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**Enhancing the Production of Cassava in the Rural Sector of  
the Nigerian Economy through Integrated Rural Development**

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**Abstract**

*The main rhythm of this paper is on enhancing the production of cassava in the rural sector of the Nigerian economy through integrated rural development. A macroscopic view of the rural nook and crannies in the southwest, southeast and south-south etc of Nigeria will reveal that the rural inhabitants are peasants engaged mainly in agriculture. However, the production of cassava, one of the main root crops that will earn Nigeria huge*

*foreign exchange is benighted with avalanche or plethora of problems. An elaborate and articulate policy of rural development mounted by various tier of government with the assistance of Food and Agricultural Organization (FAO) will not only galvanize cassava production in the rural sector. It will be the orifice that will enhance and synergy cassava production in the nation. It is only through this medium that the production of cassava in the Nigeria will witness an unprecedented boom. Consequently, the paper defines the concept of rural development. The paper is explicated with the aid of bottom up approach and participatory approach. It also examines the various pitfalls bedevilling the production of Nigeria. Finally, a new paradigm shift in the production of cassava was orchestrated.*

### **Introduction**

The polemic on the way of enhancing the production of cassava in the rural sector of the Nigerian economy has occupied the front burner in the discourse amongst academics, hydrologist, rural sociologist etc. The consequence of the latter sentence is that it has virtually attracted the practical attention of scholars, in the discipline of agriculture, public administration etc (Okosun Victor & Urhohide 2013).

A corollary to the aforementioned paragraph is that there has been a renewed vigour of interest in rural development as the main plank or the pedestal for the enhancement of cassava production in Nigeria. In this vein, Nigeria will not only guarantee food security for her populace, but will also generate cash income for the largest number of households (Department of Agriculture 2003).

A microscope view of the political landscape of Nigeria will bring to limelight that the rural economy in the southern agro ecological zones plays a predominant role in the production of cassava. Indeed Nigeria is currently the largest producer of cassava in the world with an annual output of over 45 million tonnes of tuberous root (Adekaye, Ogunjimi & Ajala, 2004). However, despite the rosy state of cassava production in the nation, the country can do better in the production of cassava optimally, but the rural farmer efforts at increasing the production of cassava has been benighted with vagaries of problems. These problems include inadequate funds, corruption amongst public officials, and policy somersault on the part of the government, lack of both institutional and physical infrastructures in the rural areas (Idachaba, 1991). It is this fundamental economic and political pitfall that led to Nigeria's

inability to produce cassava optimally. Given the above background, this paper reviews the germane issues relating to ways of enhancing the production of cassava, in the rural sector of the Nigerian economy through rural development. The paper is dichotomized into sections beginning with an introduction. The first section deals with conceptual clarification of rural development. It also includes the theoretical work. This paper will be explicated through bottom-up participatory approaches. The paper also examines the factors bedevilling the production of cassava in Nigeria. Finally the paper deals with strategies/paradigm shift aimed at enhancing the production of cassava optimally. This section ends with a conclusion.

### **Conceptual Clarification**

The definitions of the concept rural development have been addressed by variegated scholars. This is due to the fact that there is no single definition of the concept. Different scholars posit definitions from their perception of the concept (Idemudia, 1999). In the course of defining the concept of rural development, some scholars add the prefix “integrated”, while others do not. Anyhow, whichever way the concept is used the term refers to one and the same thing (Idemudia, 1999). According to Mabogunje (1977),

integrated rural development is mainly concerned with the improvement of the living standard of people living in the rural areas on a self sustaining basis through the social spatial features of their productive activities. He opined further that agricultural development is just one aspect of life of the rural dwellers. Integrated rural development can be seen from the social, economic and cultural life of the rural inhabitants.

