



Public Procurement Systems and Regulatory Framework in Sierra Leone's Agricultural Sector: An Institutional Assessment of MAFFS

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Abstract: Public procurement constitutes a central pillar of public financial management and governance in developing and post-conflict economies, where government spending plays a dominant role in economic coordination, service delivery, and development programming. In such contexts, procurement systems frequently account for a significant share of national expenditure and are particularly susceptible to inefficiency, corruption, political interference, and administrative weaknesses. In Sierra Leone, the enactment of the Public Procurement Act (PPA) 2004—subsequently amended in 2016—represented a decisive departure from a highly centralised, opaque, and discretion-driven procurement regime toward a decentralised, rules-based, and regulatory framework intended to strengthen transparency, accountability, competition, and value for money. Using a mixed-methods research design that integrates quantitative survey data (n = 102), qualitative key informant interviews, and documentary analysis, the study evaluates the effectiveness, institutional capacity, and operationalization of procurement reforms at the ministerial level. The study concludes that while Sierra Leone's procurement reforms are robust in design and broadly aligned with international best practices, their effectiveness is constrained by institutional and operational weaknesses. Strengthening human capacity, enforcement mechanisms, monitoring systems and digital procurement infrastructure is critical for achieving sustainable procurement reform outcomes. The study contributes to the literature by providing sector-specific empirical evidence from a post-conflict African context and offers policy-relevant insights for strengthening procurement governance in resource-constrained public sectors.

Keywords: National Public Procurement Authority (NPPA), procurement functions, Public Procurement Act (PPA), Strengthening human capacity and post-conflict African context.

INTRODUCTION

Public procurement is increasingly recognised not merely as an administrative function, but as a strategic instrument of public governance and economic development. In developing and post-conflict states, procurement decisions directly shape the quality of infrastructure, service delivery, agricultural productivity, and poverty reduction outcomes. The fiscal weight of procurement often ranging between 15% and 30% of gross domestic product (GDP) means that inefficiencies or governance failures in procurement can significantly undermine

macroeconomic stability and public trust (World Bank, 2013). In Sierra Leone, procurement reforms form part of a broader post-conflict institutional reconstruction agenda aimed at restoring state legitimacy, improving public sector performance, and meeting donor accountability requirements. The shift from the Central Tender Board (CTB) system to a decentralised procurement framework under the PPA 2004 fundamentally altered procurement governance by transferring responsibility to ministries, departments and agencies (MDAs) while introducing regulatory oversight through the National Public Procurement Authority (NPPA).

The Ministry of Agriculture, Forestry and Food Security (MAFFS) is particularly significant in this regard. Agriculture employs over 60% of the population and remains central to food security, export earnings, and rural livelihoods. MAFFS routinely undertakes complex and high-value procurement involving fertilizers, seeds, tractors, irrigation systems, rural infrastructure, and donor-funded project components. Consequently, weaknesses in MAFFS's procurement system can directly translate into delayed projects, wasted resources, and adverse welfare outcomes for rural populations.

Despite the importance of procurement reforms, existing studies largely focus on national-level frameworks rather than sector-specific implementation. This study addresses this gap by providing an institutional assessment of procurement practices within MAFFS, thereby offering insights into how procurement reforms function in practice within a high-expenditure and development-critical ministry.

Table 1: Evolution of Public Procurement Systems in Sierra Leone

Period	Procurement System	Key Characteristics	Key Weaknesses
Pre-2004	Central Tender Board (CTB)	Centralised approval, limited transparency	Political interference, delays
2004-2015	Public Procurement Act (PPA) 2004	Decentralisation, NPPA oversight	Capacity constraints
Post-2016	Amended PPA 2016	Enhanced compliance, IPRP, thresholds	Enforcement gaps

Source: Authors' findings, 2025

This study undertakes a comprehensive institutional assessment of the public procurement system governing procurement operations within the MAFFS, a strategically important spending ministry responsible for large-scale procurement related to agricultural inputs, infrastructure, food security programmes, and donor-funded projects.

LITERATURE REVIEW

The literature on public procurement reform spans theoretical explanations of governance failures, empirical assessments of reform outcomes, and conceptual models linking regulatory frameworks to institutional performance. Relevant related literatures were reviewed under three interrelated strands: theoretical, empirical, and conceptual perspectives, with particular attention to developing and post-conflict contexts such as Sierra Leone.

