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RESOURCE USE EFFICIENCY ON CASSAVA PRODUCTION IN ABIA STATE, NIGERIA: IMPLICATION FOR AGRI-FOOD MARKETING

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ABSTRACT

Food security is a global challenge and is further exacerbated by inefficiency in resource use in agricultural production. This affects the ability of farming households to commercialize their net surpluses. Accordingly, improved efficiency will enable agric-marketing to optimize its full function to create utilities for consumers. The goal of this study is to investigate the role of resource use efficiency on commercialization and food security of cassava farmers in Abia state. The study therefore identified determinants and levels of commercialization among farming households based on resource use. The study used multistage sampling technique in the selection of location and 90 respondents. Analytically, descriptive statistics, marginal return of efficiency (efficiency ratio), multiple regression model, and food security index were used. Result showed that the marginal variable products are less than their prices (MVP<MFC). This indicated an inefficient utilization of resources used in cassava production. Again, inputs, adoption of modern technology, labour, and household size returned as significant factors that influence resource use efficiency; the result of the food security status shows that farmers who are food insecure are greater in number than their counterparts who were food secure, with a general food insecurity incidence at 0.61. In view of this, the study recommended that government and stakeholders should come up with new initiatives and policies that will transform the smallholders from consistence-oriented to market-oriented production; training of farmers on the adoption of modern farming technologies to boost production and food security and marketable surpluses.

Keywords: Cassava, efficiency, food security, marketing, resource use

INTRODUCTION

In the face of worsening poverty situation, growing inequalities and food insecurity in the world, the United Nations, estimated that in 2050, the world will need to increase food production by more than 70% to feed its growing population. This calls for integrated efforts in rethinking of strategies and practices that are sustainable and efficient. Admittedly,

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agriculture, marketing, distribution, and other sectors are important vehicles in achieving post development agenda especially food security. Although economies of most countries witnessed increase progress in recent time, but against popular expectation, these growths were triggered by the service sector and have left unresolved the central issue of how effective the agricultural sector has performed. For instance, Table 1 highlighted the sectoral contributions to Nigeria economy and paints a worrisome picture of underperformance in the agricultural sector. This has severe implication on how effectively marketing can meet customer food expectation.

Marketing serves as a sort of a gearbox, which makes a profitable connection between demand and supply for products. According to Andrew, Jonathan, and Colin (2008), marketing systems play a decisive role in vibrant economies as mechanisms for both exchange (necessary for specialization and hence leads to higher economic growth) functions and the proper coordination of the exchange (through price signals) which reflect and shape producer and consumer incentives in supply and demand interaction. If small-scale domestic producers are to take advantage of the projected domestic demand growth, then marketing systems in the supply chains linking producers to consumers must be able to support low-cost production and timely delivery of the product. This is because of severe implication, such as levels of customer satisfaction, producer's profits, and overall welfare of the society (Beierlein, Schneeberger, & Osburn, 2014).

Table 1: Sectoral Contributions to GDP Before and After GDP Rebasing

Sectors	Before Rebasing	After Rebasing
Agricultural sector	35	22
Service sector	29	52
Telecommunication (specific Industry)	0.9	8.7
Manufacturing	1.9	6.8
Oil and Gas sector	32.4	14.4

Sources: National Bureau of Statistics, 2014

Today, Nigeria face increased cost in meeting domestic food due in part to food scarcity occasioned by convergence of economic, social, and political challenges. This emerging scenario has engendered a bloat in the percentage of food insecure households, especially those residents in the rural areas where the effect of government policies is rarely felt and as such inequalities will continue to widen. Food scarcity which affects effective marketing is constrained by the gap in food supply and demand. For instance, despite the productive capacity and advantage of Nigeria in cassava production, great imbalance still exists in the demand and supply of cassava. This affects both domestics and industrial utilizations of cassava (Olomola, 2007) and by extension capacity of marketing in the marketing system to address issues of availability, price, and distribution of this important product. The gap is predicated on the fact that about 80% of farming holdings in Nigeria are poor resource farming (Nwajiuba, 2013). This limits their ability to compete favourably with other countries that have attained the desired allocative/economic and technical efficiency in production.

