### UNIVERSITY OF PORT HARCOURT

### **EXPORT BUSINESS DYNAMICS:**

Cassava, the New Black-Gold Initiative

### **An Inaugural Lecture**

By

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#### ORDER OF PROCEEDINGS

2:45 P.M. Guests are seated

3:00 P.M. Academic Procession Begins

The procession shall enter the Ebitimi Banigo Auditorium, University Park and the congregation shall stand as the procession enters the Hall in the following order:

ACADEMIC OFFICER
PROFESSORS
DEANS OF FACULTIES/SCHOOLS
DEAN, SCHOOL OF GRADUATE STUDIES
PROVOST, COLLEGE OF HEALTH SCIENCES
ORATOR
REGISTRAR
LECTURER
DEPUTY VICE-CHANCELLOR (ACADEMIC)
DEPUTY VICE-CHANCELLOR (ADMINISTRATION)
VICE - CHANCELLOR

After the Vice-Chancellor has ascended the dais, the congregation shall remain standing for the University of Port Harcourt Anthem. The congregation shall thereafter resume their seats.

#### THE VICE-CHANCELLOR'S OPENING REMARKS

The registrar shall rise, cap and invite the Vice-Chancellor to make his opening remarks.

THE VICE-CHANCELLOR SHALL THEN RISE, CAP, MAKE HIS OPENING REMARKS AND RESUME HIS SEAT.

#### THE INAUGURAL LECTURE

The Registrar shall rise, cap and invite the Orator, Professor B. F. Nwinee to introduce the Lecturer.

The Orator shall then rise, cap, introduce the Lecturer and resume his seat. The Lecturer shall remain standing during the introduction. The Lecturer shall step on the rostrum, cap and deliver his Inaugural Lecture. After the Lecture, he shall step towards the Vice-Chancellor, cap and deliver a copy of the Inaugural Lecture to the Vice-Chancellor and return to his seat. The Vice-Chancellor shall present the document to the Registrar.

#### CLOSING

The Registrar shall then rise, cap and invite the Vice-Chancellor to make his closing remarks.

The Vice-Chancellor shall rise, cap and make his closing remarks. The Congregation shall rise for the University of Port Harcourt Anthem and remain standing as the Academic (Honour) Procession retreats in the following order:

VICE-CHANCELLOR
DEPUTY VICE-CHANCELLOR (ADMINISTRATION)
DEPUTY VICE-CHANCELLOR (ACADEMIC)
REGISTRAR
LECTURER
ORATOR
PROVOST, COLLEGE OF HEALTH SCIENCES
DEAN, SCHOOL OF GRADUATE STUDIES
DEANS OF FACULTIES
PROFESSORS
ACADEMIC OFFICER

### **DEDICATION**

This lecture is dedicated to the Lord, our God Almighty, who made the completion of the work possible.

#### **ACKNOWLEDGMENTS**

Vice – Chancellor Sir, my academic story cannot be presented without mentioning a number of persons for their contributions to my success.

Firstly, I give glory and adoration to our God Almighty for his immeasurable kindness to my entire family. I am strongly indebted to my Late Father, Elder Michael Nnabuihe Ezirim; my mother's support to everything about me is a huge testimony (Mrs. Fidelia Nnemeziri Ezirim – Nee Odoh). This husband and wife inculcated in me the values of education at the formative age. I wish to appreciate my younger brother Mr. John Ezirim and his family in Canada, for his unalloyed support to the family. My other brothers, sisters, uncles, aunties, cousins, nieces and nephews are also tremendously appreciated in all ramifications. My colossal gratitude goes to my inlaws, the Onyeacho family of Ikembara in Ikeduru Local Government Area of Imo State, for their impeccable love and solidarity at all times. My co-in-laws, the Emetuches, the Ibes and others are all part of my humble appreciation.

Other special families to be appreciated include: The Njemanze family, the Unogu family, the Azubuike family, the Obioha family, the Nelson family, the Enwereji family, the Odoh family, the Okereke family, the Kalu family, the Akpoghomeh family, the Ajienka family, the Lale family, the Achalu family, the Kinani family, the Nwachukwu family, the Ahiauzu family, the Awujo family, the Baridam family, the Nwinee family, the Akpan family, the Asi family, the Akpobolokemi family, the Ohochukwu family, the Biringa family, the Uzoukwu family, the Adiele family, the

Okere family, the Aham Anyanwu family, the Akpotu family, the Ikein family, the Ogwo family, the Ogoun family, the Chukwu family, the Jasmine T. Amadi family, the Ezirim family, the Emenike family, the Nwakanma family, the Igbiks family, the Onyenaucheya family, the Umoh family, the Ojiabo family, the Amue family, the Ezeiruaku family, etc. My undiluted gratitude also goes to all my Pastors for their prayers and support.

My profound gratitude further goes to all the staff of the Department of Marketing, all the staff of Faculty of the Management Sciences, all the staff of the University of Port Harcourt, various state governments in Nigeria, the Federal Government of Nigeria, the international community, all the cassava-related agencies, centres, organizations, institutes, institutions, ministries, etc.

Friends from different institutions in Nigeria and beyond, our professional bodies in Nigeria and beyond, are highly appreciated for their kind gestures. Those whose materials and ideas are used to enrich this lecture are all sincerely appreciated for the wonderful knowledge they have established.

I wish to specially demonstrate my immense gratitude to my Orator and Dean, Professor B. F. Nwinee. Thank you for your support, cooperation and encouragement at all times. My deep appreciation goes to all my present and former students at all levels and in different programmes: I thank God because many of them are making giant strides in their various fields of endeavour. In addition, I thank all the former Vice – Chancellors of the University of Port Harcourt, all the Principal Officers of the University of Port Harcourt, particularly Professor N.E.S. Lale, the current Vice –

Chancellor, for giving me the opportunity to present this Inaugural Lecture.

Finally, at this juncture, let me appreciate and thank members of my immediate family, especially my best friend, the sugar in my tea, my love, pillar of my family, mother of my children and confidante, Mrs. Helen Nkechinyere Aloy – Ezirim. God bless the first day I met you in life; you are indeed a divine gift and light; I sincerely thank you for your prayers, love, care and understanding. Others include my son, Master Bright Chinedu Aloy-Ezirim, as well as Ijeoma and Chikanso.

#### **PROTOCOL**

The Vice-Chancellor Sir

Members of the Governing Council present

Deputy Vice – Chancellors

Registrar and other Principal Officers

Provost, College of Health Sciences

Dean of Graduate School

Deans of Faculties / Schools

Distinguished Professors and Colleagues

Great Students of Unique Uniport

Ladies and Gentlemen of the Press

My Lords Spiritual and Temporal

Ladies and Gentlemen

### **EXPORT BUSINESS DYNAMICS:**

### Cassava, the New Black-Gold Initiative

#### 1. INTRODUCTION

I welcome you all to the 139th inaugural lecture of the University of Port Harcourt Lecture series. This is the second from the Faculty of Management Sciences and, of course, the first from the Department of Marketing in the League of inaugural Lecturers. Vice Chancellor Sir, please permit me to inform you that, this inaugural lecture today is the first of its kind from the domain of Marketing when you take the statistics of all the universities in both Bayelsa State and Rivers State. The first and the only Inaugural Lecture from the Faculty of Management Sciences before today took place in the year 2000 (18 years ago) and was delivered by Prof. C.C. Nwachukwu. Today marks the beginning of a new era in the history of Faculty of Management Sciences. I am, indeed, very delighted to present this lecture. In all, it is a moment of sober reflection. To reflect on the past, assess the present and offer the road map for sustainable development of the nation – Nigeria - using Export Business. On this premise, with great honour and pleasure, I count it a privilege, Mr. Vice-Chancellor, to be listed among the Professors to deliver this Professorial Lecture today. I am really grateful to our vibrant and dedicated Vice – Chancellor, Professor N.E.S. Lale, for making this outing a reality.

The choice of my topic, "EXPORT BUSINESS DYNAMICS: Cassava, the New Black-Gold Initiative" is very timely, especially now that we have remembered to diversify the Nigerian economy and compete favourably with other nations of the world.

Awareness of what cassava can do globally is the thrust of this lecture, and the need to enlarge the little available information on export business of primary products from Nigerian producers, processors and exporters further necessitated this lecture that brought about today's jamboree. To this end, the following export business gaps identified by previous researchers like Kohls and Uhl (1980), Vernoon and Welis (1990), and Burrell (2003) are to be considered: gaps between foreign demand and supply chain management of Nigerian primary products, the gap between the current Nigerian foreign exchange earnings and the expected foreign exchange earnings; the gap between Nigerian Import and Export endeavours, to fill Nigerian Current Vacuum resulting from underutilization of agricultural and industrial capacities. These are deterrents to export business enterprise of any nation, as this situation can encourage high rate of unemployment and political anxiety. When all these gaps are filled, improvement on the export business of Nigeria's primary products will be possible.

The call for export capacity consolidation as an economic activity has been self-evident from the need to exchange surpluses in order to increase utility, enhance growth, improve the socio-economic and political life of a people. Parker (2000) remarked that there was a rising demand for goods and services the world over from the most under-developed countries to the most industrialized, as a result of market dynamics and allied factors. To appreciate this plan to move Nigeria forward in export business according to Ezirim and Maclayton (2011), the need to check other successful nations policies and programmes becomes central. In the same vein, to throw more light on the nature of Nigeria's export business as stated by Ezirim et al (2011), experience from cassava, the New Black-Gold (Cassa-

Gold) initiative could be viewed as necessary. Efforts by Ogbeh (2005) and Bamidele (2006) disclosed that countries like Thailand, Brazil, China, Ghana, Malaysia, Colombia, Denmark, United Kingdom, Sweden, Netherlands, India, etc. need to be emulated by Nigeria in order to fill the existing gaps in primary products export Business enterprise. (Ezirim and Opara, 2010).