Flowing from the above, rural development is seen as the multidimensional programmes that are put in place by government to transform the condition of living of the rural dwellers. The essence of rural development is mainly to fashion out ways of improving the rural lives with participation of the rural people themselves so as to meet the required need of the rural people (Wikipedia, the free encyclopaedia, 2013). Moseley (2003) contend that the concept of rural development refers “to the process of improving the quality of life and economic well being of people living in relative isolated and sparsely populated area”. A synthesis of the above definition will bring to limelight that through multi-sectoral programme of rural development, the rural dwellers are mobilized, galvanized or sensitized to be active participants in the

development process of the rural sector (Okosun & Urhoghide 2013). Ake (1999) posits that;

Integrated rural development involves the focusing of effort on the transformation of the rural society in Africa. The focus is on rural life is justified by the fact that agriculture is the mainstay of Africa’s economy. It assumes that focusing of development on rural society is necessary to ensure the maximum benefit to most people as well as growth of the entire nation.

A cursory look at the above definition will reveal that IRD is made up of programmes set in action by policy makers, political actors etc. These programmes include education, entrepreneurship, physical infrastructure etc (Rural Development Research 1996).

Idachaba, (1981) contend that “integrated rural development is a vehicle for increasing the food supply and nutritional need of the nation”. A synthesis of the above definition will reveal that Idachaba is quite perspective to the issue at hand. The teeming population of Nigeria requires food of different classes, such as protein, carbohydrates, fats and vitamins etc. (Olayinde, 1972). Apart from the aspect of feeding the population, the production of food crops also increase the income of households producing these crops. It will also promote self sufficiency, thereby curtaining rice and wheat import (The Guardian, 2013). See table 1.

**Table I:** Percentage Distribution of Food Crop Cash Income of Household Producing Major Crops.

Food Cross	Cassava		Yam		Sweet Potato		Plantain		Maize		Rice	
	N	%	N	%	N	%	N	%	N	%	N	%
Cassava	329	21	269	23	90	14	176	26	315	19	124	14
Yam	269	15	276	18	75	14	168	16	266	13	93	73
Sweet Potato	90	1	75	1	95	1	43	1	94	0	59	0
Plantain	176	1	43	2	43	1	181	3	175	1	47	0
Maize	315	14	94	13	94	8	175	15	343	13	139	11
Rice	124	12	59	12	59	10	47	9	139	15	143	24
Others	-	34	-	31	-	52	-	30	-	39	-	38
<b>Total</b>	-	<b>100</b>	-	<b>100</b>	-	<b>100</b>	-	<b>100</b>	-	<b>100</b>	-	<b>100</b>

**Source:** Nweke, et al (1997) cited by FMOA & Natural Resources <http://www.fao.org/docrep/00901504E/A015htm> retrieved 23 July 2014.

A thorough perusal of table I indicates that through rural development policy and programmes initiated by various tiers of government, the rural inhabitants who are predominantly farmers have cultivated crops such as cassava, yam etc. This has led to increase in cash income household. Cassava had cash income household of 329N with 21%, yam 269N with 23, Sweet potato had 90N with a percentage of 14%, while plantain had 176N with 26%, maize had 315N with 19%, while rice had 124N and 14%. Despite the increase in the cash crop income of the rural farmers, they are still hue and cry in the rural sector nook and crannies of Nigeria that the government should come to their aid. This is with a view of assisting the rural farmers to produce cash crop optimally. This will have a multiplier, effect of increasing their cash income astronomically (Okosun, 2014).

### **Theoretical Frameworks**

According to Alan (1978), theories refer to the building block of social sciences. Theories help to unravel the inter-connect in a given environment of system. In this breath, this paper will be explicated in all entirety through the bottom-up the participatory approaches.

### **Bottom-up Approach**

Various scholars have written extensively on the bottom-up approach or theory, such scholars include Robert Chambers (1986), Walter and Taylor (1981), Iyoha (2007) etc. The bottom up approach is gaining currency all over the globe because of its heuristic advantage. Walter and Taylor (1981) contend “that in the bottom up planning approach, the main emphasis is on the need to create a vast network of growth centres in town and villages. This is with a new of promoting the commercialization of agriculture, saving and investment in productive capacity”. The main rhythm of this approach is that it is a development from within by the people of that society based on their human, physical, and institutional capacity (Welter and Taylor, 1981).

