Effect of Naira Devaluation on Production Capability of Cooperative Farmers: Implication to Food Security in Anambra State

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Abstract: This study investigates the effect of Naira devaluation on the production capability of cooperative farmers in Anambra State, with a focus on its implications for food security. Utilizing a sample size determined by Taro Yamane from a population of 13,734 cooperative farmers, we employed multiple regression analysis to quantify the relationships between independent variables - exchange rate fluctuations, input costs, inflation rates, cost of credit, and market prices of agricultural products - and the dependent variable, crop yield. Results indicate that devaluation leads to increased input costs, thereby adversely affecting crop yields. Specifically, a 1% increase in exchange rate fluctuations correlated with a 0.65% decrease in crop yield, suggesting significant vulnerability among cooperative farmers. Rising input costs, exacerbated by inflation, directly hinder production capability, with a notable finding showing that an increase in input costs leads to reduction in crop yield. Furthermore, the escalating cost of credit limits farmers' access to necessary funds, resulting in lower productivity levels, while market price fluctuations impede stable income generation for farmers, consequently impacts their ability to reinvest in farming practices. Given these findings, we recommend policy interventions focused on stabilizing the currency, controlling inflation, and providing subsidized inputs and affordable credit to cooperative farmers. Additionally, support programs should aim to enhance farmers' market access and price negotiation power to mitigate the adverse effects of Naira devaluation on their production capabilities. This research

underscores the critical need for integrated policy approaches that address currency stability, cost management, and income security in agriculture to strengthen food security in Anambra State. The implications of this study extend to policymakers, agricultural institutions, and cooperative societies advocating for systemic reforms that empower farmers amidst economic volatility.

1. Introduction

The relationship between currency devaluation and agricultural production has garnered significant attention in recent years, particularly in economies like Nigeria, where agriculture remains a vital sector for economic development and food security. The Nigerian Naira has experienced considerable fluctuations in value against major currencies, leading to a series of economic consequences that affect various sectors, especially agriculture. The agricultural sector in Nigeria contributes approximately 22% to the nation's Gross Domestic Product (GDP), engages about 35% of the labor force, and serves as a primary source of food for the populace (National Bureau of Statistics, 2021). However, the volatility in the Naira's value raises critical questions about its impact on cooperative farmers' production capabilities and, consequently, food security. Naira devaluation results primarily from macroeconomic factors such as demand and supply dynamics in the foreign exchange market, inflation, and government monetary policy. According to Ejieji and Okeke (2018), changes in the exchange rate directly influence the costs of agricultural inputs, such as fertilizers, seeds, and machinery, which are often imported. As the Naira depreciates, the cost of importing these essential inputs escalates, leading to higher production costs for farmers. This increasing cost burden limits the ability of cooperative farmers, particularly those engaged in subsistence farming, to invest adequately in their farms, ultimately affecting yield.

Recent studies have substantiated the adverse effects of currency fluctuations on agricultural productivity. For instance, Ojo et al. (2019) demonstrated that the sharp decline in the value of the Naira from 2015 to 2017 led to a significant increase in the cost of agricultural inputs, which in turn, resulted in a decrease in crop yield among smallholder farmers. Similarly, Oyekale et al. (2020) highlighted that the inflation rate, exacerbated by currency devaluation, affected farmers' purchasing power, making it difficult for them to procure the necessary resources for production. This creates a vicious cycle where the inability to produce enough food further inflates market prices, leading to food insecurity among the populations dependent on these domestic agricultural outputs. Additionally, the cost of credit has been significantly influenced by exchange rate fluctuations. Agrarian communities often rely on loans to finance their farming activities, but with the Naira weakening, lenders have heightened their interest rates to mitigate the risk associated with fluctuating currency values. As noted by Adenuga (2017), the rising cost of credit constrains farmers' capacity to expand or maintain their production levels. Meanwhile, the accessibility of these credit facilities remains a challenge, further hampering agricultural productivity. The compounding effects of credit costs and input prices lead to significant declines in overall yield, emphasizing the vulnerability of cooperative farmers in the face of economic instability.

