The Role of Supplier Selection Practices on Supply Chain Performance of Public Sugar Firms in Western Kenya

Osewe Maureen Auma¹, Dr. Fredrick Aila², PhD.

¹M. Sc. Student, Department of Management Science, Maseno University, Kenya maurrenosewe@gmail.com
²Senior Lecturer, Department of Business Administration, Maseno University, Kenya Fredrick.aila@gmail.com

ABSTRACT

Supply chain management is imperative in the contemporary business world as a conduit of better overall organization returns. Many stakeholders in companywide practices are increasingly turning to managing supply chains in the place of managing competitions in order to improve supply chains performance. In the G2 Grid online report, it is expected that supply chains will grow by 11.2% between 2020 to 2027, verily improving flow of products to final consumers despite global political systems disruptions such as Russia’s invasion of Ukraine. In Kenya, sugarcane production contributes 15% to the country’s GDP with majority of sugar firms domiciled in the western region of the country. In spite of these, supply chains performance in public sugar firms of Western Kenya remain to be low due to protracted legal battles, cane poaching and huge supply gaps. Even though numerous studies have been advanced on supply chain management and supply chain performance in sugar firms, effect of supplier selection practices on supply chain performance of public sugar firms remains scanty. The purpose of the study was establishing the effect of supplier selection practices on supply chain performance of public sugar firms in western Kenya. The study was guided by the Resource Based Theory. A correlational research design was adopted on a population of 42 respondents with units of analysis as procurement officers and finance officers. Primary data was collected using a structured questionnaire. Standard linear regression analysis was adopted in the analysis of data. The results show that supplier selection practices has a positive significant effect and explains 55.8% variance in supply chain performance (β=.354, p<.05, R²=.558, p<.05), implying that a unit improvement in supplier selection practices results into 0.354 unit improvement in supply chain performance. We conclude that supplier selection practices has an important role in supply chain performance in public sugar firms in Western Kenya.

Key words: Supplier Selection Practices Supply chain performance public sugar firms Resource Based Theory

1.0 INTRODUCTION

1.1 Background of the study

Supply chain performance can be said to be the manner in which an organization carries out its tasks of procurement, order processing, purchasing, inbound logistics, manufacturing, packaging, quality assurance and outbound logistics while achieving the set target objectives but at the same time maintaining high efficiency and effectiveness (Cooper, Lambert & Pagh 1997). Flora (2022) defines supply chain as the effectiveness of each stage of the e-commerce supply chain in optimizing costs, reducing inefficiencies, reducing speed and meeting customer requirement this involves on time delivery, stock availability, order accuracy and production lead times.

Contextually, public sugar cane firms in western Kenya has been experiencing poor performance, however it is not known whether issues of supply chain performance is the reason for the poor financial performance. Therefore, supply chain performance is important because it improves living standards by enabling consumers to get products at a lower cost. Also, supply chain performance improves inventory turnover hence improves financial performance of an organization. Various tools are used in supply chain performance measurements which are also the indicators of Supply chain performance the different parameters include, output levels, input levels and the production rate (Cooper, Lambert & Pagh, 1997).

In Kenya, sugar industry contributes and plays a significant role in economic growth; it contributes to 15% of the overall Kenyan Gross Domestic Product (GDP) (KSh2009). Despite this, Kenyan sugar sector as compared to its global and regional counterparts has not been doing well. Most of the public sugarcane firms in western Kenya have accumulated debts, farmers are not being paid in time and production is at its knees. The government has tried to bail the companies out and this has not been successful. It is not clear, therefore, whether green procurement contributes to challenges in the sugar sector production in Kenya given that previous studies have displayed varied results.

A notable development in the sugar sector currently is the Voluntary Sustainability Standards (VSSs) among sugar cane farms and mills. This is an area that has been non-existent in the recent past. However, by 2016, 3.2% of the sugar market was already made up of VSSs compliant produced sugar. This constituted 96.7% of conventional sugarcane production. Another global concern about sugar consumption is the debate about health issues which arise...
from excess consumption of sugar; the debate has led to a projection of decline of sugar consumption of 1.1% annually from 2018 to 2027 as compared to 2.1% annually over the last decade.

