

AGRO-BASED ENTREPRENEURSHIP AND FOOD SECURITY IN NIGERIA: PANACEA FOR SUSTAINABLE DEVELOPMENT

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Abstract

Government age long dependency in oil and gas as its primary source of revenue has unintended negative consequence in Agro based industries and food security in Nigeria. Despite Government neglect to support agro-based entrepreneurship, enterprises in agriculture possess value chains with an intriguing potential to create sustainable economic development for Nigeria. This emphasizes the need for development partners to adopt already existing SME programmes and ideas to meet the needs of farmers in order to add value to their agricultural products, and invest in new interventions targeted at value addition for rural development and increased agricultural productivity for small scale farmers. Hence, the present study explored agro-based entrepreneurship and food security in Nigeria. Agro-based entrepreneurship has encouraged diversification into non-traditional agricultural products and value addition to reduce vulnerability and enhanced food security and poverty reduction. The study examined the development of Entrepreneurship in Nigeria, Identified various agro-based businesses that can thrive in Nigeria, emphasized the role of agro-based entrepreneurship in food security, national economy and sustainable development. Furthermore, the study examined the guiding theory the assumptions of the study and identified challenges that young entrepreneurs face in Nigeria with an insight into the role of Government in ensuring sustainable food security in Nigeria. It is recommended that agro-based entrepreneurs be encouraged to enhance their skills so as to access appropriate information using ICT tools which will provide the necessary information on weather forecast patterns, input prices, projected market prices, government incentives, and agricultural-related policies and programmes. The study further recommended that Government should support rising agro-based entrepreneurs with sponsorships of trainings on agricultural entrepreneurship, innovations and technologies, which are essential in meeting up with the current trends in agro based industries.

Keywords: Entrepreneurship, Food Security, Sustainable Development

Introduction

The dwindling state of Nigerian economy due to economic downturn, harsh government policies toward alternate revenue channels for Government, over dependency on foreign agricultural products have caused great damage to the pace of indigenous agricultural productivity in the country. Recently, Nigeria has come up with various policies to encourage indigenous farming that ensure adequate supply of food to the nation which have availed Nigerian youths with the competitive advantage of gaining insight into the field of agro based industries, become entrepreneurs in this sector and contributing to the production and security of food supply in Nigeria (Olaoye, 2014). There are numerous opportunities in agriculture and other related businesses in which entrepreneurs could aggressively exploit in order to become self-reliant, boost their economic life, and contribute to the nation's food security drive (Verma & Shrivastava, 2021). According to Verma and Shrivastava (2021), agricultural opportunities which could contribute immensely to ensuring food productivity and food security include and not limited to dairy farming, beekeeping, mushroom farming, fisheries and organic fertilizer production. These are all small and medium

enterprises (SMEs) which are vital in the economic growth and emancipation of most African countries including Nigeria.

Agriculture-related SMEs is said to have significantly made viable contributions to the development of Africa in terms of job opportunities, rural-urban migration and wealth creation (Doran et al., 2009). The relevance of agricultural SMEs to developing economies like Nigeria is not well documented and McNellis et al (2010) argued that enterprises in agriculture have value chains and have the intriguing potential to create sustainable economic development. However, the market forces are not usually conducive for young innovators to thrive. It is very important for development partners to coopt already existing SME programmes and ideas to meet the needs of farmers, add value to their agricultural products, and invest in new interventions targeted at value addition for rural development (Digal, 2007). Development organizations have been encouraged to empower small farmers in agricultural value addition to ensure a boost in food security, by creating strong, investable SMEs that can promote economic development in the rural areas (Olaoye, 2014).

Agro-Based Entrepreneurship and Food Security

Agro-entrepreneurship is defined as the process whereby farmers use innovative patterns in order to make their agricultural products alluring and fascinating (Ntale, Anampiu & Gathaiya, 2015). It is the pattern of delving into the various needs of human, satisfying these needs, and in view of maximizing profit. In line with this definition, Atieno (2006), proposed that key policy areas of concern in agro-entrepreneurship are:

- i. Increasing agricultural productivity for small scale farmers.
- ii. Encouraging diversification into non-traditional agricultural products and value addition to reduce vulnerability.
- iii. Enhancing food security and poverty reduction.