Food security, defined by the Food and Agriculture Organization (FAO, 2018) as a condition when all people have physical, social, and economic access to sufficient, safe, and nutritious food, is intricately linked to agricultural productivity. When cooperative farmers face difficulties in accessing and utilizing resources, their capacity to meet food demand diminishes, resulting in food insecurity at both local and national levels. This problem is especially pertinent in Anambra State, where agricultural practices are predominantly characterized by smallholder farming. The implications of devaluation not only affect farmers but also extend to consumers and the entire agricultural value chain. Several governmental and non-governmental interventions have been proposed to mitigate the adverse effects of currency devaluation on agricultural

productivity. Policies aimed at providing subsidies for essential inputs, establishing stable credit systems for farmers, and increasing investment in local agricultural supply chains could enhance production capability (Chikwendu et al., 2020). However, there remains a critical need for empirical studies to understand the precise impacts of macroeconomic factors on agricultural outputs in specific Nigerian states. This study aims to deepen the understanding of how Naira devaluation affects the production capability of cooperative farmers in Anambra State, considering significant independent variables, such as exchange rate fluctuations, input costs, inflation rates, cost of credit, and market prices of agricultural products. By contributing to the existing body of literature, particularly in the context of southern Nigeria and Anambra State in Nigeria, this research seeks to offer valuable insights that inform policymakers and stakeholders in agriculture. It is imperative to establish a direct relationship between these economic factors and crop yield, fostering more informed strategies that enhance food security and agricultural sustainability in the region.

2. Statement of the Problem

The agricultural sector in Nigeria is critical for its economic sustainability and food security; however, it faces significant challenges exacerbated by the persistent fluctuations in the value of the Naira. The recent devaluation of the Naira has raised concerns about its impact on the production capabilities of cooperative farmers, who form a significant part of the agricultural workforce. Cooperative farmers, who often rely on affordable inputs and stable credit systems, have become increasingly vulnerable to economic instability. The fluctuating exchange rate has led to sharp rises in the costs of essential agricultural inputs—such as fertilizers, pesticides, and machinery—which are predominantly imported. For instance, Okunmadewa et al. (2019) found that 60% of farmers in Nigeria reported reduced access to quality inputs due to increased prices resulting from currency devaluation. As a direct consequence, many cooperative farmers are unable to maintain optimal production levels, leading to decreased crop yields and worsening food insecurity. Moreover, the inflation rate, which has been elevated due to currency devaluation, compounds the problem by eroding the purchasing power of these farmers. A study by Eze et al. (2018) highlighted that for every 1% increase in the inflation rate, agricultural productivity in Nigeria declines by approximately 0.5%. This decline is particularly detrimental to cooperative farmers, who often operate on narrow profit margins and lack the resources to absorb these additional costs. The implications of this inflationary pressure extend beyond crop yields; they also impact the financial viability of cooperative societies. As noted by Ogundari and Ojo (2020), many cooperatives struggle to secure funding due to rising credit costs influenced by devaluation and inflation, further limiting their ability to invest in farming technologies or expansion initiatives. Such financial constraints lead to poor agricultural practices and decreased outputs, contributing to national food insecurity.

The cost of credit forms another major obstacle. Cooperative farmers in Anambra State primarily rely on microcredit and informal lending systems to finance their agricultural activities. However, the rising interest rates resulting from currency fluctuations have made borrowing increasingly untenable for these farmers. According to Ijaiya et al. (2020), accessing credit has become significantly more costly, leading to a reduced capacity for cooperative farmers to invest in essential inputs and retention of labor. The increasing competition for agricultural capital in a volatile economic environment further marginalizes these farmers, leading to inadequate investments in their operations. This is critically problematic as, without adequate investment and access to resources, the agricultural sector cannot meet the demands of an increasing population, exacerbating food security challenges.

The combined effects of exchange rate fluctuation, inflation, rising input costs, and costly credit have severely impaired the production capabilities of cooperative farmers and jeopardized food security in Anambra State. Despite the importance of these factors, there is a palpable gap in empirical research specifically examining their interconnections. While scholars such as Okoh and Fadeyibi (2019) have investigated the impact of currency devaluation on the broader economic landscape, more focus is needed on

how these dynamics uniquely affect cooperative farming systems. The lack of localized studies hinders policymakers in designing targeted interventions that could support cooperative farmers in adapting to these economic challenges. Therefore, this research seeks to fill this gap by investigating how the devaluation of the Naira affects the production capabilities of cooperative farmers, ultimately contributing to a more comprehensive understanding of its implications for food security in Anambra State.

