

Sustainable Human Development Review
(*An international multidisciplinary academic research journal*)

ISSN: (PRINT) - 2006-8425, e-ISSN (ONLINE): 2536-6920

Volume 9, Number 3, September, 2017

Sustainable Human Development Review
Website: *shdevr.org*

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Published by
Welfare & Industrial Promotions (WIPRO) International
Phone: +234-803-338-7472, +234-805-315-2828
Website: www.wiprointernational.org

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ISSN

PRINT: 2006-8425

e-ISSN (ONLINE): 2536-6920

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Cover design & concept: Rowland Egolum & Felix Ezeh

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EDITORIAL

Human development is a broad and comprehensive concept concerned with economic growth and its distribution, basic human needs and variety of human aspirations, and distress of the rich countries and the human deprivations of the poor. Going beyond economic development, which is concerned with income and growth, human development covers all human capabilities. It is “a process of enlarging people’s choices” created by expanding human capabilities.

Economic growth is essential for all human development because no society has been able to sustain the well being of its people without continuous economic growth. On the other hand, it is healthy and educated people that can contribute to economic growth through productive employment and increase in income. Thus, economic development is a means to human development. Hence, development theoreticians and practitioners must pay equal attention to economic development and human development.

Hitherto, emphasis has been on economic development – not on people’s adequate nutrition, access to safe drinking water, better medical facilities, better schooling for their children, affordable transport, shelter, secure livelihood and productive and satisfying jobs. It is to address this gap that the *Sustainable Human Development Review* (SHDR) was born January 2009 as an international multidisciplinary academic research journal. Its Volume 1 Number 1 of March 2009, Volume 1 Number 2 of June 2009, Volume 1 Number 3 of September 2009 and Volume 1 Number 4 of December 2009 kept to faith, courtesy of our esteemed contributors across the globe as well as diligence and commitment of our dedicated reviewers and editors.

From *SHDR* Volume 2 Number 1 of March 2010, *Editorial*, which had been hitherto not considered necessary, was introduced, in conformity to the practice of globally acclaimed journals of academic research output. This Volume 9 Number 2 of June 2017 of *SHDR* presents another set of rich articles touching various topical human development issues.

In the first article, titled *Self-efficacy as a predictor of information literacy skills of technical college students in Nigeria*, Chris Eriye Tralagba of Evangel University Akaeze Library in Ebonyi State, Nigeria submitted that information literacy skills help students for life-long learning. The study investigated self-efficacy as predictor of information literacy skills of students in Government Technical Colleges in South-south Nigeria. The main objective of the study was to find the level of self-efficacy of the students and to what extent self-efficacy predicts information literacy skills. Descriptive survey method was used. A structured questionnaire was used for data collection from a study population of 660. The result showed a significant relationship between self-efficacy and information literacy skills. The study recommended the incorporation of information literacy skills as part of the school curriculum and the introduction of activities to boost the self-efficacy of

students. Also, student information literacy training and activities should be introduced early.

In the second article, titled *The challenges of entrepreneurs in accelerating sustainable development in natural resource-rich Nigeria*, Onyenenwa Cyprian Eneh of the University of Nigeria, Nsukka submits that Nigeria is rich with abundant natural resources and factors of production, but its development paradoxically remains sluggish since its independence in 1960. This review examines a number of daunting challenges that make entrepreneurs unable to accelerate sustainable development in Nigeria. Findings support the theories reviewed in the study, which are the Schumpeterian Theory of Economic Development and the Resource Curse Theory. Government ought to make deliberate efforts to address these challenges to enable entrepreneurs take their rightful place to drive the economy for the needed sustainable development.

In the third article, titled *Selected macroeconomic determinants of non-profit households consumption expenditure in Nigeria*, Lucky Otame of Bournemouth University, U.K. and Department of Banking and Finance, Federal Polytechnic Nasarawa, Nigeria, considers the impact of selected macroeconomic variables of final consumption expenditure of general government, changes in investment, net taxes on production and gross capital formation on the final consumption expenditure of non-profit households using quarterly time series data on household consumption from 2010q1 to 2015q4 obtained from the CBN statistical bulletin. Stata 15 was employed in the regression analysis. The result shows among others that less than 28% of the variation of the target variable is accounted for by the predictor variables with an R-squared of 0.4039 which suggests a positive but moderate relationship between the dependent variable FCENPH and the explanatory variables was found. In addition, only *Cil* (Changes in Investment) and *NToP* (Net Taxes on Production) as expected are statistically significant at the 5% level of significance. The result indicates that *FCEGG* and *GCF* do not necessarily determine non-profit households' final consumption pattern in Nigeria. There is therefore the need to strengthen fiscal measures targeted at household to make it more inclusive and also streamline government spending to be more effective on households the study suggests.

In the fourth article, titled *Foreign investors and ease of doing business with ministries, departments and agencies (MDAs) in Nigeria*, Ezinwa, Vincent Chi and Ikechukwu, Arinze Ernest of General Studies Division, Enugu State University of Science and Technology, Agbani, Enugu State, Nigeria opined that business environment in Nigeria might be a challenge to even foreign investors in Nigeria. This study was an attempt to probe the touted improvement in ease of doing business in the 21st century Nigeria. Critical research method was adopted to analyze relevant literature information and reports on events around the country. Results show that foreign investors get frustrated with Nigeria's brand of ease of doing business. A major setback and deficiency in communication flow between government agencies and foreign investors exists. This impairs conduct of enquires that can lead to

Editorial

decision on launching out to Nigeria with foreign investment. Most Nigerian ministries, departments and agencies (MDAs), which are repositories of vital investment information, lack functional information communication technology (ICT) facilities, such as telephone lines, website and emails. Less than 30 percent of MDAs have functional website and e-mails in Nigeria. The study recommends ways MDAs overcome their communication challenges.

In the fifth article, titled *Proximate composition and micronutrient quality of commercial "igba", "osu akidi" and "okpa" (three legume-based food products)*, Nzelu, I.C. and Nwosu U.L. of the Department of Food Technology, Federal Polytechnic, Oko, Anambra State, Nigeria reported on the proximate composition and some micronutrient quality of "Igba", "Osu akidi" and "Okpa". The moisture and ash contents of the samples were $42.32 \pm 0.35\%$ and $3.02 \pm 0.02\%$ for "Igba"; $34.72 \pm 0.46\%$ and $9.59 \pm 0.37\%$ for "Osuakidi" and 50.09 ± 0.29 and $4.60 \pm 0.60\%$ for "Okpa" respectively. Their crude protein contents were $19.09 \pm 0.63\%$ for "Igba" $27.29 \pm 0.37\%$ for "Osuakidi" and $19.32 \pm 0.32\%$ for "Okpa" while their respective fat/lipid contents were $9.70 \pm 0.21\%$, $3.13 \pm 0.05\%$, and $10.56 \pm 0.5\%$ for "Igba" "Osuakidi" and "Okpa". Microelements like iron, magnesium and calcium were 1.47 ± 0.01 ppm; 18.66 ± 2.40 ppm, and 2.73 ± 4.96 ppm for "Igba". "Osuakidi" had 19.66 ± 1.34 ppm magnesium and 30.46 ± 0.54 ppm Calcium and these were significantly higher than the values from the other legume based food products studied. Enhanced consumption of these local foods/delicacies should be encouraged.

We pray that all those whose papers could not make it in this issue would understand, and try to send better-quality papers in future for our globally competitive review process. We most sincerely congratulate those whose papers made it to this Issue. We heartily thank all our esteemed contributors and enjoin them not to flag in their zeal for research and publishing, which are veritable tools for confronting abounding development challenges in developing countries in efforts to develop the total man. We welcome contributions in all disciplines across the globe (see *Author's Guide*, p.84).

Contributors are also encouraged to take advantage of our sister online journals, *Journal of Applied Sciences and Development*, JASD (Website: jasdevr.org) and *Technoscience Review*, TR (Website: TechnoscienceReview.org) to stagger their academic outputs in our academic high-quality Journals for visibility and competitive ranking in line with global practice. It is gladdening to report that all our three Journals have joined the globally high impact factor and competitive Journals indexed/archived by GoogleScholar, PKP PLN locks, CiteSeerX, DataCite, JSTOR, Scopus, AJOL, Microsoft Academic, etc.

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SELF-EFFICACY AS A PREDICTOR OF INFORMATION LITERACY SKILLS OF TECHNICAL COLLEGE STUDENTS IN NIGERIA

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Abstract

Information literacy skills help students for life-long learning. The study investigated self-efficacy as predictor of information literacy skills of students in Government Technical Colleges in South-south Nigeria. The main objective of the study was to find the level of self-efficacy of the students and to what extent self-efficacy predicts information literacy skills. Descriptive survey method was used. A structured questionnaire was used for data collection from a study population of 660. The result showed a significant relationship between self-efficacy and information literacy skills. The study recommended the incorporation of information literacy skills as part of the school curriculum and the introduction of activities to boost the self-efficacy of students. Also, student information literacy training and activities should be introduced early.

Keyword: *Information literacy skills, Self-efficacy, Students*

Introduction

Information literacy is the ability to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information (American Library Association Presidential Committee on Information Literacy, 1989). This is regarded as the basis for life-long learning. Jullen (2002) reported that information literacy is the ability to make efficient and effective use of information sources and

that an information literate student today should possess specific online search skills that incorporate the ability to select appropriate search terminology, construct a logical search strategy and evaluate the needed information appropriately.

Information literacy is a crucial skill desperately needed by students in Government Technical Colleges to pursue basic education to function in information-driven society. Students should be able to recognize when information is needed, to locate the information source, to evaluate the credibility of the source and the various formats of the information. The abundance of information in various formats in this information explosion era is of little help but pains to students of Government Technical Colleges who have not learned how to use information effectively.

In the age of information explosion, information has assumed a new dimension as a critical factor of production, socialization and education especially with the emerging social media platforms. Technical College students are regarded as digital natives and need to process information in the learning environment in order to perform well in school and to become better citizens. To participate in the socio-cultural activities in the society, students need information literacy skills. They need to identify the need for information, the source, credibility and utilization of that information, and to manage the volume of information effectively at their disposal, in view of the fact that all things are mediated. A lack of the needed or inadequate information literacy skills has placed Technical College students in a difficult situation and they find it impossible to do well in school and society.

Studies on information literacy skills among students in Government Technical Colleges in South-south Nigeria are lacking. Therefore, this study investigated how self-efficacy predicts information skills of Government Technical College students in South-south Nigeria.

Literature review

The phrase, information literacy, first appeared in print in a 1974 report written on behalf of the National Commission on Libraries and

Information Science by Paul G. Zurkowski who was at the time the President of the Information Industry Association. Zurkowsjki used the phrase to describe the techniques and skills learned by the Information literate student. This is for the utilizing of a wide range of information tools as well as primary sources in molding information solutions to their problems. The key concept in information literacy is the impact of information in the society in view of new skills. Other educational goals, including traditional literacy, computer literacy, library skills and critical thinking skills, are related to information literacy skills.

AL-Issa (2003) described information literacy as a process that influences the development of information literacy skills, documentation and expectations. The study was conducted with 24 female and male students attending a private school and a public school in Kuwait. The study recommended further research on a larger scale locally and regionally to really assess students' levels and understanding of information literacy as other standards in order to design effective holistic approach in literacy instruction.

In 2003, the National Forum of Information Literacy together with United Nation Educational and Scientific Organisation (UNESCO) and the National Commission on Library and Information Science sponsored an international conference in Prague with representatives from twenty-three countries to discuss the importance of information within a global context. The Prague Declaration described information literacy as a key, social, cultural and economic development of nations and communities, institutions and individuals in the 21st century and declared its acquisition as part of the basic human right of life-long learning. The Alexandra proclamation also linked Information literacy with life-long learning and also set information literacy as a basic human right to promote inclusion of all nations.

On May 28, 2009, United States, California Governor, Anold Schwar Zenegger, signed an executive order 5-06-09, establishing a California ICT Digital Literacy Leadership Council, which in turn, was directed to establish an ICT Digital Literacy Advisory Committee. The executive order further states "ICT Digital Literacy is defined as using digital technology, communication tools and/or networks to access,

manage, integrate, evaluate, create and communicate information in order to function in a knowledge-based economy and society. The Governor further directed all concerned authorities, schools, higher education employers, work force training agencies, local governments, communities, organisations and civic leaders to advance California as a global leader in ICT Digital literacy.

Ultimately, information literate students are those who have learned the basic rudiments of how to seek information, where to find information, confirm the source and the information as credible and use it. These students know how to learn because they know how knowledge is organized, how to find information and how to use such information in such a way that others can learn from them. Such students could be regarded as those prepared for life-long learning because they can find information needed for any task or decision at hand.

To underscore the importance of information literacy in a modern society, the International Federation of Literacy Association and Institutions (IFLA) has established an Information Literacy Section. This section has, in turn, developed and mounted an Information Literacy Resources Directory called InfoLit Global. Librarians, educators and information professionals may self-register and upload information literacy related materials. According to the (IFLA) website, the primary purpose of the Information Literacy Section is to foster international co-operation in the development of information literacy education in all types of library and information institutions.

Another conception of Information Literacy Skills is used primarily in the library and information studies fields and this conception, as rooted in library instructions and bibliographic instruction, is the ability to recognize when information is needed and to have the ability to locate, evaluate and use effectively the needed information. In this view, information literacy becomes the basis for life-long learning. It is also the basis for evaluating contemporary sources of information. This is in view of the fact that everything is mediated using various forms of information content that determines the method of dissemination.

Tang and Tseng (2013) reported that students with high self-efficacy demonstrated superior knowledge of digital resources selection and use. Self-efficacy is one of the concepts under social learning theory of Bandura (1986, 1987) which postulates that human achievement depends largely on interactions between one's behaviour, personal factor (example thought, beliefs and environmental conditions. This Scholar defined self-efficacy as the measure of one's competitiveness to complete tasks and reach goals which influences every aspect of human endeavours. Students obtain information to appraise their self-efficacy from their actual performance, their vicarious experiences. Persuasions they receive from others and their psychological reactions.

Self-efficacy describes a belief in one's capability to produce at their level of attainment to perform in certain manner to reach a certain goal. Self-efficacy differs from efficacy in that one has the power to produce an effect (efficacy) and the other is the belief in the power to produce that effect (Schunk and Perjares, 2002).

