Public expenditure and performance of the agricultural sector: evidence from Sri Lanka

Anojan Vickneswaran

Department of Accounting, Faculty of Management Studies and Commerce, University of Jaffna, Sri Lanka

**To whom correspondence should be addressed. Email: anojanv@univ.jfn.ac.lk*

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Abstract

This study investigates the influence of agricultural public expenditure on the performance of Sri Lanka's agriculture sector. Utilizing data sourced from the annual reports of the Ministry of Finance spanning 2011 to 2022, the findings reveal a significant and positive correlation between the recurrent expenditure of the Department of Agriculture (DoA) and the gross domestic production of the agriculture sector ($p < 0.01$). However, no statistical evidence supports a significant relationship between the Ministry of Agriculture's (MoA) capital expenditure and DoA and the performance of the agriculture sector. These results underscore the pivotal role of public recurrent agricultural expenditure in bolstering the agriculture sector's performance. Particularly noteworthy is the significant impact of DoA's recurrent expenditure on sectoral performance. The study advocates for increased budget allocation towards recurrent expenditure within the agriculture sector, especially emphasizing the importance of augmenting the DoA's recurrent expenditure to ensure enhanced performance and sustainability. Ultimately, the study underscores the critical importance of effective and efficient management of public funds in driving the agriculture sector's performance.

Keywords: *Agriculture sector, Capital expenditure, Recurrent expenditure, Sri Lanka.*

JEL Classification: Q14, H50, O13

INTRODUCTION

Agriculture, services, and industry are major economic sectors in Sri Lanka, contributing significantly to the country's gross domestic product (GDP). Sri Lanka, a developing country, has a long history of agricultural production. According to the Ministry of Finance's annual report for 2022, 16 economic activities fall under the agriculture sector. In 2022, the agriculture sector contributed LKR 906,505 million to Sri Lanka's GDP (Annual Report of Ministry of Finance, 2022 Provincial Data). However, this contribution is insufficient to meet the local demand for agricultural products, necessitating significant imports to fulfill the shortfall, leading to considerable cash outflow. Despite a substantial global demand for high-quality agricultural products, Sri Lanka struggles to supply and generate foreign income due to its low agricultural production levels.

The agriculture sector faces numerous challenges, which have intensified over the years. Major challenges include climate change, insufficient agricultural land, a growing population, biodiversity loss, and low investment in the sector (Denisa, 2023). Singh

(2011) notes that India's agriculture sector faces similar challenges in ensuring food and nutritional security for its large population sustainably, further strained by global food and energy price spikes, environmental degradation, and declining productivity growth. Many nations are developing and implementing sustainable policies and goals to improve and protect their agriculture sectors. Several UN Sustainable Development Goals (SDGs) focus on and support the agriculture sector in various ways (UN, SDGs 17, 2015).

In addition to these challenges, Sri Lanka's agriculture sector is also hindered by the budget deficit, policy-level challenges, the aftermath of COVID-19, and natural disasters. The budget deficit, a major economic issue in Sri Lanka, has worsened in recent decades. Consequently, the country is striving to address this deficit. The agriculture sector is being considered for reducing cash outflow by decreasing agricultural imports and increasing cash inflow by boosting agricultural exports. Furthermore, low-income individuals involved in agricultural production require financial support for their economic activities.

The government of Sri Lanka allocates and spends a considerable amount of public money on agricultural activities, mainly through the Ministry of Agriculture, the Department of Agriculture, and other relevant ministries. These expenditures are categorized under two major categories: recurrent and capital expenditures. In 2022, the recurrent and capital expenditures of the Ministry of Agriculture were LKR 66,896.575 million and LKR 28,254.437 million, respectively. The Department of Agriculture spent LKR 5,138.752 million on recurrent expenditure and LKR 1,267.022 million on capital expenditure in the same year. These figures indicate a significant allocation of public funds to agricultural activities. Despite this, agricultural production remains insufficient for local consumption. This raises the general question: What is the impact of public agricultural expenditure on the performance of the agriculture sector?

