www.iiste.org

Enhancing Agricultural Value Chains Crucial to Achieving Sustainable Economic Growth in Nigeria

Izin Anne Ehighebolo

Department of Humanities and Social sciences, School of General studies, Auchi Polytechnic, Auchi, Edo state, Nigeria *izin_anne@auchipoly.edu.ng*

Abstract

Nigeria is blessed with arable land mass and human resources however she is bedeviled with a crawling economy characterised by high unemployment rate, poverty and low per capita income. The ability of agriculture to contribute tremendously to economic growth is inherent if only the agricultural value chains in Nigeria are well developed. Adopting an exploratory approach, this paper examines the contribution of agriculture to GDP from 1981 to 2021; identifies the different stages of the agricultural value chain and the broad factors affecting them in Nigeria. It observed that for the past 40 years, the contribution of Agriculture to GDP has been low compared to the 1960s when agriculture was the mainstay of the economy. In addition more emphasis has been on input supply stage of the value chain while less attention has been given to other stages. In order to achieve the desired economic growth in Nigeria, a review of existing policies and removal of bottle necks in the production, processing and trade of agricultural products are recommended.

Key words: Nigeria, economic growth, agriculture, value-chain, GDP

DOI: 10.7176/JEP/13-33-14

Publication date: November 30th 2022

1. Introduction

Agriculture plays a significant role in the economic prosperity of any nation. It has contributed significantly to the economic advancement of developed and developing economies. It can contribute significantly to economic development of Nigeria if well harnessed. Empirical evidences abound on the significant impact of Agriculture on economic growth in Nigeria. It is therefore worrisome that the contribution of agriculture to economic growth has not increased tremendously over time. High unemployment rate, low per capita income, poverty amongst other challenges beset majority of people living in Nigeria. In order to address these issues, past administrations and the current President Buhari-led-government have made attempts to revamp the agricultural sector. In as much as these attempts are laudable the desired contribution of agriculture to gross domestic product (GDP) is still a far cry from the desired. Just as in the case of Sierra Leone, where agriculture contributes 60.7%, countries can receive more than 50% of their GDP from agriculture.

Agricultural sector in Nigeria has great potential but it is characterised with low yields, low level of inputs, limited areas under cultivation due to high dependence on oil by the government and less emphasis on the benefits that accrue from an improved agricultural value chain. Over the years so much has been done about increasing the production of crops and in more recent times, a review of input supply was done with the introduction of Agricultural Transformation Agenda (ATA). Despite these, a lot more still needs to be done in these areas as well as in the areas of processing and trade.

To achieve the potential output of the agricultural sector and its corresponding effect on economic growth and development of Nigeria, the contributions of agriculture to economic growth (GDP), will be reviewed; the effect of agricultural value chains on economic growth and the broad factors affecting them will be addressed.

2. Literature Review

According to Blandford (2010), agriculture is the cornerstone of human existence and an important contributor to economic activities. It is the source of food required for human existence and raw materials needed by industries. Studies such as Olabanji et al. (2017) and Olajide et al. (2010) have shown a relationship between agriculture and economic growth.

Empirical evidences abound on the significant impact Agriculture has on economic growth in Nigeria (Tolulope & Chinonso, 2013; Oyinbo & Rekwot, 2014, and Kamil, Sevin, & Bekun, 2017). Furthermore, Odetola and Etumnu (2013) using a time series data from 1960 to 2011 revealed that in Nigeria, the agricultural sector has positively and consistently contributed to economic growth. Literature maybe replete with the relationship between agriculture and economic growth in developing and developed economies (Olabanji et al., 2017), however not much has been done on agricultural value chains.

An agricultural value chain describes the set of actors and activities that bring a basic agricultural product from production in the field to final consumption where at each stage; value is added to the product (Food and Agriculture Organisation (FAO), 2010). It is composed of the full range of activities designed to bring commodities from its conception to the end user (kojo Edeme et al., 2019). It is a connected string of groups or units working together to satisfy market demands for a particular product or group of products. Kumar & Sharma (2016) described the growth and development of agricultural value chains crucial for poverty reduction and achievement of food security in developing countries. Meanwhile Oji-Okoro (2011) and Verter & Bečvařova (2016) as cited in kojo Edeme et al. (2019) also maintained that one step towards achieving sustainable economic growth and development in Nigeria is improving the value chain inherent in the agricultural sector.

3. Agricultural sector and the economy of Nigeria

Nigeria is a tropical country in West Africa with favourable climate and arable land mass suitable for agricultural activities. According to Adetunji (as cited in Sani, 2018) she occupies a total area of 92.4 million hectares which includes 91.1 million hectares of land and 1.3 million hectares of water bodies. With a great population living in the rural areas, agriculture serves as sources of food production and livelihood. It provides employment by way of the farmers who cultivate crops and rear animals such as cashew, rice, cassava, fish, poultry, maize, etc; the distributors who transport them and the individuals that engage in the business of selling agricultural products. Some of the agricultural products require complicated, little or no processing while some are imported to augment local production

NBS (as cited in Sani, 2018) identified agriculture as the single largest employer of labour in Nigeria while Ekpo and Umoh (as cited in Noko, 2018) stated that it remains the leading employment sector of the vast majority of Nigerian population. Consequently it contributes to gross domestic product.