Inefficiency is the bane of Nigeria agricultural development. Many studies, such as Omonona (2009); Nweke, Spender, and Lynam (2002); Nwajiuba (2013); Obasi and Agu (2000), have identified low productivity in agricultural production caused by inefficient use of resources as the challenge of Nigeria agriculture competitiveness and marketing of agricultural produces. According to Bamidele, Babatunde, and Rasheed (2008), Nigeria agricultural problem centres on efficiency with which farmers use resources on their farm. It also borders on how those factors that explain farm efficiency could be addressed to improve both production and creation of form, place, time and possession utilities.

Efficiency is an important factor of productivity in growth as well as stability of production especially in developing economies (Hazarika & Subramanian, 1999). Efficiency in resource use has become a very significant factor in increasing agricultural productivity (Ali & Chaudry, 1990; Bravo-Ureta & Pinheiro, 1993; Ashok, Ali, & Shah, 1995; Seyoum, Battase, & Flemming, 1998; Abay, Miran, & Gunden, 2004; Chavas, Petrie, & Roth, 2005). The scope of agricultural marketing by implication can be expanded and sustained through efficient use of resources (Udoh, 2000) for improve productivity.

The development of efficient market must start with the management of factor endowment and efficient resource utilization. Nigeria has a deep and reflective history with cassava production as the largest producer of cassava in the world; but not so encouraging one with utilization and value chain to achieve global market competitiveness and food security due to poor agricultural marketing capabilities. The concern of marketing is to ensure that there is availability of products to meet consumer demand. This is possible to the extent that resources are used in an efficient and effective manner for the overall welfare of the society and economic developments. The interest on resource use efficiency and food security is predicted on its role also in enhanced societal welfare (Okunmadena, 2001). The need to reverse the dwindling agricultural production and empower agric-marketing to cater for increasing demand for food security and position Nigeria for global competitiveness has necessitated the reconsideration of the issue of efficiency in agricultural production. The goal of this article is to investigate the influence of resource use efficiency on food security status of farmers at difference levels of commercialization. Also, to identify the major factors that influence resource use efficiency in the study area.

LITERATURE REVIEW

From an economic perspective, humans are rational being. They make prudent and logical decisions that guarantee the best outcome. This is the case with household farming decision, which is made with understanding of exchange to obtain outcomes that benefit the family given that the farmer cannot provide everything he needs. Commercialization is a household marketing decision which is based on rational choice model. It provides the framework to understand farmer's behaviour and attitude toward marketing of surplus outputs. This model is part of the expanded view of theory of planned behaviour of Ajzen (1988, 1991) focusing on self-interest and rational choice-based. Commercialization is that proportion of agricultural production that is marketed based on a farmer's rational

choice decision (Govereh, Jayne, & Nyoro, 1999). According to these researchers, agricultural commercialization aims to bring about a shift from production for solely domestic consumption to production dominantly market-oriented. In line with the above definitions, Sokoni (2007) perceive commercialization of smallholder production as "a process involving the transformation from production for household subsistence to production for the market." The concomitant realization is that what is marketed as surplus is based on the household farming decision

