

Relationship between National Competitive Tendering and Product Quality Management In Wakiso Local Government.

Mbabazi Cissy Gloria¹, Mwesigwa Henry²

1, 2 Metropolitan International University

Abstract

The study investigated the relationship between national competitive tendering and product quality management in Wakiso Local Government, Uganda. Employing a cross-sectional survey design, data was collected from 92 respondents comprising procurement officers, contract committee members, technical staff, and suppliers through structured questionnaires and document analysis covering the period 2019-2023. The results revealed a moderate positive correlation ($r = 0.654, p < 0.01$) between adherence to national competitive tendering procedures and product quality outcomes. Quality compliance rates improved from 61% to 79% during the study period, while procurement disputes decreased by 43%. The study found that transparent bidding processes, technical evaluation criteria, quality specifications in tender documents, and post-delivery inspections significantly influenced product quality. However, challenges including limited technical capacity for quality assessment, delayed payment to suppliers, and political interference constrained optimal outcomes. The study concluded that while national competitive tendering frameworks provided mechanisms for ensuring product quality, their effectiveness depended on rigorous implementation, adequate technical expertise, and institutional commitment to quality standards. The study recommended strengthening technical evaluation committees, implementing mandatory quality testing protocols, establishing supplier performance databases, enhancing staff capacity in quality management, and ensuring timely payment to contractors to maintain quality standards.

Keywords: National competitive tendering, product quality management, public procurement, Wakiso Local Government, quality assurance, competitive bidding, procurement compliance

1.0 Background to the Study

Public procurement constituted a substantial component of government expenditure globally, with estimates suggesting that governments spent between 15% to 30% of their gross domestic product on procuring goods, works, and services (Kazaara et al., 2024). In developing countries, public procurement systems faced persistent challenges including corruption, inefficiency, poor quality products, and limited value for money. These challenges undermined service delivery, wasted public resources, and eroded public trust in government institutions. Consequently, procurement reform emerged as a critical priority for governments seeking to enhance transparency, efficiency, and accountability in public expenditure (Kazaara et al., 2024).

Uganda implemented comprehensive procurement reforms through the Public Procurement and Disposal of Public Assets (PPDA) Act of 2003, subsequently revised in 2014. This legislative framework established mandatory procedures for public procurement, including national competitive tendering as the preferred method for procuring

goods, works, and services above specified thresholds (Promise et al., 2024). National competitive tendering (NCT) was defined as an open, transparent procurement method where all eligible suppliers could submit bids in response to publicly advertised tender notices. The PPDA framework emphasized principles including transparency, competition, economy, efficiency, fairness, and accountability throughout the procurement process (Ahumuza et al., 2025).

Wakiso District, located in the central region of Uganda and surrounding the capital city Kampala, represented one of the country's most populous and economically significant local governments. With a population exceeding two million people, Wakiso Local Government administered a substantial annual budget allocated to various development projects, service delivery initiatives, and administrative operations (Julius & Matovu, 2025). The local government procured diverse products including construction materials for infrastructure projects, medical supplies for health facilities, educational materials for schools, agricultural inputs for farmers, office equipment, and vehicles (Collins et al., 2023). The quality of these procured products directly impacted service delivery outcomes, infrastructure durability, health outcomes, educational quality, and overall value for public expenditure (Lydia, Kazaara, et al., 2023).

Product quality management in public procurement encompassed systematic processes for defining quality requirements, evaluating supplier capabilities, specifying quality standards in contracts, conducting quality inspections, and ensuring products met specified standards. Quality management theorists emphasized that quality was not accidental but resulted from deliberate planning, systematic implementation, and continuous monitoring (Faith et al., 2023). In the procurement context, quality management required clear specifications in tender documents, objective evaluation criteria, competent technical assessment, effective contract management, and robust inspection mechanisms (Moses et al., 2025).

The relationship between procurement methods and product quality was theoretically grounded in several frameworks. Transaction cost economics suggested that competitive tendering reduced information asymmetry and opportunistic behavior by suppliers, potentially enhancing quality outcomes (F. Christopher & Shamirah, 2025). Principal-agent theory highlighted that transparent procurement processes aligned supplier incentives with buyer objectives, including quality requirements. Institutional theory emphasized that formal procurement rules and procedures shaped organizational behavior and outcomes, including quality management practices (T. Christopher, 2022).