3.1 Contribution of Agriculture to Gross Domestic Product (GDP)

Despite Nigeria's natural and human resources (favourable climate, population and arable land mass); high unemployment rate, low per capita income, poverty amongst other challenges beset majority of people living in Nigeria. The contribution of agriculture to economic growth (GDP) has not increased tremendously in the past 40 years.

After independence in 1960, the Nigerian economy was solely dependent on agriculture and it contributed over 60 percent to GDP (Gabriel, Haruna & Abdusalam, 2014). It was similar to current day Sierra Leone where agriculture contributes 60.7% to its GDP. However after the discovery of oil it dropped to about 25 percent between 1975 and 1979. Table 1 and Figure 1 show the dwindling contribution of agriculture to GDP (as a percentage of GDP) from 1981 to 2021. In a period of 40 years, the highest contribution from agriculture was in 2002 with 36.97 percent and the lowest was 12.24 percent in 1981. A slight growth was recorded between 2017 and 2020. This slight growth can be attributed to a number of factors such as increase in the land cultivated by the small scale farmers, an improvement in the seedlings used or implementation of some new policies, to mention a few.

For the past 40 years, the average contribution of agriculture to GDP can be described as low compared to the 1960s. It is therefore safe to state that over the past 40 years activities in the agricultural sector have been low and its contribution to national economic growth is unsatisfactory given the potential of the sector. Some of the reasons ascribed for these include, rural urban migration; inadequate supply of agricultural inputs for farmers in rural areas; inadequate supply of credit facilities to support cost of agricultural productivity; low government spending; poor adoption of relevant technology by farmers and so on.

The government has made some notable efforts in improving the performance of the sector through the initiation of agricultural schemes and policies. They include; National Accelerated Food Production Project, National Agricultural Cooperative Bank, Agricultural Credit Guarantee Scheme Fund, Agricultural Development Project, Operation Feed the Nation, River Basin Development Authorities, Root and Tuber Expansion Project, National Special Program for Food Security, Agricultural Transformation Agenda (ATA), Agriculture Promotion Policy(APP), Economic Recovery and Growth Plan (ERGP) etc. Some of these programs and policies have made appreciable contribution in increasing agricultural productivity, food security and employment however Idachaba (as cited in Sani, 2018) stated that empirical records of many of these programs and projects are not impressive enough to bring about the expected transformation of the agricultural sector in the country. This position is supported by this paper based on the contribution of agricultural sector as still largely underdeveloped. This underdevelopment has militated against the achievement of the potential growth of the sector. The policies of past government hitherto focused more on increasing the quantity of agricultural products (production) and less emphasis was placed on other aspects of the value chain.

Year	% GDP						
1981	12.24	1991	20.89	2001	24.48	2011	22.24
1982	13.5	1992	20.32	2002	36.97	2012	21.86
1983	14.99	1993	23.49	2003	33.83	2013	20.76
1984	18.31	1994	25.17	2004	27.23	2014	19.99
1985	18.23	1995	25.49	2005	26.09	2015	20.63
1986	18.02	1996	26.2	2006	24.74	2016	20.98
1987	20.55	1997	27.42	2007	24.66	2017	20.85
1988	23.37	1998	27.91	2008	25.28	2018	21.2
1989	21.28	1999	26.03	2009	26.75	2019	21.9
1990	21.56	2000	21.36	2010	23.89	2020	24.1
2021	23.4						

Table 1: Contribution of Agriculture to GDP from 1981 to 2021

Note: Data source is the World Bank



Fig 1: Contribution of agriculture to GDP trend from 1981 to 2021

3.2 Nigeria's Agricultural Value Chain

A typical agricultural value chain consists of primary inputs/input supply, production, processing and trade. It is made up of actors such as Input Dealers; Producers; Processors and Traders (Evbuomwan & Okoye, 2017). A value chain works best when the actors in the pre-production, production and post production cooperate to produce a higher quality product and generate more income for the participants in the chain. This goes a long way in boosting an economy. Thus in an agricultural value chain, the people and activities that improve a product before it gets to the consumer is shown in figure 2.



Fig 2: Agricultural Value Chain

The primary input of the value chain consists of activities such as getting farmland, seedlings and other inputs required to get a desired product(s). Production entails the cultivation of the land, rearing of the animals and harvesting. Processing involves storage and packaging of the product as well as getting other by-products from the crop/animal. Effective packaging adds value to a produce, enhances standardization and enables traceability. The last stage (trade) entails distribution, transportation and other infrastructures that enable the product get to the consumer.