The role that supplier selection practices play in performance of supply chains is important and previous numerous studies have investigated the relationship between supplier selection practices and supply chain performance in different contexts. For instance, Nasiche et al. (2020) studied supplier training on performance of sugar cane enterprises in Kenya. Their study was descriptive with a sample of 400 farmers drawn from the sugar cane enterprises. The study also adopted a qualitative paradigm. Results of the study revealed a positive significant relationship between supplier training and performance of sugar cane enterprises (r =0.347, p=0.000). The study however deviates from the present proposal in that the proposed study will focus on supplier selection and supply chain performance from the perspective of green supply chain management.

The study by Duica et al. (2018) looked at supplier’s selection by recognizing selection of suppliers as an important process in supply chain management. In addition to this, they observed that selection of suppliers is important in managing the relationship between suppliers and the organization. The researchers also acknowledge that supplier selection is a challenging task and that arriving at the right supplier and even maintaining the relationship for purposes of future suppliers is not easy. The study used mathematical models such as regression functions and time series analysis to underscore the importance of supplier selection; they also adopted both qualitative and quantitative paradigm in their study. The study however, did not outline exhaustively the benefits of supplier selection from supply chain performance point of view and whether supplier selection is done from green supply chain perspective. Furthermore, the study did not specify the sector which their study was based.

1.2 Objective of the study
The main objective of the study was to determine the effect of supplier selection practices on supply chain performance of Public Sugar firms in Western Kenya.

1.3 Research Hypothesis
H₀₁: Supplier selection has no significant effect on supply chain performance of Public Sugar firms in Western Kenya.

1.4 Justification of the Study
Sugar cane contributes to livelihood of over 100 million globally, in Kenya; sugar contributes to 15% of the overall GDP. Food manufacturing companies consumes greater part of sugar which is being produced globally. Many studies have been done about the performance of public sugar companies in western Kenya, but none of the studies has conclusively and exhaustively investigated the link between green procurement and supply chain performance of sugar companies in western Kenya. Sugar cane production process entails some activities which may be considered to be environmental unfriendly. Consequently, the world is focusing on climatic change hence emissions which are considered dangerous to environment is highly discouraged. Climatic change and degradation of ozone layer has taken the center stage in the global discussion. No wonder, the world has been keen on green operations in all sectors. This study therefore proposes to evaluate whether public sugar firms in western Kenya have been practicing green procurement and its nexus with supply chain performance. The results of the proposed study will be important to policy makers, scholars, preceding academicians and other stakeholders for purposes of policy formulation and decision making concerning performance of sugar firms in Western Kenya.

1.5 Conceptual framework
The figure 1.1 depicts conceptual framework of the study. According to Kothari (2014), a conceptual framework can be defined as a research that has a relationship with some abstract ideas or theoretical foundation and shown diagrammatically. The author further opines that conceptual framework is used by researchers to interpret ideas.

![Conceptual framework](image)

Figure 1.1: Conceptual framework of the effect of supplier selection practices on supply chain performance of public sugar firms in Western Kenya.
Source: (Adapted Wernerfelt, 1984)

The independent variable is supplier selection. Aspects of supplier selection such as green policies, environmental awareness, budget and resource allocation and compliance may affect performance of supply chains in public sugar firms. The dependent variable is supply chain performance. Measures of supply chain performance such as cost effectiveness, profit, quality compliance and timeliness may be achieved through adoption and use of supplier selection practices. The elements of the conceptual framework are derived from both theory and empirical studies (Kothari, 2014). Therefore, the study is made up two main variables, independent variable (supplier selection practices) and the dependent variable (supply chain performance) which interacts to produce and effect relationship.

2.0 LITERATURE REVIEW

2.1 Resource Based Theory

The Resource Based Theory was proposed by Wernerfelt in 1984. The theory holds that by considering company products and their relationship with the available resources of the firm, the resources of a firm and the respective products are like ‘two sides of the coin’. Moreover, Wernerfelt (1984) proposed that, the notion of looking at the firm as a wider set of resources traces back to the roots of works by Penrose (1959), Penrose (1959) emphasizes the link between resources, strategic advantage and competitiveness. Wernerfelt (1984) asserted that by referring to resources, he only meant internal resources of a firm. Another pioneer of resource based theory is Barney who wrote two manuscripts in 1986. One concentrated on the use of strategic factor markets while the other on culture as a source of advantage. He started with neoclassic assumptions that there are no rents (normal returns) in competitive markets, and to obtain rents; it is necessary to access a strategic factor market.