Hazell, Poulton, Wiggins, and Doward (2007) averred that most definitions refer to agricultural commercialization as "the degree of participation in the output markets with the focus very much on cash incomes." However, there are some writers who attach profit motive as an integral part of agricultural commercialization. Among others, Pingali and Rosegrant (1995) noted that agricultural commercialization goes beyond just selling in the output market. They claim that a household's marketing decisions, both in the output and input choice, should be based on profit maximization. They further averred that commercialization does not only occur by the reorientation of agriculture to highly valued cash crops but it could also occur by reorienting it to primary food crops. From the view point of Von Braun (1994), commercialization of subsistence agriculture takes many forms. They state that: "Commercialization can occur on the output side of production with increased marketed surplus, but it can also occur on the input side with increased use of purchased inputs. This implies that the net surplus of farmers is a function of efficiency with which the farmers engage in farming production and other agricultural activities to produce beyond subsistence level of production for market orientation. In this instance, we can differentiate three levels of market orientation according to Moti, Gebremedhin and Hoekstra (2009)—subsistence systems, semicommercial systems, and commercial systems based on the farm households' objective for producing a certain crop, their source of inputs, their product mix, and income sources. In these cases, the level of efficiency with resource use in farming will determine the level of surpluses the farm households will present to the market for commercialization.

Commercialization brings multifaceted level of benefits to both the farming households and rural economy. For instance, it plays a role in increasing income and stimulating rural growth (Von Braun and Kennedy, 1994), other benefits highlighted by several authors include employment opportunities, higher agricultural productivity, direct income benefit for employees and employers, expanding food supply, consumption and nutrition (Govereh et al., 1999; Leavy & Poulton, 2007; Pender & Dawit, 2007). However, commercialization is constrained by associated risk of efficient market and high cost in the food marketing system according to Govereh et al. (1999). Therefore, the outcomes of commercialization are dependent on whether the market is efficient. If efficient markets do exist, then commercialization leads to separation of production from consumption, supporting food diversity and overall stability at household level and increased food security and improved allocative efficiency at macro level (Fafchamps, 2005; Bernard & Gabre-Madhin, 2007). However, if markets remain inefficient and transaction costs are high, smallholders fail to exploit the blessings of commercialization.

Based on the above line of reasoning, small holder farming households' capabilities to engage in commercial agriculture is constrained by the convergence of factors among which is inefficiency and other exogenous factors, such as availability of new technologies, infrastructure, market access, and policies. Therefore, this study is encouraged to test the hypotheses: H_1: there is significant difference between cassava production, commercialization, and food security of farmers; H_2: there is significant relationship between socioeconomic profile of cassava farmers and resource used.

METHODOLOGY

Abia State is the study area for this study. The state is located within the southeastern Nigeria and lies between longitude 04° 45¢ and 06° 07¢ North and Latitude 07° 00¢ and 08° 10¢ East. Abia state is bounded by Imo state at the western border; Ebonyi and Enugu states at the North; Cross River and Akwa-Ibom states at the East and Rivers state at the south. Its population stood at about 2.883.999 persons with a relatively high density at 580 persons per square kilometer (National Population Commission, 2007). Abia state is divided into administrative blocks called local government areas, which is further grouped into three agricultural zones namely, Ohafia, Umuahia, and Aba zones. In terms of occupation, about 70% of Abians are farmers and have the potential to produce agricultural produce and products, such as palm oil, cassava, vegetables, palm kernel, yam, rice, and so on, and also engage in food processing (Abia State Government, 1992). The presence of a good number of agricultural institutions, such as National Root Crops Research institute, Michael Okpara University of Agriculture, Umudike, Faculty of Agriculture, Abia State University, Uturu, in the state guarantees an unquantifiable advantage and adds to their capacity in agricultural production.

Data for the study consist mainly of primary data, which were obtained with pretested and structured questionnaire. It includes data on socioeconomic characteristics: age, education, gender, price, household size, farm size, labour, inputs, and so on. For this purpose, a multistage sampling technique was used. In the first stage, two local government areas were selected from each of the three agricultural zones of the state. The second stage involved the selection of two villages purposively from each local government areas. Then, the final stage involved a careful selection of 20 cassava farmers from each of the selected villages in each of the zones. This aggregated 90 respondents for the study.
In terms of analytical tools, socioeconomic characteristics of cassava farmers were realized with descriptive statistics, whereas multiple regression (OLS) models were tried to estimate the factors that determine resource use efficiency. The implicit form of the production function is expressed as:

$Y=f(X_1,X_2,X_3,X_4,X_5,X_6,X_7,X_8\ldots+e_i$……………………………….. (1)

where:
Y= output of cassava (kg)
X_1=Age (years)
X_2=Gender

X_3=Education (years)
X_4=Cost of inputs (Naira)
X_5=Household size
X_6=Adoption of modern farming technologies (adapt=1, otherwise=0)
X_7=Income
X_8=Extension awareness/Visitation (aware=1, otherwise=0)
X_9=Farm size (ha)
X_{10}=Access to credit (access=1, otherwise=0)
X_{11}=Association/Union (membership=1, otherwise=0)
X_{12}=Hire labour (hire labour=1, otherwise=0)
e_i=error term

This methodology is consistent with Daniel, Sanda, and Adebayo (2010) and Shehu, Tashikalma, and Gabdo (2007), who used the same method in their studies.

The Marginal Return of Resource utilization was used to ascertain the resource use efficiency among cassava farmer. This is recourse to the fact that value of the marginal physical product (MVP) = marginal factor cost (MFC).

From estimated regression results of linear production, the values of MPP and MVP for regression used were estimated as follows:

$$MPP_i = \frac{dy}{dx} = b_i \frac{\bar{y}_i}{\bar{x}_i} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

MVPxi = MPPxiPy

where MPPi = marginal physical product of input Xi (MVPxi)
MVPxi = marginal value product input xi
Xi = Arithmetic mean value output
Py = unit price of the output.
bi = the regression coefficient of the ith input
xi = quantity of ith input used, following Uchegbu (2001).

In this study, the formula below following Orebiyi, Olorunsanya, Babatunde, and Fatore (2006), Daniel *et al.*, (2010) and Goni and Baba (2007) was used to determine the efficiency of resource use:

$$r = \frac{MVPxi}{MFC} \quad \text{---------- (3)}$$

where
MVP= Marginal value product of ith input and it is given as marginal physical product (MPP) and unit price of the output {MPPXi (PY)}
MFC= Marginal factor cost of ith input or resources.
MPPXi = Marginal physical product of the ith resources

PY = Output price per unit.
r= Efficiency ratio (ratio of MVP to MFC)

The decision rules in determining the resource use efficiency ratio are as follows:
If, r=1, it implies that cassava farmers are efficient in the use of the resource.
r< 1, implies that cassava farmers are inefficient (over utilizing resources) in resource use
r>1, implies that cassava farmers are inefficient (under-utilizing resources)

The above decision criterion is consistent with the Kay (1981), Goni and Baba (2007), and Daniel *et al*. (2010) who used the same approach in their studies on resource use efficiency.

Food Security Index of Cassava Households

The households were classified into food secure and food insecure households using food security index, which was used to establish the food security status of various households (Omonona & Agoi, 2007). It is given by;

Fi = Per capita food expenditure for the ith household/ 2/3 mean per capita food expenditure of all households ……..(4)

where Fi= food security index
when Fi ≥ 1= food secure ith household
Fi ≤1= food insecure ith household.

A food-secure household is therefore that whose per capita monthly food expenditure fall above or is equal to two thirds of the mean per capita food expenditure. On the other hand, a food-insecure household is that whose per capita food expenditure falls below two-third of the mean monthly per capita food expenditure (Omonoma & Agoi, 2007; Arene & Anyaeji, 2010).