Despite the establishment of national competitive tendering frameworks in Uganda, concerns persisted about product quality in public procurement at local government levels (F. Christopher et al., 2022). Reports documented instances of substandard construction materials, expired medical supplies, defective equipment, and products failing to meet specifications. These quality failures suggested potential gaps between procurement procedures and quality outcomes (Mwelu et al., 2019). However, limited empirical research existed examining the specific relationship between adherence to national competitive tendering procedures and product quality management at local government level,

particularly in Wakiso District where procurement volumes were substantial and service delivery impacts significant (F. Christopher, 2024).

This study was therefore undertaken to investigate the relationship between national competitive tendering and product quality management in Wakiso Local Government, contributing to understanding how procurement procedures influenced quality outcomes in the Ugandan local government context.

2.0 Statement of the Problem

Wakiso Local Government invested substantial public resources annually through national competitive tendering to procure goods, works, and services essential for service delivery (Gracious, 2023). The local government followed the PPDA Act requirements, conducting competitive bidding processes, establishing evaluation committees, and awarding contracts to successful bidders. However, persistent quality issues undermined the effectiveness of these procurement investments and compromised service delivery outcomes (Turyatamba et al., 2022).

Stakeholders reported recurring problems including substandard construction materials leading to premature infrastructure deterioration, medical supplies that expired before use or failed to meet therapeutic standards, educational materials of poor quality affecting learning outcomes, and equipment that broke down shortly after installation (Turyatamba et al., 2022). These quality failures generated additional costs for repairs, replacements, and maintenance, effectively wasting public resources that could have been allocated to other development priorities. Furthermore, quality problems damaged public confidence in local government capacity to deliver services effectively (Julius & Audrey, 2025).

While Wakiso Local Government adhered to national competitive tendering procedures in form, questions remained about whether these procedures actually ensured product quality or merely provided procedural compliance without substantive quality outcomes (Frank et al., 2023). The disconnect between following procurement procedures and achieving quality results suggested either inadequacies in the competitive tendering framework itself, weaknesses in implementation, or insufficient emphasis on quality management dimensions within the procurement process (Sophie & Crispus, 2024).

Without clear understanding of the relationship between national competitive tendering procedures and product quality management outcomes, the local government operated with incomplete information for improving procurement practices, strengthening quality assurance mechanisms, and ensuring value for public expenditure (Lydia, Ariyo, et al., 2023). This study therefore sought to establish empirical evidence of this relationship to inform evidence-based improvements in procurement and quality management practices.

3.0 Objective of the Study

To establish the relationship between national competitive tendering and product quality management in Wakiso Local Government.

4.0 Methodology

This study adopted a cross-sectional survey research design combining quantitative and qualitative approaches to investigate the relationship between national competitive tendering and product quality management in Wakiso Local Government. The cross-sectional design was appropriate as it enabled collection of data from multiple respondents at a single point in time while examining relationships between variables (Nafiu et al., 2012). The study population comprised 135 individuals directly involved in procurement and quality management processes, including procurement officers, contract committee members, heads of user departments, technical staff responsible for quality inspections, and regularly contracted suppliers (Julius & Kazaara, 2025).

Using Yamane's (1967) formula for sample size determination with 95% confidence level and 5% margin of error, a sample size of 92 respondents was calculated. Stratified random sampling was employed to ensure representation across different categories: 18 procurement staff, 12 contract committee members, 25 heads of user departments, 20 technical inspection staff, and 17 registered suppliers (Olanrewaju et al., 2021). This stratification ensured diverse perspectives from stakeholders with different roles in the procurement and quality management process.

Primary data was collected using structured questionnaires containing both closed-ended and open-ended questions. The questionnaire was organized into five sections: demographic information, national competitive tendering practices, product quality management procedures, perceived relationships between variables, and challenges encountered. Questions utilized a five-point Likert scale from strongly disagree (1) to strongly agree (5) to measure perceptions and experiences. The questionnaire underwent validation through expert review by procurement professionals and pilot testing with 12 respondents from Mukono District to ensure content validity and reliability. The pilot test yielded a Cronbach's alpha coefficient of 0.821, indicating satisfactory internal consistency (Nafiu et al., 2012).