#### HISTORY OF NIGERIAN NON-OIL SECTOR

History has shown, according to Ezirim, Okeke and Akpobolokemi (2011), that before the discovery of crude oil in the early 1950s, Nigeria's export business concentrated on the country's local agriculture, mining and allied produce. The said produce include: cassava, cocoa, palm produce (oil and kernels), rubber, cotton, tin, coal, hides and skins, groundnuts, ivories, elephant tusks, etc. These produce constituted Nigeria's main export commodities and it is necessary to note that most of these exportable goods were unprocessed and had little or no value added to their raw state before being exported (Ezirim. Ogwuegbu, Worha. Okon and Akpobolokemi 2005). This idea could be the reason, according to Ezirim and Chukwu (2010), why the later exporters earned better revenue or profit than the primary producers due to their processing involvements. Ezirim, Okeke and Ebiringa (2010) asserted that despite the shortfalls observed in the then agricultural sector of Nigeria, it still provided about 85 per cent of total export earnings for the nation and accounted for not less than 63 per cent of the country's gross domestic products as at 1960. World Development Index (2013) reported that over 90% of Nigerians lived on less than US \$2 daily. Nigeria is 169 out of 179 countries rated on the well-being of mothers, while one in six children dies before their fifth birthday. These were the woes of 1970s oil exploration in Nigeria: abandoned investment in almost every sector except petroleum by the successive authoritarian governments before 1999.

Thus, Nigeria's schools, rural infrastructure and agriculture deteriorated, ironically, forcing critics to term Nigeria's oil boom as oil doom. However, in the face of the current world oil price decline, cassava export can increase Nigeria's foreign exchange earnings.

#### AGRICULTURAL POLICY IN NIGERIA

The main national policy on agriculture in Nigeria according to Ezirim et al (2005) is based on sufficiency of food production and surplus for use as industrial raw materials or export.

The priority areas include:

All aspect of direct agricultural production, but in particular, rehabilitation of groundnut, cotton, cocoa, oil palm production and forestry.

Investment in processing of agricultural produce and storage facilities

Investment in processing of agricultural input, supply and distribution

The agricultural mechanization, e.g.

Adoption and use of farm equipment such as bulldozers

**Farming tractors** 

**Provision of land** 

**Land-preparation services** 

Agricultural support activities

Research

Funding

Water resources development for irrigation and food control infrastructure

Development of fabrication of appropriate small-scale and mechanized technologies for immediate consumption or storage.

#### DEVELOPMENT OF COMMODITY BOARD IN NIGERIA

The development of Nigerian commodity board started before the year 1945, but not until 1949 did the need for decentralization of the board to regional level come into existence. It then became known at the national level as marketing boards.

The Eastern Nigerian Produce Marketing Board, formed during the period with others, initiated policies by which it could withhold some monetary benefits accrued from sales of agricultural produce for development projects within the Eastern Region. The board was later renamed Eastern Nigeria Development Corporation (ENDC) in 1963. This corporation became moribund about May 1967 when the salaries of its workers were no longer paid. (Ezirim et al, 2005).

#### NIGERIA CASSAVA FOOD PRODUCTION POTENTIALS

Nigeria that once exported food crops, controlling about 42% of global groundnut and oil-palm products trade, now spends more than US \$11B yearly on food importation with about US \$4M on wheat. The new emerging fact is that cassava exports have the potentials of re-writing these ugly stories for the better. There has not been enough awareness and publicity on the current potentials of Nigeria's cassava as a Dollar Magnet Crop with the ability to upturn Petro-naira revenue (Nigeria Cassava Processors & Marketers Association - NICAPMA, 2014; West African Agricultural Productivity Programme-WAAPP, 2014; Nigerian

National Petroleum Corporation-NNPC, 2011, National Bureau of Statistics-NBS, 2010; Food and Agriculture Organization Statistics-FAOSTAT, 2010).

#### CASSAVA EXPORT BUSINESS ENTERPRISE

In another development, there is an urgent need as stated by Ezirim and Okeke (2008) to revive Nigeria's non-oil sector. To this effect, Nigeria has discovered high sales potentials for her cassava export. In this direction, Nigeria hopes to generate U.S. \$5 billion in revenue annually from the export of cassava and related products, President Olusegun Obasanjo has said in 2006.

Obasanjo, who spoke in Abuja at the start of the second Agricultural Summit hosted by the Nigeria Economic Summit Group (NESG) said that the Federal Government was targeting between 7 and 10 per cent sustained growth rate annually in the agricultural sector in order to ensure long-term **food security and alleviation of poverty**.

The president, who was represented at the occasion by the Minister for Agriculture, Chief Bamidele Dada, said that two delegations of the Federal Government led by Chief Audu Ogbeh, the Presidential Adviser on Food Security and Agriculture and the Minister of State of agriculture were in Brazil, Colombia, Netherlands and Scandinavian countries respectively to explore the market opportunities for the export of cassava products. It was noted that the visits proved that there were lots of prospects to achieve the target as the private sectors in the countries visited expressed interest to buy cassava from Nigeria.

Right now, Nigeria is the largest producer of cassava tubers. We produce about 35 - 40 million metric tones of cassava annually and we have instructions that within the next three years we could increase the production to 150 million metric tones of cassava (Ezirim and Maclayton, 2011).

# PROBLEMS ASSOCIATED WITH EXPORT BUSINESS IN NIGERIA

#### **Agriculture and its Expected Status**

It is necessary to recall that before the advent of the **Crude oil** (**Black Gold**), according to Ezirim et al (2005), agriculture ranked first in the Nigerian scheme of things and tangible achievements were made through it. Currently, agriculture is not given its expected status. In this direction, to save Nigeria from over-dependence on crude oil export, the Federal Government of Nigeria pledged to support the agricultural sector and announced the need for immediate action in five agricultural sub-sectors: cassava, rice, vegetable oils, livestock and tree crops. The Cassava Initiative alone seeks to generate US\$5 billion in export revenue by 2007, and since its launch in July, 2002, great excitement has been generated, creating new hopes and even greater expectations.

Other problems associated with Nigerian agricultural products foreign supplies include:

- Inadequate supply to meet local and foreign demands; high cost of local Production.
- High level of marketing expenses (transport, Promotions, pricing Methods adopted, Channel costs, Insurance, Taxes and administrative incompetence's).

- High rate of Local consumption.
- Inadequate government and allied supports.
- Low number of local producers of Nigerian exportable primary products.
- Poor export processing costs control system and high export prices.
- Inadequate supports for production expansion.
- High crude oil export promotional activities.
- Irregular government policies, programmes and unstable economy.
- Again, many Nigerians in the export business enterprise seem to use basins, tin cups, plastic buckets, bags, mobile trucks, head pans, etc., to measure their export produce.
- There is this lack of standardized weights and measures and this can make assessing the efficiency of the marketing systems extremely difficult.
- Tremendous role that women play in production, processing and marketing may need re-examination.





International Institute of Tropical Agriculture (IITA) Survey in Nigeria.

Again, an IITA survey in several Nigerian states showed the top five problems to be:

- High cost of cassava
- Lack of capital by farmers
- Drying in the rainy season
- Shortage of labour
- Inadequate supply of fresh roots

Clearly, if production expansion and processing are to develop in Nigeria, these deterrents must be resolved. As stated earlier, Nigerian primary products like cassava were before now described as **orphaned commodities without adequate institutional**, **organizational and policy supports (NEPC, 2009).** 

#### EXPORT BUSINESS FACTS

The following export business facts have been provided by NEPC (2009).

#### **EXPORTING**

Exporting is the activity or business of selling goods or services in foreign markets in order to earn foreign exchange or settle certain foreign debts, etc.

#### REASONS FOR EXPORT

Foreign markets impose strong discipline on firms; encourage competition and efficiency of operations. Individuals /firms /companies of a nation engage in export business in order to achieve the following objectives, among others:

- To earn foreign exchange
- To increase profit levels

- To expand an existing business
- To gain access to bigger and profitable markets
- To tap vast export potentials
- To reap economies of large scale production
- To exploit opportunities in new markets
- To support government export promotion and policies
- To finance economic activities of the nation
- To even out cyclical fluctuations
- To gain international esteem/repute.

#### AN EXPORTER

An exporter is someone who sells goods or services to a foreign market(s) in order to make profit, among other objectives. Exporters can be classified into the following categories:

- Export Merchant is an exporter who buys goods/products for export from the manufacturers/producer, etc. He owns the goods for export.
- ii. Manufacturing Exporter is a company which, apart from being a manufacturer of a particular product or range of products, is also exporting the said product(s) by itself.
- iii. Export Agent/Broker.

The Agent/Broker does not actually export but serves as a contact between the overseas importer and the local exporter. Such agents use their knowledge of the export products, the target market as a platform for contact between the overseas importer and the local exporter. He receives commission for his services.

# ENABLING ENVIRONMENT FOR CONDUCIVE EXPORT BUSINESS

- Stimulation for production on the basis of the country's comparative advantage
- Appropriate management of the foreign exchange of the nation in favour of exports sector.
- Product sales potential survey in specific export markets
- Capacity to produce high quality products
- Effective Export Promotion Policy of the government of Nigeria.

To develop an export culture, owners of small and medium scale enterprises or individuals typically pass through these stages;

- Ignorance about export;
- Become aware of exports but do nothing
- Start attending workshops/seminars/ conferences to acquire export knowledge and
- Pick-up a few trial/ contacts and begin to export.

Exporting is not an easy task; it requires a thorough preparation, hard work and determination. Exporting can be very profitable, challenging and exciting.

# FACTORS THAT COULD INFLUENCE AN ENTERPRISE'S READINESS TO START EXPORT BUSINESS ARE PRESENTED THUS:

 Production/Sourcing Capacity: Ability to source the required product(s) in large quantities and acceptable quality either directly through production, manufacturing, or indirectly through the producers/merchant, etc, is important. There must be adequate and regular supply to meet the export market demand. The acquisition of sufficient technical knowledge on the product/service for export is an added advantage.

- **Financial Resources:** To supply sufficient quantities of a given product/services to export markets, one requires adequate financial resources. Funds can be sourced through the financial institutions especially for exports. One can contact one's local banks for export financing. The Nigerian Export Import Bank (NEXIM) was set up by the Federal Government of Nigeria to provide export financing through the commercial banks. A number of serious exporters have enjoyed such services throughout the country.
- Management and Marketing Ability: An enterprise will certainly require an efficient and effective team with a Marketing background to be able to manage export trade successfully. An individual can avail himself of services of export clearing agents to take care of the logistics management of his exports. The operators should keep abreast of developments in the sector.
- Export Unit (Organizational Structure and Manpower): You need a structure to carry out the export activity. A simple structure comprising the Export Manager, Sales Clerk and a Shipping Officer will be appropriate. The Manager takes decisions on products to sell, the markets to go into, channels to use and the selection of agents. The sales clerk

prepares promotional materials, acknowledges orders, prepares quotations and ensures that packing and labeling are correctly done. The Shipping clerk has responsibility for packing, documentation and transportation. For a small company wishing to do export business, the schedules and functions of the key personnel as enumerated above will be of immense assistance to it.