The study's main objective is to examine the impact of public agricultural expenditure on the performance of the agriculture sector in Sri Lanka. The secondary objectives of the study are:

- To examine the relationship between the Ministry of Agriculture's recurrent expenditure and the agriculture sector's performance.
- To find the relationship between the Department of Agriculture's recurrent expenditure and the agriculture sector's performance.
- To assess the relationship between the Ministry of Agriculture's capital expenditure and the agriculture sector's performance.
- To investigate the relationship between the Department of Agriculture's capital expenditure and the performance of the agriculture sector.

Wagner’s Law posits that as a country's economy develops, the public sector grows both in size and in the range of services it provides. In agriculture, this suggests that as an economy grows, the government tends to increase its expenditure on agricultural activities and related services, such as infrastructure development, research, and subsidies (Kuckuck, 2014).

Public Choice Theory focuses on how public expenditures are determined by the preferences and interests of various societal groups, including policymakers, interest groups, and voters. In the agriculture sector, public expenditure may be influenced by the lobbying efforts of agricultural producers, agribusinesses, and rural communities and broader political considerations (Boyne, 1998).

Investment-led Growth Theory suggests that public expenditure, particularly on infrastructure and human capital development, can stimulate economic growth and productivity improvements in agriculture. For example, investments in irrigation

systems, transportation networks, agricultural research, and extension services can enhance the sector's performance by improving market access, increasing agricultural productivity, and promoting technological innovation (Baldwin & Seghezza, 1996). According to these theories, economic growth is associated with public expenditure. It is important to find the relationship between public expenditure and sectoral performance, especially in the agriculture sector, for the country's sustainability, as this relationship may differ from country to country.

Many previous studies have focused on the relationship between public expenditure and the performance of agriculture and other sectors. Agricultural activities differ from country to country. Dahun & Utpal (2018) examined the relationship between expenditure on agricultural activities and economic growth. They found a positive and significant relationship between expenditure on crop farming and economic growth. Additionally, their results showed a negative impact of agricultural expenditure on forestry, dairy, and irrigation on economic growth.

Public policies play a significant role in public financial management and performance. Selvaraj (1993) concludes that public expenditure policies are crucial for the growth of the agriculture sector and that any reduction in agricultural public expenditure negatively affects the performance of the agriculture sector in India. Importantly, low-income individuals are predominantly involved in the agriculture sector, necessitating adequate financial support for successful operations and performance. Therefore, public policies regarding public finance play a significant role in the performance of the agriculture sector, especially in emerging economies.

Abdoulaye et al. (2021) examine the relationship between public expenditure and the growth of the agriculture sector, finding a positive and significant relationship between public expenditure and agricultural growth in Mali. Similarly, et al. (2020) find a positive and significant relationship between public agricultural expenditure and agricultural sector output in both the long and short term in Sub-Saharan Africa.

Research and development play a crucial role in the agriculture sector's performance. Singh & Jha (2015) highlight that agricultural public expenditure has increased since the mid-2000s, emphasizing the importance of prioritizing infrastructure and research investments in underdeveloped regions, particularly in eastern India. Redirecting public resources to address market failures is crucial. Research and development and infrastructure investments are vital for rural development, especially in backward areas. However, effective institutions are essential for realizing economic gains from increased capital expenditure.

Changes and challenges are unavoidable in the ever-changing environment. Every sector has faced numerous challenges over the years. Singh (2011) concludes that urbanization and changing consumer demands necessitate a shift towards environmentally friendly practices and quality assurance. While agriculture experienced significant growth in the 1980s and early 1990s, growth rates have since slowed, particularly in cereal production, hindering the achievement of a 4% agriculture gross domestic production growth target.