RESULTS AND DISCUSSIONS

The marginal physical product (MPP) for each of the production inputs was estimated from the regression coefficient of the stochastic frontier production function. This was used in determining the value of the marginal products (MVPs) at the geometric mean of inputs following Okon and Enete (2009) and Daniel *et al*. (2010). These form the basis for the result presented in Table 2. Within the limits of statistical reliability, these values provide a measure of the efficiency of resource use of the production inputs prevailing on the average, in cassava production in the study area. The result indicates that all the MVP are less than their prices (MVP<MFC). This indicated an inefficient utilization of resources used in the production of cassava. From an economic perspective, allocative efficiency is achieved at the point where the farm is at equilibrium with the value of MVP

to the prices of resources used or is able to achieve profit using same factors, but, in the case of the factors used above, the reverse is the case. All the resources are overused. To correct this imbalance, adjustment could be made in terms of quantity of factor inputs used and cost in the production process to restore r=1 (Goni & Baba, 2007). The result generally showed that cassava farmers are inefficient in the allocation and utilization of available resource, despite high cost of most productive resources, such as labour. This result is consistent with the findings of Emakaro and Ekunwe (2009), which had similar outcomes. This affects commercialization outcome and availability of food in the marketing system. The choice of farming households to move from subsistence level of market orientation based on the finding of this result hinders semicommercial system or commercial system. The goal of agricultural marketing to make form, place, time, and possession utility is hindered further due to high level of inefficiency in resource allocation and utilization.

Table 2: The Level of Efficiency of the Factors used in the Production of Cassava

Variables	MPP	MFC (#)	MVP (#)	R	Inference
Variable inputs(kg)	0.001	350	0.035	0.0001	Over-utilized
Farm size(ha)	-3.146	3500	-110.11	-0.03146	Grossly over-utilized
Labour (p/day)	18.982	900	664.37	0.738	Over-utilized

Source: Field survey, 2016

NB: The price of output used for this analysis was based on the current farm gate price of 35/kg of cassava.

Analysis of the Determinants of Resource Use Efficiency

The estimated result of the determinants of cassava resource use efficiency is presented in Table 3. The result shows that linear function had the best fit, hence its choice as the lead equation. From the result, the following variables were significant with positive signs Inputs (X_4), Adoption of Modern Farming Technology (X_6), Household size (X_5), and labour (X_{12}). This is in line with a priori expectation. This implies that as these variables increase, the output of cassava also increases.

The coefficient of household (family labour) was found to be significant at 10% level and positively related to hired labour (5%) which also has a positive sign. This indicates that the greater the number of hired labour used in the production of cassava with every available resource in place, the higher the output per production. This implies that an increase in a unit of these labours will lead to an increase in output by 32.39% and 19%, respectively. The higher percentage of family labour over hired labour could be attributed to the high cost of hiring farm labour in Abia state. This finding supports the one conducted by a past researcher who had a similar outcome, such as Okike (2000) and Umoh (2006). In line with a priori expectation, large household sizes are virtually seen as advantage in terms of contributing to labour and as such, perceived as a source of cost reduction. Although this outcome is in disagreement with the findings of Nwachukwu and Onyenweaku (2007) who opined that large household sizes impose pressure on family income. That

notwithstanding, the importance of labour (family and hired) in our cultural setting that is predominantly manual cannot be over emphasized; this is in contrast with advanced countries that are involved in mechanized farming. Human power plays a crucial role in virtually all farming activities (Umoh, 2006).

Adoption of modern farming technology and inputs (fixed and variable inputs used in production of cassava) had a positive sign and was significant at 1% level, respectively. This is in line with *a priori* expectation. This showed a stronger relationship with output and signifies that for every 1 unit of improved input added into the production of cassava, the output will yield more than 22.12% returns and 100%, respectively. This has implication for improve yield, productivity, and reduced cost of hiring labour (input). The coefficient of farmers' age indicated a negative significant. This implies an inverse relationship with output. The negative relationship could imply that although older farmers are more risk averse, younger ones are more dynamic, with regard to the adoption of innovation that would enhance their productivity (Okon & Enete, 2009), with modern farming technology. Age, in this study is used also as a proxy for farmers' experience. It shows that the higher a person's age, the more experience the farmer in the production system and knowledge of risk management in farming than inexperienced farmers; however, from the findings as indicated by the negative coefficient of age of the farmers, age has no direct bearing. This result implies that in today's modern farming business, what counts is not mainly experience of the farmer as proxied by his age but the level of adoption of modern technologies and right resources. In fact, in this age of smart agriculture, age is not important but farmers' ability to adoption modern tools of farming that improve efficiency and productivity.

