The “baby steps” in mainstreaming sustainable public procurement in Ghana: A “double-agency” perspective

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The emerging literature on public procurement policy suggests that public procurement may be leveraged to advance several public policy agenda. Hence, many countries have reformed their public procurement process towards social and environmental outcomes termed sustainable public procurement. These reforms have often been launched in response to international initiatives such as the global 10-year framework for action on sustainable consumption and production by the Johannesburg implementation plan in 2002 and the Sustainable Development Goals. Yet, empirical evidence on the drivers and benefits of SPP in developing countries is still scarce. This gap is addressed with a qualitative case study of six public sector institutions in Ghana. On the basis of elite interviews, this paper highlights barriers to mainstreaming SPP in Ghana’s public sector. We further advance the scanty principal–agency literature by establishing a double-agency relationship in the context of SPP, which depicts limited agency cases where principals lack the capacity to defend their own interests.

1 | INTRODUCTION

The public procurement literature suggests that substantial amount of public funds are spent on public procurement (Thai, 2001). Globally, this constitutes about 15–20% of national revenues, with the figures from developing countries hovering between 20 and 70% (Thai, 2001; World Bank, 2012). Notwithstanding, most governments often fail to apply due diligence in their procurement processes, which often results in negative environmental and socio-economic impacts, corruption, and legal losses on government coffers (Hope, 2017; Neupane, Soar, & Vaidya, 2014; Preuss, 2007). Taken together, these consequences can culminate into a severe loss of value for citizens and impede a nation’s overall development. Hence, many countries, including Ghana, have reformed their public procurement processes towards social and environmental outcomes.

Contemporary public procurement serves as a tool for advancing good governance and sustainable development through resource optimisation, improved project delivery, strengthened public procurement systems, and stakeholder participation (Adjei, 2010; Preuss, 2009). International reports argue that reformation of public procurement “can contribute directly to improving a country’s business, investment, and social environments” (World Bank, 2012, p. 6). In response to public procurement shortcomings and the global 10-year framework for action on sustainable consumption and production by the Johannesburg implementation plan, the Marrakech Task Force (MTF) was voluntarily formed in 2003. Led by the Swiss Government, its members include Mexico, the Philippines, Argentina, Ghana, Czech Republic, Norway, China, the United Kingdom, the State of Sao Paulo, and the United States of America, as well as several international organisations. With a framework developed from its periodic meetings, the MTF seeks to stimulate sustainable public procurement (SPP) practices among both developed and developing countries. These efforts are further deepened by target 12.7 of the Sustainable Development Goals (SDGs), which focuses on stimulating SPP practices in accordance with national priorities.

What are the barriers of implementing SPP in developing countries? Prior research has found positive effects of integrating environmental and socio-economic criteria into procurement practices (Hall & Purchase, 2006; Preuss, 2007; Walker & Brammer, 2009, 2012). However, these studies focussed on developed countries (Keulemans & Van de Walle, 2017)—leaving a gap with respect to the developing country contexts. Empirical studies and knowledge
on the prospects, drivers for adoption, and potential impact of SPP on
the participation of small local businesses in developing countries are
essential because these resource-constrained economies have high
levels of inequalities and climate change vulnerability (Karjalainen &
Kempainen, 2008; Walker, Miemczyk, Johnsen, & Spencer, 2012).
The study adopts a qualitative approach with case studies from six
Ghanaian public sector organisations to illustrate the barriers
hampering efforts to mainstream SPP in Ghana. The paper draws on
the principal-agency theory in its analyses of in-depth interviews
gathered.

The remainder of the paper is structured as follows. A conceptual
background to the study and the justification for the use of the
principle-agency theory as theoretical framework is presented in
Section 2. Section 3 outlines the research methodology. The main
findings of this study are subsequently discussed in section 4.
Section 5 concludes the paper with implications for public procure-
ment policy and practice, the agency theory, and for future research
agenda.

2 | CONCEPTUAL OVERVIEW

2.1 | Public procurement as a strategic public policy
tool

Public procurement refers to the process through which public sector
agencies acquire public goods and services from third parties
(Neupane et al., 2014). It encompasses buying, renting, leasing, or
acquiring supplies, construction, and various forms of services.
It comprises inter alia a narration of requirement, selection, and award
of contracts that relate to obtaining goods and services by the govern-
ment for the welfare of citizens. Emerging literature suggest that
public procurement may be leveraged to advance several public policy
agenda (Grandia & Meehan, 2017). For example, Grandia and Meehan
(2017), from a multidisciplinary perspective, delineate the implications
of public procurement for achieving public value and illuminate its
strategic aspirations and attractiveness to policymakers, as it constitu-
tes a substantial fraction of government's expenditure (see also
Erridge, 2007). Unlike the private sector, buyers in the public sector
operate in a political market place with different incentives,
constraints, and with different opportunities for discretionary actions.
Therefore, they afford the opportunity to apply their procurement
choices towards a wider scope of public policy agenda (Grandia &
example, notes that public procurement is interconnected with the
three main pillars of effective governance: enhanced delivery of public
service, value for money, and a supportive environment for private
sector growth. Parker and Hartley (1997), however, caution that
stretching the selection criteria to meet these several policy outcomes
has negative implications as it leads to vaguely specified contracts
with little contributions to achieving expected outcomes (see also

Also, the public procurement practice is sometimes fraught with
inefficiencies such as undue delays, corruption, lack of transparency,
and disregard for social and environment impacts (Karjalainen, 2011;
For example, the World Bank (2012) and Transparency International
(2011) argue that public procurement corruption is increasing globally
and particularly in developing countries. Public procurement corrup-
tion in sub-Saharan Africa particularly constitutes over 70% of public
contracts with a 30% price rise (Mawenya, 2008). This menace
hinders national development by weakening national institutions,
increasing business costs, eroding public trust, as well as discouraging
external investment (Hope, 2017; Neupane et al., 2014). From the
agency perspective, Kauppi and Van Raaij (2014) observe that the
inherent information asymmetries in the public procurement process
engenders opportunism due to the incongruent goals of actors.
Further, excessive delays in the payment process to contractors is
reported to be severe, which in Ghana's case, exceed 30 steps (World

To address these problems, contemporary public procurement
policies have been reformed through decentralisation, digitisation,
increased emphasis on environmental and social outcomes, increased
spending visibility, and minimised information gaps in the process
(Klabi, Melloul, & Rekk, 2016; Neupane et al., 2014; Preuss, 2009).
Other initiatives target value for money (i.e., economy, efficiency,
and effectiveness), achieved through prudent use of public resources
in the acquisition of goods, works, or services (Ibrahim, Bawole,
Obuobisa-Darko, Abubakar, & Kumasey, 2017). According to Ibrahim
et al. (2017), value for money emanates from true compliance with
best procurement practices and rules that guide the specification of
pretender criteria, bidding, evaluation, and award and execution
criteria but not covert attempts to "window-dress" noncompliance
(p. 381). Value for money also concerns an assessment of life-cycle
cost and quality of products or the evaluation of whether the
expected outcome of the procurement is satisfied. Klabi et al. (2016)
submit that these measures inform the government about the reputa-
tion of the supplier towards lowering the risk and cost of future
procurements.

