ENTERPRISE ANALYSES ACROSS CASSAVA AGRIBUSINESS VALUE CHAIN IN NIGER-DELTA REGION OF NIGERIA: IMPLICATIONS FOR AGRIBUSINESS, WOMEN AND YOUTH POLICIES

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ABSTRACT

The issues of youth unemployment, inequality, poverty, economic recession and associated anti-social activities are critical challenges currently limiting the development of the Niger Delta Region of Nigeria. This study therefore assessed the various cassava agribusiness value chain nodes in the Region, with the view to ascertaining their returns on investment and propensity for attracting the pool of unemployed youths and women into agribusiness and uplifting their livelihoods. Evidence from the study suggests that cassava enterprises, particularly processing, is most promising to attract the youths and women into agribusiness, given its high returns on investment. It thus becomes imperative that cassava enterprises be incorporated into on-going and proposed development interventions of the private sector, government and development partners, with a view to actualising the policy objective of women and youth empowerment in the country, and in particular, the Niger Delta Region, as detailed in the Agricultural Promotion Policy and the Economic and Growth Recovery Plan. The study further recommends that the cassava value chain enterprises should be deployed as focal commodities for the proposed agribusiness incubation centres and the agro-industrial parks, with a view to causing entrepreneurs empowerment and national output, while serving as antidote to economic recession.

KEYWORDS: Enterprise Analysis, Cassava, Value Chain, Niger Delta, Agribusiness, Recession Women and Youth Policies

INTRODUCTION

Agriculture is the most important sector in the Nigerian economy. It employs 38.0 per cent of Nigerians and contributes 23.1% of the country's Gross Domestic Product (Federal Republic of Nigeria, 2017). The sector grew by 4.88 per cent in the third quarter of 2016 and by as much as 13 per cent in previous years, suggesting immense unrealized potential (Federal Republic of Nigeria, 2017). However, the performance of the sector in international trade over the years depicts declines and stagnation, having lost its position in the export of key commodities (Federal Ministry of Agriculture and Rural Development, 2011). Following the shift from agriculture to crude oil and gas in the late 1960s, Nigeria's growth has continued to be driven by consumption and high oil prices. The structure of the economy is largely import dependent, consumption driven and undiversified. Oil accounts for more than 95 per cent of export and foreign exchange earnings while the manufacturing sector accounts for less than one percent of total exports (Federal Republic of Nigeria, 2017). Bakare (2011) noted that as agriculture export shrank from the traditional 12-15 commodities of the 1960s, Nigeria became a net importer of the basic food it normally exported. Presently, majority of Nigerians

remain under the burden of poverty, inequality and unemployment. FMARD (2011) revealed that Nigeria was the leading exporter of groundnut with a world's share of 42% and had 27% of the world's palm oil export, 18% of cocoa and 1.4% of cotton. It is also the major West African cotton exporter. This glory however declined over years, with the dominance eclipsed by its competitors. The general economic performance is undermined by deplorable infrastructure, consumption and mismanagement of public finances (Federal Republic of Nigeria, 2017). Aside these, youth unemployment became rife, (particularly in the Niger Delta Region) with about 27% (22 million) youths unemployed, while transition from school to employment has been difficult (International Fund for Agricultural Development, 2017). There has also been no structured path to follow or role models to look up to. These developments are not unconnected to limited access to technical skills, insufficient, inappropriate and inaccessible finance, negative effect of climate change and the perception of agriculture as unattractive for generating income and sustaining life. According to Akinbamijo (2015), the shift in focus away from agriculture to petroleum brought about severe underinvestment in the sector by the public and private sectors and was further accentuated by weak, unenforced, poorly implemented and often conflicting policies at all levels of the country's governance structures (Nwuneli, undated). In a related development, Anaebonam (2015) posited that as desirable as agribusiness is to economic well-being, many countries in the sub-Saharan Africa, including Nigeria, are yet to optimise their potentials. According to the source, the challenges are not unconnected to the relegation of agriculture to subsistence farming, non-prioritization of agri-business at the different levels of governance, lack of infrastructure, poor storage facilities, poor state of research, poor and disjointed value chains, occasioned by the discovery of oil (Anaebonam, 2015). These challenges tend to raise doubt, as to the efficiency of agribusiness activities within the Niger Delta Region of Nigeria. Thus, this study therefore examines the margins and rate of returns on investments under the cassava agribusiness enterprises within the Niger-Delta Region of Nigeria and identified the most promising enterprise in each state based on the returns on investment criteria. Justification for this study stems from the need to identify viable and sustainable agribusiness enterprises which can attract the pool of jobless unemployed youths and other vulnerable lots in the Region, particularly the women. According to the Nigeria's Economic Recovery and Growth Plan, agribusiness and agro-allied industries will enable mass employment in the formal and informal sectors, given the colossal domestic demand, the potential for import substitution, and opportunities arising from increased yields and raw material processing.