The government allocates public funds for various agricultural activities. Singh et al. (2021) examine the relationship between public expenditure and agricultural growth in Punjab from 1990/91 to 2019/20. They found that expenditure on crop husbandry, dairy development, and agricultural research positively influenced agricultural growth while spending on soil and water conservation and forestry and wildlife did not. The study concluded that agricultural GDP growth drove increased public expenditure. Still, the absence of reverse causality suggests suboptimal allocation, urging public sector agricultural spending to be reprioritized for better effectiveness.

Another study by Anderu & Omotayo (2020) examines the relationship between government spending and agricultural output growth in Nigeria from 1981 to 2018. The results indicate that government spending positively impacts agricultural output in the short and long term. This underscores the criticality of sustained government investment in the agricultural sector to ensure its growth. The study recommends enhancing agricultural policies, efficient loan allocation, and implementing sustainable fiscal measures to foster actual growth amidst challenges such as corruption and policy instability.

Fan & Zhang (2008) assess the impact of government expenditure on agricultural growth and rural poverty in Uganda. They find that spending on agricultural research and extension significantly boosts agricultural production and poverty reduction, followed by investments in rural roads. The level of education shows a positive effect, while health spending has minimal impact. Additional investments in the northern region are most effective in poverty reduction, while the western region yielded higher returns in agricultural productivity.

Comparing public expenditure and its performance among similar countries is vital for corrective actions and better future performance of each nation. Timothy et al. (2015) compare the impact of public expenditure on agricultural growth in South Africa and Zimbabwe. They find that both countries prioritize current expenditure over capital goods, which hinders growth. Non-agricultural spending affects agricultural growth differently based on economic conditions. The study suggests South Africa should increase total expenditure due to strong linkages. At the same time, with limited resources, Zimbabwe should avoid overly funding non-agricultural sectors to prevent higher opportunity costs in agriculture.

Financing is crucial for the performance of agricultural activities. Rita et al. (2020) investigate the relationship between Nigeria's government expenditure, agriculture, and economic growth. Their results show a positive correlation between recurrent expenditure, capital expenditure, commercial bank loans to agriculture, agricultural credit guarantee scheme loans, and economic growth. Government spending on agricultural activities and agricultural sector output significantly impacts economic growth. The study recommends empowering farmers with resources and implementing policies to enhance agricultural sector spending in Nigeria.

Chandio et al. (2016) examine the relationship between government agricultural expenditure and economic growth in Pakistan from 1983 to 2011. The results show a significant influence of agricultural output and government expenditure on economic growth. The study recommends increased government spending in agriculture to address challenges like inadequate funding and infrastructure, promoting agricultural productivity and overall economic growth.

Mustapha & Enilolobo (2019) explore the impact of public agriculture spending on agricultural output in sub-Saharan Africa (SSA), focusing on channels like credit, research, fertilizer, and energy budgets. Using the system generalized method of moments, they find a weak relationship between public spending and agriculture performance. The study suggests prioritizing infrastructure development and research and development over private fertilizer subsidies to improve agricultural sector policies and enhance food security in SSA.

Gong (2018) examines the impact of public expenditure and trade on agricultural productivity in China from 2004 to 2015. Using a semi-parametric production function, Gong finds that increased public expenditure and exports positively influence agricultural productivity, while imports show no significant effect. The study underscores the importance of supply-side reforms. It suggests policy implications for

enhancing agricultural productivity, emphasizing the role of public spending and export promotion in driving growth in China's agricultural sector.

Didi et al. (2016) investigated the influence of agricultural capital expenditure on economic performance in North Kalimantan Province, using panel data from 2004 to 2013 across five regions in Indonesia. Employing simultaneous equations models, they find a significant positive impact of agricultural capital expenditure on the gross regional domestic product, with a 42.86% increase for every one percent rise. Capital expenditure positively affects consumption, investment, and regional exports, suggesting broader economic benefits.

Based on the above studies, the following hypotheses are developed and tested in this study:

H1: There is a significant impact of recurrent agricultural public expenditure on the performance of the agriculture sector in Sri Lanka.