2.2 | Sustainable public procurement

Emerging public procurement literature contends that there is the
need to assess tenders beyond price criteria—to also consider other
environmental and social criteria that control the production and con-
sumption behaviours of suppliers (Gelderman, Semeijn, & Bouma,
2015; Keulemans & Van de Walle, 2017). This concept, which is
termed sustainable public procurement, is defined by Brammer and
Walker (2011, p. 455) as "... the act of integrating a concern for
broader social and environmental impacts within procurement under-
taken by government or public sector bodies." The definition
suggests an act of expending public resources on products and
services that promote sustainable development tenets. In line with
this idea and for the purpose of this study, the concept is defined
as the considerations for long-term social and environmental impacts
of products while meeting the fundamental principles of public
procurement.

SPP has become popular in light of the major adjustments in the
global corporate social responsibility (CSR) and supply chain debates
Therefore, most public sector and nongovernmental organisations (NGOs) are now examining themselves whether they are being environmentally and socially responsible in their own supply chain processes after having to facilitate private sector engagement in CSR initiatives (see Brammer & Walker, 2011; Lund-Thomsen & Costa, 2011; Rodríguez et al., 2016). For instance, in their international study, Brammer and Walker (2011) explore how public organisations are implementing SPP and its drivers among private sector businesses. Notwithstanding the significant variation in the extent of public policy outcomes and the nature of the practice across regions, they identified inter alia resistance by public sector authorities to pay more for SPP products (Brammer & Walker, 2011). They, therefore, highlight the need for appropriate policy and regulations to promote SPP. In a similar comparative study, Keulemans and Van de Walle (2017) present EU citizens’ preference for multicriteria selection that addresses SPP to mere cost-effectiveness and domestic favouritism in public procurement decisions. In contrast to Brammer and Walker (2011), Keulemans and Van de Walle (2017) concludes that citizens of EU are more inclined to accept expensive tender offers provided the price variations are explained by environmental and social considerations. According to Crespin-Mazet and Dontenwill (2012), these considerations present purchasers with complex decision-making processes like developing new metrics for assessing the environmental and social impact of products and production behaviours of suppliers. This often attracts additional administrative cost to the purchaser, which explains their resistance in Brammer and Walker (2011). However, ignoring the metrics may stimulate exploitation and capriciousness due to the information gaps created (Kauppi & Van Raaij, 2014).

The multicriteria metrics for SPP may span all the three dimensions of sustainable development. With respect to the economic dimension, SPP practice emphasises optimal resource allocation and cost-effectiveness to avoid unnecessary procurement risks (Adjei, 2010; Keulemans & Van de Walle, 2017). In addition to purchasing price, other cost variables aimed at value for money and associated with product use, maintenance, and disposal are also assessed (Geng & Doberstein, 2008). Also, the environmental dimension—mostly referred to as green procurement—involves taking into consideration the environmental responsiveness and management systems of suppliers (Geng & Doberstein, 2008; Preuss, 2007). Thus, suppliers are assessed for the environmental impact they pose through the whole life cycle of their products in the procurement process (Bratt, Halstedt, Robért, Broman, & Oldmark, 2013). This dimension is popular with the energy, automotive, electronics, and other related industries that deal with raw material extraction (Nagel, 2000; Wilhelm, Blome, Bhakoo, & Paulraj, 2016). The social facet of public procurement is also applied in copious ways to promote social justice and to elicit supplier activities that promote human rights, welfare, and favourable working conditions for employees (McCrudden, 2004). Notwithstanding its contribution towards promoting the interest of minority such as women, the disabled, and small- and medium-scale enterprises (SMEs) (see Brammer & Walker, 2011; Patil, 2017; Walker & Brammer, 2012), the social variable is often difficult to enforce as they are mostly not standardised compared with those of environmental nature (McCrudden, 2004; Wilhelm et al., 2016).

2.3 SPP in developing countries

The United Nations Environment Programme UNEP (2013) reports that countries like Mauritius, Chile, Tunisia, and Lebanon including Ghana are piloting SPP using the MTF framework (see Figure 1). The framework builds on existing methodologies used by various international organisations and developed countries such as the United Kingdom. From Figure 1, the MTF framework requires an initial assessment of current public procurement structures and processes. This involves the collection of basic information regarding the availability of SPP criteria in a country’s procurement practices across sectors. Next, a review of national procurement regimes and an assessment of market readiness to produce and supply sustainable products are conducted. Finally, the MTF framework guides the implementation of SPP policies in a step-by-step manner.


**FIGURE 1** Marrakech Task Force (MTF) framework for sustainable public procurement (SPP)

Source: United Nations Environmental Programme (UNEP) (2011)
friendly products and services is undertaken. SPP policy plan is subsequently drafted based on the results of earlier activities. Prior to implementation, the framework requires capacity building of relevant stakeholders like procurement bureaucrats, policymakers, and suppliers through strong sensitisation programmes. Kopp (2011), however, cautions that in order to ensure uniformity in the practice, the MTF approach ought to be, as well, implemented at the local government levels.

With this framework, the few reported developing countries have currently repealed/amended their public procurement laws to align with contemporary sustainability concerns. In these economies, however, it appears that more weight is placed on the environmental aspect of their sustainability procurement agenda than on the social issues (Geng & Doberstein, 2008). This situation may be due to the easy and specific nature of environmental criteria compared with social criteria (McCrudden, 2004; Wilhelm et al., 2016).

Although the SPP literature offers some positive impacts, prior studies are limited to the developed country contexts (Hall & Purchase, 2006; Preuss, 2007; Walker & Brammer, 2009, 2012). For example, the literature clearly reveals that the concept is gaining some success in the health, labour, and environmental sectors of countries such as the United Kingdom (Brammer & Walker, 2011), Italy, Sweden (Uttam & Roos, 2015), and Switzerland, whereas knowledge about these impacts and challenges in the developing countries context appear scarce. This empirical study contributes to the SPP literature by exploring the challenges of implementing SPP in developing countries, with the narrative of Ghana.

### 2.4 The state of SPP in Ghana

Ghana became a member of the MTF led by Switzerland in August 2010 to promote SPP in its procurement practices with the MTF framework (PPA, 2017). Since joining the MTF, Ghana has benefited from a US$2.7 million development assistance from the Swiss Government to facilitate its efforts on this project. In this regard, several sensitisation and training programmes have been undertaken, including the Patient Procurement Act amendment (Act 663). This mandates the Public Procurement Amendment Act 2016 (Act 914) to respond to the contemporary sustainability orientation of public procurement and to correct existing snags in the practice. The Public Procurement Authority (PPA) and its Board (PPB) are responsible for outlining the main institutional and administrative arrangements, procedures for tendering, monitoring compliance, and facilitating capacity building of the over 1,600 entities to whom the procurement function has been decentralised by the central government.