THEORETICAL INSIGHTS

Concept of Business Enterprises and Agribusiness

Numerous research works (Boehlje 2002; Mendelu undated; myfinancialintelligence, 2015 and Ogidi, 2015) have focused on numerous aspects of the agribusiness concept. Specifically however, Davis and Goldberg (1957) defined agribusiness as the sum total of all operations involved in the processing and distribution of products produced on a farm, covering production operations, storage, transportation and agricultural commodity marketing.

Agribusiness Policy in Nigeria

The policy thrust of agribusiness development in the country is aimed at promoting access to agro-processing through public and private sector participation; revitalization of Staple Crops Processing Zones, Agribusiness Incubation Centres and Agro-industrial parks; promoting partnership with State Governments to incentivize agribusiness development, amongst other development focus issues (FMARD, 2016).

Women and Youth Policy in Nigeria

The focus of the women and youth policy as detailed in the Agricultural Promotion Policy is to maximize the contributions of women and youths to agricultural production and ensure the elimination of discriminatory practices in the employment of women and youths in the sector. The policy also focussed attention at developing and launching entrepreneurship platforms, with a view to creating a pathway for youths and women to enter agribusiness economy.

Cassava Production and Value Chain

Nigeria is the largest producer of cassava in the world, with a total production of 55 million MT of fresh cassava roots in 2014. Despite her comparative advantage in cassava production, Nigeria is not one of the major players in the global value-added trade of cassava-based products (FMARD, 2015). The holistic cassava value chain actors comprise mainly of the agro-input dealers, producers, traders, processors, transporters and marketers, even though there are regional and state peculiarities. Figure 1 depicts a typical cassava value chain.