Therefore, firms may only obtain greater than the average returns from adopting and using their product market strategies when the cost of their resources which should be used to implement their strategies is much less than their economic value (Barney 1986). In summary, resource based theory asserts that value is the only and necessary condition in the Resource Based Theory (RBT). No resource of strategy is valuable as such; it depends on configuration of resources, routines, and embedded assets. Resource Based Theory (RBT) provides an important framework for explaining and predicting the basis of the firm’s competitive advantage and performance (Barney 1986, Penrose, 1959). The proposed study is however coined around supply chain performance. Supply chain deals in procurement of mostly resources (products) and services, when the entire process of supply chain of products and services is done efficiently and with minimum costs, then it is expected that supply chain performance will improve. This theory will guide this study because it is linked to the dependent variable (supply chain performance). It will be used to best understand supply chain performance in a bid to make comparisons, contrasts and making inferences and generalizations.

2.2 The Concept of Suppliers Selection

Supplier selection is a very important process in supply chain management. Grondys et al (2015) asserts that supplier selection plays a very important role in reducing the cost and time to market and it also improves the quality of the products. Similarly, Ware et al (2012) underscored the importance of supplier selection. They opined that with the current competition witnessed globally, coupled with growing market environment, the actual competition is not between firms against firms but supplier against supplier. With technology, the market gets closer and closer; consumers expect fast delivery, economical products, excellent service and high quality product coupled with desired service level. Therefore, supplier selection becomes essential. These reviewed studies link supplier selection to success and supply chain performance but failed to link supplier selection based on green procurement (environmental consideration) with performance.

2.3 Supplier Selection practices and Supply Chain Performance

Garg et al (2013) studied supplier selection criteria and methods in supply chain, their study adopted review methodology where previous empirical studies were reviewed before conclusions and recommendations were made. The researchers observed that an effective supplier selection process is essential for manufacturing organizations; supplier selection reduces risk, maximizes overall value of the purchaser and harnesses closeness and long term business relationships.

Nyaberi et al (2018) studied supplier selection in manufacturing companies in Kenya. The paper adopted mixed methods design by using both explanatory and descriptive survey research designs. The study targeted a population of 151 food and beverages Small and Medium Enterprises in Nairobi County which were practicing supplier development programs. The study employed a stratified random sampling technique and a sample of 399 was used in the study. The study employed qualitative paradigm and questionnaires were used in the study. The study results showed a conclusion that food and beverage companies in Nairobi County adopt and use various criteria in supplier development practices. These included selection based methods where quality of the products of the delivered by the service providers is considered, financial strength of the supplier, flexibility and ease of the supplier to deliver, supplier efficiency in service delivery, supplier charges, good market reputation of the supplier and increase in cost of operations. The study however missed a critical aspect of selection which is selection based on green operations compliant by the supplier. This is an area that the proposed study will seek to investigate. Lastly, the study was done among food and beverage companies operating within Nairobi while the proposed study will be done among Public Sugar companies in Western Kenya.
Nasiche et al. (2020) studied supplier training on performance of sugar cane enterprises in Kenya. Their study was descriptive and a sample of 400 farmers, their study paradigm was qualitative. Results of the study revealed a positive significant relationship between supplier training and performance of sugar cane enterprises ($r=0.347, p<0.000$). The study however deviates from the present proposal in that the proposed study will focus on supplier selection and supply chain performance even though previous studies link supplier’s selection and financial performance of sugar companies.

Duica et al. (2018) studied supplier’s selection. The study used mathematical models such as regression functions and time series analysis to underscore the importance of supplier selection; they also adopted both qualitative and quantitative paradigm in their study. The study however, did outline exhaustively the benefits of supplier selection form organizational performance point of view. Furthermore, the study did not specify the sector which their study was based. They recognized selection of suppliers as an important process in supply chain. In addition to this, they observed that selection of suppliers is important in managing the relationship between suppliers and the organization. The researchers also acknowledge that supplier selection is a challenging task and that arriving at the right supplier and even maintain the relationship for purposes of future suppliers is not easy.