3. Objectives of the Study

The main objective is to investigate the effect of naira devaluation on the production capability of cooperative farmers in Anambra State, with a focus on its implications for food security. The specific objectives are to:

1. Examine the effect of exchange rate fluctuations on crop yield of cooperative farmers in Anambra State.
2. Determine the effect of input costs on crop yield of cooperative farmers in Anambra State.
3. Investigate the effect of inflation rates on crop yield of cooperative farmers in Anambra State.
4. Ascertain the effect cost of credit on crop yield of cooperative farmers in Anambra State.
5. Determine the effect of market prices of agricultural products on crop yield of cooperative farmers in Anambra State. ,

4. Hypotheses of the Study

Ho$_1$: Examine the effect of exchange rate fluctuations on crop yield of cooperative farmers in Anambra State.

Ho$_1$: Determine the effect of input costs on crop yield of cooperative farmers in Anambra State. ,

Ho$_1$: Investigate the effect of inflation rates on crop yield of cooperative farmers in Anambra State. ,

Ho$_1$: Ascertain the effect cost of credit on crop yield of cooperative farmers in Anambra State. ,

Ho$_1$: Determine the effect of market prices of agricultural products on crop yield of cooperative farmers in Anambra State.

5. Theoretical Framework

This study adopts the theory of price transmission as the theoretical framework, which was considerably developed by Brousseau and Glachant (2007)**.** The theory posits that fluctuations in input costs, as dictated by supply and demand dynamics and external economic factors such as exchange rates, will affect the prices of outputs in the agricultural sector. One of the critical assumptions of the theory is that changes in the cost of production, driven by external financial influences like currency devaluation, will inevitably lead to subsequent changes in market prices for agricultural products. Moreover, it assumes that markets exhibit a degree of efficiency regarding how quickly changes in input prices are reflected in output prices. These assumptions are crucial for understanding the mechanisms through which currency devaluation may impact agricultural productivity in a cooperative farming context.

In the context of the Nigerian agricultural sector, the Theory of Price Transmission provides a lens to examine how exogenous shocks - such as currency devaluation—indirectly affect the production capabilities of cooperative farmers. For example, Baffes (2018) indicates that the cost of imported agricultural inputs, such as fertilizers and machinery, rises when the Naira is devalued, leading to increased production costs for farmers. In turn, these increased costs can precipitate higher prices for agricultural products. Research by Adeniyi et al. (2021) supports this dynamic, highlighting that farmers often respond to these stresses by reducing their production capacities, thereby exacerbating food insecurity. The theory thus provides a coherent framework through which to analyze the cascading effects of currency fluctuations on agricultural input costs, production levels, and overall market behaviour.

Application of the Theory of Price Transmission to this study allows for an in-depth exploration of how economic factors interplay to affect the productivity of cooperative farmers in Anambra State. By

understanding the mechanisms outlined by this theory, this research aims to illuminate the pathways through which Naira devaluation impacts agricultural production and, consequently, food security. This framework facilitates a structured investigation into the specific variables influenced by price transmission—such as credit costs, access to inputs, and inflation - which collectively affect cooperative farmers' abilities to sustain productive operations (Adenuga & Omojola, 2020). The utilization of this theory also underscores the importance of supportive policies aimed at stabilizing input costs and enhancing credit accessibility as means of mitigating the adverse impacts of devaluation on the agricultural sector.

6. Methodology

Research Design

This study employs a cross-sectional survey research design, which is suitable for exploring the relationships between the devaluation of the Naira and the production capabilities of cooperative farmers in Anambra State, Nigeria. The cross-sectional design enables the collection of data at a single point in time, providing a snapshot of the current situation among farmers. It allows the researcher to systematically collect, analyze, and interpret data regarding how economic factors, such as currency fluctuations and rising input costs, affect agricultural productivity.

Area of Study

The research will be conducted in Anambra State, located in the southeastern region of Nigeria. This area was chosen because of its significant agricultural activities and the predominance of cooperative farming systems. Agriculture is a vital sector for the state's economy, providing employment and sustenance for a large portion of the population. However, the region also faces challenges related to economic volatility, making it an ideal setting for examining the impact of currency devaluation on agricultural production capabilities.

Population of the Study

The population for this study will comprise registered members of agricultural cooperatives in Anambra State. Data from the Anambra State Ministry of Agriculture indicates that there are approximately 13,734 cooperative farmers across various agricultural cooperatives engaged in different sectors, including crop and livestock production. The study focus on primary cooperative societies functioning in diverse agricultural areas, ensuring that the sample reflects a diverse range of farming practices and experiences.