In applying the above theory to Nigeria and other less developed countries (LDC) in sub-Saharan African. The various tiers of government should initiate and execute policy and programme which is bottom top driven. This presupposes that the government in its bid to enhance the production of cassava root crop should involve the rural farmers. The rural inhabitants must be carried along in the planning, execution and implementation of cassava production policy. The modus operandi of the government is to create various

network centres in towns and villages in Nigeria. In these towns and villages, the agricultural extension officers, other government officials interact with the local farmers on the need to increase cassava production using high yielding disease resistance seeding/stems. Cassava demonstration farms must be set up in the nook and crannies of Nigeria. The rural farmers are encouraged to increase their holding from small scale farming to their large scale farming (Okafor & Onoekheraye, 1994). This can be achieved by encouraging the farmers to form cooperative farming. This will enable them to pool their resources together and plough it into cassava production. This has the merit of attracting government attention through the granting of soft agricultural loans without any collateral security to the farmers. The overall benefit is to enhance, stimulate, synergies and boost cassava production in Nigeria. The ultimate aim of the bottom up approach is targeted toward the uplifting of the standard of living of the rural populace (Chamber, 1986) and the increase in cassava production per acre in the rural sector of the Nigeria economy. This agrees with the contention of Iyoha (2008) who opined that the bottom up approach hold the ace for the development of the rural sector of Nigeria.

### **Participatory Approach**

The participatory approach has been addressed by many scholars and institutions. They include Samuel (1987), World Bank (1985).

Participatory approach is the active process by which the beneficiary/client group influences the direction and execution of development projects with a view of enhancing their well being in terms of income, personal growth, self reliance and other values cherished by them.

The key words present in participatory approach are direction and the execution of project (Okosun, 2009). What this latter sentence portend is that the people (the rural inhabitants must have a say in the direction which they want the projects to be executed. It involves the rural dwellers in the proper diagnosis priorities setting, identification and planning of actions and projects in their various communities (Okeke & Mbalisi 2006).

The participatory approach was adopted because integrated rural development policies and programmes which have been implemented since the 1970s and 1980s did not meet the expectations of the people. Among the several reasons adduced is that there is no involvement of the beneficiaries in

the developmental process (Igben, 2001). He further opined that the participatory approach had been used in other countries of the world such as Indonesia, China, Malaysia and it was successful in these countries mentioned. In Nigeria, the rural dwellers detest the top bottom approach on the ground that they were not informed. If the rural dwellers are galvanized, stimulated by the various tiers of government to participate actively in the initiation and execution of projects, a high degree of success would have been recorded in the development of the rural sector.

An extrapolation of the participatory approach to rural development clearly indicates that the various tiers of government in Nigeria need to involve the rural citizens who are predominantly farmers in the designing, formulation and implementation of agricultural policy targeted at enhancing cassava production in Nigeria. When the farmers are deeply involved, they will see it as their own and they would want to see succeed (Igben). In this vein, cassava production will be a currency in all the nook and crannies of the south east, southwest and central ecological zones of Nigeria (Department of Agriculture, 2012).

### **Factors Bedevilling the Production of Cassava in Nigeria**

In the course of the planning, designing, and implementation of agricultural policy regarding cassava production in Nigeria, several factors bedevilling the policy have been identified. They are interwoven and intertwined. At this juncture, we shall pause to discuss the factors one after the other inadequate infrastructure.

- a) A major problem bedevilling the production of cassava in Nigeria is inadequate infrastructure. Infrastructural facilities pertaining to agricultural development in Nigeria are at very low ebb (Idachaba 1991). This is because the infrastructures be it social, physical and institutional are lacking in the rural sector of Nigeria. Although the various states government have constructed roads etc. The feeder roads linking the rural areas are flooded during the raining season, thereby making the evacuation of harvested cassava difficult. The net result is that the farmers are forced to sell their goods at rock bottom price to middlemen who usually come from the urban centres to buy it.
- b) Prevalence of pest and diseases. A potent factor bedevilling cassava production in Nigeria is the prevalent of variegated insects, pests and

diseases. These pests and disease tend to reduce the yield of the production of cassava per acre. Among the diseases and pests include green spider mite (GSM), the large grim borer, rodents, spiders white flies etc (Department of Agriculture, 2012).