#### 2. NATURE OF CASSAVA (CASSA-GOLD)

Cassava (Manihot esculanta; also called manioc) is a woody shrub of the Euphorbiaceae spurge family cultivated as an annual crop in tropical and subtropical regions for its edible starchy tuberous root, a major source of carbohydrates. The flour made of the roots is called tapioca.

Cassava is the third largest source of carbohydrates for human food in the world. The flesh can be chalk-white or yellowish. Cassava roots are very rich in starch, and contain significant amounts of calcium (50mg/100g), phosphorus (40mg/100g) and vitamin C (25mg/100g). However, they are poor in protein and other nutrients. In contrast, cassava leaves are good sources of protein if supplemented with the amino acid methionine despite containing cyanide (NEPC, 2009).

#### DIFFERENT NAMES FOR CASSA-GOLD

Common name: Cassava Botanical: Manihot esculanta

Local Names in Nigeria

Hausa: Rogo lgbo: Akpu Yoruba: Ege



#### GLOBAL CASSAVA PRODUCTION

World production of cassava root was estimated to be 184 million tonnes in 2002. The majority of production is in Africa where 99.1 millions tonnes were grown, 33.2 million tonnes were grown in Asia and 33.2 million tonnes in Latin America. Currently, Nigeria is still the world's largest producer but consumes almost all her produce.

#### EXPORT CAPACITY

Nigeria is the world's largest producer of cassava. However, based on the statistics from the FAQ of the United Nations, Thailand is the largest exporting country of dried cassava, with 77% of world export in 2005. The second largest exporting country is Vietnam, with 13.6%, followed by Indonesia (5.8%) and Costa Rica (2.1%). Worldwide cassava production increased by 12.5% between 1990 and 1998.

#### LOCAL VARIETIES

- (i) Okolyawo, (ii)Panya
- (iii) Akintola (iv)Akon
- (v) Etunbe
- (vi) Akpu. (vii) Dan wari,

**Source: IITA** 



#### ORIGIN AND PRODUCTION

Cassava originated from Latin America and later moved to Asia in the 17th century and to Africa in about 1558. In Nigeria, cassava is mostly grown on small farms, usually intercropped with vegetable, plantation crops, yams, sweet



potatoes, melon, maize, etc. Cassava is propagated by 20-30cm long cutting of the wood stem spacing between plants is usually 1-1.5 metres. Intercropping beans, maize, and other annual crops is practiced in young cassava plantations.

Nigeria is the largest producer of cassava tuber in the world, producing about 34 million tonnes of the world's 174 million tonnes in 2001.

#### GROWTH

Cassava is a perennial crop, it could be harvested during the first or second year. It is propagated mainly from stem cutting. However, propagation by seed is equally possible. Cassava can be harvested anytime of the year when the crop is mature. The exact time of harvesting depends on rainfall, soil conditions and temperature regime, etc. It is, therefore, grown in Nigeria between April and October. Cassava could do well in diverse ecologies:

- (a) A wide range of altitude (0-200m)
- (b) Low and high rainfall areas
- (c) Under poor soil fertility and management conditions.

Because of these, cassava is virtually grown in all states of the Federation including the Federal Capital Territory.

#### AREAS OF PRODUCTION:

The total areas under cassava cultivation in Nigeria, is about 3.60 million hectares. All states, including the Federal Capital Territory (FCT), cultivate appreciable quantities of cassava. However, Akwa Ibom, Edo, Delta, Abia, Benue, Oyo, Ogun, Osun, Ondo, Ekiti, Enugu and Cross River are major producers. Most of the cassava produced in Nigeria are processed and consumed in various forms locally with little processed for export.

#### USES OF CASSAVA DERIVATIVE PRODUCTS:

In Africa, cassava provides a basic daily source of dietary energy. Cassava roots are processed into a wide variety of granules, pastes, etc., or consumed freshly boiled or raw. In most of the cassavagrowing countries in Africa, the leaves are also consumed as green vegetable, which provide protein and Vitamins A and B, an important flavoring agent in cooking. Cassava can be used for alcohol, syrups, etc. Alcohol is in demand in both the food and beverage industry and in the pharmaceutical industry.

#### BIOFUEL

In some countries, significant research has begun to evaluate the use of cassava as ethanol biofuel feedstack. Under the Development Plan for Renewable Energy in the 11th Five-Year Plan in China, the target is to increase the application of ethanol fuel by 2010. This will be equivalent/substitute of 10 million tonnes of petroleum. As a result, cassava (tapioca) chips have gradually become a major source of

ethanol production. On December 22, 2007, the largest cassava ethanol fuel production facility was completed in Beihai with annual output of two hundred thousand tonnes. which would need average of one and a half million tonnes of cassava. In



November 2008, China-based Hoinon Yedaa Group reportedly invested US \$51.5million (\$31.8m) in a new biofuel facility that is expected to produce 33 million gallons a year of bio-ethanol from cassava plants.

#### ANIMAL FEED/LIVESTOCK FEEDS

Cassava is used worldwide for animal feed. Cassava hay is produced at a young growth stage, 3- 4 months, and harvested about 30-45cm above ground, sun-dried for 1-2 days until having final dry matter of at least 85%. The Cassava hay has a high protein content (20-27% crude protein) and condensed tannins (1.5-4% CP). It is used as a good roughage source for dairy, beef, buffalo, goats, and sheep by

either direct feeding or as a protein source in the concentrate mixtures.

Because of the high-energy contents and low prices of cassava, livestock industries have since been using cassava chips and pellets in compounding animal feeds production, both locally and internationally. The compound livestock feeds are developed for pigs, cattle and sheep, goats and poultry.

#### ETHNO MEDICINE

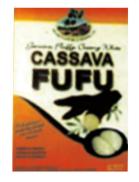
The bitter variety of Manihot root is used to treat diarrhea and malaria; the leaves are used to treat hypertension, headache and pain; Cubans commonly use cassava to treat irritable-bowel syndrome; the paste is eaten in excess during treatment. As cassava is a gluten-free natural starch, there have been increasing incidences of its appearances in Western cuisine (style of cooking) as a wheat alternative for sufferers of celiac disease.

#### CASSAVA FLOUR:

Cassava Flour is used for baking bread, meat pie, sausage rolls, strips, biscuits, doughnut, etc.

#### CASSAVA STARCH:

In some countries, cassava starch is used as substitutes to maize starch (USA and Canada) or potato starch (Europe) for industrial applications. In the textile industry, cassava starch is used for warp sizing, cloth and felt finishing. Cassava starch is also used for the manufacture of adhesives, dextrin and paste and as filler in the manufacture of paints.



Cassava starch is also used as a binding agent in the production of paper, textile and monosodium glutamate, an important flavoring agent in cooking.

#### CASSAVA WINE/OIL:

IITA, Ibadan, has succeeded in extracting oil from cassava seeds. The oil is yet to be developed to an edible level, but it has been confirmed that it can be used for making soap and for some pharmaceutical products.

#### 3. CASSAVA PROCESSING:

Processing of cassava for human and animal consumption /industrial uses is done to:

- (a) Reduce the cyanide content (poisonous substance) of the tuber/leaves to a safe level;
- (b) Reduce the weight for ease of mobility and;
- (c) Ensure ease of storage for a reasonable length of time.



#### PROCESSING FOR HUMAN CONSUMPTION

Two varieties of the cassava are of economic value: the bitter, or poisonous; and the sweet, or non-poisonous.

Because the volatile poison can be destroyed by heat in the process of preparation, both varieties yield a wholesome food; cassava tuber can be processed into the following:

- Garri and flour
- Flour for Amala or fufu (Yoruba), Akpu (Igbo),

- Tuwo (Hausa)
- Snacks, e.g. tapioca (consumed in the South East and Niger Delta)

#### PROCESSING FOR EXPORT

Cassava tubers are rarely exported but processed into chips and pellets, starch, flour and ethanol. The foreign market opportunities exist for chips, pellets, and starch which Nigerian entrepreneurs and exporters could exploit. To transform cassava tubers to chips and later pellets is done through machines, and some of these machines such as cutting, drying machines, etc are fabricated locally.

#### CHIPS

Cassava chips are derived from fresh tubers that are washed, peeled and cut into slices of 3-6 cm length. Conversion of cassava into chips shelf life. value-addition. prolongs increases the transportation costs and reduces their toxicity potential (as in the case of cyanide in cassava.) The most important unit operations in chips production are size reduction and drying. Fresh cassava tubers may be peeled or left unpeeled, depending on the end-use of the dried chips. For example, cassava chips destined for use in animal feed compounding need not be peeled before chipping. Chips can be served as precursors for flour and pellets products. Chips are similarly used as feedstock in the production of ethanol and starch extraction.

#### PELLET

Pellets are produced from chips; after chips have been dried they are ground and hardened into cylindrical pellets, about 2cm long, up to 1

cm in diameter. Of late, pellets have become more popular than chips because they are denser and easier to handle.

#### CASSAVA STARCH

Cassava starch is an important industrial raw material which is used in the manufacture of a number of products, including food adhesives, thickening agents and pharmaceuticals. There is high demand for starch in textile, paint and pharmaceutical industries, and cassava starch has been used to fill some of these demands.

### PACKAGING FOR EXPORT

### CASSAVA CHIPS, FLOUR AND PELLETS ARE PACKED IN

- (a) 25kg and 50kg bags (sisal, jute or gunny)
- (b) The bag must be impermeable
- (c) Free of insects and free from any odour which may affect the quality of their contents, jute bags should be free of carbon content and hence marked "Carbon-free" or can be packed into airtight containers.

