

# **Assessing IFAD Value Chain Development Programme on Productivity and Income of Smallholder Farmers' in Obafemi-Owode and Yewa North Local Government Areas of Ogun State Nigeria**

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## **1. Abstract**

Smallholder farmers are faced with the challenges of low productivity, poor access to market, poor processing technology, and vicious cycle of poverty. The International Fund for Agricultural Development (IFAD) intervention focused on agriculture using a value chain approach to enhance market access and increase productivity growth and income of smallholder farmers.

This study, therefore, assessed the effect of the IFAD VCDP on the productivity growth and income of smallholder cassava and rice farmers in Obafemi-owode and Yewa North of Ogun State, Nigeria. The VCDP provided input supports, agrochemicals, land development and preparation, agricultural processing and equipments and market interventions which are requisite value addition techniques. The beneficiaries of these supports are farmers in the different enterprise units (producers, processors and marketers).

Ogun State is one of the benefitting States of the IFAD Value Chain Development Programme (VCDP) in Nigeria. It comprises a traditionally agrarian population of cassava and rice staple farmers. Data were collected using structured questionnaires and focused group discussions. The sample size comprised 329 respondents made of 227 farming households in Obafemi-owode and 102 farming households in Yewa North Local Governments Areas of Ogun State. Data analysis involved use of descriptive and inferential statistics.

Results revealed that the VCDP has contributed significantly to the productivity growths and income of smallholder farmers in Obafemi-owode and Yewa North of Ogun State, Nigeria. It also led to enterprise development, value addition and marketable surpluses. The study also identified the challenges confronting the VCDP, and opportunities for scaling up of the programme in Nigeria.

**Keywords:** Smallholder farmers, Value chain, Cassava, Rice, Income

## **2. Introduction**

The International Fund for Agricultural Development (IFAD) is a specialized agency of the United Nations (UNs), it was established as an international financial institution in 1977 as one of the major outcomes of the 1974 World Food Conference. It resolved that an International Fund for Agricultural Development should be established immediately to finance agricultural development projects primarily for food production in the developing countries with focus on alleviating poverty of the rural dwellers through investment in agricultural activities, as agriculture is seen in the developing countries as a sector with viable potential to move the rural poor out of poverty and with the capacity to feed the world. In sub-Saharan Africa for instance, maximizing the potential of agriculture would yield faster growth in reducing poverty than investment in other sectors, knowing the world population and the increasing demand, as

population rises. The sub-Saharan Africa has enormous natural, physical and human potential, compared to the developed countries where the cost of producing food is becoming high and land is scarce. With the magnitude of untapped resources in sub-Saharan Africa, the focus of the international community (Agricultural finance donors) has shifted from food aid to developing the capacity of the numerous smallholder farmers to increase their productivity (R.N Mgbenka & E.N Mbah, 2016). Africa has large expanse of land and with enough resources, agriculture would set a new pace for Africa's growth and development. The IFAD intervention maximizes the potential of smallholder farmers by exposing them to opportunities through inputs support, market access and services that would increase their farming yield, build their human capacity and consequently increase their income. Through low-interest loans and grants, IFAD works with governments to develop and finance programmes and projects that enable rural poor people to overcome poverty. Since starting operations in 1978, IFAD has invested US\$14.8 billion in over 900 projects and programmes that have reached some 400 million poor rural people. Governments and other financing sources in donor countries, including project participants, contributed US\$12.2 billion, and multilateral, bilateral and other donors provided approximately another US\$9.6 billion in co-financing. This represents a total investment of about US\$21.8 billion.

The IFAD intervention in Nigeria is focused on Value Chain Development Programme (VCDP) because of the challenges faced by smallholder farmers such as low productivity, poor access to market, poor processing technology, lack of adequate information, high costs of farm inputs, inadequate credit system, the vicious cycle of poverty and the recent challenge which has seemed formidable; climate change. The partnership between the International Fund for Agricultural Development and the Federal Government of Nigeria is focused on cassava and rice smallholder farmers, knowing the potential economic value of the staple crops if every challenge is removed from planting through harvesting to consumption. Also, to achieve Nigeria's Agricultural Transformation Agenda which aims to increase production, reduce food imports and provide millions of new jobs for young people; the potential of agriculture needs to be adequately harnessed since the sector is seen as an alternative to the oil dependent economy that has not been able to deliver the country from economic, social and other challenges be-devilling the nation. Over 80% of the total farming population in Nigeria are smallholder farmers cultivating less than 5 hectares in the rural areas producing about 95% of the total national output, yet poverty still remains a rural phenomenon with two-thirds of the total population considered poor.

The Value Chain Development Programme is a development initiative that was contrived for Nigeria, it is an approach to tackle the challenges faced by smallholder farmers. The six-year programme is aimed at improving cassava and rice value chains in six states in Nigeria by proffering solutions to low productivity, limited access to productive assets and inputs, paucity of opportunities for value addition, inadequate support services such as extension services and research, inability to access rural financial services, inadequate market and rural infrastructure. The IFAD/FGN adopted the value chain approach to enhance productivity, promote agro-processing, access to markets and opportunities to facilitate improved engagement of the private sector and farmers' organisations. The programme, through commodity-specific Value Chain Action Plans (VCAP) at different local governments in the participating states engages with actors along the chain – producers, processors, marketers and their farmer organisations as well as public and private institutions, service providers, policy and regulatory environment to deliver relevant and sustainable activities that would lead to gradual transformation of the sector and contribute to achieving food security, expand income-generating activities and employment opportunities.

The field research indicates that, IFAD-VCDP has contributed to the increased standard of living of smallholder farmers in the area as they all could attest to provision of farm inputs, improved market access and linkage to extension services, participation in trainings, increase in income e.t.c. For effective coordination and monitoring of the intervention, the implementing state (Ogun state) ensured every farmer belonged to a farmer organization and existing ones were recognised and adjusted to suit the *modus operandi* of the intervention.