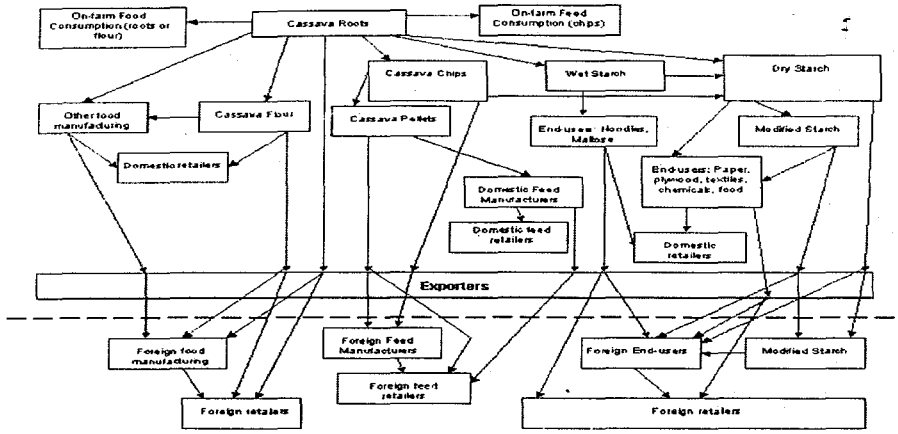

Figure 1: A typical cassava value chain
Source: Valuechains4poor.pbworks.com

METHODOLOGY

Study Area

The study was undertaken in the Niger Delta States of Nigeria, located in the southern part of Nigeria and bordered to the south by the Atlantic Ocean and to the East by Cameroon. The region covers about 112,110 square kilometers, representing 12% of Nigeria's total surface area (Federal Republic of Nigeria, undated) and a population of about 30 million people, representing 18% of Nigeria's population. The region is located within the tropical rainforest climate zone on the northern regions and freshwater swamp and mangrove swamp forests in the southern regions, from Longitudes 4.15°N - 7.17°N and Latitudes 5.05°E - 8.68°N (Okoro *et al.*, 2014). It has the heaviest rainfall within West Africa, with an annual rainfall totals of between 1,300mm and 4,000mm (Anyadike, 1992; International Fund for Agricultural Development, 2002; Nicholson, 2003), with annual rainfall peak between April and October and an average temperature of 24-33.3°C (Kadafa undated; Umoh, *et al.*, (2013). The Region comprises nine States, spread across the South-South (Akwa Ibom, Cross River, Edo, Delta and Rivers States), South East (Abia and Imo States) and South West (Ondo State) Zones of Nigeria. Bayelsa, Cross River and Rivers States have extensive coastlines; Ondo, Delta and Akwa Ibom have coastlines and agricultural lands, while Abia, Edo and Imo have no coastlines.

Sample Design, Techniques and Sample Size

Sample Selection

The multi-stage sampling design, complemented with stratification was employed for this study. The first stage involved the selection of four States (Abia, Cross River, Edo and Rivers) out of the 9 Niger Delta States, based on regional stratification and performance criteria under the recently closed IFAD supported Community-based Natural Resource Management Programme. The second stage was the random selection of one Local Government Area each under each of the three agro-ecological zones in each of these States, while the third stage was the selection of two communities each under each LGA, except for Umuahia North LGA in Abia State and Akpabuyo LGA in Cross River State which had three communities each, thus totalling 12 LGAs and 26 communities. The fourth stage entailed

the administration of 50 questionnaires in each state covering all the cassava agribusiness nodes (production, processing, marketing and transportation) (Table 1.0).

Table 1: Details of sample selection and questionnaire administration

STATE	ZONE	LGA	COMMUNITIES	FGDs proposed	FGDs Conducted
ABIA					
	Abia North	Bende	Etiti Ugwueke		
			Akoli Imenyi		
	Abia Central	Umuahia North	Umuezike Ofeme		
			Okwuta	50	50
			Okwoji		
	Abia South	Ugwunagbo	Etiti Akano Ngwa		
			Ngwa Iyi Ekwe		
CROSS RIVER	Calabar	Akpabuyo	Idebe Offiong Umo		
			Urua Ndung		
			Ikot Ekiriba		
			Offiong		
	Ogoja	Bekwara	Ugbaro	50	50
			Nyanya		
	Ikom	Obubra	Iyamoyong		
			Ovukwa		
EDO	Edo North	Akoko Edo	Ikiran-Ile		
			Ureme –Erhunrun		
	Edo South	Uhumode	Ennuhu	50	50
			Evbuohuan		
	Edo Central	Esan	Oria/Illushi		
			Okhuesan		
RIVERS	Zone 1	Obia Akpo	Eneka		
			Alua		
	Zone 2	Abuah	Okana	50	50
			Ajrokwu		
	Zone 3	Ikwere	Ozuaha		
			Apani		
TOTAL				200	200

Source: Field Survey, (2017)

Method of Data Collection and Management

Given the limited time frame, a rapid survey using focused group discussion (FGD) was employed for data collection. The approach entailed using the existing profile of enterprise groups to identify groups to be interviewed. In all, 12 Enumerators were involved in the survey, comprising 3 enumerators per state. Data collection covered input and output data of the cassava value chain actors under the 5 targeted value chain nodes. Data analyses was undertaken by the research team using spss and excel packages to generate descriptive statistics, such as mean, frequencies, ratios; benefit cost analysis and Returns on Investment Index.

Model Specification

The models specified under this study were for the gross margin and returns on investment (Equations 1 and 2).

Gross margin (GM) = $\sum TR - \sum TVC$ (1)

Were;

TR = Mean of Total revenue of respondents, and

TVC = Mean of Total Variable Cost of Production

Return on Investment (ROI) % = $\frac{\sum GM}{\sum TVC} X\ 100$ (2)

RESULTS AND DISCUSSION

The results of the cassava agribusiness value chain across the 4 states considered are as detailed in Table 1.0. The margin analysis undertaken across the four states sampled shows that cassava processing enterprise was the most profitable, with a margin of one million, thirty thousand, two hundred and ninety eight naira, thirty two kobo (₦1,030,298.32K), while margin from transportation business was the least, estimated at one hundred and forty thousand, two hundred and forty four naira, fourteen kobo (₦140, 244.14K). In terms of Returns on Investment for all sampled states combined (Figure 1.0), processing business also yielded the highest return of 414.55%, while marketing enterprise returned the least of 60.26%, implying that for ₦4.14k and 0.60K were obtained from ever naira spent on these enterprises.