H1a: The recurrent expenditure of the Ministry of Agriculture significantly impacts the performance of the agriculture sector in Sri Lanka.

H1b: The recurrent expenditure of the Department of Agriculture significantly impacts the performance of the agriculture sector in Sri Lanka.

H2: Capital agricultural public expenditure significantly impacts the performance of the agriculture sector in Sri Lanka.

H2a: The capital expenditure of the Ministry of Agriculture significantly impacts the performance of the agriculture sector in Sri Lanka.

H2b: The Department of Agriculture's capital expenditure significantly impacts the performance of the agriculture sector in Sri Lanka.

METHODS

Conceptual framework

The total recurrent and capital expenditures of the Ministry of Agriculture and the Department of Agriculture are considered independent variables. At the same time, the agriculture sector's gross domestic product (GDP) is used to measure the sector's performance (dependent variable). Public agricultural expenditure is the major source of financing for the agriculture sector because most low-income individuals are involved in agricultural economic activities. Public agricultural expenditure is allocated by two major public units: the Ministry of Agriculture and the Department of Agriculture. Therefore, the recurrent and capital expenditures of these two respective public units are considered the independent variables in this study. Given that gross domestic product is the best measure of performance, the gross domestic product of the agriculture sector is considered the dependent variable in this study. The following figure illustrates the relationship between agricultural public expenditure and the agriculture sector performance, showing the independent and dependent variables of the study.

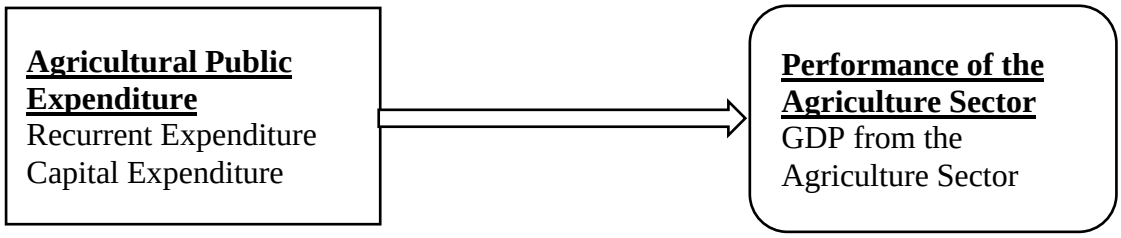

Figure 1. Conceptual framework

Data collection

This is a quantitative study. Data for the study are sourced from the annual reports of the Ministry of Finance from 2011 to 2022. These data are available under the "Head-wise Summary of Budgetary Provision and Expenditure (Schedule III)" section in the Ministry of Finance annual report.

Mode of analysis

Descriptive statistics, correlation analysis, and regression analysis are used in this study with the help of SPSS. Descriptive statistics reveal attributes of the tested variables in this study. Regression analysis answers the research question and tests the study's hypotheses.

Research model

Two statistical models are developed and tested in this study:

$GDPAS = \beta_0 + \beta_1 MACE + \beta_2 DACE + \varepsilon_i$ ..... (1)

$GDPAS = \beta_0 + \beta_1 MARE + \beta_2 DARE + \varepsilon_i$ ..... (2)

Where:
GDPAS: Gross Domestic Production of Agriculture Sector
MACE: Ministry of Agriculture Capital Expenditure
DACE: Department of Agriculture Capital Expenditure
MARE: Ministry of Agriculture Recurrent Expenditure
DARE: Department of Agriculture Recurrent Expenditure

RESULTS AND DISCUSSION

Descriptive

Descriptive statistics show that the minimum recurrent agricultural public expenditure of the Ministry of Agriculture and the Department of Agriculture is LKR 396.29 million and LKR 1,749.35 million, respectively, during the study's sample period. The minimum capital expenditure of these two public institutions is LKR 712.96 million and LKR 946.30 million, respectively, for 2011-2022. The maximum recurrent agricultural public expenditure of the Ministry of Agriculture and the Department of Agriculture is LKR 66,896.58 million and LKR 5,138.75 million, respectively, during the sample period. The maximum capital expenditure of these two public institutions is LKR 28,254.44 million and LKR 1,806.80 million, respectively, from 2011-2022 (Table 1).

