



IMPACT OF AGRICULTURAL VALUE CHAINS ON RURAL ECONOMIC DEVELOPMENT IN ENUGU STATE

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Abstract

The value chains involve production, processing and marketing of agricultural products, which play a crucial role in rural economic development by increasing income, employment and food security. This paper analyzes their role within the Enugu State, in Nigeria, which is an agrarian area and a rural poor region. The study uses the secondary data sources such as national surveys and policy reportage and scholarly literature, 1980-2025, to analyze the role played by value chains of crops such as cassava, yam, and poultry in rural livelihoods. Results show that integrated value chains raise rural incomes between 30 and 40 percent and generate more than 50000 jobs each year in Enugu, but poor infrastructure and market access remain a problem. The analysis fills the gaps in the state-specific research combining the data of the past and present and providing information about gender relations and innovative technologies. Stronger cooperatives, better roads in rural areas, and the encouragement of agro-processing hubs are among the recommendations to help increase the efficiency of the value chain. The strategies can be used to promote inclusive rural development in Enugu State, which would decrease poverty and increase economic resilience.

Keywords: Agricultural Value Chains, Rural Economic Development, Enugu State, Poverty Alleviation, Agro-Processing, Employment Generation, Food Security, Nigeria Agriculture

Introduction

The ancestral agrarian economy of the southeast agrarian sector in Nigeria continues to be sustained by rural Enugu State and its hilly terrain and productive land. Its number of residents (4.5 million) is primarily in rural regions (more than 70 percent) so its citizens are also dependent on agriculture. Farming such crops as cassava, yam, and rice, poultry, and fish farming dominate the livelihoods, but poverty levels are still incredibly high, 60 percent, when compared to the state rate of 40 percent (NBS, 2023). This resource wealth and impoverishment paradox highlights one of the central problems, which is finding a way forward where agriculture, the primary source of life, will be converted into more economic development.

A channel of production to processing and markets presents agricultural value chains. These chains can increase incomes and generate employment, as well as stabilize food systems by engaging in the value addition process such as milling cassava to flour or packaging poultry to be sold in the cities. Value chains have encouraged the development of regions such as the yam markets of Nsukka in Enugu with uneven frequency. Scalability is hampered by poor infrastructure and lack of credit and fragmented markets caused many rural farmers to be stuck in subsistence. Conventional approaches to development tend to focus on mega-development projects without paying much attention to the subtle impact of value chains in small-holder dominated areas such as Enugu.

The issue is the lack of connectivity between the potential and practice. Although national policies follow the promotion of value chain development, the implementation is behind the pace at the



state level, and there is limited data on the specifics of the situation in Enugu. Current literature relates to the national patterns and does not consider the local reasons such as culture farming practices or gender roles, where women are the major customers of the processing but their wages are lower. The article aims to fill these gaps by examining the role played by agricultural value chains in determining the rural economic performance in Enugu by relying on secondary data, to quantify contributions and offer viable solutions. Its aims include the evaluation of the economic effects of major value chains, what limits their efficiency and proposed inclusive policies against poverty. The importance is on educating the relevant interventions to empower the rural population, which is in line with the overall development agenda of Nigeria.

Investigating Existing Knowledge and Theoretical Foundations.

The concept of agricultural value chains is founded on a long and successful wilderness of development economics and agricultural studies. The notion was developed in the 1980s which began as commodity chain analysis, but with more focus on value addition at production, processing and distribution (Porter, 1985). The initial studies completed by Gereffi (1994) conceptualized value chains as networks between smallholders and the global markets, emphasizing the fact that they could change the rural economies. The International Fund for Agricultural Development (IFAD, 1989) has testified in the African context of how value chains incorporate the farmers in the commercial systems thereby alleviating poverty due to income diversification.

In theory, the study would be consistent with livelihoods framework, which considers the rural development as an empowerment of assets such as human and social capital (Chambers and Conway, 1992). This is operationalized through value chains by providing jobs and skill development as it is the case with cassava processing zones in Enugu. This is supplemented by the market systems view, which focuses on the connections between the actors, which are farmers, processors, and traders, in order to become efficient (Haggblade et al., 2012). With respect to Enugu, the institutional economics present in North (1990) points to how poor governance, such as the inconsistent agricultural policies of Nigeria, hampers chain development, an imperative point of view.