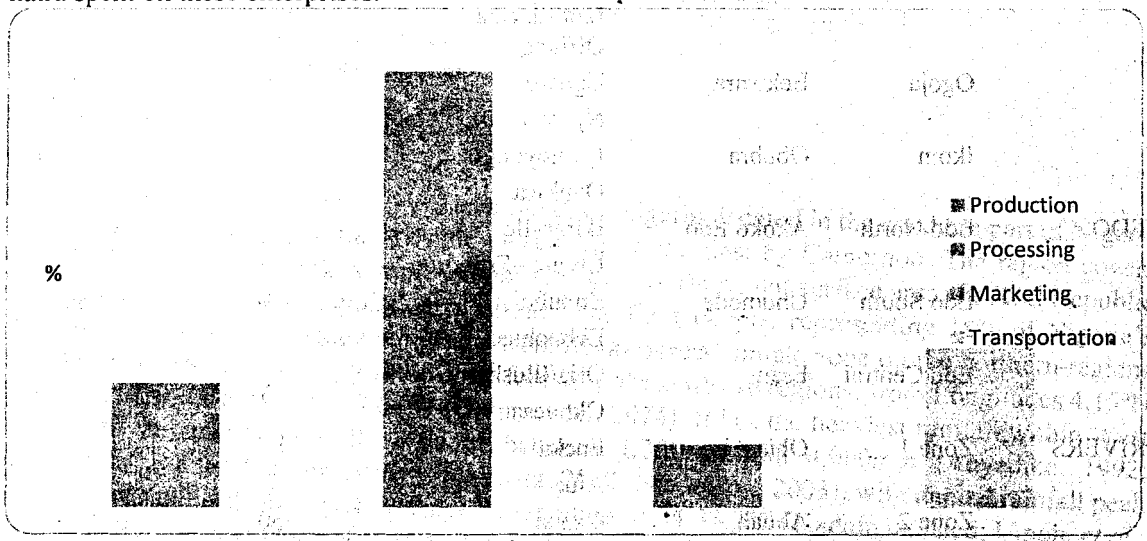

Figure 3.0: Returns on Investment across Cassava Agribusiness Value Chain (Combined for all States)

Analysis across the individual states provided insight into the states specific performance. For Edo State for instance, transportation yielded the most return on investment of 448.96%, implying that ₦4.48K was obtained on every naira spent. In Abia State, processing yielded the highest ROI of 542.88%, while marketing yielded the least of 20.0%. For Rivers State, processing recorded the highest return of 646.42%, while production returned only 9.84%.