### 3. Methods

The research was conducted in 2 out of 5 implementing LGAs of Obafemi-owode and Yewa North. The coordinates of project sites and research locations were taken with the pictures of respondents. The data were collected through quantitative survey methods (Online structured questionnaire – **Open data Kit - ODK**) was used. The structured questionnaire was pre-tested before the research commenced. Qualitative survey method was also used through Focused Group Discussions (FGDs) and Key Informant Interviews (KII). Data collected includes; Socio-economic data, productivity and income level, physical and financial assets. Market access and improved services. Besides primary data that was gathered for the research, secondary data was used such as the programme implementation manual of the IFAD Value Chain Development Programme, baseline study and mid-term review conducted by the state. The data collected were coded and analyzed using Statistical Package for Social Sciences (SPSS-Statistics IBM 20). Both qualitative and quantitative data were generated for the study and represented on charts and tables. Descriptive statistics, frequencies and cross tabulations will be used to describe the socio-economic characteristics, the productivity level, income level and assets and beneficiaries' access to market and improved services. Below is a breakdown of the 329 sample size purposively selected from the total population of 2,243.

Enterprise Unit	LGA	Population Size	Sample size	LGA	Population Size	Sample Size
Cassava Producers	<b>OBAFEMI-OWODE</b>	1162	170	<b>YEWA NORTH</b>	487	71
Processors		139	20		109	16
Marketers		9	1		15	2
Rice Producers		226	33		65	10
Processors		10	2		11	2
Marketers		5	1		5	1
<b>Total</b>			<b>1,551</b>		<b>227</b>	
<b>Population size total – n2,243. Sample size total – n329.</b>						

#### 4. RESULTS AND DISCUSSIONS

##### SOCIO – ECONOMIC CHARACTERISTICS.

##### Gender distribution of beneficiaries by Enterprise units.

This topic sheds light on the participation of Men and Women in Agriculture generally and specifically, according to the enterprise units studied. It shows that overall, Men are still more involved in Agriculture but according to the enterprise units, there are more Women in the processing and marketing chain than Men as shown as 12% and 1.52% against 1.3% and 0% respectively. This is not the case when we look at production, as 61% of Men against 23% of Women produce. However, the participation of women has increased overtime.

Table 1 - Display of gender distribution of beneficiaries by Enterprise unit

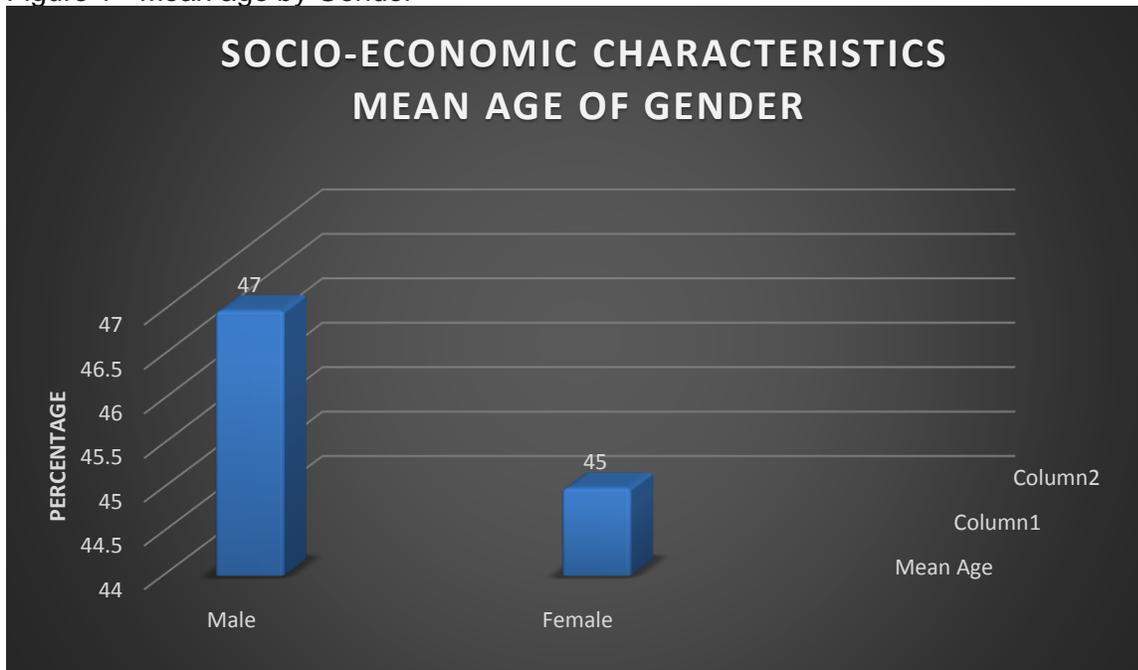
Variables	Male	Female
	%	
Production	61	23
Processing	0.3	12
Marketing	0	1.52
<b>Total</b>	<b>62%</b>	<b>38%</b>

Furthermore, a look at the marital status of the study area shows that 95.7% of the population are married and one can infer that, their Men go to the farm while majority of their Women stay at home and process these crops while handling the homefront. It should also be noted that from the large married population, one can deduce a sense of submission and respect from the Women to their Men, while the Men display their sense of responsibility by fending for the family.

##### Mean Age of Gender beneficiaries

The ages of the male beneficiaries ranges between 26 years and 68 years and the mean age is 47 years while the female beneficiaries' ages ranges between 20 years and 70 years and the mean age is 45 years. The beneficiaries are in their middle age and this signifies that they are in their active and working age where they are largely productive, thereby striving to move out of poverty and ensure a better livelihood. One can also deduce from this result that there is less participation of Youth in agriculture as it is been perceived as a tedious task – drudgery. This decline in youth participation has made the middle age (both male and female) the driving force of agriculture in the study area. It can also be deduced that these generation of farmers, grew up into the farming occupation engaged in by their parents and knowing they are in the rural communities, agriculture seems to be the viable occupation or option to move out of poverty in the locality.