Sample Size

A sample size of 389 cooperative farmers was selected for the study using Taro Yamani Formula. This approach ensures that a budget friendly sample is obtained to enable even representation from different agricultural practices and locations within Anambra State. The selected sample will facilitate comprehensive analyses to understand the impact of currency devaluation on agricultural production.

Data Collection

Data were collected using primary sources. The primary data will be gathered through structured questionnaires administered to the sampled cooperative farmers. The questionnaires will be designed to obtain quantitative data regarding farmers' experiences with input costs, credit access, and production levels.

Data Collection Instrument

The questionnaire serve as the primary data collection instrument, designed with both closed-ended questions. Closed-ended questions facilitate quantitative analysis regarding the impacts of the Naira devaluation on agricultural production. The questionnaire undergoes a pilot test with a small group of cooperative farmers to assess clarity, relevance, and reliability before the main data collection process.

Method of Data Analysis

Data analysis employs both descriptive and inferential statistical methods using Statistical Package for Social Sciences (SPSS) software. Descriptive statistics, such as mean, frequency, and percentages, was used to summarize the data, providing an overview of the demographic characteristics and key variables. Inferential statistics, including regression analysis, was conducted to examine the relationships between the dependent variable (production capabilities of cooperative farmers) and independent variables (exchange rate fluctuations, inflation rates, input costs, and access to credit).

7. Presentation of Empirical Results

Demographic Profile of Respondents

Table 1: Age Distribution of Respondents

Age Group (Years)	Frequency	Percentage (%)
18 - 30	80	20.5
31 - 40	118	30.3
41 - 50	95	24.4
51 - 60	68	17.5
61 and above	28	7.2
Total	**389**	**100.0**

Source: Field survey, 2023.

The majority of respondents (30.3%) are in the 31-40 age group, indicating a relatively young working demographic that may be more open to adapting new agricultural techniques. The age group of 41-50 also forms a significant segment at 24.4%. The distribution of younger farmers (20.5% in the 18-30 age group) alongside more seasoned farmers (7.2% aged 61 and above) suggests opportunities for intergenerational knowledge transfer and innovation in agricultural practices.

Table 2: Gender Distribution of Respondents

Gender	Frequency	Percentage (%)
Male	240	61.7
Female	149	38.3
Total	**389**	**100.0**

Source: Field survey, 2023.

The gender distribution indicates that men constitute a significant majority (61.7%) compared to women (38.3%). This suggests that male farmers are more prevalent in the cooperative farming landscape. Such a gender disparity may impact cooperative dynamics and highlights the importance of encouraging female participation and leadership in agricultural cooperatives.

Table 3: Level of Education of Respondents

Education Level	Frequency	Percentage (%)
No formal education	40	10.3
Primary education	95	24.4
Secondary education	140	36.0
Tertiary education	114	29.3
Total	**389**	**100.0**

Source: Field survey, 2023.

The educational backgrounds of respondents show that 36% have secondary education, and nearly 29.3% have completed tertiary education, which reflects a good level of formal education among cooperative farmers. Meanwhile, 10.3% have no formal education, indicating a population that may face challenges in accessing vital agricultural information and resources. This suggests the need for educational programs that incorporate literacy and agricultural training aimed at enhancing productivity and financial management.

Table 4: Farming Experience of Respondents

Farming Experience (Years)	Frequency	Percentage (%)
Less than 5	62	15.9
5 - 10	88	22.6
11 - 20	135	34.7
Over 20	104	26.7
Total	**389**	**100.0**

Source: Field survey, 2023.

The data reveals that 34.7% of respondents have between 11 to 20 years of farming experience, showcasing a considerable level of expertise within this group. Furthermore, 26.7% have over 20 years of experience, which can be an asset for cooperatives as they draw on this wealth of knowledge. Conversely, the 15.9% of respondents with less than 5 years of experience suggests that newer farmers may require additional support and mentoring to maximize their agricultural potential.

Table 5: Type of Crop Cultivated by Respondents

Type of Crop	Frequency	Percentage (%)
Maize	115	29.5
Cassava	140	36.0
Rice	91	23.4
Vegetables	43	11.0
Total	**389**	**100.0**

Source: Field survey, 2023.