More so, agro-based entrepreneurship is a good integral part of economic emancipation of any country. A strong and a viable agricultural sector could be sufficient enough to feed its growing population, generate employment, earn foreign

exchange and serve as a source of provision of raw materials to industries. According to Olaoye (2014), the herculean task of feeding the growing population of Nigeria would require technical strategies, new pattern of thinking, investments and diversification of the nation's economy, and focus solely on agriculture. The World Food Summit held in Rome in 2009, provided a huge insight in understanding the fundamental need for emerging and growing economies to shift attention towards entrepreneurship and food security. In line with the resolutions reached by the heads of nations, at the Summit, the global food insecurity problems (most especially in developing countries) could be adequately taken care of if due attention is given to agriculture. In entrepreneurial form, proactive utilization of agricultural resources of agricultural resources of any nation could help immensely in promoting her economy. It could enhance the GDP, provide food and employment for the populace and reduce poverty. It should be noted that policies mentioned above are silent on portfolio diversification, that is, diversification of small scale farmers into non-agricultural enterprises (Ochango, 2007).

Theoretical Framework

Opportunities-based Theory (Drucker, 1985)

This theory is premised on the recognition and pursuit of unexploited or underexploited opportunities (Anderson & Miller, 2003). Accordingly, entrepreneurship is the pursuit of varied opportunities beyond controlled resources. Entrepreneurship is a two-stage process: identifying and creating opportunities. It is closely followed by exploiting those opportunities. It usually emanate from the existence of unmet gaps in the market or along the value chain, which create opportunities (new goods, services, markets, methods), and the capacity of agents including their ability to identify or see those opportunities and link them to their own livelihoods, and the courage to take action (Eckhardt & Shane, 2003). Entrepreneurs are not necessarily sources of change but managers of change and exploiters of the opportunities that change brings. Each time there is an unmet market gap, there is always an entrepreneurial opportunity and entrepreneurs are able to see that opportunity. This, in turn, becomes a motivation to take actions. How would this theory work in the context of Nigerian

agriculture? In Nigeria, there are various opportunities in primary agriculture (under-utilized crops) and agricultural value-adding economic activities amid inherent institutional hurdles for entrepreneurs. A lot of agricultural products are sold raw (locally and internationally) without much value addition. In the midst of missing links and opportunities along the food value chain, the transaction costs of and barriers to accessing services and mainstream markets are prohibitive for individual smallholders (Kirsten & Sartorius 2002). Even where they exist, opportunities are often not pursued in the agricultural sector due to the failure of the actors to recognize them. Even if young entrepreneurs do identify opportunities intermittently, they are constrained by the size of their operations and lack the resources to take advantage of such opportunities.

Development of Entrepreneurship in Nigeria

The peculiarities of the Nigeria's agricultural sector provide further compulsion to the dire need of entrepreneurship. Agriculture is reported as the bedrock of Nigerian economy because it provides support to employment ratio and

source of creation of livelihood (Isah and Abah, 2017). In this sense, it is important to mention that agriculture is responsible for the employment of about two-third of Nigeria workforce which stands at about 42% to the Gross Domestic Product (GDP). It is as well a vital source of getting raw materials (Uneze, 2013). Verma and Shrivastava (2021) suggested that the agricultural sector of Nigeria has a striking place for capacity growth but the reality on ground is saddening as the sector is still largely operating at subsistence level, alongside with the fact that there exist so many unfocused and barren government policies. As suggested by Surdashaan (2013), the type of opportunities that dwell in the agricultural sector cannot be overemphasized. Production of agricultural products by making use of the technology, resources and demand in the market; distribution, procurement, farm implements hiring like tractors, seed drills, sprayers, harvesters, etc. are all enticing ventures in which the teeming unemployed Nigerian youths could make exploits of. Narendan and Ranganathan (2015) are of the view that electronic marketing, cold supply chain, advisory and consultancy services provide immense opportunities for the youths to

function agro-entrepreneurs and thereby serving as a means to agricultural development and nation building. Over the years, youths had taken agriculture to be an outdated venture, labor intensive, unprofitable venture and have left it for the old and fragile to seek better opportunities as white collar workers. Agro-based entrepreneurship tries to change this mindset of young graduates by making them see agriculture as a dynamic sector that offers multifaceted type of opportunities to young entrepreneurs along the entire agro-business chain. In line with the postulations of Issa and Abah (2017), entrepreneurship in agriculture is still at the foundation stage; concerted efforts should be geared towards making it popular most especially among the youths. In order for us as a nation to maximally attain the sustainable food security drive, government has to sincerely shift its emphasis, gearing it towards the agricultural sector. Entrepreneurship in the agricultural sector will pave way for the diversification of the nation's economy if the necessary infrastructures needed are placed on motion.