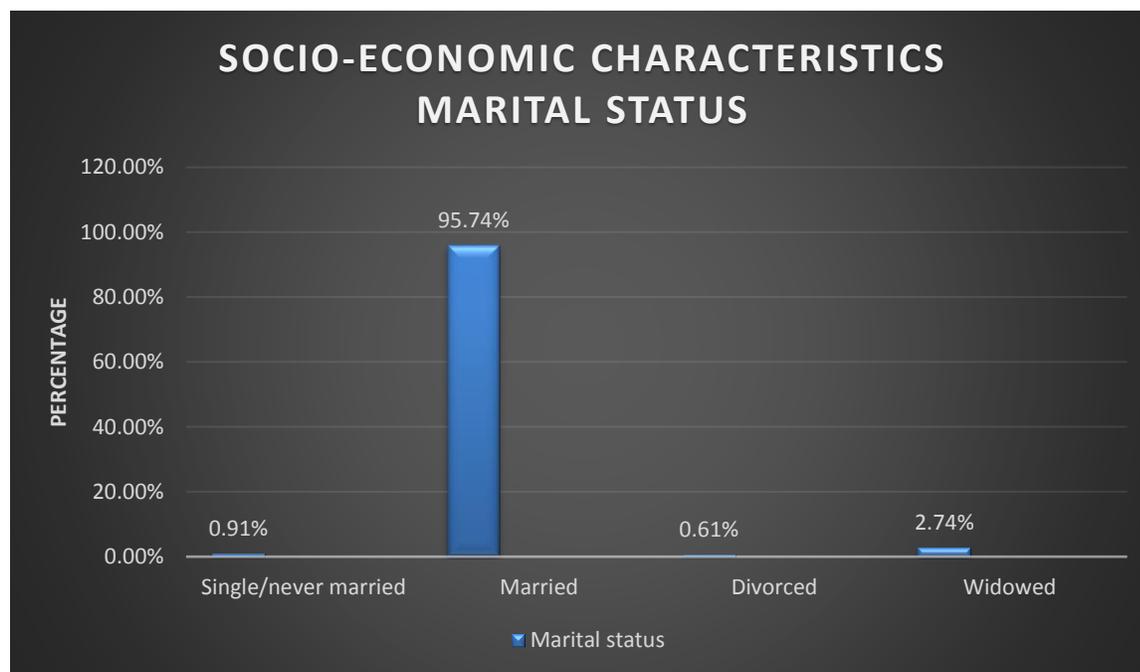
Figure 1 - Mean age by Gender



### Marital Status of the Beneficiaries

It is observed below that 95.74% of the beneficiaries are married. Farming in rural areas places premium on home help and for this, it can be said that the people get married and give birth to increase the labour force for farming activities. Also, due to their low level of education, there might be cases of early marriage as a result of unwanted pregnancies and the ladies would end up getting married as abortion is not allowed or scary for them. Early marriages might also occur because the communities are closely knit and some community dwellers with a large household might want to marry off their daughters to a neighbour whom they grew up together to relieve the burden on the family. It should be noted that the African culture place a high value on marriage as it depicts some level of responsibility and maturity.

Figure 2 – Marital status percentage distribution



### Levels of Education by Gender

The major focus here is the primary and secondary education completed by both male and female gender. The percentage of males who completed primary education is 22.5% while that of female is 15.2%. In the same vein, males with completed secondary education is 16.4% and female is 6.1%. These findings point to the need for **girl child education**, as the inclusion of women in education helps to control overpopulation, gives rise to better trained children, more of good values parading the society and poverty reduction. With more girls in school, it reduces the rate of child mortality as abortion is prevented in case of unwanted children after dropping out of school and under age 5 deaths because of malnutrition. Maternal mortality and early marriage also reduced when there are more female children/teenagers in school.

Table 2 – Display of the level of education of beneficiaries

Variables	Male	Female
	%	
No Formal Education	7.6	7
Primary Education not completed	2.4	2.4
Primary Education completed	22.5	15.2
Secondary Education not completed	8.8	6.1
Secondary Education completed	16.4	6.1
Post-secondary Education (Years)	4	1.52

On an overall scale however, it can be deduced that 22.5% and 15.2% of male and female respectively had completed primary school as their highest level of education in the study location, as against 16.4% and 6.1% male and female who completed secondary education. Post-secondary education (Polytechnics, Colleges, Universities) recorded the lowest percentages with 4 and 1.52 of male and female respectively. This necessitates a need for sensitization in the rural communities about the essence of Education and not just confine their children to been a helper in the farm. Educated youths involvement in agriculture will introduce innovative techniques and novel ideas to improve farming practices, thereby making it an attractive profession and less tedious, as initially perceived. It also brings to the fore, the need for more strategies to improve the standard of living of these farmers, so they can afford educating their children.

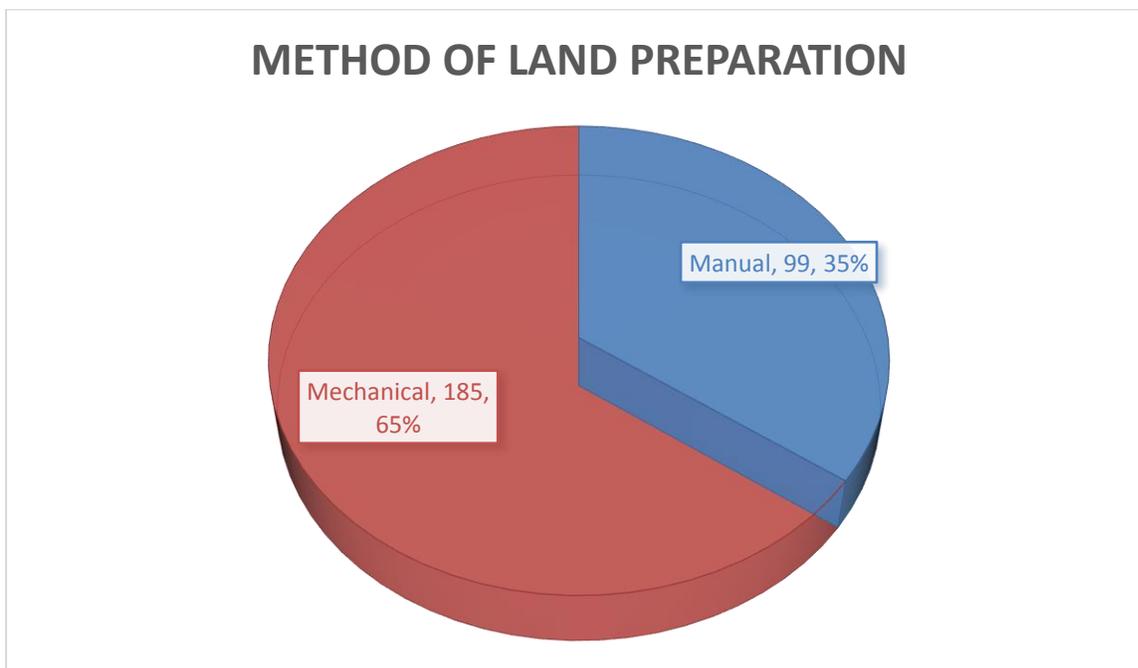
## **ANALYSIS OF THE IMPACT OF IFAD VALUE CHAIN DEVELOPMENT PROGRAMME ON THE SMALLHOLDER FARMERS.**

