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AGRICULTURE



AKINDELANO
LEGAL PRACTITIONERS

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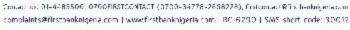
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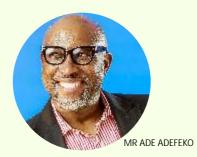
MR JOHN DELANO, Editor

ohn Delano graduated from Hull University with an LLB (honours) decree in 1998 and became a registered lawyer in Nigeria a year later. He practiced as a solicitor with Irving & Bonnar in capital markets transactions corporate and company law. He later worked in the field of publishing law in the UK for such companies as Informa and The Independent.



THE ADVANTAGES AND CHALLENGES OF GREENHOUSE FARMING IN NIGERIA

rs. Nkiru Okpareke popularly called Nkiru Tomato is the CEO/COO of Enviro Gro Farms, a premier commercial grower and marketer of fine quality vegetables in Nigeria. Produce on the farm is grown in a 5000 sq m irrigated, climate controlled green-house and 8 hectares of open field using growing methods that comply with Good Agricultural Practices standards for the production of vegetables. Nkiru has over twenty years working experience with a decade of that experience in ExxonMobil as a project and design engineer and project manager for infrastructure projects in Nigeria, United States, Singapore and France.



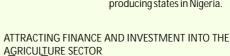
THE NIGERIAN RICE CONVERSATION AND THE NEXUS WITH FOOD SECURITY

r Ade Adefeko is Vice President Corporate and Government Relations and also in charge of External Communication and Stakeholder Management at OLAM NIGERIA is the largest Agribusiness and food company in Nigeria and a subsidiary of OLAM international of Singapore the parent company with a presence in 70 countries. Ade is is on the advisory board of the African Wealth Report (AWR) and Synergos Nigeria's State Partnership for Agriculture (SPA) in non-executive capacities.

MR RICHARD OGUNDELE

r Richard Ogundele currently heads the Agribusiness portfolio of the DFID/World bank funded GEMS4 Wholesale Retail Market Development Project, as the Group Intervention manager(GIMAgribusiness) comprising of the Rice and Fresh Produce Sectors in Nigeria. One of his achievements on this role was to lead his team to deliver the National Rice Cluster Mapping in 18 major

producing states in Nigeria.



r Mezuo Nwuneli has worked extensively in the agribusiness sector in West Africa and across a broad range of crop value chains. He resigned from AFIG to cofound Sahel Capital fund manager for ("FAFIN"), Mezuo holds a Master in Business Administration (MBA) from Harvard Business School, and received a B.Sc. in Industrial Management, with a minor in Information Systems, from Carnegie Mellon University.



PEOPLE IN FOCUS

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THE ROLE OF RESEARCH AND TECHNOLOGY IN THE AGRICULTURE INDUSTRY

r Kenton Dashiell is Deputy Director General IITA Partnerships for Delivery. He has degrees from Purdue University, Oklahoma State University, and the University of Florida in Agronomy and Crop Breeding. He was the Soybean Breeder for IITA based in Ibadan, Nigeria from 1983 to 2001. Before re-joining IITA in 2012 he was the Leader of the N2Africa Project based with

CIAT-Tropical Soil Biology
Fertility in Nairobi,
Kenya. At present his
interests include
m o v i n g
technologies that
increase crop
yields in farmers'
fields and
improving the
nealth and
nutrition of African
families.

DR KENTON DASHIELL



Hon. Commissioner for Agriculture and Rural Development, Oyo State

yo State is open for business in agriculture and seeking for private sector participation. Along with IITA and Leadway Assurance we paid a visit to the Commissioner at his office in the secretariat, Ibadan and were informed that the Ministry of agriculture Oyo State is planning an Agri-Investment Summit early next year, at which the state will unveil its seven point strategics approach to unlocking the potentials of crops e.g Cassava, Maize, Poultry, Aquaculture and other potentials for the agriculture industry. The state is also planning to take advantage of the anchor borrowers scheme.

kindly email: John Delano, for more information



MRS ADEPEJU ADEBAJO
OGUN STATE COMMISSIONER FOR AGRICULTURE

WHAT IS OGUN STATE DOING?

rs Adepeju Adebajo has over 25 years' experience Spanning various industries and finance. She is currently the Ogun State Commissioner for Agriculture. Previous roles include MD at Lafarge Africa Plc; MD at Wapco where she also managed Public Affairs and Communication Strategy. She was on the Board of Lafarge Africa Plc , Ashaka Cement PLC and Lagos Business School. Prior to that Mrs. Adebajo headed strategic planning, brand management and product development at the United Bank for Africa.



THE A-Z OF AGRIBUSINESS - NIGERIA -THE FUTURE WAS YESTERDAY

OLUMIDE FAMAKINWA

lumide Famakinwa is the chief executive officer of Firstling Nigeria Limited, the company incorporated in year 2000 was established to majorly focus on the agribusiness sector and to raise agribusiness development practitioners within Nigeria and Africa. Our goal is to witness the Nigerian agricultural sector achieving a dynamic, distinctive and competitive status within Africa and beyond her shores.



LAND OF GREENS AND WHITE
- Hues and shades of diversities in
agricultural land acquisition in Nigeria
OGOHI ODEKINA

gohi Odekina is an Architect and Farmer. He is the CEO of Moed Acres Limited, engaged in irrigated and rain fed farming of exotic fruit and vegetables in Jos, Plateau State. He is a graduate of architecture from Federal University of Technology, Minna, Niger state and he studied hydroponics vegetable production at PERFECT GROW (Pty) Ltd, Hydroponics Solutions Africa, Krugersdorp South Africa.



Editor's Foreword

John Delano Akindelano Legal Practitioners



n Wednesday 28th of June Akindelano Legal Practitioners (ALP) hosted the 6th edition of the ALP Seminar series which featured experts in Agriculture industry. The theme was Transforming the Nigerian Agriculture and the Agro-allied industry and it attracted many leading figures institutions and stakeholders involved in Agriculture and the Agro-Allied industry.

Some of these include the Commissioner for Agriculture for Ogun State Mrs. Adepeju Adebajo, Deputy Director General for IITA, Dr Kenton Dashiell, Mr. Ade Adefeko VP Olam, Mr. Mezuo Nwuneli Sahel Capital, Mr. Sadiq Usman

Flour Mills of Nigeria, Mr. Oluyele Delano (SAN) ALP, Dr Ajibola Samson Leadway, Mr. Chuka Mordi Union Dicon Salt and many others.

In the wake of faltering prices for Crude and a dire need to diversify the sources of its foreign exchange earning it comes as no surprise that there's now a substantial clamour for Nigeria to revive its Agricuture sector. But the sheer numbers of the subsistence farming population will no longer make up for the lack of mechanized farming and the poor infrastructure.

Nigeria's population is now three times bigger. The infrastructure gap and the dearth of





an integrated agriculture system has become a hindrance to a full resurgence of Nigeria's dominance in this sector.

As a result of bad or inexistent roads in rural areas, on average more than 27% of the crops produced by Nigerian farmers is lost before it reaches market as a result of inefficient transportation system, non-existent storage facilities and a deficiency of Power supply. Yet the urgency of unlocking our Agricultural potential is more pertinent now than ever before because we are spending as much as \$20bn of our foreign reserves yearly on importation of food.

The end result is an unnecessary use of foreign exchange reserves and a weakening of the Naira.

The ALP seminars topics sought to address these and other issues in four sessions dealing with a) The role of research and Technology; b) Treating Agriculture as a business; c) Attracting Investment into the Agriculture Sector and d) the challenges involved in acquiring land for Agricultural purpose.

The keynote speeches were delivered by Dr Kenton Dashiell Deputy DG, IITA Ade Adefeko SVP Investment and Government Relations Olam Mezuo Nwuneli Sahel Capital and Oluyele Delano (SAN) Managing Partner of ALP. Mrs Adepeju Adebajo was also on hand to inform the delegates about Ogun states strategy to improve the Value chain and optimize its agricultural pursuits.

According to Dr. Dashiell there are many positive developments in the Nigerian Agriculture space including improve productivity in crops like Soya bean, Maize and Cassava. The intensification in Cassava has worked well and Nigeria now has the highest output in the world- producing high -yielding, early bulking varieties resistant to CMD varieties.

AIP Seminar 6:

Transforming Nigeria's Agriculture and Agro-Allied industry

Speakers, Special Guests and Panelists



MRS. BUKOLA AWOSANYA



MR. JOHN DELANO

MRS. ADEPEJU ADEBAJO Ogun State Commissioner for Agriculture





MR. KENTON DASHIELL



MR. ADE ADEFEKO



MRS. OLUFUNKE JONES



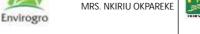
MR. MEZUO NWUNELI







MR. LEONARD OKEREAFOR











MR. MAWULI COFFIE





MR. VAN JONES



NIJI-GROUP

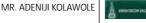
MR. RICHARD OGUNDELE



MIRA MEHTA



MR. AYODEJI BALOGUN



MR. CHUKA MORDI

ALP SEMINAR SERIES



















However if this output is to translate into more revenue there must be a concerted effort to produce Cassava Starch Flour Ethanol and Sweetener, for domestic use and for export. He also urged that Nigeria needs to utilize Cassava to replace imported Wheat up to 20% in bread and 40% in other confectionaries

The biggest target now is to seek to achieve self-sufficiency in rice, maize, maize, soybean, and poultry production; 50 %self-sufficiency in fish, wheat, and dairy production by 2019 through establishment of a private sector -led, government-enabled input distribution platform for the dissemination of a technology package.

