ABSTRACT: The overarching objective of this study was to determine the Individual Factors Influencing Procurement Regulatory Compliance by Tanzanian Local Government Authorities. A descriptive survey research design was employed where 4 (four) Local Government Authorities in Arusha Region (Arusha City Council, Arusha District Council, Meru District Council and Monduli District Council) were studied. Guided research questions based variables; Personal Qualification, Staff awareness of Procurement Rules and Regulation, Staff Training on Procurement Procedures and Employees Workload were studied. Related literature to this research was studied based on the aforementioned variables. Reliability of research instruments was tested using test-retest and validated by experts in academic research. Purposive sampling was used to select the appropriate sample size of 185 respondents from a population of 200 respondents. Descriptive (mean) and inferential t-test statistics were used to analyse the data. Results showed that personal qualification, staff awareness of procurement rules and regulation, staff training and employees’ workload influences the compliances of procurement regulatory by Local Government Authorities. Individual factors influence the compliance of public procurement regulations in the LGAs by 83%. To enhance compliance to public procurement regulations, adequate training on procurement laws and regulations have to be provided to procurement staff, tender board members and accounting officers so as to ensure that service is rendered objectively and with accountability.

KEYWORDS: Compliance, Public Procurement Regulations, LGAs

INTRODUCTION

The main aim of procurement regulatory in Tanzania is to promote transparency and fairness in the public establishments’ procurement with the main objective of ensuring value for money on the government resources used and compliance with procurement regulatory. However various CAG reports reveal that apart from having procurement regulatory in place there are losses of public funds resulted from noncompliance with procurement regulatory. According to (CAG 2011:123), “In view of this responsibility to procuring entities including Councils, my general statement is that, the status of compliance with the Public Procurement Legislations learned from the transactions tested as part of my audits is still not satisfactory as far as the legal requirements is concerned”. Further, (CAG, 2013:153), indicates noncompliance with procurement regulatory “I generally state that the status of compliance with the Public Procurement Legislations learnt from the LGAs transactions examined as part of my audits is still not satisfactory”. Compliance with procurement regulatory by LGAs continues to have little compliance improvements yearly as stated in (CAG, 2014:120), “I noted that out of 163 LGAs transactions examined as part of my audit, status of compliance with the Public Procurement Legislations for 127 LGAs equivalent to 78% was satisfactory while 36 LGAs (22%) was not satisfactory”. A further (CAG 2015), report shows 24 LGA’s
in Tanzania equivalent to 15% could not fully comply with the requirement of the public procurement legislations.

Compliance levels continue to be unsatisfactory in Tanzanian LGAs despite efforts made by the Public Procurement Regulatory Authority (PPRA). Procurement audits carried out revealed noncompliance with procurement regulatory in LGAs (PPRA 2015:102), “the analysis of the audit indicated that seventeen (17) procuring entities had poor performance in complying with PPA and its regulation” and among these entities eight (8) 47% were Local Government Authorities. This recognizes the need to investigate procurement regulatory compliance by the Local Government Authorities. This study finds out how individual factors influence procurement regulatory compliance by the Tanzanian LGAs.

Research Objectives

General objective

The main objective of this research was to explore the influence of Individual Factors in Compliance with Procurement Regulatory by Local Government Authorities in Arusha Region.

Specific objectives

i. To determine the extent of compliance with Public Procurement Regulations in the Local Government Authorities.

ii. To identify Individual factors influencing Public Procurement regulatory in the Local Government Authorities.

iii. To establish the extent to which Individual factors influence the compliance of Public procurement regulations in the Local Government Authorities.

Factors governing compliance to public procurement regulations

Personal qualifications

Procurement experts have mainly two tasks. The first one being to make sure that their agencies do comply with rules and regulations guiding procurement practices and participate in procurement activities of their agencies according to the approved budgets, Thai (2001). According to Lysons & Farrington (2006), Personal qualification in procurement is a requisite as it influences making good decisions with confidence and within a short time. According to Raymond (2008), personal qualification in procurement compliance do involves education level of the personnel and professional methodology in performing procurement undertakings. If the procurement staff has inadequate know how on procurement issues will lead to negative significances as noncompliance with procurement code of conduct. Procurement professionals however required to possess a set of skills and competence in order for them to perform their works efficiently. Jensen and Stone Cash (2004) and others suggests that essential skills procurement professional required to possess comprise; cost and price analysis, negotiation skills and procurement processes. According to Kwagbenu (2003), Shortage of procurement specialists lead to lack of procurement compliance in both Local Government Authorities and central government.
Staff awareness of public procurement rules and regulations