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ministry of Agriculture Recurrent Expenditure	12	396.29	66,896.58	25,813.36	23,170.29
Ministry of Agriculture Capital Expenditure	12	712.96	28,254.44	6,428.29	8,740.76
Department of Agriculture Recurrent Expenditure	12	1,749.35	5,138.75	3,741.76	1,208.80
Department of Agriculture Capital Expenditure	12	946.30	1,806.80	1324.13	259.24
Gross Domestic Production of Agriculture Sector	12	569,954	950,451	821,019.50	162,641.74

The Ministry of Agriculture's average recurrent and capital expenditures are LKR 25,813.36 million and LKR 6,428.29 million, respectively. The Department of

Agriculture's average recurrent and capital expenditures are LKR 3,741.76 million and LKR 1,324.13 million, respectively. According to the mean values of both expenditures, the Ministry of Agriculture spends more than the Department of Agriculture in capital and recurrent expenditures. Moreover, the Ministry of Agriculture's recurrent expenditure is nearly seven times that of the Department of Agriculture's recurrent expenditure, and the Ministry of Agriculture's capital expenditure is nearly five times that of the Department of Agriculture's capital expenditure.

The average gross domestic production of the agriculture sector is LKR 821,019.50 million from 2011 to 2022. This is just over 22 times the total expenditure of the Ministry of Agriculture and the Department of Agriculture.

Correlation Analysis

Table 2. presents the results of the correlation analysis, which examines the relationships between different agricultural expenditures and the gross domestic product (GDP) of the agriculture sector in Sri Lanka. Pearson correlation coefficients were calculated to determine the strength and direction of these relationships. This analysis helps to identify which types of public agricultural expenditure have the most significant associations with the performance of the agriculture sector.

Table 2. Correlation

		GDP of AS
Ministry of Agriculture Recurrent Expenditure	Pearson Correlation	.542
	Sig. (2-tailed)	.069
	N	12
Ministry of Agriculture Capital Expenditure	Pearson Correlation	.420
	Sig. (2-tailed)	.174
	N	12
Department of Agriculture Recurrent Expenditure	Pearson Correlation	.956**
	Sig. (2-tailed)	.000
	N	12
Department of Agriculture Capital Expenditure	Pearson Correlation	.498
	Sig. (2-tailed)	.099
	N	12

The correlation analysis results show that all tested variables positively correlate with the gross domestic production of the agriculture sector (Table 2). Notably, the recurrent expenditure of the Department of Agriculture is positively and significantly associated with the gross domestic production of the agriculture sector. The Pearson correlation coefficients indicate varying degrees of positive correlation, with the highest significant correlation observed between the Department of Agriculture's recurrent expenditure and the gross domestic production of the agriculture sector ($r = .956$, $p < .001$).

Multicollinearity

Table 3 presents multicollinearity statistics, specifically tolerance and Variance Inflation Factor (VIF), for variables related to agricultural expenditure and their impact on the agricultural sector's Gross Domestic Product (GDP). Tolerance values below 0.1 or VIF values above 10 generally indicate multicollinearity. In this case, all variables have tolerable levels of multicollinearity, as their VIF values are below 5, suggesting they do not excessively inflate each other's variance.

Table 3. Collinearity statistics

Variable	Tolerance	VIF
Ministry of Agriculture Recurrent Expenditure	.393	2.545
Ministry of Agriculture Capital Expenditure	.491	2.037
Department of Agriculture Recurrent Expenditure	.537	1.864
Department of Agriculture Capital Expenditure	.552	1.813

Dependent Variable: Gross Domestic Production of Agriculture Sector

The table shows that all variables have acceptable levels of multicollinearity, as indicated by tolerance values above 0.1 and VIF values below 5. This suggests that multicollinearity is not a significant issue in the model, and the variables do not excessively inflate each other's variance. This allows for a more reliable interpretation of the impact of the Ministry of Agriculture and the Department of Agriculture's recurrent and capital expenditures on the GDP of the agriculture sector.