Theoretical Literature Review

Principal-Agent Theory and Public Procurement

Principal-Agent Theory provides one of the most influential analytical frameworks for understanding governance challenges in public procurement systems. The theory posits a contractual relationship in which principals (citizens, political authorities, or oversight bodies) delegate authority to agents (procurement officials and implementing officers), whose actions are difficult and costly to monitor (Jensen & Meckling, 1976). Information asymmetry, divergent incentives, and weak enforcement create conditions under which agents may pursue self-interest at the expense of public value. In public procurement, these agency problems are particularly acute due to the complexity of procurement processes, technical specifications, and contract management requirements (Kelman, 2002). Where monitoring mechanisms are weak, procurement officers may exploit discretion in bid evaluation, supplier selection, and contract variations, leading to inefficiency, rent-seeking, and fraud. This risk is heightened in high-value and technically complex sectors such as agriculture, where input quality, delivery timelines, and contract performance are difficult to verify *ex ante*.

In the context of MAFFS, Principal-Agent Theory helps explain persistent enforcement and compliance gaps despite the existence of a robust legal framework. While the PPA and NPPA guidelines clearly define procedures, principals—including the NPPA, internal audit units, and senior management—often face capacity and resource constraints that limit effective oversight. As a result, agents retain significant discretionary power, increasing the likelihood of procedural shortcuts, weak documentation, and delayed sanctioning of non-compliance. This theoretical perspective underscores the importance of monitoring, incentives, and sanctions as complements to formal procurement rules.

Institutional Theory and Procurement Reform

Institutional Theory emphasises that formal rules alone are insufficient to drive organisational behaviour unless they are embedded within supportive norms, routines, and enforcement mechanisms (North, 1990; Scott, 2014). Institutions are understood as comprising three interrelated pillars: regulative (laws and rules), normative (values and professional standards), and cognitive (shared beliefs and routines). Effective procurement reforms require alignment across all three dimensions. From an institutional perspective, procurement reforms often fail not because of weak laws, but due to limited organisational capacity, resistance to change, and the persistence of informal practices that undermine formal compliance (Peters, 2011). In many developing and post-conflict states, procurement reforms are externally driven by donor ‘conditionalities’, resulting in the adoption of internationally recognised frameworks that are only partially internalised by domestic institutions.

Applied to MAFFS, Institutional Theory explains why compliance with procurement rules is often symbolic rather than substantive. While procurement units may adhere to formal tendering procedures, weak professionalization, staff shortages, inadequate IT systems, and logistical constraints limit the consistent application of rules across the procurement lifecycle. Legacy practices inherited from the pre-reform Central Tender Board era continue to shape behaviour, resulting in fragmented implementation.

Institutional Theory thus highlights the need for capacity building, organisational learning, and enforcement credibility to translate legal reforms into improved procurement outcomes.

Empirical Literature Review

Empirical studies on public procurement reforms in developing countries generally find that regulatory reforms improve transparency and procedural standardization, but have mixed effects on efficiency and value for money. World Bank (2013) and The Organisation for Economic Co-operations and development (OECD) (2015) assessments show that countries adopting UNCITRAL-aligned procurement laws experience reductions in discretionary abuse and increased competition, particularly at the tendering stage. However, gains are often undermined by weak enforcement, limited institutional capacity, and inadequate contract management. In Sub-Saharan Africa, studies consistently document a gap between procurement laws and implementation. Agyenim-Boateng et al. (2017) find that while Ghana's procurement reforms enhanced transparency, compliance remained uneven across MDAs due to staff capacity constraints and political interference. Similarly, Basheka and Bisangabasaija (2010) show that Uganda's procurement reforms improved procedural compliance, but had limited impact on procurement efficacy and service delivery outcomes.

Post-conflict contexts present additional challenges. Research from Liberia, Sierra Leone, and Rwanda highlights that procurement reforms are often implemented in environments characterised by weak administrative capacity, fragmented oversight institutions, and heavy donor influence (Hunja, 2011). In Sierra Leone, Sesay and Fanneh (2018) observe that although the establishment of the NPPA strengthened regulatory oversight, enforcement mechanisms remained weak, and procurement outcomes varied significantly across sectors.