Gelderman (2006) states that, among factors influencing noncompliance with procurement regulatory is staff awareness’ level with public procurement rules and regulations. De Boer and Telgen (1998), state that in Netherlands during the initiation of public procurement regulation most of cities and municipalities did not comply due to lack of staff awareness to public procurement rules and regulations. A research done in Uganda by Eyaa and Oluka (2011), revealed poor procurement compliance level to be driven by lack of familiarity with public procurement rules and regulations. Many procurement specialists in Kenyan entities experiencing shortage of general information about procurement regulatory compliance, principles, framework, procedures and procurement process, PPOA (2007).

Staff training and compliance on procurement procedures

Procurement regulations should ensure that procurement professionals are provided with appropriate training so as to serve in procurement, PPOA (2007). The study by PPOA further showed deficit of procurement expertise at public entities. The procurement operations have been weakened by the overall lack of procurement knowledge. The study also found there was few procurement training provided. Also it was revealed that, procedures, rules and regulations do not support procurement timely, payments and implementation of contracts. For instance legal provisions were not provided, time limits for fund appropriation and handling of payments and invoices KACC (2007). Another research conducted by KPMG International after instituting of procurement regulations reveals that public procurement still undergoes fraud and misconduct (KPMG 2008). KCC study added, it was revealed that public officials altered regulations to limit the involvement of interested firms in procurement

Staff workload and compliance with procurement procedures

Hui et al (2011) stipulates that proper allocation of staff’s duties and responsibilities is the mechanism for promoting accountability and transparency and provides base for compliance to rules and regulations pertaining a particular organization and industry at large. Rossi, (2010) “Opines that formal duties must first be defined, agreed, and applied top-down internally within an organization if they are to be effective”. Public entity with open commitment to public procurement compliance is revealed by top management’s commitment to principled corporate performance (Krawiec, 2003). As cited in Heneghan and O’Donnell, (2007), “compliance culture in an organization must start in the boardroom and should be reflected and evidenced in directors’ own behaviors and attitudes”. In a linked study Obanda (2010) specified that resilient institutional support by top levels of management is required by procurement employees to stimulate honesty, integrity, monitor the public procurement process and apply procurement regulation correctly. To ensure that effective compliance with procurement regulatory principles are practiced and procurement non-compliance are avoided, regular supervision and administration must be safeguarded

METHODOLOGY

Primary data in this study was collected from various respondents working with Local Government office in selected councils through the use of questionnaires. A total of 185 respondents were selected from the four councils where the study was conducted. This included accounting officers, tender boards’ members, procurement staff and council
employees. Due to time constrain it was difficult to cover all LGA’s in Arusha region, hence to make this study possible it was done in four councils namely (Arusha CC, Arusha DC, Monduli DC and Meru DC) in Arusha Region.

Secondary data was collected through reading various reports as CAG reports, PPRA reports, PSPTB brochures, Procurement manuals and PPRA journals.

**Research Design**

Inferential statistic helped the researcher to assess the strength of the relationship between the independent variables and dependent variable and hence to reach a conclusion based on the facts collected. An inferential statistic method was suitable for this research, and it allowed the researcher to spend little resources to determine the influence of individual factors in compliance with procurement regulatory by LGAs in Arusha Region.

**Sampling Technique and data analysis**

Purposive Sampling technique was used in this research. The purposive sampling within each council was used to determine a group of people (the accounting officers, procurement staff and tender board members). As each council had personnel with different expertise and experience the researcher believed purposive sampling was appropriate for this research. Quantitative data were analysed using SPSS (Version 17). The t-test is mostly used method to test the differences in means between variables. The level of significance for the difference for the t-test was 0.05.

**FINDINGS AND DISCUSSIONS**

**Demographic Information**

Four demographic items were used by the researcher in questionnaires supplies; age, gender, level of education and working experience. Responses collected from respondents are as shown here under.

**Age**

Table 1 and figure 1 shows that most of respondents (52.4%) were in the age group of 30-39 and few (7%) with age above 50 years. This implies that majority had enough experience on the Procurement Regulatory Compliance.