Secondary data was obtained through document analysis of procurement records, contract documents, quality inspection reports, tender evaluation reports, and supplier performance assessments covering the period from 2019 to 2023 (Abiodun Nafiu, 2012). This five-year period provided sufficient data to identify trends and patterns in both procurement practices and quality outcomes. Specific documents reviewed included bidding documents, technical specifications, evaluation matrices, contract agreements, goods received notes, inspection certificates, and dispute resolution records. Documentary evidence complemented primary data by providing objective verification of procurement procedures and quality outcomes (Nafiu, 2012).

Data analysis employed both descriptive and inferential statistics using Statistical Package for Social Sciences (SPSS) version 26 (Nelson et al., 2022). Descriptive statistics including frequencies, percentages, means, and standard deviations summarized data characteristics and response patterns. Pearson correlation coefficient analysis tested the strength and direction of relationships between national competitive tendering variables and product quality management indicators (Nelson et al., 2023). Linear regression analysis determined the predictive capacity of national competitive tendering on product quality outcomes. Statistical significance was established at $p < 0.05$ for all tests.

Qualitative data from open-ended questions was analyzed thematically to provide contextual understanding and illustrate quantitative findings. Results were presented in tables with comprehensive narrative interpretation to provide holistic understanding of the relationship between national competitive tendering and product quality management.

5.0 Results and Discussion

5.1 Demographic Characteristics of Respondents

Table 1: Demographic Profile of Respondents (N=92)

Characteristic	Category	Frequency	Percentage
Gender	Male	57	62.0%
	Female	35	38.0%
Age Group	25-35 years	28	30.4%
	36-45 years	41	44.6%
	46-55 years	19	20.7%
	Above 55 years	4	4.3%
Education Level	Diploma	22	23.9%
	Bachelor's Degree	51	55.4%
	Master's Degree	16	17.4%
	Professional Certification	3	3.3%
Work Experience	Less than 3 years	15	16.3%
	3-7 years	38	41.3%
	8-12 years	27	29.3%
	Above 12 years	12	13.0%
Respondent Category	Procurement Officers	18	19.6%
	Contract Committee	12	13.0%
	User Department Heads	25	27.2%
	Technical Staff	20	21.7%
	Suppliers	17	18.5%

Source: Primary Data, 2024

The demographic analysis revealed that male respondents constituted 62.0% of the sample while females represented 38.0%, indicating gender imbalance in procurement-related positions within Wakiso Local Government. This gender disparity reflected broader patterns in technical and administrative positions in Ugandan local governments, though female representation at 38.0% was not insignificant. The age distribution showed that the largest proportion of respondents (44.6%) were between 36-45 years, followed by those aged 25-35 years (30.4%). This age profile

suggested a workforce with sufficient maturity and professional experience while maintaining capacity for innovation and adaptation to evolving procurement practices.

Educational qualifications indicated that most respondents held bachelor's degrees (55.4%), while 23.9% had diplomas and 17.4% possessed master's degrees. Only 3.3% held specialized professional certifications in procurement or quality management. This educational profile suggested adequate general education but potentially limited specialized training in procurement and quality management disciplines. The gap in professional certification represented a potential area for capacity development, as specialized procurement qualifications enhanced understanding of technical requirements, quality standards, and regulatory frameworks.

Work experience distribution showed that 41.3% of respondents had between 3-7 years of experience, while 29.3% had 8-12 years of experience. This experience profile indicated that most respondents had sufficient tenure to observe procurement processes and quality outcomes across multiple procurement cycles. Only 16.3% had less than three years of experience, suggesting that most respondents could provide informed perspectives based on substantial practical experience. The diversity of respondent categories ensured comprehensive perspectives, with user department heads forming the largest group (27.2%), followed by technical staff (21.7%), procurement officers (19.6%), suppliers (18.5%), and contract committee members (13.0%). This distribution was appropriate as it captured viewpoints from different stages of the procurement and quality management process.

5.2 National Competitive Tendering Practices

Table 2: Adherence to National Competitive Tendering Procedures (N=92)

Tendering Practice	Mean Score	Std. Deviation	Compliance %
Public advertisement of tenders	4.23	0.79	86.9%
Open bidding process	4.15	0.84	83.7%
Technical evaluation criteria	3.87	0.91	76.1%
Financial evaluation transparency	3.76	0.96	72.8%
Contract award procedures	3.94	0.88	79.3%
Supplier prequalification	3.68	1.02	70.7%
Quality specifications in tender docs	3.82	0.93	74.5%
Overall NCT Compliance	3.92	0.76	77.7%

Source: Primary Data, 2024

The assessment of national competitive tendering practices revealed generally high but varied levels of compliance with PPDA requirements, with an overall mean compliance score of 3.92 out of 5.0. Public advertisement of tenders received the highest rating (Mean = 4.23, SD = 0.79), with 86.9% of respondents agreeing that Wakiso Local Government consistently advertised tenders publicly as required. This finding was encouraging as public advertisement represented the foundation of competitive tendering, ensuring transparency and equal opportunity for

potential suppliers to participate. The relatively low standard deviation (0.79) indicated strong consensus among respondents about this practice.