All the studies reviewed about the relationship between supplier selection and supply chain performance have been documented, though none has concentrated on supplier selection and supply chain performance more so in public sugar firms in Western Kenya. For instance, Garg et al. (2013) reviewed literature and confirmed that supplier selection reduces risk, maximizes overall value of the purchaser and also improve business relationships. Nyaberi et al. (2018) studied supplier selection in manufacturing companies in Kenya by using primary data and stratified random sampling technique and the study confirmed that supplier selection influence supplier chain performance positively. Nasiche et al. (2020) studied supplier training on performance of sugar cane enterprises in western Kenya, the study confirmed that there is a positive significant relationship between supplier training and supply chain performance of sugar cane enterprises. Lastly, Duica et al. (2018) studied supplier selection and used mathematical modeling such as regression and time series and also confirm a positive relationship between supplier selections.

While the reviewed confirmed positive relationship between supplier selection and supply chain performance, they had differences in methodology. For instance, Garg (2013) only reviewed literature and is not specific about the population studied or the firm investigated, Nyaberi et al. (2018) focused on food and beverage companies, Nasiche et al. (2018) became closer to the proposed study by focusing on sugar enterprises in Western Kenya, however, the proposed study will focus only on sugar companies in Western Kenya yet Nasiche et al. focused on all sugar enterprises in Kenya. Besides, Nasiche et al. also used supplier training instead of supplier selection, Duica et al. (2018) on their part used mathematical models such as regressions and times series to study the relationship between supplier selection and supply chain performance. It is therefore not known how the results will deviate when the proposed study will use different methodology (population, sampling and research design) to determine the relationship between supplier selection and supply chain performance specifically of Public sugar companies which are found in Western Kenya.

It is clear that reviewed literature have ignored the effect of supplier selection and supply chain performance of public sugar firms in Western Kenya, ignoring correlational design, in a primary quantitative approach. From the previous studies, it is clear that reviewed literature ignored the effect of supplier selection on supply chain performance of public sugar firms in Western Kenya, ignoring correlational design in a primary quantitative approach.

### 3.0 METHODOLOGY AND DESIGN

The study adopted a correlational research design to evaluate the effect of supplier selection practices on supply chain performance of public sugar firms in Western Kenya. According to Segal & Coolidge (2018), a correlational research design enables a researcher to establish relationship among conceptualized study variables and is ideal for primary quantitative studies. The population of the study comprised of heads of procurement and finance departments of public sugar manufacturing firms in Western region of Kenya making a total of 42 respondents. The study adopted the census technique in which the entire population of the study was incorporated as sample of the study.

Primary data was the main data type used in the paper. A structured questionnaire with a key section on the research variable was employed as main research instrument. In the analysis of data, standard linear regression model, regression pitting mean elements of supplier selection practices and firm performance. This was modelled as below:

$$Y = \beta_0 + \beta_1X_1 + \epsilon \text{ ................................................................. (3.1)}$$

### 4.0 RESULTS AND DISCUSSIONS

#### 4.1 Response Return rate

The researcher issued 42 questionnaires to 42 participants who made up sample of the study. This included 36 staff in procurement and 6 finance officers.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Sample</th>
<th>Actual return</th>
<th>Response rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Officers</td>
<td>36</td>
<td>33</td>
<td>91.7</td>
</tr>
<tr>
<td>Finance Officers</td>
<td>6</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>38</td>
<td>90.5</td>
</tr>
</tbody>
</table>

Source: (Field data, 2023)
The table 4.1 shows that from a sample 42 respondents issued with questionnaire, 38 were fully filled and returned, representing a 90.5% return rate. The remaining 6 questionnaires were partly filled, were not returned and or were insufficient. Collis & Hussey (2010) explains that a response rate of 70% is fit for generalization of results and findings in a research. The response rate of 90.5% was therefore adequate and researcher proceeded to further analysis.

