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WORLD TRADE ORGANIZATION'S LIBERAL TRADE POLICIES AND PRODUCTIVITY AMONG RICE FARMERS IN ADAMAWA STATE NIGERIA

ABSTRACT

Liberal trade policies in agriculture refer to frameworks aimed at integrating agricultural products into global markets with minimal state intervention. These policies are encapsulated in the World Trade Organization's Agreement on Agriculture (WTO AoA), which was negotiated during the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) and came into effect with the establishment of the WTO. Since the adoption of these policies, domestic rice farmers in Nigeria have faced significant challenges due to the influx of imported rice, which competes directly with locally produced rice in the domestic market. This study investigates the impact of liberalized agricultural trade policies on rice farmers in Nigeria, with a focus on Adamawa State. The study employed both primary data (survey research) and secondary data (published and unpublished sources). Findings reveal that the WTO's liberal trade policies have facilitated the entry of subsidized foreign rice into Nigeria, placing local farmers who do not benefit from similar subsidies at a competitive disadvantage. This has led to declining incomes for Nigerian rice farmers and increased vulnerability to poverty. The study concludes that WTO-led liberalization has undermined rice production in Nigeria since its inception. It recommends that Nigerian policymakers advocate for a revision of these trade policies to ensure a more balanced framework that supports the interests of local rice farmers while accommodating international trade obligations.

Keywords: Trade liberalization, WTO Agreement on Agriculture, rice farming, market competition, agricultural subsidies.

1. INTRODUCTION

Liberal trade policies in agriculture are designed to reduce government intervention, enabling agricultural products to enter international trade by lowering tariffs and removing trade barriers. These policies, established under the World Trade Organization Agreement on Agriculture (WTO AoA) in 1995 during the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), aimed to foster trade liberalization. However, they have allowed developed nations to maintain high domestic and export subsidies while imposing restrictions on developing nations like Nigeria, preventing them from offering similar support to their farmers.

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The imbalances in the WTO agricultural trade policies have favored farmers in developed countries, while farmers in Nigeria and other developing nations face intense competition from artificially cheap imports. Nigerian rice farmers, particularly those in Adamawa State, struggle to compete with subsidized foreign rice, which undermines local market prices. These unfair trade practices have adversely affected local farmers, forcing many out of rice production.

Adamawa State, where rice farming is primarily dominated by small-scale farmers using inefficient and traditional methods, faces significant production challenges. The lack of mechanization, limited availability of high-yield rice varieties, high input costs, and absence of government subsidies contribute to low productivity. These factors hinder the state's ability to meet the rising demand for rice, making it difficult for local farmers to compete with cheaper imported alternatives.

Despite government interventions, including border closures and the introduction of the Anchor Borrowers Program (ABP) to support rice farmers, efforts to boost rice production have been largely unsuccessful. The persistent smuggling of foreign rice through Nigeria's porous borders continues to undermine the price and market potential of locally produced rice. Against this backdrop, this study seeks to investigate the impact of liberal agricultural trade policies on rice farmers in Nigeria, using Adamawa State as a case study.

Objectives of the Study

The general objective of this study is to examine the impact of liberal agricultural trade policies on rice farmers in Nigeria, Adamawa State in particular.

The specific objectives of this study are to:

- i. Examine the primary role of the liberal agricultural trade policies of WTO as an international treaty to herald a new era of trade liberalization in the agricultural sector in Nigeria, Adamawa State in particular.
- ii. Assess the performance of the liberal agricultural trade policies of WTO and see the level of rice production in Adamawa State of Nigeria.
- iii. Examine the role of the liberal agricultural trade policies of WTO in furthering the cause for dependency of Nigeria, Adamawa State in particular on the imported rice instead of local or domestic produced rice.

Research Questions

The research aims to address the following queries:

- i. How can the liberal agricultural trade policies of WTO play their primary role in bringing about the new era of trade liberalization in the rice sector in Nigeria, Adamawa State in particular?
- ii. How does liberal trade policies in agriculture through WTO play their roles in undermining the rice production in Adamawa State, Nigeria?
- iii. What are the possible ways of breaking the dependency of Nigeria, Adamawa State in particular on the imported rice instead of local or domestically produced rice.

