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CONSTRAINTS TO THE EFFECTIVE IMPLEMENTATION OF THE AGRICULTURAL VALUE-CHAIN DEVELOPMENT PROGRAMME IN ANAMBRA STATE

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ABSTRACT

The study assessed the constraints associated with the implementation of the agricultural value chain development programme in Anambra State with the view to remedying the situation. The quasi experimental design was adopted. The multi stage sampling procedure involving purposive and simple random sampling technique was used to select 240 respondents for the study. The area of the study was Anambra state of Nigeria. 240 beneficiary farmers were used as the population of the study. The method of data collection was through the use of questionnaire and structured interview. The data collected was analyzed using the descriptive statistics such as the mean and the standard deviation. The study revealed among those that late supply of agro-input by the service providers, inadequate farm machineries for mechanization, inadequate farm land for massive production. The study recommends The problem of inadequate farm machineries for mechanization should be addressed by the government in corroboration with other stakeholders involved in the programme. This can be achieved by establishing a mutual agreement with the relevant manufacturing companies that can provide the relevant production machineries needed by the farmers. Poor programme staff's remuneration and incentives should be accorded top priority in the programme. This is to eliminate all sorts of corruption practices among the programme staff while creating an enabling environment for the programme to thrive. This can be achieved by paying the staff their remunerations and incentives as at when due, in other to allow the staff to focus on the programmes goals and objectives.

Keywords: Constraints. Effective and Agricultural value chain.

Introduction

Agriculture is mostly seen as an integrated approach designed to improving the environment and wellbeing of the people of the community (Dooember, et al, 2020). The first step in the process of agricultural development is to abandon the view of agriculture in pre-modern or traditional societies as essential static. However, the problem of Agricultural development is not

that of transforming a static agricultural sector into a modem, dynamic or progressive: sector, but of accelerating theater of increase in agricultural and productivity consistent with the growth of other sectors of a modernizing economy. For the purpose of this work the Value Chain Development Programme which is one of the agricultural programmes introduced by the government of Nigeria to promote agricultural productivity, national economic development is considered.

Value chain comprises full range of activities and Services required to bring a particular product through the different phases of production and delivery., to the final consumers (International Fund for Agricultural Development (IFAD) 2018) The term value chain also refers to the importance, that value is added to products across one link to the next one in the chain through the combination of knowledge and resources (Dubey Rajeev Swatentra, Abhishek and Nikhil, 2020; Ovidijus, 2013). Value chain is a business model that describes full range of activities needed in creating a product or service (Tardi and Brock. 2020). It is a concept describing the full chain of a business's activities in the creation of a product ranging from the initial reception of materials all the way through its delivery to market, and everything in between (Chai, 2021).

From the organizational and institutional view, a value chain can be analyzed as the formal and informal arrangements that allow coordination and collaboration links across actors and at different points along the chain (IFAD, 2018).

United States Agency for International Development (2020) and Inter-American Development Bank (2013) described it as a full range of activities that are required to bring a product or service from its conception to its end use, including all the market channels available to all firms. A value chain in agriculture identifies the set of actors and activities that bring a basic agricultural product from production in the field to final consumption, where at each stage value is added to the product (Danish Refugee Council (DRC), 2020). It is a set of linked activities that work to add value to a product, and consists of actors and actions that can improve a product while linking commodity producers to processors and markets (Funmilola, Olawale and Nwadihi, 2018). It is an economic system around a particular commercial product with focus on value addition along sequence of activities of providing inputs, producing-transforming, marketing and consumption. A value chain focuses on the degree of coordination and collaboration between the value chain operators or actors and business model tor particular commercial product (FAO, 2014).

According to SANREM (2020), value chain can be a vertical linking or a network between various independent business organizations and can involve processing. packaging, storage, transport and distribution. It works better when the actors involved cooperate to produce higher-

quality products and generate more income for all participants along the chain, as opposed to the simplest kinds of value chains, in which producers and buyers exchange only price information (Norton, 2014). It encompasses the flow of products, knowledge and information, finance, payments, and the social capital needed to organize the producers and communities. Example, for firms that produce goods and services, a value chain operation will comprise the steps that are involved in bringing a product from conception to distribution, and everything in between, such as procurement of raw materials, manufacturing, and marketing activities. Information needed in value chain is especially important to all value chain actors, and flows in two directions: markets inform producers of price, quantity and quality needs, product handling and technology options, while producers inform processors and markets about quantity of production, locations, and timing and production issues (Norton, 2014),.

