The Importance of Sustainable Procurement in Public Institutions

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Author’s contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

ABSTRACT

Sustainable procurement has in the recent past generated considerable interest world over considering the potential benefit it presents in preserving the environment and other aspects of human life and development. This is more seemingly been applied more in private firms than in the public sector organisations. The research sought to add to the knowledge of sustainable procurement and how organisations in the public sector can embrace it to facilitate development and service delivery. The research outlined the importance of sustainability and the challenges that organisations face when implementing initiatives. The outcomes of the research indicate that there was lack of clear policy guidelines in most public institutions to embrace and act on the pillars of sustainability. There was also a lack of top management commitment to ensure that sustainability is implemented in public institutions. There was a need for public institutions to ensure that a comprehensive skills development and training in sustainable procurement is undertaken to foster implementation and awareness across the organisation especially procurement professionals.

Keywords: Sustainable procurement; public procurement; sustainability; Zambia.

1. INTRODUCTION

Sustainable Procurement has in the recent past generated a considerable amount of interest and can be defined as a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in
terms of generating benefits not only to the organisation, but also to society and the economy, whilst reducing the damage to the environment (DEFRA, 2006).

Some studies have been made on the factors that affect the implementation of sustainability initiatives in an organisation. The majority of these studies were conducted on sustainability within private sector organisations [1,2] (Giunipero et al., 2012). In today’s public sector, sustainability is an important topic [3].

There are potential benefits of public procurement in terms of sustainability is shown considering the size and influence of the public sector in terms of its percentage expenditure on Gross Domestic Product of a county [4]. A limited number of studies have investigated the role of the public sector in the development of sustainability initiatives (Warner & Ryall, 2001; Swanson et al., 2005; Thomson & Jackson, 2007) [3,4]. Managers in public institutions are usually faced with bureaucratic procedural and legal challenges. There are other stakeholders both internal and external who have an impact on the successful implementation of sustainability initiatives.

1.1 Objectives and Aim

Finding out the importance of sustainable procurement in public institutions and what challenges organisations faced in implementing sustainable procurement initiatives in the public sector was the aim of the study.

The Research objectives were as follows;

1) To examine how sustainable procurement was conducted in Public institutions;
2) To understand how public institutions considered the importance of sustainable procurement;
3) To analyse the benefits of sustainable procurement in public institutions; and
4) To find out the barriers and challenges of implementing sustainable procurement.

1.2 Research Questions

The research sought to answer the following research questions;

RQ1: Is Sustainable Procurement important in public institutions?

RQ2: What factors influence implementation of sustainability in public institutions?

To answer the above questions, public sector organisations were studied to understand how they consider the importance of sustainable procurement in their operations. The conceptual model was developed in section 3, the research design and methods were discussed in section 4, the results of the studies were presented; section 5 concludes; section 6 shows the recommendations; and section 7 discusses future research.

1.3 Significance of the Study

The research was significant as it sought to offer ways in which public institutions can embrace sustainability in their operations considering the growing demand world over for organisations to support broader policy goals such as resilient, environmental stewardship, and inclusive economic development, and social protection. This research will add to the already existing body of knowledge of research on sustainability and how organisations consider sustainability in their operations. Further the research will seek to identify actors and factors that can influence sustainable procurement in public organisations.

1.4 Scope of the Study

The research covered public institutions based in Zambia. It sought to analyse the importance of Sustainable Procurement in Public institutions.

1.5 Limitations

The work was not able to be performed to great depth due to;

- Time limit in which the project was to be completed;
- Financial constraints needed for more data collection;
- Some procurement professionals in public institutions were hesitant to provide data to be used in the research.

2. LITERATURE REVIEW

2.1 Public Procurement

Public procurement is one of the key economic activities of government and refers to “the acquisition of goods and services by government or public sector organisation” (Uyarra & Flanagan, 2010).
The size of public procurement in most economies is significant. Public procurement plays a very critical role in the development programmes of any country and is accountable for mostly 10 to 15% Gross Domestic Product GDP for Zambia.

2.2 Sustainable Procurement

Sustainable Procurement has gained a lot of interest and a high degree of importance in international policies. The UK SP Task force has defined Sustainable Procurement as a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst reducing the impact on the environment (DEFRA, 2006).