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 29</td>
<td>29</td>
<td>23.4</td>
</tr>
<tr>
<td>30 - 39</td>
<td>65</td>
<td>52.4</td>
</tr>
<tr>
<td>40 - 49</td>
<td>23</td>
<td>18.6</td>
</tr>
<tr>
<td>&gt;50</td>
<td>7</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Field data, 2016

**Figure 1: Respondents age**
Source: Field data, 2016

Respondent’s Genders

Table 2 shows that majority of respondents were male who comprised 56.5% while female were 43.5% this shows that more males are employed compared to females.

Table 2: Composition of respondents’ gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>54</td>
<td>43.5</td>
</tr>
<tr>
<td>Male</td>
<td>70</td>
<td>56.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>124</td>
</tr>
</tbody>
</table>

Source: Field data, 2016

Education Level

Table 3 and figure 2 shows that respondents with certificate level of education were 4.8%, diploma 8.1%, majority of respondents (58.9%) possessed first degree and 26.6% were post graduate holders. Looking at the education level profile it implies that majority of the respondents’ were conversant with the procurement regulatory and compliance issues in their respective LGA’s.

Table 3: Respondents education level

<table>
<thead>
<tr>
<th>S/N</th>
<th>Education Level</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Certificate</td>
<td>6</td>
<td>4.8</td>
</tr>
<tr>
<td>2</td>
<td>Diploma</td>
<td>10</td>
<td>8.1</td>
</tr>
<tr>
<td>3</td>
<td>Degree</td>
<td>73</td>
<td>58.9</td>
</tr>
<tr>
<td>4</td>
<td>Post-graduate</td>
<td>33</td>
<td>26.6</td>
</tr>
<tr>
<td>5</td>
<td>Masters</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>6</td>
<td>PhD</td>
<td>1</td>
<td>0.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data, 2016
Respondent’s Work Experience

Table 4 and figure 3 shows the working experience of respondents in their respective LGA’s. About 18% of respondents had working experience of less than one year, 29% had 1 to 5 years working experience. Majority of (35.6%) had 6 to 10 years working experience.

Table 4. Respondents Work Experience

<table>
<thead>
<tr>
<th>Working experience</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>22</td>
<td>17.7</td>
</tr>
<tr>
<td>Between 1 and 5 years</td>
<td>36</td>
<td>29.0</td>
</tr>
<tr>
<td>Between 6 and 10 years</td>
<td>44</td>
<td>35.6</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>22</td>
<td>17.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data, 2016

Figure 3: Respondents working experience

Source: Field data, 2016
Influence of staff training

Staff training influenced procurement regulatory compliance by 17.7% whereas 22.6% reported staff training to influences procurement regulatory compliance moderately. Majority of the respondents 57.3% were of view that staff training influences procurement regulatory by great extent.

Furthermore, 37.1% of respondents agreed that tender board members don’t have appropriate procurement competence to handle the compliance process. Most of the employees in procurement department are not properly trained and lack enough skills to process procurement compliance processes (23.4% and 46.8% agreed and strongly agreed). Parallel to that 81.5% (54.1% agree and 27.4 strongly agree) that training on documenting standards and best procurement practices would facilitate uniform of procurement regulations and enhance compliance. Consultation to the successful Government departments or procurement experts would improve compliance in the LGAs; this was agreed by 58.9% and 22.6% strongly agreed.

Training seemed to influence compliance with procurement regulatory by LGAs. Lack of adequate training leads to know how in understanding the laws and regulations that govern procurement compliance, more than 80% of respondents agreed lack of adequate training to be a menace to compliance with procurement law and regulations. Lack of competence of tender board members and lack of skills of procurement department staff were also a big challenge to compliance to the procurement regulations. However, documenting standards and best practices that facilitate uniform application of procurement application, consultation to successful government departments or experts in the procurement process that improve compliance and inadequate training on procurement procedures that lead to non-compliance in procurement regulations in LGA were the biggest challenges.

Influence of staff awareness on procurement regulations

About 23% of respondents were of view that staff awareness on procurement rules and regulations influences procurement regulatory compliance by very great extent, while majority 53.2% responded that it influences by great extent. High level of noncompliance is attributable to complex procurement laws (40.3% and 12.1% agreed and strongly agreed respectively). This shows complex procurement laws has significant impact in procurement regulatory compliance by LGAs.