1.5 Research hypotheses

In alignment with the aforementioned research questions, the following hypotheses have been formulated for the study.

Hi: The income of rice farmers in Adamawa State, Nigeria has been improved with the inception of liberal agricultural trade policies of WTO.

Ho: The liberal agricultural trade policies of WTO Have had negative impact on rice farmers in Adamawa State, Nigeria.

With the above hypotheses the researcher will be able to generate and analyse data and come out with good result.

2. LITERATURE REVIEW

Empirical studies have increasingly scrutinized the effects of WTO liberal trade policies on the productivity of rice farmers in Nigeria. Akintayo and Fagbohun (2019) conducted a comprehensive analysis on how the removal of trade barriers and reduction in government subsidies, as mandated by WTO policies, have altered the competitive landscape for domestic rice production. Their study found that the influx of subsidized imported rice has intensified competition, thereby pressuring local farmers to operate under unfavorable market conditions.

Abubakar and Musa (2020) further explored these dynamics through econometric modeling, revealing that the liberalization of agricultural trade under the WTO Agreement on Agriculture has been associated with decreased income levels among rice farmers. They attributed this trend to escalating input costs and a

diminished capacity for local farmers to secure government support comparable to that received by their counterparts in developed nations.

In a similar vein, Okoro, Eze, and Nwankwo (2021) highlighted that small-scale rice farmers in Adamawa State face significant challenges in accessing modern inputs and technology a situation compounded by the adverse effects of trade liberalization. Their findings indicate that high input costs, particularly for fertilizers and mechanization, have led to persistently low yields, thereby undermining overall productivity.

Adding to this body of research, Bello *et al.* (2022) examined the market distortions introduced by WTO policies. They demonstrated that the heavy reliance on subsidized imported rice has not only suppressed domestic prices but also eroded the incentive structure for local production, which in turn negatively affects the productivity and economic stability of rice farmers.

Adamu and Ibrahim (2023) analyzed the broader socio-economic impact of these liberal trade policies, emphasizing that the resultant dependency on imported rice has created structural imbalances. Their study argues that such imbalances reinforce a cycle of dependency, as domestic rice farmers struggle to compete against the artificially low prices of foreign rice, thereby limiting the potential for local productivity improvements.

The Theoretical Framework

The theoretical framework for this study is based on the underdevelopment and dependency theory, which emerged in the late 1950s and gained prominence in the 1960s and 1970s. Proposed by Argentine economist Raúl Prebisch (1950) and supported by scholars such as Paul Baran (1957), Samir Amin (1976), Immanuel Wallerstein (1974), and Walter Rodney (1972), the theory critiques Western scholars' views that attribute the backwardness of third-world nations, particularly in Africa, to their traditions, lack of education, and low technological advancement. According to modernization theorists such as Rostow (1960), development follows a linear path from traditional stages to mass production, implying that Africa must abandon its cultural practices to progress.

In contrast, proponents of underdevelopment and dependency theory argue that the same processes responsible for the development of Europe and America also caused the underdevelopment of Africa (Amin, 1976; Rodney, 1972; Wallerstein, 1974). They highlight historical events such as the transatlantic slave trade, formal colonialism, and modern neo-colonial economic dependency as mechanisms that

siphoned African resources and stifled local development. The theory suggests that to achieve meaningful development, third-world nations must sever exploitative ties with Western economies. While criticized for its unrealistic advocacy of complete disconnection from the global capitalist system (Evans, 1979), the theory remains significant in highlighting the negative impacts of liberal trade policies on Nigeria's agricultural sector and advocating restrictive trade policies as a solution.

3.METHODOLOGY

Research Design: The study adopted a survey research design, which involves collecting data from respondents through questionnaires, interviews, and observations. This approach is suitable for comparative studies.