Agricultural value chain includes a wide range of activities such as development and dissemination of plant and animal genetic material, input distribution, farmer organization, farm production, post-harvest handling processing. provision of technologies for production, grading facilities, cooling and packing technologies, post-harvest local processing, industrial processing, storage, transport, finance, and feedback from customers or markets (Norton, 2014). At the heart of the agricultural value chain concept, is the idea of actors connected along a chain producing and delivering goods to consumers through a sequence of processes (Henriksen, Riisgaard, Ponte, Hartwich and Kormawa 2010). However "vertical" chain cannot function in isolation and an important aspect of the value approach is that it also considers “horizontal” impacts on the chain such as input supply, Finance provision, extension support and the general enabling environment. The approach t been found useful, particularly by donors, in that it has resulted in a consideration of a factors impacting on the ability of farmers to access markets profitably, leading to a range of chain interventions. It is used both for unbearding existing chains and for do identify market opportunities for small farmers (Wikipedia, 2021).

The value chain approach in agricultural development helps identify weak points in the chain and actions to add more value (Norton, 2014), The framework helps organizations identify and group their own business functions into primary and secondary activities (Chai, 2021). Value chain works best when operators cooperate to produce higher-quality products and generate more income for all participants along the chain, as opposed to the simplest kinds of value chain, in which producers and buyers exchange only price information. According to Rex (2013), the value chain approach considers the role of existing chain actors, supporting actors, and the policy environment. It allows the actors to look at current challenges in value chain, as well as the opportunities for improving the

efficiency of the value chain and the benefits for everyone involved. Sometimes, participating in a well-functioning value chain brings farmers hot higher incomes alone, but attract young people to farming or persuade them not to leave rural areas by offering better ways to earn money and as well, help the farmer learn new skills and adopt improved practices (Chapota, 2013).

According to International Fund for Agricultural Development (IFAD) (2012), the Value Chain Development Programme (VCDP) is a six-year agricultural development intervention programme initiated and implemented by the Federal Government of Nigeria (FGN) and International Fund for Agricultural Development (IFAD). The programme was designed to improve both cassava and rice value chains for small-scale farmers in six selected states of the Federation Anambra, Benue, Ebonyi, Niger, Ogun and Taraba. The Value Chain Development Programme emerged from the International Fund for Agricultural Development (IFAD) with Country Strategic Opportunities Programme (COSOP) of between 2010 and 2015 periods (IFAD, 2012). The Development with Country Strategic Opportunities Programme which was established on the recommendations of the Country Programme Evaluation (CPE) was Carried out in 2008/2009 April, 2009 by the Federal Government of Nigeria (FGN) and International Fund for Agricultural Development. The Country Programme Evaluation (CPE) recommendations laid emphases on the future IFAD interventions on Agriculture, with emphasis on the enhancement of productivity and access to market (Fumilola, 2018),

The Value Chain Development Programme (VCDP) is anchored on Nigeria governments vision for Agricultural Transformation through commodity value chain approach which was an approach designed to tackle the challenges of smallholder farmers (Value Chain Development Programme (VCDP), 2020). The goal of the programme is to reduce rural poverty, increase food security and accelerate economic growth on a sustainable basis by proffering solutions to limited access to productive assets and inputs, low productivity, limited opportunities for value addition, inadequate support services such as extension services, inability to access rural financial services, inadequate market and infrastructure (Value Chain Development Programme (VCDP), 2020). According to Mgbenika and Mbah (2016), the primary target groups for the VCDP are the poor rural households engaged in cassava and rice value chains. This includes the 15,000 smallholder farmers cultivating up to five hectares of land devoted to cassava and rice, I,680 small-scale processors and 800 traders as direct beneficiaries with emphasis on women and youth; and 22,000 indirect beneficiaries, benefitting largely from the infrastructure improvements, amongst other things.

The Value Chain Development Programme is coordinated under the technical responsibility of the Federal Ministry of

Agriculture and Rural Development (FMARD) and the State Ministries of Agriculture (MoAs) whilst implementation at the national level receives oversight and guidance from the Value Chain Steering Committee (VCSC), Federal Ministry of Agriculture Development (FMARD) as the lead implementing agency, delegates' the function and day-to-day implementation and coordination responsibilities to the National Programme management Unit (NPMU). In each of the selected states, the daily implementation of the programme is handled by the State Programme Management Unit, which ensures effective and efficient implementation of the programme activities at the state and Local Government Area level. The programmne which is domiciled in the Federal Ministry of Agricultures and Rural Development is implemented through the following components:

- Agricultural Market Development;
- Smallholder Productivity Enhancement: and
- Programme Management and Coordination.