In connection to that lack of clarity in procurement laws and regulations lead to non-compliance (43.5 percent and 28.5 percent agreed and strongly agreed). Therefore, 59.6% and 20.2% agreed and strongly agreed that familiarity with procurement regulations by employees might influence compliance with procurement regulations by employees. It can be generally derived that inherent limitations of the procurement law and regulations contribute to non-compliance to the procurement law. Complex legislative requirements of the procurement laws and lack of clarity in procurement laws and regulations are believed to threaten compliance to the procurement laws and regulations. Other factors such as scanty familiarity to the procurement rules attributes to non-compliance to procurement laws and regulations.
Personal qualification influence

About 73% of respondents were of view that personal qualification influences procurement regulatory by very great extent. Also, Maintaining high standards of professionalism influence compliance with procurement legislation (50.0% agreed and 31.5% strongly agreed). This suggests that maintaining high standards of professionalism has influence in compliance with procurement legislation. On other hand personnel with experience in procurement regulations in the office influence compliance (52.4% and 23.4% agreed and strongly agreed respectively). to procurement regulations. Apart from that, personal knowledge on procurement regulatory contributes to regulatory compliance (34.7% agreed and 22.6% strongly agreed). It was agreed that personnel with high education level influence procurement compliance (39.5% agreed 16.2% strongly agreed)

Apart from other aforementioned attributes that leads to non-compliance to procurement issue of personal qualification seemed to influence compliance to procurement laws and regulations. Maintaining high standards of professionalism in the public sector has been reported to enhance efficiency and effectiveness in complying with the regulations. The issue of having personnel with experience in the office with regard to procurement regulatory, personnel with high level of education like post-graduate diploma or masters would not necessary enhances good understanding and greater chance to compliance to the procurement law and regulations. Personnel with low level of education like certificate and diploma should not be considered as a factor that attributes to non-compliance to procurement rules.

Employees workload influence

Employee’s workload influences procurement regulatory by very great extent (46.9%) By referring to respondents response employees workload influences procurement regulatory compliance in the LGAs. This was supported by 54.1% of respondents. This indicates high employees work load has significant impact in procurement regulatory compliance by LGAs. Parallel to the workload number of procurement staff also seem to influence level of non-compliance (41.6 percent agreed and 29.4 percent strongly agreed). This suggests that fewer number of procurement staff in the council has influence in compliance with procurement legislation. On top of that, lack of collaboration with other department heads and stakeholders hinders compliance (46.8 percent of responses show they agreed and 22.6 strongly agreed). Like workload, high volume of work contributes to unethical practice and non-compliance (34.7% percent agreed and 22.6% strongly agreed). It was concurred by majority (50.8%) that lack of prioritization on procurement works influences non-compliance.

Regression Analysis

Results from multiple regression analysis to test the extent to which individual factors influence compliance of public procurement regulations in the Local Government Authorities. Multiple regression analysis assisted to test the extent to which four independent variables (personal qualification, staff awareness of procurement regulations, staff training on procurement procedures and employees workload) influences the dependent variable (compliance of public procurement regulations).

Coefficient of determination have been used to describe the extent to which procurement regulatory compliance (dependent variable) can be explained by the change in the individual
factors (independent variable) or the percentage of variation in the dependent variable (compliance of public procurement regulations) that is explained by all the four independent variables (personal qualification, staff awareness of procurement regulations, staff training on procurement procedures and employees workload).

Table 5.0: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>R² Adjusted</th>
<th>Standard error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.910a</td>
<td>0.828</td>
<td>.292</td>
<td>.65432</td>
</tr>
</tbody>
</table>

Source: Field data, 2016

Independent variables researched shows only 83% of individual factors influence compliance of public procurement regulations by Tanzanian LGAs as represented by the Rsquare this implies that other factors not researched in this study influence by 17%. Hence more research needs to be done to find the other factors influencing procurement regulatory compliance by the Tanzanian LGAs.