Agricultural value chains in Nigeria are predominantly traditional and saddled with a lot of inefficiencies. Examples include the cassava, rice, cotton, cocoa, tomato or cattle value chains which involve a large number of small scale farmers, producers and wholesalers/retailers. According to PWC (2017) Nigeria's agricultural value chain consists of 80% small holder farmers and a few commercial processors plagued with inadequate inputs, obsolete technology and poor financing. This goes to show that the farmers are more interested in getting the agricultural product produced and a smaller percentage handles the processing and probably trade. For some produce, a high level of activities takes place at the second stage while a low level of activities takes place at the third stage (processing). A popular example is the fact that cocoa is produced massively in Nigeria, exported and the by-products (chocolate bars, butter) are imported. Only about 20% of cocoa produced is processed in Nigeria. Majority of the few businesses involved in processing do not follow international standard. A lot of crops go bad due to poor storage facilities, technical knowhow amongst others. In accomplishing trade, a lot of bottlenecks exist. They include poor infrastructure, lack of information dissemination, poor agro dealer trade associations etc and these create inefficiencies that negatively affect the sector and the economy.

4. Agricultural Value Chain and Economic Growth

An improved agricultural value chain can stimulate and ensure desired potential growth required in the agricultural sector and economy. For example, Brazil became a global producer of many agro processed commodities including orange juice, sugar and ethanol after improving the country's agricultural value chain

(PWC, 2017). It was further stated that agribusinesses in Brazil created 16 million jobs and increased her exports significantly. This can be the case for Nigeria if only a sincere and critical analysis is made of agricultural value chains.

5. Conclusion and Recommendations

Given the low contribution of agriculture to GDP for the past 40years and the seemingly slow economic growth rate experienced in the country, an unlocking of the agricultural value chain by way of removing the bottle necks in input supply, production, processing and trade of agricultural product is exigent. An improved agricultural value chain is indeed crucial to achieving the desired sustainable economic growth required in Nigeria. As a matter of urgency, the government should:

- a) Adopt a microeconomic approach in addressing the challenges faced at each stage of the agricultural value chain. This will go a long way in strengthening the capacity of participants across the agribusiness value chain
- b) Review old policies and programmes and enact new ones if necessary.
- c) Encourage more private sector participation and agro dealer trade associations.
- d) Improve access to credit by all value chain stakeholders (farmers, small-scale processors, storage operators and retailers.
- e) Improve the institutions that over see the activities in the agricultural sector and ensure a comprehensive microeconomic data base of activities in the sector. This will go a long way in encouraging further empirical research.
- f) Construct and rehabilitate rural roads to ease market accessibility.
- g) Encourage innovations and the use of technological inputs in the various stages of the value chain.
- h) Provide grants to encourage further research into the inherent problems prevalent in the agricultural sector in Nigeria

References

- Blandford, D. (2010). The Contribution of Agriculture To Green growth. 1–36. https://www.oecd.org/greengrowth/sustainable-agriculture/48258861.pdf
- Evbuomwan, G. O. & Okoye, L. U. (2017). Agricultural value chain financing and small scale farmers in Nigeria: The Pre-Requisites. NG-Journal of Social Development., 6, 47–57. https://doi.org/10.12816/0040237.
- Food and Agriculture Organisation of the UN. (2010). Agricultural value chain development: Threat or opportunity for women's employment. Retrieved from http://www.fao.org/3/i2008e/i2008e04.pdf
- Gabriel, A., Haruna, U. & Abdusalam, R. (2014). Trend analysis of the contribution of agriculture to the gross domestic product of Nigeria (1960 - 2012). *IOSR Journal of Agriculture and Veterinary Science*. 7. 50-55. 10.9790/2380-07145055
- Kamil, S., Sevin U. & Bekun, F.U. (2017). The contribution of agricultural sector on economic growth of Nigeria. *International Journal of Economics and Financial* Issues. 7, 547-552. Retrieved from https://www.econjournals.com/index.php/ijefi/article/view/3941.
- kojo Edeme, R., Idongesit, J. & John, A. (2019). *Optimizing value chain in the Nigeria's agricultural sector*. Retrieved from https://www.researchgate.net/publication/341909322 Optimizing Value
- Kumar, S., & Sharma, A. (2016). Agricultural value chains in India : Prospects and Challenges. CUTS Centre for International Trade, Economics & Environment, April, 1–19. http://www.cuts-citee.org/pdf/
- Noko, E. J. (2018). *Impact of agricultural sector on economic growth of Nigeria*. Retrieved from https://educacinfo.com/agricultural-sector
- Oyinbo O. and Rekwot G. Z, (2014). Agricultural production and economic growth in Nigeria: Implication for rural poverty alleviation. *Quarterly Journal of International Agriculture*, 53,(3) 207-223
- Price Waterhouse Cooper. (2017). Transforming Nigeria's agricultural value chain. Retrieved from <u>www.pwc.com</u>
- Sani, E (2018). *The impact of agriculture on economic growth in Nigeria: 1980- 2014*. Retrieved from https://afribary.com/works/the-impact-of- agriculture-on-economic-
- Tolulope O. & Chinonso E. (2013). Contribution of agriculture to economicgrowth inNigeria.Paper presented at the 18th Annual Conference oftheAfricanEconometricSociety (AES)Accra, GhanaSocietyAccraAccraAccra
- World Bank Group (2017). Nigeria from the World Bank data. Retrieved from https://worldbank.org