Whilst the earlier focus was on environmental procurement, Sustainable procurement ensures that social, environmental and economic aspects of procurement decisions as sought (European Commission, 2006)

Early research in this area concerned primarily with managing the impact on the environment within supply chain operations especially highlighting the strategic threats and opportunities associated with the environment. Research concerned with issues to do with sustainable procurement has a long history in private sector organisations and originated with a particular focus on the management of environmental issues in supply chains, or “green supply chain management” (Srivastava, 2007).

Most of the existing research on sustainable procurement focuses on environmental issues while other studies have focused on social issues. More recently research has began to examine sustainability in supply chains activities in an integrated way such that both social and environmental issues in supply chains are seen as part of a related whole [5].

Sustainable Procurement has a long history in private sector with particular focus on environmental management issues in supply chains [6] (Srivastava, 2007).

2.3 Sustainable Public Procurement

Sustainable public procurement refers to the act of integrating a concern for broader social and environmental impacts within procurement undertaken by government or public sector bodies [3]. Studies have specifically focused on Sustainable procurement policy and the development of ways of assisting in policy implementation. It was found that green procurement has been encouraged through legislation, providing information and dismantling barriers (Thomson & Jackson, 2007).

Research concerned with aspects of Sustainable Procurement has a long history in private sector with particular focus on the management of environmental issues in supply chains [6] (Srivastava, 2007).

2.4 Dimensions of Sustainable Public Procurement

There are three dimensions known as pillars for sustainable procurement. These pillars are known as environment, social and economic. Under each sustainability pillar there are sustainable issues that need to be integrated into the procurement decisions and operations of an organisation.

2.5 Environment

Throughout the life cycle of a service or product that is purchased, there is an impact on the environment. Examples maybe from the extraction of raw materials and the way a product is manufactured through to its use and finally its disposal. The product or service bought must have less negative impact on the environment through its manufacture, use and disposal.

2.6 Social

Public Procurement can be used to foster and drive social improvements in the country where the organization operates in as Procurement activities have social impacts. This can be achieved by ensuring that there are proper working conditions for workers of contractors engaged by the organisation, installing or building offices that have access to the disabled, working against child labour or forced labour. Another example is having or procuring goods manufactured under good conditions and fairly traded to ensure there is sustainability from sources of supply and to areas of consumption.

2.7 Economic

Economic sustainability ensures that there is an economic benefit obtained to the community from
which the product was manufactured and also to that in which it was sold. Economic in this case does not only mean the initial purchase price paid for the product or service but also means that there was efficient procurement processes including usages, maintenance and disposal costs at the end of its life of the product.

Building on these fundamental pillars of sustainability Elkingston (1998) formulated the notion of the “triple bottom line”, which explains that sustainability is the interrelationship of economic, environmental and social dimensions [7].

Stakeholders have moved from a traditional focus on quality management systems to requests for information on sustainable procurement and ethics. Procurement professionals are the custodians of expenditure for their organisations and there is need to ensure they are acting in a sustainable manner.

2.8 Benefits of Sustainable Public Procurement

It is evident that what and how the Governments procure goods, services and works contribute significantly both to its ability to deliver sustainable development to its citizens and also important to its credibility with its development partners. When products are procured from companies that are not ethically responsible, for example companies that take advantage of their workers or companies that damage the environment through their operations, then those companies engaged in such un-sustainable practices are being encouraged to continue with these practices. Organisations should therefore support companies that produce sustainable products.

Sustainable public procurement seeks for long term positive impacts on economic, social and environment issues by helping to;

- Obtain and achieve value for money;
- Ensure that there is Sustainable economic development;
- Reduce the emission of harmful substances and waste generation;
- Ensure that there is Improved ethical behaviour of supplier or contractors;
- Improve working conditions-health and safety, labour standards; and
- Ensure that there is a fair and better society among others.

3. METHODOLOGY AND METHODS

This chapter outlines the method used in data collection and data sources for the researcher to conduct the research. It highlights the research design, defines data sources, data collection tools used, and outlines the scope and limitations faced when undertaking this research.