### **1. Assessment of productivity level of beneficiaries**

#### **Method of Land Preparation**

The techniques of land preparation are enumerated as part of input accessed by producers in the above section. From the chart below, a total of 284 producers (cassava and rice) benefitted from the intervention and it was recorded that 65% beneficiaries had access to mechanized farming. These underscores the improvement in their farming practices. It also shows that the producers saw the benefits of mechanized land preparation, as opposed to the manual land preparation being engaged in previously.

Figure 3 – Chart showing the method of land preparation adopted by smallholder farmers



## Mean Quantity of Production inputs

This section explains the inputs accessed by the beneficiaries before and during the International Fund for Agricultural Development-Value Chain Development Programme (IFAD-VCDP) intervention. The range of improved seeds/cuttings used by the beneficiaries before VCDP was 20kg and 1500kg and the mean was 366kg, during VCDP the mean was 577kg ranging from 0.6kg and 2500kg. As for fertilizer, the mean before VCDP was 128.75kg at the range of 4kg and 450kg while during VCDP, there was increased use resulting in mean of 326.05kg. The use of agrochemicals also increased during VCDP with a mean of 13.12kg at the range of 2kg and 40kg compared to before VCDP where the mean is 6.09kg. Clearing of land also recorded a difference as the mean increased from 0.926ha before VCDP to 1.725ha during VCDP and this positive change can be accrued to the use of machines. The mean of size of land prepared increased also from 0.919ha to 1.630ha during VCDP as a result of the trainings the beneficiaries received on agrochemicals application which majority of them accepted they have been applying wrongly and caused some of their plants to dry up before maturation. This is a confirmation that all the beneficiaries did not just acquire more land and acquire other assets because of increased income, but they also added knowledge and could increase their capacity to serve as Training of Trainers (ToT).

Table 3 – Display of the mean distribution of production inputs

(kg)	QuantitybeforeVCDP	Price before VCDP	Quantity during VCDP	Price duringVCDP
Improved seeds/cuttings	366	19179.23	577	42188.20
Fertilizer	128.75	18670.77	326.05	41634.86
Agrochemicals	6.09	13412.15	13.13	30422.18
Land clearing	0.926	16710.92	1.725	31827.48
Land Preparation	0.919	16120.42	1.630	30621.48

## Input Sources

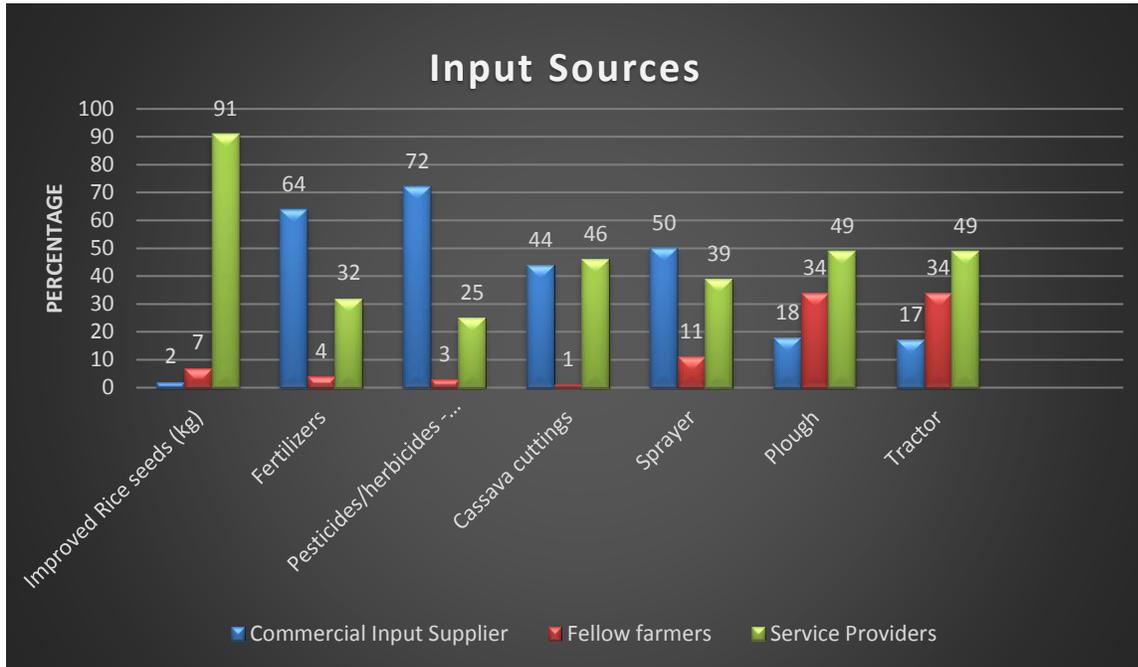
These inputs are for crop producers alone and the figure below explains how the beneficiaries accessed the inputs that increased their sales and eventual income earned.

From the figure below, it should be noted that Commercial input suppliers are private sellers of these products and they have a partnership with the IFAD-VCDP to subsidize the sales of these products to the farmers. The beneficiaries were not given the inputs for free, there is an agreed amount they pay per input and IFAD-VCDP makes up to the commercial input suppliers. Fellow farmers just as the name implies means farmers buy these inputs from each other or share. The Service providers are the IFAD-VCDP initiators. So, it is safe to say that the Commercial input suppliers and Service providers are closely related since they have a partnership agreement.

Improved rice seeds and cassava cuttings were accessed by majority of the beneficiaries from the service providers knowing their expertise in seeds and stem modifications is unparalleled as it would have gone through series of experiments to increase its yield and withstand pest encroachments and environmental hazards. Agrochemicals, fertilizer and Sprayer were

accessed directly from the suppliers. Heavy machines such as plough and tractor were accessed from the service providers more as they have to go through some process to ensure documentation and effective monitoring. The intervention was well planned, with the inclusion and consultation of private sellers (stakeholders), it showed how much interest they had in ensuring impartation on these smallholder farmers who before now had little or no access to these inputs even though it was available.