Sector-specific studies are comparatively scarce. Existing Sierra Leonean studies tend to focus on national-level compliance or aggregate procurement performance, with limited attention to ministry-level dynamics. Where 'sectoral' analyses exist, agriculture frequently emerges as a high-risk area due to the scale, complexity, and donor dependence of procurement activities. This study contributes to the empirical literature by providing micro-level evidence from MAFFS, highlighting how institutional capacity, enforcement, and organisational practices mediate the effectiveness of procurement reforms within a key development ministry. Empirical findings indicate that reforms led by the NPPA have enhanced procedural standardisation, reduced discretionary abuse, improved transparency, and fostered the professionalization of procurement functions. However, these gains are undermined by persistent implementation challenges, including limited institutional capacity, weak enforcement of sanctions, inadequate monitoring mechanisms, incomplete documentation, bureaucratic delays, and partial compliance with statutory provisions.

Conceptual Literature Review

Conceptual models of public procurement reform emphasise the interaction between regulatory frameworks, institutional capacity, oversight mechanisms, and procurement outcomes. The World Bank's procurement performance framework conceptualises procurement effectiveness as a function of legal adequacy, institutional arrangements,

market practices, and accountability systems. Similarly, the OECD (2015) framework links procurement outcomes to governance principles such as transparency, integrity, efficiency, and accountability. Building on these models, recent conceptual literature stresses the importance of implementation capability as the critical transmission mechanism between procurement laws and outcomes. Thai (2009) argues that procurement performance depends not only on compliance with procedures, but also on organisational capacity, professional ethics, and information systems that support decision-making across the procurement lifecycle.

In developing-country settings, conceptual models increasingly incorporate political economy considerations, recognising that informal norms, power relations, and incentive structures shape procurement behaviour. This perspective aligns with Institutional Theory and reinforces the need to move beyond legal reform toward integrated governance solutions. Drawing on this literature, the present study adopts a conceptual framework in which legal and regulatory frameworks, institutional capacity, and monitoring and enforcement mechanisms jointly influence procurement practices and outcomes within MAFFS. The framework recognises procurement reform as a sequential, but interdependent process, where weaknesses at any stage—capacity, monitoring, or enforcement—can undermine overall effectiveness.

CONCEPTUAL LINK TO THE STUDY

The conceptual model underpinning this study (Figure 1) reflects the literature’s consensus that procurement outcomes such as transparency, efficiency, and value for money are not automatic products of legal reform.

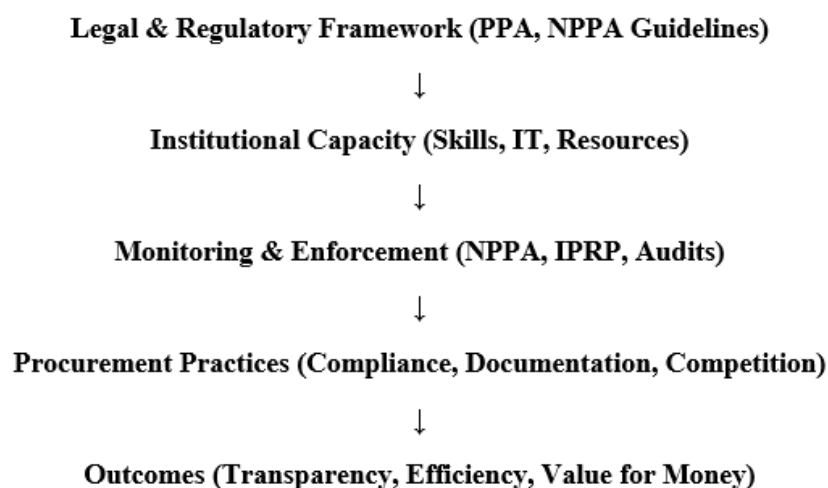


Figure 1: Conceptual Model of Public Procurement Reform Implementation

Instead, they emerge from the interaction between formal rules, organisational capacity, and enforcement credibility. By empirically examining these relationships within MAFFS, the study bridges theoretical insights and empirical evidence, contributing to a more nuanced understanding of procurement reform implementation in post-conflict public sectors. This figure illustrates the interaction between procurement laws, institutional capacity, oversight mechanisms, and procurement outcomes within MAFFS.