PPA has hence constituted a Ghana task force on SPP from a multistakeholder group, which was outdoored in December 2010. The task force is responsible for assisting the PPA to identify areas of priority and sustainability criteria for application in public procurement (UNEP, 2011). The group comprises actors from trade and industry, civil society, standards evaluation bodies, engineers, government agencies (both local and central), private businesses (suppliers), and academia. Despite all these efforts, sustainability criteria in the public procurement practice still appears unofficial in Ghana after 8 years of MTF membership. The principal–agency theory is employed to explain this situation as it holds much promise for analysing relationships in a management process fraught with information gaps and incongruent goals such as the public procurement (Gelderman et al., 2015).

### 2.5 Principal–agency theory

Public procurement as a strategic policy tool, which aims at maximising the welfare of citizens, also presents a principal–agency relationship. This relationship characterises goal incongruence and information asymmetry, giving rise to agency problems in public procurement practice (Kauppi & Van Raaij, 2014). In this study, the principal–agency theory is used to explore how citizens (principal) engage government (agent) to award public contracts aimed at sustainable outcomes (Ross, 1973, p. 134). To present a holistic analysis of the research problem, the findings in Table 3 define government to include both political executives and bureaucrats (procurement managers) of the procurement entities in line with Gordon Murray (2009) and Gelderman et al. (2015).

Although the agency theory has extensively been applied to economics, management, and business spheres to explain managers–shareholders, board of directors–shareholders, and managers–employees relationships, among others (Eisenhardt, 1989; Jensen & Meckling, 1973; Ross, 1973), it extends to other relationships such as purchaser–supplier, parent–child, and government–citizen relationships (see Kauppi & Van Raaij, 2014; Munro, 1999; Wilhelm et al., 2016). In a more recent debate, Wilhelm et al. (2016) sought insight into the circumstances under which first-tier suppliers (as agents) will comply with sustainability requirements of lead firms in a multi-tier supply chain. Complementing the agency theory with institutional theory, they discovered a double-agency relationship between (a) first-tier suppliers with second-tier suppliers and (b) second-tier suppliers with lead firms, hence establishing the need for lead firms to incur separate agency cost for both relationships to reduce information asymmetries towards sustainability compliance (Wilhelm et al., 2016).

The agency theory has four main assumptions, which are inherent in the sustainable procurement practice. First, there are divergent goals between the government and the citizens. Thus, whereas government resists high spending on SPP products in favour of choices that maximises their political stability, citizens are more inclined towards SPP products (Brammer & Walker, 2011; Keulemans & Van de Walle, 2017). In some instances, governments lack the capacity to uphold their promises to citizens due to misrepresented competence and resource availability. Eisenhardt (1989) refers to these agency problems as moral hazard and adverse selection. However, to promote their interest, Jensen and Meckling (1976) recommend that principals must incur appropriate agency cost to redirect the agent from opportunistic actions. Information asymmetry, rational behaviour towards expectations and the discretionary freedom of agent, and the effect of agent’s actions on the principal’s welfare are the three other assumptions of the theory (Eisenhardt,
1989: Jensen & Meckling, 1976). With the agency theory as the main analytical framework, this study analyses the relationship between citizens and government to explain the barriers hindering SPP implementation in a developing country context.

3 | RESEARCH METHODOLOGY

This study adopts a case study design to explore the factors responsible for the low presence of SPP in a developing country. While the case method affords this study detailed insight into the nature and complexity of implementing SPP (Ellram, 1996; Yin, 2003), Pagell and Wu (2009) suggest that it is also suitable for building and extending theories like the agency theory in the context of sustainability in public procurement. Multiple cases were studied for the purposes of validity and rigour (Yin, 2003).

This study adopts a purposive sampling technique, which allowed the researchers to use their judgement in the selection of cases that best answered the research question (Yin, 2003). Three main criteria were used to select six cases from over 1,600 procurement entities: (a) the consistency of entity’s mandate with sustainability issues; (b) responsibility of enforcing public procurement regime in the country; and (c) both central and local government coverage. These cases also represent three of the six categories of entities under the Public Procurement Amendment Act 914: central government ministries and state-owned enterprises (category B), subvented agencies (category C), and local government agencies (category F).

A three-stage primary data collection process was employed. First, a pilot study was conducted based on relevant secondary data (peer-reviewed articles, books, and institutional publications), which served as a useful background for identifying key questions and issues that were addressed prior to the comprehensive data collection stage (Ellram, 1996). With the aid of a semistructured interview guide, the second stage gathered 18 elite interviews (each lasting 25-60 minutes) via a face-to-face method, which allowed further probing. Respondents comprised officials of selected cases whose responsibilities are relevant to the public procurement function, according to the composition of Entity Tender Committees in the first and second schedules of Act 914 (GOG, 2016). Taking into account all ethical considerations recommended by Yin (2003), this process spanned 3 months (March to May 2017). Table 1 shows the characteristics of interviewees and cases.

Case reports were foremost drafted for each case followed by a cross-case analysis using data from all six entities (Ellram, 1996; Wilhelm et al., 2016). Procurement entities are the unit of analysis of this study (see holistic multiple case design, Yin, 2003) as the elected political executives at the central government have, to some extent, delegated to them their responsibilities of procuring SPP goods and services for the citizens. With an interpretivist research paradigm, data were thematically analysed to allow for inductive reasoning and cocreation of knowledge (Miles & Huberman, 1994). First, data were broken down into categories under common themes. Patterns among these categories were repeatedly and carefully studied to summarise the initial themes and to further develop subthemes (Ellram, 1996; Miles & Huberman, 1994). Appendix A shows an illustration of data coding. The main elements of the agency theory were then identified from the data to enhance explanation of evolving patterns towards generalising the findings and from which a model is proposed (see Pagell & Wu, 2009; Pratt, 2008).

Key measures were undertaken to ensure validity. Beside the pilot study, which helped shape questions that were used for the

| TABLE 1 | Distribution of interviewees |
|-----------------|---------------------------|-----------------|-----------------|
| Codes for Entities<sup>a</sup> | Legal mandate and brief description | Purchase volumes<sup>b</sup> | Job descriptions of respondents | SPP training<sup>c</sup> |
| A<sub>F</sub> | Aims at improving the quality of life of the people of Accra | 18.13 | Director | No |
| | | | Expenditure officer | No |
| | | | Budget officer | No |
| | | | Legal officer | No |
| | | | Procurement officer 1 | No |
| | | | Procurement officer 2 | Yes |
| B<sub>C</sub> | The main promotional and regulatory body for the minerals sector in Ghana | 2.31 | Finance director | No |
| | | | Legal officer | No |
| | | | Procurement officer | Yes |
| | | | Administrative officer | No |
| C<sub>B</sub> | Aims at formulating, coordinating, monitoring, and evaluating issues of minority and social protection | 8.67 | Procurement officer | Yes |
| | | | Procurement officer | No |
| D<sub>C</sub> | Guides development to prevent, reduce, and eliminate environmental pollution and actions that lower the quality of life in Ghana | 2.73 | Director | No |
| | | | Procurement officer | Yes |
| E<sub>B</sub> | Improve the health status of all people in Ghana | 66.58 | Procurement officer 1 | Yes |
| | | | Procurement officer 2 | No |
| F<sub>B</sub> | Oversee public procurement in Ghana | 1.58 | Operations officer | Yes |
| | | | Procurement officer | Yes |

<sup>a</sup>Indices B, C, and F indicate whether the procurement entity belongs to central government ministries and a state-owned enterprise category, a subvented agencies category, or a metropolitan assembly category, respectively.