Table 3: Regression Analysis to Determine Resource Use Efficiency

Variables	Linear	Exponential	Double log	Semi-log
Constant	6.427	2.717	-.070	-105.659
	(.347)	(6.768)***	(-.055)	(-1.729)*
Age	-.439	-.008	-.511	-28.146
	(-1.906)*	(-1.640)	(-2.281)*	(-2.597)*
Gender	3.105	.125	.163	4.740
	(.585)	(1.088)	(1.551)	(.933)
Education	.575	-.012	-.155	1.583
	(.760)	(-.743)	(-1.159)	(.244)
Inputs	.001	2.03E-005	.531	22.356
	(6.397)***	(6.604)***	(8.642)***	(7.532)***
Household size	3.239 (2.313)*	.084 (2.757)**	.435 (2.682)**	16.273 (2.073)*
Adoption of modern farming technology	22.115 (3.997)***	.399 (3.329)**	.311 (2.852)**	18.115 (3.435)**

Table 3 (continued)

Variables	Linear	Exponential	Double log	Semi-log
Income	-3.5E-006	-1.1E-007	-.031	-.366
	(-.442)	(-.655)	(-.620)	(-.150)
Extension	8.453	.166	.073	3.548
	(1.337)	(1.216)	(.576)	(.578)
Farm size	-3.146	-.065	-.022	.056
	(-1.859)*	(-1.780)*	(-.441)	(.023)
Credit	1.826	.050	.033	.068
	(.298)	(.376)	(.265)	(.011)
Association	3.137	.047	.048	3.021
	(.540)	(.376)	(.419)	(.543)
Labour	18.982	.441 (3.326)**	.390 (3.217)**	16.737
	(3.100)***			(2.854)**
R	.875	.696	.753	.715
R^2	.769	.484	.567	.512
F-statistics	7.873***	8.374***	11.687***	9.343***

Source: Field survey, 2016

NB: *, **, and *** are 10%, 5% and 1% respectively

Farm size (X_9) showed a negative coefficient signs. This showed that it has an indirect relationship with output. The negative size of land is in line with the findings of Onoja and Achike (2010) and Mwakalobo (2000), which had the same outcome. It is expected that increased area cultivated would have been associated with gross output, so the sign of the coefficient for land would have been positive. Therefore, in their opinions, land expansion viz-a-viz size may not bring marginal returns given the way they were combining their resources. Also, increased farm size diminished the timeliness of input use. This result is in variance with those of Agwu, Anyanwu, and Mendie (2013); Omonona (2009); and Omiti (2009). According to them, increased area cultivated is associated with gross output, so the sign of the coefficient for land would have been positive.

Finally, all other variables, such as gender, association, credits, extension, education, and income, were not statistically significant and therefore made no impact in determining efficiency of resource use in cassava production. Most of these do not conform to *a priori* expectation. These might be due in part to farmer's inability to assess credit facilities from financial institution, illiteracy, lack of visit by extension workers, and other unexplained reasons. Against the backdrop of the above, this study justified the hypothesis that socioeconomic profiles of cassava farmers affect the choice of resources use in cassava production.

The value of R^2 (77%) indicates that there are other factors affecting resource use efficiency in the production of cassava that were not indicated in the model. This could include some exogenous factors such as government policies on issues bordering around marketing

factors, and so on. The F ratios for all the models are statistically significant at 1% level showing that farmers in this study area plant cassava very well, thereby justifying the research work in the chosen areas.