4.2. Supplier Selection practices

The study sought to determine the effect of supplier selection practices on supply chain performance in public sugar manufacturing firms in western Kenya. Respondents were asked to respond to a set of questions on a five point Likert scale where NE-No Extent (1), SE-Small Extent (2), ME-Moderate Extent (3), LE-Large Extent (4) and VLE-Very Large Extent (5). The descriptive results are presented in Table 4.4

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green purchasing policies formulation during supplier selection process</td>
<td>0(0.0)</td>
<td>4(10.5)</td>
<td>13(34.2)</td>
<td>17(44.7)</td>
<td>4(10.5)</td>
<td>3.55</td>
<td>0.828</td>
</tr>
<tr>
<td>Selecting suppliers who adhere to environmental or green supply chain requirements</td>
<td>1(2.6)</td>
<td>3(7.9)</td>
<td>3(7.9)</td>
<td>23(60.5)</td>
<td>8(21.1)</td>
<td>3.89</td>
<td>0.924</td>
</tr>
<tr>
<td>Prequalification of only suppliers who are compliant with Environmental conservation rules</td>
<td>1(2.6)</td>
<td>0(0.0)</td>
<td>16(42.1)</td>
<td>5(13.2)</td>
<td>16(42.1)</td>
<td>3.92</td>
<td>1.050</td>
</tr>
<tr>
<td>Only suppliers who adhere to green supply chain requirements are finally selected</td>
<td>6(15.8)</td>
<td>4(10.5)</td>
<td>15(39.5)</td>
<td>6(15.8)</td>
<td>7(18.4)</td>
<td>3.11</td>
<td>1.29</td>
</tr>
<tr>
<td>Most pre-qualified suppliers in your organization are aware of green supplier selection criteria.</td>
<td>3(7.9)</td>
<td>10(26.3)</td>
<td>13(34.2)</td>
<td>9(23.7)</td>
<td>3(7.9)</td>
<td>2.97</td>
<td>1.078</td>
</tr>
</tbody>
</table>

Source: (Field data, 2023)

The first statement on supplier selection was on green purchasing policies during supplier selection where 17(44.7%) of the participants’ respondent that to a large extent their organization formulate the policies, 13(34.2) respondent that their organization formulates policies to a moderate extent while 4(10.5) respondent showing formulation of policies to a very large extent and small extent respectively. This was further confirmed by mean and standard deviation (M=3.55, STD=828) as shown in table 4.3. On whether their organizations selected suppliers adhering to environmental requirements, 23(60.5%) recorded that they do so to a large extent, 3(7.9%) respondent they select the suppliers to a moderate and small extent while 8(21.1) respondent they do so to a very large extent. A mean and standard deviation (M=3.89, STD=.924) further showed selection of suppliers adhering to environmental requirements moderately.

Concerning Prequalification of suppliers who are compliant with Environmental conservation rules, 16(42.1%) recorded that their firms do so to a very large extent. The same frequency 16(42.1%) confirmed that this statement to a moderate extent while 5(13.2) showed their organizations prequalify suppliers with compliant with Environmental conservation rules to a large extent. A mean and standard deviation (M=3.92, STD=1.050) conformed the prequalification to a moderate extent. Whether the organization finally selects suppliers adhering to green supply chain management requirements, 15(39.5%) reported they do so moderately, 7(18.4%) recorded they do so to a very large extent, 6(15.8%) reported they do so to a large extent. A mean and standard deviation (M=3.11, STD.290) showed final selection of suppliers to a moderate extent. The study also established whether prequalified suppliers were aware of green selection and 13(34.2%) reported they were ware to a moderate extent, 9(23.7%) recorded they were ware to a large extent while 3(7.9%) replied they were ware to a very large extent. The mean and standard deviation (M=2.97, STD=1.078) showed awareness to a moderate extent.

4.2.2 Effect of Supplier Selection Practices on Supply Chain Performance

In order to establish the effect of supplier selection practices on supply chain performance, the study first examined whether supplier selection practices has any association with supply chain performance of public sugar firms in Western Kenya. To actualize this, the Pearson Product Moment correlation was adopted in the model as below;
The results in table 4.7 show that supplier selection practices had a positive correlation ($r=.631$, $p<.05$) indicating that supply chain performance is positively associated with supplier selection practices in the public sugar manufacturing firms. The study then proceeded to carry out a standard linear regression model analysis between supplier selection practices and supply chain performance. This was modelled as follows;

### Table 4.3: Regression Model summary

<table>
<thead>
<tr>
<th>Model Summary *</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.747*</td>
<td>.558</td>
<td>.519</td>
<td>.48991</td>
<td>14.332</td>
</tr>
<tr>
<td>a. Predictors: (Constant), mean supplier selection practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Dependent Variable: mean supply chain performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (Field data, 2023)