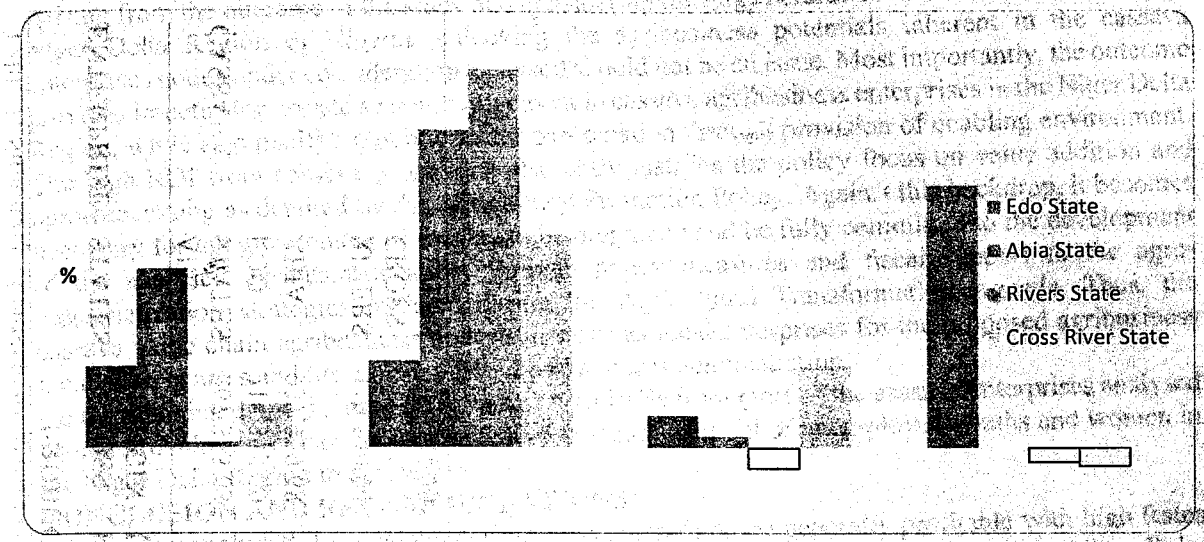

Figure 2: Returns on Investment (ROI) on Cassava Agribusiness across Sampled States

With respect to Cross River State, ROI of 366.39% was obtained under cassava processing as the highest ROI, while transportation business yielded the least of -31.08%. Thus, based on the criteria of prioritization using the ROI, it thus implies that transportation business should be prioritized in Edo State, followed by processing, production and marketing in that order. In Abia however, cassava processing should be the first priority, followed by cassava production and then, marketing; for Rivers State, cassava processing should be prioritized, followed by cassava production and in Cross River State, cassava processing should be the priority, followed by cassava marketing, production and lastly transportation.

Table 1: Summary of enterprise gross margins (Naira) and returns on investments (%)

		PRODUCTION		PROCESSING		MARKETING		TRANSPORTATION	
ENTERPRISE	**STATES**	**GROSS MARGIN**	**Returns on Investment**	**GROSS MARGIN**	**Returns on Investment**	**GROSS MARGIN**	**Returns on Investment**	**GROSS MARGIN**	**Returns on Investment**
	ALL								
CASSAVA	STATES	267,355.63	117.84	1,030,298.32	414.55	270,897.19	60.26	140,244.44	151.92
	EDO	218,335.29	138.66	284,663.33	147.84	81,750.00	55.23	567,166.67	448.96
	ABIA	937,929.68	306.08	2,213,927.27	542.88	790,468.00	20.00	-	-
		-				-		-	
	RIVERS	110,540.94	9.84	961,779.00	646.42	499,724.00	-34.57	136,933.33	-24.26
	CROSS RIVERS	193,351.70	74.25	722,379.64	366.39	156,152.72	142.03	-9,500.00	-31.08

Implications of Results for Agribusiness; Women and Youth Policies in Nigeria

Arising from the outcome of the study and considering the huge natural and climatic potentials of the Niger Delta Region of Nigeria, unlocking the agribusiness potentials inherent in the cassava enterprises nodes under consideration analysed should not be an issue. Most importantly, the outcome provides impetus for private sector involvement in cassava agribusiness enterprises in the Niger Delta Region, while also justifying public sector participation through provision of enabling environment. The high ROI from cassava processing also aptly justifies the policy focus on value addition and agro-processing as detailed by the Agricultural Promotion Policy. Against this backdrop, it becomes necessary for the government of the day to be pragmatic and be fully committed to the development of the analysed agribusiness nodes through policy measures and fiscal support to the agro-industrialization strategies initiated during the Agricultural Transformation Agenda. Thus, the cassava value chain agribusiness nodes can serve as focal enterprises for the proposed agribusiness incubation centres and the agro-industrial parks of this administration.

On the other hand, the positive margins and high ROIs from most of the cassava enterprises analysed should provide more than enough incentive to attract the pool of unemployed youths and women in the Niger Delta Region to agriculture.

CONCLUSION AND RECOMMENDATIONS

The study concluded that cassava agribusiness enterprises are generally profitable with high Rates of Returns on Investment, particularly in the processing enterprise. Thus, for the entire Niger Delta Region, cassava processing should be given first priority, followed by transportation business, production and marketing in that order. For Abia, Rivers and Cross River States, cassava processing should be the priority enterprise, while in Edo State cassava transportation business should receive first priority followed by processing. The study affirms that the cassava agribusiness nodes are promising and profitable to attract the youths and women into agribusiness, while causing empowerment and serving as antidote to the current economic recession. The study further recommended that the cassava value chain enterprises should be deployed as focal commodities for the proposed agribusiness incubation centres and the agro-industrial parks.

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