According to Global Value Chain Initiative (GVCI) (2007) as cited in Ewuzie, Ifediora and Anctolh (2020), value chain is an arrangement that describes the linkages of participants and their value creating activities that enhance the movement of goods and services from production, processing, marketing to the end user. In agricultural parlance, the term "value chain" is used interchangeably with such terms as supply chain, market system, and agri-food chain, depending on what is being considered. Based on agri-food sector perspective, Drummond and Goodwin (2011), defined value chain as all activities and processes that occur between producers of food and ultimate consumers. According to Donovan, Franzel, Cunha, Gyau and Mithöfer (2015), donor agencies like USAID, FADAMA, and IFAD usage of value chain is in line with World Bank (2010) definition which describes value chain as full range of Value adding activities required to bring a product or service through different phases of Production including the procurement of raw materials and other input. The concept of value was introduced to improve productivity and profitability of the actors in the agricultural sector (Ewuzie, Ifediora and Anctoh. 2020) The notion of agricultural value chain underscores system approach to value added activities where the action of one component in a system affects every other component within the system

According to Ugwuonah (2017), the idea of the value chain is relatively new in agricultural sector it is however, resides at the core of high-impact and sustainable initiatives focused on improving productivity, competitiveness and growth of Small-Medium Enterprises (SMEs).

Recently, most of the agricultural intervention programmes, initiated and implemented in agricultural sectors by both government and non-government agencies (donors) take the value chain approach. The

value chain approach has shifted focus and emphasis away from agricultural production to consumer demand, marketing and the coordination of product flow from producer to consumer (Ewuzie, et al, 2020) The value chain concept acknowledges that production must be linked to demand and the critical role of organizing the flow from farmer to consumer opportunities must be taken into consideration. A value chain links the steps a product takes from the producer to the consumer. It. therefore, includes research and development, input suppliers, production, processing, marketing and finance (Norton, 2014).

An agricultural value chain starts with the provision of farm inputs which include seed, fertilizer and other agro chemicals used in the cultivation of crops (Rex, 2013). All the inputs are provided by the agro input dealers to the farmer who uses them in the production of agricultural crops and livestock. Whereas, according to Ewuzie, et al, (2020), the production component entails the actual production activities which culminates in the usage of farm inputs in a way that it is prescribed by the agricultural technologies for a particular commodity to produce the required produce. Value chains are created for the better understanding of consumer needs to respond to these requirements in better and more strategic way. The trade components entails exchange and distribution activities that are carried on at the primary product level by marketing middlemen, Processing has to do with value addition activities which are concerned with the change in form of the produce. Besides these activities that are central to a value chain, the business environment and provision of allied services also affect the value chain and as such constitute part of the value chain. Activities of the various participants in the value chain are expected to increase the value that is added to the products and Shrestha (2012) further opined that participants' conduct along the chain determines the efficiency and return accruing to each participant.

Statement of the problem

Since the Value Chain Development Programme began the government has invested a relatively huge sum of money into it. For the fact that the programme is aimed mainly at ensuring food security, improving the standard of living of people by increasing agricultural productivity, it is however necessary to find out the challenges confronting the programme implementation. However the study rests on determining the constraints to the effective implementation of the value chain development programme in the study area.

Objectives of the Study

General, the objective of this study is to investigate the major constraint to the effective implementation of the agricultural value chain development programme. Specifically the study seeks to investigate the areas of difficulties in programme. Such as input supply, finance supply among others.

Specifically the study ascertained:

- The input supply constraint
- Finance supply constraints

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Research Questions

- What are the input supply constraints associated with the implementation of the agricultural value chain development programme in Anambra State.?
- What are the finance supply constraints associated with the implementation of the agricultural value chain development programme in anambra State?

Design of the study

The quasi experimental design was adopted for the study because it does not required any laboratory experimental work

The Area of Study

The study was conducted in Anambra State, Nigeria. Anambra State is located in South-Eastern region of Nigeria. Anambra State is sub-divided into four Agricultural zones (AZs) namely: Anambra AZ, Awka AZ, Aguata AZ and Onitsha AZ which spread across the twenty-one local Government.