<sup>b</sup>Percentage of annual total purchase volumes for all the six case entities for 2016.

<sup>c</sup>Participation in SPP training organised by PPA in 2014.

Source: Authors’ construct (based on field data and Acts 663 & 914).
second stage of data collection, initial case reports prepared from interviews and secondary data sources were subjected to review and approval by authorities of each case studied for construct validity (Ellram, 1996). Findings from the multiple cases were then triangulated against each other and further with the secondary data used to corroborate emerging findings (Yin, 2003).

4 | DISCUSSION OF FINDINGS

This section discusses the key findings of this study. The existing SPP criteria used by public procurement entities in Ghana are foremost presented. From the agency theory perspective, the paper subsequently explains how four main factors hinder efforts in implementing SPP in Ghana. Finally, a double-agency relationship of SPP is defined.

4.1 | Existing SPP criteria

Analysis of the interview data gathered reveals that some SPP criteria exist in Ghana’s public procurement practice (see Table 2). These include certifications for fuel efficiencies, carbon emissions, star ratings for electrical appliances, and the protection of marginalised groups of society. Others include protection of indigenous firms and SMEs as well as economic efficiency measures. Apart from the above observation, it was also noted that there is no single policy guide outlining these criteria. Thus, whereas some were perceived as foreign elements, others were noted as already existing in separate national legal documents such as the Persons with Disability Act 715 and the Labour Act 651 of Ghana. The former mainly constitute social and environmental criteria that the PPA intends to introduce into the Ghanaian public procurement practice through its standard tender documents (STDs).

### TABLE 2 | Existing sustainable public procurement (SPP) criteria in Ghana’s public sector

<table>
<thead>
<tr>
<th>SPP criteria</th>
<th>Specific requirements</th>
<th>Brief details</th>
<th>Rationale</th>
<th>Drivers and lead enforcers</th>
<th>Constraining factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Energy efficiency</td>
<td>Five-star rating for electrical appliances</td>
<td>Control energy consumption and address power crises confronting the country</td>
<td>Eco-labelling by EC, GSA, PPA, and EPA</td>
<td>Availability of funds</td>
</tr>
<tr>
<td>Emissions levels</td>
<td>Carbon emission levels of vehicles</td>
<td></td>
<td>Reduce emission of hazardous chemicals into the environment (Bratt et al., 2013; Nagel, 2000)</td>
<td>EPA Act 490 enforced by EPA, MOH, AMA, &amp; PPA</td>
<td>Availability of funds</td>
</tr>
<tr>
<td>ISO standards</td>
<td>ISO certifications</td>
<td>(especially for office stationary and electronics)</td>
<td>Ensure that suppliers conform to industrial production standards.</td>
<td>Donor conditions, Acts 633 and 914 by PPA, EU, and World Bank</td>
<td>Capacity of local suppliers and availability of funds</td>
</tr>
<tr>
<td>Social</td>
<td>Access to persons with disability (PWDs)</td>
<td>Mandatory for owners and occupiers of public facilities like schools, clinics, banks, and work premises to provide easy access to PWDs</td>
<td>Promote the rights, esteem and the capacity of PWDs for socio-economic opportunities.</td>
<td>Section 6 of the PWDs Act 715 enforced by MoGCSP, PPA</td>
<td>Capacity of procurement entities to enforce</td>
</tr>
<tr>
<td></td>
<td>Participation of local suppliers</td>
<td>Quota is granted to local suppliers and contractors Subcontracting to local firms</td>
<td>Build capacity and promote the participation of local firms (see Preuss, 2009; World Bank, 2012)</td>
<td>Labour Act 651 and Local government Act 936 by AMA, PPA</td>
<td>Availability of local capacity for the job</td>
</tr>
<tr>
<td>Economic</td>
<td>Value for money</td>
<td>Cost price, delivery time, quality, and postdelivery services.</td>
<td>Promote the procurement of product or service of high quality.</td>
<td>Acts 633 &amp; 914 by PPA &amp; all other entities</td>
<td>Availability of technical competence of suppliers</td>
</tr>
<tr>
<td></td>
<td>Life-cycle costing (LCC)</td>
<td>Consolidated costs of product/service: purchasing price, usage, and cost of products disposal inter alia.</td>
<td>Improve efficiency of goods and services procured</td>
<td>STDs by PPA, MOH, EC, and Minerals Commission</td>
<td>Technological capacity of suppliers, availability of funds, and capacity of entities to enforce</td>
</tr>
<tr>
<td></td>
<td>Financial capacity of contractors</td>
<td>Financial statements and bid security are demanded (often with works involving huge sums)</td>
<td>Ensures that contractors are financially secured to deliver on the contract terms (see World Bank, 2017)</td>
<td>Acts 633 and 914 by PPA and all other entities</td>
<td>Quality of financial accounting practices of suppliers and bidders’ access to bid security.</td>
</tr>
</tbody>
</table>

Note: AMA: Accra Metropolitan Assembly; EC: Energy Commission; EPA: Environmental Protection Agency; EU: European Union; GSA: Ghana Standards Authority; MoGCSP: Ministry of Gender, Children and Social Protection; MOH: Ministry of Health; PPA: Public Procurement Authority; STD: standard tender document.
Source: Authors’ construct.
A triangulation of the responses on prior knowledge of SPP with other secondary data from institutional documents suggest that environmental requirements are more emphasised in instances involving the procurement of electronics, electrical appliances, and vehicles. This affirms prior studies (Bratt et al., 2013; Nagel, 2000) that green procurement is synonymous with industries like the energy, automotive, and electronics. In Ghana’s context, these environmental requirements are applied at diverse stages of the purchasing process: explicitly in STDs or in the tender evaluation process. The latter situation often motivates normative considerations in the approval of SPP contracts, hence giving rise to high tendencies of noncompliance.

Notwithstanding the presence of some SPP requirements, they are discretionarily enforced and complied with based on the financial and technical capacity of the procurement entities, suppliers’ ability to respond to SPP, and local capacity for subcontracting amid other normative factors by political executives. Similarly, in a more recent discussion on SMEs, Patil (2017) found that a public procurement policy meant to increase local participation in India is hampered by weak administrative capacity and unfavourable risk-averseness measures by public authorities, which he termed as “efficiency syndrome” (p. 402). It is therefore plausible to suggest that developing countries lack capacity for SPP.

4.2 Barriers of SPP in Ghana

Ghana joined the MTF task force on SPP in 2010, but SPP is still yet to be conventionalised. This paper refers to these delays as “baby steps” and therefore explore such factors affecting SPP mainstreaming in Ghana’s public sector. The study found four main impediments thwarting the country’s efforts (see Figure 2).