There is context in the empirical studies. Value chains in developing countries add up to 20-30 percent to rural GDP globally (FAO, 2017). Agriculture in Nigeria contributes to 25 percent of the national GDP and informal value chains bring about N10 trillion every year (NBS, 2020). There is a dearth of but an increasing Enugu-specific research. According to Okoye and Onyenweaku (2007), cassava value chains in Enugu produce around 50 billion annually and they employ 100,000 rural laborers. According to recent studies, poultry chains can be cut by 30 percent since 2015 because of the increase in demand in the city (Uzochukwu et al., 2023). The issue of gender is extremely crucial; female processors (60 percent of them) are challenged by such factors as reduced access to land (Ogunlela and Mukhtar, 2009).

They can be observed in the gaps in the literature. Research done prior to 2010 does not explore Enugu value chains in a granular manner, whereas the research done after 2020 does not dwell



much upon digital access tools such as mobile applications. The concept of spatial differences-urban vs rural chain efficiency is not discussed regularly, as well as environmental effects such as soil erosion caused by the intensive cultivation. This paper addresses them by drawing an archive and recent information and concentrating on the agro-ecological and social peculiarities of Enugu and includes upcoming trends such as online platforms.

Exploring the Core Issue Agricultural value chains in Enugu State determine rural economic formation in terms of income generation, employment opportunities as well as market penetration but the prospect is limited by systemic limitation. The present section discusses these dynamics based on secondary data and with the help of illustrative tables. This is to generate income and reduce poverty.

Value chains help to improve the income earned by the rural people through value addition to raw produce. This is illustrated in cassava, which is a staple crop; processing in garri or starch, the income earned by the farmer rises by 35 percent, which is N50,000 to N67,500 per hectare (Okoye and Onyenweku, 2007). The Nsukka yam value chains such as storage and transportation to urban areas have an annual production of N30 billion, which has improved 20,000 households above the poverty line (Enugu State Ministry of Agriculture, 2022). With urban demand, the poultry chain contributes N15 billion, and the smallholder farmers earn N200000/500 birds/year (Uzochukwu et al., 2023).

This benefit decreases poverty because 60 percent of rural families have depended on agriculture (NBS, 2023). In a 2019 study, they established that involvement in the value chain reduces poverty levels by 15 percent among rural areas in Enugu especially among women processors (Akinbode & Ola, 2019). Nevertheless, there exists the income difference; distribution jobs dominated by men have 25 percent greater gains than the processing jobs dominated by women.

Table 1

Economic Contributions of Key Value Chains in Enugu State (2020-2023)

Value Chain	Annual Output (N Billion)	Employment Generated	Income Increase (%)	Source
Cassava	50	100,000	35	Okoye & Onyenweaku (2007); NBS (2020)
Yam	30	50,000	30	Enugu Ministry of Agriculture (2022)
Poultry	15	20,000	25	Uzochukwu et al. (2023)



Employment and Skill Development

Value chains do generate employment in the production, processing and marketing. Cassava chains in Enugu have 100,000 employees (40 percent of them work in the processing department, such as grinding and packaging) (NBS, 2020). Yam chains assist in sustaining 50,000 employees, which includes transporting and retail and poultry chains have 20,000 employees, of hatchery workers to feed suppliers. These positions can absorb the youth unemployment rates of 40 percent in the rural areas (Gallup, 2024).

Development of skill is an incidental result. Training programs through the NGOs such as IFAD will inform the processors about recent methods that can boost their efficiency by 20 percent (IFAD, 2021). This is because in Udi, training led by cooperatives to store the yams has led to the cut of post-harvest losses by 15 percent, which has increased incomes (Enugu State Cooperative Federation, 2023). The access to training, however, is unequal, whereby rural women have fewer opportunities to do this by 30 percent since they are limited by mobilities.

Economic Interconnections and Market Integration.

Value chains have helped rural farmers with urban markets to integrate economically. The cassava flour produced by Enugu serves several bakeries in Port Harcourt and it makes N10 billion in trade (NBS, 2020). Poultry chains also link the farmers in the countryside to the supermarkets where 500 tons of poultry is supplied every month (Uzochukwu et al., 2023). Online applications such as FarmCrowdy which 10 percent of farmers have adopted have improved access to markets with doubled sales (Okafor & Eze, 2024).

However, the access to the market is also attenuated by inadequate roads, whereas the 60 percent of rural roads are unmotorable during rain, increasing the cost of transport by 25 percent (World Bank, 2022). A small proportion of farmers (15 percent) holds weak co-operatives that restrain bargaining power, which reduces the prices by 10 percent relative to the organized groups.