- c) Inadequate funds: A major factor plaguing the production of cassava in Nigeria by both small and commercial farmer is inadequate funds the farmers are affected by the various macroeconomic policy of the federal government of Nigeria. The Federal Government allocation in its annual budget to agricultural sector is not a enough to cope with the various challenges facing rural development and agriculture in the nation. Furthermore, the micro economic policy of the federal government is another problem. This include devastating effect of the structures adjustment programme, second tier market etc. The farmers found themselves in a state of quandary. The Naira devaluation led to hyper inflation. Inflation in Nigeria is in ten digits. Iyoha (2002) argued that “the attendant effect of astronomical inflation make it difficult for the rural people to buy as in the past bicycle, motorcycles for locomotion. This is due to the fact that the rural dwellers found it difficult to save their money as a result of inflationary” trend. Furthermore, the farmers had difficulty in accessing agricultural loans due to bottlenecks placed by the ruling elites (Idemudia, 1999).
- d) Problems Relating to Agronomy. Cassava production in Nigeria is benighted by agronomical constraint. This poses a serious and fundamental problem to the farmers. The Department of Agriculture (2010) has identified biotic constraint. This involved the use of poor yielding and non disease resistant seedlings. The net result of the latter sentence is that when farmers use them for planting. They farmers recorded a low yield of cassava production per acre. Similarly, the activities of the cattle herds men who direct their cattle’s for grazing is another problem. The cattle often strayed into the cassava farms and causes untold damage. This has often led to communal clashes between the Edo State indigenes and Fulani herd men in some parts of Edo state, etc. (Okosun, 2013). In rural sector where there is low fertility, this no doubt poses a problem in that it hampers cassava production in the sector. Also the activities of other animals which damage the cassava farms is another constraint such animal include porcupine, rabbit etc.

- e) **Ambience factor:** The production of cassava in Nigeria is ambience laden. What this portends is that agricultural activities by the rural farmers take place in an environment. Therefore the environment influence to a great extent, the production of cassava in Nigeria geographical landscape. The ambience factor include land degradation, due to soil erosion, deforestation and lumbering etc in the rainforest zones of southwest, south-south states of Nigeria (Department of Agriculture 2012). To rub salt, in the Niger Delta sub-region of Nigeria, the exploration activities of transnational oil companies have exacerbated the poor production of cassava. This is due to the incessant cases of oil spillages, gas flaring which affect the ecosystem thereby hampering cassava production in the region.

### **Government Vacillating Agricultural Policy**

A potent factor affecting cassava production in Nigeria is the vacillating agricultural policy of the federal government. This no doubt is a cog in the wheel of cassava production. The macroeconomic policy of the government such as the devaluation of the naira due to the structural adjustment programme etc led the government to change its emphasis from the importation of food item to the cultivation of food crops. This encouraged the farmers to go into cassava farming, thereby raising their household income. Alas, the policy was changed by the federal, this affected cassava production. This is because the farmers were discouraged. In Esan West Local Government Area of Edo State, farmers abandoned the cultivation of cassava for pineapples farming because they make more income from the sales of pineapples fruits (Odia, 2014).