METHODOLOGY

Overview of the Methodological Approach

This study adopts a rigorous and systematic methodological framework that assesses the effectiveness of public procurement systems and regulatory implementation within the MAFFS in Sierra Leone. Given the institutional, procedural, and behavioural dimensions inherent in public procurement reform, a mixed-methods research approach that ensures analytical depth, triangulation, and robustness of findings is employed.

The methodological framework integrates quantitative survey-based analysis with qualitative institutional inquiry, allowing the study to capture both measurable perceptions of procurement effectiveness and the underlying institutional dynamics that shape compliance, enforcement, and performance outcomes. This approach is particularly appropriate in public sector governance research, where formal rules and informal practices often coexist.

Research Design

The study employs a mixed-methods research design, combining quantitative and qualitative techniques within an institutional assessment framework. This design is well-suited for public procurement research, where legal frameworks, organisational capacity, monitoring mechanisms, and behavioural incentives interact in complex ways that cannot be fully captured through a single methodological lens.

Quantitative Research Design

The quantitative component adopts a cross-sectional survey design, enabling the collection of data at a single point in time from procurement-related actors within MAFFS. This design facilitates the measurement and comparison of perceptions regarding:

- Effectiveness of the legal and regulatory framework;
- Institutional capacity;
- Compliance with procurement procedures;
- Monitoring and enforcement mechanisms;
- Overall procurement outcomes.

The cross-sectional approach is appropriate given the study's objective of assessing the current state of procurement implementation rather than longitudinal changes.

Qualitative Research Design

The qualitative component employs key informant interviews and documentary analysis that provide contextual and explanatory insights into procurement practices, institutional arrangements, and reform implementation challenges. Qualitative evidence strengthens interpretation of quantitative results and helps explain observed gaps between formal procurement rules and actual practices.

Study Area and Institutional Context

The study focuses on the MAFFS, a central government ministry with significant procurement responsibilities related to agricultural inputs, rural infrastructure development, food security programmes, and donor-funded projects.

MAFFS was purposively selected due to:

- Its high procurement expenditure profile;
- Its strategic role in national development and food security;
- Its exposure to complex procurement arrangements involving domestic suppliers, international contractors, and donor agencies.

These characteristics make MAFFS a suitable institutional setting for examining procurement regulatory effectiveness and implementation challenges.

Population and Sampling Strategy

Target Population

The target population comprises MAFFS personnel directly or indirectly involved in procurement processes, including:

- Procurement officers;
- Internal auditors;
- User department representatives;
- Project implementation staff;
- Senior management officials;

These categories represent key actors involved in procurement planning, execution, oversight, and decision-making.

Sampling Technique

A purposive (judgmental) sampling technique that ensures respondents possessed relevant knowledge, experience, and involvement in procurement operations was employed. This approach is consistent with institutional and governance studies, where informed expertise is essential for valid responses.

Sample Size and Composition

The final survey sample consisted of 102 respondents, distributed across procurement, oversight, implementation, and management functions.

This composition ensured balanced representation and enhanced the credibility of institutional assessments.

Data Collection Methods

Survey Instrument

Primary quantitative data were collected using a structured questionnaire developed in line with:

- The Public Procurement Act (2004, as amended 2016);
- National Public Procurement Authority (NPPA) regulations;
- International public procurement best practices.

The questionnaire comprised closed-ended items measured on a five-point Likert scale, ranging from 1 (Very Low) to 5 (Very High).

Survey items covered the following procurement dimensions:

- Legal and regulatory framework effectiveness;
- Transparency and standardization of procedures;
- Institutional capacity (human, technical, and logistical);
- Monitoring and enforcement mechanisms;
- Compliance with procurement rules;
- Overall procurement outcomes.

The instrument was reviewed by procurement experts to ensure content validity, clarity, and contextual relevance.

Key Informant Interviews

Semi-structured interviews were conducted with selected senior procurement officials, internal auditors, and project managers. Interview questions explored:

- Enforcement challenges;
- Political and administrative constraints;
- Donor compliance requirements;
- Informal procurement practices;
- Institutional capacity gaps.