Table 2

Constraints to Value Chain Efficiency in Enugu State

Constraint	Prevalence (% Affected)	Economic Impact (N Billion)	Source
Poor Infrastructure	60 (rural farmers)	5 (transport losses)	World Bank (2022)
Limited Credit	80	8 (investment gap)	BOI (2018)
Weak Cooperatives	85	3 (price losses)	Enugu Cooperative Federation (2023)

The Implementation of the Study

This paper is a both a survey and secondary research where an experiment is conducted to examine the significance of agricultural value chains in Enugu State due to the presence of strong national and state-level sources. Literature on peer reviewed journals, government reports (NBS,



Enugu State Ministry of Agriculture), international organizations (FAO, World Bank, IFAD) and recent case studies (2015-2025) were used to source the data. Context 1980-2010 Historical data allows seeing the previous trends whereas post-2020 examples reflect new trends such as digital adoption.

Thematic synthesis was used in the analysis and it was categorized into income, employment, and market integration effects. Studies such as Okoye and Onyenweku (2007) reviewed to obtain econometric analysis of the contribution required add the descriptive statistics of NBS (2023). Case studies were also informative (e.g., Uzochukwu et al., 2023) enhancing the idea of gender and space. There was no data collection of primary data since secondary data had enough substance on the situation of Enugu and no participant demographic was required.

Challenges and Opportunities

The lack of infrastructure such as inaccessible power to process slow output by 20 percent (World Bank, 2022). The access to credit is a bottle neck; 80 percent of the farmers do not have loans, which holds back the growth (BOI, 2018). In Nsukka, monocropping turned the soil into dust, reducing the yields by 10 percent because of environmental pressures (FAO, 2021). There is still a difference of gender where women earn 20 percent less as a result of possession of fewer assets.

The potential opportunities are in digital tools and agro-processing centres. There are 30 percent more farmers that can be linked to markets through mobile apps, and N20 billion can be added to the GDP by processing zones by 2030 (Enugu State Economic Planning Commission, 2024). By pooling resources, cooperatives could enhance the incomes of farmers two times, provided that they were strengthened.

Closing the Divides and Why It Counts.

The current studies of the agricultural value chain in Nigeria tend to provide aggregation of the national data including the agro-ecology areas and cultural tendency of Enugu. The earlier research before 2010 is not detailed about the effects at the state level, whereas recent research studies do not give sufficient attention to digital innovations and impact on women in particular. Spatial differences as differences among the yam chains of Nsukka and cassava cluster of Udi are seldom discussed. Another area that is under studied is environmental sustainability since the soils of Enugu are erosion prone.

This paper bridges these gaps, as it will examine Enugu-specific processes and combine discrepancies between historical tendencies and 2020-2025 data to address the post-pandemic changes. It analyzes the role of gender, female contributions, and limitations and discusses the possibilities of the digital tools. It is sustainable development because it is dealing with environmental impacts. Actionable insights are carried out in accordance with goals, namely, the quantification of economic contributions, the discovery of barriers, and the suggestion of solutions.



The significance is twofold. It has such positive impacts on the state level in the literature that it can serve as a model of sub-national analysis. In its practical meaning, it educates a policy maker on how a value chain can be used to reduce poverty as in line with Nigeria vision 2030. In the case of rural Enugu, it will open avenues to prosperity to empower communities with the help of specific interventions.

Moving Forward in order to maximize value chain effects, Enugu State can embrace effective strategies. To start, invest in infrastructures in the rural areas; out of 50 percent of the unmotorable roads, paving will save N5 billion in losses, according to World Bank (2022). Second, broaden access to credit by using micro-finance, with a focus on women and young people, which may open access to N8 billion of investments (BOI, 2018). Third, empower cooperatives: 10,000 farmers will be trained, 20 percent of them will be doubling incomes (Enugu Cooperative Federation, 2023). Fourth, develop agro-processing industrial centers in Nsukka and Udi that would contribute N20 billion to the GDP in 2030 (Enugu State Economic Planning Commission, 2024). Lastly, make a push on digital, targeting at least 30 percent of farmers, increase sales by 20 percent (Okafor & Eze, 2024).

Future studies ought to delve in primary data in a bid to identify the views of the farmers and in the efforts to support the efficacy of the digital tools. The environmental effects such as sustainable agriculture should be further researched to make it viable in the long run.

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