#### MARKET ACCESS TARIFF

- Under the EU Cereals Scheme, prices lower than the price support levels established for domestically produced cereals are prevented from entering the market.
- Imports of cassava are subject to quotas negotiated between the EU and producing countries.
- Least developed countries (LDCs) are allowed to exceed the quotas by a total of 3,000 metric tonnes per year, with proof of origin.
- Imports from Africa, the Carribbean and Pacific (ACP) countries into the EU is zero duty under the EU-ACP

Cotonou agreement (Cotonou convention). This agreement which was signed in Cotonou on 23 June, 2000, was concluded for a 20-year period from 2000 to 2020. It is the partnership agreement between developing countries and the EU. 79 countries are involved. The Cotonou agreement is for developmental relations, political relations, trade relations, etc.

#### DISTRIBUTION CHANNELS

Cassava in any form is imported directly by a few major specialized importers in Europe and by animal feed compounders. Trading takes place among importers and/or compounders within the European community. Many authors like Wesiby (1998), Plucknett (1995), and Ezirim (2004) have stated that multiple channels are used for cassava distribution at the international arena, involving many channel members and facilitators.

#### **QUALITY STANDARDS**

Quality standards may vary from country to country but the most acceptable standards are presented thus:

- The moisture content should be between 12 & 14%
- Foreign bodies such as sand/soil should not exceed 3% per metric tonne.
- Crude fibre content should not be greater than 5%
- Starch content should be up to 82%
- The colour should be bright and attractive.

Given that there are different cassava varieties, for maintenance of product quality from different batches of production, producers should adhere strictly to the adopted system of production; this will make the already accepted product quality of a producer to continue to attract favourable demand. Quality drags the price as stated in Ezirim and Chukwu (2010) and Ezirim and Chukwu (2011).

# 4. FOREIGN BUSINESS IMPORTS

The Netherlands is the major market in Europe. While Germany, Portugal, Spain, United Kingdom, and Belgium are minor importers. The Netherlands imports are re-exported to other destinations in Europe and Russia. Chips and pellets are the principal products that are exported to these countries. Thailand is the major supplier to this market, supplying about 90% of the market requirements. Rotterdam is the major market centre in Europe. The other importing countries are China, South Korea, Malaysia, Indonesia and Japan. In fact, China is displacing Europe as a major importer of chips, importing over a million tonnes of chips in 2002. It is important to note that China and Indonesia in the past were exporters but currently imports Japan is also a prominent market; however, the products destined for the Japanese markets are mainly cassava-derived starch, and, to a less extent, flour and chips.

South Africa has emerged as a major market for cassava products. Indonesia, though a major producer, due to its large population, consumes most of its production and imports from Thailand to augment its requirements (NEPC, 2009).

TABLE 1: WORLD CASSAVA PRODUCTION

	1999	2000	2001 Prelim.
	( Million tonnes)		
World	172.6	175.5	174.0
Africa	92.4	92.7	90.9
Congo	16.5	16.0	13.5
Ghana	7.8	7.5	7.8
Madagascar	2.5	2.2	2.4
Mozambique	5.4	4.6	4.5
Nigeria	32.7	33.9	34.0
Tanzania	7.2	5.8	5.0
Uganda	3.3	5.0	5.5
Asia	50.9	50.5	49.4
China	3.6	3.6	3.8
India	6.1	6.2	6.2
Indonesia	16.5	15.7	15.5
Philippines	1.8	1.8	1.8
Thailand	20.3	20.3	19.2
Vietnam	1.8	2.0	2.0
Latin America & Caribbean	29.2	32.1	33.5
Brazil	20.9	23.4	24.6
Colombia	1.8	1.9	2.0
Paraguay	3.5	3.5	3.7

Source: NEPC, 2009.

### Major Exporters: Thailand

Thailand is the largest exporter of cassava-derived products in the world, exporting various cassava-derived products as chips, hard pellets, starch and flour. Currently, the country supplies 98% of the world market requirements. Other exporters of cassava roots to the

EU include: Indonesia, Tanzania, China, Mozambique, Malawi, Ghana, and Togo.

#### Starch

Thailand is again the leading supplier of cassava- derived starch, exporting mainly to the Asian market. Japan is the largest market for starch.

#### **PRICES**

Cassava is a low-priced product in the international market. Prices of cassava chips and pellets vary from time to time depending on the destination country and nature of demand, including expenses. Forces of demand and supply according to Ezirim and Opara (2010) count in the determination of cassava prices, including other Market Dynamics.

Table 2. PRICES OF CASSAVA PRODUCTS, 1992-2002

Year	Price (US\$) F.OB. (Rotterdam)
1992	183
1993	137
1994	144
1995	177
1996	152
1997	108
1998	107
1999	102
2000	84
2001	80
2002	100 - 107

Source: FAQ Year Book

From the table above, it is obvious that prices of chips have consistently been on the decline. Price of cassava chips/pellets have been falling persistently since 1996, reflecting mainly the weakness of EU import demand, and also the loss of competitiveness of cassava feed products vis-a-vis **domestically produced grains in the European Union**. However, it is envisaged that prices would pick up in the next few years. Presently, prices of cassava derivatives have improved tremendously due to the decline in grains supply.

#### MARKET OPPORTUNITIES

# Export Market Opportunity for Nigeria Cassava Chips and Hard Pellets.

In the European Union, animal feeds compounders (the biggest end users of cassava in the EU) are faced with a sharp decline in supplies and high prices of feed grains and farm fodder resulting from the drought in 2003. This drought has caused a substantial decline in the total European Union production of wheat and coarse grains by 24 million tonnes. Even after releasing stocks from the **strategic reserves** and cutting back the exports of subsidized grain to Third World countries this trend persisted. The most attractive option to replace feed grains in the EU is a mix of cassava chips/pellets and soya beans meal. Prices of pellets in Rotterdam are currently trading by over 10% above the previous year's level (quoted in Euro/MI). Furthermore, the pronounced appreciation of the Euro against US dollar during the last months, has caused import prices which are normally quoted in Euro to increase by almost 30% in 2002.

Pronounced appreciation of the Euro against the dollar is now creating a very conducive environment for Nigeria's market entry into the European Union.

# EXPORTERS OF CASSAVA CHIPS AND PELLETS IN NIGERIA

- Elis and Wills Association Limited, 13 Commercial Road, Apapa, Lagos.
- ii. Unique Enterprises Nigeria Limited, 43 Cemetery street, Ebute Metta, Lagos.
- iii. Simvan Nigeria Limited, 49 Docemo Street, Lagos.
- West Cott Conveyers Limited, 258 lkorodu Road, Obanikoro, Lagos.

#### **OUALITY INSPECTION**

- i. SGS Inspection Services Ltd. 13/ 15 Wharf Road, Apapa, Lagos.
- ii. Standards Organization of Nigeria (SON).

#### PROCESSORS OF CASSAVA

- i. Real Foods, & Allied Industrial Ltd (Starch) Km 19, Ibadon fe Road, Asejire, Ibadan
- ii. Livestock Feeds Plc (Animal Feeds) 1 Henry Carr Street, P.M. B. 21097, lkeja Lagos.
- iii. Allied Atlantic Distrilleries Ltd (Alcohol)Km 40, Abeokuta Expressway, Sango Otta, Ogun State

# SUPPLIERS OF INDUSTRIAL MACHINE FOR CASSAVA CHIPS & PELLETS

Vitex Industrial Ltd
 19th Floor, Western house
 810 Broad Street, Lagos
 P.O. Box 70066

Victoria Island Lagos

Tel: 2631740,2633743,2635132 Fax: 234-1-2633743,2635132 Fax: 1-202-2126038

 $E\text{-mail:}ioseph 1103@\,mail.com$ 

Addis Engineering Limited
 26 Abimbola Street, Isolo Lagos

Tel: 4527483,4523397

E-mail: Addis@hyperia.com

IITA

Industrial Processing Department Ibadan, Oyo State.

Tel:

#### Fax:

Nova Technology Ltd
 Ajibode Bus-stop, between U.l. & Niser
 U.I. P.O. Box 19825, Oyo Road, Ibadan
 E-mail: nova@errands.skannet.com

Table 3: Area and output of cassava roots by states in Nigeria

Column 3= column 2/ column 1. Sources: OGADEP data 2001; and PCU

State/ADP	Annual HA. Planted (X 1000)	Annual MT Produced (X 1000)	Mean Yield MT/Ha	Indicative prices of fresh roots (Naira/Mt)		surplus <b>cassavā</b> Rating	Surplus Cassava Rating Target for Vision 2020 in Nigeria
	1	2.	3	4	5	6	7
Benue	261.1	3221	13.6	-	-	high	high
Kogi	184.0	2605	14.2	3379	2987	high	high
Enugu	186.5	2085	11.2	4360	7410	low	high
Imo	156.5	2052	13.1	6340	5980	medium	high
Cross River	177.5	1958	11.0	7800	8820	low	high
Kaduna	206.0	1835	8.9	6600	9230	low_	high
Rivers	167.5	1735	10.4	15800	11600	low	high
Ondo	73.2	1267	17.3	3500	3120	high	high
Ogun	75.7	1178	15.6	5890	3075	high	high
Oyo	121.0	1019	8.4	2430	4910	high	high
Osun	66.0	915	13.9	5100	4560	high	high
Akwa-Ibom	117,8	893	7.6	6070	4300	medium	high
Delta	70.0	311	11.6	4350	5179	low	high
Ekiti	41.2	651	15.8	3500	2000	medium	high
Anambra	53.0	627	11.8	24250	4800	low	high
Edo	45.0	545	12.1	3810		low	high
Niger	73.5	535	7.3	14880	10390	low	high
Bayelsa	30.0	459	15.3	30000	70000	low	high
Ebonyi	29.0	435	15.0	1070	3350	medium	high
Kwara	30.0	425	14.2	-		medium	high
Plateau	26.9	345	12.8	10920	2340	medium	high
Lagos	25.1	300	12.0	•		low	high
Abia	15.7	265	16.9	5650	2320	medium	high
Nasarawa	25.0	248	9.9	8720	5870	medium	high
Taraba	12.0	111	9.3	13910	15230	low	high

Source: NEPC, 2009.

Also an additional price comparison for the year 2000 confirms that the central states of Nigeria (Benue and Kogi) are important surplus areas for cassava. Because of the large number of sunny days, these are the logical locations for investment in chipping processing facilities.