Self-efficacy beliefs are developed and reinforced by mastery, modeling and encouragement during socialization and reduction of stress reaction (Bandura, 1994). Students gain proficiency when they experience success through repetition activities. Self-efficacy could either be low or high. Kurbanoghu (2003) established a relationship between self-efficacy and Information Literacy Skills.

According to the National Board for Technical Education NBTC, there are one hundred and fifty-five (155) Technical Colleges in Nigeria. These colleges were established to offer technical and business courses ranging from mechanical craft, electrical installation, motor vehicle mechanic, fabrication and welding, computer craft, block laying and concreting furniture craft, painting and decoration, plumbing and pipe fitting, printing craft, graphic arts, catering craft, graphic arts and business studies. These courses lead to the award of National Technical Certificate and national Business Certificate by the National Business and Technical Board (NABTEB) after the successful completion of a three (3) years course. The reason for technical education according to (Ojimba, 2012) was too much emphasis on University education in

Nigeria which have reduced the economic opportunities of those who are more work oriented than academics.

Technical education is basically designed to offer students the opportunity to improving themselves in their chosen profession and contribute to the developmental needs of the society. Nuru (2007) as cited by Okoye R & Onyewe (2016) opined that any nation's economy is required to prepare young people for the jobs of the future of which technical education have crucial role to play. Technical education therefore was carefully united to train a needed man-power to fit in a gap university graduates may not fit-in. There is a general consensus that employer of labour demands more skills than they did in the past (Yang 2008). It is in the light of this that the national Board for Technical Education structured the programmes and curriculum in the technical colleges for produce the needed man-power at the completion of any programme in technical colleges. Self-efficacy could be a significant predictor of information literacy skills of students of Technical Colleges in South-south Nigeria.

According to Kofi Annan Secretary-General of the United nations 1997-2006 "information is liberating and knowledge is power. Certainly, students in Government Technical schools cannot learn without using information that requires the necessary skills (Bruce 2008 p111). Information literacy skills in its totality include the ability to find, evaluate. Store, manage and manipulate information to solve problems and to know what is on notice within social, ethical, cultural and legal context. Traditional literacy deals with the ability to read and write but there seems to be various types of literacy. Such as media literacy, computer literacy, library literacy, web literacy etcetera.

In this context, normal and active literacy focuses on making students in technical colleges to be aware of their environment, read and write in their day-to-day activities. Information literacy skills are quite different from that. They are rather a combination of all these and goes far beyond them. American Library Associate Presidential Committee and Information Literacy (ALAPCIL, 1989) explains "ultimately information literate students are those who have learned how to learn.

They know how to learn because they know how knowledge is organized, how to find information and how to use information in such a way that others can learn from them. These the students prepared for life-long learning because they can always find information needed for any task or decision at hand.

Bundy (2004) reported a relationship between information literacy and life-long learning. According to the Scholar, information literacy is the foundation for independent and life-long learning. This was amplified by ACRL (2000) which emphasized the need for information literacy skills for students in technical colleges so as to be able to process the large amount of information available in a contemporary society. Simply being exposed to a great deal of information will not make students information literate. Furthermore, Data smog refers to the idea that too much information can create information barrier in our lives. Especially students and the society require a special skill to handle this increasing information. Information literacy is therefore considered as the best solution to data smog (ACRL2006).

According to McTavish (2009) the information society is becoming more complex by the day and the need for students in Government Technical Colleges to increase and maximize their contributions to a healthy democratic and pluralistic society. In addition, students are to maintain a prosperous and sustainable economy. Besides, governments and the industries are challenged to create an educational system to focus on the students' attention on information literacy. Brink (2006) research was on government organisation, such as Human Resources and Skill Development in Canada, claims that almost half of the working-age of Canadian does not have the information literacy skills they need to meet the over-increasing demands of the information society.

In Africa, information literacy skills has not received the attention it deserves, for instance Baro (2011) conducted a survey of information literacy education in library schools in Africa. Findings showed that presently only a few library schools offer the course Information Literacy as a standalone course in their curricula. Rather, it

is briefly discussed as a topic in related courses. The reason for this, according to the Scholar is Library and Information science departments lack the technology, other facilities and qualified man-power to teach the course. Shithole et al (n.d.) conducted a survey on information literacy education. A case study of the African University, Mutare, Zimbabwe found that students do not understand that information literacy skills are transferable.

Kurbanoglu (2003) conducted a study on the link between self-efficacy, information literacy and life-long learning. According to this scholar, the characteristic of modern society is the constant changing process. When the volume of information release to the society increases the technology to cope with the processing of such information gains momentum and the use of technology becomes widespread.

Societies of the information age needs confident, independent, self-regulated learners equipped for life-long learning. Consequently, an information literate student knows how to learn and is capable to achieve life-long learning. Information literacy skills are therefore used to describe the skills of information problem solving (American Library Association 2000). The result of the study suggests that the level of students' perceived self-efficacy for information literacy increases slightly through the years and the highest level is acquired in the third year and decrease slightly at the final year.

Keshaverv et al (2016) study on student sense of self-efficacy in searching information from the web: A PLS approach. The results of the study reflected the importance of studying the students' searching behaviour as it now possible to help them improve their information searching and evaluating skills which are largely related to their self-efficacy. The more self-efficacy they have the more success in information searching could be expected. Other research findings have found significant relationship between self-efficacy and the behaviour of information searching in the sense that the more a student has self belief, the higher the level of their ability for information searching will be (Ata and Baran, 2011; Aalier and Serin, 2012; Cakmak, 2010). However, the concept of information searching self-efficacy as an integrated concept

is the students belief about accessing, using, sharing and evaluating of information (Kurbanoghu, Akkoyulu and Umay, 2006).

The role of information literacy self-efficacy in students learning and educational achievements has also been taken into consideration by De Meulemeester (2013). The results of the research showed that the test of improving students information literacy skills did not change after the second year while their information literacy self-efficacy increased by raising their educational level. The relationship between information literacy, self-efficacy, academic motivation and employment has also been explored. (Ross, Perkins & Bodey 2013) among students with and without paid employment. The findings indicate the importance of motivation in information self-efficacy.

A significant relationship was also found between the amount of time spent studying and information self-efficacy. The relationship between psychometric characteristics of student information literacy self-efficacy has also been explored (Brown, 2005). As seen in the literature reviewed, most of the researches in the field of self-efficacy and information literacy have been conducted by Turkish researchers in recent years in Turkish. However, this researcher was not able to lay hands of any empirical study on the topic self-efficacy as predictor of information literacy skills among students in Government technical Colleges in South/South, Nigeria. Therefore, this study is intended to bridge the gap.

The review of the literature revealed that there is a dearth of empirical research on self-efficacy as predictor of Information Literature Skills of students in Government Technical Colleges South/South, Nigeria. Most of the available research works are on information literacy skills of undergraduates, information literacy skills and life-long learning, information literacy education in library schools, the information society, and data smog. Most of these studies were carried out by Turkish researchers in recent years and in Turkish land. Therefore, this study investigated self-efficacy as predictor of information literacy skills of students in Government Technical Colleges South/South, Nigeria.

Research methodology

The study adopted description research design. Multi-stage sampling technique was adopted. At the first stage one Technical College was selected randomly from each of the 6 states that make up the South-south geo-political zone. These are Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers states. Each of these states has technical colleges as follows: Akwa Ibom – 6, Bayelsa 2, Cross River 4, Delta 6, Edo 7, and Rivers 4. At last 110 respondents were selected from six technical colleges, i.e. one (1) college from each state to form a sample population of 660. The research instrument used for data collection was a structure questionnaire on self-efficacy of students on information literacy skills (SESILS) designed by the researcher.

Results and discussion

The survey result showed that beginners in technical colleges in South/South, Nigeria score low in self-efficacy for information literacy skills and found it difficult to deploy necessary skills. Students level of perceived self-efficacy increases slowly as they pass through the school system in their first and second year. This is in agreement with (Kurbanogu, 2003).

The result also showed that students' self-efficacy belief for information literacy for problem solving becomes strong as he/she progress through the school system. This is not to suggest that time spent in the school is a factor that predict information literacy skills. Another factor that indicates students' acquisition of information literacy skills is their disposition to practice information seeking behavior. The students should be given practical training always on information seeking skills which is directed at building their self-efficacy.

In addition, it was also observed that quite a good number of students in technical colleges have not heard about information literacy skills even when they have been using such skills without knowing. The result showed that there was significant relationship between information literacy skills and self-efficacy ($r = ,358^{**}, N = 964, P < .05$). This suggests that self-efficacy had positively enhanced information

literacy skills in this study. This led to the rejection of the null hypothesis formulated for the study.

Conclusion and recommendations

Based on the findings of this study, it is recommended that students in technical colleges in South/South, Nigeria should be exposed to information literacy skills training early in life and there should be programme training as part of the school curriculum. In addition, since the psychology construct self-efficacy is found to be significantly related to information literacy skills of students, attention should be paid to develop students' self-efficacy for life-long learning. If Government Technical Colleges in South/South, Nigeria are to achieve their set objectives, the training should include information literacy skills so as to enhance their learning process and practice their acquired skills.

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LEATHER WARES FACTORIES IN ABA, NIGERIA: CHALLENGES AND WAY-FORWARD

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Abstract

Ariaria International Market in Aba, Abia State of Nigeria houses a cluster of leatherworks factories that manufacture exported wares. Except their challenges are addressed, they are going down. The study was aimed at identifying their challenges and charting the way-forward. Key informant technique was used to elicit data from 17 respondents. The data were analyzed with the help of simple statistical tools. Results showed high exchange rate and other costs of importation of machinery and raw materials was a key challenge. Other challenges include lack of entrepreneurial spirit in graduate youths, poor doing business facilities and infrastructure, irregular electricity power supply, competition from imported goods, and lopsided development. Others are policy reversals, high and double taxation, difficulties in procuring business approval from government, high inflation rate, and unstable foreign exchange rate, in addition to corruption and fraud. The study recommends government encouragement of the leatherworks sub-sector with the right equipment and support.

Keywords: *Economic diversification, Leather wares factories, Aba, Nigeria*

Introduction

Enterprises constitute the driving force for economic development and generate 60-70% of domestic employment. They can achieve equitable and sustainable industrial diversification in developing economies, like Nigeria, which is among the poorest countries in the world and experienced economic recession in 2017. They are responsible for economic growth of the developing countries of the world, also known as the BRICS countries (Brazil, Russia, India, China, South Africa) and the rapid economic transformation of the Asian Tigers (Aliogo and Eneh, 2013; Eneh, 2017).

An important part of the real sector in Nigeria is the leather wares manufacturing sub-sector. It has a heavy presence among industrial concerns in Aba, Abia State, South-east geo-political zone of Nigeria, where the sub-sector engages micro, small, medium and large scale manufacturing and marketing of unisex footwears, waistbelts and handbags. Since the era of Eastern region, Aba has remained one of the top three industrial hubs in the Igbo-dominated zone. Igbos are reputed for entrepreneurial dexterity. The other two industrial hubs are Nnewi and Onitsha. Together, the three hubs, with Port Harcourt industrial hub, Eastern region was the fastest growing economy in the world up to the mid-1960s and was described as the home of business minds (Eneh, 2005).

Identifying and addressing the challenges of this sub-sector will enhance the performance of the dwindling Nigerian economy. This study is also well-timed, as the federal government of Nigeria has come up with policy on diversification of the monolithic (oil) economy by way of encouraging entrepreneurship in Nigeria beyond the crude oil sector to the real sector of the economy. The initiative will also curb the high rate of unemployment among graduate youths in the country. It will also enhance economic self-reliance of the people. The study, therefore,

was aimed at identifying the challenges of leather wares manufacturing sub-sector with a view to forging a way-forward for the sub-sector in Aba.

Review of relevant literature

Daily Sun (2016) opined that entrepreneurial spirit was a necessary factor in success of enterprises. Youths should also subject themselves to apprenticeship, in addition to their academic training and qualifications. Apprenticeship was a much-needed human capacity development or skills empowerment. On the other hand, government improvement in provision of doing business facilities and infrastructure would help Aba entrepreneurs actualize the potential and capacity of Aba to become the small and medium enterprises (SME) capital of Nigeria and position the country as truly the giant of Africa.

More hands needed to be recruited into the sub-sector. This requires mounting periodic sensitization and awareness raising programmes for the youths, who abandon enterprise as a noble means of livelihood and wealth creation for ignoble ones, like political thuggery, kidnapping for ransome, armed robbery and other social vices. Youths need to be encouraged to believe in themselves to stand against challenges. They ought to use their talents and creativity in working hard to success, since life does not end in the four walls of the educational institution.

Despite the challenges of using the traditional method of shoe making in Ariaria International Market in Aba, Abia State of Nigeria, the products (shoes and other leather wares) made in Aba are in high demand, as traders from neighbouring African countries of Cameroon, Mali, Ghana, and Ivory Coast, among others, throng to Aba city to place order for the Aba made leather wares. The current Nigerian economic down-turn notwithstanding, the shoe makers in Ariaria International Market, Aba are dogged (Ifeanyi, 2017).

Increasing cost of importation of machinery and leather raw materials, due to the rising cost of foreign currency at the parallel market, is inimical to the business. Without machines, an Aba shoe

maker can only produce about 300 pairs of shoes in a week, which is an insignificant fraction of the huge and regular demand from patrons from Mali, Cameroon, Sierra Leone and other parts of the world.

Aba shoe makers also produce good quality military boots of specified world standard to the delight military and para-military organisations. According to Adeola (2016), big-time suppliers of the boots place order for upwards of 50,000 military pairs of boots, on which they insert or engrave foreign labels for imported products, to beat Nigerians' craze for foreign products. Some shoe makers in Aba take their products off-shore, put the labels of foreign products, and bring the products back to sell in different parts of the country as foreign made products.

Irregular electricity power supply compel the factories to depend on electricity power generating sets at higher cost for the set acquisition, fueling and maintenance. Kerosene stove may be used to dry materials, but still at higher cost than using electricity.

Absence or poor state of roads militates against the movement of people and goods. These increase production cost and consumer price.

To encourage local production and creation, there is the need for the federal government to ban the importation of leather products. According to Okoro (2016), made in Aba products are already making waves in different countries in Africa, such as, Togo, Niger Republic, Cameroon, Gabon, Ghana, Libya, Senegal, in addition to their patrons from all parts of Nigeria, mostly the North. Some semi-finished Aba products are taken to Dubai in the United Arab Emirate and Italy for finishing touches, from where they are brought back to Nigeria for sales as foreign shoes in boutiques in Abuja, Lagos, Port Harcourt, Enugu, Uyo, Kano, etc.