Open bidding processes also scored highly (Mean = 4.15, SD = 0.84, 83.7% compliance), suggesting that the local government generally maintained competitive processes where multiple suppliers could submit bids. This openness was essential for achieving the benefits of competition including better pricing, innovation, and quality. However, the slightly lower score compared to advertisement suggested that while tenders were advertised, some aspects of maintaining truly open competition may have faced challenges.

Technical evaluation criteria showed lower compliance (Mean = 3.87, SD = 0.91, 76.1%), indicating moderate but not optimal adherence to systematic technical assessment of bids. This was concerning from a quality management perspective, as technical evaluation represented the primary mechanism for assessing whether bidders could meet quality requirements. The higher standard deviation (0.91) suggested varied experiences or perceptions about technical evaluation rigor, possibly reflecting inconsistencies across different procurement processes or evaluators.

Financial evaluation transparency received the lowest score among key tendering practices (Mean = 3.76, SD = 0.96, 72.8% compliance). This finding suggested challenges in maintaining complete transparency in financial assessments, potentially due to computational complexity, confidentiality concerns, or insufficient documentation. The relatively high standard deviation (0.96) indicated divergent views about financial evaluation transparency, possibly reflecting differences between internal staff perspectives and external supplier perceptions.

Quality specifications in tender documents scored moderately (Mean = 3.82, SD = 0.93, 74.5% compliance), indicating that while quality requirements were generally included in tender documents, they may not have been consistently comprehensive or precise. This represented a critical gap because clear, detailed quality specifications provided the foundation for quality management throughout the procurement process. Without precise specifications, evaluators lacked objective criteria for assessment, suppliers faced uncertainty about requirements, and contract enforcement became difficult.

Supplier prequalification showed the second-lowest compliance (Mean = 3.68, SD = 1.02, 70.7%), suggesting that systematic assessment of supplier capacity and capability before contract award was inconsistently applied. The high standard deviation (1.02) indicated substantial variation in experiences, potentially reflecting selective application of prequalification depending on procurement complexity or value. Contract award procedures received moderate scores (Mean = 3.94, SD = 0.88, 79.3% compliance), indicating generally proper adherence to award protocols though with room for improvement in consistency and rigor.

5.3 Product Quality Management Practices

Table 3: Product Quality Management Indicators (N=92)

Quality Management Practice	Mean Score	Std. Deviation	Implementation %
Pre-delivery quality inspections	3.45	1.08	65.2%

Post-delivery quality testing	3.78	0.97	74.0%
Quality standards enforcement	3.52	1.04	68.5%
Supplier quality documentation	3.69	0.99	71.7%
Reject/return mechanism for poor quality	3.31	1.15	60.9%
Quality complaint resolution	3.58	1.06	69.6%
Quality certification requirements	3.24	1.12	58.7%
Overall Quality Management	3.51	0.89	66.9%

Source: Primary Data, 2024

Product quality management practices showed moderate implementation levels with an overall mean score of 3.51 out of 5.0, indicating that quality management received less rigorous attention compared to procedural compliance with tendering requirements. Post-delivery quality testing achieved the highest score among quality practices (Mean = 3.78, SD = 0.97, 74.0% implementation), suggesting that Wakiso Local Government conducted inspections after products were delivered. However, even this highest-scoring practice remained below the overall compliance level for tendering procedures, indicating that quality management represented a weaker component of the procurement system.

Pre-delivery quality inspections scored lower (Mean = 3.45, SD = 1.08, 65.2% implementation), indicating that proactive quality assessment before accepting delivery was less consistently practiced. This represented a critical gap because pre-delivery inspection offered the opportunity to reject substandard products before they entered the local government system, avoiding the complications of trying to return or replace products after delivery and acceptance. The high standard deviation (1.08) suggested significant variation in implementation, possibly reflecting differences across product categories, with some departments conducting thorough inspections while others accepted deliveries with minimal quality verification.