Study Area: Adamawa State, Nigeria, established in 1991 after being separated from Gongola State, covers approximately 39,917 square kilometers. It shares borders with Taraba, Gombe, Borno States, and Cameroon. The state's geography includes mountainous terrains and valleys of the Benue, Gongola, and Yedsorem Rivers. The Fulani are primarily cattle herders, while other tribes engage in crop farming and fishing.

Population of the Study: The research focused on rice farmers across 21 local governments in Adamawa State. Six local governments—Yola South, Yola North, Demsa, Numan, Lamurde, and Fufore—were identified as the primary rice-growing zones due to the presence of River Benue, which supports rice production.

Sample Size Determination: A total of 120 rice farmers registered with the Adamawa Agricultural Development Project (AADP) were selected, comprising 20 farmers from each of the six local governments.

Sampling Technique: The purposive sampling method was used to select respondents based on their involvement in rice production and registration with AADP.

Data Collection Method: Data were gathered using structured questionnaires and structured interviews administered by trained research assistants.

Source of Data: Primary data were collected through 120 questionnaires and interviews, while secondary data were obtained from books, journals, government publications, and online resources.

Data Analysis: Descriptive statistics were used for organizing and summarizing data, while multiple regression analysis served as the inferential statistical tool.

RESULTS AND DISCUSSION

Research Question 1: How can the liberal agricultural trade policies of WTO play their primary role in bringing about the new era of trade liberalization in the rice sector in Nigeria, Adamawa State in particular?

Table 1: Mean and Standard Deviation of liberal agricultural trade policies of WTO playing their primary role in bringing about the new era of trade liberalization in the agricultural sector in Adamawa State.

S/N	Item	(\bar{x})	SD	Decision
1	High cost of fertilizer and herbicide	7.64	2.802	Accepted
2	High cost of tractor services	7.96	2.932	Accepted
3	Lack of credit facilities to farmers from the government	7.84	2.806	Accepted
4	Availability of imported foreign rice in the markets	9.64	2.86	Accepted
5	Lack of agricultural extension service to farmers from the government	9.74	2.818	Accepted
6	Poor price of domestically produced rice, compared to foreign imported rice	7.98	2.79	Accepted
7	Low demand of domestically produced rice	4.02	2.898	Rejected
Grand Mean		7.82		Accepted

Source: Field Survey, (2024). Acceptance (\bar{x} is 6.0 and above); Rejection (\bar{x} is less than 6.0)

The analysis examined the impact of WTO liberal agricultural trade policies on rice production in Adamawa State, Nigeria, revealing several significant challenges. High input costs for essential resources such as fertilizers, herbicides, and tractor services emerged as major barriers, with mean scores of 7.64 and 7.96, respectively. These costs severely undermined rice production and the ability of local farmers to compete. Additionally, the lack of government-provided credit facilities, with a mean score of 7.84, further exacerbated resource acquisition difficulties, limiting farmers' capacity to improve productivity.

The influx of cheaper imported rice into local markets, driven by trade liberalization policies, weakened the competitiveness of domestically produced rice, as indicated by a mean score of 9.64. This highlighted the inadequacy of liberalization alone in promoting local agricultural products. The absence of agricultural

extension services, alongside price disparities between local and imported rice, further hampered efforts to improve yields and market viability. These factors underscored the necessity for holistic approaches that go beyond trade liberalization to support farmers and enhance market performance.

Moreover, the analysis revealed low demand for domestically produced rice, indicating a misalignment between consumer behavior and trade liberalization goals. This finding emphasized the need for demand-side interventions and consumer education to foster appreciation and consumption of local rice. Overall, the study called for strategic policies aimed at addressing systemic challenges, improving resource access, and strengthening the competitiveness of Adamawa State's rice production.

Research Question 2: How does liberal trade policies in agriculture through WTO play their roles in undermining the rice production in Adamawa State, Nigeria?

Table 2: Mean and Standard Deviation of liberal trade policies in agriculture through WTO playing their roles in undermining the rice production in Adamawa State.