#### VARIETIES OF CASSAVA



**Cassava Chips** 



**Cassava Pellets** 

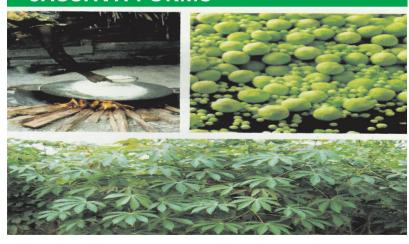
### **CASSAVA TUBERS**



**Cassava Tubers** 

#### Cassava Tubers

### **CASSAVA FORMS**



#### The Mosaconi Cassava processing factory.

This was a large operation that utilized raw cassava from farmers for the production of **packaged garri and laundry starch** for local and export markets. It began operations in 1993 but closed in 1999.

Before the establishment of the factory, the community used cheap cassava for the production of local staple foods like Iafun and garri. When the company began, it patronized cassava growers in the state and bought most of the cassava from their farms. This resulted in a scarcity of cassava and a higher selling price for smaller local processors.

As local cassava prices rose, public complaints by the local people surfaced that the presence of the factory was increasing the price of lafun. This resulted in a number of problems such as pilfering, administration fraud, and use of poor land, lack of adequate/accurate information and vandalism of factory equipment. The factory suffered as a result and faced a shortage of cassava for its operations.

Since the factory had no farm of its own, it tried to solicit cassava growers to supply cassava into the factory through radio and television jingles. This only encouraged cassava growers to truncate the maturity of planted cassava, selling cassava of less than eight months old. After many unsuccessful attempts at the troubleshooting, the owner was forced to close down the company. (NEPC, 2009).

This company really merited its failure in business due to its myopic approach to business. How can it limit its supply of raw materials to its immediate environment only. The company could not develop its own farm and has a poor security arrangement for the enterprise.

Human resources management of the company appears to be weak also.

#### 5. EXPORT BUSINESS DYNAMICS DEMONSTRATIONS

#### **EXPORT BUSINESS DYNAMICS (Diversification of Exports)**

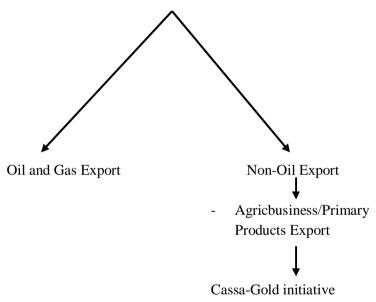


Fig 1: Framework of Export Business

**Source:** Researcher's concept derived from literature, 2017

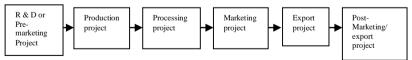
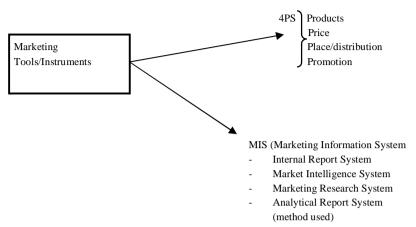


Fig 2: Cassava supply chain management and integrated project management interface

**Source: Critical Literature, 2017** 



**Fig 3:** Marketing Instruments for Cassava Export Business **Source:** Critical Literature, 2017.



**Fig 4:** Export project activities **Source:** Critical Literature, 2017

#### CASSAVA REPORTS

- Agric business summits
- Food & Agriculture Organization (FAO) Report on Cassava;
   African Development Bank (AFDB) Report on Cassava
   Export, Women and Cassava, Heritage Bank and Non-oil
   Exports in 2016; African Export and Import Bank (Afreximbank) Report, etc.
- Cassava farmer groups
- Cassava exports

- Nigerian Cassava supply chain
- (Science-Driven Agric Transformation)
- (Demand-Driven Cassava Export)
- Organic farming and global trend
- Cassava Domestic Consumption & Nigerian Export Capacity
- Govt Interventions on cassava export consolidation: CBN
- Efforts
- Cassava uses
- Nature of Nigerian cassava processing/export
- Extraction of ethanol from cassava and sugar cane
- Ethanol uses
- Nigerian non-oil export consolidation
- Coffee Kenya's Biggest Export, yet they prefer taking Tea
   & Beer
- Nigerian strategic investments
- Crude oil/coal in Enugu/Cassava Export and Ethanol Extraction
- Reduction of Nigerian cassava domestic consumption
- Return of marketing boards

#### RELATED SEARCHES:

- Cassava processing business plan
- Cassava value chain development project
- Cassava Export Market
- Cassava Production in Nigeria by states
- Cassava Production cost per hectare
- Commercial cassava farming
- Cassava value chain Analysis
- World production of cassava in 2015

- World production of cassava in 2016
- Action plan for cassava in Nigeria
- www.unaab.edu.ng-cassava Report final Contacts:
- NEPC
- Export processing zone
- Export –import Banks
- Bank of Industry
- Bank of Agriculture
- Federal office of statistics (Bureau of statistics)
- Federal Ministry of Commerce and Industry
- Nigerian customs
- World trade statistics on cassava exports
- World Bank Records on cassava exports
- WTO Records on cassava exports
- Working group on International Agricultural Research, 1997
- Federal University of Agriculture, Umudike
- European Commission, Directorate for Agriculture on EC and Cereals Substitute and Animal Feeds
- Agriculture Trading Company (ALTRACO) in Rotterdam, Germany.
- International Agritrade Co. Ltd. Rotterdam, Germany.
- A.C.T Offer international, Humburg, Germany.

#### OTHER RELEVANT ORGANIZATIONS

- International Institute of Tropical Agriculture (IITA) Oyo Road P.M.B. 5320, Ibadan, www.iita.org.
- National Root Crop Research Institute, Umudike, P.M.B 7006, Umuahia, Abia State.
- Website: www.nrcrLorg.ng

- Cassava Growers Association of Nigeria, P.O. Box 10564, Dugbe, Ibadan, Oyo State
- Cassava Growers Association of Nigeria, Trade Fair Complex, Agbatoro Road, Akure, Ondo State.

### Cassava support institutions, organizations, agencies, centres and institutes:

- International Centre for Tropical Agriculture (CIAT) in Colombia
- International Institute of Tropical Agriculture (IITA) in Nigeria
- Brazil National Centre for Genetic Resources and Biotechnology
- Brazil National Cassava and Fruit Research Centre (CNPMF) in Bahia holds the world's largest national collection of cassava germplasm.
- National Agricultural Research Services (NARS) for different countries dealing on cassava.
- Global champions and catalysts for cassava, e.g. CGIAR, CIAT, IEAD, World Bank, African Development Bank, Asian Development Bank, Inter-American Development Bank, etc.
- International Laboratory for Tropical Biotechnology (ILTAB)
- Working Group on International Agricultural Research

#### They support in terms of:

- Financing
- Changing policies that constrain markets and production
- Identifying and supporting global research and development

### Jobs while in service and after retirement/resignation within cassava supply chain management/Value Chain Management

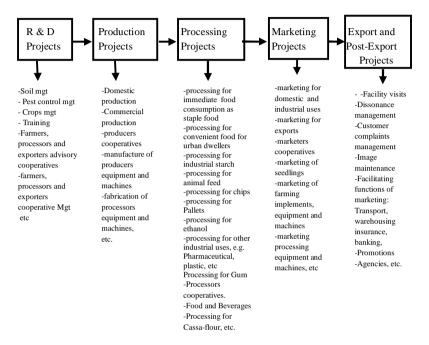


Fig. 5: Job Opportunities within Cassava Supply Chain Management/Value Chain.

Source: Researcher's Concept Based on Literature, 2017.

**Entrepreneurship** is the act of coming up with unique and need-stratifying ideas with consciousness /enthusiasm and high level of commitment to do business with any amount of money available in any form of the business by individuals or organizations or the business of becoming entrepreneurial in any form of the business.

To be entrepreneurial according to the *BBC English Dictionary* (1992) means having the qualities that are needed for people to succeed as entrepreneurs. Many authors like Ottih (2014) presented such qualities as:

- Commitment, determination and hardwork,
- Independence, self-reliance, internal locus of control
- Creativity, innovativeness, adaptability
- Tolerance for risk, ambiguity and uncertainty
- Achievement, motivation,
- Leadership and good human management
- Foresight and opportunity seeking
- Optimisim; etc.

Other qualities include drive and initiative taking, goal orientation, competitiveness, proactiveness, communication, human relations, decision – making ability, good use of time and good planning ability among others. Oji (2016) asserted that Entrepreneurs occupy a central position in a market economy. It is the entrepreneurs who serve as the Spark Plug in the economic activities. The economic success of nations worldwide is the result of encouraging and rewarding the entrepreneurial instinct (natural tendency to behave in a particular way). Entrepreneurship display can occur in different sizes of the business (small-scale, medium-scale and large-scale business) and also in different forms of the business (sole proprietorship, partnership and joint ventures, etc).

**Intrapreneurship** is all about the staff of an organization having creative and positive ability to support the organization's entrepreneurial attributes. The organization cannot become a good and successful entrepreneur without the staff being intrapreneurial in line with the policies and programmes of the entity (the organization).

Intrapreneurship, therefore, means transforming the staff of an organization to become entrepreneurial or possessing the quality of coming up with unique ideas that will help the organization become a good and successful entrepreneur. So the synergy as a result of the relationship between the staff and the organization as an entity matters a lot for the socio-economic development and growth of these partners in business. The organization itself and the staff should see themselves as partners in business relating in different positive forms. In this manner, the staff becomes:

- Innovative
- A Risk-Taker
- Dynamic
- Resourceful
- Committed
- An ambassador etc.

While the organization provides all the necessary motivations and enabling environment for creative and positive thinking.