3.1 Research Design

The descriptive design was used in the study as it was appropriate to obtain information concerning the current status of the sustainability in public institutions. Gronhaug (2005) asserts that in descriptive design the problem is structured and well understood.

3.2 Target Population

The study targeted procurement practitioners in eight public institutions in Lusaka, Zambia.

3.3 Sampling Frame

The purpose of sampling was to gain an understanding about whole population based on the characteristics of the sample. The study used purposive sampling. The method helped the researcher to choose and select various stakeholders who have different experiences with the issues of the sustainable public procurement and thereby reduce bias in the data.

3.4 Sample and Sampling Technique

The purpose of sampling was to gain an understanding about some features or attributes of the whole population based on the characteristics of the sample. In this study, a sample size of 30 procurement professionals was used for the research. All the respondents had sufficient knowledge on how performance of the procurement function could embrace sustainable processes.

3.6 Methods

The data collection methods used were a Questionnaire which were designed using the variables identified as important for meeting the survey objectives and semi structured interviews.

3.7 Data Collection Procedures

The questionnaire was administered and the respondents in the questionnaire and interviews
were 30 procurement professionals. (Please see Appendix for details of the Data Collection Instruments). The primary source of data collection method used in the study included use of questionnaire and semi-structured interviews that were used to obtain information from the Procurement practitioners. The secondary data was obtained from the already written materials which included the journals magazines, and other past studies other relevant books and published information for companies.

3.8 Processing and Analysis

After gathering data from interview schedules and questionnaire schedules the data was analyzed using qualitative techniques, to facilitate description and explanation of the study findings. The data collected was entered into a computer and analyzed using Microsoft Excel 2013 through triangulation.

4. DISCUSSION

The results Table 1 shows the experience of the respondents and levels of education.

This result shows the respondents were adequately trained in procurement and had the necessary experience with 60% having more than 5 years of procurement experience. As the main actors of sustainable procurement in public institutions it is essential that the procurement staff have the adequate qualifications to help in the implementation of sustainability in the organization.

The respondent indicated that they had knowledge of what defines sustainable procurement. However the knowledge was more of the environmental impacts than social; and economic impacts of procurement. The respondent also indicated the importance of sustainable procurement in public institutions considering the benefits that go beyond the organization especially in terms of the environment.

Procurement professionals play an important role in linking the external knowledge to internal needs of an organization. Procurement professionals are therefore able to influence sustainability initiatives in the organization by advising various users of sustainable solutions to requirements. Procurement professionals’ knowledge of sustainability and organizational awareness are important instruments in the support of sustainability initiatives [4,5,8] (Paulraj,2011). A lack in the understanding of what sustainable procurement is and what benefits an organization stands to obtain can make it challenging to embrace it can.

![Knowledge of Sustainability](image)

**Fig. 1. Knowledge of the dimensions of sustainable procurement**
Table 1. Respondents education & experience

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experience in Procurement</strong></td>
<td></td>
<td></td>
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<tr>
<td>1 - 4 years</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>5 - 9 years</td>
<td>14</td>
<td>46.67</td>
</tr>
<tr>
<td>10 years or above</td>
<td>6</td>
<td>13.33</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>11</td>
<td>36.67</td>
</tr>
<tr>
<td>Degree and above</td>
<td>19</td>
<td>63.33</td>
</tr>
</tbody>
</table>

Table 2. Degree of embracing sustainability in Organisations

Where 1= disagree strongly - 5 = agree strongly

<table>
<thead>
<tr>
<th>Sustainable Procurement</th>
<th>Org 1</th>
<th>Org 2</th>
<th>Org 3</th>
<th>Org 4</th>
<th>Org 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of guidelines and policies embrace sustainability in the organisation</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Existence of Top Management support for sustainability</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>There is Procurement Planning done every year</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>The use of whole life cycle analysis when making decisions</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>full utilisation of any E-Procurement</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Environmental consideration when procuring</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>disposal policy is in place</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>use of Health and safety criteria in tender evaluation</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Visit supplier premises</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
An overview of the organisation's integration of sustainability in their processes is displaced in Table 2 below. The results show the scores of the respondents in the sampled organisations. Each selected feature was scored on a five-point scale: 1-2 means that this feature was either not present or absent; and 4-5 meant that the feature was very present or completely present.