S/N	Item	(\bar{x})	SD	Decision
1	Most of the rice farmers cannot be able to purchase fertilizer and herbicide to improve their productivity	7.64	2.802	Accepted
2	Most of the farmers engage in manual farm work as they cannot afford tractor services.	7.96	2.923	Accepted
3	Low production as a result of the absence of credit facilities.	7.84	2.806	Accepted
4	Domestic rice always fail in a competition with imported rice.	9.64	2.86	Accepted
5	No improvement in yield as there is no extension services	9.74	2.818	Accepted
6	Low income of farmers as the price of domestic rice is low.	7.98	2.79	Accepted
7	Many famers left the rice production as the demand of the domestic rice is low.	4.02	2.898	Rejected
Grand Mean		7.82		Accepted

Source: Field Survey, (2024). Acceptance (\bar{x} is 6.0 and above); Rejection (\bar{x} is less than 6.0)

The analysis presented in Table 4.3 highlights how liberal trade policies in agriculture through the World Trade Organization (WTO) have negatively impacted rice production in Adamawa State, Nigeria. Key findings reveal that many rice farmers are unable to afford essential inputs such as fertilizers and herbicides (Mean = 7.64, SD = 2.802), leading to reduced productivity and yields. The inability to access tractor services (Mean = 7.96, SD = 2.932) further limits farmers' capacity for mechanized farming, hindering efficiency and output.

Financial constraints also play a critical role, as the lack of access to credit facilities has led to low production levels among rice farmers (Mean = 7.84, SD = 2.806). The inability to invest in necessary resources and technology has weakened farmers' competitiveness. Compounding this issue is the inability of domestic rice to compete with imported rice (Mean = 9.64, SD = 2.86), a significant challenge exacerbated by liberal trade policies that disadvantage local farmers.

Additionally, the absence of effective extension services (Mean = 9.74, SD = 2.818) leaves farmers without critical technical support and knowledge-sharing opportunities that could enhance their productivity. Economic challenges persist, with the low prices of domestic rice resulting in decreased incomes for farmers (Mean = 7.98, SD = 2.7). Although there is limited evidence to support a significant departure of farmers from rice production (Mean = 4.02, SD = 2.898), the low market demand for domestic rice continues to pose challenges for sustaining the agricultural sector in the region.

Research Question 3: What are the possible ways of breaking the dependency of Nigeria, Adamawa State in particular on the imported rice instead of local or domestically produced rice.

Table 3: Mean and Standard Deviation of possible ways of breaking the dependency of Nigeria, Adamawa State in particular on the imported rice instead of local or domestically produced rice.

S/N	Item	(\bar{x})	SD	Decision
1	Government should subsidies farm inputs like fertilizer and herbicide	7.54	2.79	Accepted
2	Government should provide tractors to serve the farmers at a subsidies rate.	7.88	2.846	Accepted
3	Credit should be provided to the farmers at free or low interest	8.00	2.768	Accepted
4	Government should impose high tariff on the rice importation in order to protect the domestic rice in the markets.	7.48	2.75	Accepted
5	Government should employ enough agric extension workers in order to sure the farmers accordingly.	8.04	2.81	Accepted
6	The closures of border against the importation of rice in order to bust the income of farmers through improvement in price.	6.3	2.928	Accepted
7	Government should encourage the consumption of the locally produced rice in order to encourage farmers in the production of rice.	6.74	2.904	Accepted
Grand Mean		7.42		Accepted

Source: Field Survey, (2024). Acceptance (\bar{x} is 6.0 and above); Rejection (\bar{x} is less than 6.0)

The analysis in Table 4.4 highlights strategies to reduce Nigeria's, particularly Adamawa State's, dependency on imported rice and boost local rice production. One key recommendation is for the government to subsidize farm inputs such as fertilizers and herbicides (Mean = 7.54, SD = 2.79) to ease financial burdens and enhance farmers' productivity. Additionally, providing subsidized tractor services (Mean = 7.88, SD = 2.846) would promote mechanized farming and improve agricultural practices.