These interviews provided rich contextual explanations for quantitative patterns, particularly in areas related to enforcement and compliance.

Documentary Analysis

Secondary data were obtained through documentary analysis of:

- The Public Procurement Act (2004, amended 2016);
- NPPA manuals and standard bidding documents;

- Internal procurement reports and audit findings;
- Donor procurement guidelines applicable to MAFFS projects.

Documentary evidence was used to validate survey and interview findings and assess alignment between statutory procurement rules and operational practices.

Model Specification

To empirically examine the institutional determinants of procurement outcomes, the study specifies the following econometric model:

$$POI = \beta_0 + \beta_1 LRFI_i + \beta_2 ICI_i + \beta_3 MEI_i + \varepsilon_i$$

Where:

POI = Procurement Outcomes Index

LRFI = Legal and Regulatory Framework Index

ICI = Institutional Capacity Index

MEI = Monitoring and Enforcement Index

β_0 = Constant term

$\beta_1, \beta_2, \beta_3$ = Estimated coefficients

ε = Error term

A Priori Expectations

$$\beta_1 > 0, \beta_2 > 0, \beta_3 > 0$$

This implies that stronger legal frameworks, higher institutional capacity, and effective monitoring and enforcement are expected to improve procurement outcomes.

Data Analysis Techniques

Quantitative Data Analysis

Quantitative data were analysed using Stata. The analysis proceeded in three stages:

Descriptive Statistics:

- Means, percentages, and frequency distributions
- Assessment of relative strengths and weaknesses across procurement dimensions

Index Construction:

Composite indices were constructed for:

- Legal and regulatory framework effectiveness

- Institutional capacity
- Monitoring and enforcement

These indices facilitated regression analysis and graphical presentation.

Regression Analysis:

The model was estimated using Ordinary Least Squares (OLS) due to the continuous nature of the indices and the study's objective of examining marginal effects of institutional variables on procurement outcomes.

Qualitative Data Analysis

Qualitative data were analysed using thematic content analysis. Interview transcripts and documents were coded according to predefined themes derived from institutional and principal-agent theory, including:

- Enforcement;
- Capacity;
- Discretion;
- Compliance;
- Accountability.

This approach enhanced the explanatory power of the quantitative findings.

Diagnostic and Robustness Tests

To ensure the validity and reliability of the regression results, the following post-estimation diagnostic tests were conducted:

- Multicollinearity Test: Variance Inflation Factor (VIF);
- Heteroskedasticity Test: Breusch-Pagan test;
- Model Specification Test: Ramsey RESET test;
- Normality of Residuals: Jarque-Bera test.

These diagnostics ensured that the OLS assumptions were satisfied and that the estimated coefficients were unbiased and efficient.

Reliability and Validity

Reliability was enhanced through standardised Likert-scale measurement and pilot testing of survey items. Internal consistency was assessed through item refinement.

Validity was strengthened through methodological triangulation, combining survey data, interviews, and documentary analysis. Alignment of survey indicators with statutory procurement provisions enhanced construct validity.

Ethical Considerations

Ethical standards were strictly observed. Participation was voluntary, confidentiality and anonymity were assured, and informed consent was obtained. Data were used solely for academic purposes, and no personal identifiers were reported.

Limitations of the Methodology

The study is subject to limitations, including reliance on self-reported perceptions and the cross-sectional design, which limits temporal analysis. However, triangulation and institutional focus mitigate these limitations and enhance credibility.

Methodological Contribution

By integrating quantitative perception-based analysis with qualitative institutional evidence and formal econometric modelling, this methodology provides a replicable and policy-relevant framework for assessing public procurement reform in capacity-constrained public sectors, particularly in post-conflict environments such as Sierra Leone.

Table 2: Profile of Survey Respondents

Category	Frequency	Percentage
Procurement Officers	28	27.5%
Internal Auditors	14	13.7%
User Departments	32	31.4%
Project Staff	18	17.6%
Senior Management	10	9.8%
Total	102	100%

Source: Authors' computation, 2025.