Due to high cost of importation of leather raw materials from Italy, Spain and South Korea and unaffordability of foreign exchange, Aba leather products have become extremely costly, up to triple their prices of three years ago. The dealers are stranded for lack of wares. Many Aba leather workers, who used to produce with pure leather, have resorted to producing with synthetic leather raw materials imported from

China at cheaper rate. Some others collect down-payment from dealers to enable them import raw materials, at the risk of not being sure of what to get at the end.

Lopsided development reflects in the federal government assisting farmers in the North with tractors and other necessary farm tools and inputs at affordable costs of purchase and/or rent as well as provision of soft loans. The same government is yet to action its economic diversification policy by addressing the challenges of entrepreneurs in Southeast Nigeria.

Policy reversals, high and double taxation, difficulties in procuring business approval from government, high inflation rate, and unstable foreign exchange rate are some other challenges faced by Aba leather workers. These add to corruption and fraud.

To stem the tide, the government should help Aba leather workers with modern machines to help them overcome the challenges of obsolete equipment in shoe manufacturing. Government should partner with the private sector to provide regular electricity supply to Aba leather workers.

The government and Bank of Industry should collaborate to assist the Aba leather workers with modern machinery even if it is on daily rental basis. Leather works involve the process of decent and neat cutting, folding, sewing, and gumming at the different stages of production. The government can also open leather works industrial training centres in Ariaria International Market in Aba to improve the skills of current workers and build more hands for sustainability and succession. It can also stop high and double taxation.

Research methodology

Aba in Abia state is made up of two local governments areas (Aba South and Aba North). Aba was established by the Ngwa clan of Igbo people as a market town near the Aba River. It is at the intersection of roads leading to Port Harcourt (capital of Rivers state), Owerri (capital of Imo state), Umuahia (capital of Abia state), Ikot Ekpene and Ikot Abasi (both in Akwa Ibom state) (capital of Rivers state) (Hoiberg, 2010). The city

became a collecting point for agricultural products following the British made railway running through it to Port Harcourt. Aba is well known for its craftsmen. As of 2006 census, Aba had a population of 534,265 (Falola and Heaton, 2008).

Aba is surrounded by oil wells which separate it from the city of Port Harcourt. Its major economic contributions are textiles and palm oil along with pharmaceuticals, plastics, cement, and cosmetics which made the Ariaria International Market to become the largest market in West Africa seconded by the Onitsha Main Market. There is also a Heineken brewery, a glass company and distillery within the city.

Aba is powered by the Enugu Electricity Distribution Company (EEDC) - a product of the unbundling of the Nigerian Electricity Power Authority (NEPA). Another electrical company, Geometric Power Company, is yet to start power generation. Inhabitants are mostly Christians by religion.

The purposive sample included all 14 local shoe factories clustered in Aba North Industrial Market (Shoe Plaza Division), Ariaria International Market, Aba and 3 key officers (Chairman, Secretary and Public Relations Officers) of the cluster. Key informant technique (KIT) was used to elicit information from each factory owner or his representative and 3 key officers (Chairman, Secretary and Public Relations Officers) of the Aba North Industrial Market (Shoe Plaza Division), Ariaria International Market, Aba. Of the 17 respondents, 5 were women. A questionnaire data collection instrument was administered to the respondents. Simple statistical tools were used to analyze the data.

Results and discussion

The youths need entrepreneurial spirit and to subject themselves to apprenticeship, in addition to their academic training and qualifications. In support of this finding, Eneh and Eneh (2014) submit that decorative certificates are being acquired from Nigerian educational institutions, without the necessary skills content. Nigerian education system cannot

produce enterprise-ready school-leavers and graduates with skills for economic self-reliance and poverty reduction.

More hands need to be recruited into the leather works sub-sector. This would serve to improve available hands and recruit and train new hands for succession. Periodic sensitization and awareness raising programmes for the youths have become necessary.

With traditional technology, the Aba leather workers produce export quality goods Cameroon, Mali, Ghana, and Ivory Coast, among others. How much better would they perform, if given the right machinery, which they cannot afford due to rising cost of foreign currency.

Aba shoe makers produce good quality military boots of specified world standard to the delight military and para-military organisations. But, they have difficulties in procuring business approval from government due to corruption. Besides, they need to insert or engrave foreign labels for imported products because of the Nigerians' craze for foreign products. To do this, Aba shoe makers take their products off-shore, put the labels of foreign products, and bring the products back to sell in different parts of the country as foreign made products. "Aba-made" is a national stigma for made-in-Nigeria goods, especially among people with unreasonable appetite for foreign products.

The factories depend on electricity power generating sets at higher cost for the set acquisition, fueling and maintenance because of irregular electricity power supply. Other alternatives, e.g. kerosene stove for drying materials, are less effective and costlier.

Besides, the absence or poor state of roads militates against the movement of people and goods. These increase production cost and consumer price. This supports earlier report by Eneh (2011) that development projects abandonment is common in Nigeria.

To encourage local production and creation, there is the need for the federal government to ban the importation of leather products. Local industries in developing countries need government protection against competition with foreign competitors.

Due to high cost of importation of leather raw materials from Italy, Spain and South Korea and unaffordability of foreign exchange, Aba leather products have become extremely costly, up to triple their prices of three years ago. Aba leather products dealers are stranded for lack of wares. Some many Aba leather workers, who used to produce with pure leather, have producing with synthetic leather raw materials imported from China at cheaper rate. Some others collect down-payment from dealers to enable them import raw materials at the risk of not being sure of what to get at the end.

Lopsided development reflects in the federal government assisting farmers in the North with tractors and other necessary farm tools and inputs at affordable costs of purchase and/or rent as well as provision of soft loans. Southeast Nigeria should receive a similar industrial boost by the same government that tauts economic diversification.

Policy reversals, high and double taxation, difficulties in procuring business approval from government, high inflation rate, and unstable foreign exchange rate are some other challenges faced by Aba leather workers. These add to corruption and fraud. This supports the report of Eneh (2011) that policy summersault is a development issue in Nigeria.

The findings also support the report of Eneh (2010) that Nigeria ranked poorly in doing business environment occasioned by absence of or decaying infrastructure, weak government commitment and inadequate incentives, underdeveloped human resources, politico-social factors, among others.

Recommendations

The government should assist Aba leather workers with modern machines to help them overcome the challenges of obsolete equipment in shoe manufacturing. Government should partner with the private sector to provide regular electricity supply to Aba leather workers.

In consortiu, the government can work with the Bank of Industry to provide Aba leather workers with modern machinery even if it is on

daily rental basis. The decent and neat cutting, folding, sewing, and gumming at the different stages of production of leather works constitutes a process that needs mechanisation. The government can also open leather works industrial training centres in Ariaria International Market in Aba to improve the skills of current workers and build more hands for sustainability and succession.

The ministry of information and culture and National Orientation Agency should use the media to re-orient the Nigerian consumers on the evil patronizing foreign goods cum lack of interest in locally made alternatives. Business owners should build clusters and networks to collaboratively tackle their common challenges.

Conclusion

The study has identified the challenges faced by Aba leather wares factories which are burning out. The way-forward was also charted for stakeholders.

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THE CHALLENGES OF ENTREPRENEURS IN ACCELERATING SUSTAINABLE DEVELOPMENT IN NATURAL RESOURCE-RICH NIGERIA

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Abstract

Although Nigeria is rich with abundant natural resources and factors of production, its development paradoxically remains sluggish since its independence in 1960. This review examines a number of daunting challenges that make entrepreneurs unable to accelerate sustainable development in Nigeria. Findings support the theories reviewed in the study, which are the Schumpeterian Theory of Economic Development and the Resource Curse Theory. Government ought to make deliberate efforts to address these challenges to enable entrepreneurs take their rightful place to drive the economy for the needed sustainable development.

Introduction

One in every five Africans is from Nigeria, which abounds with natural resources, including mineral deposits in forms of metallic minerals, non-metallic minerals, mineral fuels, and miscellaneous minerals. Metallic minerals found in commercial quantities in Nigeria include iron-stone, gold, columbite, feldspar, tantalum, magnesite, zircon, lead ore, zinc ore,

casserite, molybdenite, wolframite, iron ore, bauxite, copper, and limonite. Non-metallic minerals found in commercial quantities in Nigeria include clay, kaolin, fire-clay, glass sand, limestone, calcite, dolomite, bentonite, gypsum, sulphur, barytes, phosphate, dolerite (quarry stone), diatomite, lignite, kyanite, salt, talc, mica, gemstone, and trona. Mineral fuels found in commercial quantities in Nigeria include petroleum, natural gas, etc. Miscellaneous minerals found in commercial quantities in Nigeria include spring, and hot springs (Eneh, 2007).

Harnessing natural resources brings about and accelerates sustainable development, but requires factors of production, which are land, labour, capital and entrepreneurship. There is not only sufficiency of land (923, 768 km² and population density of 194.86 in 2014), but also abounding natural resources in Nigeria. With a population of 173.6 million people in 2013, the country also has sufficient hands (labour). Although the cost of capital is high in Nigeria, capital is available, especially with increasing remittance records in recent past (Eneh and Eneh, 2014; Eneh, 2005).

Enterprises are far from lacking in Nigeria. *The Vanguard* (2008) reported that over 600,000 companies were registered in Nigeria. The number soon grew to 1 million. In 2011, additional 72,396 companies were registered. This grew to 81,144 in 2012, and declined to 71,942 in 2014. After introducing the “24-hour start-to-finish business registration” in November 2012, the Corporate Affairs Corporation of Nigeria registered 10,723 companies in 4 months.

It is expected that a combination of these factors of production ought to result in sustainable development in Nigeria. On the contrary, Nigeria’s economic development remains sluggish, declining indeed. Three out of 4 micro, small and medium enterprises die every year in the country. Nine out of 10 prospective entrepreneurs do not get to start their enterprises. Many state-owned enterprises have been privatized for insolvency or commercialised, in an attempt to inject life into them.

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Multinational corporations are folding their production businesses or relocating from the country (Eneh, 2010).

Table 9.3.2.1 compares Nigeria's GDP per capita with those of other developing countries. Nigeria crawls behind economically and its rate of development is considerably slower than those of Malaysia, Indonesia and Venezuela between 1965 and 1995. The 1995 GDP per capita income of \$260, which ranked Nigeria as the 19th poorest nation in the world then, was about the same as the country's GDP per capita income in 1972, twenty-three years earlier. This reflects stagnation of first order in economic development.

Table 9.3.2.1: GDP per capita for selected developing countries

S/No.	Country	GDP per capita (1965)	GDP per capita (1995)	Increase
1.	Nigeria	\$5.8 billion	\$26.8 billion	3.6 folds
2.	Malaysia	\$3.1 billion	\$85 billion	27 folds
3.	Indonesia	\$3.8 billion	\$198 billion	52 folds
4.	Venezuela	\$3.8 billion	\$75 billion	20 folds

Source: Eneh, 2006

Table 9.3.2.2 compares the GNP per capita of fellow sub-Saharan African countries. Nigeria had equal GNP per capita of 599 with neighbouring Cameroon in 1975-1984 period. But, Cameroon's GNP per capita increased by 66 % in 1984-1989, while Nigeria's GNP per capita decreased by 51%. The GNP per capita for Senegal rose from 436 in 1975-1984 to 558 in 1985-1989, and rose further to 629 in 1989-1998.

This sharp contrast suggests that Nigeria has a peculiar case and raises the question as to why it lags behind in economic development not only between between 1975 and 1998, but to date. Indeed, the Nigerian economy went into recession by the third quarter of 2016 and is feared to

go into depression (NBS, 2016). Growing literature focuses on this contradiction. This review attempts to, in general, paint the paradox, and to, in particular, identify the challenges facing entrepreneurs in accelerating sustainable development in Nigeria.

Table 9.3.2.2: GNP per capita for selected sub-Saharan African Countries, 1975-1998

S/No.	Country	GNP per capita (1975-1984)	GNP per capita (1985-1989)	GNP per capita (1989-1998)
1.	Nigeria	599	292	258
2.	Cameroon	599	996	771
3.	Zambia	562	332	377
4.	Senegal	436	558	629
5.	Ghana	356	404	396
6.	Kenya	340	366	311
7.	Togo	325	340	363
8.	Benin	313	326	367
9.	Sub-Saharan Africa	524	511	534

Source: Eneh, 2006

Theoretical literature

Two important theories implicated for this study are the Schumpeterian Theory of Economic Development and the Resource Curse Theory. According to the Schumpeterian Theory of Economic Development, harnessing natural resources for economic development is done by entrepreneurs - people who undertake significant projects or activities, venturesome individuals who stimulate economic progresses by finding new and better ways of doing things. They shift economic resources out of an area of lower, into an area of higher, productivity and greater yield, create value and are the innovators who drive the creative-destructive process of capitalism. They function to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried

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technological possibility for producing a new commodity; producing an old one in a new way; opening up a new source of supply of materials or a new outlet for products; reorganizing an industry, and so on. Entrepreneurs are the change agents in the economy. By serving new markets or creating new ways of doing things, they move the economy forward (Dees, 2004).

The Resource Curse Theory (also known as the Paradox of Plenty) refers to the contradiction whereby countries and regions with an abundance of natural resources, especially point-source non-renewable resources, like minerals and petroleum fuels, tend to have less economic growth and worse development outcomes than countries with fewer natural resources. This hypothesis is based on many different reasons, including a decline in the competitiveness of other economic sectors; volatility of the revenues from the natural resource sector due to exposure to global commodity market swings; and government mismanagement of resources, or weak, ineffectual, unstable or corrupt institutions.

Several case studies (Djankov, et al., 2008; Gylfason, 2001; Satch, et al., 1995), have shown a disconnect between natural resource wealth and economic development. From 1965-1998, in the OPEC countries, GNP per capita growth decreased on average by 1.3%, while in the rest of the developing world, per capita growth was on average 2.2%. The negative effects and curses of these resources have been identified (Ogbuju and Eneh, 2014) as:

- i. Conflict: Natural resources often provoke conflicts within societies, as different groups and factions fight for their share.
- ii. Taxation (Rentier state): In many economies that are not resource-dependent, governments tax citizens, who demand efficient and responsive government in return. In countries with economy dominated by natural resources, however, rulers do not need to tax

their citizens because they have a guaranteed source of income from natural resources, nether do they account to citizens.