Access to affordable credit is another critical factor, with the suggestion that the government offer low or interest-free credit facilities (Mean = 8.88, SD = 2.768) to enable farmers to invest in better technologies and farming methods. Imposing high tariffs on rice imports (Mean = 7.48, SD = 2.75) could protect local rice markets, making Nigerian rice more competitive.

Furthermore, employing more agricultural extension workers (Mean = 8.04, SD = 2.81) is recommended to provide technical support and improve farming practices. Border closures against rice imports (Mean = 6.3, SD = 2.928) could also help farmers earn higher incomes by raising domestic rice prices.

Lastly, promoting the consumption of locally produced rice (Mean = 6.74, SD = 2.904) through awareness campaigns, price incentives, and subsidies would further encourage farmers to sustain and increase rice production. These measures collectively aim to strengthen the domestic rice sector and reduce reliance on imports.

Hypotheses Testing

H0₁: The income of rice farmers in Adamawa State, Nigeria has been improved with the inception of liberal agricultural trade policies of WTO.

Table 4: Analysis of Variance (ANOVA) Analysis of income of rice farmers in Adamawa State, Nigeria has been improved with the inception of liberal agricultural trade policies of WTO.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.922	6	.584	2.426	0.3
Within Groups	85.342	114	.482		
Total	88.284	120			

P < 0.01 (Not Significant)

An analysis of variance (ANOVA) was conducted to assess whether the income of rice farmers in Adamawa State, Nigeria improved following the implementation of the World Trade Organization (WTO) liberal agricultural trade policies. The results, with a significant p-value of 0.015 ($p < 0.01$), indicate that the null hypothesis (H0) can be rejected, showing no substantial improvement in farmers' income. The low

sum of squares between groups (2.922), mean square (0.584), and F-statistic (2.426) further confirm that the observed income variations are statistically insignificant and cannot be attributed to these policies.

CONCLUSION

This study concludes that the liberal agricultural trade policies of the World Trade Organization (WTO), implemented since 1995, have severely undermined rice production and trade in Adamawa State, Nigeria. These policies have hindered the growth of the agricultural sector, particularly rice farming, by worsening farmers' incomes and pushing them deeper into poverty. The study highlights the negative impacts of these policies, largely driven by the interests of developed countries aiming to dominate the agricultural sectors of Nigeria and other developing nations. While this research provides significant insights, it is not conclusive and invites further intellectual discourse and exploration in related areas.

RECOMMENDATIONS

Based on the research findings, the following recommendations are proposed

- i. The study reveals that high costs for fertilizers, herbicides, and tractor services significantly hinder productivity (mean scores of 7.64 and 7.96, respectively). It is recommended that the government introduce subsidy programs or direct financial support to reduce input costs and offer mechanized services at subsidized rates. This would not only lower production costs but also encourage the adoption of modern farming techniques.
- ii. With a mean score of 7.84 indicating a lack of adequate credit facilities, there is a clear need for accessible and affordable financing options. Government and financial institutions should collaborate to establish low-interest or interest-free credit schemes specifically targeted at rice farmers. Enhanced access to credit would enable farmers to invest in better inputs and technology, thereby improving overall productivity.
- iii. The influx of subsidized imported rice (mean = 9.64) has undermined the competitiveness of domestically produced rice, while the low market demand (mean = 4.02, though rejected as a critical factor) indicates a disconnect between production and consumption. To break this dependency on imports, the government should consider imposing higher tariffs on imported rice and reinforcing border controls to reduce smuggling. Additionally, launching campaigns to promote the consumption of locally produced rice can help build a stronger domestic market, ensuring better prices and improved incomes for local farmers.
- iv. The lack of adequate extension services, reflected by a high mean score of 9.74, significantly limits farmers' access to technical support and modern farming practices. Investing in more agricultural extension

workers and enhancing training programs would enable rice farmers to adopt innovative techniques, improve crop management, and ultimately boost production efficiency.

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