Figure 4 – Chart showing the percentage of each input by the providers



### Mean Harvest of Production Outputs

It is observed that due to the intervention, the range of cassava harvest with VCDP is 5tons and 25,000tons with a mean average of 36.5tons while before VCDP, it was 15.58tons with range of 1ton and 25tons. This same increase is recorded for rice farmers as the range of harvest before VCDP is 0.25tons and 3.5tons with a mean of 1.099tons while with VCDP, the mean is 3.616tons from a range of 0.8tons and 7tons. The increased use and accessibility of production inputs resulted in the increased tonnage harvested by the crop producers and it confirms the impact of the intervention. This increase definitely had a ripple effect on the quantity of crop processed for final consumption, generating more income across board the enterprise unit. As a result of the value addition right from planting, the consumers get to consume better food, fortified with increased nutrients.

Table 4 – Display of mean hectares and harvest of the production output

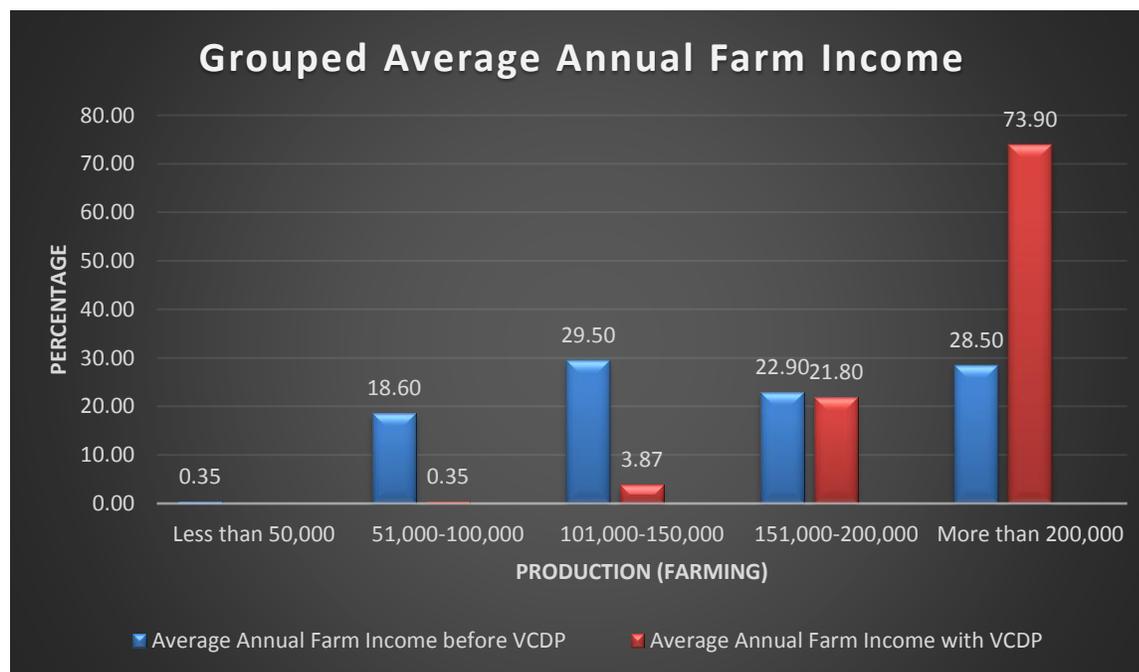
Variables	Hectare before VCDP	Harvest before VCDP	Hectare with VCDP	Harvest with VCDP
	ha	ton	ha	ton
Cassava	0.9606	15.58	1.6755	36.5
Rice	0.7442	1.099	1.5581	3.616

## 2. Evaluation of the level of farmer’s income and possession of physical assets

### Income of Beneficiaries – Crop Producers

The figure below shows the grouped average earnings by crop producers due to the inputs accessed. The intervention by the Value Chain Development Programme took effect in 2016 and from the data gathered which reflected the impact of the intervention in 2017, one can appreciate the huge difference in their average annual income where out of 284 crop producers, 73.90% beneficiaries earned more than #200,000 with VCDP intervention as against 29.50% producers who earned between #101,000 and #150,000 before the intervention. The percentage of the beneficiaries spread across all the grouped income before the intervention with 18.60%, 29.50%, 22.90% and 28.50% but after the intervention, the numbers were less spread, as over 70% of them earned over #200,000. This remarkable increase stems from the inputs accessed by the beneficiaries such as; improved cassava cuttings/rice seeds, fertilizer, other agrochemicals as well as access to land. The beneficiaries also had access to mechanized farming as opposed to manual labour they engaged in. With this, they could focus their energy on maximizing the potential impact of the machines and other improved techniques introduced to them.

Figure 5 - Chart showing average annual farm income of crop producers.



The economic value of cassava crop is quite high looking at the various foods it is processed into. It can be processed to about 12 different foods, which explains why we have majority of the farmers in the state planting cassava and making ends meet through its yield and typifies value addition on a large scale.