Population of the study

The population of the study included all the 240, rice farmers that benefited from the agricultural value chain programme in Anambra State.

Sample and sampling techniques

The Multi-stage sampling procedure involving purposive and simple random sampling technique was used to select 240 respondents that were used for the study. Stage 1 involved a purposive selection of four Local Government Areas as against the eight Local Government Areas that participated in the programme. Stage 2 involved a random selection of 30 farmers who participated in the programme, giving a total of 240 respondents that were used for the study.

Instrument

The data for the study were collected from both primary and secondary sources using a structured questionnaire and interview whose items boarder on issues relating to constraints to the effective implementation of value chain development programme. It identified the constraints associated to VCDP implementation, the beneficiaries were asked to indicate on a 4-point likert-type scale, how serious each of the various shortlisted constraints militates against the effective implementation of the programme in the area. The beneficiaries' responses were categorized as follows: Very severe (VS) = 4, Severe (S) = 3, Not Severe (NS) = 2, and Not Very severe (NVS) = 1. These values (4+3+2+1) were added to obtain the value of 10, which was divided by 4 to get a mean score of 2.5. The mean score value for each of the constraining variables determined the variable to be considered as the major constraint. Thus, mean score values of ≥ 2.5 were regarded as the major constraints, while mean score values < 2.5 were considered otherwise. The data was further subjected to factor analysis.

Validity

The instrument for data collection was validated by experts in Agricultural education and measurement and evaluation.

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Method of data Analysis

The IBM statistical product and Service solution (SPSS), software was used to analyze the data collected. Descriptive statistics such as frequency count, percentage and mean score were used.

Constraints to the implementation of the project	Means (Ẋ) Score	SD
Research question 1: Input supply constraints		
Late supply of agro-input by the service providers	4.00*	0.453
Inadequate farm machineries for mechanization	4.00*	0.505
Inadequate farm land for massive production	3.89*	0.533
High cost of privately sold agro-input such as fertilizers	3.89*	0.506
Inadequate supply of agro-input by the service providers	3.85*	0.439
Poor remuneration for the programme staff	3.60*	0.405
Poor logistic support for the field staff/workers	3.52*	0.405
Farmer-Herder crises	3.00*	0.385
Inadequate of storage facilities	2.85*	0.362
Poor extension service visit to farmers	2.85*	0.362
Inadequate training of farmers on improved technologies	2.73*	0.563
Research question 2: finance supply of constraints		
Difficulty in obtaining financial assistance from banks	2.60*	0.304
Poor extension-farmer ratio	2.55*	0.221
Corruption among staff and service providers	2.55*	0.221
Inadequate access to improved varieties	2.52*	0.389
Inadequate access to agro chemicals	2.50*	0.480
Difficulty in marketing products	2.36	0.450
Inadequate and untimely release of funds	2.20	0.580
High production cost	2.15	0.588
High cost of labour	2.10	0.572
Inadequate training of programnme staff	1.86	0.464

Discussion

The table of data analysis above reveals that the mean distribution of the respondents according to challenges to effective centration of the Value Chain Development Prooramme among beneficiaries in Anambra State, Nigeria. The major challenges to effective implementation of Value Chain Development programme in Anambra includes late supply of agro-inputs by the service providers (Ẋ=4.00) inadequate farm machineries for mechanization (Ẋ = 4,00), inadequate farm land (Ẋ = 3.89), high cost of privately sold agro-inputs such as fertilizers (Ẋ =3.89), inadequate supply of agro-inputs by the service providers (Ẋ =3.85), poor remuneration and incentives for the programme start (=3.60), poor logistic supports for the field staff/workers (Ẋ =3.52), farmer-herders crises (Ẋ = 3.00), inadequate storage facilities (Ẋ = 2.85). poor extension service visit to beneficiaries-2.85), inadequate training of programme beneficiaries on improved technologies (Ẋ =-2.73), difficulty in obtaining financial assistance from the bank (Ẋ =2.60), poor

extension-farmer ratio 2.55), corruption among programmne staff and service provider (Ẋ = 2.55), inadequate access to improved rice varieties (X= 2.52) and inadequate access to agro chemicals (Ẋ - 2.50)