4.2.1 Lack of relevant legal framework

Although the Public Procurement Act 663 has been amended by Act 914 to provide a legal basis for SPP in Ghana, the absence of a clear legal framework to regulate and to provide a guide for SPP practice has been a challenging factor. For example, only sections 2, 22, and 56 of the Public Procurement Amendment Act 914 provide for SPP (GOG, 2016). Whereas section 2 adds social and environmental considerations to the objectives of the PPA, section 22 provides for the introduction of sustainability criteria in tender documents of entities. Section 56, on the other hand, redefines socio-economic policies of government to include environmental policies. Notwithstanding, the amendment act seems to have failed to emphasise clearly why, what, and how sustainability issues should be integrated.

A clear legal backing, to an extent, reduces information asymmetry and serves as an agency cost, which compel the government to comply with SPP (see Figure 3). Without an enforceable SPP legal regime, the government may conveniently exercise its discretionary powers with limited information for suppliers—giving rise to agency problems regarding the SPP agenda (see Table 3). There is, therefore, the need for comprehensive legal guidelines that clearly specify the SPP objectives, outline the common criteria to apply, and how to enforce and monitor compliance in a manner that yields public value (Bratt et al., 2013; Erridge, 2007). Ibrahim et al. (2017), however, caution that the presence of procurement regulations does not automatically guarantee compliance, which is evident by the discretionary compliance with the few existing SPP criteria in stand-alone laws as shown in Table 2.

4.2.2 Limited capacity of stakeholders

In addition to lack of clear SPP legal framework, Table 3 shows that entities including those responsible for enforcing SPP standards lack the requisite capacity to design SPP criteria and to evaluate suppliers. This is no different in the SME public procurement policy in India (Patil, 2017). SPP practice involves several national stakeholders: the procurement entities and their bureaucrats, members of the tender evaluation committees at the various sectors, suppliers, regulatory and standardisation institutions, and citizens and political executives (policymakers). All these stakeholders require adequate knowledge of the SPP concept to be able to exercise whatever responsibility that is required of them. According to PPA reports, however, it was not until 2014 that procurement officers had their first training on SPP. The training covered only 570 procurement practitioners from six regions (Upper-West, Northern, Central, Eastern, Greater Accra and the Western Region) due to financial constraint. In addition, about 244 out of over 700 suppliers in the database of PPA were also sensitised on SPP (PPA, 2014). The fate of local suppliers and SMEs, whose participation in SPP is significant for strengthening the local industry, is uncertain.

This finding affirms prior studies that most policy implementation failures are due to limited knowledge of the policy (Ayee, 2000; Eisenhardt, 1989; Kauppi & Van Raaij, 2014). Inadequate education...
and sensitisation are perhaps the reasons for the lack of SPP STDs and the vagueness of SPP in the recently amended procurement law (Act 914). This can be attributed to the fact that policymakers and procurement practitioners themselves lacked adequate knowledge on SPP in their inputs towards the amendment. Without robust systems to solicit for contributions from stakeholders on SPP requirements and to disseminate same to the general public, the SPP policy will always be seen as foreign and therefore face resistance from stakeholders.

### 4.2.3 Poor monitoring and inspection systems

Besides weak SPP capacity, SPP monitoring is also poor. Monitoring in SPP is essential to reduce the agency problem associated with the new public procurement criteria because it ensures fair distribution and access to information. Kauppi and Van Raaij (2014) advance that monitoring serve as a control mechanism that restrain the agent from shirking. A policy like SPP requires strict compliance with legal frameworks and standards. Yet, in the context of Ghana’s SPP, there

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**FIGURE 3** The double-agency model for sustainable public procurement (SPP)

*Source: Authors’ construct*

**TABLE 3** Double-agency relationship in sustainable public procurement (SPP)

<table>
<thead>
<tr>
<th>Agency problems in SPP</th>
<th>Double-agency relationship</th>
<th>Government</th>
<th>Procurement bureaucrats (principal)</th>
<th>Supplier (agent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentives and goal conflict</td>
<td>Principal-agency relationship 1 (PA1)</td>
<td>Citizens (principal)</td>
<td>Principal-agency relationship 2 (PA2)</td>
<td>Supplier (agent)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Political executives (agent)</td>
<td>Enforce sustainability standards and comply with Act 663 and 914 and with other guidelines by the Public Procurement Authority (PPA)</td>
<td>Suppliers’ with SPP capacity conform to the perceived expensive SPP requirements to enhance their reputation, which secures longer contractual relationship with entities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Local government politicians adhere to donor conditions for good will, social capital, and external funding</td>
<td>Suppliers lack knowledge about principals’ SPP goals and objectives. Specific SPP criteria to enforce relevant provisions of the Amended Procurement Act 914 are lacking. Entities who are responsible in disseminating and enforcing sustainability criteria from stand-alone laws are inherently limited by SPP capacity. Available SPP requirements are discretionarily enforced.</td>
<td>Entities lack information about credit and professional capacity of the supplier to execute SPP contracts.</td>
</tr>
<tr>
<td>Information asymmetry</td>
<td></td>
<td>SPP criteria and standards, evaluation measures, and reports are not clear. Campaign for SPP and effective public financial management are mere rhetoric in practice</td>
<td>Entities enforce sustainability standards and comply with Act 663 and 914 and with other guidelines by the Public Procurement Authority (PPA)</td>
<td>Suppliers lack knowledge about principals’ SPP goals and objectives. Specific SPP criteria to enforce relevant provisions of the Amended Procurement Act 914 are lacking.</td>
</tr>
<tr>
<td>Adverse selection</td>
<td></td>
<td>The discretion of politicians allows them to interpret the uncoordinated SPP laws for their own political stability. Constrained budget is also used to justify for not procuring SPP products and services that are perceived expensive</td>
<td>Budget constraint and limited technical capacity of entities leads to inability to commit and develop SPP criteria in standard tender documents, necessitating the convenient enforcement of SPP. Monitoring systems for SPP are weak, with limited capacity to enforce few fragmented requirements.</td>
<td></td>
</tr>
</tbody>
</table>
is poor and no formalised monitoring and evaluation systems for SPP. Institutional measures and personnel for monitoring SPP are lacking. This implies an inadequate requisite capacity to monitor activities of suppliers in line with SPP compliance standards and to guide procurement bureaucrats towards enforcing sustainability. Without effective monitoring measures, supplier and procurement bureaucrats may embark on opportunistic ventures at the expense of citizens. For example, considering the perceived high cost of SPP, some respondents underscored that weak controls may create an avenue for unethical suppliers to falsify their qualification for SPP contracts in their quest to participate in competitive tenders.

From Figure 3, monitoring systems serves as agency cost for citizens to hold procurement entities accountable and to compel suppliers to comply with SPP standards (Eisenhardt, 1989; Wilhelm et al., 2016). Without them, procurement bureaucrats act within their whims and the caprices of politicians (Ayee, 2000; Ibrahim et al., 2017). Monitoring would help policymakers to ascertain whether the intended sustainability outcomes are being met while compelling stakeholders to commit to their respective roles of the SPP policy outcome. Therefore, the importance of a dynamic and comprehensive monitoring and evaluation system to the central procurement agencies is critical.