#### NIGERIA BUSINESS OPPORTUNITIES

#### TABLE 4: NIGERIAN EXPORTABLE PRODUCTS

#### 1. AGRICULTURAL COMMODITIES

#### A) Cocoa

Cocoa beans light crop Cocoa beans main crop Cocoa butter Cocoa cake

#### **B)** Cassava Products

Cassava Chips Cassava pellet Cassava flour Cassava starch Cassava Glucose Tapioca, Garri Starch

#### C) Gum Arabic

Gum Arabic Grade I GumArabic Grade 2 Gum Arabic Grade 3

#### D) Edible Nuts

Cashew nut (Raw) and Kernels Ground nuts Walnuts (in Shell)

#### (ii) Vegetables

Asparagus
Beans
Baby corn
Beetroot
Sprout
Carrots
Cauliflowers
Courgettes

#### E) Spices

Chilies (Funtua Small)
Ginger ( Dried, peeled, split)
Pepper (Black and white
Cloves)
Nutmeg (unsorted)

#### F) CRUDE DRUG

Kola nuts (dried) Kola nuts (fresh) Quincy seed (Bitter kola)

#### **G) NATURAL FIBRES**

Cotton lint Jure Coconut fibres Coir yarn

### H) HORTICULTURAL PRODUCTS

#### (i) FRUITS

Avocados Apricots Bananas Grape fruits Guava (White and Pink) Lemons

Cucumbers	2. SEMI MANUFACTURED		
Garlic	PRODUCTS		
Karela	(A) Shrimps and Prawns		
Leeks	Processed H.I. Brown		
Lettuce	Grades		
Mange tout	16/20		
Mushrooms	21/25		
Okra	26/3 6		
Onions	31/35		
Peas	36/50		
Potatoes	5 1/60		
Radish	61/70		
Spinach	71/90		
Tinda	91/100		
Mediaeval plants; (Lemon	110 and above		
grass)			
Red and White Sorrel	H.L.WHITE		
(Harbicus Sabdariffa)	8/12		
	11/15		
Dehydrated vegetables	15/20		
Mangoes	2 1/25		
Melon (Water)	26/3 6		
Oranges	31/35		
Pawpaw	36/50		
Peaches	5 1/60		
Pineapples	61/70		
Plantains	71/90		
Strawberries	91/100		
Tomatoes	110 and above		
Passion fruits			
(iii) Cut Flowers	(B) Rubber		
Roses	Grade		
	RSS I		
	RSS 2		
	RSS3		

(iv) Medicinal Herbs	TSR5L			
Wide indigo	NSR5L			
Neem	WL 5L			
Papain	CL5L			
Garlic	TSR5			
Lemon grass	NSR5			
Aloe vera	WL 5			
	CL5			
Others	TSR 10			
Soya beans	WL 10			
Coconut (flesh)	CL 10			
Copra	TSR2O			
Shea nuts	NSR2O			
Shea butter	MX 3			
Cof				
fee Arabica				
Coffee Robusta				
Sesame seed (Beni seed)				
Egusi				
Yams				
(c) Others	(vii) Foot Wear and			
Coconut (desiccated)	Leather Products			
Cow horns/bones/hoofs	Foot Wears Leather sandals			
	Leather slippers			
3. MANUFACTURED PRODUCTS	Leather foot wear			
i) Cotton Products	Canvas shoes			
Cotton thread	Leather folders and bags			
Cotton grey cloth	Shoes Shoe soles			
Textiles fabric	Belts			
Tapestry cloth	Men's shoes			
Cotton bags	Ladies shoes			
and sacks	Children shoes			
Towels				
Absorbent cotton wool				
Cotton yarn				

#### (ii) Textile Products

Cotton super print (African print)

Cotton real wax

Cotton sheet

Bedspread and sheets

Mosquito nets

Table covers

Cushion covers

Linens and other furnishing articles

Napkins

Pillow cases

#### (iii) Finished Leather

(Goat, Sheep & Cow)

#### GRADE

Standard

Medium

Lin

Pillow cases

#### (iii) Finished Leather

(Goat, Sheep & Cow)

#### GRADE

Standard

Medium

Lining

#### (iv) Ready Made Garments

Adire batik wears

Suits

Shirts

Safari Coats

**Trousers** 

Customes and fashion

Children wears

Boubou

Beach wears

#### (viii) Petroleum and Petrochemical Products

Liquefied gas

Petroleum jelly

Bitumen

Steam Coal

PVC

Carbon black

Polypropylene

Polythene bags

Paraffin and wax

Aviation fuel

Motor spirit

Lubricants

Insecticide

# (v) Textile Secondary Accessories Zippers Fasteners Buttons

#### (vi) Canvas Goods

Tents
Tarpaulins
Carpets and rugs
Other floor coverings
School bags
Canvas shoes

#### (ix) Chemicals

Borax (anhydrate and decanhydrate) Alcohol Ammonium Nitrade

Acetic acid Benzene Butadiene Glycerine Menthanol

Photographic chemicals
Magnesium carbonate
Hydrochloric acid
Hydrogen peroxide
Caustic soda
Phenol
Sulphuric acid

#### (x) Fertilizers

Toluene

Yeast

Urea Nitro phosphate Calcium ammonium nitrate Super phosphate

#### (xvi) Iron and Steel Products

Machine tools and industrial parts

Wires and cables for telegram Wires and cables for electrical

installation

Galvanized pipes Nails, screws, nuts etc Corrugated iron sheets

Aluminum ingots Zinc alloys

Iron & steel bars, rods etc Gas cylinders and cookers

- 50kg cylinders -2.50kg cylinders -6.25kg cylinders -3kg cylinder Mini cookers Cookers (single) Cookers (double)

#### (xvii) Vegetable Oils/Fats and Cakes

Cocoa butter
Cocoa cake
Coconut oil (crude and refined)
Fish oil (crude and refined)
Shea butter
Palm kernel oil (crude and
refined)

#### (xi) Automobiles

Peugeot brand of cars Mercedes buses and lorries Utility Vehicles e.g. Isuzu Motorcycles Bicycles

#### (xii) Automotive Parts

Brake pads and Linings
Batteries and casings
Auto cables
Mirrors
Tubes and Tyres
Rubber mats
Headlights and side lights.
Fan belts

#### (xiii) Paper and Paper Products

Poster papers
Print paper coated1/impregnated
Kraft liner in rolls or in sheets
Paper Board
Card Board

#### (xiv) Plastic and Plastic Products

Plastic house wares
Chairs, tables and house furniture
Pharmaceutical packaging's
Shoes and slippers
Poly bags
Storage tanks and containers

#### (xv) Stationeries

Paper bags, boxes etc
Paper for packing/packaging
containers.
Envelopes
Wall Papers

Sesame seed oil
Ginger oil
Soya bean oil (crude and
refined)
Soya bean cake
Copra oil
Castor oil
Maize oil
Groundnut oil (crude and
refined)
Sunflower seed oil (crude and
refined)
Cotton seed oil
Cotton Seed cake

Palm kernel cake

### (xix) Non Alcoholic Beverages and Tobacco

Cocoa and cocoa based drinks Tea Tobacco and tobacco manufactures Mineral drinks-Coca cola, Fanta, Seven up etc Malt drinks, Energy drinks e.g. Lucozade

### (xx) Alcoholic Beverages, Wines and Spirits

Kola nut wine
Gins Coconut liquor
Whiskies
Brandy
Tonic wines
Stows
Lager beers

Palm wine

Writing pads

Paper stationeries

Registers, diaries, file covers etc

Paper toiletries

#### (xxi) Roofing Sheets and other Building Materials

Corrugated asbestos

Cement sheets

Natural light grey

#### Grade

1.25m

1.830m

1.22m

Pigment dark grey 1.525m

1.830m

2. 135m

Long span roofing sheets

Building wires

Clear sheet glass

100 x 480 x 2mm

95x 610 x 3mm

830x 1220 x4mm

500x 1220x5mm

Cement

Cement clinkers

Rubber tiles

#### (xxii) Wood and Wood Products

Wood furniture and components

Briquette (charcoal)

Veneer ceilings

Wood charcoal

... . . .

Wooden designs

Rail

way sleepers

#### ( xxv) Processed Food Items

Sardine and herrings 'in

tomato sauce

Tomato paste

Tomato puree

Tomato ketch-up

Tropical fruit juices

Spring water (bottled)

Custard powder

Corn flakes

Sea foods, shrimps, lobsters

etc'

Honey

Poundo yam (yam flour)

Sova beans meal

Food ingredients and spices

Copra cake

Fish meal

Linseed cake

Meat/bone meal

Sunflower seed meal

Citrus pulp pellets

Tapioca

Grounded ginger

Grounded melon

Grounded pepper

#### xxvi) Cosmetics and Toiletries

Hair products

Shampoo

Body Lotions/creams

Soaps and detergents

Perfumes

Toilet soaps

Medical soaps

Sanitary pads

Toilet tissues

Bamboo furniture and components Rattan woven 33 l.Ul dry baskets Wooden doors and frames Wall and ceiling tiles Window frames Cane furniture

#### (xxiii) Sweets and Confectioneries

Malta sweet Tom torn Chewing gum Biscuits

#### (xxiv) Electrical/Electronics

Room Air conditioners
Lamps and lighting fittings
Electric bulbs
Refrigerators
Stabilizers,
Welding machines
Battery chargers
Electrical cables

#### (xxvii) Glass Products

Bottles (all types)

Mugs

Plates and household products
Windscreens

#### (xxviii) Telecommunication Cables

- (a) 1000M OFA2Y(A)2YT (30 x 2 x O.65m) per km
- (b) 2000m of A-2Y
- (c) 2YT (100 x 2 x 06.65mm) per km

### (xxix) Pharmaceutical and Medical Supplies

Tablets Syrups Over the counter

Over the counter (OTC) drugs Hospital beds and beddings Surgical instruments

### Empty cassettes (xxx) Industrial Tools and EQ

#### **Uipment**

Process machines

Crushers

Coupling boxes

Industrial machines

Industrial plants for ice cream &

paper making

Nylon sealing machines

Milling plants

Basic oil extraction plants

Soap, paint manufacturing plants

#### (xxxi) Other Manufactured Products

Chalk

Aluminum plates

Candles

Sinks

Wash basins

Bath tubs and other sanitary fixtures

Tooth brushes

#### 4. SOLID MINERALS

#### (a) Metallic and Iron Ores

Aluminum

Iron ore

Manganese

Magnesium

Lead and lead concentrates

Process machines

Crushers

Coupling boxes

Industrial machines

Industrial plants for ice cream &

paper making

Nylon sealing machines

Milling plants

Basic oil extraction plants

Soap, paint manufacturing plants

#### (xxxi) Other Manufactured Products

Chalk

Aluminum plates

Sinks

Wash basins

Bath tubs and other sanitary fixtures

Tooth brushes

#### 5. SOLID MINERALS

#### (a) Metallic and Iron Ores

Aluminum

Iron ore

Manganese

Magnesium

Lead and lead concentrates

Silver

Zinc

Columbium ores

Copper

Silica

#### (b) Non-Metalic Ores

Kaolin Asbestos Graphite Mica Sulphur Banixite Barytes Magnesite Anlydrite Calcite Gypsum Marble Potash Granite Colemanite Silica sand Potash Bentomitic clay Bally clay Potassium Feldspar Talc Dolomite Bitumen Carbon black Coal Lime Surpentine

#### (c) Precious and Semi-Precious Stones

Gold

Agate

Sapphire (different colours)

Kunzite

Topaz

Citrine

- 2. Raw hides and skins (including wet blue and all unfinished leather)
- 3. Scrap metals
- 4. Unprocessed rubber latex and lumps
- 5. Artifacts and Antiquities
- Wild Life Animals classified as endangered species and products thereof.