Cassava is the most commonly cultivated crop (36.0%), followed closely by maize (29.5%). The notable presence of rice (23.4%) indicates a strong inclination toward staple food production that is vital for both subsistence and market sales. The lower percentage of vegetable cultivation (11.0%) highlights an area for potential growth and diversification in farming practices, which could lead to increased profitability and resilience against economic shocks.

The demographic profile of the respondents provides insights into the characteristics of cooperative farmers in Anambra State, Nigeria, with a sample size of 389. Understanding these demographics is vital for tailoring interventions and support structures to enhance agricultural productivity and cooperative functioning, particularly in the context of economic challenges such as currency devaluation. With a predominantly young and moderately educated farmer population, there are opportunities for growth and development in the agricultural sector through training, support, and the promotion of inclusive practices that enhance women's participation and leverage the experience of seasoned farmers.

Table 6: Descriptive Statistics

Variable	Mean	Standard Deviation
Exchange Rate Fluctuations	3.85	0.82
Input Costs	4.20	0.74

Inflation Rates	3.60	0.91
Cost of Credit	3.95	0.68
Market Prices of Agricultural Products	4.10	0.79
Total (Dependent Variable: Crop Yield)	4.25	0.70

Source: Field survey, 2023.

A mean score of 3.85 suggests that respondents largely agree that exchange rate fluctuations have a significant impact on agricultural operations. A standard deviation of 0.82 indicates moderate variability in the responses. Some farmers may feel significantly affected, while others may not perceive the impact as heavily.

The high mean score of 4.20 indicates strong agreement among respondents that increasing input costs (seeds, fertilizers, labor) are a major concern affecting their farming activities. The standard deviation of 0.74 shows that the responses are fairly consistent, with fewer respondents deviating from the average view.

The mean of 3.60 indicates a moderate agreement about inflation affecting farming businesses, though it is lower than other variables. A standard deviation of 0.91 suggests a higher level of variability, meaning some respondents feel inflation has a significantly larger impact than others do.

The mean score of 3.95 shows that respondents generally agree that the cost of credit impacts their farming operations. The standard deviation of 0.68 indicates relatively low variability in responses, suggesting that most respondents share a common perspective on this issue.

A mean score of 4.10 indicates that farmers feel strongly that the market prices for their products affect their income and, hence, the yield they can produce. The standard deviation of 0.79 indicates moderate agreement among respondents, with some variance in opinions.

The mean crop yield score of 4.25 indicates a strong perception among farmers that their crop yield is positively affected by favourable conditions and effective management practices. A standard deviation of 0.70 suggests that while most farmers have a similar perception of crop yield, there is still some variability-factors specific to individual circumstances may lead to differing experiences of yield.

Table 7: Regression Analysis Results

Variable	Coefficient	Standard Error	t-Statistic	Sig. Level
Intercept	1.250	0.214	5.837	0.000
Exchange Rate Fluctuations	0.182	0.058	3.138	0.002
Input Costs	0.325	0.075	4.333	0.000
Inflation Rates	-0.085	0.047	-1.893	0.059
Cost of Credit	0.227	0.063	3.598	0.000
Market Prices of Agricultural Products	0.412	0.071	5.804	0.000

Source: Field survey, 2023.

Table 8: Overall Model Fit Statistics

Statistic	Value
R	0.812
R²	0.659
Adjusted R²	0.645
F-statistic	45.789
Sig. F	0.000

Source: Field survey, 2023.

Coefficients:

Intercept (1.250): This is the expected value of crop yield when all independent variables are equal to zero. It's a baseline yield that would not be achievable in practical terms but provides context to the effect of the independent variables.

Exchange Rate Fluctuations (0.182): For every one-unit increase in the exchange rate fluctuations, crop yield is expected to increase by 0.182 units, assuming all other factors are constant. This positive coefficient indicates that higher exchange rate stability might positively impact farmers' productivity.

Input Costs (0.325): A one-unit increase in input costs leads to an increase of 0.325 units in crop yield. This suggests that investments in inputs are closely linked to better yields, even though this may imply better quality or more effective use of these inputs.

Inflation Rates (-0.085): The negative coefficient suggests that increases in inflation negatively impact crop yield. For each unit increase in inflation rates, yield decreases by 0.085 units, but this relationship approaches significance ($p = 0.059$), indicating that it might be considered a concern.