He said the way forward is to use research to serve the needs of the industry via reform of the Agricultural Research Council of Nigeria (ARCN) from a coordinating research council to a managing research council. We must seek to strengthen capacity for project management and policy making in the public sector via training of staff all levels in financial and technical management.

Finally we must create new a generation of farmers and Agri-preneurs by recruiting, training and mentoring 40,000 young men and women under the ENABLE Youth program of the Government and the AfDB.

Mr. Ade Adefeko delivered an interactive address in which he made a number of points firstly we don't need to wait for FDI when Direct Domestic Funds are being pumped into Agriculture by the likes of Olam Flour Mills Dangote Farms to mention a few.

Secondly that Nigerian Farmers must for themselves into aggregate groups so that they have a louder voice in the Value chain; Thirdly that the Nigeria government on the Federal and State level must stop playing lip service to infrastructure reform, rather they must deliver on their promises to build more roads and bridges connecting rural areas to market towns. Fourthly that agriculture must be addressed a business not a social program.

According to Mr. Nwuneli of Sahel Capital Agricultural transformation is not only about food – it is also about the economy. Over the past 10 years there has been a gradual increase in agribusiness investments in Nigeria. However, even with this increase in investment, over \$5 billion is still needed to provide required financing for farmers and agribusinesses.

There has also been an increase in bank lending to the agricultural sector, though not as fast as lending to other sectors. He said there is a wide gap between the demand and supply of agricultural finance in Nigeria, estimated at USD\$4billion per annum 1 2014 lending: Oil & Gas (N3.1 trillion), Manufacturing (N1.6 trillion), Trade & Commerce (N1.0 trillion), Financial Services (N763 billion), Government (N732 billion), Agriculture (N479 billion).

Agriculture lending has declined as a % of overall bank lending over the past 30-years, but has increased as a % of lending over the past 7-years. A broad range of policy issues impact attractiveness of investment in Nigeria's agricultural sector Security concerns in North Eastern Nigeria have resulted in: (1) dramatic reductions in crops planted and harvested in the region, (2) higher transportation costs (4) significantly reduced trade between Borno and Niger/Chad. (4). Roads Poor rural roads and key interstate roads 5. Central Bank (FX)6). Customs / Import Tariffs (7). Water Irrigation strategy for dry season farming. 8. Status of Insurance Agricultural.

The final session Navigating the Minefield of acquiring land for Agriculture in Nigeria was undertaken by Mr. Delano (SAN). He said that the Land Use Act has been singularly unhelpful in empowering companies seeking to own land for purposes of Agriculture. He made the point that people are not incentivized or encouraged to bring their land into the realms of registered land because it is a disadvantage to do so. The most glaring disadvantage is the fact that a Certificate of occupancy will limit your ownership of land to 99 years. Whereas unregistered land has no limitations of time attached to it. His sessions and other sessions are accessible on the ALP website.



PRIVATE SECTOR LED AND GOVERNMENT ENABLED TRANSFORMATION OF AGRICULTURE IN NIGERIA: INFRASTRUCTURE, MODERN TECHNOLOGIES AND YOUTH.

Dr. Kenton Dashiell



ver the past 50 years there have been several major successes research that has led to improving the agro-alied industry and here are a few examples.

Cassava Intensification

The introduction of high-yielding, early bulking varieties resistant to the Cassava Mosaic Disease (CMD) by IITA and the establishment of small-scale processing facilities in the 1980s led to a transformation of cassava as food in the country and pushed Nigeria up to the world's largest producer of cassava.

These interventions increased profit margins for producers and drove down prices of cassava food products across rural and urban Nigeria. Another major effort began in 2003 with the Presidential Initiative on Cassava and

continued with the Cassava Transformation Agenda in 2011. It sought to position cassava as an industrial crop and foreign exchange earner, beyond its traditional role as a food crop.

A number of projects to build flour, starch, and sweetener processing factories were initiated, and small- and medium-scale farmers received over 100 million bundles of certified stock of improved cassava varieties. These initiatives also demonstrated the potential of cassava replace imported wheat by up to 20% in bread and up to 40% in other confectionaries.

Transformation of Maize in the Guinea savannas. Since its introduction through the West African coast about five centuries ago, maize has been the most dominant cereal crop in southern Nigeria. In the last 40 years, the outstanding potential of maize in the northern



savanna, development of IITA striga resistant varieties, and a thriving poultry industry, has pushed maize to becoming one of the two dominant cereals in Northern Nigeria replacing on millions of hectares traditional cereal crops of sorghum and millet. Although maize continues to be a main staple of the inhabitants of the humid forest ecology of the south, the bulk of the maize for human and poultry consumption now comes from the northern savannas.

Over 70% of the national maize production is from the savannas largely located in the north. Dramatic increases in maize production from 0.65 million ha in 1984 to about six million ha in 2014 has been accompanied by the release of Striga resistant hybrid maize to farmers and a multi-pronged extension program involving NAFPP (National Accelerated Food Production Project), ADPs (Agricultural Development Projects), and RBDAs (River Basin Development Authorities), Food production campaigns (Operation Feed the Nation and Green Revolution) and the escalating demand for maize particularly for compounding livestock feed.

Soybean in Maize-Soybean Farming Systems Up till the late 1980s soybeans were largely unknown in Nigeria. An initiative by IITA provided information on opportunities for soybean production, harvesting, storage, processing as well as on its nutritional benefits. Since then, soybean production has increased dramatically more than sevenfold between 1980 and 2008 Nigeria currently produces about 600,000 Mt of soybean per year.

Potential grain yields of IITA improved soybean varieties are as high as 3.6MT/Ha although actual yields in farmer's fields range between 1-1.5MT/Ha. These improved soybean varieties fix between 44 and 103 kg N/Ha of their and the yield of maize grown after soybean had 1.2-1.3 fold increases compared to maize after maize.

Sorghum for food security and industrial uses. With over 9 million tons of sorghum

produced annually, Nigeria is the world's largest producer of food sorghum but yields of traditional varieties have always been lower than 1MT/Ha.

Beginning the late 1990s, IAR and ICRISAT released open pollinated improved sorghum varieties that raised yields to 1.5-2MT/Ha. In 2012, the Institute for Agricultural Research and Premier Seeds Nigeria, Ltd. developed and released two sorghum hybrids that further increased yields to 3-4MT/Ha in farmer's fields.

As productivity and production increased, a gradual and systematic industrial use of sorghum in producing malt, malt beverages, and malt foods ensued. The entry of Sorghum into the industrial sector has created a demand for farmers and encouraged the use of new improved technology.

Raising wheat production. Wheat in Nigerian is a low land crop grown under irrigation in northern part of the country, especially in the Lake Chad Basin, during the cold dry season months. Wheat is one of the cheapest sources of protein and demand for wheat in the country exceeds four million metric tons of grain per annum.

Nigeria is one of the leading wheat import countries spending over US\$4billion of foreign exchange annually importing wheat. The major use of wheat is in bread making, confectionaries, and other fast-foods, especially noodles. Nigeria's national wheat production in the last decade's averaged 80,000MT/annum from 50,000 Ha; more than 80% of national wheat production came from farmers cultivating between 0.5Ha and 1.5Ha with yields of 0.5-1MT/Ha. of land using rudimentary methods of production, harvest, and threshing of wheat. The price of Nigerian wheat is high and unattractive to large wheat millers who have their infrastructure set up to import, process, and market wheat from their bases in Lagos. Wheat varieties that can produce higher yield under Nigeria condition have been identified through wheat germplasm exchange and testing between ICARDA and the Lake Chad Research Institute.



These varieties include Norman Borlaug and Reyna 28 have yields of 3-4 MT/Ha on farmer's fields and are revolutionizing wheat production in Northern Nigeria.

Probably the major obstacle that needs to be addressed that will allow then allow a real transformation in Agriculture is the poor infrastructure in rural Nigeria. The main improvements that need to be made were determined by a recent survey. The survey project categorized infrastructures into three, namely physical, social and institutional infrastructures. The three categories comprise as follows:

Rural physical infrastructure, responsible for incremental growth of the rural food and non-food economy and representing the hardware of rural economic growth in real terms, namely - a) Rural roads that cause accelerated delivery of farm inputs, thereby reducing transportation costs and enhancing spatial agricultural production efficiency; b) Storage facilities that help in preserving foods items from the time that farmers produce them to the time consumers need them; c) Processing facilities that help changing the food items from one form to another through value addition; and d) Irrigation facilities which assure farm water supply thereby protecting the farm production system against uncontrollable and undesirable fluctuations in domestic food production; etc. The category of physical infrastructure constitutes the critical mass of physical capital required for economic growth of the economy.