Regression analysis

Model 1.

Model 1's adjusted R square shows that over 89% of the gross domestic production of the agriculture sector depends on the recurrent expenditure of the Ministry of Agriculture and the Department of Agriculture (Table 4).

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.956[a]	.915	.896	52494.75665

a. Predictors: (Constant), Department of Agriculture Recurrent Expenditure, Ministry of Agriculture Recurrent Expenditure

Furthermore, Table 5 results show that the total recurrent expenditure of the Ministry and Department of Agriculture significantly and positively impacts the gross domestic production of the agriculture sector. Therefore, H1 is accepted in this study. Most low-income people are engaged in agricultural activities and need adequate finance to enhance their activities. They usually face limitations in accessing private finance due to their income level and financial position. Previous studies have shown a significant relationship between public expenditure and the performance of the agriculture sector (Abdoulaye et al., 2020; Rita et al., 2020; Chandio et al., 2016; Gong, 2018). Public finance, especially public agricultural recurrent expenditure, is more helpful as they need finance for their working capital for agricultural activities. Previous studies support this study's findings.

Table 5. ANOVA

Model		Sum of Squares	Mean Square	F	Sig.
1	Regression	266174417362.751	133087208681.375	48.295	.000[b]
	Residual	24801295286.249	2755699476.250		
	Total	290975712649.000			

a. Dependent Variable: Gross Domestic Production of Agriculture Sector

b. Predictors: (Constant), Department of Agriculture Recurrent Expenditure, Ministry of Agriculture Recurrent Expenditure

Table 6 shows that the recurrent expenditure of the Department of Agriculture significantly and positively impacts the agriculture sector's gross domestic product

(GDP). Therefore, H1b is accepted in this study. The Department of Agriculture's recurrent expenditure is mostly related to working capital for agricultural activities, which explains its significant relationship with agricultural sector performance.

This strong positive relationship indicates that for every unit increase in the Department's recurrent expenditure, the agriculture sector's GDP increases by approximately 129.308 units. The high Beta value of 0.961 further emphasizes the strong influence of this variable.

Table 6. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	338650.279	52836.021		6.409	.000
	Ministry of Agriculture Recurrent Expenditure	-.057	.833	-.008	-.068	.947
	Department of Agriculture Recurrent Expenditure	129.308	15.972	.961	8.096	.000

a. Dependent Variable: Gross Domestic Production of Agriculture Sector

The results show no statistical evidence for the relationship between the recurrent expenditure of the Ministry of Agriculture and the gross domestic product of the agriculture sector. Therefore, H1a is rejected in this study. This suggests that the Ministry's recurrent expenditure does not have a measurable effect on agricultural performance within the scope of this study.

Model 2.

Model 2's adjusted R square shows that nearly 24% of the gross domestic production of the agriculture sector depends on the capital expenditure of the Ministry of Agriculture and the Department of Agriculture.

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.614[a]	.377	.238	141946.78504

a. Predictors: (Constant), Department of Agriculture Capital Expenditure, Ministry of Agriculture Capital Expenditure

The results show that the total capital expenditure of the Ministry and Department of Agriculture does not significantly impact the gross domestic production of the agriculture sector. Therefore, H2 is rejected in this study. Natural resources such as land, sea, forest, rainwater, climate, and wind are major resources for agricultural activities, collectively known as natural capital. The major capital for agricultural activities is provided by nature. This study shows a positive relationship between public agricultural capital expenditure and agriculture sector performance, but it is not at a significant level. Timothy et al. (2015) conclude that South Africa and Zimbabwe prioritize current expenditure over capital goods, hindering growth. On the other hand, Didi et al. (2016) found a significant positive impact of agricultural capital expenditure on gross regional domestic product in Indonesia.