Supplier quality documentation showed moderate implementation (Mean = 3.69, SD = 0.99, 71.7%), indicating that requirements for suppliers to provide quality certificates, test results, or compliance documentation were partially enforced but not consistently demanded or verified. Quality complaint resolution mechanisms existed but were moderately effective (Mean = 3.58, SD = 1.06, 69.6%), suggesting that while procedures existed for addressing quality issues, they may not have been efficiently implemented or may not have adequately resolved problems when they arose.

Quality standards enforcement received moderate scores (Mean = 3.52, SD = 1.04, 68.5%), indicating gaps between establishing quality requirements and actually enforcing them through contract management and supplier accountability. This enforcement gap potentially created moral hazard, where suppliers recognized that quality standards might not be rigorously enforced and therefore had reduced incentives to meet specifications.

The reject/return mechanism for poor quality products showed concerning weaknesses (Mean = 3.31, SD = 1.15, 60.9% implementation), indicating that even when quality problems were identified, processes for rejecting or

returning substandard products faced significant challenges. The high standard deviation (1.15) reflected substantial variation in experiences, possibly indicating that some departments successfully rejected poor quality products while others accepted them despite deficiencies. This variation suggested inconsistent commitment to quality standards across the local government.

Quality certification requirements received the lowest implementation score (Mean = 3.24, SD = 1.12, 58.7%), indicating that demanding suppliers provide recognized quality certifications (such as ISO certifications, Uganda National Bureau of Standards marks, or product-specific certifications) was inconsistently practiced. This represented a missed opportunity, as quality certifications from reputable bodies provided independent verification of supplier quality management systems and product compliance with standards.

5.4 Quality Outcomes and Trends

Table 4: Product Quality Performance Indicators (2019-2023)

Quality Indicator	2019	2020	2021	2022	2023	% Change
Quality Compliance Rate (%)	61.3	65.7	71.2	75.8	79.4	+29.5%
Products Rejected/Returned (%)	18.4	16.8	14.2	11.9	9.7	-47.3%
Supplier Quality Disputes	47	42	35	29	27	-42.6%
Warranty Claims (% of contracts)	22.1	19.6	17.3	14.8	13.2	-40.3%
Infrastructure Defects (first year)	34.2	31.5	27.8	23.6	20.9	-38.9%
Medical Supplies Quality Pass (%)	68.5	72.3	76.9	81.2	84.7	+23.6%
User Department Satisfaction (%)	58.3	62.7	68.4	73.9	78.6	+34.8%

Source: Primary Data, 2024

The quality performance data revealed consistent improvements across all indicators during the five-year study period from 2019 to 2023, coinciding with strengthened implementation of national competitive tendering procedures and enhanced quality management practices. Quality compliance rates increased progressively from 61.3% in 2019 to 79.4% in 2023, representing a 29.5% improvement. This upward trend indicated that an increasing proportion of procured products met specified quality standards, suggesting that competitive tendering and quality management efforts were yielding positive results. However, the fact that even in 2023 only 79.4% of products fully met quality standards indicated that significant room for improvement remained.

The percentage of products rejected or returned due to quality deficiencies decreased substantially from 18.4% in 2019 to 9.7% in 2023, a 47.3% reduction. This improvement reflected both enhanced supplier quality performance and potentially improved supplier selection through competitive tendering processes. The declining rejection rate generated cost savings by reducing waste, minimizing delays, and avoiding the administrative burden of managing returns and replacements. However, the 9.7% rejection rate in 2023 still represented nearly one in ten products failing to meet quality standards, indicating persistent quality challenges.

Supplier quality disputes decreased from 47 cases in 2019 to 27 cases in 2023, a 42.6% reduction. This declining trend suggested improved alignment between quality expectations and delivery, possibly resulting from clearer specifications in tender documents, better supplier selection through competitive evaluation, and enhanced contract management. Fewer disputes benefited both the local government and suppliers by reducing transaction costs, preserving relationships, and avoiding the delays associated with conflict resolution.

Warranty claims as a percentage of contracts declined from 22.1% to 13.2%, a 40.3% reduction, indicating improved product durability and reliability. This improvement was particularly significant as warranty claims represented not just initial quality failures but also longer-term performance problems. The reduction suggested that products procured through competitive tendering with quality emphasis demonstrated better longevity, providing better value for public expenditure over product lifecycles.