Source: NEPC, 2009

### 6. EXCERPTS: "NIGERIA CAN EARN MORE THAN N15TRN ANNUALLY FROM CASSAVA"

President, Nigeria Cassava Growers Association (Pastor Segun Adewumi-Interview with CALEB ONWE of New Telegraph Nigerian Newspaper- Sept 30, 2016)

#### CASSAVA SUMMIT AND ENLIGHTENMENT 2016

"The summit provided great enlightenment to stakeholders and the public on the progress, challenges and prospects in the cassava industry. Cassava is Nigeria's gold, even though such recognition has not been given to it. I would be bold to state that it is better for us as economy promoters to give attention to developing the full potential of the cassava industry than pursuing fuel. Cassava can actually give us more than N15 trillion annually going by the present exchange rates and global demand for it. Our association is already championing a crusade to make cassava a national product, we want all stakeholders at all levels to give priority attention to cassava. We are trying to be above board in creating the enlightenment.

Secondly, cassava is cultivated all over the country from the North to the South. Cassava grows and lives with water but survives with heat, the fact that there is no water for three months cannot affect cassava, so it is so easy to grow and Nigeria is known as the highest producer of cassava in the world, so, it is what we have that we will promote. Cassava is the only farm produce in the world that Nigeria has been recognised globally as a leader, so it is very necessary to promote cassava.

### The country is targeting U.S. \$5 billion on cassava annually, is it realistic?

In my opinion, that projection is very modest. It is possible for us to actually get three times that amount if we are focused on cassava. Let me give this analysis, right now, Nigeria has up to 84 million hectares of yet to be cultivated arable land.

If we can give five million to producing cassava, we will get 200 million metric tons of cassava and that 200 million, if you look at the industrial factors, at the ratio of four tons of fetch cassava root to one ton of cassava starch, you will get up to 50 million metric tons of starch. And the same value can also be obtained from other byproducts of cassava, which we can process and export to earn foreign exchange. We have had a lot of policies geared towards developing the potential of cassava and yet, appreciable progress has not been made."

What do you think that Nigeria is doing that is likely going to hinder the vision of developing the cassava industry?

#### LACK OF RELIABLE FACILITIES FOR PROCESSING

"Beginning from the regime of Chief Olusegun Obasanjo when cassava started receiving attention, I can tell you that what he did during his regime in the cassava sub-sector of agriculture was inspirational. He sold the vision to us and partly implemented it though he couldn't get the strategy to do it well.

Akinwumi Adesina, the immediate past minister of agriculture, who did pretty well to promote cassava bread, also picked up that vision for cassava production. We were convinced that he was going to

intervene, and bring about the desired turnaround, he tried, but certain things could not fall in the right place. Regarding cassava bread, countries like Cameroun and Brazil have already achieved up to 20 per cent of cassava flour in bread baking, but in Nigeria, we are yet to achieve that. The problem we have here is implementation of workable strategies.

Previous regimes did their best, but due to certain challenges, all that was desired as far as tapping the full economic value of cassava was not achieved. And I think the present regime is trying not to fall into the same pit. For instance, N10 billion was released for the promotion of cassava bread, the money was shared between, growers and processors of cassava, the master bakers and other areas where it was necessary.

In our own case, the Bank of Agriculture disbursed to us and we cultivated 29,500 hectares of cassava, however, by the time the cassava sowed got matured, I think something went wrong with the processing, they didn't have the equipment required and the cassava rotted away. That occurred due to lack of reliable facilities for processing and I think based on that, the working capital that was supposed to be given to them was not available for them, the money was a grant that doesn't require the type of measures the banks were introducing, measures that the people could not fulfill, so our cassava rotted away.

I think the present government is looking into it so that they will not repeat the same mistake. I want you to know that the concept is that 50 per cent additional charges on import duty will be added to importation of wheat flour, and if we import N250 billion worth of

wheat in a year? That means the 50 per cent added will bring it to N100 billion annually that could have been collected for the past five years. I also believe that the N10 billion that was released for cassava programme was not enough."

Now Nigeria is targeting 45 million jobs from cassava, if we must realise this, what do we need to do around cassava?

# We need a Cassava Commission or a Specialized Committee under the Ministry of Agriculture and Rural Development (MARD) to drive the cassava programme.

"We have already made our presentation to the present Minister of Agriculture and Rural Development, we recommended creation of a Cassava Commission or a specialised committee under the ministry to drive the cassava programme. There is need for a commercial programme and such initiative cannot thrive under the bureaucratic system of the ministry without the private sector driving it. We also want the ministry to establish a commercial centre for cassava that will be driven by the private sector."

### WE NEED TO PROMOTE COTTAGE INDUSTRIES IN THE RURAL AREAS WHERE THIS CASSAVA IS PRODUCED

"Secondly, we want to promote cottage industries in the rural areas where this cassava is produced, though I am aware that in 2009, about N1 billion was deposited in a certain bank to help establish the cottage industry, but the money was not disbursed, we have brought this to the notice of the present minister."

### MECHANISED AGRICULTURE/FARMING IN NIGERIA (ORGANIC FARMING AND BIO-TECHNOLOGY)

"There is also the need for mechanised farming in Nigeria, if we want to create massive jobs, I will tell you those farmers in America are not up to five per cent of the population of America, yet they produce enough food for their country and also export to other countries. So, mechanised farming is needed to trigger industrial revolution that will create opportunity for massive employment.

I will tell you this, the three major cassava industrial products, ethanol, industrial starch and cassava floor, that we are concentrating on now are raw materials to numerous industrial items with limitless market potentials, even if the entire land mass in Nigeria is used to plant cassava, it would not be enough to meet the needs of our people. There is massive opportunity for employment in the cassava sub-sector of agriculture if we can do the needful."

### WE ALSO NEED YOUTH EMPOWERMENT THROUGH CASSAVA FARMING INITIATIVE /PROGRAMMES

"In our association, we are already considering youth empowerment through cassava farming, the belief that if they cultivate about 10,000 hectares of lands that will be cleared and allocated to them by the government, at least every youth stands the chance to make up to N2 million profit annually after expenses, and if such youth decides to take it up as a career, we can form them into cooperatives that can own facilities with specialised equipment."

#### WE ALSO NEED SPECIALISED EQUIPMENT TO BRING DOWN COST OF PRODUCTION, PROCESSING, ETC; AND OUR CASSAVA IS THE MOST EXPENSIVE IN THE WORLD

"This is because. specialised equipment will bring down cost of production, like harvester that can do more than what human labour can do; planter is also one of such specialised equipment. All these strategy will not just create employment but will help us to compete in the world market. I can also tell you that our cassava is the most expensive in the world, even in terms of quantity."

## SELLING CASSAVA CHIPS IS SLAVE MENTALITY LIKE WHAT IS HAPPENING WITH OUR CRUDE OIL: NIGERIA AND CHINA

"There was a time when the issue of cassava chips came up, Fadama invited me to talk about it, I told them that selling cassava chips is slave mentality like what is happening with our crude oil, which we sell and they will refine it and resell to us at their price. We believe, it will be better to process the cassava here, get all the value in it and then sell them to the end users anywhere in the world.

Now Nigeria is collaborating with China to improve the economy, and China has a lot to do with cassava product; and instead of exporting raw cassava to China, government is talking about cassava chip, why can't government invite the Chinese investors to come to Nigeria and establish processing facilities here and refrain from exporting our job opportunities. I know that at a point, the bakers were actually brought into the cassava initiative, so that they can put at least 10 per cent of cassava flour in baking bread, but it appears that certain interest is trying to frustrate that initiative.

Can you tell us how much foreign exchange that cassava has brought into the country in the last two years?

The three major cassava industrial products

- Ethanol
- Industrial starch
- Cassava floor

#### Plus:

Livestock feed"

### COST OF PRODUCTION AND PROCESSING IN NIGERIA IS TOO MUCH FOR THE WORLD MARKET (ADEWUMI, 2016)

- 7. HOW CAN NIGERIAN FARMERS, PROCESSORS AND EXPORTERS BENEFIT FROM THE NEW PARADIGM (NEW THINKING WITH CASSAVA)
  - By associating themselves with modern R & D techniques
  - By getting more committed with production expansion programmes and projects
  - By forming processing cooperatives for value chain enhancement.
  - By becoming directly involved in Export through formation of cooperatives
  - By minimizing local cassava waste
  - By minimizing local cassava consumption
  - By rationing cassava uses in Nigeria and beyond
  - By viewing cassava production from a commercial perspective
  - By supporting government consideration of cassava as a National Crop, etc, this can, to a large extent, help in

planning and controlling Nigerian cassava uses at all times and in different places.

#### Rationing of Cassava Uses in Nigeria and Beyond



Fig.6: Nigerian Cassava Uses in Rations Source: Researcher's concept based on literature, 2017

#### EXPORT BUSINESS STRATEGIES OF NATIONS

#### **➤** Kenya Coffee Export Business Strategy

The biggest export of Kenya is coffee, but they consume mainly tea and beer. Coffee is strictly reserved for export business to earn foreign exchange for the country.

#### > East Asian Tigers Export strategy:

The four little Dragons: Hong Kong, Taiwon, Singapore and South Korea. These countries were noted for maintaining high growth rate and rapid industrialization. They pioneered what is known as Asian Approach to Economic Development. Their strategies include:

- Embracing education strongly
- Focused on exports to richer industrialized nations
- Trade surplus with richer industrialized nations
- Sustained rate of double-digit growth for decades
- Non-democratic and relatively authoritarian political systems during the early years

- Undervalued currencies
- High level of U.S. treasury bond holdings
- High savings rate
- High level of economic freedom, etc (Ezirim and Maclayton, 2011).