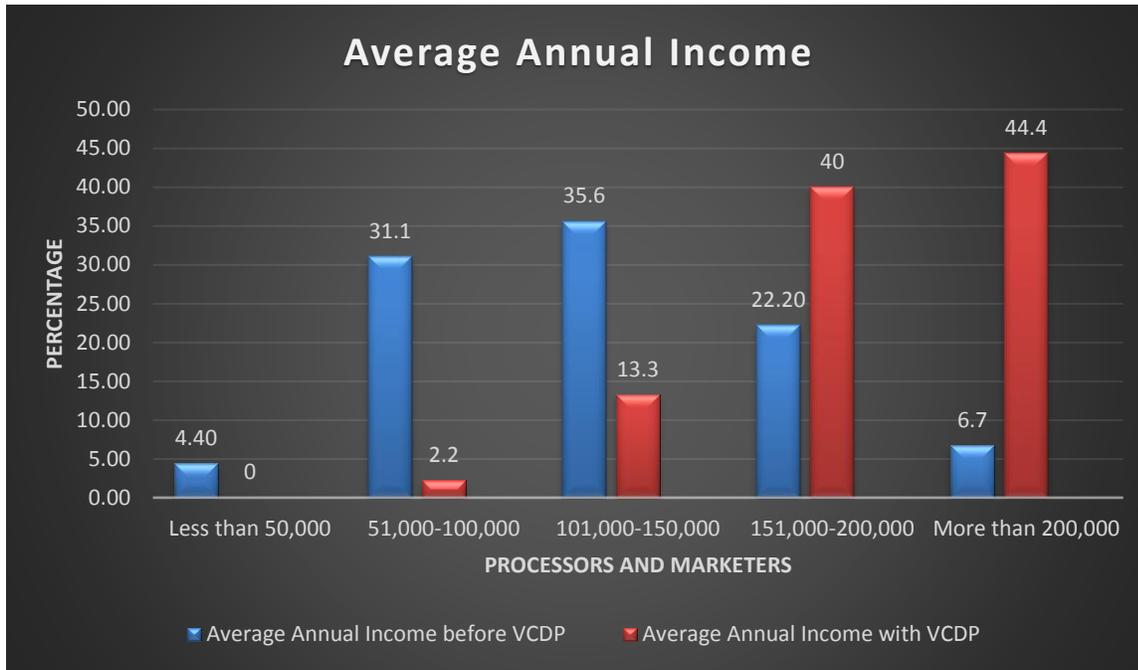
These beneficiaries, besides the financial upliftment recorded, their exposure to the use of those inputs definitely increased their human capacity and knowledge as some of them didn't apply these favourable techniques initially because of their traditional beliefs and maybe because of financial constraint. The state is predominantly agrarian population, and so the programme extensively leveraged on this in achieving its aim and also contribute their quota to improving the livelihood of these smallholder farmers.

#### Income of Beneficiaries – Processors and Marketers

It should be noted that more than 90% of the farmers are crop producers. However, due to focus of the intervention on value chain addition, these farmers were catered for in their different enterprise units, even though there was still more focus on the producers' enterprise unit due to the population and importance.

From the figure below, one could observe the impact of the intervention on the average annual income as the percentage of beneficiaries with higher income increased to 44.4% at more than #200,000 as against 36.6% beneficiaries at #101,000 - #150,000 before the intervention in the processing and marketing enterprise unit. With access to improved processing techniques such as 'False bottom technique' for rice processors, rice and cassava processing mill with modern equipment, we could see a positive change. Access to market and availability of reliable off-takers also increased the sales of marketers and consequently their income. Access to market information through Agricultural Market Information System (AMIS) is also a considerable factor in the increase in income, as the beneficiaries are aware of prevailing market issues or opportunities at the right time. With continued intervention, maintenance, practice and improvement in garnered knowledge; the standard of living of these smallholder farmers would continue to increase.

Figure 6 – Chart showing average annual income of processors and marketers

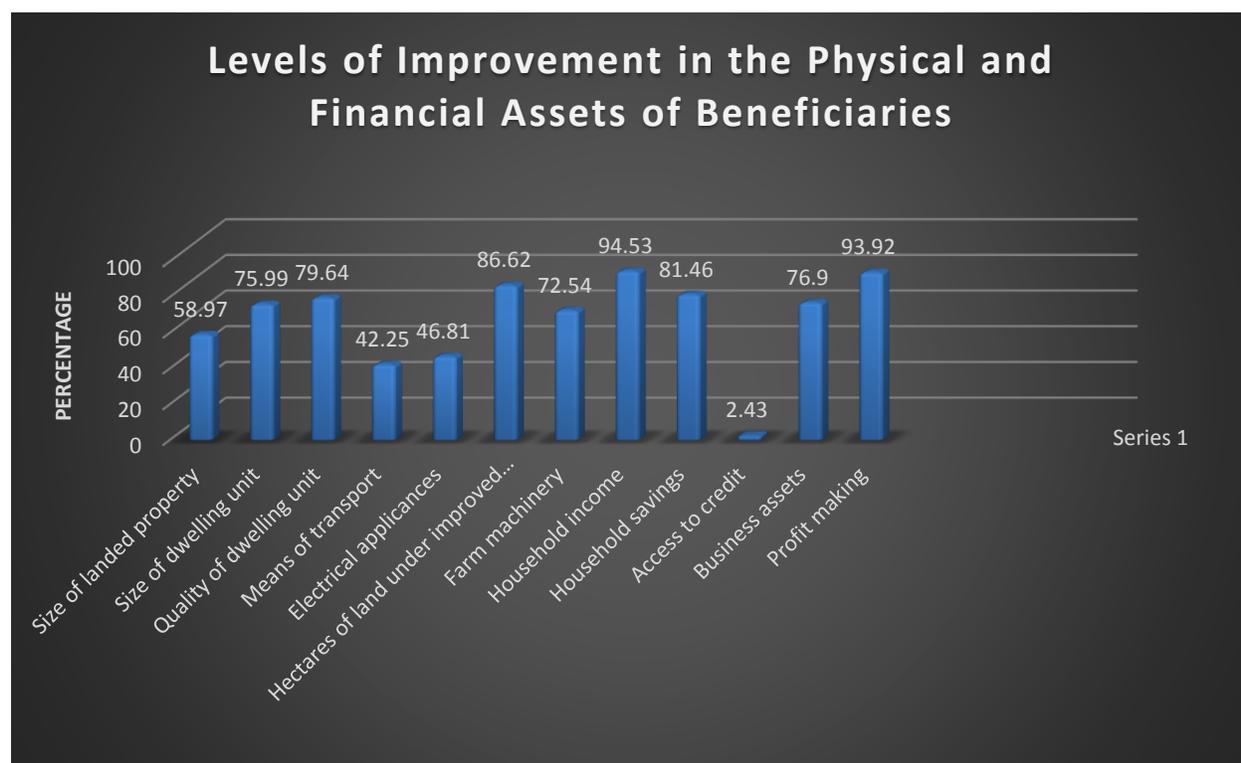


#### Impact of the programme on the Physical and Financial Assets of Beneficiaries.

The illustrations below explain how much the value chain development programme has impacted on the beneficiaries looking at the variables outlining their assets and physical improvements. With a total sample size of 329 across the crop enterprise (Cassava and Rice) and enterprise unit (Producers, Processors and Marketers), it is seen here that the beneficiaries had over 70% improvement in their physical and financial assets as a result of the intervention, except for; Means of transport, Electrical appliances and Access to credit which had 42.25%, 46.81% and 2.43% respectively in the variables outlining the impact on the beneficiaries. Acquiring assets isn't as easy as inputs been accessed to improve farming activities, therefore making assets acquisition quite a luxury for some, as needs are considered on a scale of preference. Also, access to credit isn't an asset to be acquired and the programme did not directly give loans, but linked the farmers with microfinance institutions to apply for loans and have agreement with the financial lenders but the issue of collateral was a constrain as many of them couldn't meet the requirement of the institutions, thereby depriving them access to credit and giving such a low number of beneficiaries of loans.