Rural social infrastructure, responsible for social protection of the rural people, namely - a) Rural borehole schemes that help in providing clean water, environmental sanitation and personal hygiene to rural dwellers; b) Formal and informal education that promote rural productivity by making the farmer able to decode agronomic and other information, and carry out other desirable modern production practices; basic education also promotes feeding quality, dignity, self-respect and sense of belonging as well as political integration of the rural people; c) Health facilities, which ensures that people are free from debilitating diseases to enjoy the full benefit of their lives; d) Farmers' unions and cooperatives that facilitate economics of scale and profitability of rural enterprise; e) Agricultural extension improves the technology status of the farm business etc. The category of social infrastructures constitutes the critical mass of social capital required for economic development.

c. Rural institutional infrastructure, responsible for development of formal and informal institutions in rural areas and



represents the software of the rural economy, namely: a) rural institutions such as cooperatives credit societies, farmers associations, community associations, among others that help in giving the people a voice and a vote in managing the rural economy thereby maximizing the participation of rural people in the policy process etc.; b) policy institutions such as research infrastructure, extension infrastructure, financial infrastructure, market infrastructure, etc.; and c) non-state the series of non-state intervention bodies or actors, such as non-government organizations (NGOs), community-based organizations (CBOs), and civil society organizations (CSOs). These categories of institutional infrastructures collectively represent the critical mass of the institutional capital required for economic progress in terms of growth and development of the rural food sector.

Finally there needs to be a plan that clearly defines what needs to be accomplished by research organizations, government and the private sector.

4.1. Short term Goals

- i. Make agricultural research serve the needs of the industry via reform of ARCN from a coordinating research council to a managing research council
- ii. Achieve self-sufficiency in rice, maize, soybean, and poultry production; 50% self-sufficiency in fish, wheat, and dairy production by 2019 through establishment of a private sector-led, government enabled input distribution platform for the dissemination of a technology package of variety/breed and soil/crop/livestock production systems in collaboration with the Technologies for African Agricultural Transformation (TAAT) program, using a public and private extension and advisory support service.
- iii. Create a new generation of farmers and Agripreneurs by recruiting, training, and mentoring 40,000 young men and women under the ENABLE Youth program of the Government and the AfDB
- iv. Strengthen capacity for project management and policy making in the public

sector via training of staff at all levels in financial and technical management

4.2 Medium term Goals

- I. Generate additional funding for R&D in Nigeria through promotion of the commercialization of research results within the research system and propose a mechanism for ARCN and each of the NARIs to establish Business Plan and Development Units
- ii. Raise agricultural productivity of key commodities and their marketing via the creation of a strong research, extension, primary production continuum
- iii. Enhance policy stability by legislating ARCN reforms, agricultural policies on regulation of agro-inputs, input distribution, and extension into law

iv. Expand financing to agriculture via tripling the size of the risk sharing facility of NIRSAL

4.3 Long Term Goals

- i. Establish 12 Staple Crop Processing Centers (SCPZs) or Agropoles all across the six geopolitical zones to create hubs of food production and processing
- ii. Increase efficient marketing of agricultural products from northern part of the country in the southern part through the development of key agricultural corridors, including but not limited to the Lagos-Kano-Jibia corridor, and the Damaturu-Abuja-Calabar corridor
- iii. End farmer-pastoralist conflict via the creation of intensive livestock farming.







THE NIGERIAN RICE CONVERSATION AND THE NEXUS WITH FOOD SECURITY

Ade Adefeko



he Rice debate in Nigeria is an intense and fierce one by different players who don't understand the dynamics and only tend to put out emotional arguments not grounded on facts and logic but aim to score cheap political points.

They try to play to the fact that self-sufficiency is a walk in the park and merely requires sloganeering and mantra speak. I beg to disagree, we need to think through the issues and be pragmatic in our approach.

As a background and to further contextualize the issue, let us dimension our consumption and production and then find out the gap and thereafter look at factors militating against our quest to achieve self-sufficiency and what can be done to realize same. As a first step, it is important to mention the major rice

producing states as Kebbi, Jigawa, Niger, Kano, Adamawa, Taraba, Nasarawa as well as Benue and Kogi and the foremost millers are Olam, Coscharis, Umza, Labana, 3 Brothers Stallion and lately Wacot.

Nigeria, depending on the data being presented and the one you believe, consumes between 5.5 -7.0million metric tons of rice per annum. For this article, I will use the figure and data provided by the highest echelons of government which for now is 7 million tons.

About 2.7 million tons of that is produced locally but if we add the recent 2 million tons of paddy (which translates to about 1.2 million tons of packaged rice- as about 22-23 per cent is husk and 7-8 per cent is bran while the balance 10 per cent is rejects & bran/brokens) the government tells us has been generated by the





farmers in Kebbi, Niger, Nasarawa, Kano, Jigawa, Ebonyi that will be 3.9 million tons. Meaning we technically have a gap of three million tons which can only be met by legitimate imports or smuggling.

Another dynamic we might not be aware of is that rice consumption in the country is almost entirely parboiled rice. In West Africa, only Nigeria consumes parboiled rice. Other West African countries including all the neighbouring countries Niger, Benin, Cameroon, Chad are not consumers of parboiled rice. In Africa, South Africa is probably the only other major country that consumes parboiled rice.

Whenever the tariff differential between the Nigerian rice tariff and the tariff in Benin Republic) and Togo is very wide, the resultant effect is significant and massive levels of illegal cross border trade flows (smuggling). As per the industry sources, illegal smuggling of rice from Benin, Niger and Cameroon have easily been to the level of between 1,000,000mt to 2,000,000mt per annum over the past 6-7 years. The markets in northern Nigeria like Kano are completely swamped with smuggled rice which enters the country through land borders with Niger Republic and Katsina and other Northwestern states. Legitimate importers of rice in Nigeria have thus effectively been shut out of Kano and other northern markets for several years.

The shipments of parboiled rice from India and Thailand into Lome, Cotonou, and Douala ports is a very fair estimate of smuggled rice into Nigeria as none of these countries have internal consumption of parboiled rice. All the imports of parboiled rice into these countries finally find their way into Nigeria. Smuggled rice is about 2 million tons now and that needs to be curbed.

Often, the Ministry of Agriculture touts the drop in official import volumes into Nigeria as evidence of increase in local production whereas in actual fact the drop in official import volumes has been more than offset by increased arrivals of parboiled rice in Benin and Togo evidencing heightened smuggling activity which needs to be seriously curbed.

Almost all the rice that one can see in markets across the length and breadth of the country is imported rice. There is very little of locally produced or milled rice in the market whether it is in big markets like Lagos, Abuja, Kano or Onitsha or even the smaller markets like Makurdi, Ilorin, and Kaduna. To be fair to the current government and particularly the Central Bank of Nigeria, its intervention programme tagged Anchor Borrowers Scheme to encourage local production by granting single digit loans to out growers is yielding results albeit in trickles but it is a good start.

Conversely, paddy prices in Nigeria have hovered around N60, 000 per metric ton from

2015 and has climbed to 160,000 in 2016-17 which is significantly higher than the prices in India and Thailand. This makes it challenging for rice millers in Nigeria to be competitive.

In addition, rice millers have found that it is quite challenging to procure large quantity of quality paddy in an efficient manner. As a result, most of the rice mills are operating below capacity. Although the Federal ministry of Agriculture claims that there are about 21 rice mills in the country, one reckons that there are not more than 9-10 Mills that are active and in regular production. The average yield in Nigeria for paddy is around 2.25mt per hectare. This leads to a situation of high production cost for the farmer, high paddy prices for the rice miller, low level of surplus paddy available for sale by the farmer and also poor earnings for the rice farmer.

The number of jobs and improved livelihoods that can be created in rural areas by investment and improvement in paddy production is in several multiples coupled with rice milling and distribution as part of the entire value chain.



The process of developing a rice farm of meaningful scale (thousands of hectares) can anywhere from 5-10 years. Experience shows that the rice farming part of the value chain requires 4-6 times the investment required in rice milling. Rice farming also has a multi-year gestation period as land has to be identified, purchased and title documents obtained, land cleared and levelled, irrigation and other infrastructure built and soil testing, seeds testing and multiplication and best practices developed for each site. Further rice farming investments by the corporate sector also entails engaging with the host communities and farmers on a deeper level which has enduring socio economic benefits for the communities far beyond added rice production.

Private sector investment in rice farming and cultivation is essential in ensuring a workable and enduring linkage between farm to factory in the rice value chain. A rice mill simplistically speaking is a piece of hardware which can be set up within 18-24 months. Rice milling technology is fairly standardized and readily available.

But for a rice mill to function effectively it needs steady and reliable supply of good quality paddy at competitive prices which is not available today. The biggest bottleneck in the rice value chain is rice farming and not rice milling. It requires long gestation, bigger quantum of investments and a complexity of factors to manage.

