-1903) Vilfredo Pareto (1848-1923) and Emile Durkheim (1858-1917) and, at later date, the anthropologists Arthur Radcliffe-Brown (1881-1955) Bronislaw Malinowski (1884-1942). The theory was refined by Talcott Parson (1902-1979). Another major exponent of the theory is Robert Merton (1910-2003). In the 1940s and 50s, functionalism was the dominant social theory in American sociology (Ruth and Alison 1980). Comte, Spencer and Pareto emphasized the interdependence of parts of the social system. Durkheim emphasized integration or solidarity, which inspired both Radcliffe Brown's and Malinowski's analyses of the function of the social institution. Functionalism views society as a regular system of interrelated elements/parts/components with structures, social relationships and observed regularities.

To Parson's functional system problems AGIL, Adaptation means the problem of securing sufficient resources from the environment and distributing them throughout the system. According to Parsons, for a social system to survive certain structures and institutions are needed to perform the function of adaptation. In this study, VCDP serves as the structure that distributes farm inputs to Cassava farmers. These result in the high output of Cassava and a source of livelihood, employment as well as generation of income for cassava farmers in Benue state leading to equilibrium

Goal attainment emphasizes the mobilization of resources and energy to attain system goals and to establish priorities amongst them. In this study, VCDP set a goal to reduce rural poverty and achieve accelerated economic growth on a sustainable basis; VCDP is determined to achieve this goal by distributing inputs to cassava farmers in the selected areas of their intervention programme.

In terms of integration, Parson means the need to coordinate, adjust and regulate relationships among various actors or units within the system to keep the system functioning. In Benue State, VCDP adopts the strategy of involving women and youths to fully participate in the programme, the programme also adopts the strategy of strengthening Farmer's organization, it incorporates both federal, state and local government in financing the programme. All the involvement is to integrate all the components of the society to enable the programme's success. With this arrangement, both parties felt a sense of belonging hence both the federal, state, and local government and the beneficiaries are full participants of the programme leading to cordial relations amongst the value chain (VC) as well as equilibrium to Logo LGA hence this action leads to reduction of rural poverty in the local government area.

The fourth function is latent pattern maintenance-tension management. VCDP in this regard helps in keeping the value system intact and guaranteeing the conformity of the members of the system by providing inputs to cassava farmers. VCDP in the study area ought to provide farming inputs and other services to boost cassava production in the area. This will provide peace, stability and equilibrium to cassava farmers in the Logo local government area.

Functionalism emphasizes interdependence and interrelation, VCDP and cassava farming are well related. Cassava farmers in Benue state need the assistance of VCDP to enhance their productivity. The functionalists advocate belief in the end goodness of existing structures; thus the relationship between VCDP and cassava farmers is ultimately believed to be good hence VCDP intervention is believed to reduce poverty among rural farmers, provide income, generate employment and provision of food security. All these in turn will lead to equilibrium and stability in the social system.

Parson's argument is relevant to explaining the relationship between IFAD/VCDP and cassava production in Benue state, the extent to which cassava farmers can live well depends on the opportunities they have received from the IFAD/VCDP programme. Cassava farmers who have benefitted from the IFAD/VCDP programme are more likely to enjoy a sustainable livelihood than those who have only limited access to the programme. Thus IFAD/VCDP programme has provided a means of livelihood to cassava farmers to improve their lives as well as their families.

Methods

Logo Local Government area of Benue state was the study setting, Nigeria. The Local Government area was created out of Katsina-Ala local government on 5th December 1996 by the Late Gen. Sani Abacha. The population of the study comprises beneficiaries of the VCDP programme on cassava production in Logo LGA of Benue state, Nigeria. The LGA has a total of 2,023 beneficial farmers of IFAD/VCDP (IFAD/VCDP 2021). Based on Taro Yamane's (1967) sample size determination formula as thus: $n = \frac{N}{1+N(e)^2}$. The study arrives at 400 respondents. Questionnaires and Focus Group Discussions

were used as instruments for data collection. The study adopted a multistage sampling technique where purposively and simple random sampling techniques were used as sampling techniques. The hypothesis was tested with Regression at a 0.05 level of significance.