4.2.4 Lack of political will and budget constraint

Although the will and commitment of relevant stakeholders, including procurement bureaucrats and heads of entities, to enforce the SPP policy cannot be overemphasised, that of the political executives is more crucial to the success of the SPP policy (Ayee, 2000). Politicians who are chief custodians of the public purse lack the will to accept and support SPP due to its perceived high initial cost. Table 3 shows that politicians often prefer quantity, tangibility, and quick results, which earn them political stability and capital, to SPP products and services with impacts, which are often realised after a long while. Quick and tangible outputs provide politicians the needed political capital for renewing their mandate with citizens in their short political tenure. This results in a divergent interest with that of the citizens.

Table 3 further provides that political executives and other senior bureaucrats may desire to apply normative considerations allowed by their discretionary powers to satisfy their loyal contractors and suppliers who may not meet the SPP criteria due to their nepotistic relationship, which Ameyaw, Mensah, and Osei-Tutu (2012) refer to as a social fabric. For example, in the context of privatisation of urban water services in Ghana, Hirvi and Whitfield (2015) found that the ruling elites allocate resources legally and illegally to “patron–client networks,” who support the ruling coalition. This validates earlier findings that politicians and management of public sector entities lack support to incorporate sustainability criteria into planning and to strategise public procurement and resist payment for sustainable products (Brammer & Walker, 2011). The policy, therefore, will rely on a commitment and the strong support of political executives and heads of various entities to observe success in its implementation in developing countries.

4.3 The double-agency perspective

This study thus establishes a two-way principal–agency relationship (PA) with regards to SPP (see Figure 3). At PA1, citizens (the principal) elect various political executives (the agent) from both central and local governments through a social contract based on the promise of sustainable public goods. Table 3 indicates that political executives are responsible for making public policies, including those that promote and regulates the behaviour of suppliers towards SPP tenets. This enhances their social and political capital towards their political stability (Gelderman et al., 2015; Hirvi & Whitfield, 2015).

However, the authority and responsibility for enforcing SPP standards are decentralised to other 1,600 procurement entities (principal in PA2). Heads of these entities are mostly political executives appointed by the president to oversee a number of functions including public procurement. From Table 3, bureaucrats of the procurement entities are procurement professionals who enforce SPP standards towards public value (Erridge, 2007), yet vulnerable to the whims of political executives. Just like other agency relationships (Kauppi & Van Raaij, 2014; Wilhelm et al., 2016), agency problems also exist here in PA1 and PA2.

4.3.1 Citizen–political executive relationship

The agency problem is facilitated by the asymmetric information on SPP in the citizen–political executive relationship (PA1) due to the absence of a composite SPP legal regime. Citizens also have limited time and information to decide on the tenure of ruling politicians. Hence, they rely on contracts with short-term outcomes, most of which are procured in the last 2 years of administrative tenure. This period is often a short time to realise the full impacts and outcomes of procured goods prior to re-election. This study acknowledges a tendency of politicians taking advantage of the lack of SPP legal guidelines and sustainability standards in STDs to advance their own political stability.

This finding is consistent with prior studies (Abdulai & Hickey, 2016; Hirvi & Whitfield, 2015), which emphasise the tendency of politicians allocating resources and approving public spending that yield quicker outcomes and benefits to its patron–client networks. In pursuit of their political stability, Hirvi and Whitfield (2015) underscore that politicians amass campaign resources by committing high volumes of public budget to the award of single/restricted contracts to their sponsor suppliers (Sigman, 2015), rather than seeking the long-term welfare of their citizens. In Ghana’s educational sector, Abdulai and Hickey (2016) also reveal how resource allocations over a 15-year span were informed by the incentives of the competitive clientelist political settlement at the expense of national unity and inclusiveness. This is facilitated by the high discretionary power of politicians and bureaucrats of which undue advantage is often taken (Osei-Tutu et al., 2010; Myint, 2000). Thus, politicians, through the procurement entities, approve and justify these behaviours based on political expediencies as against SPP standards.
4.3.2 | Procurement bureaucrat–supplier relationship

At PA2, weak stakeholder capacity, lack of unified SPP policy guide, and poor SPP monitoring and inspection system create two forms of information asymmetry (see Table 3), affirming Kauppi and Van Raaij (2014). First, the uncertainty regarding SPP criteria used for public procurement creates information gaps. Although the Public Procurement Amendment Act 914 provides for SPP, there are no specific guidelines for enforcing it. Hence, procurement bureaucrats resort to their discretion and other normative considerations in enforcing existing SPP requirements from stand-alone laws, partly based on their budget and the capacity of their evaluation team. The other form of information asymmetry is where procurement entities lack knowledge about the financial and technical capacity of suppliers to execute public contracts. In these situations, both the government and the suppliers usually take advantage of the agency problem. Thus, whereas corrupt bureaucrats and political executives leak salient information regarding SPP criteria to their favourite suppliers, unprofessional suppliers also offer unwholesome products due to weak SPP monitoring. Both pose substantial risk to the citizens, hence the need for an agency cost to redirect the actions of the agents in PA1 and PA2 and the principal in PA2 from opportunism and rather towards advancing SPP policy outcomes for the citizens (Kauppi & Van Raaij, 2014).

The presence of monitoring mechanisms in the form of incentives or supervision to control the abuse of such superior information by political executives, bureaucrats, and suppliers as discussed in section 4.2.3 are critical (also see Eisenhardt, 1989). From Table 3, some certifications are required from suppliers as evidence of their technical competence and financial capacity to execute SPP contracts. Such evidences include records of social security contributions for employees, bid security, life-cycle costing assessment, tax compliance, environmental assessment certificates, ISO certification, energy efficiency certification, and architectural designs with disability friendly features, among others. Complying with these requirements enhances suppliers’ reputation and long-term relations with procurement entities—an incentive to commit to sustainability (see Table 3). This incentive also lowers the risk and the cost of future procurements (Klabi et al., 2016; Wilhelm et al., 2016).

It is therefore imperative for an SPP policy to recognise the several interests and roles of stakeholders (Ahenkan, Bawole, & Domfeh, 2013) considering the complex decision-making process presented by the SPP reform (Crespin-Mazet & Dontenwill, 2012). Beside the PPA, other external stakeholders such as civil society organisations (CSOs), standards oversight bodies, international and donor organisations, and academia also advance the interest of citizens and suppliers (Ahenkan et al., 2013) as per the MTF on SPP framework. Thus, while some strengthen the accountability systems in the SPP process, others create the needed environment to develop and evaluate SPP standards, research, and policy analysis and to build the capacity of suppliers to respond to SPP requirements (see Figure 3). Donor conditions and endorsements are other forms of agency cost borne on behalf of citizens. This corroborates Gelderman et al. (2015) that elected representatives in public administration are more sensitive to external pressure from interest groups with respect to sustainability. The situation typifies a few cases where the principal lacks the capacity to bear the agency cost (Munro, 1999). The responsibility, however, lies with government to harmonise the support of all relevant stakeholders towards SPP outcomes in line with the clarion call to address issues of scarce resources, social responsiveness, and climate change leveraging on public procurement as a policy tool (Grandia & Meehan, 2017).