Estimation of Food Security Status at Different Levels of Commercialization

The result of food security status of cassava farmers at different levels of commercialization is presented in Table 4. The result shows that farmers who are food insecure are greater in number than their counterparts who were food secure. Although Chirwa and Matita (2012) observed that households who are food secure tend to be more commercialized, this result does not wholly support the assertion because the proportion of both food secure and food insecure households shored up with increasing level of commercialization. It shows that cassava farmers operating at a low level of commercialization are few and there is a slight disparity in the proportion of those that are food secure and those that are food insecure. Those that are food insecure are more in number. However, majority of the farmers seem to operate at a medium level with more of the people attaining food security. Also, at high commercialization level, the scenario is no different from that of those operating at a low level of commercialization. On the overall, the proportion of farmers that are food insecure is more than those that are food secure as indicated by the food insecurity incidence. This is comparable to the food insecurity incidence of 0.49 posted by Omonona and Agoi (2007) for Lagos Urban households.

Table 4: Estimates of Food Security Status at Different Levels of Commercialization

Levels of Commercialization	Food Secure		Food insecure	
	Freq	%	Freq	%
Low (1 – 25%)	3	8.57	7	12.73
Medium (26 – 50%)	20	57.14	30	54.54
High (51 – 100%)	12	34.29	18	32.73
Total	**35**	**100**	**55**	**100**
Food insecurity incidence	**= 0.61**			

Source: Field Survey, 2016

In line with a *prior* expectation, increase cassava production as a result of efficient resource utilization and thus commercialization. This implies the tendency to attain food security. Cassava commercialization is seen as the aggregate of household surplus presented by smallholder farmers in the market for acquisition and income.

CONCLUSION

Nigeria and indeed many developing countries of the world face a worsening food crisis; and roots and tubers, such as cassava, have been identified as a viable crop in household food security in sub-Sahara Africa with the capacity to ameliorate the challenges posed by food insecurity. Unfortunately, the current capacity of farmers to increase production of cassava for commercialization to bridge the gap in cassava supply and demand is marred by inefficient allocation of resource. For instance, the efficiency analysis of land, input and labour indicated that resources were underutilized. This does not allow farmers to reap the benefits of their investment; it discourages the productive capacity of farmers and youths to be fully engaged in agriculture. To reverse the trend, increase efficiency in resource use becomes imperative. Because the current level of commercialization of cassava in Nigeria is low given our capacity and international status as the world's largest producer of cassava, government and other stakeholders should shoulder the responsibility of developing new initiatives and policies that will transform the smallholders from subsistence oriented to market-oriented production system. This will require the use of incentives, such as training of farmers on modern farming techniques, acquiring modern smart farming tools and financing, reduction in the cost of labour, encouraging of youths to venture into agriculture, since young ones are more dynamic and averse to risk than old farmers in terms of adoption of innovation in modern farming techniques, improved cassava varieties and other inputs that has been discovered to be risk free and promises better harvest, training by extension personnel and support policies by government so as to optimally generate output that will balance demand and supply for the product in the markets to farmers to attract people to explore the downstream subsector and the commodity's value chains.

Food marketing in recent time has undergone strings of reforms, bringing waves of competition in all segments of the market. However, there still exist pockets of market inefficiencies. Improved market conditions that will engender more participants in the market are necessary to dismantle inefficient market conditions that are prevalent in food marketing system in most developing countries. The need to scale up training to improve efficiency in both allocative and marketing capabilities to provide impetus for food security cannot be overemphasized. Increasing efficiency of farming households is important to grow farming household capacity to move the ladder in their market orientation. Agri-food marketing thrives on the wing of commercialization of agricultural product by farming households. Hence, whatever affects their capacity to present surpluses to the market affects marketing functions and its abilities to create utility. Agricultural marketing is an economic activity that depends on marketing efficiency. Improve efficiency both for allocative and other resources use will enable especially agric-marketing to exercise its full capabilities in areas of pricing, selling, assembling, transportation, processing, storage, and preservation to create utility for consumers.

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