Moreover, the study further indicated that difficulty in marketing produces (Ẋ =2.36), inadequate and untimely release of fund (Ẋ = 2.20), high production cost (Ẋ = 2.15), high cost of labour (Ẋ (Ẋ = 2.10) and inadequate training of programme staff (Ẋ = 1.86) were among the minor constraints militating against effective implementation of the Value Chain Development Programme in the study area. The finding suggest that the Value Chain Development Programme as implemented in Anambra encountered numerous but surmountable challenges. These challenges as indicated to cult were as a result of mismanagement of programme's resources, non-implementation engine's blueprint both on the part of the programme staff and beneficiaries. The result of Olaolu et al (2014), who reported that several constraining is in agreement with the findings factors limited the effectiveness of most agricultural Intervention programmes in Nigeria. Most of the constraints as perceived by the rice farmers are in agreement with the findings of Ofana, et al., (2016) who reported that the input subsidy administration and delivery has been tainted with official and institutional corruption. Hence, the process that involves using some private sector by the government to procure inputs such as fertilizer on her behalf. led to the distortions in the procurement process such as over-invoicing, late and insufficient deliveries of inputs and middlemen cartel development in the distribution system.

Conclusion

The major challenges to effect implementation of Value Chain Development programme in Anambra includes late supply of the agro-inputs by the service providers (Ẋ =4.00), inadequate farm machineries for mechanization (Ẋ =4.00), inadequate farm land (Ẋ = 3.89), high cost of privately sold agro-inputs such as fertilizers (R -3.89), inadequate supply of agro-inputs by the service providers (Ẋ - 3.85), poor remuneration and incentive for the programme staff (Ẋ 3.60), poor logistic support for the field workers (Ẋ =3.52), farmer-herder crises (X3.00), inadequate storage facilities (Ẋ -2.85), poor extension services' visit to programme beneficiaries (X-2.85), inadequate training of programme beneficiaries on improved technologies (Ẋ = 2.73), difficulty in obtaining financial assistance from the bank (Ẋ - 2.60), poor extension-farmer ratio (R- 2.55). corruption among programme staff(Ẋ =2.55), inadequate access to improved rice varieties (Ẋ -2.52) and inadequate access to agro chemicals (X=2.50). The result shows a strong correlation (R=0.857) between the dependent and independent variables. Hence, the null hypothesis was rejected. The result revealed that out of the nine independent variables that were fitted into the multiple regression model, only four variables: age (3.021), educational level (2.614), farming experience (3.941) and

number of extension contact (2.610) had a significant relationship with the dependent variable at 5%.

Recommendations

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

- The problem of inadequate farm machineries for mechanization should be addressed by the government in corroboration with other stakeholders involved in the programme. This can be achieved by establishing a mutual agreement with the relevant manufacturing companies that can provide the relevant production machineries needed by the farmers.
- Poor programme staff's remuneration and incentives should be accorded top priority in the programme. This is to eliminate all sorts of corruption practices among the programme staff while creating an enabling environment for the programme to thrive. This can be achieved by paying the staff their remunerations and incentives as at when due, in other to allow the staff to focus on the programmes goals and objectives.
- On the challenges of farmer-herder crisis, as indicated by the beneficiaries the government should bring lasting solutions to these crisis by initiating policies that can ensure a peaceful coexistence between the farmers and herdsmen. The farmers and herdsmen should dialogue for peace to reign.
- On the late supply of agro-inputs by the service providers all parties involved should ensure Adequate and timely provision of all the agro-inputs and logistics needed by the farmers tor Maximal production in the study area At the onset of the farming season, necessary Provisions should be made in respect to all the agro-inputs and delivered to the rice farmers As at when due. This will discourage the beneficiaries from relying on high cost of privately Sold agro-input by the agro dealers.
- The commitment of the extension agents and programme staff to the programme goals and Objectives should be improved for effective implementation of the programme in the study Area. This can be achieved through the provision of adequate logistics support.
- Financial institutions need to be encouraged by the state government to provide low interest loans to programme beneficiaries. This is to encourage the beneficiaries to participate more in the programme activities.
- The problem of inadequate farm land for paddy rice production may be as a result of increase in population which increases the alternative use of land for agriculture. Also, the type of land tenure system which encourages family ownership of land does not allow Farmers to acquire large areas

of land tor production. Therefore, the government Can acquire large expanse of land for farm m settlement scheme and on the part of the farmers, Cooperative farming can be encouraged.

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