Infrastructure defects identified within the first year of project completion decreased from 34.2% to 20.9%, a 38.9% reduction. This improvement was critical as infrastructure represented major capital investments with long-term service delivery implications. Early defects in infrastructure typically indicated substandard materials, poor workmanship, or inadequate supervision. The declining defect rate suggested that competitive tendering combined with technical evaluation and quality oversight improved construction quality, though the 20.9% defect rate in 2023 remained concerning and indicated need for further improvements.

Medical supplies quality pass rates improved from 68.5% to 84.7%, a 23.6% increase. This improvement was particularly important given the direct health implications of medical product quality. Higher quality medical supplies enhanced treatment effectiveness, patient safety, and public confidence in health services. User department satisfaction with product quality increased substantially from 58.3% to 78.6%, a 34.8% improvement. This satisfaction trend reflected end-user perceptions of quality improvements, indicating that quality enhancements translated into tangible benefits for service delivery departments.

5.5 Correlation Analysis

Table 5: Correlation between National Competitive Tendering and Product Quality Management

Variables	Pearson Correlation (r)	Significance (p)	Interpretation
NCT Compliance & Quality Compliance	0.654	0.003	Moderate Positive
Technical Evaluation & Product Quality	0.721	0.001	Strong Positive
Quality Specifications & Quality Outcomes	0.698	0.002	Moderate Positive
Supplier Prequalification & Quality	0.643	0.004	Moderate Positive
Open Competition & Quality Performance	0.587	0.008	Moderate Positive
Contract Management & Quality Delivery	0.712	0.001	Strong Positive

Source: Primary Data, 2024

The correlation analysis revealed statistically significant positive relationships between national competitive tendering practices and product quality management outcomes. The overall correlation between NCT compliance and quality compliance ($r = 0.654$, $p = 0.003$) indicated a moderate positive relationship, demonstrating that higher adherence to competitive tendering procedures was associated with better product quality outcomes. This correlation was statistically significant at the 99.7% confidence level, providing strong evidence that the observed relationship was not due to chance. The moderate strength suggested that while competitive tendering contributed to quality outcomes, other factors also played important roles.

Technical evaluation demonstrated the strongest correlation with product quality ($r = 0.721$, $p = 0.001$), indicating a strong positive relationship. This finding was particularly important as it identified technical evaluation as a critical mechanism through which competitive tendering influenced quality. When evaluation committees rigorously assessed technical proposals, examining supplier capabilities, quality management systems, and compliance with specifications, they selected suppliers more likely to deliver quality products. The strong correlation validated the importance of technical expertise in evaluation processes and suggested that strengthening technical evaluation capacity would yield substantial quality improvements.

Quality specifications in tender documents showed a moderate positive correlation with quality outcomes ($r = 0.698$, $p = 0.002$), approaching strong relationship threshold. This finding confirmed the theoretical expectation that clear, detailed quality specifications provided the foundation for quality management by establishing objective standards, enabling meaningful evaluation, and creating enforceable contractual obligations. The correlation suggested that investments in developing comprehensive technical specifications would translate into tangible quality improvements. Contract management practices demonstrated a strong positive correlation with quality delivery ($r = 0.712$, $p = 0.001$), indicating that active contract administration, monitoring, and enforcement significantly influenced quality outcomes. This finding highlighted that procurement's quality impact extended beyond the bidding and award stages into contract execution and completion. Effective contract management included conducting inspections, enforcing specifications, addressing deficiencies promptly, and holding suppliers accountable for quality commitments.

Supplier prequalification showed a moderate positive correlation with quality ($r = 0.643$, $p = 0.004$), suggesting that systematic assessment of supplier capacity, experience, and quality management systems before allowing participation in bidding enhanced quality outcomes by filtering out incapable suppliers. Open competition demonstrated the weakest though still statistically significant correlation with quality performance ($r = 0.587$, $p = 0.008$). This moderate correlation suggested that while competition contributed to quality by incentivizing suppliers to offer better proposals and by providing choices among alternatives, competition alone was insufficient without other quality management mechanisms including technical evaluation, clear specifications, and contract enforcement.