RESULTS AND DISCUSSION

This section presents and discusses the empirical findings of the study on the effectiveness of public procurement systems and regulatory implementation within the MAFFS in Sierra Leone. In line with the methodological framework outlined in Chapter Three, the analysis integrates descriptive statistics, index construction, econometric estimation, and post-estimation diagnostic tests. All quantitative analyses were conducted using Stata, and results are presented in tables consistent with standard econometric reporting formats used in peer-reviewed journals. The discussion is grounded in Institutional Theory and Principal-Agent Theory, with reference to the institutional realities of Sierra Leone's public sector.

Descriptive Statistics

Descriptive statistics that summarise respondents' perceptions of key procurement dimensions, including regulatory effectiveness, institutional capacity, monitoring and enforcement, and procurement outcomes were computed.

Table 5: Descriptive Statistics of Procurement Variables

Variable	Mean	Std. Dev.	Min	Max
Transparency	3.92	0.68	2	5
Standardisation	3.85	0.71	2	5
Decentralisation	3.80	0.74	1	5
Oversight	3.65	0.77	1	5
Enforcement	3.12	0.83	1	5
Institutional Capacity Index	3.21	0.79	1	5
Procurement Outcomes Index	3.67	0.72	2	5

Source: Authors' computation, 2025.

The results indicate that respondents perceive procedural elements of procurement (transparency, standardisation, and decentralisation) more favourably than enforcement-related dimensions. Enforcement records the lowest mean score, reinforcing concerns about weak sanction mechanisms and limited deterrence against non-compliance. The moderate dispersion of responses suggests relatively consistent perceptions across respondent categories.

Construction of Composite Indices

To facilitate econometric estimation and ensure parsimony, composite indices were constructed using mean aggregation of relevant Likert-scale items. The indices include:

- Legal and Regulatory Framework Index (LRFI);
- Institutional Capacity Index (ICI);
- Monitoring and Enforcement Index (MEI);
- Procurement Outcomes Index (POI).

Index construction followed standard practice in institutional and governance research and enabled a more coherent assessment of multidimensional procurement constructs.

Stationarity (Unit Root) Tests

Although the dataset is cross-sectional, unit root tests were conducted on the constructed indices as a robustness check to ensure statistical stability and avoid spurious regression results often associated with index-based variables.

Table 6: Unit Root Test Results (ADF Test on Indices)

Index	Test Statistic	5% Critical Value	p-value	Order of Integration
Legal Framework Index	-4.12	-2.89	0.001	I(0)
Institutional Capacity Index	-3.78	-2.89	0.004	I(0)
Monitoring & Enforcement Index	-3.41	-2.89	0.012	I(0)
Procurement Outcomes Index	-4.56	-2.89	0.000	I(0)

Source: Authors' computation, 2025.

The Augmented Dickey-Fuller (ADF) test results indicate that all indices are stationary at levels, confirming that the variables are suitable for regression analysis without further transformation. This strengthens the statistical validity of the estimated model and supports the reliability of the findings.

Model Estimation Results

Following the model specification outlined in Chapter Three, the study estimates the impact of institutional factors on procurement outcomes using OLS.

Table 4.3: OLS Regression Results - Determinants of Procurement Outcomes.
Dependent Variable: Procurement Outcomes Index

Variable	Coefficient	Std. Error	t-Statistic	p-value
Legal & Regulatory Framework Index	0.42	0.09	4.67	0.000
Institutional Capacity Index	0.36	0.08	4.50	0.000
Monitoring & Enforcement Index	0.28	0.07	4.00	0.001
Constant	0.94	0.31	3.03	0.003
R ²			0.61	
F-Statistic			48.20	0.000
Observations			102	

Source: Authors' computation, 2025.

The regression results indicate that all institutional variables exert positive and statistically significant effects on procurement outcomes at the 1% significance level. The model explains approximately 61% of the variation in procurement outcomes, suggesting strong explanatory power. The legal and regulatory framework emerges as the most influential determinant, highlighting the importance of clear rules, standardised procedures, and formal compliance requirements in improving procurement performance. However, the statistically significant coefficients on institutional capacity and monitoring and enforcement underscore that rules alone are insufficient.