- iii. Dutch disease: This is an economic phenomenon in which the revenues from natural resource exports damage a nation's productive economic sectors by causing an increase of the real exchange rate and wage increase. This makes the real sector less competitive in world markets.
- iv. Revenue volatility: Prices for some natural resources are subject to wide fluctuation, leading to inability to plan.
- v. Excessive borrowing: Since governments expect more income in future, they accumulate debt, even though they receive natural resource revenues as well.
- vi. Corruption: In resource-rich countries, it is often easier to maintain authority through allocating resources to favoured constituencies than through growth-oriented economic policies and a level, well-regulated playing field.
- vii. Lack of diversification and enclave effects: Economic diversification may be neglected by authorities or delayed in the light of the temporary high profitability of the limited natural resources.
- viii. Human resources: In many resource-rich countries, natural resource industries tend to pay far higher salaries than what would be available elsewhere in the economy. This tends to attract the best talents from both private and government sectors, thereby damaging these sectors by depriving them of their best skilled personnel (internal brain-drain).
- ix. Liberty and democracy: There is a correlation between rises and falls in the price of petroleum with rises and falls in the implementation of human rights in major oil-producing countries.

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Ogbuju and Eneh (2014) and Eneh (2007) also showed that all the identified negative effects and curses of the natural resources are applicable to Nigerian situation.

The challenges of entrepreneurs in resource-rich Nigeria

Gerber (2007) listed ten reasons why most businesses fail: lack of management systems; lack of vision, purpose, or principles; lack of financial planning and review; over-dependence on specific individuals in the business and poor market segmentation and/or strategy; failure to establish and/or communicate company goals; competition or lack of market knowledge; inadequate capitalization; absence of a standard-quality programme; and owners concentrating on the technical, rather than the strategic, work at hand. All the ten factors are quite evident among Nigeria's small businesses.

Jhingan (2009) submitted that foreign exchange constraint hinders entrepreneurship in developing countries. Export proceeds are not used to develop other sectors, which rather suffer neglect. On the other hand, too much dependence on export has exposed developing economies to external shocks from fluctuations in export markets. This report supports the Resource Curse Theory, which, according to Ogbuju and Eneh (2014), is applicable in Nigeria.

Pettit (2004) reported five major factors why more than half of small businesses fail within the first four years as under-capitalization/inadequate sales; lack of a big vision, lack of a clear plan; lack of focus and lack of expertise. Particularly stressed are the word 'big' in the visioning process and 'clear' in the planning process. Many people get it wrong at this stage, confusing 'big vision' with 'starting big'; and 'clear business plan' with 'bogus business plan'. Many small businesses fail because of fundamental shortcomings in their business planning, which ought to be realistic and based on accurate and current information as well as educated projections for the future.

Schaefer (2006) identified starting a business for wrong reasons, locating the business wrongly, over-expansion and lack of website as killers of small businesses. Those who start small businesses solely to make a lot of money, to have time for family, or to avoid answering to anyone may find the businesses coming to grief sooner than later. Factors like passion, physical fitness or mental stamina to withstand challenges, positive attitude, strong drive or determination, using failure as a learning process, honesty or integrity, and consideration for others are far more important. As a good leader, a successful manager creates a work climate that encourages productivity. He has a skill for hiring competent people, training them and is able to delegate functions. He is also skilled at strategic thinking, able to make a vision a reality, and able to confront change, make transitions, and envision new possibilities for the future.

Lack of experience, insufficient capital (money), poor location, poor inventory management, over-investment in fixed assets, poor credit arrangements, personal use of business funds, unexpected growth, competition, and low sales are also factors making over 50% of small businesses in the United States of America (USA) fail in the first five years. The absence of a viable market for the product or service, poor capital structure or cash flow crunch, lack of marketing expertise, poor management, and being out of touch with customers are the greatest small business killers (Rao, 2009).

Hussey (2010) opines that small businesses fail because the owners think they are good at what they do, forgetting that there are others doing exactly the same thing. Ward (2010) submits that small businesses fail because those who start them fail to do the market research to find out if there is any genuine market for their product or services, bother to get the money sorted out before they start the business, choose a feasible business model, plan for growth or what happens if the new business is a success, and plan an exit strategy. To avoid failure at the exit of the pioneer

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promoter, there is the need for an explicit plan, which goes beyond wishful thinking.

Edrich (2003) gave twenty-five basic reasons why small businesses fail, to include fear, procrastination, choosing quantity over quality (or cutting corners), poor follow-ups, wrong spending pattern (too little or too much), cockiness (pride and arrogance), and blame shifting or incessant excuses. Fan (2003) submits that small businesses need public support because of their inherent disadvantageous characteristics, such as limited managerial capabilities, lack of economies of scale, lack of collective voice and influence on policy, frequent cases of market failures and their biases against small businesses, weak financial capacity to undertake research and development (R&D) or procure other costly support services such as business development services (BDS), and huge knowledge gaps (most small business promoters do not know what they need to know but which they do not know). When these public supports are not available, chances of failure can be very strong.

The submissions of Fan (2003) quite aptly describe the circumstances surrounding the failures as well as dismal performance of small businesses in Nigeria, which lag behind their counterparts in other countries in terms of export earnings and GDP contributions to aggregate economic growth. Table 9.2.2.3 shows the importance of small and medium enterprises (SMEs) in terms of contribution to GDP, export earning, and employment generation. In Nigeria, the contribution of SMEs to GDP is poor at 10%, as against 40-68% for other countries listed. Their export earning is negligible at 3%, relative to 27-40% for other countries. Therefore, there must be additional, country-specific reasons or factors militating against the survival of small businesses in Nigeria.

Table 9.2.2.3: Importance of SMEs

S.N	Country	Employment %	Export earning %	GDP %
1.	U.K.	53	27	52
2.	U.S.A.	52	30	50
3.	India	79	38	40
4.	Hong Kong	78	37	51
5.	Japan	70	40	68
6.	Nigeria	75	3	10

Source: Fan (2003)

There is predominance of ‘necessity entrepreneurs’ (promoters who start businesses because of the need to be busy than idle) over ‘opportunity entrepreneurs’ (promoters who embark on businesses to take advantage of identified market opportunities). Necessity entrepreneurs buckle and fall/fail at the slightest threat, whereas opportunity entrepreneurs will always be concerned about how to maintain or expand market shares. The absence of a well thought-out programme of converting necessity entrepreneurs to opportunity entrepreneurs in Nigeria is one of the reasons for poorer small business performance (and therefore, possible higher failure rate) in Nigeria.

Adebiyi (2014) opined that distorted and corrupted value system, coupled with weak operating capacity in terms of skills, knowledge and right attitude, constitutes major killers of small businesses in Nigeria. This confirms the earlier submission of Jhingan (2006) that human resources constraint militates against development in developing countries, as people lack the critical skills and knowledge required for all-round development of the economy because of inadequate knowledge production. This also reflects in lack of appropriate technology.

A normal business cycle starts with an initial gestation period without income accruing, moves to the commencement of inflow (which may fall below outflow or expenses) until the break-even point is reached,

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progresses to incremental growth of profit until the business matures. With innovative entrepreneur, the maturity will experience a plateau or prolongation. Challenges will come along the way. The serious entrepreneurs will, with determination and perseverance, weather the storm, while the ‘flight-by-the-night’ ones will exit into ‘quick-fix’ options, leading to the death of the original business. Most Nigerian entrepreneurs have the tendency to run businesses half-heartedly because there are other fast, alternative means of ‘making money’ quick, leading to failure of small businesses in the country.

The dismal state of infrastructure, especially electricity power, transportation and workspace facilities affect SMEs adversely in Nigeria. Table 9.2.2.4 compares the population to electric power generation/consumption for ten countries.

Table 9.2.2.4: Comparative analysis of consumption of electric power in selected countries

S.N	Country	Population	Electric power generation	Electric power per capita consumption
1.	U.S.A.	250 million	813,000 MW	3.2 KW
2.	Cuba	10.54 million	4,000 MW	0.38 KW
3.	U.K.	57.5 million	76,000 MW	1.33 KW
4.	Ukraine	49 million	54,000 MW	1.33 KW
5.	Iraq	23.6 million	10,000 MW	0.42 KW
6.	South Korea	47 million	52,000 MW	1.09 KW
7.	South Africa	44.3 million	45,000 MW	1.015 KW
8.	Llibya	5.5 million	4,600 MW	1.015 KW
9.	Egypt	67.9 million	18,000 MW	0.265 KW
10.	Nigeria	140 million	4,000 MW	0.03 KW

Source: Okafor (2008)

Electric power per capita consumption in Nigeria is a paltry 0.03 KW, as against 0.265-3.2 KW for other countries listed. Weak small businesses cannot afford alternative electricity power sourcing in the face of the epileptic electricity generation/supply situation in Nigeria, which has drastically reduced capacity utilization of small businesses, damage their equipment and ultimately lead to the demise of many small businesses. Those weathering the storm lose product price competitiveness because of high cost of production. Nigeria is generally a high cost origin and a poor performer in the export market of goods or services. Adebisi (2014) reported that power generation by Manufacturers Association of Nigeria (MAN) members took 36 percent of production cost. As a result of this, 10 per cent of members operated at 48.8 per cent capacity, 60 per cent were at varying stages of coma, while 30 per cent had completely closed down. These are mostly medium to large entrepreneurs, how much more for small businesses.

Poor road infrastructure combines with absence of alternative means of transportation to scuttle the efforts of entrepreneurs, who are compelled to pay usurious costs to Shylock landlords for workspace facilities, such as office space, parks, etc. Sudden and frequent rent upward reviews further devastate limping small businesses. Not surprising, the mortality rate of small businesses in Nigeria is quite high.

Contrary to Nigerian situation, many countries in Asia provide public supportive infrastructure for small businesses, either to compensate for inadequacies or to research into alternative ways of overcoming the effects of lapses in infrastructure. Mandah and Ewurum (2012) submitted that the failure of government to provide a conducive business environment and poor management of resources have affected the growth and performance of small businesses in Nigeria. In India, researches into the application of alternative energy sources as well as non-electricity dependent technologies for rural applications are given topmost consideration. Small businesses in Nigeria are cut off from research and

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development (R&D) efforts/results, hence they are not internationally competitive, even in an era of globalization. The result is business failure. Critical business development services (BDS) and special government patronage or deliberate market support (practised in many Asian countries) are lacking Nigeria, unlike Canada, where 43 per cent of government purchases and 66 per cent of government contracts are made to the small business sector (Adebiyi, 2014).

The current trade policy regime sees no need to protect Nigerian small businesses from unfair dumping of sub-standard imported products. But, in the United States of America (most liberalized economy of the world), the government (through the Small Business Administration, SBA, and the Department of Agriculture), still offers some supports to small businesses and the agricultural sector respectively.

Multiple taxation is a killer of small businesses in Nigeria. Each of the three tiers of government (federal, state and local) exploits its rights to threaten the lives of small businesses through heavy yokes of duplicated, multiple taxations. An entrepreneur in Nigeria makes 35 tax payments, spending an average of 938 hours per year to prepare them. Similar statistics for OECD and sub-Saharan Africa are 12.8 payments, 194.1 hours; and 37.7 payments, 306 hours respectively (World Bank, 2010).

Adigun (2009) and Eneh (2005) submit that myriads of challenges plaguing the business environment in Nigeria included weak government commitment and inadequate incentives, poor personal traits and destructive personal attributes of entrepreneurs, underdeveloped human resources and poor manpower management, high rate of HIV/AIDS infection, and politico-social factors. Together, these and other challenges militate against the establishment, survival and growth of enterprises.

Poor access to finance is an issue in Nigeria, especially when a business, started with owners' equity, needs to get additional funds critical for expansion and/or modernization of production process. Nigeria ranked 87 out of 183 countries in terms of business credit access (World Bank,

2010). Ill-timed disbursements and usually high interest rates have turned life-line finance into poison. The impact of specialized development finance institutions, such as the Bank of Industry (BOI), which are expected to deliver credit at lower than market rates, is yet to be felt. Beside all these is the issue of lingering insecurity occasioned by terrorism, ethnic militia, etc. Achebe (1984) said it was only a masochist that would choose Nigeria for a tour or holiday. The entrepreneur is overwhelmed by these and other factors and cannot accelerate sustainable development in Nigeria.

Conclusion and Recommendation

This review situates all four factors of production in Nigeria. This makes the sluggish rate of development in the country a paradox. The paper also identifies the daunting challenges of entrepreneurs to accelerating sustainable development in the country. Some are peculiar to the country, others are general. The Resource Curse Theory examined in the theoretical concept of the study squarely applies to Nigeria.

Against the backdrop of the Schumpeterian Theory of Economic Development also reviewed, the ideal entrepreneur has come to a wrong place in Nigeria and can hardly survive there. Notwithstanding, governments in Nigeria do not lack in touting the country as a business-friendly environment. They keep inviting foreign investors to take advantage of the environment to move into the country with their businesses.

The truth is, until and unless the myriads of challenges plaguing the business environment in Nigeria are addressed without paying lip service, the abundantly available factors of production will not develop Nigeria, as entrepreneurship is disabled and cannot act as the engine driving the economy. The present administration of Mohamadu Buhari came on board by the triple pronged promise and trust of fighting insecurity, corruption and unemployment. One year after, the government

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acknowledges it has not addressed any of them, for whatever reasons and excuses.

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SELECTED MACROECONOMIC DETERMINANTS OF NON-PROFIT HOUSEHOLDS CONSUMPTION EXPENDITURE IN NIGERIA

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Abstract

This study considers the impact of selected macroeconomic variables of final consumption expenditure of general government, changes in investment, net taxes on production and gross capital formation on the final consumption expenditure of non-profit households using quarterly time series data on household consumption from 2010q1 to 2015q4 obtained the CBN statistical bulletin. Stata 15 was employed in the regression analysis. The result shows among others that less than 28% of the variation of the target variable is accounted for by the predictor variables with an R-squared of 0.4039 which suggests a positive but moderate relationship between the dependent variable FCENPH and the explanatory variables was found. In addition, only Cil (Changes in Investment) and NToP (Net Taxes on Production) as expected are statistically significant at the 5% level of significance. The result indicates that FCEGG and GCF do not necessarily determine non-profit households' final consumption pattern in Nigeria. There is therefore the need to strengthen fiscal measures targeted at household to make it more inclusive and also streamline government spending to be more effective on households the study suggests.