It is also worthy of note that beneficiaries of Hectares under land improved management and Farm machinery were only producers in the crop enterprise as the variables are not applicable to processors and marketers. Out of a total 284 sample size for the producers, one could also observe that over 70% of them benefitted from these mechanized farming techniques, even though they were not directly funded to access these inputs. These results, show overall that there were immense benefits for these farmers in their respective value chain.

Figure 7 – Chart showing the level of improvement in the physical and financial assets of beneficiaries



### 3. Beneficiaries' access to market and improved services.

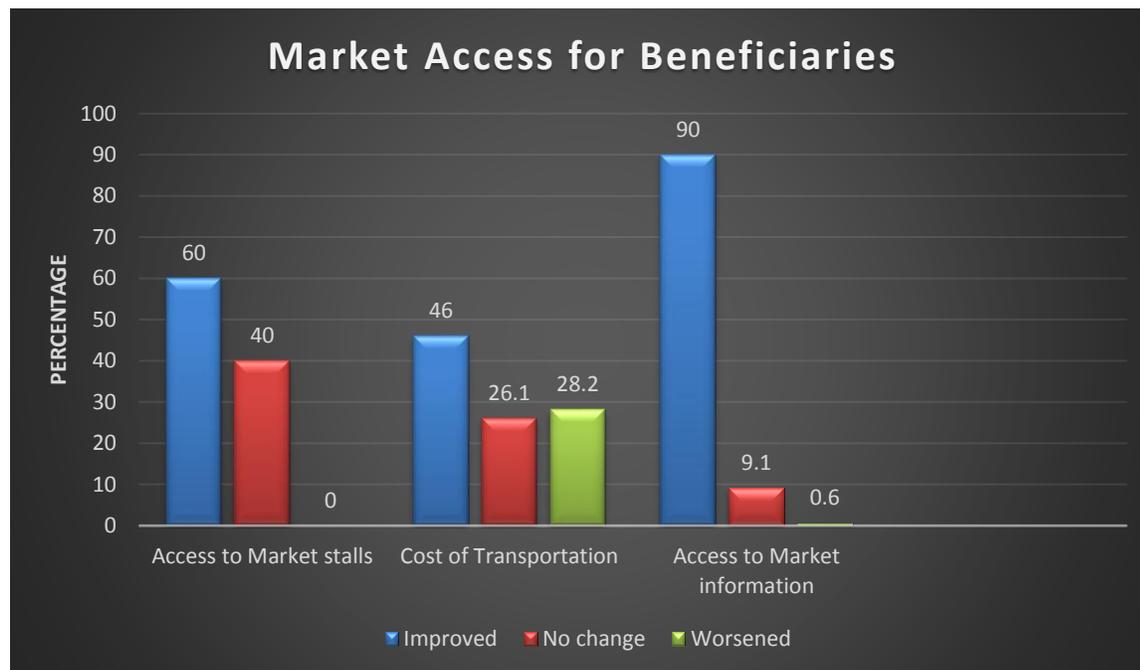
#### Beneficiaries' Access to Market

The figure below reveals that the beneficiaries had a significant improvement in their access to market. Access to market stalls applies only to marketers and we could see that 60% of the beneficiaries confirmed it as they had access to market stalls as new markets were constructed for them close to their community where they could still meet demand and they don't necessarily have to travel few kilometers to the main community market. This has eased their livelihood. Having improved market access means it would have a ripple effect on cost of transportation as it makes it easier to reach the target market without much cost to bear and also helps to save. Their income as also increased that they could better afford the cost of transportation.

Also, 90% of the beneficiaries have improved access to market information, being part of a farmer organization where information flows and ideas are being shared during meetings. The heads of the farmer organizations have more access to information, being the contact person in the communities with the IFAD-VCDP extension agents in the local governments and therefore reaching out to their members frequently. In addition, the Agricultural Market Information

System (AMIS) initiated by the programme also increased their access to information about current issues in the market such as price, weather reports on planting period, availability of off-takers, e.t.c. Through the AMIS, beneficiaries get instant messages applicable to their value chain activities and this has increased their awareness on prevailing information in the market.