In a bid to attain economic diversification agenda, the government of Nigeria has

continued to invest in agricultural development in its policy and budgetary plans. It is targeted at building strong agribusiness economy which could meet domestic food demand goals, generate export revenues and also create jobs. The efforts which saw increased national focus on the sector has continued to grow opportunities in the whole agricultural value chain, with farm inputs supply for production. Nigeria has framed various policies to push for mechanization, leading to increased adoption of tractors in agricultural production. It has also introduced and implemented several initiatives, key amongst which is the Anchor Borrowers Program (ABP) managed by the Central Bank of Nigeria (CBN) to support small holder farmers with funding and farm inputs. Under the ABP, state governments and private sector organizations, including food-processing companies, acting as “the anchor,” can access funds at single digit rates from the CBN to provide inputs to farmers to produce agricultural commodities. The program which has so far been successful, is currently facing challenges because of loan default by borrowers. The dire security issues in the country have significantly hampered

farmers’ ability to work on their farms, thus affecting food production. Food shortages persist and have triggered rising inflation.

Profitable Agro-based Businesses in Nigeria.

According to), agricultural opportunities which could contribute immensely to ensuring food productivity and food security include and not limited to rice farming, cassava farming, pig farming, maize, pineapple farming, beekeeping, mushroom farming, fisheries and organic fertilizer production.

Rice Farming

Rice is one of the staple foods in Nigeria, consumed across socio-economic classes. Demand for rice increases almost on hourly basis because of increase in population and its fascinating cuisine and tasty nature. Commonly boiled and eaten with stew and vegetables, rice is a rich source of carbohydrate. According to Kamai, Omoigui, Kamara and Ekeleme (2020), Nigeria depends very heavily on rice importation of 3 million tons annually, equivalent to US\$480 million in scarce foreign exchange. This is huge and could serve as a major source of employment to

most Nigerians. Currently, majority of the farmers who produce rice in Nigeria, rely on traditional technology with an observed low use of improved input technologies. Rice are

usually cultivated on lowland areas and on upland areas where there improved soil fertilities.

Some of the rice varieties recommended for Nigeria

Variety	Habitat	Characteristics								
		Adaptation	Tillering capacity	Potential yield (t/ha)	Days to maturity (days)	Plant height (cm)	Stem base coloration	Ligule type/length	Husk color at maturity	Amylose content
FARO 44	Irrigated lowland	Shallow swamp	High	7	95–110	100–115	Green	Long grain	Straw	Intermediate (22.9%)
FARO 52	Irrigated lowland	Shallow swamp	High	6	125–135	115–120	Straw	Long grain	Straw	Intermediate (22.9%)
FARO 61	Lowland	Shallow swamp	High	5	100–115	90–100	Straw	Long grain	Straw	Intermediate (22.9%)
FARO 59	Upland	Rainfed upland	Medium	3	95–100	100–120	Light purple	Intermediate	Golden	Intermediate (22.9%)
GAWAL R1	Irrigated Lowland	Rainfed upland	High	10	90–05	100–115	Green	Long	Straw	Tolerance to blast disease

Source: GoSeed (Business Incubation Platform, IITA)

1. Poultry Farming

The idea of domesticating birds like chicken and ducks for meat, production of eggs in large quantities as well as using their incidental products such as their urine droppings and feathers in industries as natural unprocessed materials is known as poultry farming (Stiles, 2017). Poultry is believed to play significant role in Nigeria economy through provision of foods while also creating jobs for the teeming unemployed youths. Alders et al. (2019) hinted that poultry provides raw materials to

some industries. The hospitality industry hugely depends on it for the supply of feathers for display and making of comfortable luxury mattresses. Poultry business provide affordable meat for the country especially those in the urban areas. These are viable economic opportunities for the youths to explore and become self-reliant (Wahyono & Utami, 2018).