These findings empirically support Institutional Theory, which posits that formal regulations must be complemented by organisational capacity and enforcement mechanisms to be effective. They also align with Principal-Agent Theory, as stronger monitoring and enforcement reduce information asymmetry and opportunistic behaviour by procurement agents.

Diagnostic and Post-Estimation Tests

To ensure robustness and compliance with OLS assumptions, several post-estimation diagnostic tests were conducted.

The diagnostic results confirm the absence of multicollinearity, heteroskedasticity, and model misspecification. Residuals are approximately normally distributed, indicating that the estimated coefficients are unbiased, efficient, and statistically reliable.

Table 8: Diagnostic Test Results

Test	Null Hypothesis	Test Statistic	p-value	Conclusion
Variance Inflation Factor (VIF)	No multi-collinearity	Mean VIF = 1.78	–	Accepted
Breusch-Pagan Test	Homoskedasticity	$\chi^2 = 1.94$	0.164	Accepted
Ramsey RESET	Correct specification	F = 1.21	0.302	Accepted
Normality Test (Shapiro-Wilk)	Normal errors	W = 0.98	0.221	Accepted

Source: Authors' computation, 2025.

Discussion of Findings

The empirical evidence reveals a design implementation gap in Sierra Leone's public procurement reforms. While the legal and regulatory framework significantly enhances procurement outcomes, its effectiveness is constrained by institutional capacity deficits and weak enforcement mechanisms.

This explains why procedural compliance such as adherence to bidding processes and documentation requirements is stronger than substantive compliance, particularly in contract management, supervision, and post-award accountability. In MAFFS, these challenges are amplified by the technical complexity and scale of agricultural procurement and reliance on donor-funded projects.

Contribution to Theory and Policy

From a theoretical perspective, the findings reinforce the complementarity of Institutional Theory and Principal-Agent Theory in explaining procurement performance in developing and post-conflict contexts. Legal reforms improve outcomes only when supported by capable institutions and effective enforcement.

From a policy standpoint, the results suggest that procurement reform efforts in Sierra Leone should prioritise:

- Capacity building for procurement and audit staff;
- Strengthening enforcement and sanction mechanisms;
- Enhancing post-award monitoring and contract management.

SUMMARY OF FINDINGS, CONCLUSION, AND POLICY RECOMMENDATIONS

Summary of Key Findings

This study undertook a comprehensive institutional and empirical assessment of the public procurement system governing procurement operations within the MAFFS in Sierra Leone. Anchored in Institutional Theory and Principal-Agent Theory, and employing a mixed-methods research design, the study evaluated the effectiveness of procurement reforms introduced under the PPA 2004, as amended in 2016. Drawing on survey data from 102 procurement-related officials, key informant interviews, documentary analysis, and econometric estimation using Stata, the study generated the following key findings.

First, the findings indicate that procurement reforms have substantially improved procedural governance within MAFFS. Descriptive statistics reveal relatively high mean scores for transparency, standardisation, and decentralisation of procurement processes. The use of standardised bidding documents, open competitive bidding, and formal procurement planning has reduced discretionary decision-making and enhanced consistency in procurement operations.

Second, regression results provide strong empirical evidence that institutional determinants significantly influence procurement outcomes. The legal and regulatory framework, institutional capacity, and monitoring and enforcement mechanisms all exert positive and statistically significant effects on the Procurement Outcomes Index. The legal and regulatory framework exhibits the largest marginal effect, confirming that clear rules and formal procedures are foundational to effective procurement governance.

Third, despite these procedural gains, the study identifies persistent institutional capacity constraints within MAFFS. These include shortages of professionally trained procurement personnel, limited technical expertise for complex agricultural procurements, weak information technology infrastructure, and inadequate logistics for record-keeping and contract supervision. These constraints significantly undermine the operationalisation of procurement reforms.

Fourth, the findings reveal a pronounced design-implementation gap. Although Sierra Leone's procurement laws and regulations are broadly aligned with international best practices—such as those promoted by the World Bank, UNCITRAL, and OECD—implementation at the ministerial level remains uneven. Weak enforcement of sanctions, incomplete documentation, and limited post-award monitoring reduce the effectiveness of procurement reforms and contribute to procedural rather than substantive compliance.