5 | CONCLUSION

In conclusion, this paper identified limited political/leadership commitment, lack of SPP monitoring systems, lack of stakeholder capacity on SPP, and absence of clear SPP guidelines as barriers hindering SPP implementation in developing countries. With the lenses of the principal–agency theory, this empirical study is the first to establish a two-way principal–agency relationship in the context of SPP. Information gaps and incongruent goals in advancing SPP are illuminated. To address these agency problems, the paper suggests two measures: monitoring and incentives. Monitoring require sensitisation and training of procurement bureaucrats, policymakers, and suppliers on SPP criteria to minimise information gaps. Regular evaluation and robust audit systems are also essential incentives to align the incongruent goals of both agents towards the ultimate interest of the principal. Thus, while the suppliers comply with SPP for their reputation and a long-term relationship with entities, procurement bureaucrats are induced to comply with SPP for public value. Political executives, on the other hand, are controlled by the endorsement of external pressure for political stability through audit reports. The study contributes to the public procurement policy and management literature with a framework that harmonises the relationships among citizens, government, and suppliers including other SPP stakeholders towards promoting SPP in developing countries.

This empirical study does not claim to be exhaustive. It is limited to an exploration of barriers of sustainability in the downstream side of the supply chain. Although this responds to prior studies, conclusions presented are based on the perspective of public procurement managers. Therefore, further empirical studies may present the perspectives of politicians, suppliers of public contracts, and civil society organisations to test the validity of these findings. Such studies may for instance offer a more strategic approach to assess market readiness to respond to SPP as well as their impact on the participation of domestic and SME suppliers. Future studies are also urged to assess how the recent digital growth in public administration could be leveraged to reduce the information gaps in SPP.

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CONFLICT OF INTEREST

There is no conflict of interest.
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REFERENCES


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## APPENDIX A

### CRITICAL THEMES TABLE ON EXISTING SUSTAINABLE PUBLIC PROCUREMENT CRITERIA

<table>
<thead>
<tr>
<th>Coding categories</th>
<th>Area of focus</th>
<th>Supporting responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental criteria</strong></td>
<td>Energy efficiency</td>
<td>&quot;For now, we mainly look at how energy efficient electrical appliances are. Whether it is 3 or 4 star standard according to Ghana Standards Authority and Energy Commission&quot; (procurement officer 2, entity A); &quot;... when we are buying fridges and other electrical appliances, we consider those that are suitable for the tropical climates in terms of energy consumption ... and so on our tender document, we indicate as an evaluation criterion, the number of stars which represents the level of efficiency we required&quot; (operations officer, entity Fb); &quot;So we look for electrical appliances with more stars&quot; (operations officer, entity Fb); &quot;... buying from 1 to 5 stars depending on funds available means that you are still within the confines of the law&quot; (procurement officer, entity Fb); &quot;These days we also use turbo and the boost technology for vehicles. The turbo should be an engine that is 1.6 litres with more power output than, maybe, a regular 3.0 litres engine vehicles have due to their electronic boosting functionality&quot; (procurement officer, entity Dc); &quot;There is also the eco drive. We have a specified cubic capacity that ensure low fuel consumption depending on it usage&quot; (procurement officer, entity Dc).</td>
</tr>
<tr>
<td><strong>Emissions levels</strong></td>
<td>... with vehicles, we acquire them from manufacturers who emit very low hazardous chemical substances into the environment in the revised detailed specifications&quot; (director, entity Dc); &quot;Before, we weren't particular about these things, but now, we look at all those things when acquiring a product&quot; (procurement officer 1, entity A); &quot;So ensure to buy products that are environmentally friendly and also appropriate for our climate in terms ... of emissions&quot; (director, entity A); &quot;We also specify the minimum level of CO2 emissions from the vehicles we buy&quot; (procurement officer 1, entity Eb); &quot;We talked about the emission requirements. The carbon dioxide (CO2) from the use of the vehicles and it should be about 145 g per kilometre and with air pollution that is not below u4 out of a maximum of u8 for vehicle technologies&quot; (procurement officer 2, entity A).</td>
<td></td>
</tr>
<tr>
<td><strong>ISO standards</strong></td>
<td>&quot;With regards to A4 papers, we include in our specifications, the ISO environmental certifications&quot; (operations officer, entity Fb); &quot;In the case of office furniture, we go in for swivel chairs that are made from recyclable or recycled materials. There are standards and other trademark criteria that meet those criteria. Some of these components (including the wheels of the chair) appear metallic but are plastic, which can be recycled&quot; (procurement officer, entity Fb); &quot;... especially when they are chemicals for cleaning and all those things, I know some of them have ISO9000 on them or that sort. It is only that I cannot give you specifications off my head until I make reference to my books&quot; (procurement officer 1, entity A); &quot;... we always consider bits and pieces of some of these things to assess and evaluate tenders, although they might not have been captured in the tender document&quot; (administrative officer, entity B2).</td>
<td></td>
</tr>
<tr>
<td><strong>Social criteria</strong></td>
<td>Access to persons with disability (PWDs) and rights of the marginalised</td>
<td>&quot;We ensure that human beings or disadvantaged groups are not negatively affected&quot; (procurement officer 1, entity Cb); &quot;As an entity, when we wish to construct a public building, we are responsible to ensure that provisions are made for the disabled people to easily access the structure and use the facility&quot; (procurement officer 1, entity A); &quot;Like schools, you need to create access for the disabled people to also have access to the facility. Even though it is a law already, we also state it in the tender documents for the bidders to be aware&quot; (procurement officer 1, entity A); &quot;Tenders are required to present the social security numbers of their employees&quot; (procurement officer 1, entity Cb); &quot;We have to make sure that the supplier does not engage the services of minors or does not cheat their labour. We have therefore request for SSNIT clearance certificate to find out the number of employees a supplier has and whether their SSNIT benefits are being paid regularly&quot; (procurement officer 2, entity Cb); &quot;... we don't discriminate. We evaluate and assess all tenderers who apply to do business with us ... there may be so many women suppliers and firms that are managed by women who deal with us, although we don't look at the gender balance nature of their workforce&quot; (procurement officer, entity Dc); &quot;In procuring consultancy services, the competitive firm must have highly diverse team members in terms of gender and disability as well as meeting other evaluation criteria of the tender documents&quot; (procurement officer, entity Dc); &quot;In competitive procurement, it is allowed to use CSR only in cases where it was indicated as an evaluation criterion. In this case, priority is given to tenderers who engage in CSR activities. This is because the practice also adds to the society as SPP demands&quot; (procurement officer 2, entity Cb).</td>
</tr>
<tr>
<td></td>
<td>Subcontract to indigenous suppliers and training of local artisans</td>
<td>&quot;... in order for the society to benefit, we put some clauses that at least you must employ some percentage of artisans from the local area&quot; (director, entity A); &quot;In considering contractors to construct a road in a particular village, we look at a contractor who will employ people from that village because it is their area that you may be causing some inconvenience&quot; (director, entity A); &quot;There is always an impact from every project but the question is, are you giving them employment? That is why when you are given a contract, you look at even the Ghanaian company who can employ. If we have engineers here, why do you have to go a bring officer, entity Fb); &quot;That is why when we are given a contract, we acquire them from manufacturers who emit very low hazardous chemical substances into the environment in the revised detailed specifications&quot; (director, entity Dc); &quot;Before, we weren't particular about these things, but now, we look at all those things when acquiring a product&quot; (procurement officer 1, entity A); &quot;So ensure to buy products that are environmentally friendly and also appropriate for our climate in terms ... of emissions&quot; (director, entity A); &quot;We also specify the minimum level of CO2 emissions from the vehicles we buy&quot; (procurement officer 1, entity Eb); &quot;We talked about the emission requirements. The carbon dioxide (CO2) from the use of the vehicles and it should be about 145 g per kilometre and with air pollution that is not below u4 out of a maximum of u8 for vehicle technologies&quot; (procurement officer 2, entity A).</td>
</tr>
<tr>
<td>Economic criteria</td>
<td>Area of focus</td>
<td>Supporting responses</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Value for money</td>
<td></td>
<td>“We consider the purchase price of the item and other efficient considerations in our procurement. Which supplier has the highest or lowest tender price?” (procurement officer, entity C3); “Most times, the tender with the least price seems to be the criterion, but of course you need to satisfy the technical specifications” (procurement officer, entity F3); “With the technical specifications, if you meet the basic ones and you have the least quoted price, obviously, you may become the supplier of choice” (legal officer, entity B3); “Sometimes, we decide on this based on our previous experience. There was an instance where we bought about 20 pieces of toners. They were in good condition according to the stores unit, so we kept them for a while. After about two to three months, the toners weren’t functioning well. So in the next round, I will not invite such a supplier for low value items which are not more than Ghc 1,200” (procurement officer, entity F2); “The usage cost is also considered. The product may be expensive to buy but its maintenance cost may be low and also will serve its purpose for a long time” (procurement officer 2, entity A4); “… the quality of the items and the delivery time are all factors in the procurement decision” (PO, AMA); “In procurement, price is not all that matters. Quality and the delivery time is also very, very important” (expenditure officer, entity A4); “We also consider price and the supplier’s honesty in paying their taxes” (procurement officer, entity F5)</td>
</tr>
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</table>