2. Maize Farming

Maize is a major cereal and one of the most important food crops in Nigeria. Its genetic

plasticity has made it the most widely cultivated crop in the country. Over the years, maize has become an important crop. Kamara (2014) reported about 10.2 million tons of maize produced from 4.8 million hectares, making Nigeria the highest producer in Africa. Research efforts by breeders and agronomists have led to the production of many technologies like breeding of high yielding varieties that are tolerant to drought, diseases, low nitrogen and striga infestation (Kamara, 2014).

3. Catfish Farming (Aquaculture)

Aquaculture as a distinct segment of agriculture involves the production of fish and other aquatic animals (Umaru, Okoh & Ishiwu, 2021). In Nigeria, production of fishes is reported as contributing 12% to the share of Agricultural Gross Domestic Product (GDP) between 2000 and 2004 (Akinwunmi, 2014). More so, fish farming presently yields 3.5% to Nigeria's Gross National Product (GNP), and is said to be accounting for 0.2% of the overall world fish supply. The annual demand for fish in Nigeria is pegged at about 1.4 million tons, with its domestic production being 780,000 tons (Umaru, Okoh & Ishiwu, 2021). Ike and Chuks-Okonta (2014) reported that a

good number of fish farmers in Nigeria have concentration on catfish production. Catfish is the fastest-growing fish under fish captivity. This is because it can always survive in a wide range of conditions, and can tolerate dense stocking. It can be carried on small or medium scale.

4. Snail Farming

One of the most significant secondary animal protein sources in Nigeria is snail (Adewale & Belewu, 2022). Snail is categorized among the miniature livestock which has of late, listed among Nigerian farmers as an aftereffect of the FAO's alert on protein insufficiency derived from animals (Adesope, 2000). Farming of snails ought to be encouraged as an emerging subdivision of sustainable animal production. Snails generally have been conceived as being highly source of protein derivation to humans and they are valuable in research. The productivity of snail farming depends on to greater extent, the adoption of present-day improved techniques and strategies in production which requires gaining information on snail's hatchery, feeding, housing and marketing of its end products. According to Jimoh and Akinola (2020), snails are easy to

rear as they feed on largely very common foods in our environments. Snails are commonly fed with fruits of pawpaw, pineapple, banana, pear, oil palm, cassava leaves, cocoyam and water leaves. Sadly, snail populations in Nigeria have declined massively due to the negative impact of human activities on the areas that snails that live in, or are reared. More so, there are no significant efforts geared at producing snails in large quantities and the continuous in demand for the consumption of snails cannot meet up with the teeming population that live on snails in order to gain proteins.

5. Pineapple Farming

Pineapple as an economic crop has encouraging potentials for foreign exchange earnings. Christopher, Moses and Harold (2022), reported that pineapple can increase national income through the expansion of small and medium enterprises and agro-based entrepreneurs in Nigeria. It is said to be one of the crops with the most potential in the international market and highly profitable, an activity that calls for large workforce. Pineapple is the second most traded product after bananas in Philippine. There are varieties of pineapples, but the most widely grown are smooth cayenne,

queen and the recently introduced variety called MD2 which commands 80% of the global trade in pineapples. Pineapple is a wonderful tropical fruit that has scintillating juiciness, alluring flavors and overwhelming health benefits. In developing countries like Nigeria, most of the fresh pineapples are produced, sold in domestic markets and bought for domestic purposes and consumptions (Christopher, Moses & Harold, 2022). The total pineapple production globally is tagged at 16-18 million tons (Acland, 2004). With a higher demand for pineapple worldwide, many people are engaged in pineapple farming for small, medium, large and even export purposes. Through pineapple production, many families have been able to acquire basic needs of life and through it, educate their children and dependents.

6. Pig Farming

The profit (money) made by the pig farmer depends on the number of pigs sold per sow on the farm over a period of one year. The profit made is therefore influenced by the ability of the farmer to manage the farm in such a way that the sows produce a maximum number of pigs that can be marketed in the shortest time possible. Good

management means: Good housing that will allow the efficient production of marketable pigs. Proper disease control. Clean conditions and precautionary measures on the farm will make disease control easier. The use of good, highly productive breeding animals that grow efficiently, use their feed efficiently, produce carcasses with a low fat content and produce up to 20 and more piglets per year. Correct feeding. The farmer must know the feed requirements of the different age groups and feed each group the correct quantity of the right mixture. Pig farmers should be aware that profit margins can differ from year to year. The price of feed and the market price of pigs go up when pig meat is scarce and drop again when there is an oversupply. Likewise, feed prices change, particularly that of maize which is included at a rate of up to 60 % in pig feeds. Feed costs, however, amount to about 60 % of the total production costs.