Finally, the study confirms that procurement governance challenges within MAFFS reflect broader institutional realities typical of post-conflict and resource-constrained public sectors. Weak monitoring intensifies Principal-Agent problems, while limited institutional capacity inhibits the internalisation of formal procurement rules, consistent with predictions from Institutional Theory.

Conclusion

This study concludes that public procurement reforms in Sierra Leone are robust in legal design, but constrained in institutional implementation. Within MAFFS, reforms introduced under the PPA 2004 and its 2016 amendment have significantly improved transparency, procedural standardisation, and decentralisation, marking a decisive departure from the pre-2004 centralised and opaque procurement regime. However, empirical evidence demonstrates that legal reforms alone are insufficient to guarantee effective procurement outcomes. The effectiveness of the procurement system is curtailed by persistent weaknesses in institutional capacity, monitoring and enforcement, contract management, and digital infrastructure. As a result, compliance with procurement rules is often formalistic rather than outcome-oriented, particularly in post-award phases where value for money is ultimately determined.

The study reinforces the view that procurement reform is fundamentally an institutional process, not merely a legal or technical exercise. Sustainable improvements in

procurement governance require complementary investments in human capital, organisational systems, enforcement mechanisms, and information technology. Without addressing these institutional foundations, procurement reforms risk remaining symbolic and failing to deliver their intended development outcomes.

By providing sector-specific empirical evidence from a key spending ministry in a post-conflict African state, this study contributes meaningfully to the literature on public procurement governance and offers practical insights for policymakers seeking to translate procurement reforms into tangible performance improvements.

Policy Recommendations

Based on the empirical findings and theoretical insights of the study, the following policy recommendations that strengthen procurement governance within MAFFS and across Sierra Leone's public sector, are proposed.

Strengthen NPPA Enforcement and Compliance Mechanisms

The NPPA should enhance the depth, frequency, and follow-up of procurement compliance monitoring. Clear timelines for implementing audit and compliance recommendations should be enforced, and graduated sanctions—ranging from warnings to administrative penalties—should be applied consistently. Public disclosure of compliance outcomes would further strengthen accountability and deterrence.

Institutionalise Professional Procurement Cadres

Government should establish a dedicated professional procurement career stream within MAFFS and other MDAs. Mandatory certification and continuous professional development—through NPPA-accredited programmes and internationally recognised qualifications such as chartered institute of procurement and supply (CIPS)—should be institutionalised to reduce reliance on untrained or ad hoc procurement personnel.

Accelerate Adoption of End-to-End E-Procurement Systems

The implementation of a comprehensive end-to-end e-procurement system should be prioritised. Such systems should cover procurement planning, bidding, evaluation, contract award, contract management, and archiving. Digital platforms would enhance transparency, reduce bureaucratic delays, improve records-keeping, and enable real-time oversight by NPPA and audit institutions.

Strengthen Procurement Planning and Documentation

MAFFS should enforce the timely preparation and approval of Annual Procurement Plans (APPs) aligned with budget cycles. Standardised documentation and centralised digital archiving systems should be strengthened to ensure complete procurement records, improve auditability, and support effective contract supervision.

Enhance Contract Management and Post-Award Oversight

Procurement reforms should extend beyond tendering processes that encompass the full procurement lifecycle. Dedicated contract management units, clear performance indicators, and routine monitoring mechanisms should be established to ensure that awarded contracts deliver value for money, meet quality standards, and comply with contractual obligations.

Improve Budgetary and Logistical Support for Procurement Units

Adequate financial, logistical, and technological resources should be allocated to procurement units within MAFFS. Predictable funding for staffing, information technology (IT) infrastructure, transport, and operational expenses is essential for effective procurement planning, monitoring, and compliance.

Implications for Policy, Practice, and Future Research

From a policy perspective, the study highlights the necessity of integrated procurement reform strategies that combine legal reforms with institutional strengthening and digital transformation. For practitioners, the findings emphasise that effective procurement outcomes depend not only on adherence to rules but also on capacity, enforcement, and post-award oversight. For future research, longitudinal studies could assess how procurement performance evolves over time following institutional reforms. Further studies could also extend the analysis to other high-spending ministries, local councils, or conduct comparative cross-country assessments of procurement reform implementation in post-conflict African economies.

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