The results indicated that the existing guidelines and policies that govern public procurement do not embrace sustainability. The respondent alluded to the fact that the Zambian public procurement Act and Regulations do not embrace sustainability and that was where public institutions got the mandate to formulate internal processes. Therefore sustainability would be embraced in the organization if the Procurement Act would clearly stipulate so. Internal procurement procedures are formulated from the Procurement Act and Regulations.

The respondent indicated that there was no support of top management to implement sustainable procurement in public institutions. It was indicated that as the public procurement act and regulations do not state explicitly how it can be incorporated in operations and management found it difficult to support sustainable procurement in the organization. Procurement literature points out the pivotal role top management support plays in the implementation of organizational change [9]. A study by Brammer and Walker [5] found leadership and management support to be critical in the implementation of sustainable procurement.

From the responses Procurement Planning was undertaken in the organizations and recognized as a benefit to cost saving by consolidating supplies. Procurement planning was essential and offered an opportunity to integrate sustainability initiatives on products and services been planned for purchase at the beginning of the year. Specifications could be tailored to meet sustainability criterion in the tender documents at planning stage [10-16].

The respondents indicated that Whole Life Cycle consideration was not applied when making purchasing decisions from the time an item was bought up to the time it was disposed. For organisations to accrue the benefits of sustainable procurement whole life cycle should be incorporated in procurement decisions.

There was no full utilisation of E-Procurement that public institutions were supposed to use to conduct procurement. E Procurement had the potential to reduce face to face contacts with suppliers thereby reducing the risk of corruption among procurement professionals and in turn provide value for money spent with improved efficiencies.

It was discovered that environmental consideration was not done for all procurements unless for some tenders that have an environmental impact. It was discovered that because of lack of sustainability in place, this was not practiced.

There is no disposal policy in place in the organization except only for motor vehicles. Ministry of finance had a disposal department that disposes off assets on behalf of public institutions.

The respondents indicated that tender documents used in public institutions are generated as standard templates from Zambia Public Procurement Authority and give little or no room for amendments to incorporate health and safety criterion. The Health and Safety criteria may be incorporated in the tender document’s terms of reference within the parameters allowed in the preparation of tender documents.

It was discovered that no visits were conducted at supplier premises or factories. It is important that organization conduct due diligence on the firms they are conducting business with by visiting their premises. This visit will help organisations know the working conditions of the supplier’s workforce. The labour conditions and employment practices to ensure there is no forced or child labour.

The main barrier or challenge that was indicated by the respondent was not having sustainable procurement enshrined in the act and regulations that govern procurement processes in public institutions. Top Management support for the implementation of sustainability would allow firms to execute in a proper manner when it is enshrined explicitly in the procurement act.

5. CONCLUSION

Sustainable Procurement is vital as governments in developing countries have sought ways to address the challenge of sustainable development by leveraging their influence as the major spenders on procuring goods and services. This research has provided an
overview of the importance of sustainability in public procurement and the findings have revealed that sustainable procurement in public procurement is not been fully implemented in purchasing decisions. The major issue identified was lack of clear sustainability guidelines in policies and guidelines that govern the conduct of procurement in public institutions. If government policy and legislation is supportive of sustainable procurement, public sector organisations are more likely to implement sustainable procurement. The analysis shows that while some organisations embrace some sustainability criteria in their procurements, most areas of sustainability are relatively neglected and are not considered in the criteria.

Training of procurement professionals in the application of sustainable procurement is vital as they are the main influencers.