Nigeria has suitable agro climatic conditions for cultivation of paddy. The current low yields are a function of poor seeds, no or low level of usage of inputs like fertilizer and pesticides, lack of irrigation, poor farming and post-harvest practices etc. These can be addressed, in my view, through engaging, supporting and training the farmers under the Farmer Out grower Programmes run by the investors in their areas of operation.

If the investors are engaged in commercial farming they have ready access to knowledge, expertise and resources that are required to effect that change and government should



simply enable through right policies and easing the land tenure process.

The way forward in order to assess the demand and supply situation on the one hand is for policy makers to work with right set of data that are accurate and complete. Ignoring the supply of imported parboiled rice into and from neighboring countries leads to false assumptions and consequently wrong policy formulation. On the other hand, the current Tariff of 70 per cent for imports is not sustainable for trading and as such high tariffs cannot sustain imports into the country as cost of smuggled rice through land borders is far cheaper. Moreover the Central Bank has placed a technical ban by not allowing Form-M and by extension allotting foreign exchange.

With regards to production, farmers should be encouraged with government declaring a minimum support price for rice farmers and buy the paddy from the farmers and aggregate the paddy in silos and storage facilities of the Ministry of Agriculture as a first step. This would help to provide clear and hard data about the actual production levels and availability of paddy in the country in addition to building a strategic reserve.

Another part of the policy thrust should be to encourage investors/corporates in rice business in Nigeria to invest in rice farming. The policy should aim at getting the investor to have a commercial rice farmer to cover at least 50 per cent of their milling capacity and to rely on Farmer Out grower programmes for the rest of the paddy. This would kick-start the much needed investment and corporate participation in rice farming.

Every investor in rice milling should be mandated to incorporate a rice farming component to assure a minimum 50 per cent supply against stated capacity. If this is not done there is a real risk of investors who have only done the relatively small/minor investment in rice milling alone to compete unfairly against the investors who have invested in both rice milling and rice farming.

They can do so by being able to bid up the paddy procurement price because they do not have the high capital investments and associated costs, from the catchment area of companies that have invested in integrated farming and milling projects.

In conclusion, we must commend the efforts of the current government with its AGRICULTURAL CHANGE AGENDA through the Minister of Agriculture and the Central Bank Of Nigeria ably led by the Governor Godwin Emefiele for his intervention via the Anchor Borrowers programme which supports over 200,000 farmers across different value chains and lastly not forgetting the Kebbi State governor Senator Atiku Bagudu who is the chief proponent of grow local for rice and wheat.

We must stress, however, that they should not resort to banning rice Imports by fiat but make sure adequate mechanisms put in place to ensure self- sufficiency are carried out through fiscal measures like a hike in duties and levies whilst we work hard to ramp up production with my aforementioned recommendations. These and only through these propositions can we ensure food security on the long term.





THE A-Z OF AGRIBUSINESS - NIGERIA THE FUTURE WAS YESTERDAY

Olu Famakinwa

Definitions

gribusiness is simply the business of agricultural production. Agribusiness touches on health, nutrition, safety, science and environment, however due to more efficient operating practices, new technologies, increased level of partnership and collaboration across the supply chain, the future for the industry is very attractive and still emerging.

Clichés describing agribusiness are quite valid from the farm to the fork, soil to the skin, ground to grub, from the earth to the edible, all give credence to the detailed and concise process of the value chain.

Key trends shaping agribusiness are the need for more food, biofuels, rising importance of environmental sustainability, continued food price volatility and globalization.

The catchphrase 'The Future was Yesterday' highlights the pragmatic and cautious need to fast track the process of agribusiness industrialization in Nigeria considering the empirical evidence that the developed countries of the world have attained monumental heights and are just consolidating on the gains of a mature and structured market.

Presently the developed countries have moved the agribusiness industry platform to the heart of digitalization. Digitalization is not only widening access to markets and improving efficiencies but it also increasing transparency in terms of location tracking and cost of shipments. In simple words the future of agribusiness is going digital all the way and Nigeria must



meander through the murky waters of the past and present to appropriately direct the future.

Technology is playing a huge role in the transformation of agricultural supply chains. The deep roots and contemplation of the main theme of this article is extracted from the historicity of the industrial revolution sandwiched in between the preceding agricultural revolution and post information technology revolution.

The industrial revolution reflects our challenges as a country in terms of scale and scope of transformation which would involve all stakeholders of the polity, from the public and private sectors to academia and civil society. How integrated and comprehensive is our response to the process of agribusiness industrialization? It has been agonizingly slow and the methodology seem regressive in planning, implementation and control based on impact and results.

The Fourth Industrial Revolution, finally, will change not only what we do but also who we are. It will affect our identity and all the issues associated with it: our sense of privacy, our notions of ownership, our consumption patterns, the time we devote to work and leisure, and how we develop our careers, cultivate our skills, meet people, and nurture relationships. It is already changing our health and leading to a quantified self, and sooner than we think it may lead to human augmentation. The list is endless because it is bound only by our imagination. (Klaus Schwab is Founder and Executive Chairman of the World Economic Forum)

The first industrial revolution used water and steam power to mechanize production. The second used electric power to create mass production. The third used electronics and information technology to automate production. The fourth is building on the third, the digital revolution that has been occurring since the middle of the last century.

It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. On the scale of 1-4 where is Nigeria? It appears we are presently going to have a wholesome combination of the

different phases of industrial revolution simultaneously running to kick start our transformation.

The global future of agribusiness is digitalization and it started yesterday. The digitalization challenges of the agribusiness sector in Nigeria remains numerous and interlocked amongst complexities, with investments, mechanization and commercialization at the top of the list.

Dubai Multi Commodities Centre (DMCC), a leading government establishment for trading international commodities and the world's fastest-growing free zone teamed up with Future Agenda on an odyssey to discover the future of global trade. A few highlights from their findings after twelve months of extensive research (2015).

\$40tn - the total value of global trade, which is a measure of real cross-border economic activity 85% - the reduction in cost of exports with the adoption of a fully digital supply chain USD29tn - the potential growth of the value of the digital economy over the next decade 1.1bn - the size of Africa's workforce, which is estimated to be the largest in the world by 2040 40 - Number of countries needed to collaborate for One Belt One Road trade route to work \$400bn -





the total value of world food trade and a vast slice of the global trade pie DMCC from the number above give credence to how business decisions are shaped and formed. Agribusiness is an important subset within the trade sector and play a crucial role.

As a side shot, the recent decision by the government of Nigeria to export yam to Europe and United States unequivocally reflects our past not even the future of agribusiness in Nigeria which started yesterday. Almost the same as the government of Nigeria taking up the role of the private sector and exporting raw cocoa beans and rubber in year 2017. The business decision by government is a moral loss for the country. The private sector should row the boat while government steers the boat.

We would briskly look at the Shea butter industry as a classical case and as a nexus between the rich and poor players. Three global players namely Natura Cosmeticos, Fuji Oil, AarhusKarlshamn and IOI Loders Croklaan were x-rayed vis-a-vis African countries.

Natura Cosmeticos founded in 1969 is a Brazilian manufacturer and marketer of beauty products, household and personal care, skin care, solar filters, cosmetic perfume and hair care products.

The company's product are sold through representatives and in more than 3,200 stores in many countries around the world. Natura Cosmeticos bought The iconic Body Shop for USD1.6billion in June 2017.

Fuji Oil Co Ltd with headquarters in Osaka (Japan) was founded in 1950. The group runs 21 production plants in Japan and overseas in 9 different countries.

Serving the world as a global supplier of intermediate food ingredients, the Fuji Oil group's unique research and development has led to numerous innovative, high value-added specialty products. Staff strength of 4,367 employees worldwide ensure the global activities resulting in a consolidated turnover of €1.99B.

IOI Loders Croklaan is a Cocoa Butter Equivalent producer involved in the procurement of shea nuts and shea butter for 50 years. As a company, they want to develop the shea industry further, adding more value in the shea belt countries, and ensure food safety and sustainable products.



According to Global Shea Alliance, nearly two billion shea trees grow naturally on farmlands across twenty African countries and provide a critical source of nutrition and income to rural women and their families. The trees produce 1,200,000tons of kernels annually and half are consumed in domestic and export markets. The Shea industry has doubled in the past 10 years and is now highly valued in food and cosmetic products worldwide. An estimated 16,000,000 rural women collect fresh shea fruits and process the kernels from naturally growing trees to extract a healthy vegetable oil known as "shea butter".

We can logically draw a thin parallel line between the established shea butter processers in the developed countries and shea nut growers in the far flung countries in Africa. It clearly reechoes one message – Nigeria just like Africa must start to trade with each other to get out of the vicious poverty cycle. All parameters for competitiveness must start with developing our internal industrial engine and capacity.

According to www.worldstopexport.com Singapore's top trading partners are China (13%), Hong Kong (12.6%), Malaysia (10.6%). Canada's top trading partners are United States of America (76%), China (4.1%) and United Kingdom (3.3%). Germany's top trading partners are United States of America (8.9%), France (8.4%) and United Kingdom (7.1%). The Observatory of Economic Complexity (OEC) in their 2015 report; The top export destinations of Nigeria are India (\$9.1B), Spain (\$4.63B), South Africa (\$4.58B), Brazil (\$4.14B) and The Netherlands (\$3.37B). The top import origins are China (\$13.6B), The United States (\$3.24B), The Netherlands (\$3.22B), India (\$2.28B) and Belgium-Luxembourg (\$1.98B).