7. Food Processing

Food processing consists mainly of three categories which include; primary method of food processing, secondary method of food processing and tertiary method of food processing. Categorically, primary method of food processing involves converting

agricultural products like raw wheat kernels and livestock into edible products. Here, ingredients derived through ancient methods such as drying, threshing, winnowing, and milling grain, shelling nuts, and slaughtering animals for meat fall under this category. Deboning and chopping meat, freezing and smoking fish and meat, extracting and filtering oils, canning food, food irradiation preservation, candling eggs, and homogenizing and pasteurizing milk are all examples of this operation. For secondary food processing, it involves the process of processing food items from ready-to-eat components. They include baking bread, whether at home, or at a small bakery, or in a large facility. Secondary food processing include fermenting fish and creating wine, beer, and other alcoholic beverages. Sausages are a form of secondary processed meat created by comminuting (grinding) already processed meat. Cooking processes are widely used to define the majority of secondary food processing methods known to humankind. Tertiary food processing includes the commercial manufacturing of what is popularly referred to as processed food is referred to as tertiary food processing. Those TV dinners and reheated aero plane meals, ready-to-eat or heat-and-

serve cuisine are all examples of tertiary kinds of food processing.

Food processing assists in no small measures in not only promoting agro-based entrepreneurship, but offers tremendous help in attaining our nation's food security drive. This in line with the view of Ogino (2022) when he suggested that toxin elimination, preservation, ease of marketing and distribution duties, and increased food uniformity are among advantages of food processing. He went further to hint that food processing enhances the annual availability of many goods, allows for long distance transportation of delicate perishable items, and makes many types of foods safe to eat by preventing rotting and harmful microorganisms. Without sophisticated food processing procedures, contemporary supermarkets would not exist, and long journeys would be impossible. It has been observed that processed meals are less prone to quick deterioration unlike raw and fresh foods, and so are better suited for long-distance travel from the source to the targeted consumers. Most of the processed foods contributes to ease food shortages and enhance population nutrition by making numerous new cuisines available to the

masses. Also, food-borne illnesses can also be reduced through food processing. Fresh materials, such as fresh fruit and raw meats, are more likely to contain pathogenic microbes capable of causing serious sickness (e.g. Salmonella). Because of food processing, the enormously diverse modern diet is only genuinely conceivable on a large scale. Modern eaters have easy access to a vast range of food previously unfathomable to their forefathers, thanks to transportation of more exotic foods and the removal of much hard labor.

However, Ogino (2022) argued that the nutritional density of food can be lowered as a result of processing. The amount of nutrients lost is determined by the food and the manner of preparation. Heat, for example, degrades vitamin C. stemming from this, canned fruits have less vitamin C than fresh fruits. The relevance of a rich microbial ecosystem in the gut to human health is jeopardized by excessive food processing (not fermentation of foods). Another safety risk is the use of certain food additives. The health concerns of any specific addition vary widely from person to person; for example, diabetics are put at risk when sugar is used as an additive.

Agro-based Entrepreneurship, Food Security, National Economy and Sustainable Development

Reports have it that while it is interesting to note that the prevalence of hunger may have decreased globally, it is also necessary to note that it has risen in Sub-Saharan Africa in the recent years mainly due to increase in population growth, low input in agricultural ventures and general economic meltdown (Isah and Abah (2017). As opined by Isah and Abah (2017), Africa needs to wade into addressing the various threats that have significant implications on food security viz; explosion in population, global warming, loss of biodiversity and globalization of injustice. This is because with the current trend, Africa is yet to toe the path of eliminating hunger by 2030 while inadequate feeding and malnutrition in Africa have risen from 17% to 19.1% in 2019 (FAO, 2019). For some time now, the question of appropriate food security have continued to be a critical issue for consideration by many government administrations in Nigeria. It is on record that small-scale farmers in Nigeria makes up about 90% of the country's agricultural output, even when it is difficult for most of

those farmers to adequately feed themselves and other relatives.