Results

Table 1 Demographic characteristics of respondents

Variable	Frequency N= 400	Percentage % = 100
Sex		
Male	243	60.8
Female	157	39.2
Age		
30-39	82	20.5
40-49	190	47.5
50-59	101	25.3
60 and above	27	6
Education		
No formal education	50	12.5
primary education	147	36.8
post-primary education	154	38.5
Tertiary education	49	12.2
Marital Status		
Married	243	60.8
Single	123	30.8
widow	34	8.4
Religion		
Christianity	209	54.4
Islam	19	4.8
Traditional religion	124	30.3
Other religion specifies	48	10.5

Source: Field survey, 2024

The data presented in the Table above indicated that majority 60.8% (243) of the respondents were male and 39.2% (157) were female. The age of the respondents shows as follows; 47.5% (190) were within the age bracket of 40-49 years, 25.3% (101) were within the age bracket of 50-59, 20.5% (82) were within the ages of 30-39 while 6.8% (27) were above 60 years of age. The table also highlighted the education of the respondents; the data obtained indicated that 38.5% (154) of the respondents had post-primary education, 36.8% (147) had primary education, and 12.5% (50) of the respondents had no formal education, while 12.2% (49) had tertiary education.

Regarding the marital status of the respondents, the table above indicates that 60.8% (243) are married, 30.8% (123) are single, and 8.4% (34) are widowers.

Also on religion, the result shows that 54.4% (209) of the respondents were Christians 4.8% (19) of the respondents were Islam, 30.3% (124) of the respondents were traditional worshipers while 10% (48) of the respondents belonged to other religion. It is a clear indication that Christians were more involved in the study.

Table 2 Activities of IFAD/VCDP on cassava production in Logo LGA of Benue state

Option	Frequency N=400	Percentage (100%)
Provision of training needs	30	7.5
Providing funds to farmers	90	22.5
Management and coordination of farm	89	22.25
Development of the cassava market	50	12.5
Dissemination of good agricultural practices	91	22.75
Provision of certified cassava stem	50	12.5

Source; Field survey 2024

Table 2 shows the activities of IFAD/VCDP in Logo LGA of Benue State, findings reveal that 7.5% (30) of the respondents mentioned that IFAD/VCDP do the activities providing training needs to cassava farmers in Logo LGA of Benue State, 22.5% (90) of the respondents mentioned provision of fund to farmers, 22.25% (89) of the respondents mentioned management and coordination of farm, 12.5% (50) of the respondents were of the view that IFAD/VCDP dose the activities of the development of cassava market in the study area, 22.75% (91) of the respondents mentioned dissemination of good agricultural practices, especially for cassava in the study area, while 12,5% (50) of the respondents mentioned provision of certified cassava stem to cassava farmers in the study area.

The objective seeks to find out the activities of IFAD/VCDP in the area, and responses from the respondents reveal different opinions. An interview with the official of VCDP a 32-year-old at Tombo council ward explains that;

The study seeks to find out the activities (inputs) of the programme in the study area, response from the official of the programme reveals that;

Respondents from VCDP at BNARDA/BAPM premises in Makurdi on the 18th June 2024 explained that;

IFAD in agreement with the Nigerian Government, covers the period 2016-2021. The goal is to help rural communities benefit from economic growth, in line with two strategic objectives: Developing the sustainable, climate-resilient economic and financial inclusion of young people in profitable agribusiness and strengthening institutions at state and community levels to work with private companies in key value chains this strategy cover all benefitting areas including Logo Local Government area. IFAD partners with the Nigerian Government in building rural institutions, establishing community-driven development initiatives, developing profitable smallholder agri-businesses, and pursuing financial inclusion for rural poor households (FGD, 2024).

This finding is in line with Ugwu, (2015) who writes on the IFAD/VCDP Strategic document which stipulates that since 1985, IFAD has been Nigeria's trusted partner for reducing rural poverty. IFAD loans help improve outreach and its impact, in building the capacity, productivity and market participation of rural people. In line with IFAD's Strategic Framework 2016-2025, IFAD's approach encourages involvement in reducing rural poverty at all levels of government; sets up and strengthens farmers' organizations; and supports the empowerment of poor rural people, especially women and young people.

Table 3: Challenge faced by Beneficiaries Farmers under IFAD/VCDP in Logo LGA.

Option	Frequency N=400	Percentage (100%)
Crises	30	7
Inadequate processing equipment	90	23
Untimely provision of fund	89	22
Lack of market for cassava products	100	25
Illiteracy	2	.5
Resistance to new variety of cassava	89	22

Source: Field Survey 2024.