Keywords: Macroeconomic variables, non-profit households, general government, fiscal measures

Introduction

Nigeria presents a very good example of government's inability and market failure in the provision of social amenities to communities and households (particularly in rural and sub urban communities). As a result, Non-Profit organisations have stepped in-the gap staffed with employees who mainly reside in houses owned and managed by their employers (the non – profits). Given the growing importance of non-profit organisations in the provision of social services, much exist in the literature on the impact of these agencies on community development and in the provision of social and economic services to the people especially in areas where there are noticeable or perceived government/ market failures in the rendering of these services. For example, the Metador Network (2017) reports that the International Rescue Committee (IRC) has an aspect of its organization known as the Emergency Response team with 17 specialists that can be readily deployed within 72 hours to respond to a crisis, such as the flooding in Pakistan in 2010 and the tsunami in Japan earlier 2018 in which 200 people allegedly died. It also reports that the BOMA project carries out an economic empowerment programme in northern Kenya known as the Rural Entrepreneur Access Project (REAP) through which it provides a seed capital grant, mentored business skills training, and a savings program to groups of people who establish an income generating business. It can therefore be argued that non-profits have become the main service providers in countries where the government is unable to fulfil its traditional role in certain areas. In the education sector for example, many NGOs have moved beyond 'gap-filling' initiatives into capacity building activities (Ulleberg, 2009/10). Their role is therefore too enormous to be ignored.

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In Nigeria, a striking upsurge has taken the wave in organizing voluntary activity and the creation of private, non-profit or non-governmental organizations. People are forming associations, foundations and similar institutions to deliver human services, promote grassroots economic development, prevent environmental degradation, protect civil rights and pursue a thousand other objectives formerly unattended or left by the state. (Togbolo, 2005). While most studies such as (Fouladi, 2010; Ulleberg, 2009; Togbolo, 2005; OECD, 2003) conclude that non-profit organisations make positive contributions to development, others such as the ones by Jane (2007) and Lisa (2005) accuse Non-profits of inaccurate accounting, corruption and diversion of funds by managers, interference in political activities among others. According to Lisa (2005), NGOs are being asked three types of accountability questions by a variety of factors: effectiveness question; question of organizational reliability and legitimacy questions. Above all, non-profit organizations tend to largely avoid/ invade government's fiscal policy strategies in developing Countries and thus neutralise fiscal policy strategies on household's spending. In other words, the government suffers serious setbacks in trying to use fiscal policy measures to control or redistribute income to in order to achieve pre-set fiscal targets. This is one aspect that has remained largely untouched by previous researches on the subject partly due to unavailability of data and lack of political will by government to implement policies and programmes in that direction.

Thus, this study contributes to knowledge and advance the literature by studying the relationship between the Final Consumption Expenditure of Non-Profit Households (FCENPH) as distinct from the final consumption expenditure of all households and the Final Consumption Expenditure of General Government (FCEGG), Changes in Investment (CiI), Net Taxes on Production (NToP) and Gross Capital Formation (GCF) which to the best of my knowledge has not been done by any other study in the Country. It also contributes further by paying attention to the issue of data

by employing recent quarterly time data obtained from the Statistical Bulletin of the Central Bank of Nigeria (CBN) which will be regressed via ordinary Least Square (OLS) to overcome the problem of non-availability of data cited by most researchers as one of the major reasons why not much have been done on the subject in developing Countries.

The rest of this paper will be organised as follows: In section two, related literature is reviewed and the theoretical framework underlying the study discussed. Section three presents the methodology employed in the analysis and specification of the model as well as definition and description of variables. Results are discussed in section four after some summary statistics are shown while the study is concluded in section five with some recommendations and the need for further study.

Literature Review

Government failure and Non-profit organisation

The non-profit sector often associated with concepts such as the “social economy”, “third sector” and “third system is a growing social and economic force all over the world and a key element in employment and social policies in most OECD countries (OECD, 2003). In Kenya, another aspect of the BOMA Project is to help Kenyan women pay for school, food and healthcare. Since 2009, 8,481 women have enrolled with the BOMA Project to successfully launch 2,651 businesses. In total, women who have enrolled with the BOMA Project have been able to provide care for over 42,250 dependent children. As development actors, NGOs (Non-profits) have become the main service providers in countries where the government is unable to fulfil its traditional role. The scope and scale of this phenomenon is immense. Non Profit organizations in Nigeria such as the Amukoko Community Partners for Health; Association for Adolescent Reproductive Health and Action or Child Health Organization and the AIDS Must Go Group are good examples of non-profit organisations rendering free education, counselling and awareness campaigns to people.

While these agencies are celebrated for their good works and sometimes criticised for their misdeeds, the decisions and choices of the households (those behind the machines) are seldom remembered. While the incomes of Non-profit organisations (Charities, NGOs, Civil Society groups, Religious organisations etc) are not subject to taxation, those of their employees are of course subjected to tax. However, most non-profits employees hide under the cover of their employers to avoid and some in some cases completely evade payment of taxes thus creating revenue losses to the government as well rendering government-households fiscal policy strategies nearly ineffective.

Theoretical Framework

Macroeconomic policy variables such as government expenditure and taxes have been traditionally known to influence and affect household spending or expenditure power. For instance, the lowering or raising of the tax rate will have the ability of increasing or decreasing the disposable income of consumers (households, etc.). Also, general investment expenditure, depending on its direction and magnitude will equally have similar impact on consumers' final consumption expenditure given the link between saving and investment. Hence, using the appropriate monetary or/and fiscal instruments, these variables can be tinkered with by the government in order to achieve a pre-set desired policy objective.

The concept of monetary interflows between the household sector, the business sector (firms) and the government sector as well as the foreign sector with their resultant effects on households and general consumption has extensively been illustrated with the concept of the Circular Flow of Income (CFI) developed by Richard Cantillon (1680s-1734) and further expanded by other scholars. Government expenditures are amongst the most significant instruments of fiscal policies and the interaction of these expenditure with other economic variables has been a subject of long debate (Fouladi, 2010). For example, Household Final Consumption

Expenditure (HFCE) is not an exhaustive measure of the goods and services consumed by households. In addition, with the growing importance of the role of Non – Profit organisations (Charities, NGOs, Religious organisations, Civil Society groups etc) in development, particularly in developing Countries with employees living mainly in houses and buildings owned by these organisations, we posit that Final Consumption Expenditure by General Government (FCEGG) and Changes in Investment (CiI), may not have any significant influence on the Final Consumption Expenditure of Non-Profit Households as opposed to profit-oriented Households. By using Nigeria as the case, where most Non-profits organizations are tax-free and employees allegedly invade personal income and other tax forms, which may result to loss of revenue to the government, we intend to explore this proposition by isolating Non-Profit households as our variable of interest.

Methodology

Ordinary Least Square (OLS) Regression analysis shall be employed for this study. Apart from its simplicity and the nature of variables, it is premised on the fact that relevant pre-test have been carried out on the variables and they conform with the basic and applicable assumptions of OLS.

Definition and description of variables

The following variables shall be employed for this study:

Dependent Variable

FCENPH = Final Consumption Expenditure of Non-Profit Households as distinct from all households. It represents what households (Consumers) spend to fulfil everyday needs which includes spending on both goods and services. This is the variable of interest and it consists of private consumption expenditure incurred for the direct satisfaction of individual or collective needs by private households of non-profit institutions serving

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households (such as religious societies, sports and other clubs, political parties, etc.).

Independent Variables

The explanatory variables for this study include the following:

FCEGG = Final Consumption Expenditure of General Government

This represents government expenditure on goods and services that are used for the direct satisfaction of individual needs (individual consumption) or collective needs of members of the community (collective consumption).

CiL = Changes in Investment – This is based on the belief that increase in investment leads to even more increase in income that might result to increase in Savings and hence, increases in investment and vice versa

NToP= Net Taxes on Production – This is premised on the assumption that businesses produce goods and services and in the process of doing so, incomes are generated for factors of production (land, labour, capital and enterprise)

GCF= Gross Capital Formation measures the net increase in fixed capital (net investment). A rise in investment should contribute towards higher aggregate demand (AD) and also increase productive capacity. Increasing investment should lead to higher economic growth in the long-term. Households can only save less disposable income before they can invest

e= the disturbance or stochastic error term which captures every other factor that influences our variable of interest not expressly included in the model

Model Specification

$$FCENPH = \alpha_0 + \alpha_1 FCEGG + \alpha_2 CiL + \alpha_3 NToP + \alpha_4 GCF + e$$

On apriori theoretical expectations, it is hoped that α_1 , α_2 ,& α_4 will be ≥ 0 & $\alpha_3 \leq 0$

Presentation and discussion of results

Before the regression results are discussed, it is important to provide a statistical description of the variables that were used in the analysis. It is believed that the descriptive statistics are extremely informative in revealing the relationship between non-profit households' consumption trend and the explanatory variables in Nigeria.

Summary and descriptive statistics

This section provides the descriptive statistics of the variables, which are used in the regression analysis.

. sum

Variable	Obs	Mean	Std. Dev.	Min	Max
PERIOD	24	20127.5	17.48291	20101	20154
FCENPH	24	58.34583	10.2482	41.73	78.38
FCEGG	24	1424.431	185.1423	899.81	1686.43
CI1	24	135.6571	24.98281	98.41	172.23
NTOP	24	123.4346	35.80458	71.07	193.88
CCF	24	2856.18	512.7571	2019.37	3747.17

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Correlation Matrix

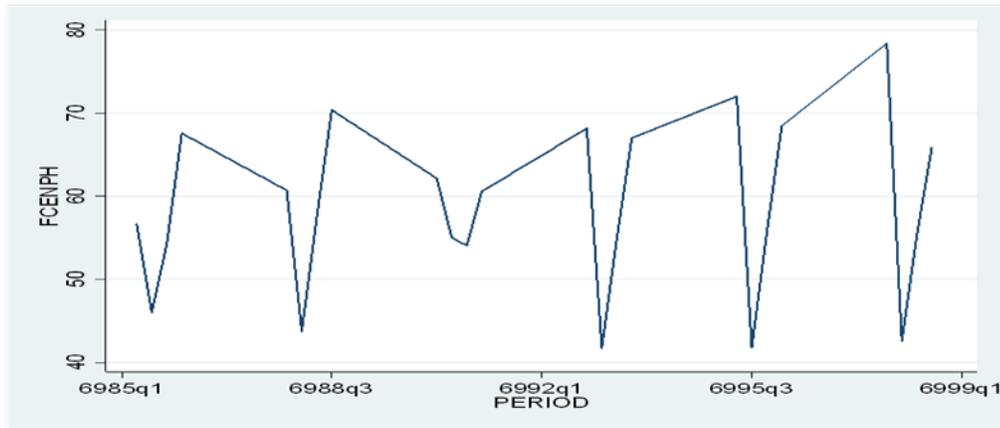
	FCENPH	FCEGG	Ci I	NToP	GCF
FCENPH	1. 0000				
FCEGG	0. 2321 0. 2752	1. 0000			
Ci I	0. 0141 0. 9479	0. 6059* 0. 0017	1. 0000		
NToP	0. 2633 0. 2139	0. 6157* 0. 0014	0. 9110* 0. 0000	1. 0000	
GCF	0. 1241 0. 5634	0. 5508* 0. 0053	0. 8565* 0. 0000	0. 8838* 0. 0000	1. 0000

From the pairwise correlation (Matrix), we can deduce that there is some evidence of zero (0) or near (0) to mild positive correlation between the dependent variable FCENPH and the individual explanatory variables and between the independent variables. Hence, pairwise deletion.

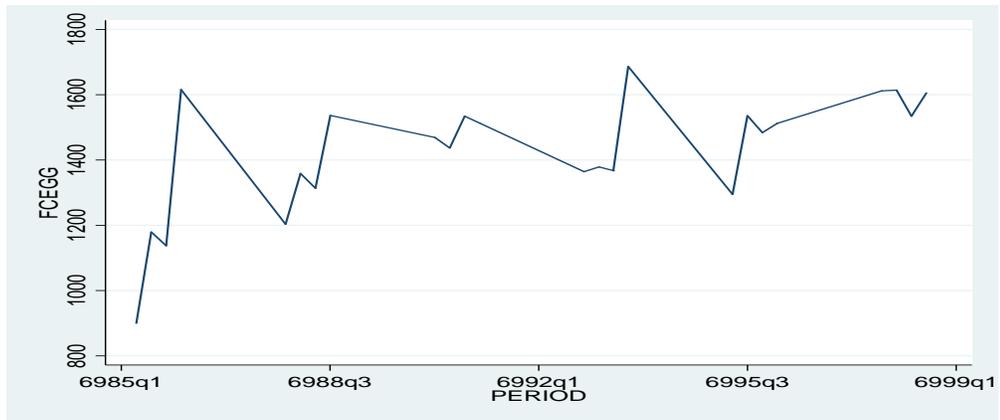
Trend of Variables

The graphs below describe the movement over time of each of the variables used for this study.