The alarming rise in food insecurity in Nigeria requires urgent actions. This is because more than 20% of Nigerian families experienced food insecurity in the year 2020. More so, Erokhin and Gao (2020) hinted that about 50% of the Nigerian population are living below poverty line of 1.9 USD. As sad as it appears, it does not end there, the Global Food Security Index (GFSI) rating shows that Nigeria is ranked 94th out of the 113 nations in 2019 with a 48.4/100 score, which positions the country below Ethiopia, Niger and Cameroun. The country therefore needs to check her outburst in the population growth if she requires improved food security. Specifically, Isah and Abah (2017) suggested that there is need to aid more workforce in agriculture in Nigeria. This would go long way in generating employment opportunities for the rural youth, control rural-urban migration, increase national income, support industrial development in the rural areas and reduce the pressure on urban cities. According to Isah and Abah (2017), entrepreneurship can

contribute to food security and national economy in the following ways:

1. Creation of jobs

Entrepreneurs in agriculture are innovators who develop new ideas necessary in managing and sustaining food security. When they do so, they create jobs to be filled by energetic young men and women in the society. As no economy grows without investment in agriculture, agricultural enterprises reduces unemployment among our youth.

2. Improved standard of living

Entrepreneurs in agriculture strives to produce in larger quantities in order to maximize profit. It is this large quantities reduces drastically the prices of most goods and agricultural services that aid in improving the standard of living as foods and agricultural products continue to become cheaper and affordable.

3. Increased exportation

When agricultural entrepreneurs take advantage to massively produce goods that they have comparative and competitive

advantages over, the rate at which importation of the products occur improve tremendously. Abundant agribusiness products could be exported to other countries where there is perceived shortage in supply. The benefit it serves in the foreign exchange market cannot be overemphasized. It balances up the country's balance of trade, agri-processing units, post-harvest, marketing.

Challenges facing young entrepreneurs in Nigeria

Some studies have been explored on the challenges of agro-based businesses in Nigeria. Ifeanyi and Okechukwu (2014) hinted that the difficulty in obtaining loans, ignorance, lack of basic skills, lack of business models and stiff government policies are the prominent factors that act against the progress of entrepreneurship in Nigeria. Specifically, some of the challenges faced by agricultural entrepreneurs in Nigeria include:

1. Inadequate funding

Finance unavailability to agricultural entrepreneurs is one of the major problems inherent in agro-entrepreneurial ventures especially due to economic downturns.

Major problems associated with young entrepreneurs include low level of purchasing power of rural consumers, lack of finance to start businesses, reduced profit owing to stiff competition.

2. Inadequate basic amenities

This has constituted a major setback to the activities of agro-entrepreneurship in Nigeria economy and siting of businesses in the country. The manner in which power supply has continued to become epileptic has tremendously affected ease of doing businesses among the small and medium scale entrepreneurs. Opting for other means of generating power supply will increase cost of production, affect market prices, and unfavorably, affect the general cost of the goods. Also, connecting various rural communities who produce agro-products in large quantities has also remained a huge challenge. This is owing to dilapidated road networks thereby making cost of transporting the goods to be on the high side. Poor storage facilities have continued to lead to wastages of agricultural products.

3. Past government policies and programmes of the government

Government policies especially agricultural policies, usually, are not properly implemented. Agricultural policies when not properly articulated leads to uncertainties among the intending agro-entrepreneurs. This has increased the risk associated with agriculture and reduced its desirability, and thereby making it a low man's job. Past and existing governments have continued to pay lip services to subsidies and incentives to young farmers to expand production. Similarly, upcoming agro-entrepreneurs are not usually encouraged as they face stiff competition with the foreign markets while unfavorable government policies do not promote growth of businesses.

4. Volatility in price

As Nigeria has continued to battle with the devastated effects of recession, prices of input and output have as well been adversely affected. This has given a blow to the cost of doing businesses in the country, and also discourages agro-based entrepreneurship in the country.