The data in Table 3 shows that 17% of the respondents thought that crises affect beneficiaries from the effective realization of the IFAD/VCDP intervention programme on cassava production in the study area. 23% were of the view that cassava farmers in the cluster area are confronted with the problem of inadequate processing equipment. 22% of the respondents believed in the untimely provision of funds, 25% were of the view that lack of market for cassava products, .5% of the respondents mentioned illiteracy 22% of the respondents complained of resistance to a new variety of cassava by beneficiaries.

An interviewee a 46-year-old woman, an officer of VCDP who was interviewed at BNARDA premises in Makurdi on the 12th of August 2024, explained that;

.....we are confronted with the issue of counterpart fund payment in the form of a grant. This tends to cause delays in the approval and implementation of production business plans and affect the farming calendar. Another challenge is inadequate federal and state (in the case of Nigeria) counterpart funding, resulting in staff salaries and allowances being in arrears for several months (FGD, 2024).

The data gathered from both beneficiaries and VCDP officials as regards the challenges affecting effecting VCDP programme in the study area presented a different view although both mention delays in counterpart provision and crises in some cluster areas. This finding corroborates with IFAD (2016) programme implementation progress which mentions some challenges of the programme such as delays in the provision of counterpart funds by the federal, some states and local governments and the inability or reluctance of participation organization (POS) to pay upfront the counterpart contribution required for the matching grants. The challenges of those who are enrolled (beneficiaries) in the programme in these cluster areas may not be the same with other clusters, this may be because of the lack of proper execution of the programme objectives in the area.

Test of Hypothesis

Ho: There is a significant relationship between IFADVCDP activities and cassava production in the Logo Local Government Area of Benue state.

Table 4; shows the regression coefficient of IFADVCDP activities on cassava production in the Logo Local Government Area of Benue state.

		Coefficients				
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.876	.266		10.829	.000
	Dissemination of improved planting material	-.412	.083	-.249	-4.949	.000
	Strengthening of selected Farmers Organization	-.625	.069	-.459	-9.076	.000
	Provision of training needs	.366	.074	.220	4.921	.000
	Promotion and dissemination of sustainable agricultural practices	.126	.136	.041	.924	.356
	Access to fertilizer and agro-chemicals	-.023	.080	.013	.286	.775
	Providing matching grants	.095	.071	.062	1.334	.183

Source: Field Survey 2024

The regression coefficient Table provides results on VCDP programme and cassava production in Logo LGA of Benue State. The strength of the relationship is given as *p*-value; $0.00 < 0.05$, this indicates a significant increase in cassava production (area cultivated) as a result of the production and dissemination of improved planting material, provision of training needs and strengthening of selected Farmers Organization. Therefore, the findings indicate that VCDP programmes have a significant positive relationship with cassava production in the study area.

However, the output also indicates that promotion and dissemination of sustainable agricultural practices is not statistically significant with a *p*-value; of $.356 > 0.05$; access to fertilizer and agro-chemicals was also not statistically significant with a *p*-value; $.775 > 0.05$; similarly, providing matching grants is not statistically significant with a *p*-value; $.183 > 0.05$. Therefore the findings indicate that the IFAD/VCDP programmes that increased cassava production in the study area are the production and dissemination of improved planting material, provision of training needs and strengthening of selected Farmer's Organization.

Conclusion and Recommendations

Based on the findings of this study, it is obvious that the contribution of the Value Chain Development Programme (VCDP) towards cassava production has impacted positively on cassava farmers in Logo LGA of Benue State. Before the IFAD/VCDP intervention program on cassava production in the study area, the area cultivated by beneficiaries was low. But after IFAD/VCDP intervention programme the rate of cassava has increased tremendously, leading to improvement in the quality of life of the farmers.

Also, the programme seems to cover only a small segment of Benue State, only Logo local government areas are covered with few cluster areas. The programme should be extended to cover all Benue state with millions of populations. Despite its success story, more is needed to be done to reduce the problems faced by VCDP such as prompt payment of counterpart funds by state, and local government areas of intervention as well as beneficiaries. There is also a need to provide an alternative market for cassava products which is the right way to improve beneficiaries' income, at present the programme seems not to focus in this direction as a result farmers have not been befitting the programme as should be. There is an urgent need for government and traditional ruler's intervention in areas engulfed with the problem of crisis.

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