Nigeria and other underdeveloped countries have been made to believe that they are strange bed fellows and cannot do business together. Nigeria's volume of intra and inter trade is paltry. Most countries develop primarily by generating substantial domestic capacity for goods and services which dovetailed into international trade. Elementary economics emphasizes the nearness to market mantra as a no-brainer for sustainable growth, profit and consolidation.

The future was yesterday and as such we must start now, policies that would stimulate and generate goods and services for trade and exchange within the country must be our upmost priority. The internal and external positive ripple effect on our three tiers of government and citizenry is unquantifiable.

William Gibson quotes "The future is already here. It is just unevenly distributed' We have the rare opportunity to stand on the precipice of time and redistribute the future and declare boldly that our generation turned the tide around.





spate of new investments in Nigeria's sugar sector should help move the country closer towards its objective of self-sufficiency, although current production is lagging behind government targets.

In early June Dangote Sugar Refinery and the Nasawara State Government signed an agreement to build an N217bn (\$700m) integrated sugar complex in Tunga.

In its first phase, the complex will include 60,000 ha of plantations and two sugar-refining factories with a combined capacity of 430,000 tonnes per year. The final phase will expand the plantation area to 100,000 ha, making it the largest operation of its kind in the country.

The Tunga deal follows on the heels of a revised agreement Dangote signed in May with the Taraba State Government for the 36,000-ha

Lau Sugar Company. Initially proposed 13 years ago, the multimillion-dollar sugar factory had been set back by disagreements on local compensation and equity structure.

Under the amended proposal, Dangote is to pay Taraba about N1.2bn (\$3.7m) for 16,000 ha of land. In addition, the local government will have a 6% equity share in Dangote Group, Yusufu Akirikwen, the state's commissioner for justice, told local media.

Sector development plan

Both projects are part of Nigeria's Sugar Master Plan (SMP) 2013-23 aimed at attaining self-sufficiency in sugar by raising output from its current 70,000 tonnes per year to 1.7m – roughly even with local annual consumption.

The gap between production and consumption saw the country's sugar import bill rise from \$113m in 1993 to over \$550m in 2015, according to the latest figures from the National Sugar Development Council (NSDC).

The SMP is supported by a federal "backward integration" programme, which looks to improve value addition and local sourcing of inputs from the country's three sugar producers, Dangote Sugar Refinery, BUA Group and Golden Sugar, a subsidiary of Flour Mills of Nigeria.

The programme – which was launched in 2013 and is one of several focused on different agricultural commodities – aims to not only boost fixed capital formation in the sugar industry but also to create up to 117,000 jobs.

The SMP has some very ambitious objectives. Dangote, for example, aims to raise production to 1.5m tonnes a year by 2023 by acquiring 150,000 ha of sugar plantations in the states of Adamawa, Taraba, Nasawara, Kwara, Kogi and Niger.

In addition to the expansion of Dangote's production, Golden Sugar's Sunti Estate was tested last year and aims to reach output of 100,000 tonnes by 2018, while the BUA Group is

expected to start planting sugar canes this year at its 20,000-ha plantation.

The Savannah Sugar Refinery in Numan, in which Dangote bought a 95% equity stake in 2013, has also doubled its production this year, to 12,000 tonnes.

Broader goals and challenges

However, the government is hoping to accelerate progress under the SMP, following a June mid-term review meeting for the programme. According to the NSDC, in spite of the increases in output and new land acquisitions, the plan has achieved only 40.3% of its production target thus far.

The limited success comes in part from a number of underlying structural issues, including difficulties over land acquisition, lack of private sector participation, scarcity of foreign exchange and a need for better risk management.

To mitigate these, in February the industry called for a new partnership with the Nigeria Agricultural Insurance Corporation to reduce losses from natural disasters, while the government has pledged to provide fresh incentives to boost public-private partnerships.

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greenhouse is a structure that allows a farmer grow crops especially vegetables, herbs and flowers in a controlled environment. The types of vegetables that can be grown in a greenhouse are tomatoes, bell peppers, cucumbers, strawberries, etc.

Also the greenhouse allows us to grow vegetables that typically will not grow in our environment as you can control the growing conditions.

Though greenhouses have been in Nigeria as far back as the late 1990s, Nigeria is still seen as a relative newcomer to this technology when compared to countries like Kenya and Ethiopia who are far advanced in farming using greenhouses with many of the farms owned by Europeans and their products exported to the EU market.

The technology though is gradually making inroads into the Nigerian agricultural sector and this can be attributed to the entrant of more educated and exposed Nigerian into the agric sector, the rise of the middle class, the entrant of foreign supermarkets chains like Shoprite and Spar, the increase in the number of 5 Star hotels

and the dollar fluctuation which makes the imports expensive.

Also, the seasonality of tomatoes because of seasonal rains and pest attacks like Tuta Aboluta have also contributed to the high demand for produce grown in green houses. For many farmers who have been in greenhouse business for years, it is much more than a frame covered in polythene, polycarbonate or nets.

It is an organized system that works together to produce the results the farmer desires.

The advantages of greenhouse are therefore as follows:

- a. In the greenhouse, the farmer controls the elements of production under partial or full controlled environmental condition to get optimum growth and productivity. The key elements which the farmer may control include the greenhouse temperature, the amount of light, the system of irrigation, fertilizer application and the atmospheric humidity.
- b. The advantage of all year farming too removes the seasonality of subsistence farmers who only plant during the rainy season.

c. Greenhouse farming also offers a better alternative to the open field farming because of bacterial and fungal diseases associated with open field production of vegetables.

Growing in a greenhouse therefore, you have less risk of pest invasion and infection because of the protected environment and hence less use of chemicals

- d. Ability to grow produce that typically cannot grow in this environment as the greenhouse allows you to control the climatic condition with the enclosure
- e. Higher yields from the same variety of seeds when compared to the ones planted in the open field
- e. Continuous harvest from the same plant over a longer period of time with use of indeterminate seeds which are developed mainly for greenhouses
- f. More efficient use of water by using irrigation and fertigation systems

g. You will need less personnel to manage a greenhouse viz a viz, open field production

Inspite of the advantages of greenhouses, there exists myriads of challenges of which are as follows:

- a. The initial cost of investment in the green house and the supporting infrastructure is very high. The cost of setting up greenhouses is high because the structures are imported. We do not manufacture them in Nigeria.
- b. Higher cost of operations in terms of either heating or cooling the enclosure for the plants
- c. The high humidity in the green house is also a good breeding ground for disease
- d. Getting the right personnel who have the expertise in growing produce in a green house
- e. The high cost of maintenance of the structure as the plastic and nets will undergo wear and tear



- f. The unavailability of high quality inputs like hybrid seeds suitable for our environment and quality chemicals required for high yields
- g. Though they are locally constructed greenhouses that cost less than 60% of the imported ones, they are made using wood and therefore do not last more than 3 years as termites typically weaken the poles.
- h. Strong winds and heavy rain pours may pull down the structure

Therefore, before an entrepreneur decides to invest in green house farming, he/she needs to ask the following question –

- A. Is the ROI worth it? Is it high enough to dedicate his money and energy to?
- B. Will I be able to find competent personnel with the necessary expertise to run the

- operations as it needs a specialized skill and years of experience in agronomy? Are all the inputs I need readily available from reputable sources?
- C. Where is the best location to set-up operations? Is it close to market? Good water source?
- D. Do I have the staying power to run this business for a long term as agriculture is a long term business with a lot of risk?
- E. Can this business venture be scalable? Greenhouse farming has come to stay in Nigeria but new entrants have to consider if this is the type of farming they want to invest in before venturing into it as though it can be rewarding, these rewards come with lots of challenges that seem insurmountable at times.



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igerian agriculture is influenced by many factors, one of which is agricultural land acquisition. They present opportunities for government; private sector and host communities to engage explore and establish win-win strategies.

This work is mostly shaped by the political ecology of our development as a nation.

A PricewaterhouseCoopers' report, titled "The long view: how will the global economic order change by 2050" ranked 50 countries by their projected global gross

domestic product by Purchasing Power Parity.

PPP is used by macroeconomists to determine the economic productivity and standards of living among countries across a certain time period.

While PwC's findings show some of the same countries right near the top of the list in 13 years, they also have numerous economies slipping or rising massively by 2030.