6. RECOMMENDATIONS

The research therefore recommends the following:

i) The research identified that the lack of clear guidelines and policies to ensure implementation of sustainability in Public Procurement Act of 2020 and Public Regulations was a major issue in public institutions sampled in this research. Therefore the regulators need to revise the Act together with the regulations that guide public procurement to include sustainability issues.

ii) Organisations in the public sector should develop clear sustainability policies that would guide not only the procurement personal but across the organisation wide. This can be done through incorporating sustainability goals and statements in the overall strategic and operational plans. Once clear sustainable policies are stated, it will be easy for the departments to embrace sustainability in their operations and implementation would be effective considering that there is top management support.

iii) The research also identified that training in sustainable procurement is crucial in the organisation. The organisations should invest in the training of procurement staff and other actors in sustainability. The profile of sustainability will be raised in the organisation when staff charged with the mandate to oversee procurement are properly trained in sustainable procurement;

iv) Organisations should carry out visits at supplier premises or factories to understand the way they operate. Regular unannounced visits will ensure that the suppliers within the supply chain of the organisation remain compliant to labour laws and other regulations. This will help identity suppliers that may be exploiting workers, using forced labour, engaging in child labour or unsafe work environments;

v) Ensure that Whole Life Costing cycle is followed for all materials and equipment purchased. This will ensure that the cost of the equipment is properly identified from purchase, maintenance and disposal stages.

7. LIMITATIONS AND FUTURE RESEARCH

This study, as any study, has its limitations. These limitations can serve as stimuli for future research. One of the limitations of the research is that it was a study in one country and the findings from this study cannot be assumed to be applicable everywhere. The population size is low. A larger data set will be more representative of target population and facilitate further analysis comprehensively. Despite the importance of embracing sustainability in procurement processes further research is needed to fully understand how sustainable procurement can be implemented in the public sector. The research identified a lack of clear guidelines in the Procurement Act and regulations but did not focus more on why this was the case. Future research should be able to identify the gaps in the Procurement Act and how sustainable procurement can be incorporated in the act and standard bidding documents so that more work is done in enhancing the guidelines with modern trends in the industry. Further research is needed in identifying actors and factors that can influence sustainable procurement in the organisation.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

1. Bansal P, Roth K. Why companies go green: A model of ecological
APPENDIX

Questioner:

Part 1. Profile of respondent

<table>
<thead>
<tr>
<th>SN</th>
<th>Question</th>
<th>Response</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>What is your level of education?</td>
<td>Diploma</td>
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<tr>
<td></td>
<td></td>
<td>Degree and above</td>
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<tr>
<td>2</td>
<td>How long is your experience as a Procurement Practitioner in Public Procurement?</td>
<td>1-5 years</td>
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<td>5-10 years</td>
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<td>Above 10 years</td>
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Part 2. Respondents' Knowledge

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<tr>
<th>SN</th>
<th>Question</th>
<th>Response</th>
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<tbody>
<tr>
<td>3</td>
<td>Do you have specific training in sustainable Procurement?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
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<tr>
<td>4</td>
<td>Do you have knowledge of what sustainable procurement is?</td>
<td>Yes</td>
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<td></td>
<td></td>
<td>No</td>
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5. If your answer to question 4 is yes, briefly explain?

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

6. Kindly put a rating according to the instruction in the table on each question below

<table>
<thead>
<tr>
<th>SN</th>
<th>Question</th>
<th>1 = Strongly disagree</th>
<th>2 = disagree</th>
<th>3 = neither agree nor disagree</th>
<th>4 = agree</th>
<th>5 = strongly agree</th>
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<tbody>
<tr>
<td>1</td>
<td>Existence of Procurement guidelines and policies embrace sustainability in your organisation</td>
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<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Top Management support for sustainability initiatives in your organisation</td>
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<tr>
<td>3</td>
<td>Procurement Planning is done every year</td>
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<td>4</td>
<td>use of whole life cycle analysis when making procurement decisions</td>
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<td>5</td>
<td>full utilisation of E-Procurement System</td>
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<td>6</td>
<td>Measure of the effectiveness of procurement performance</td>
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<td>7</td>
<td>Environmental aspects of sustainability consideration when procuring goods</td>
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<td>8</td>
<td>Do you have a disposal policy is in place</td>
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<tr>
<td>9</td>
<td>use of Health and safety criteria in tender documents</td>
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<td>SN</td>
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<td>1 = Strongly disagree</td>
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<tr>
<td>10</td>
<td>Do you often visit supplier premises?</td>
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</table>

7. Briefly, what top three (3) challenges do you face in implementing the Sustainable procurement in your organization and what proposals do you have?

Peer-review history:
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