- a. Final Consumption Expenditure of Non-Profit Households

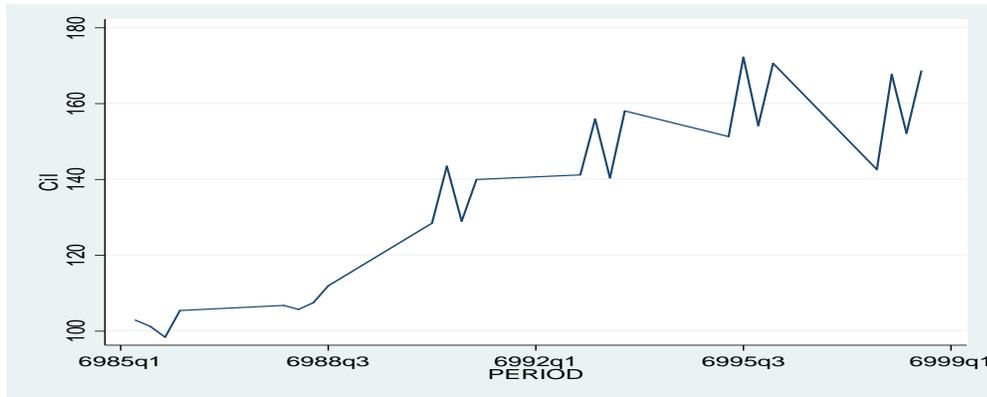


b. Final Consumption Expenditure of General Government

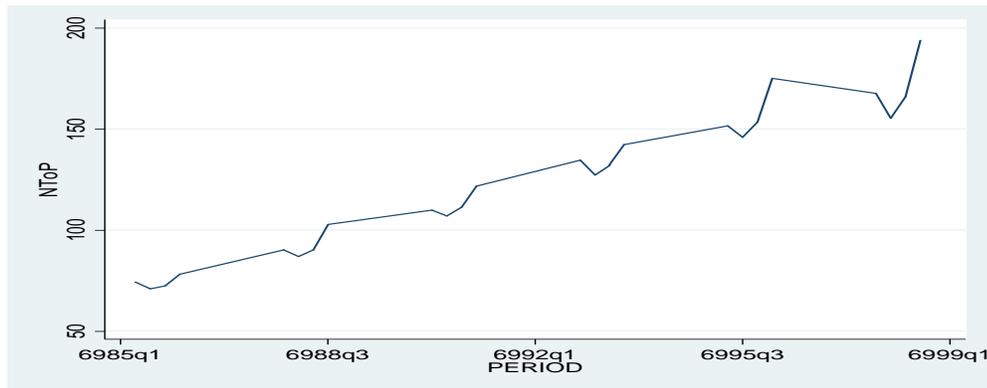


c. Changes in Investment

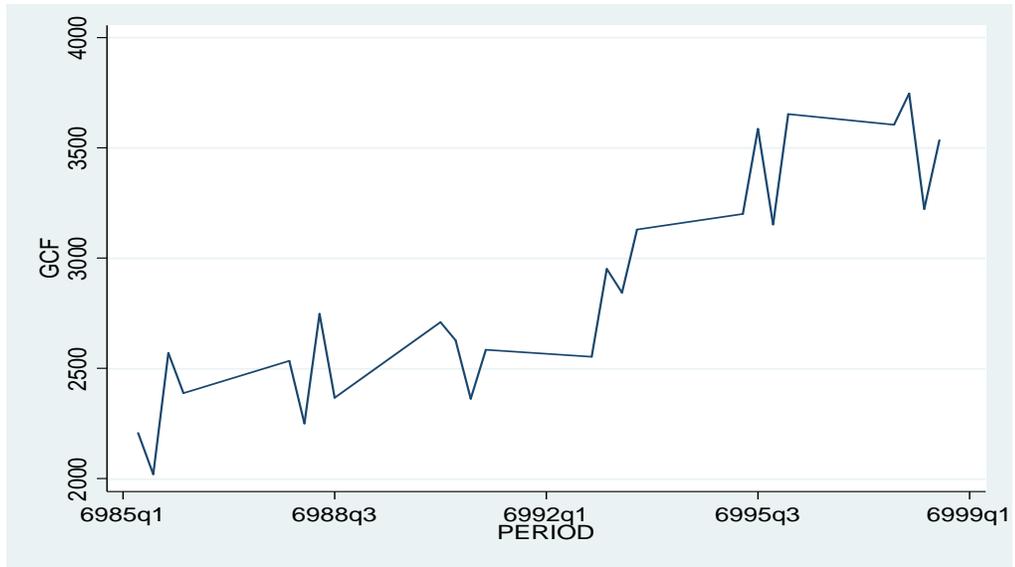
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d. Net Taxes on Production

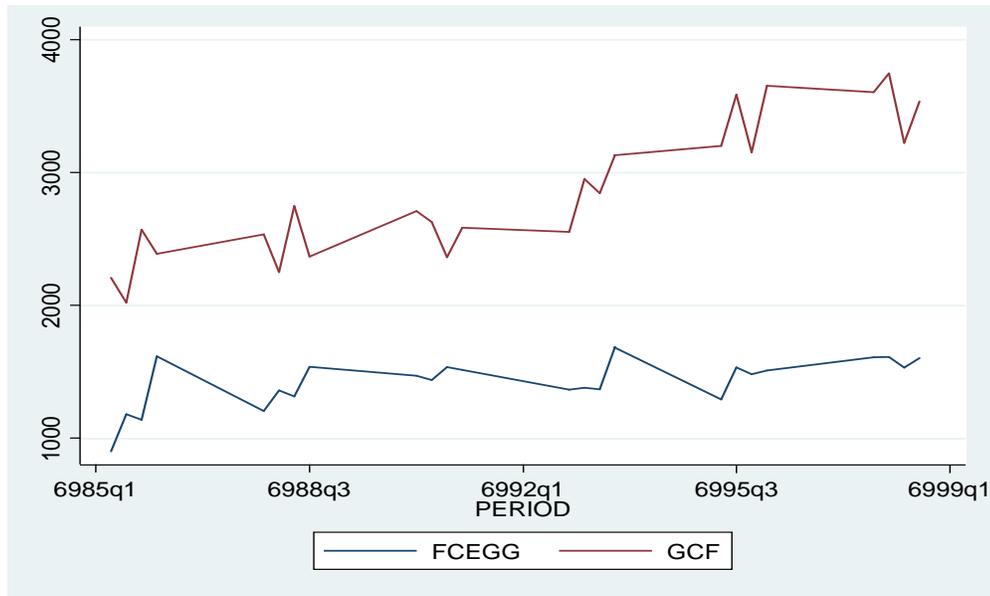


e. Gross Capital Formation



f. FCEGG & GCF Compared

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Regression Result

. regres FCENPH FCEGG CiI NToP GCF

Source	SS	df	MS	Number of obs	=	24
				F(4, 19)	=	3.22
Model	975.711737	4	243.927934	Prob > F	=	0.0355
Residual	1439.87585	19	75.7829393	R-squared	=	0.4039
				Adj R-squared	=	0.2784
Total	2415.58758	23	105.025547	Root MSE	=	8.7053

FCENPH	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
FCEGG	.0116735	.0125659	0.93	0.365	-.0146273	.0379742
CiI	-.5435702	.1845474	-2.95	0.008	-.9298323	-.157308
NToP	.4320198	.1429879	3.02	0.007	.1327426	.731297
GCF	-.0038179	.00785	-0.49	0.632	-.0202481	.0126123
_cons	73.03529	18.30222	3.99	0.001	34.72829	111.3423

Discussion of Results

The regression results shows an R-Squared of 0.4039 which suggests a positive but moderate relationship between the dependent FCENPH and the predictor variable of FCEGG, CiI, NToP and GCF while the adjusted R² of 0.2784 suggests that less than 28% of the total change in FCENPH (Final Consumption Expenditure of Non-Profit Households as distinct from all households) can be attributed to the Independent variables.

Among the individual regression slope coefficients which attempt to provide estimates of the unknown population parameters and describe the relationship between the predictor and response variable, only CiI

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(Changes in Investment) with a p-value of 0.008 and NToP (Net Taxes on Production) with a p-value of 0.007 are statistically significant at the 5% level of significance

The insignificance of FCEGG and GCF in the model are not far-fetched; they have no major impact in determining the consumption behaviour of not for profit households. To the government, this should be a serious concern and critically looked into as, if the trend is not reversed could render the realisation of target macro objectives ineffective.

Conclusion

The result indicates that FCEGG and GCF do not necessarily determine or influence non-profit households' final consumption pattern in Nigeria. There is therefore the need to strengthen fiscal measures targeted at non – profit households to make it more inclusive and also streamline government spending to be more effective on households the study suggests. In addition, there is also need for further study in the subject area particularly in developing Countries.

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FOREIGN INVESTORS AND EASE OF DOING BUSINESS WITH MINISTRIES, DEPARTMENTS AND AGENCIES (MDAs) IN NIGERIA

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Abstract

Business environment in Nigeria might be a challenge to even foreign investors in Nigeria. This study was an attempt to probe the touted improvement in ease of doing business in the 21st century Nigeria. Critical research method was adopted to analyze relevant literature information and reports on events around the country. Results show that foreign investors get frustrated with Nigeria's brand of ease of doing business. A major setback and deficiency in communication flow between government agencies and foreign investors exists. This impairs conduct of enquires that can lead to decision on launching out to Nigeria with foreign investment. Most Nigerian ministries, departments and agencies (MDAs), which are repositories of vital investment information, lack functional information communication technology (ICT) facilities, such as telephone lines, website and emails. Less than 30 percent of MDAs have functional website and e-mails in Nigeria. The study recommends ways MDAs overcome their communication challenges.

Keywords: Ease of doing business, Nigeria, Foreign investors, ICT facilities.

Introduction

Despite all the tauted efforts by successive governments in Nigeria to improve the ease of doing business in the country and thereby attracting foreign direct investments, Nigeria ranked 120 out of 190 countries in ease of doing business in 2008. The position degenerated 145 in 2017, 169 in 2016, and to 170 in 2014. Thus, the level of calmness, comfort, composure, contentment, encouragement, enjoyment, happiness, freedom, peace of mind and infrastructural facilities, both human and material resources, government policies and programmes that drive a business and attract investors to an environment, as reflected by ease of doing business, are grossly lacking from 2008 to 2018 in Nigeria (<https://tradingeconomics.com/nigeria/easeofdoingbusiness>). The report further explains that the level of benefits and gains an investor deserves from government policies, programmes, and clarification in order to run a business transaction and exploration in a country are least encouraging. There is little ease of doing business reflected by the level of freedom, liberty, effortlessness, and encouragement an investor desires in starting a business or company in a country. The ease of doing business in a country can be harsh, difficult and discomfort or it can be effortless, and simple.

This study is an attempt to probe the sincerity in beckoning on foreign investors to come to Nigeria with much-tauted improvement in ease of doing business in the 21st century Nigeria. The research adopted the critical study method to examine the relevant information and reports in the literature concerning the country's ease of doing business.

Ease of doing business environment in Nigeria

Businesses thrive on communication, which is the process of exchanging ideas and feelings or giving people business information or

clue, advice, data, enlightenment, input, knowledge, message, news and reports to guide ventures to success. For investors to explore the benefit of communication in Nigeria from our government ministries, departments and agencies, all channels of communication needs to be open and every Nigerian government staff should always have good communication skills. Poor communication between investors and MDAs sometime hinders foreign investors and government MDAs. Facilities and skills for regular communication in speech, letter, telephone, radio, computer, website, email, and others often lack in Nigerian MDAs. This hinders investment, progress and development. Likewise, good roads, railways, waterways, which will improve communication links between investors and government MDAs are also in short supply (Ezinwa, 2015).

Exploring effective communication skills and technology will help sustain development and good governance in Nigeria. Today in Nigeria, how many government ministries, departments and agencies and foreign investors communicate regularly with foreign investors to have a good relationship so that the country will easily attracts foreign investment to enhance employment generation, growth and development(Ezinwa, 2015).

Some of the specific challenges faced by foreign investors in Nigeria regarding the ease of doing business environmentt in the country are discussed below, with emphasis on MDAs in the 21st century Nigeria. The national drive by the federal government to diversify the Nigeria economy from non-oil sector by encouraging ease of doing business to foreign investors in order to ease the burden of doing business in Nigeria in the recent history of our country suffers a serious setback and short coming due to a major hinderance in communication flow between government ministries, departments and agencies and foreign investors who may want to conduct enquires before making up their minds on whether or not to invest in Nigeria.

According to Daniel andUjah (2017), most Nigerian MDAs, which are the repositories through which foreign investors could access basic investment information about the country, do not have

functional phone lines, websites and e-mails, despite the huge budgetary provisions for telephone and internet services yearly. Three (3) telephone mainlines were available per 1,000 persons in 1990 in Nigeria. The figure was 9 per 1,000 persons in Nigeria in 2005. There was no cellular subscriber per 1,000 persons in Nigeria in 1990. In 2005, there were 141 cellular subscribers per 1,000 persons in Nigeria. Similarly, there was no internet user per 1,000 persons in Nigeria in 1990. In 2005, there were 38 internet users per 1,000 persons in Nigeria (Jhingan, 2007; UNDP, 2007; Eneh, 2011a).

Most of the MDAs still list non-functional phone numbers as their means of contacts on their wobbling websites. Apart from parading dead telephone lines, many other government agencies do not bother to indicate their telephone lines on their websites as obtains in other countries. Further findings shows that where such MDAs indicate any telephone number at all on their websites, the numbers are either not working or cannot be connected to any of the networks currently in operation in Nigeria.

As Daniel and Ujah (2017) aptly pointed out, of all the federal ministries surveyed, only the Foreign Affairs Ministry provides a GSM number: 08038883494, which however, does not ring either in the day or night, thereby rendering it useless to local and international inquires. The Nigerian Investment Promotion Commission, NIPC, at plot 1181, Aguiyi Ironsi Street, Maitama District, provides two telephone lines on its websites: +234(0)92900059, +234(0)92900061, but neither of the two lines was working. The two lines report that they had been switched off, when dialed. Likewise, the Nigerian Customs Service, NCS, has this line: 09-5234694 as belonging to its Public Relations Officer, PRO, but the same line is meant for facsimile service, which unfortunately does not work. A call to the line returns a troubling answer, "The number you have called does not exist." Three other lines provided by the NCS for people to report any activity of smugglers to the agency were given as 094621597, 094621598 and 094621599. Each of them ring, but plays music at the background with nobody answering from the NCS.

The Nigerian Immigration Service, NIS, which is expected to prepare visas for foreigners and investors at a fast rate under the new dispensation, presents a phone number on its website: phone: +234-9-7806771. When dialed, the numbers kept turning in the message, “The number you are calling does not exist.” The Nigerian National Petroleum Corporation, NNPC, which is the major revenue generator for Nigeria, has inexplicably not provided any telephone contact on its website. It simply says on its contact page: Corporate Headquarters, NNPC Towers, Central Business District, Herbert Macaulay-Way, P.M.B 190, Garki, Abuja. General Inquires: Please fill out contact from below or e-mail us at contactus@nnpcgroup.com. For website problems, please contact the webmaster at webmaster@nnpcgroup.com

The Nigerian Tourism Development Corporation, NTDC, which is expected to attract visitors and in the process generate revenue for the country, had this non-functional line: +23492342764, as its major contact on its website – www.tourism.gov.ng. The contact line kept saying the number does not exist despite repeated dials. NTDC does not have a running website. A search on its website address returns: “The account has been suspended, please contact your host.”

In the Ministry of Power, Works and Housing, there was no functional telephone number listed on its website. The only semblance of what appears as a contact telephone symbol on the ministry’s website is: via phone: 234xxxxxx...

In the Federal Ministry of Industries, Trade and Investment, which is supposed to serve as the coordinating agency for investment drive into the country, a symbolic Nigeria telephone code is the only item placed where a telephone number should appear on the website of the ministry. It has the symbol: phone: +234 NGERIA.