All numbers cited in the slides are in US dollars and at constant values (for reference, the US's current PPP is \$18.562 trillion): (1)

LAND OF GREENS AND WHITE HUES AND SHADES OF DIVERSITIES IN AGRICULTURAL
LAND ACQUISITION IN NIGERIA

PwC's Ranking	Country	PPP value (\$)
32.	Netherlands	1.08 trillion
31.	Colembia	1.111 trillion
30.	South Africa	1.148 trillion
29.	Vietnam	1.303 crillion
28.	Banetadesh	1.324 trillion
27.	Argentina	1.342 trillion
26	Poland	1.505 trillion
25.	Malaysia	1.506 trillion
24.	Philippines	1.615 trillion
23.	Australia	1.663 trillion
22.	Thailand	1.732 trillion
21.	Nigeria	1.794 trillion
20.	Pakistan	1.868 trillion
19.	Egept	2.049 trillion
18.	Canada	2.141 trillion
17.	Spain	2.159 trillion
16.	Iran	2.354 trillion
15.	Halv	2.541 trillion
14.	South Korea	2.651 trillion
13.	Saudi Arabia	2.755 crillion
12.	Turkey	2.996 trillion
11.	France	3.377 trillion
10.	United Kingdom	3,638 trillion
9.	Mexico	3.661 trillion
8.	Brazil	4.439 trillion
7.	Germany	4,707 trillion
6.	Russia	4.736 trillion
5.	Indonesia	5.424 trillion
7. 6. 5. 4.	Japan	5,606 trillion
3.	India	19,511 trillion
1.	United States	23,475 tritlion
1.	China	38.008 trillion

Vietnam, the Philippines and Nigeria could make the greatest moves up the rankings



Production in Nigeria's agriculture sector alone according to National Bureau of Statistics website page, contribute substantial percentage of 50.3% Gross Domestic Product (GDP).

Land is the most significant factor in all production. There must first be land; human existence on land generates land use; and human authorities evolve a land tenure system on land governance.

1. LAND

Land is primary input and factor of production which is not consumed but without which no production is possible.

It is the resource that has no cost of production and, although its usage can be switched from a less to more profitable one, its supply cannot be increased.

The term 'land' includes all physical elements in the wealth of a nation bestowed by nature; such as climate, environment, fields, forests, minerals, mountains, lakes, streams, seas, and animals.

As an asset, it includes anything (1) on the ground (such as buildings, crops, fences, trees, water), (2) above the ground (air and space rights), and (3) under the ground (mineral rights), down to the center of the Earth.

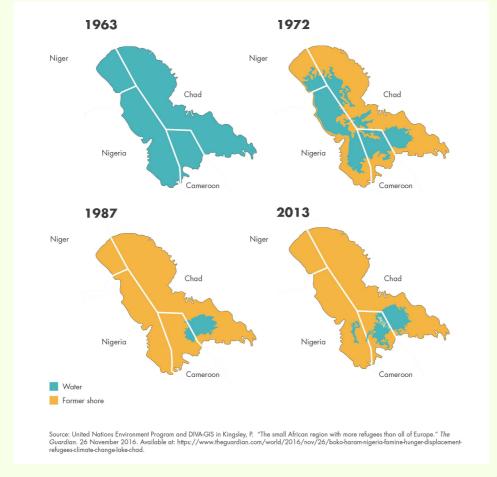
Perhaps the oldest form of collateral, land is still very attractive to lenders because it cannot be destroyed, moved, stolen, or wasted. All a lender needs is the borrower's clear title to it. [2]

s-iua	814 CHARLES	Area					
	Сотронен	Mi ²	Km²				
a	Land	251,648	9.0.768				
2	Wi er	5,019	19000				
2	Total	356,667	923,768				

Nigeria has 910,760 km2 of land, with over 84,000,000 hectares of arable land. Currently, only about 40% is being cultivated. The combined effect of environmental and human factors has impacted significantly in quality of land available for agricultural use.

a. Climate change Climate change impacts land in significant ways and can be linked to conflicts over land because it disrupts economic, social, and security order of communities

S/110	Item	Data on environmental impact				
1.	Sahara desert area	35% of land mass in Nigeria				
2,	Sahara desert ereceirate	0.6 Killomoters a year southward				
3.	Deforesortion rate	3.5% Per year				
4.	SudanoSaholian rainfall drop	3 - 4% decrease of rainfall per decade since the beginning of the nineleenth concare.				
5.	Drop in ruling season days in Northern Nigeria	From 150 to 120 in the last thirty years, destroying 20% of erup yield				
6.	Increase in sand danes/Aeulian deposits in Northern Niceria within a 20 year period	425% between 1976 and 1995				
7,	Niger Delta Region and Lagus elevation	Less than 6 meters above sea level. A 1 meter ris sea level could place 600 km ² of land scrisk of flooding and submersion.				
8.	Lake Chad shrinkage	Shrinking from 25,000km ² to 2,500km ² between 1963 and 2013, the lake lost 90 percent in its water mass. The reduction in the size of the lake has threatened the resources and livelihoods of the 50 million residents in that region.				



1. LANDUSE

Rights has added dimensions of complexities as conflicts on land are borne more out of quest for

control than out of an appreciation of scarcity or abundance of land.

Year	2003	2004	2(105	2006	2007	2008	2009	2010	2011	2012	2013	2014
Value ('000 Ha)	717.5	718.0	727.0	733.0	737.0	727.0	690,0	700,0	710.0	720.0	708,0	708.0
Change (%)		0.07	1.25	0.83	0.55	-1.36	-5.09	1.45	1.43	1.41	-1.67	00.0

Agricultural land refers to the share of land area that is arable, under permanent crops, and under permanent pastures. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded.

Land under permanent crops is land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee, and rubber.

This category includes land under flowering shrubs, fruit trees, nut trees, and vines, but excludes land under trees grown for wood or timber. Permanent pasture is land used for five or more years for forage, including natural and cultivated crops.

Land conflict pre-date the colonial era and thus blamed is not entirely on colonial administration. Kingdoms or tribes or sects with superior military assets conquer those with lesser might and disposes them from choice spots on their land.

a. Crop and pastoral cattle farmers' conflicts- religious and ethnic colourations have been attached to these, but they are really about struggle for control of land. Cattle stocks

are on the increase and require more grazing fields; crop farmers need more land to expand production for an ever increasing consumer population. All drawing on land resource that is not increasing, but is exposed to degradation due to climate and an unhealthy sense of environmental responsibility.

Crop farmers and pastoralists are Jointly responsible for Overgrazing with no plans to replenish grass stock; deploying irrigation systems that encourage water wastages; and poor farm practices. These deplete land resources; heighten perceptions and realities of land running scarce; and creates conflicts of accretion.

- b. Intra-crop farmers conflicts These are caused by different concepts of farm practices. Tiv practice shifting cultivation while Jukun cultivate same parcel of land year in year out. Without clearly defined boundaries, Tivs encroach into Jukun lands thus creating tensions that build up to conflicts.
- c. Resource conflicts Oil exploration with no environmental accountability has led to destruction of agricultural lands and fishing fresh waters in Niger Delta. This has robbed communities of traditional occupations in farming and fishing as well as desecrated land they consider sacred.

- d. Conflicts over unclear boundaries these have Inter and Intra tribal dimensions. These conflicts confirm uniformity is no guarantee for unity. Differences are not necessarily the root cause of conflicts neither are they barriers to harmony and mutually beneficial coexistence. The irrational quest for control creates and drives conflicts.
- e. Land grab spurred conflicts most of the transactions are shrouded in secrecy with little or no transparency.
- i. Governments in land grabbing- Significant numbers of host Gbagyi communities in Abuja have been displaced with lots of controversies around resettlement and compensation. Government has a structure where any legal party acquiring land is responsible for compensations. Rates are negotiated using government pegged rates based on economic trees and crops cultivated on the land. There are subtle conflicts with potentials to be escalated.
- ii. Public servants, private business men, religious organizations, civil society groups, local businesses, multinational business, and international development agencies have all been involved in small and large scale land acquisitions.

LAND TENURE

The military government of the Federal Republic of Nigeria passed the land use act to address failures of access to land due to existing customary land tenure regime. The 1978 land use act aimed at transforming lands from a traditional customary land tenure regime to a western styled statutory tenure in land through three main strategies.

- 1. By expropriating land originally owned by families and communities and vested same in the state:
- 2. By replacing proprietary rights in land with usufructuary rights;

3. And by adopting an administrative system of allocation and control of land, instead of market driven system.

Most commentators will conclude that the land use act has failed in so far as it has not achieved any of the objectives it set out to address. [3]

These failures could be traced to the land use panel Set up by the Federal Military Government on May 16, 1977. Their recommendations led to the promulgation of the Land Use Act 1978.

A number of loopholes were identified in the panel's work which inevitably produced an act that falls short of meeting its impressive objectives. These loopholes include:

- a. The land use panel did not visit the rural areas
- b. The vital information needed such as a complete records of land ownership rights, cadastral surveys unmistakably showing farm boundaries, and records of authenticated titles were not available.
- c. There was no clear definition of the amount payable on improvements made on land as per item as compensation and
- d. The law did not take full cognizance of the levels of social and economic development of the country. [4]

CONCLUSION

- a. Remove the land use act from the constitution so it can easily be amended
- b. We need legislation imposing a country wide formal registration of title
- c. Amend the act to provide more certainty of title and certainty of the nature of legal right granted.
- d. Ensure parity between deemed granted land and holder of certificates of occupancy.
- e. Impose more stringent revocation regime and a fair and just compensation policy.