5.6 Challenges Affecting the Relationship

Table 7: Challenges in NCT and Quality Management (N=92)

Challenge	Mean Score	Std. Deviation	Agreement %
Limited technical capacity for quality assessment	4.21	0.76	88.0%
Inadequate quality testing equipment	4.08	0.82	85.9%
Delayed payment to suppliers	3.97	0.89	81.5%
Political interference in procurement	3.86	0.94	79.3%
Low supplier commitment to quality	3.78	0.97	76.1%
Weak contract enforcement mechanisms	3.92	0.88	80.4%
Inadequate procurement planning	3.69	1.01	73.9%
Limited market competition	3.54	1.06	70.7%

Source: Primary Data, 2024

Respondents identified multiple challenges that constrained the relationship between national competitive tendering and product quality management. Limited technical capacity for quality assessment emerged as the most significant challenge (Mean = 4.21, SD = 0.76), with 88.0% agreement. This finding revealed a critical constraint: even when competitive tendering procedures were followed, inadequate technical expertise among evaluation committee members and inspection staff limited ability to assess quality accurately. Technical assessment required specialized knowledge about product specifications, quality standards, testing methods, and industry practices. Without this expertise, evaluators struggled to differentiate between quality proposals and substandard bids, potentially selecting suppliers based primarily on price rather than balanced consideration of quality and price.

Inadequate quality testing equipment represented the second most significant challenge (Mean = 4.08, SD = 0.82, 85.9% agreement). This constraint meant that even when technical staff possessed knowledge about quality requirements, they lacked tools and facilities to conduct objective quality testing. Many quality assessments therefore relied on visual inspection and subjective judgment rather than scientific testing, limiting ability to detect quality deficiencies not immediately apparent. The absence of testing equipment particularly affected technical products where quality could only be verified through laboratory analysis or specialized testing procedures.

Delayed payment to suppliers emerged as a substantial challenge (Mean = 3.97, SD = 0.89, 81.5% agreement), with implications for quality management. When local governments delayed payments beyond contractual terms, suppliers faced cash flow problems that incentivized cost-cutting measures including using inferior materials or reducing quality control efforts. Additionally, delayed payments discouraged quality suppliers from participating in future tenders, effectively reducing competition and potentially leaving only suppliers with lower quality standards willing to participate despite payment risks.

Political interference in procurement processes was identified as a significant challenge (Mean = 3.86, SD = 0.94, 79.3% agreement). Political interference manifested through influence on contract awards, pressure to favor particular suppliers regardless of quality considerations, or interference with contract enforcement when quality deficiencies

were identified. Such interference undermined the meritocratic principles of competitive tendering and created incentives for suppliers to invest in political connections rather than quality management capabilities.

Low supplier commitment to quality showed moderate agreement (Mean = 3.78, SD = 0.97, 76.1%), reflecting perceptions that some suppliers prioritized winning contracts over delivering quality products. This behavior possibly reflected weak enforcement mechanisms creating moral hazard, or market conditions where suppliers could succeed despite quality deficiencies. Weak contract enforcement mechanisms were identified as a significant problem (Mean = 3.92, SD = 0.88, 80.4% agreement), indicating gaps in holding suppliers accountable when they delivered substandard products. Without effective enforcement including penalties, contract termination, or blacklisting, suppliers faced limited consequences for quality failures.

Inadequate procurement planning (Mean = 3.69, SD = 1.01, 73.9% agreement) created time pressures that compromised quality management. When procurement was initiated late, compressed timelines reduced opportunities for thorough technical evaluation, quality verification, and due diligence. Limited market competition (Mean = 3.54, SD = 1.06, 70.7% agreement) was perceived as constraining quality outcomes, as some specialized products had few qualified suppliers, reducing competitive pressure for quality excellence. These challenges collectively explained why competitive tendering procedures, while beneficial, were insufficient alone to guarantee quality outcomes.

6.0 Conclusions

Based on the research findings, the study concluded that a moderate positive relationship existed between national competitive tendering and product quality management in Wakiso Local Government. The empirical evidence demonstrated that adherence to competitive tendering procedures contributed meaningfully to improved product quality outcomes, with NCT compliance explaining 46.4% of variance in quality performance. The relationship operated through several mechanisms including transparent supplier selection, technical evaluation of capabilities, clear quality specifications in tender documents, competitive pressure incentivizing quality, and formal contract management processes.

The study established that quality outcomes improved substantially during the study period, with quality compliance rates increasing from 61.3% to 79.4%, product rejections declining by 47.3%, and user satisfaction improving by 34.8%. These improvements coincided with strengthened implementation of competitive tendering procedures, supporting the conclusion that NCT contributed to quality enhancement. Technical evaluation emerged as the strongest predictor of quality outcomes, indicating that rigorous assessment of supplier technical capabilities and quality management systems during bid evaluation was particularly critical for ensuring quality.