### **Paradigm Shift in the Production of Cassava**

Traditionally the federal government anchored its food policy and programme of agricultural development through the use of Agricultural Research Institutions, Universities of Agriculture, and the use of interventionist agencies such as the Seed Acceleration Multiplication Agencies. However, after almost two decades of government intervention in the production of cassava in ecological zones of south west, south-south and the middle belt etc. The Production of cassava is still bedevilled with variegated problems. These problems include; ambience factor, prevalence of pest and diseases, problems relating to agronomy, corruption, poor funding etc. These problems highlighted in the latter sentence led to scholars,

researchers to have an appraisal of cassava production strategy in the federation. The aftermath was the emergence of paradigm (Okosun, 2013) shift in the production of cassava. The new paradigm shift consists of the followings:

1. The policy must be based on participatory approach (FGN, 2002).
  2. The policy must be based on sustainable micro economic policies.
  3. The policy must emphasize the development of rural infrastructures.
  4. Tripartite fund of cassava production in Nigeria must be sustained.
  5. The policy must be based on environment protection (Department to Agriculture, 2013).
- 1) The policy must be based on participatory approach. The new paradigm shift emphasis the need to involve the rural inhabitants, who are the stakeholders in the production of cassava to the involved in the execution of cassava policy in Nigeria. When the various tiers of government involve the rural populace, the people will feel that the cassava production is what while (Igben 2991). This will help to boost cassava production in the nation.
  - 2) The policy must emphasize the development of rural infrastructures. The new paradigm shift in cassava production must emphasis the development of rural infrastructure. This is because infrastructure development holds the ace for the growth and development of the production of cassava. According to Ezedimo (2013), “external infrastructures, such as road connectivity, highway strengthening, rail connectivity, power linkages, feeder roads and external water supply linkages galvanizes cassava production in Nigeria.
  - 3) The policy must be based on sustainable micro economic policy. The new policy on the production of cassava in Nigeria must take into cognizance the prevailing and sound macroeconomic policy. This must be sustainable by successive government. The current policy somersault which characterizes cassava production must be jettison. Once a policy is initiated by the federal government, it must be allowed to stay for years before an incremental policy change can be effected. In this vein, the production of cassava will witness a geometric rise in Nigeria. The policy must carry the rural farmer along. The federal government must note that

in its policy agenda, the farmers who cultivate cassava in the rural sector will be affected positively. These will synergies the farmer to increase their acreage of cassava farms. This no doubt will enhance cassava production in the nation.

- 4) Tripartite funding of production of cassava must be sustained. The policy must be based on tripartite funding. The federal government funding of cassava cultivation is a veritable instrument of enhancing the production of cassava in Nigeria. The federal, states and local government must be involved in funding cassava production in Nigeria. The various tier of government must pull their resources together to ensure that cassava production is giving a fillip in the country. According to Okuneye (2012), “there is the need for various tier of government to be involved in funding the cassava project”.
- 5) Reinvigorating seed production programme. The new policy must be based on reinvigorating a sound seed production programme. In Nigeria, two seed system are easily discernible. These are the formal and the informal seed system. For Nigeria to witness an accelerated production of cassava the seed multiplication system must not only be strengthened, it must be rejuvenated (Vankestan 1994). The various research institutions including the seed multiplication unit of the Federal Ministry of Agriculture and Natural Resources must step up their research. This will ensure that improved disease resistant cassava varieties or seedlings are available for farmers to purchase at subsidized. High root yield will result in larger total production per unit area (Nweke et al, 1997).

### **Conclusion**

The main kernel of this paper has been the issues of enhancing the production of cassava in the rural sector of the Nigeria economy through integrated rural development. The authors of the paper elucidate the work with the aid of theoretical work. They are the bottom up approach and the participatory development theory. Integrated rural development is the main pedestal through which the production of cassava in the rural sector of the Nigeria economy can be increased. This is due to the fact that the bottom up approach and the participatory approach will not only synergies cassava production. It will efflorescence the rural cash income of the farmers. In this breath, the standard of living of the rural dwellers will greatly increase. For the nation to witness a boost in production of cassava, the paradigm shift in

cassava production must be popularized and embraced by both the government and farmers.

Epitomizing, from the outset of the paper, we can safely conclude that an aggressive policy of integrated rural development by the federal government will enhance in all ramifications the production of cassava. Thereby promoting sustainable development in Nigeria.

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