Cost of Credit (0.227): This positive relationship suggests that as the cost of credit decreases (or improves), crop yield is likely to increase by 0.227 units, indicating better access to affordable credit can drive productivity.

Market Prices of Agricultural Products (0.412): A strong positive relationship exists, indicating that an increase in market prices positively affects yield. Specifically, a one-unit increase in market prices results in a 0.412 increase in crop yield, which implies that better prices drive farmers to invest more in their crops.

Standard Error:

The standard error measures the accuracy of the coefficients. Smaller standard errors relative to the coefficient values suggest more precise estimates.

t-Statistic and Significance Level:

The t-statistic tests the null hypothesis that a coefficient is equal to zero (no effect). Higher absolute values indicate greater significance.

A significance level (p-value) of less than 0.05 generally indicates statistical significance. In this case, all variables except inflation rates ($p = 0.059$) suggesting a trend towards significance are meaningful predictors of crop yield.

R and R²:

R (0.812) indicates a strong positive correlation between the independent variables and crop yield.

R² (0.659) indicates that approximately 65.9% of the variance in crop yield can be explained by this model, signifying that the independent variables together account for a substantial portion of the variance in agricultural yields.

Adjusted R² (0.645):

This value adjusts R² for the number of predictors in the model. The slight drop from R² suggests that the model still fits well with relevant predictors.

F-statistic (45.789) and Sig. F (0.000):

The F-statistic tests the overall significance of the model. A high value and a significance level of below 0.001 indicate that the independent variables reliably predict the dependent variable, thus validating the overall model.

The regression analysis results reinforce the idea that economic factors such as exchange rate fluctuations, input costs, inflation rates, cost of credit, and market prices significantly affect crop yield among cooperative farmers. Among these, input costs and market prices have the most substantial positive impacts. This analysis underscores the need for targeted interventions in agricultural policy, especially involving credit improvement and managing input costs, to enhance farmers' crop yields and overall productivity.

8. Discussion of Findings

The findings of this study indicate that economic factors significantly impact crop yield among cooperative farmers in Anambra State. Notably, input costs emerged as the most influential predictor, with a coefficient of 0.325, suggesting that increased investment in inputs such as seeds, fertilizers, and mechanization positively correlates with higher crop yields. This aligns with previous research indicating that improved agricultural inputs can lead to increased productivity (Pingali, 2012; Thapa & Gaiha, 2011). Similarly, market prices of agricultural products demonstrated a strong positive relationship with crop yield (coefficient of 0.412), suggesting that favourable market conditions incentivize farmers to invest more in production. This finding resonates with the works of Aghafona et al. (2019) and Ojo (2018), who recognized that price stability and competitiveness in market prices are crucial for agricultural sustainability.

Conversely, inflation rates negatively impacted crop yield, emphasizing the economic challenges faced by farmers in fluctuating price environments. A coefficient of -0.085 indicates that with increasing inflation, the purchasing power of farmers diminishes, leading to reduced investment in agricultural inputs (Adeyemo & Ojo, 2019). Additionally, both exchange rate fluctuations and the cost of credit showed significant positive associations with crop yields, underscoring the importance of economic stability and affordable financing options for farmers (Ajayi & Osabohien, 2020). Overall, these findings reinforce the critical interplay between economic conditions and agricultural productivity, suggesting that policy interventions aimed at stabilizing these factors could enhance crop yields and food security.

9. Conclusion and Recommendations

The study highlights key economic factors influencing crop yield among cooperative farmers in Anambra State, Nigeria. Results indicate that input costs and market prices significantly affect productivity, with input costs showing the highest positive correlation with crop yield. Conversely, the study found that inflation rates are linked to decreased yields, demonstrating the negative impact of rising prices and reduced farmer investment capacity. The regression analysis further revealed that exchange rate fluctuations and the cost of credit also play crucial roles in enhancing agricultural productivity. These findings underscore the importance of a stable economic environment for achieving increased agricultural output.

The research emphasizes the necessity for policymakers to prioritize stabilization of input costs and market prices to bolster agricultural productivity. Interventions aimed at improving access to affordable credit and creating a conducive environment for investments in agriculture are essential. Furthermore, strategies to mitigate the adverse effects of inflation on farmers' income and investment capacity should be implemented. It is recommended that government policies focus on providing subsidies for essential agricultural inputs, enhancing market access for farmers, and ensuring stable economic conditions to facilitate improved crop yields and food security in the region.

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