Sayne, Aaron. Climate change adaptation and conflict in Nigeria. US Institute of Peace, 2011. At 4 Is soil the new oil in Africa's quest for sustainable development? Thomson Reuters Foundation, Available athttp://www.trust.org/item/20140821153944---chxte/Land Conflict, Climate Change, and Violence in Nigeria: Patterns, Mapping, and Evolution Stone Conroy Georgetown University

Figure of the week: The shrinking Lake Chad. Thursday, February 9, 2017Available at: https://www.brookings.edu/blog/africa-infocus/2017/02/09/figure-of-the-week-the-shrinking-lake-chad/

- f. Ensure hitch free transfer of ownership and creation charges over land. [5]
- g. Ensure agricultural builds conflict management capacity. This involves necessary diplomacy, institutions and Structures in resolution of conflicts, as well as creating and guaranteeing access to markets, land and inputs.
- h. Ensure transparency and inclusiveness in land acquisitions.
- i. Ensure policies and developmental initiatives in Post-Conflict and Post-Disaster Environment with an understanding of the peculiar circumstances of these environments.
- j. Ensure legal empowerment for communities.
- k. Ensure development of vision for the welfare and integrity of communities. Land use Design and planning should be deliberate in defining priority for agriculture, food and nutrition. Agricultural land use must be protected from encroachment from other land use activities. Zoning should be deliberate in taking into account percentage of land available for sale, lease, community involvement farming initiatives, and parcels left for small holders.

- I. Ensure compensation goes beyond outright pay offs to a system of community participation in the enterprise.
- m. Integrated approaches on environmental responsibility. Some ongoing initiatives:
- iii. The Lagos State tree planting initiative this year's themed: "Think green, plant trees and live green".
- iv. The Hydrocarbon Pollution Restoration Programme (HYPREP) one-year strategic plan for implementation of the 2011 United Nations Environment Programme (UNEP) report on Ogoni land.
- v. The Green Wall project which aims to slow Sahara downward movement by planting 1,500 kilometers of vegetation along the desert's border.
- vi. In February, 2017, Nigeria and Chad called on the African Union and international donors to raise \$50 billion to 'recharge' the drying Lake Chad. The project would recharge the lake using resources from the Ubangi River.[6]
- n. Ensure draw some direction from the World Bank's Land Governance Assessment Framework (LGAF).

REFERENCES

- 1. A prediction: The world's most powerful economies in 2030 Written by Lianna Brinded, Markets Editor, Business Insider. This article is published in collaboration with Business Insider. 9 Feb 2017 https://www.weforum.org/agenda/ 2017/02/a-prediction-the-worlds-most-powerful-economies-in-2030?utm_content=buffer5ae18&utm_medium=socia l&utm_source=twitter.com&utm_campaign=buffer
- 2. Business dictionary available at : http://www.businessdictionary.com/definition/land.html
- 3. (Oluyele Delano SAN, paper presentation at ALP seminar on Agribusiness, June 28, 2017, at Oriental Hotel, Victoria Island, Lagos)
- 4. Agricultural land crisis in Nigeria: a case study of Idah local government area of kogi state. By Ukwuteno

Sylvester Osakwe, Msc. Agricultural Economics, a thesis presented in partial fulfillment of the requirement for the award of the master of science degree in agricultural economics.

Department of agricultural economics and rural sociology, faculty of agriculture/institute for agricultural research, Ahmadu Bello University, Zaria. June 1993

- 5. (Oluyele Delano SAN, paper presentation at ALP seminar on Agribusiness, June 28, 2017, at Oriental Hotel, Victoria Island, Lagos)
- 6. (Figure of the week: The shrinking Lake Chad. Mariama Sow Thursday, February 9, 2017Availableat: https://www.brookings.edu/blog/africa-infocus/2017/02/09/figure-of-the-week-the-shrinking-lake-chad/)





s part of the backward integration policy of Prof. Ben Ayade's administration, Cross River State Government is set to roll out 30 tonnes of cotton from its cotton farm by November this year.

The cotton farm situated in Woda community, Yala Local Government Area of the state, is in partnership with Arewa Cottons.

Managing Director, Arewa Cotton, Anibe Achimugu, in a chat with journalists at the farm disclosed that "we will start by allocating parcels of land to the community farmers, train them and hope that they can now pass the knowledge to others.

"Members of the community are already working with us in terms of the casual labour that we need. Also, we are collating the small holders farmers as out growers," Achimugu said, adding that "the entire cotton value chain has the capacity to generate 10,000 jobs and a lot of that vistas of opportunity will come from Cross River State."

Achimugu further informed that about 30 thousand tonnes of cotton will be rolled out from the farm in November, a feat, he assured would be a gift to Governor Ayade.

According to him, "this is clearly in line with Governor Ayade's backward integration policy and the only way to ensure the Calabar Garment Factory Factory operates at optimum capacity." Stating that the farm is in line with the world best practices in agriculture as the team is led by an old staff of Institute of Agricultural research, the MD affirmed that they were attracted by the automated garment factory in the state, the complete value chain and the quick cash flow generation as as well as the receptive nature of the people to investors.

Nigeria project manager of a Chinese firm, Ruyi Science and Technology group, Wu Xingtao, assured that his group found in Cross River State government a serious partner to do business with, accommodating and determined to develop the state garment factory with required raw materials, hence the need for the partnership.

Xingtao said: "We have plans to build textile factory in Nigeria, that means we need plenty of cotton. We want to get plenty cotton from Nigeria and not to import so we are partnering with Cross River State government to make our textile factory easy."



Affirming the Chinese firm's resolve to deliver, Facilitator/Director of the cotton farm project, High Chief Gabriel Umodem, disclosed that "we saw their projection in Australia and Pakistan and that is what we want to repeat here.

All of them don't have the market that we have as the Nigerian market is too much. If you

add that to the AGOA initiative, it means they come from China, produce in Nigeria and ship to America, so, Woda is going to be on the world map in terms of expansion.

"We promise that before the Carnival, a trailer load of a minimum of 30 tonnes of raw cotton will arrive the Calabar Garment Factory from our 2,000 hectares farm in Woda, Yala to show the world.



Introduction

There are 46 sectors that contribute to Nigeria's economy. The largest contributing sector is Agriculture, responsible for almost a quarter of Nigeria's GDP and the largest employer of labour in the country with 70% of Nigerians involved in the sector in one form or the other.

Nigeria has the potential to be one of the top agricultural forces in Africa and the rest of the world. However, in order to grow the sector, the methodologies currently governing the way agriculture and agribusiness in Nigeria is approached need to change and become more effective. Kinks in the agricultural value chain need to be addressed, updated and fixed.



What Ogun State is doing

MRS ADEPEJU ADEBAJO
Ogun State Commissioner for Agriculture



A case for backward integration Nigeria pre-1970s was an agricultural powerhouse. Unfortunately, neglect of the sector the past few decades has resulted in the stagnation and, in some cases degradation and fracturing, of the existing value chains.

Fish has a demand-supply gap of almost 2 million MT, caused in part by inadequate and/or insufficient inputs.

In the case of fishery, the high cost and insufficient supply of fish feed is a major kink in the value chain, predominantly because of an insufficient production of fish feed locally because of a lack of inputs, these inputs including maize, soybean and sorghum, crops that are also suffering from production deficits in their own rights.

Backward integration spear-headed by private sector actors and supported by government policy could help strengthen these value chains.

What should the private sector do? Backward integration refers to the process in which a company purchases or internally produces segments of its supply chain.

In the case of fish feed producers this would mean taking part in the production of maize, sorghum and/or soybean to provide raw materials for them to work with. An increasing number of larger companies are following this model of operations from dairy processors to ethanol producers.

A related model of backward integration is the use of out grower networks by larger processors, in addition to their own production. The processor enters an arrangement with farmers who will supply their products to him.

The processor can support his outgrowers through training, provision of inputs, etc. all with the aim of increasing yields and as a result providing more guaranteed and better raw materials for the processor.





What should the State Government do? As for the Government, it has a job to provide an enabling environment for private sector investors, smallholder farmers as well as generate employment for its people. As a result, the State is focusing on the following:

- Address policy and facilitate the fixing of infrastructure gaps in the value chain through, amongst other things, productive alliances,
- Establish and oversee a transparent and cluster-farming focused land allocation process,
- Encourage research and development into inputs (e.g. drought-resistant seeds) and procedure development suitable to the local environment,
- Provide incentives for farmers to form cooperatives,
- Provide training and performance-based extension services for farmers on good agronomical practices to increase productivity,
- Encourage and facilitate mechanized farming,

Encourage the participation of youth and women

What is Ogun State doing?

As the terrestrial gateway to the country's largest commercial and population centre, Lagos, Ogun State understands it has an important role to play in agriculture.

All products transported by land to Lagos from ECOWAS through Benin Republic and the rest of Nigeria must pass through the "Gateway State". This has contributed to rapid growth in the State's industrial base and an explosion in its border towns in recent years.