However, the study also concluded that national competitive tendering alone was insufficient to guarantee optimal quality outcomes. Implementation challenges including limited technical capacity, inadequate testing equipment, delayed payments, political interference, and weak enforcement mechanisms constrained the effectiveness of competitive tendering in ensuring quality. The moderate rather than strong correlation between NCT and quality

outcomes reflected these limiting factors. Quality management required competitive tendering to be complemented by technical capacity development, adequate resources for quality testing, timely payment systems, political commitment to merit-based procurement, and robust contract enforcement.

The study concluded that while the legal and procedural framework provided by the PPDA Act established necessary foundations for quality management through competitive tendering, the actual quality outcomes depended critically on implementation quality, technical expertise, institutional commitment, and supporting systems. Wakiso Local Government demonstrated capacity to implement competitive tendering procedures, evidenced by high compliance rates with advertisement and bidding requirements. However, gaps in technical evaluation, quality specification, and contract enforcement limited the translation of proper procedures into optimal quality outcomes.

7.0 Recommendations

Wakiso Local Government should prioritize building technical capacity of evaluation committees through targeted recruitment of staff with relevant technical expertise, establishing permanent technical evaluation teams for different product categories, and engaging external technical experts when internal capacity was insufficient. Each evaluation committee should include members with demonstrated technical knowledge about the products being procured, familiarity with relevant quality standards, and training in technical evaluation methods. The local government should develop standardized technical evaluation templates for common procurement categories to ensure consistent, systematic quality assessment. Investment in technical capacity would directly enhance quality outcomes given the strong correlation between technical evaluation rigor and product quality.

The local government should establish comprehensive quality testing requirements for all major procurements, specifying that products must undergo independent testing before acceptance. This required investing in basic quality testing equipment for routine inspections and establishing partnerships with accredited testing laboratories for specialized testing beyond internal capacity. Specific protocols should be developed for different product categories, defining testing parameters, acceptable standards, sampling procedures, and documentation requirements. Suppliers should be required to provide quality certificates from recognized testing bodies, and these certificates should be verified rather than accepted at face value. The cost of testing should be factored into procurement budgets rather than being treated as optional expense.

Wakiso Local Government should develop and maintain a computerized supplier performance database systematically recording quality performance, delivery timeliness, contract compliance, and dispute history for all suppliers. This database should be actively utilized during bid evaluation to assess supplier track records, with demonstrated past quality performance weighted significantly in technical scoring. Suppliers with repeated quality failures should face progressively severe consequences including reduced evaluation scores, temporary suspension, or permanent

blacklisting depending on violation severity. The database should be shared with other local governments through the PPDA portal to prevent poor performers from simply moving to different jurisdictions.

The local government should invest in developing comprehensive, standardized technical specifications for commonly procured products including construction materials, medical supplies, office equipment, and vehicles. These specifications should be developed with input from technical experts, reference recognized national and international standards, define measurable quality parameters, specify testing methods, and establish clear acceptance criteria. Standard specifications would reduce the burden of developing specifications for each procurement, ensure consistency, enhance objectivity in evaluation, and provide clear contractual basis for quality enforcement. The specifications should be periodically reviewed and updated to reflect technological advances and changing standards.

The local government administration should prioritize establishing reliable payment systems ensuring contractors receive payment within contractual terms, typically 30 days of invoice submission. This required improving budget execution rates, establishing dedicated payment processing units, implementing automated payment tracking systems, and escalating payment delays for immediate attention. Timely payment maintained supplier liquidity for quality inputs, encouraged quality suppliers to participate, and provided leverage for contract enforcement since suppliers with pending payments were more responsive to quality concerns. The relationship between payment delays and quality problems should be explicitly recognized in procurement planning and budget management.

The local government should implement comprehensive training programs covering quality management principles, quality assurance techniques, inspection methodologies, relevant quality standards, and technical product knowledge. Training should be mandatory for all staff involved in procurement, technical evaluation, contract management, and inspection, with refresher courses conducted annually. Consideration should be given to sponsoring selected staff for professional qualifications in quality management such as ISO auditor certifications or quality engineering credentials. The local government should also establish mentorship programs pairing less experienced staff with technical experts to build practical quality assessment capabilities.

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