The strategic Ministry of Mines and Steel lists a line: +23495239064, which returned frightening response: “The number you have called does not exist, please check the number and dial again.” The same scenario and problem of non-functional website, e-

mail and telephone afflicts the Ministry of Interior, Ministry of Agriculture and Rural Development, and the Ministry of Fiancé. Their phone numbers do not exist.

Beyond the telephone line problem which afflicts virtually all the MDAs in Nigeria, the updating of vital information on their websites remain another source of concern. Information is not regularly updated on most of the MDA websites. Their websites are not current and always down with error 404 showing up whenever one tries to access it for any purpose and no explanation given for such a flop. The website of the Ministry of Labour and Productivity and the Federal Ministry of Information and Culture do not have any telephone contact to assist anyone to get prompt access to any top officials of the ministries. The ministers and their heads always answer any phone call on their private mobile phones. It is also interesting to note that many ministers only pick and answer callers who are known to them, and therefore, shut out genuine information seekers for investments or any other official purpose.

The Ministry of Health and the Ministry of Education have not bothered to put a telephone symbol or any number on their websites. The saving grace for the Ministry of Health is that the minister picks and responds to text messages. He also responds to Tweets and Facebook enquires of those looking for information about his ministry.

According to the Director General of National Information Technology Development Agency, NITDA, Pantami, less than 30 percent of government MDAs have functional website in Nigeria and only 25 percent of the MDAs have functional mobile phone numbers across the country. The assessment was carried out in compliance with the executive order on the promotion of transparency and efficiency in the business environment, which is designed to facilitate the ease of doing business as it relates to the use of ICT for efficient service delivery in Nigeria.

According to the Minister of Communication, Shittu, financial institutions, government MDAs as well as other affiliated institutions, have become the targets of cyber criminals in the country.

With over N78 billion being lost annually to activities of cyber criminals, the federal government stepped up efforts to tackle cybercrimes through legislation and collaboration with the private sector to earn the trust of foreign investors with Nigeria government MDAs.

Reports (see Chizea, 2017; Obioma, 2017; Okeke, 2017; Onwuamaeze, 2017; Ochai, 2017 a,b,c; Shola, 2017; Soni et al, 2017) agree with findings on ease of doing business environment in Nigeria. Policy summersault leads to abandonment of development projects, visions and programmes. Political leaders need to be sensitized on putting society interest first and committing to development visions and programmes (Eneh, 2011b).

Strategies to help MDAs overcome their communication challenges in the 21st century are hereunder proffered as strategies to help investors to overcome the challenges of communication barriers with government MDAs in the 21st century.

- The government should have an assessment and records of shortening of all government ministries, departments and agencies websites, and e-mails, on the promotion of transparency and efficiency in the business environment, which is designed to facilitate the ease of doing business in Nigeria as it relates to the use of ICT for efficient service delivery; to boost foreign and local investors morale in doing business in Nigeria.
- The federal government and the ministry of industries, trade and investments should take concrete steps to address the identified lapses so as to curb investor's communication challenges with government ministries, departments and agencies, MDA, in Nigeria in the 21st century.
- The federal government should urgently direct all ministries, departments and agencies, MDAs, to update their websites.
- The federal government should also direct the ministry of communications and galaxy backbone to partner with the MDAs to

improve the communication channels with investors to ensure the ease of doing business in Nigeria.

- The Ease of Doing Business Secretariat (EDBES), Servicomas well as consultants should roll out massive support programme to help MDAs overcome their communication challenges and keep them up to date in terms of communicating with the world at all times.
- The federal government effort to seek \$550 million loan from China to acquire more satellites is a welcome development to overcome the challenges of MDAs communication hurdle with foreign investors. The minister of communication, Adebayo Shittu, who disclosed this while presenting a three page communiqué issued at the need of a weeklong, 4th regular meeting of the National Council on communication held at Arewa House, Kaduna said negotiations had reached an advanced stage on the deal. The procurement of SAT2 and SAT3, the minister said, was necessary considering the fact that Nigeria is losing billions of dollars yearly because it had only one satellite in the orbit. Nigeria companies and government ministries, departments and agencies are patronizing foreign satellite firms as a result of this risk for the safety of their data and security of other services provided by them thereby exporting jobs to other countries at the detriment of Nigeria (Ochai, 2017 a,b,c).

Conclusion

If the federal government provides an effective website and telephone communication channels in almost all the MDAs in the country, it will improve the ease of doing business in Nigeria, by enhancing communication flow between government agencies and foreign investors who may want to conduct enquires before making up their minds on whether or not to invest in Nigeria. Functional telephone lines in government MDAs will encourage foreign investors to access vital investment information about the country. It will also help government recent steps to diversify the economy beyond crude oil dependence to other alternative services for income and employment generation in the economy. Non-functional phone numbers and

wobbling websites in government MDAs frustrates foreign investors against investing in Nigeria. The recent step taken by the government to reform the economy and promotion of transparency and efficiency in the ease of doing business environment is a welcome development. It was designed to facilitate the business environment in Nigeria as it relates to the use of ICT for efficient service delivery. If foreign investors are attracted into Nigerian economy, it will have an accelerated and multiplier effect and contribution to the nation's economic growth. ICT development in government MDAs is aimed at fostering intellectual and professional development in our economy. It will further create a platform for networking and exchange of ideas between industries operating in MDAs and critical stakeholders in the nation's economy. With the participation for foreign investors in our MDAs, it will centrally upscale the knowledge of staff service and other professional in the MDAs as well as other stakeholders about contemporary dynamics in the country and the globe generally.

Recommendations

- ✓ This paper has come up with the following recommendations to enhance foreign investor's Ease of Doing Business with most Nigerian government Ministries, Departments and Agencies (MDAs) in the 21st century.
- ✓ The Federal Government should increase its budgetary provision for telephone and internet services yearly, to all the Ministries, Departments and Agencies to effectively open up the channels of communication between the foreign investors and the MDAs. And to remove the challenges of foreign investors ease of doing business in Nigeria.
- ✓ The Federal Government economic plan of diversifying the economy of Nigeria beyond crude oil dependence to other sectors of the economy, such as, agriculture, manufacturing, mining tourism etc. and encouraging and transforming all the government Ministries, Departments and Agencies to catch up with world best practices and ease of doing business in Nigeria are

capable of attracting foreign investors into the country that will ensure revenue and job creation.

- ✓ The Federal Government should highlight the catalytic roles of foreign investors and supporting the MDAs with websites and latest internet services to communicate effectively with foreign investors as well as other stakeholders about contemporary dynamics in the economic development of the country and the globe generally.
- ✓ The national drive of the Federal Government to establish ICT University of Nigeria is a welcome development which will help to eradicate the lack of adequate skills ICT suffers in government Ministries, Department and agencies MDAs, it is a development that will help build a dynamic and flourishing global ICT trend among Nigerian workers and intellectuals and industry to grow robustly.
- ✓ The Federal Government should urgently put in place conscious policy strategies with the context of a nationally and globally defined agenda for sustainable ICT development, to enhance the talents of MDAs staffs and specialist across a range of all sectors as it would continue to grow, as the country tried to meet the rising demand in the emerging digital economy.
- ✓ The government should make young Nigerian workers and students at various level in the MDAs to embrace ICT as it is of interest to note that the ICT industry and future is both promising and flourishing even though, the local industry has continued to suffer from skills shortage. With nowhere near enough professional to meet the demand for critical role being created as a result of rapid technological development.
- ✓ The federal government should also encourage state government to purchase satellite bandwidth requirements from NIGCOMSAT Ltd to boost their MDAs communication channel to attract foreign investors.
- ✓ The Nigerian government should endeavor to develop an ICT roadmap 2016-2019 as well as the national ICT strategic plan 2016-2024 for implementation (Shittu, 2017) the federal government

should also adopt and implement the e-government master plan as well as the creation of state computer emergence response team as measures to mitigate cyber security threats in the country and states should also implement digital job initiative in their respective domains as a means of leveraging the opportunities for alternative income presented to Nigeria youths across the country. This will also help create innovative hubs and ICT centers to accelerate the diversification of the Nigerian economy (Shittu, 2017)

- ✓ The federal government should encourage government Ministries, Department and Agencies MDAs to digitize their records and also adopt Nigeria's software in the process to ensure guidelines for Nigerian contact in ICT. Likewise, the federal government to encourage State Government to establish State Information Technology Department Agency (SITDA). This will go a long way to encourage foreign investors to do business with state ministries departments and agencies, this will ensure development, growth and progress of the Gross Domestic product in the country at large.
- ✓ According to the MTN boss in Nigeria, Moolman (2017), to encourage foreign investors and ease of doing business with the MDAs, MTN has been privileged to contribute to the development of ICT since 2001 when the right enabling environment was created by the federal government to attract investment into the telecoms industry. Moolman (2017) said that the MTN Nigeria is also proud to have been given the opportunity to play a leading role in the important sector. "Globally, Foreign Direct Investment (FDI) are motivated by the opportunities and enabling environment which the host country provides. MTN's success was indeed a catalyst for many other international companies to invest in Nigeria.

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PROXIMATE COMPOSITION AND MICRONUTRIENT QUALITY OF COMMERCIAL “IGBA”, “OSU AKIDI” AND “OKPA” (THREE LEGUME BASED FOOD PRODUCTS)

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Abstract

The proximate composition and some micronutrient quality of "Igba", "Osuakidi" and "Okpa" were studied. The moisture and ash contents of the samples were $42.32 \pm 0.35\%$ and $3.02 \pm 0.02\%$ for "Igba"; $34.72 \pm 0.46\%$ and $9.59 \pm 0.37\%$ for "Osuakidi" and 50.09 ± 0.29 and $4.60 \pm 0.60\%$ for "Okpa" respectively. Their crude protein contents were $19.09 \pm 0.63\%$ for "Igba" $27.29 \pm 0.37\%$ for "Osuakidi" and $19.32 \pm 0.32\%$ for "Okpa" while their respective fat/lipid contents were $9.70 \pm 0.21\%$, $3.13 \pm 0.05\%$, and $10.56 \pm 0.5\%$ for "Igba" "Osuakidi" and "Okpa". Microelements like iron, magnesium and calcium were $1.47 \pm 0.01\text{ppm}$; $18.66 \pm 2.40\text{ppm}$, and $2.73 \pm 4.96\text{ppm}$ for "Igba". "Osuakidi" had $19.66 \pm 1.34\text{ppm}$ magnesium and $30.46 \pm 0.54\text{ppm}$ Calcium and these were significantly higher than the values from the other legume based food products studied. Enhanced consumption of these local foods/delicacies should be encouraged.

Keywords: *Traditional foods, "Igba", "Osu akidi", "Okpa",
Proximate compositions, Micronutrient quality*

Introduction

Okeke *et al* (2008) reported of twenty (20) legumes in their Igbo Traditional Food System Documentation. African yam bean, *Krestingella geocarpa* and *Vigna subterranean* were listed.

The legume based local delicacies or foods produced from these legumes and native to south eastern Nigeria include "Igba" "Osuakidi" and "Okpa". These ready to eat foods have continuously gained some degree of commercial significance, especially the "Okpa" food product. "Okpa" food product is a household name particularly in Enugu State and, its production has advanced so much to a level where the processors should form clusters, in readiness for industrialization.

This "Okpa" a gelled Nigerian Food Product is produced from the flours of Bambara Groundnut (BGN) seeds. This food product is very popular in the south eastern parts of Nigeria and has both penetrated and features either as a snack or main meal in most families' weekly menu. This "ready to eat" food product is also sold in the markets, streets, institutions and at most motor parks from where travelers purchase and eat it hot and may carry some to serve as meals/snacks on their journeys. Onuorah (2011) reported of its presence in many parts of Nigeria including that it is marketed between the east and northern routes. It is rich in protein and has a good balance of amino acids (Barimalaa, 2000). It also possesses a relatively long resident time properties in the gastro-intestinal track (Onimawo *et al*, 2007).

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Its production involves the mixing of measured ingredients namely Bambara groundnut flour, water, salt and palm oil (this being the traditional recipe), to produce a homogenous paste. The paste is then wrapped with wilted banana or plantain leaves, or cellophane paper or both. After tying with twine to prevent leakages, the wraps are dropped into boiling water and the materials are cooked for about 60mins or more. Traditionally the Okpa products are steamed for an average of about three hours often referred to as overnight cooking. The gelled Okpa Food Product is then cooled and eaten, and could also be taken for commerce.

Igba", is a type of moi-moi (i.e., steamed cowpea paste) produced from *Sphenostylis stenocarpa*, commonly known as African yam bean (AYB). Various Igbo communities know the raw African yam bean seeds as "Okpaodudu", Azam" or "Nzamiri". Its other names include "Odudu", "Ijiriji", and, "Ofi" (Ogbo, 2002). Enwere (1998) also reported its other Nigerian names as "girigiri" (Hausa), "sese" (Yoruba) and "nsama" (Ibibio). This legume is produced and eaten in Imo, Anambra, Enugu, Cross River, Delta, Edo, Ondo and Oyo States. In the processing and production of "Igba" Food Product, or Igba uzuaki or Igbo Igbagidi (as various communities in Enugu State call it), the *S. stenocarpa* seeds are first dry cleaned and given a flash ≤ 60 mins soaking treatment, then roasted (by heating the seeds in empty but clean pans with continuous heating and stirring) until the seeds crack, after which air-cooling is done. Lastly, the roasted beans are milled (using either pestle and mortar, milling stones or with mechanical-millers). The flours are then measured out, and sufficiently

hydrated with water, then mixed with palm oil and salt. This mixture is then scouped and wrapped with natural leaves especially *Napoleona imperialis* leaves then tied with leafy part of palm fronds. With 90 to 120 minutes steaming, followed by cooling under atmospheric conditions, the traditional food, "Igba" is ready for consumption or sales.

"Osuakidi" is produced from *Krestingella geocarpa* seeds, commonly known as Krestling ground nuts (KGN), and, "akidi ala" (in Igbo). KGN seed is somewhat deep navy blue in colour with white eye in its raw state. This "Osu akidi" food product is popular in many places including Isuochi and Ezi-ama areas of Abia State and is produced by the process below. First is the dry cleaning stage involving winnowing and manual picking out of strings, pod particles, stones and other extraneous materials. Next is the over-night soaking in excess potable water followed by wet-milling, (using pestle and mortar or milling machine), to produce highly coarsely milled paste. After brief whisking, the thick and light purple coloured mixture is wrapped with wilted Plantain or Banana (*Musa paradisaca*) leaves, and then tied with leafy part of palm frond or stringy parts of Plantain or Banana plant. Whitish and strong twine are recently being used to tie the wrap. Heating and boiling for 60-90minutes produces cooked "Osuakidi". After cooling, the traditional food product can be eaten as such, but dipping it in salted palm oil, spiced with pepper or; palm oil sauce or stew, before consumption is often preferred. The palm oil sauce or stew may contain crayfish flour and "Ogiri", particularly for the palm oil sauce. These enhance the sensory and nutritional quality of the product. Sometimes, the consumers use the cooked "Osuakidi" to garnish "abacha" dishes. "Abacha" dishes are produce when rehydrated processed

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edible cassava slices are mixed with, seasoned “ncha” (palm oil in water emulsion).