Figure 8 – Chart showing the market access for beneficiaries

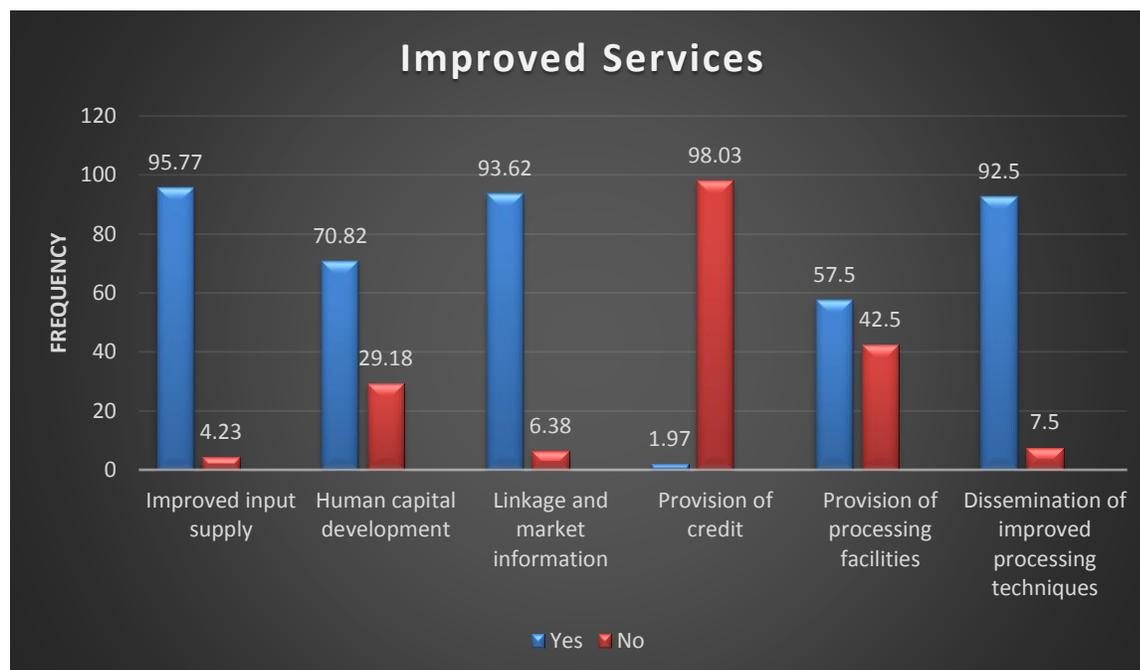


### Beneficiaries' Access to Improved Services

It is observed in the figure below that the beneficiaries in the enterprise units got access to services that invariably increased their earnings and also added value to them in terms of human capacity. The intervention recorded a huge success, not only in providing goods but also services provided to increase human capital development where they were not only given the high yield crop species but also trained on stem modification and application of chemicals. A well-equipped Cassava and Rice processing mill also availed them the opportunity of capacity building as they operate these machines themselves. "False Bottom Technique" is a rice processing technique majority of rice processors were trained on which they accrued their improved rice quality and increased orders from off-taker to.

Furthermore, provision of credit has a significantly negative response and as earlier stated, it is as a result of the beneficiaries not been able to meet the requirements of financial institutions. As it implies, the provision of processing facilities and improved processing techniques applies only to processors and it's obvious that from a sample size of 40 deduced from the total processors population of 269 in all study areas, more than half of the beneficiaries are inclusive of these services which further emphasizes the impact of the intervention on all enterprise units.

Figure 9 – Chart showing the responses of beneficiaries to services accessed through the VCDP intervention



## Conclusion

The previous sections have given an overview of the impact of the contrived IFAD-VCDP intervention on the smallholder farmers with special focus on cassava and rice farmers value chains. No doubt, the programme has empowered these farmers and made unprecedented impact on Nigeria's agricultural productivity. For instance, a report was released by the Punch Newspaper on June 27; 2018, that the International Fertilizer Development Centre (IFDC) in collaboration with the Food and Agricultural Organisation (FAO) and other international donors, revealed that fertilizer uptake by Nigerian farmers increased by 63% in 2017, rising from 959,364 metric tonnes in 2016 to 1,564,816 metric tonnes. To accrue the reason for this increase to IFAD alone would seem selfish and insensitive as there are other agencies helping farmers, but the over 12,000 farmers IFAD has helped over the years are indeed inclusive of the Nigerian farmers. This news is an indicator that Nigeria is on the path of Agricultural transformation – which was one of the aims the FGN set out with IFAD at the formation of the partnership.

Furthermore, the productivity and income level of the farmers has increased and indicators are seen in the increased adoption of mechanised farming recorded in the average usage of production input which was more than 50% increase in all inputs accessed. The increased input usage also manifested in the tonnes harvested with over 50% increase. The increase in production by crop producers, increase in crop quantity processed and increase in sales by marketers, earned these farmer beneficiaries more income and the impact was revealed in their ability to own more assets and improvement in standard of living such as household income, savings, business assets and quality of standard of living.

It should also be noted that market access serves as the output of every input a farmer uses in the course of planting, in essence, a lot of opportunities need to be created to fit the dynamism of the market. These opportunities should be created having youth participation in mind, as there are not many of them in the enterprise units. If more opportunities created are youth oriented, there is high likelihood of incursion of youths in agriculture which is an added resource in driving sales and achieving sustainable agriculture.

Lastly, the presence of farmer organisations in the rural areas has immensely benefitted their members and extensively served as middlemen between the implementers and the beneficiaries in specific capacities.

## **Recomendation**

Access.

Access to finance, credit and storage facilities is essential for farmers. Access to small loans gives farmers opportunities to rely on another finance source apart from their income, and hence, reduce dependence on income. It would increase their saving capacity, help acquire more assets and enable them meet more needs. Accessing loans by smallholder farmers means that all extreme financial conditions should be removed or made favourable so the institutions can service the low-income earners according to their capability. Provision of storage facilities should be enhanced. It makes the farmers acquire more land, knowing with their access to inputs and farming practices learnt that would guide them through to harvesting, they are sure of little or no post-harvest wastage of their crops before it is purchased.

A feature that is well practiced in the food secure nations is a government intervention where farmers are sponsored to produce surplus and after harvest, the government collects and stores for times of food shortages when it would normally be expensive, the government in turn release those food to ensure surplus in the market when there is scarcity, food would then be sold at the cheap rate it used to be sold. These mechanism by the government enriches the farmers at the time of the sponsorship because they produce on a large scale and sell to the government which ensures that food, a basic need is always made available and accessible for all. In Nigeria, we experience shortages and costly food prices. With the adoption of this initiative, there will be constant availability of food.

Public-Private sector investment.

The government should form more partnerships with private sectors to build rural infrastructures, engage in agricultural research and extension services to engender improved knowledge of sustainable agricultural practices that would impact on the farmers. With better infrastructures in rural areas and consistent extension services, it would increase youth participation in agriculture and shift the age range of active farmers from the middle age to teen/adolescent age, thereby engendering new ideas and innovations from the younger generation. Youth participation increases knowledge of agricultural value chain which provides business opportunities for actors in the enterprise units.

Record keeping and access to market information.

One important step in becoming an efficient grower or a “crop specialist” is keeping good records. By keeping track of labour, inputs on the farm, stages of production, smallholder farmers can better understand the costs involved in producing their crops. Through the

knowledge of costs of production, a farmer can make better-informed decisions, such as calculating selling prices more precisely.

Sustainability.

There should be sustainability plan in place to ensure continuity of the programme after the completion of VCDP intervention. With consistent training, a model of Training of Trainers (ToT) would be in place so they can facilitate training of new farmers and continue to impact knowledge.

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