Table 5.1: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>2.435</td>
<td>3</td>
<td>1.762</td>
<td>56.554</td>
<td>0.029</td>
</tr>
<tr>
<td>Residual</td>
<td>0.931</td>
<td>42</td>
<td>2.723</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.366</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2016

The significance value of 0.029 (Table 5.1) is less than 0.05 which implies the model is statistically significance in predicting how personal qualification, staff awareness of procurement regulations, staff training on procurement procedures and employees workload influences procurement regulatory compliance in Tanzanian LGAs. F calculated is equal to (56.554) and F critical at 5% level of significance is equal to 3.23, since the F critical is lower than F calculated it implies that the overall model was significant.

Table 5.2: Coefficient of determination

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients Unstandardized</th>
<th>Coefficients Standardized</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Constant</td>
<td>1.112</td>
<td>1.223</td>
<td>0.917</td>
</tr>
<tr>
<td></td>
<td>Personal Qualification</td>
<td>0.201</td>
<td>0.104</td>
<td>0.157</td>
</tr>
<tr>
<td></td>
<td>Staff awareness of procurement regulations</td>
<td>0.180</td>
<td>0.145</td>
<td>0.087</td>
</tr>
<tr>
<td></td>
<td>Staff training on procurement procedures</td>
<td>0.369</td>
<td>0.204</td>
<td>0.155</td>
</tr>
<tr>
<td></td>
<td>Employees workload</td>
<td>0.121</td>
<td>0.096</td>
<td>0.215</td>
</tr>
</tbody>
</table>

Source: Field data, 2016
Regression analysis was performed so as to establish the extent to which four individual factors influence the compliance of public procurement regulations in the LGAs, from the above SPSS generated table, the researcher have formulated the equation to establish the extent of all four independent variables to the dependent variable \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \)

\( Y = \) dependent variable (compliance of public procurement regulations)

\( X_1 = \) personal qualification variable

\( X_2 = \) staff awareness of procurement regulations variable

\( X_3 = \) staff training on procurement procedures variable

\( X_4 = \) employees workload variable

\( \beta_0 = \) Constant variable that is not associated with compliance of public procurement regulations

\( \varepsilon = \) Disturbance error term

Converted to, \( Y = 1.112 + 0.369X_1 + 0.201X_2 + 0.180X_3 + 0.121X_4 \)

This implies that the value of \( Y \) will be 1.112 if all independent variables are zero.

From the regression equation established, and considering all four individual factors into account (personal qualification, staff awareness of procurement regulations, staff training on procurement procedures and employees workload) at zero, procurement regulatory compliance will be 1.112. Data analyzed shows that taking all other independent variables at zero, a unit increase in staff training on procurement procedures will lead to a 0.369 influence in procurement regulatory compliance; a unit increase in personal qualification will lead to a 0.201 influence in procurement regulatory compliance, a unit increase in staff awareness of procurement regulations will lead to a 0.180 influence in procurement regulatory compliance and a unit increase in employees workload will lead to a 0.121 influence in procurement regulatory compliance. This concludes that staff training on procurement procedures influences more to the procurement regulatory compliance by Tanzanian LGAs.

At 5% level of significance and 95% level of confidence, Staff training had a 0.045 level of significance, staff awareness of procurement regulations showed a 0.188 level of significant, personal qualification showed a 0.188 level of significant, and employees’ workload showed a 0.321 level of significant hence the most significant factor is staff training.

**CONCLUSION**

From the above findings it was concluded that staff training, staff awareness of procurement regulations, personal qualification and employees workload as individual factors studied have influence in procurement regulatory compliance by Tanzanian Local Government Authorities. Also through regression analysis it was concluded that the extent of individual
factors in influencing the compliance of public procurement regulations in the LGAs is by 83 percent as represented by the $R^2$ this implies that other factors not researched in this study influence by 17%. Hence more research needs to be done to find the other factors influencing procurement regulatory compliance by the Tanzanian LGAs. The study recognize the importance of integrity, training in procurement regulatory compliance conversely; more efforts needs to be done to advance compliance conduct, knowledge of staff on procurement rules and regulations, council tender boards and procurement staff due to the reason that failure comply with procurement regulatory councils may lead to major loss of government money. The other issues revealed in field included; advance the impact of compliance on quality of goods and services, enhancing challenges facing the implementation of public procurement regulations in Tanzanian LGAs. Improve transparency and accountability. Provide solution to the challenges facing e-procurement in the LGAs.

REFERENCES


Government of Tanzania: Public Procurement Act, Act No.9 of 2011