5. Inadequacy of technological tools

Adoption of either too obsolete or too sophisticated technological tools tends to frustrate the end users who may not wield

the know-how or have knowledge of its maintenance cost. If technology is advanced beyond the knowledge of its end users, it is likely that it would render the workforce useless while high energy consuming technology truncates production due to high cost of fuels. Away from the gaps that must be filled to attain increased productivity, attaining food security in Nigeria is also challenged by the infestation of pests, post-harvest losses, unfavorable weather conditions, insufficient irrigation facilities, climate change and inadequate warehousing.

Role of Government in Sustaining Food Security in Nigeria

Immediately after the discovery of oil in Nigeria and following the boom in the oil sector which was experienced in the 1970's, agricultural sector which used to be a source of huge revenue for middle and high income earners for the country was totally neglected. This neglect led to a decline in agricultural production hence Nigeria became a major importer of food items and agro-allied raw materials (Ibeogu & Abah, 2016). The resultant effect of this situation is that agricultural sector failed to perform its

traditional functions effectively. To mitigate this ugly trend, both the federal and state governments formulated several policies and embarked on a variety of agricultural programmes which were all aimed at improving the viability of the agricultural sector. In a country where most of the households are said to be experiencing food insecurity, there is the urgent need by government at all levels to develop programmes to ensure food security and nation building. The National Special Programme for Food Security (NSPFS) implies assumed access to food supply at the household, sub-national and national levels. This programme was and is established in all the senatorial districts of Nigeria. The programme is handled by the federal government and the Food and Agricultural Organization (FAO) and it involves food crop production, Irrigation, livestock and food processing (Ibeogu & Abah, 2016).

Food security at the family household, community, and at the national level is should be the ultimate goal of every administration. That is to say, food availability and peoples' access to food supply should be the objective. At the national level, food security implies assured

food availability to meet current minimum requirement per capita during the scarcity period and also to meet any unexpected shortfall over a limited period, about 3 - 4 months. The variables that determine food security are production input, exports and stock exchanges. According to Ibeogu and Abah (2016), Food production is determined by land availability, crop yield, and environment and as well as fund. Individuals and households require food availability and adequate intake of food to enable them contribute to national development. Food security therefore, is the state achieved when food systems operate such that “all people, at all times, have physical and economic access to sufficient safe and preferences for an active and healthy life”.

Recommendations

Agriculture is the cornerstone of the economies of most emerging economies of most developing countries in the world including Nigeria. A robust agricultural sector in Nigeria is unarguably supposed to launch the country into an era of league of opportunities. The unique nature of the agricultural sector in no doubt a springboard for youth empowerment towards a sustainable socio-economic development of

any nation. It in line with this pattern of thought that this study recommends thus:

1. Government at all levels should endeavor to make the agricultural sector unique and attractive to the youths.
2. The scope of agriculture should be expanded in line with the current infrastructure in order to increase productivity.
3. Government should provide seed capital the youths in agro-based businesses, and increase available funding for production expansion.
4. Government should develop agricultural value chains for crop, livestock or fish production.

All these and even more are very crucial to the development of the agricultural sector in Nigeria.

Conclusion

Entrepreneurship as one of the means to livelihood and a means to attaining food security in Nigeria has not received the required attention it deserves. This could be proved with the fact that most of the previous studies related food insecurity all pointed towards climate, the price of

agricultural produce, a low level of education, weak market linkages, poor mechanization, a lack of farm inputs, and storage facilities and major challenges hindering agro-based entrepreneurship and food security. Going by the above, this study concludes that while other factors remain constant, agro-based entrepreneurship is important in attaining food security in Nigeria. The study has outlined agro-based entrepreneurship techniques which, when promoted, could serve as the panacea to food security by ensuring food availability, accessibility, sustainability, and affordability. Not minding the outlined challenges in ensuring food security, there exists evidence that agro-based entrepreneurship remains pivotal in the very many techniques that the government embarks upon. The government should also implement laws and programmes that allow consumers to buy at the traditional market outlets that are not only effective at getting food to consumers in need but also ensure their dignity and ability to make food choices. Furthermore, agro-based entrepreneurs are encouraged to enhance their skills so that they could access appropriate information using ICT tools, mostly TV, radio, and phone calls. This will

provide them with the necessary information on weather forecast patterns, input prices, projected market prices, government incentives, and agricultural-related policies and programmes. Also, rising agro-based entrepreneurs could embark on sponsorships for training on agricultural entrepreneurship, innovations and technologies, which are essential in meeting up with the current trends in agricultural enterprises.

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