The table 4.10 presents regression model results on the effect of supplier selection practices on supply chain performance of public sugar manufacturing firms in Western Kenya. The R value is 0.747, which indicates that supplier selection practices encompassing green policies, environmental awareness, compliance and budget & resources have a positive relationship with supply chain performance of the public sugar firms. R shows the correlation between observed and predictor variables, with values ranging from -1 to +1 the sign of R showing direction of relationship. Therefore, the R value of 0.747 implies that supplier selection practices are positively associated with supply chain performance. The $R^2$ value is .558 which is also significant ($p=0.037<0.05$) indicating that the independent variable, supplier selection practices explains a 55.8% variance in the dependent variable (supply chain performance). The remaining 44.2% change in the supply chain performance is explained by other variables not accounted for in the current study. The adjusted $R^2$ is .519, which implies that the model is fit when overestimation is controlled.
The results on relationship between supplier selection practices and supply chain performance at (β=.354, p<.05). The findings show that a one unit improvement in supplier selection practices enhances supply chain performance improves by a magnitude of 0.301 units.

Observing the unstandardized model coefficients, the results on relationship between the dependent variable, (supply chain performance) and the independent variable (supplier selection practices) was modelled as follows

\[ Y = 1.210 + 0.301 X_{sp} \]  

In this, the null hypothesis; \[ H_0: \] Supplier selection practices has no significant effect on supply chain performance of public sugar firms in Western Kenya is rejected, we adopt the alternative hypothesis evidencing significant effect of supplier selection practices on supply chain performance.

The results of the study (R²=.558, β=.354, p<.05) cements evidence that supplier selection practices has a positive and significant effect on the supply chain performance of public sugar manufacturing firms in Western Kenya. The study findings agrees with the previous study findings. For instance, Duica et al. (2018) on supplier selection on Organizational performance which found a significant positive relationship however, even though the study recognized supplier selection as an important aspect of the supply chain management the study sector was not specified.

Furthermore, the study findings lend credence to the result of a study done by Nasiche et al. (2020) on the relationship between supplier training and performance of sugar cane enterprises in Kenya. The study was descriptive and was done among 400 farmers in Kenya. The findings of the study confirmed a significant positive relationship (r=0.34, p=0.000). The current study mainly focused on the six public sugar firms in Western Kenya which also found a positive significant relationship between supplier selection practices and supply chain performance at (β=.354, p<.05).

The study however deviates from the current proposed study in that it focused all the sugarcane enterprises in Kenya on financial performance basis while the current study focused on supplier selection and supply chain performance of public sugar firms in Western Kenya.

### 5.0 CONCLUSION

The study sought to determine effect of supplier selection practices on performance of supply chains of public sugar firms in Western Kenya. In a standard linear regression analysis, model results show that supplier selection practices has a significant positive effect on supply chain performance, agreeing with previous other studies and theoretical grounds. We thus conclude: Improvements in supplier selection practices improves performance of supply chains. We provide sufficient confirmatory evidence that improving performance of supply chains can be achieved chiefly by adopting prudent supplier selection criteria. Undeniably, the criteria of selecting suppliers is an important resource that supply chain firms may implement to raise their performance standards.

### REFERENCES


---

**Table 4.3: Regression Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.210</td>
<td>.433</td>
<td></td>
<td>2.795</td>
</tr>
<tr>
<td></td>
<td>mean supplier selection</td>
<td>.301</td>
<td>.118</td>
<td>.354</td>
<td>2.544</td>
</tr>
</tbody>
</table>

a. Dependent Variable: mean supply chain performance

**Source:** (Field data, 2023)

The table 4.4 presents the model coefficient results of the variables. The findings show that there is a constant performance of supply chain in the public sugar manufacturing firms even without including any variable in the model as evidenced by a constant value (B=1.210) that is significant at a p value of 0.005 (p<.05). From the findings, it is clear that supplier selection practices has a positive significant contribution to supply chain performance as shown by the beta coefficient (β=.354, p<.05). The findings show that a one unit improvement in supplier selection practices enhances supply chain performance improves by a magnitude of 0.301 units.