Cowpea *Vigna unguiculata*, is the most widely grown, distributed and consumed legume in Nigeria. It is the first in the legumes’ list presented by Okeke *et al* (2008). It is an important food legume in both African and South East Asia (Sanni *et al*, 2006), but cowpea alone cannot solve the long term malnutrition problem of the poor nations (Nigeria inclusive), neither can food aid or trade solve it. Adequate utilization of indigenous plant foods can contribute towards the solution to malnutrition especially for the low income group. Traditional food, defined by Okeke *et al* (2008) as “all food from a particular culture available from local resources and culturally accepted” (Ihekoronye and Ngoddy, 1985) will go a long way towards addressing malnutrition issues. Besides, the literature is replete with the call for research on such leguminous food grains as African yam bean, *S. stenocarpa* (Hochst ex A. Rich), Bambara groundnut, *Vigna subterranean* (L).Verdc and *Krestingella geocarpa* (Bhat and Karim, 2009; Fasoyiro *et al*, 2012). Scarce information on the chemical quality “Igba”, “Osuakidi” and “Okpa” informed this study.

Materials and Methods

- (i) Sample collection: "Igba" and “Okpa” were purchased from hawkers in Enugu City while the "Osuakidi" wraps were purchased from “Orie” Isuochi markets in, Abia State
- (ii) Proximate composition of samples.

The moisture, ash, lipid/fat, crude protein and crude fibre contents of the samples were determined by AOAC (2010) methods. Total carbohydrates were determined by difference, while the calorific value or energy value was calculated using the factor: 4.1 (for carbohydrate and protein); 9.4 for fat (Fox and Cameron, 1989). Atomic Absorption Spectrometry (AAS) was also conducted for the determination of the elemental composition of the ash, using APHA (1995) method.

Results and Discussion

The proximate composition results were recorded on Table 9.3.4.1, while the micronutrients' quality was recorded on Table 9.3.4.2. There were significant differences in the chemical quality of the legume based delicacies.

Table 9.3.4.1: Proximate Composition of the commercial "Igba", "Osu akidi" and "Okpa"

Parameters	Igba	Osu akidi	Okpa
%Moisture	42.32 ^b ± 0.35	34.72 ^c ± 0.46	50.09 ^a ± 0.29
%Ash	3.02 ^c ± 0.02	9.59 ^a ± 0.37	4.60 ^b ± 0.60
%Crude protein	19.09 ^b ± 0.63	27.29 ^a ± 0.37	19.32 ^b ± 0.32
%Fat	9.70 ^b ± 0.21	3.13 ^c ± 0.05	10.56 ^a ± 0.56
%Crude fibre	3.11 ^b ± 0.11	7.90 ^a ± 0.08	2.87 ^c ± 0.15

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Carbohydrate	22.79 ^a ± 0.79	17.39 ^b ± 0.12	12.56 ^c ± 0.64
Energy KJ/100g	1104.14KJ/100g	888.76KJ/100g	965.87KJ/100g

Values are means ± Standard deviation of triplicate determinations. Means with the different letters along a row showed significant difference (p < .05).

Table 9.3.4.2: Micronutrient Composition of the samples

Microelement	Samples		
	“Igba”	“Osu akidi”	“Okpa”
Iron	1.47 ^b ± .010	0.79 ^c ± 0.10	1.75 ^a ± 0.05
Calcium	12.73 ^b ± 4.96	30.46 ^a ± 0.54	14.04 ^b ± 4.00
Zinc	3.62 ^b ± 0.24	7.73 ^a ± 0.31	2.18 ^c ± 0.08
Potassium	7.63 ^c ± 1.45	171.79 ^b ± 0.70	191.08 ^a ± 1.00
Magnesium	18.66 ^a ± 2.40	19.66 ^a ± 1.34	18.66 ^a ± 0.26
Sodium	3.10 ^a ± 0.10	0.00 ^c ± 0.00	1.10 ^b ± .11
Copper	0.14 ^a ± 0.00	0.07 ^b ± 0.01	0.04 ^c ± 0.01

Values are means ± Standard deviation of triplicate determinations. Means with the different letter along a row showed significant difference (p < 0.05).

Table 9.3.4.1 shows that the samples had a moisture content which ranged between 34.72 ± 0.6% (Osuakidi) and 50.09 ± 0.29% (Okpa). Onimawo *et al* (2007) reported 46.40% moisture for “Okpa” All were at intermediate moisture level according to the classification of Okaka and Okaka (2001). Direct added water or by diffusion during the preparation was minimal for

the “Osuakidi” and the “Igba” samples. This is a process requirement and, it is claimed that the “Osuakidi” product may be devoid of such noticeable changes like drawiness in the product by the third day of its production, without re-heating the product. Average ash content of $3.02 \pm 0.02\%$ for “Igba”; $4.60 \pm 0.60\%$ for “Okpa” and $9.59 \pm 0.37\%$ for “Osuakidi” were obtained. Onimawo *et al* (2007) reported 3.40% for stemed cake (Okpa) from bambara nut. “Osuakidi” was significantly higher ($P < 0.05$) in ash compared to other samples. Detailed micro-elements obtained by Atomic Absorption Spectrophotometer (AAS) were presented in Table 9.3.4.2. Udensi (2005) reported that soaking before processing as in “Osuakidi” is an effective traditional method of improving the nutritional quality of different food crops. Tripsin inhibitor, tannin, phytic acid, hydrogen cyanide, heamaghitins, raffinose and stachyose were among the anti-nutritional factors reported to have been reduced within the 6-24 hours of soaking in ‘akidiala’ (*K. geocarpa*). Again, longer times enhanced greater removal of the anti-nutrients in that study.

Crude protein content of the samples ranged between $19.09 \pm 0.63\%$ (“Igba”) to $27.29 \pm 0.37\%$ (“Osu akidi”). Ihekeronye and Ngoddy (1985) and Okaka, (1997) reported the normal range of proteins in leguminous seeds to be between 21.6% and 23.4%. However, Omoikhoje and Omueti (2000) reported 19.40% and 21.64% crude proteins respectively for cooked and roasted BGN flours. The fat and carbohydrate contents of the samples were $9.70 \pm 0.2\%$ and $22.79 \pm 0.79\%$ for “Igba”, $3.13 \pm 0.03\%$ and $17.39 \pm 0.12\%$ for “Osu akidi” and $10.56 \pm 0.56\%$ and $12.56 \pm 0.64\%$ for “Okpa”, see Table 4.1. These values were significantly different from each other but compare favourably with some cowpea products. Sanni *et al* (2006) reported the ash of content seven to eight varieties of cowpea to be

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1.6% to 4.1%. $4.60 \pm 0.60\%$ ash was obtained from the “Okpa”. Nzelu, (2014) obtained being $3.57 \pm 0.10\%$ ash in the Okpa produced from white/cream coloured bambara groundnut seeds’ flour, to which only common salt, palm oil and water were the additions. The respective crude fat and crude proteins for the products (in %) were 9.70 ± 0.21 , 19.09 ± 0.09 for Igba; 3.13 ± 0.05 , 27.29 ± 0.37 for “Osu akidi” and 10.56 ± 0.56 and 19.32 ± 0.32 for Okpa. Nzelu (2008) reported the fat content of roasted and dehulled *S. stenocarpa* beans as 2.50%. Also 7.34% and 2.24% crude fat have been reported earlier for flours of roasted BGN seeds by Omoikhoje and Omueti (2000) and Nzelu (2014) respectively. The addition of palm oil in the production of the “Igba” and “Okpa” as against “Osuakidi” must have enhanced the lipid contents of the two products. This could explain why “Osuakidi” had the least crude fat content.

“Osu akidi” was highest in its content of crude fibre ($7.09 \pm 0.08\%$) while “Igba” had $3.11 \pm 0.1\%$ and “Okpa” had $2.87 \pm 0.15\%$. It is expected that the hulls of the seeds would have contributed to the crude fibre contents of these food products. The highest value of crude fibre was obtained from “Osuakidi” this could be because the seed hulls were not removed before the size reduction during the process to produce the very coarse mash/paste. Fibre is usually high in hulls. This indigestible component of plant materials provides roughage and bulk for controlling a healthy condition of the intestine (Potter and Hotchkiss, 1995).

There was a significant difference ($p < 0.05$) in the level of carbohydrate among the legume based food products. “Igba” had a carbohydrate content of $22.79 \pm 0.79\%$ as against the $17.39 \pm 0.12\%$ of “Osuakidi” and 12.56

$\pm 0.64\%$ for “Okpa”. Onimawo *et al* (2007) reported of 11.38% carbohydrate from steamed cake (Okpa) made from bambara nut, and 12.51% carbohydrate from steamed cake (moin-moin) from cowpea. The energy values of “Igba”, “Osuakidi” and “Okpa” in KJ/100g were 1104.14, 888.76 and 965.87 respectively. “Igba” and “Okpa” are known to demand water consumption from consumers. This development is a common after effect when leguminous seeds are consumed. Both “Okpa” and Cowpea’s Glycemic effect was determined by Onimawo *et al* (2007) and Okpa was reported as having lower glycemic index than cowpea with average glycemic index values of 77.94 for moin-moin and 38.33 for Okpa. The ability of a food to cause a sharp increase in blood sugar is termed Glycemic effect. Thus, “Okpa” is a better diet for the diabetic patients. It is also a good food for farmers, especially during the mound making sessions during the farming seasons.

The micronutrient composition of the three legume food products were recorded on Table 2 (in ppm). These include Iron (Fe^{++}), Sodium (Na^+), Magnesium (Mg^{++}), Calcium (Ca^{++}), Potassium (K^+), Zinc (Zn^{++}) and Copper (Cu^{++}). Legumes are good sources of Iron (Fe^{++}). The Fe^{++} contents of the legume based foods varied significantly and ranged between 0.79 ± 0.1 ppm and 1.75 ± 0.05 ppm with “Okpa” having the highest quantity. Murano (2003), reported legumes among others as the chief sources of Fe^{++} with the chief role of Fe^{++} including Haemoglobin formation, energy utilization and, part of myoglobin with its deficiency symptoms including anemia, weakness, headaches and reduced immunity among others. Legumes are also listed among the chief sources of calcium (Murano 2003). Calcium is a principal mineral in bones and teeth. It is also involved in muscle contraction and relaxation as well as in nerve

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function, blood clotting and blood pressure. Calcium contents of the legume samples were 30.46 ± 0.54 ppm for “Osuakidi”, 14.04 ± 4.00 ppm for “Okpa” and 12.73 ± 4.96 ppm for “Igba”. “Osuakidi” could therefore be described as a recommendable best source of Ca^{++} nutrient, when the three legume foods are considered. The Zinc (Zn^{++}) content of the legume based foods also differed significantly. The range was between 2.18 ± 0.08 and 7.73 ± 0.31 , see Table 2. The Zn^{++} concentration in the products was highest in “Osuakidi” followed by the concentration in “Igba” and the least concentration was from “Okpa”. Protein rich foods, such as meats, fish, and poultry among others are the best sources of Zn^{++} . Zinc functions as part of many enzymes. It is present in insulin and is involved in making genetic materials and protein. It is also involved in making sperm and in foetal development. The highest concentration of potassium was from “Okpa” which had 191.08 ± 1.00 followed by the 171.79 ± 0.70 obtained from “Osu akidi” and lastly, the 7.73 ± 0.31 , obtained from “Igba”. All whole foods, meat, milk, fruits, vegetables, grains and legumes are good source of potassium (Murano, 2003). Potassium facilitates such reactions as protein synthesis, fluid balance, nerve transmission and contraction of muscle. It must be remembered that the land used for cultivation, age and the variety of crop and, environmental conditions usually bring about the differences in different crops’ constitution. There was no significant difference in the concentrations of the Mg^{++} nutrient in terms of their concentrations. However the values obtained were between 18.66 ± 2.40 ppm and 19.66 ± 1.34 ppm. Magnesium plays such roles as bone mineralization, protein synthesis, enzyme action, normal muscular contraction and nerve transmission. Murano (2003), reported the major

sources of magnesium as nuts, legumes, whole grains and dark green vegetables among others. No common salt was added to “Osuakidi” during the production and it will not be surprising that “Osuakidi” had nil concentration of Sodium (Na^+) while “Igba” had the highest Na^+ concentration. Because the procedure of these products have not yet been standardized, personal idiosyncrasy of the individual processors would most likely interfere. Again, agronomical practices will also interfere as far as all constituents are concerned. Though the concentrations of the Copper (Cu^{++}) nutrient obtained differed significantly (see Table 2), Copper had the very least concentrations when considering all the values obtained for the nutrients quantitatively in the three legumes based food products. “Igba” had the highest value, 0.14 ± 00 ppm while “Okpa” had the least concentration with 0.04 ± 01 ppm. All the same, copper is very important being part of several enzymes and helps in making haemoglobin in the blood. Diarrhea, vomiting and nausea are some of the deficiency symptoms for lack of or insufficient copper concentrations in the body. “Osuakidi” had the highest concentrations of calcium, zinc and magnesium elements, while Okpa had the highest of iron and potassium contents. “Igba” had the highest concentration of sodium and least of potassium. Generally these legume food products are good sources of micro-elements and, consumption of these local delicacies are encouraged.

Conclusion

These traditional food products are good sources of proteins and ash and are rich in energy. While iron may be sourced from “Okpa”, magnesium and calcium were highest in “Osu akidi”. Enhanced production and consumption of these food products should be encouraged, while the

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amino acid profiles should be determined for nutritional predictions. Efforts should also be made for as for improved packaging studies. All the three legume products were wrapped with natural leaves and in the traditional setting, spice (not even onions or crayfish) is not used.

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ISSN: (PRINT) - 2006-8425, e-ISSN (ONLINE): 2536-6920

Volume 9, Number 3, October, 2017

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