Table 8. ANOVA

Model		Sum of Squares	Mean Square	F	Sig.
2	Regression	109635704594.212	54817852297.106	2.721	.119[b]
	Residual	181340008054.788	20148889783.865		
	Total	290975712649.000			

a. Dependent Variable: Gross Domestic Production of Agriculture Sector
b. Predictors: (Constant), Department of Agriculture Capital Expenditure, Ministry of Agriculture Capital Expenditure

Furthermore, Table 9 shows that the Ministry of Agriculture's capital expenditure positively impacts the agriculture sector's gross domestic production, but it is not significant (Sig. 0.206). Therefore, H2a is rejected in this study. Similarly, the capital expenditure of the Department of Agriculture positively impacts the gross domestic production of the agriculture sector, but it is also not at a significant level ($p > 0.05$). Therefore, H2b is rejected in this study.

Table 9. Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	402696.428	222431.280		1.810	.104
Ministry of Agriculture Capital Expenditure	6.732	4.937	.362	1.364	.206
Department of Agriculture Capital Expenditure	283.237	166.472	.451	1.701	.123

a. Dependent Variable: Gross Domestic Production of Agriculture Sector

Despite the lack of statistical significance, the positive coefficients indicate a trend that capital expenditures from both the Ministry and the Department of Agriculture are positively associated with the sector's GDP. While not conclusive in this study, this trend suggests that continued investment might still be beneficial.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The agriculture sector contributes considerably to the gross domestic product (GDP) of Sri Lanka, being the third major contributing sector in 2022. Adequate financing is crucial for the performance of all economic activities, and the government of Sri Lanka allocates a considerable amount to the agriculture sector in every budget. The Ministry of Agriculture and the Department of Agriculture play vital roles in the performance of the agriculture sector. The results of this study indicate that public agricultural recurrent expenditure has a greater impact on the performance of the agriculture sector than public agricultural capital expenditure. Moreover, public recurrent agricultural expenditure significantly impacts the performance of the agriculture sector. Specifically, the recurrent expenditure of the Department of Agriculture significantly and positively influences the sector's performance.

While public agricultural capital expenditure positively impacts the agriculture sector's performance, it is not at a significant level. The capital expenditure of the Department of Agriculture has a more substantial impact on the sector's performance compared to the capital expenditure of the Ministry of Agriculture. Effective and

proportionate public fund allocation for recurrent and capital agricultural expenditures will likely boost the sector's performance. The study suggests that public recurrent expenditure significantly impacts the agriculture sector, particularly the recurrent expenditure of the Department of Agriculture. Additionally, most low-income individuals are engaged in agricultural activities, so optimal allocation of public funds for recurrent and capital agricultural activities can help reduce poverty and unemployment, enhancing rural development, especially in developing countries like Sri Lanka.

The primary independent variables of this study are public agricultural recurrent and capital expenditures, marking a key limitation. The exclusion of private investment is a significant omission. The study's scope spans only 12 years, restricting its temporal breadth. Furthermore, the gross domestic production of the agriculture sector is influenced by multifaceted factors such as climate, technology, poverty, population dynamics, insufficient natural resources, and biodiversity loss, which were not incorporated into the statistical models of the study.

Recommendations

This area of research holds pivotal importance in fostering sustainability, particularly in alleviating poverty and safeguarding the environment. Its contributions are invaluable to both present and future generations. However, this study's scope is confined to a single country, warranting future research to encompass similar nations to discern broader trends in the tested variables and facilitate the generalization of findings within comparable contexts. Extending the duration of data collection could yield deeper insights. Comparative studies involving developed and developing nations could offer invaluable insights, enabling a nuanced understanding of the relationships between the variables under scrutiny. Such findings can potentially inform more effective public policies within the agricultural sector, thereby enhancing its overall performance.

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