The State does not have a shortage farming potential with its 1.2 Million hectares of arable land, of which only 350,000 hectares is currently under cultivation, it's tropical climate and high average rainfall.

Furthermore, its diverse agricultural landscape means a wide variety of crops can be grown on its soil. Major crops currently grown or



cultivated in the State include cassava, rice, maize, fruits, vegetables, cotton and soybean.

Ogun State is committed to playing its part in developing agriculture in line with the Federal Government's Agricultural Promotion Policy (2016-2020). The Policy is focused on solving the following issues: Food security, Import substitution, Job creation and Economic diversification away from oil. The Ogun State Government is looking to address these challenges by fixing kinks in the value chain, driven by private sector investment.

The State Government on its part has undertaken significant investment in transport infrastructure over the past few years, connecting roads to previously inaccessible (farming) communities.

Furthermore, special intervention projects have been setup across the State creating demonstration farms for rice, cassava,

tomatoes, poultry and fisheries showcasing: improved agronomical practices, use of high-yielding disease-resistant varieties and mechanization of farming activities (cassava planters and harvesters).

Ogun State is also increasing its efforts to collaborate with industrial off takers to create more out-grower schemes, supporting more smallholder farmers and generating more employment. Finally, the State has developed a simple and fast land allocation system for businesses individuals interested in farming and agricultural processing in Ogun.

In conclusion, thanks to its location, the Government's active participation in the agricultural sector and continued private sector investment and involvement at the smallholder farmer level we believe that Ogun State can become the template for successful integrated agribusiness in Nigeria.



ore often than not, people get demands for one commodity or the other for procurement with all standards etc., spelt out, but are unable to deliver.

The simple reason for this, is the lack of a proper aggregation support service provision in the various commodity value chains in Nigeria.

What does this entail?

Aggregation would mean different things to different actors depending on the segment of the value chain in focus but generally refers to bulking of produce in an organized manner, adhering to set standard operational procedures to achieve volume, quality, traceability and consistency of delivery of produce to market.

This activity in itself, is a specialty but often ignored in agribusiness operations hence, the high wastage at the Post-Harvest end of the value chain in most commodities.

This is a business on its own especially when associated logistics such as storage, cold chain, handling, packaging, transportation and delivery to market from an aggregation center is put in perspective.

To aid this task of aggregation centers development with associated logistics, having a cluster mapping of possible various locations



makes it easier to engage in and operationalize for all commodities.

An example of this can be seen in the Rice and Tomato cluster maps produced by GEMS4 which is meant to stimulate investments in this field of value chain development activities.

If one knows locations upfront, volumes to be dealt with, timing of availability and state of operation, it becomes easy to figure out the size of operation and investment required to get started in any of the locations chosen.

In summary, Production > Post Harvest M a n a g e m e n t (A g g r e g a t i o n) > processors/Consumers/Export Market will lead to creation of jobs and incomes with attendant infrastructure development.

Economic growth is definitely guaranteed from this window of opportunity. Actual details and economics of this model available for interested investors.



REVAMPING NIGERIA'S RURAL AGRICULTURAL ECONOMIES Mr. Soji Apampa

ewspapers are replete with the alarming stories of Fulani herdsmen/farmers or Fulani herdsmen/community clashes.

The clashes have often resulted in condemnable, criminal, barbaric acts that have largely gone unpunished by the authorities and have led to calls for a ban on open grazing of cattle in states like Ekiti and Benue; calls for the establishment of ranches by 11 Northern States; and resistance to a National Grazing Reserves Establishment Bill (2016) from everywhere but the far North of Nigeria.

As serious as the issue is, no one seems to have proffered a satisfactory response.

The Fulani homestead is run on proceeds from the milk economy. Sale of cattle does occur but only to meet extraordinary expenses rather than for day-to-day subsistence. However, the breeds of cattle they manage which are hardy

and can survive the West African conditions (insects, disease and drought) are better for beef production than for milk production.

Without genetic improvement, across Africa, local breeds yield an average of 5-6L of milk/day but in Nigeria they achieve between 0.1 and 3L a day. For a cow to produce one litre of milk, it needs to drink at least 3L of water a day and have access to good quality fodder. The fodder available to the herdsmen in Nigeria, access to which they appear ready to kill farmers and murder entire communities for, is typically high in Lignin content and has a low conversion ratio — the fodder consumed still produces inadequate yields of milk.

The long treks the animals go through in search of water and fodder also induce nutritional stress and very little of what is eaten has the luxury of being converted to milk – it is mostly burned up as energy.



The Business Innovation Facility (BIF) a UK Aid programme embarked on action learning to see if any of these constraints could be overcome. It purchased Napier grass seedlings from East Africa for £1,000 where similar challenges had been addressed by pastoralists and planted this in Ladduga Grazing Reserve, Kachia Local Government, Kaduna State in partnership with one of the pastoralist cooperatives there.

After 45 days, the grass had grown and was taller than a man.

The cooperative did trials – they had four cows fed for two weeks on their usual fodder and another four fed only on the Napier as fodder. Those fed on their usual fodder continued producing less than 1L of milk a day whilst after 2 weeks those on the Napier fodder produced 3.5L/day.

This was the first sign that not having the right fodder was a big constraint. The raw milk sells for about N100/L so producing 3.5L/day meant a tripling of income from one cow. There are 240 lactating days in the year so the increase in income from one cow is very significant.

Another thing the BIF programme observed was that the women then boiled the milk to

pasteurise it and they typically boiled off 20% of the milk by volume. The programme taught them indirect pasteurisation techniques helping them to save the N20/L they were losing. The programme then went on to teach the women how to make cottage yoghurt (which could last at least 5 days without refrigeration).

This was sold by the women for N600/L on the market days in the grazing reserve and now the programme is helping the cooperative to establish a mini milk processing facility within the reserve. The immediate impact of this production would be to increase the crude animal protein intake of members of that community.

40% of the body's dry matter is protein however, intake of animal protein is at present 4.82g/caput/day in Nigeria as against the 35g recommended by FAO leading to stunted development and other health problems. Secondly, a mini milk processing facility, processing 1,000L/day will directly touch 200-500 households everyday (who sell milk), create 10-20 milk aggregators, 7-10 milk collectors on motor bike, 6 Factory jobs, and 20 bicycle-based retailers.





This will be enabled by Agency-Banking services run locally to mention a few of the economic benefits. The households and persons impacted will increase their incomes in the process. With the increase in incomes, it is not unthinkable to get beneficiaries to put down 10% of the extra incomes they are earning over and beyond what they had before the intervention towards the maintenance of the processing facility.

Because of the Napier grass introduction, Kaduna State government has taken up the strategy of homestead Napier propagation (and spread it to some 80 communities spending about £200,000 in 2016 to replicate the trial) as an alternative to open grazing and the Federal Government has also now adopted promotion of Homestead Napier propagation as policy.

Commercial Napier grass producers are also springing up and seedlings have been purchased and planted by cooperatives from most of the 11 grazing reserves in Northern Nigeria. The Fulani youth are starting to think that there is a possibility of becoming more sedentary as the risks of nomadic life also include clashes with cattle rustlers who typically show no mercy to the herdsmen.

Excited by the progress being made to increase milk yields and the planned mini processing facility, the Kaduna State government promised to invest to fix the rural road linking Ladduga to the main Kaduna-Kafanchan highway.

The major reflections from the action learning exercise were that growth in rural economies in Nigeria could be stimulated given:

- 1. The right levels of research to identify the real root causes of constraints and innovations in ways of intervening. Providing the right kind of fodder was more transformative than banning open grazing or forcing herdsmen into ranches
- 2. Innovations that show their worth by pointing out what must be done for the poor to achieve sustainable income growth. The extra 2.5L/day was a straight increase in income as was the N20/L saved from losses and the N350/L extra profit from cottage yoghurt (sold at N600/L but costing N250/L to produce)
- 3. Income growth that is inclusive of women and youth, and not just the men (the cottage yoghurt produced by women, and the milk collection system, bicycle-based retail system run by the youth)

- 4. Scale and sustainability the rural economy must eventually be integrated into the mainstream the distribution of products will go into nearby towns and villages
- 5. The power of example and demonstration of the potentials to attract investment. Based on the £1,000 experiment a State Government replicated it with £200,000 and is leading BIF to encourage investors to establish a mini processing plant.
- 6. Investments in the rural infrastructure. Based on the planned investment in a miniprocessing plant, the State Government has committed to fixing the rural roads to support the scaling up of the initiative.
- 7. Sustained improvements in the standard of living of pastoralists involved. This can generate positive spin-offs like establishment of local clinics and provision of other services such as off-grid energy and so on.
- So, how do we revamp Nigeria's rural agricultural economies? It would appear to take a focus on 7is innovation, incomes, inclusion, integration, investment, infrastructure and improvements if we find enough Nigerians willing to take an evidence based approach to investing in the rural economy rather than copying what they see others doing in agriculture. After all, such attitudes lost millions of Nigerians their investments on the Nigeria Stock Exchange between 2008 and 2009.



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