#### > Canadian Export Business strategy.

At the best of times, exporting can be a complex and challenging process. Yet, when it is approached with careful deliberation, exporting can be a rewarding growth strategy for any business. There are Canadian ten key steps to take your export efforts from start to success (Ezirim and Maclayton, 2011).

#### > Netherlands Export Business strategy

Netherlands is cassava's major market in Europe while Germany, Portugal, Spain, United Kingdom, and Belgium are minor importers. Netherlands imports are re-exported to other destinations in Europe and Russia. Chips and Pellets are the principal products that are exported to these countries (NEPC, 2009).

#### Nigerian Export Business Strategy

Due to the fact that Nigerians do not believe in themselves and the bad image of the country abroad, Nigeria has not gotten effective and efficient export business strategies. Imagine Gari that is exported to some countries has to bear a Germany label (Adewumi, 2016).

### RECOMMENDATIONS /AREAS OF URGENT GOVERNMENT INTERVENTION

- Considering cassava as a National Crop, like crude oil
- Government participatory role in the cassava supply chain management/value chain. (on Project Bases)

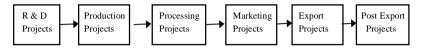


Fig.7: Supply chain management on project bases Source: Researcher's concept based on literature, 2017.

- Government facilitating role in the supply chain management should be enhanced and well monitored.
- Government cannot leave cassava supply chain management in the hands of individuals and organizations alone.
- Enabling Environment for cassava supply chain management; infrastructure, funding, technology, training, workshops, trade missions, etc.
- Government should, of necessity, emulate countries in Asia, Latin America and the Caribbean, etc., who know what cassava can do globally.
- Nigerians should embrace science and technology for enhanced cassava economy (Domestication of technologies).
- The use of appropriate technocrats to be in leadership.
- Interfaces by units, departments, faculties, firms and industries for team-work/synergistic operations should be encouraged.

- Garri accounts for 70% of total cassava consumption in Nigeria, compared to 40-59% in Ghana, Cameroon and Cote d'ivoire.
- Cassava stories are more pervasive for the following variables:
- An increase in income of 1.8 million smaller holder farmers by US 450 dollars annually;
- The generation of 1,000,000 jobs in rural Nigeria over the next 3 years
- A strong value-added chain of the various derivatives;
- Strong market agencies/institutions established for long-term sustainability of the cassava sub-sector of Nigerian economy.
- Improving on yields by use of improved disease-resistant and adapted cassava varieties from national and international organizations like IITA and WAAPP (West African Agricultural Productivity Programme).
- Today, World Communities are still coming up with more and new uses for cassava through R&D. These R&D outputs are continously causing higher global demand for cassava derivatives. So, there is a need for a stronger cassava initiative consolidation for all nations producing and exporting cassava. Therefore, Nigerian Government should be part of this cassava export business by strengthening all the stages of the commodity value chain.

We need urgent Advancement in the Nigerian Cassava Export, based on the current global demand for the crop. Cassava is a versatile crop that can give employment to many if well harnessed. Stop wasting our cassava today. Cassava can replace or support crude oil for us if well harnessed.

Our various governments must take full participatory roles for Nigerian cassava to take its pride of place in the global export market.

This opportunity is here for us, tap it now and enjoy it.

A robust private investment in mechanization of cassava farming, where machines plant stem, uproot the tuber, peel the tubers, wash the tubers, grind the tubers and all the derived products that may be obtained during the process. This would reduce the cost and improve the quality of derived products.

Real Cassava Farmers and Political Cassava Farmers, which one is for Nigeria's vision for development of Cassava Economy?

#### MESSAGE FROM THE INAUGURAL LECTURE

#### > DEVELOPMENT OF EXPORT BUSINESS NETWORKS:

Cassava The Dollar Magnet Crop

- Export capacity consolidation
- Effective & efficient exports strategies to be in place
- Strategic Reserves
- Export Business Strategic Savings (Proceeds)

#### Our target

Jur targ

To grow/develop at home and market abroad

#### For

Foreign exchange earnings and global recognition of Nigeria for good image abroad

Movement from subsistence farming to mechanized farming is highly required in Nigeria now/commercial cassava farming/supply chain management.

Fig. 8: Export Business Framework for Nigeria and Cassava Economy Source: Lecturer

#### THE MARITIME SUB-SECTOR

The wealth of the world, they say, is in the water. Maritime is the key. The bulk of global export and import business cargoes pass through water. We need to strengthen our maritime economy and other modes of transport for a successful export business in Nigeria.

## CONCLUSION

Vice-Chancellor Sir, distinguished Ladies and Gentlemen, Export Business Dynamics in terms of Export Capacity Consolidation, Projects, Programmes, Effective and Efficient Policy Frameworks, Human Capital Developments etc. are urgently needed in Nigeria for National Development. If this is achieved, there will be great enhancement in the areas of foreign exchange earnings, debt servicing, foreign reserve, balance of trade, balance of payment, strategic reserve, etc. at the international and local arenas.

Again, as we have seen and heard from this inaugural lecture today, diversification of Nigeria's economy with sincerity of purpose, team-work and common goal can take the country to the promised land and cassava alone as a versatile and dollar magnet crop can take us far, based on its present global demand. Today, Cassava has over 2000 uses the world over. Let everyone in Nigeria join and support this Cassa-Gold Economy Crusade. Please be a Cassa-Gold Crusader in Nigeria and beyond. Embrace the message of today's lecture and be empowered on how to support our national development to be able to create Jobs to support yourself and others.

Vice Chancellor sir, please permit me to inform the world that figures 1 to 8 are now global and they are brain children of Professor ALOY CHINEDU Ezirim of the Department of Marketing, Faculty of Management Sciences, University of Port Harcourt, Port Harcourt.

Thank you for gracing this occasion and remain blessed.

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## CITATION ON PROFESSOR ALOY CHINEDU EZIRIM

Dip., B.Sc., MBA, M.Sc., Ph.D., Ph.D., CMNIMN, FCAI, MTAMN.



Prof. Aloy Chinedu Ezirim was born on the 6th day of May 1965 in Port Harcourt to the Christian family of Late Elder Michael Nnabuihe Ezirim and Mrs. Fidelia Nnemeziri (Nee Odoh) of Eziama, Osu-ama, Isiala Mbano L.G.A., Imo State, Nigeria. He had a challenging and humble beginning in life. The young Chinedu had his primary education at St. Michael's Primary School, Eziama and obtained the First School Leaving Certificate in 1975. He attended St. Aquinas' Secondary School, Osu-ama, Mbano, from 1975 to

1980 and obtained the West African School Certificate (WASC). From this point, the parents of Aloy Chinedu Ezirim could no longer support his educational career due to financial challenges. This forced the young Aloy to start fending for himself early in life. He was engaged as a Sales Clerk with Zeb Philips and Brothers Ltd from 1981 to 1983 and left them to start up small-scale businesses.

Mr Vice Chancellor Sir, this Aloy Chinedu Ezirim is consummate businessman. He has been involved in several partnerships with many local and international shoe manufacturing and distributing firms. Due to divine providence and the good fortunes from his business he was able to establish Harmony Shoes Nigeria Ltd, a sectoral leader in the industry today in Nigeria. He actively managed the shoe company between 1988 and 1998.

As a true academic he never lost sight of his ambition and goal in life which was to have a good education. The challenges and prosperity associated with his business never deterred the young Aloy from going to school and by the end of 1998, he had bagged the following academic qualifications: a Diploma in Marketing (obtained in 1991 from the Federal Polytechnic, Nekeda), plus a BSc and an MBA both in Marketing (obtained in 1995 and 1998 respectively from the Enugu State University). These qualifications enabled him to secure an appointment with University of Port Harcourt in 1999 as a Lecturer II and this officially ended his career in the business arena.

Not satisfied with his academic attainment, A. C. Ezirim enrolled in the Federal University of Technology, Owerri for an M.Sc Degree in Project Management which he was awarded in 2001 and proceeded with and completed a PhD programme in Project Management in 2005 from the same institution. As a voracious reader he enrolled for a terminal degree but this time with the Rivers State University of Science and Technology, Port Harcourt. He successfully defended this PhD degree in Marketing in 2009. As a teacher and one with a flair for learning and research, he steadily rose in rank and was promoted a Professor of Marketing on July 25th, 2012 by the university.

Professor A. C. Ezirim is a member of several professional bodies. He is a Chartered Member of National Institute of Marketing of Nigeria; Member, the Academy of Management, Nigeria and a Fellow of the Institute of Corporate Administration, Nigeria amongst others.

Professor Aloy Chinedu has served in several Committees in different capacities within and outside the University of Port Harcourt. He has served as External Examiner to many institutions and has examined and assessed several Professors and Associate Professors in different Universities. He was a member of the Committee on Strategic Planning of the Faculty of Management Sciences in 2001; Co-ordinator, Diploma Programme - C.C.E. Uniport in 2004; Faculty Representative for the NUC Research Fair; Chairman, Committee on the Establishment of the Dept. of Hospitality Management and Tourism; Chairman, Departmental Committee on Results Verifications; Acting Head, Department of Marketing; Chairman, University Committee on Proposal to Organize Exhibitions on Campus (2011); Pioneer Assistant Director, Uniport Business School; Chairman, Committee on Centenary Celebration, St. Matthew's Anglican Church Parish, Mgbuoba (2016); etc.

Prof. Aloy Chinedu Ezirim has several books and Journal articles to his credit, both nationally and internationally with merits.

Mr. Vice Chancellor Sir, this scholar from Isiala Mbano has a friend and worthy companion, the only woman in his life, his wife, Mrs. Helen Nkechinyere Aloy-Ezirim and they are blessed with a son, Bright Chinedu Aloy-Ezirim. This family functions under the trinity of divine wisdom, divine favour and divine direction.

Vice Chancellor Sir and distinguished Ladies and gentlemen, please permit me to invite Prof. Aloy Chinedu Ezirim to the podium to discuss the topic, "EXPORT BUSINESS DYNAMICS: Cassava, the New Black Gold Initiative."

Professor B. F. Nwinee

Orator