• Life-cycle costing (LCC)                                                                                      | “… whether the products that we are going to procure can be recycled, how energy efficient they are and even how we are going to dispose them off” (procurement officer, entity D2); “Like buying a vehicle, you have to calculate the maintenance cost and all that before you buy … with computers, we do. We look at all those things” (procurement officer, entity F3); “For instance … if we can buy this for Ghc 2 and that for Ghc 4. You might say, oh let’s go for the Ghc 2, but at the end of the day, you will be repairing this over and over although it was cheap. But with this, even though you bought it for Ghc 4, it might last for a very long time without any issues of repairs. And at the end of the day, you’ll save money more than with the Ghc 2 one. We also do this in relation to the vehicles we buy” (procurement officer, entity F3); “Especially for vehicles and all these electronics, the purchasing price of some products may be very cheap, but disposing of them after use may be very expensive compared to the initial price” (procurement officer 2, entity A4); “The operational cost may also be so huge. So we take all these things in account” (finance director, entity B3); “… we prefer products which may be expensive, but the running cost is cheap. We also highlight after sale services. Of course, EPA has stopped buying certain goods I don’t want to mention” (procurement officer, entity D2); “The supplier is expected to have a well and functioning service centre. If you do not have it, no. Because if we buy a machine from you costing about Ghc 35,000 and there is no guarantee that there will be after sale services. What happens when the machine is faulty? It will mean the money just goes down the drain or you pay to get an unlicensed technician to look at it and you lose your warranty” (procurement officer 2, entity A4) |

Financial capacity of suppliers                                                                                   | “You see, price can be a factor but it is not the only factor that we look at. We … look at whether the company has the financial capability … to undertake this contract” (legal officer, entity A4); “Tenderers are required to present a bid security as their source of funding for the bid” (legal officer, entity B2); “… the financial capacity called bid security could be an introduction letter from bankers that this organisation is working on that project which we will be supporting financially” (finance director, entity B3) |

Source: Compiled by authors, based field data.
## APPENDIX B

### CRITICAL THEMES TABLE ON BARRIERS OF SUSTAINABLE PUBLIC PROCUREMENT IN GHANA

<table>
<thead>
<tr>
<th>Coding categories</th>
<th>Supporting responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lack of relevant legal framework</strong></td>
<td>&quot;We have gone for about three or four years after some of our officers were trained, but we are not finding any legal framework which is pushing for its implementation&quot; (legal officer, entity BC); &quot;... if we are going to introduce other sustainability variables aside from price, then we need to design a legal system that is able to measure what it has to. So that it is not subjective&quot; (legal officer, entity BC); &quot;... this is one of the reasons why the previous procurement regime has been amended ... to accommodate SPP issues&quot; (operations officer, entity FB); &quot;... with our current legal regime, you cannot do some of these things. So I was expecting it to be one of the key areas of amendment to the law. Because if you do it and you don't have a law backing it, its implementation becomes a problem&quot; (procurement officer 1, entity EB); &quot;Our amended legal framework does not clearly support SPP. It does not provide specific SPP requirements regarding sustainability in public procurement&quot; (procurement officer 2, entity EA); &quot;If we don't make the people know very well what to do, the tendency will be for them to be doing their own things without applying the rules as they should&quot; (legal officer, entity BC); &quot;... when the regulations are clearly stated in the law and in the guidelines, it becomes very easy to roll it out. We have to back some of these things with the necessary legal framework to make it easier&quot; (finance director, entity BC); &quot;... we always consider bits and pieces of some of these things to assess and evaluate tenders, although they might not have been captured in the tender document&quot; (administrative officer, entity BC).</td>
</tr>
<tr>
<td><strong>Limited capacity of stakeholders</strong></td>
<td>&quot;People are not aware of this sustainable procurement. And even procurement officers and directors of other departments need serious training on that in particular&quot; (procurement officer 1, entity CB); &quot;I don't think much more people are in the known when it comes to the sustainability aspect of the whole thing&quot; (procurement officer, entity FA); &quot;When it comes to the environment, especially, not all the suppliers have the understanding of what the requirements are because the SPP training that was done last year or two years ago was for only procurement practitioners. And you know, procurement is supposed to be a teamwork of stakeholders made up of procurement entities and suppliers. Therefore, it will be a challenge if the suppliers do not know about the SPP criteria that other entities are going to consider in their evaluation&quot; (director, entity DC); &quot;... if you are doing national competitive tendering where you restrict the tender to only local suppliers, but they don't have the capacity to meet the sustainability requirement, how will you be able to achieve your aim?&quot; (finance director, entity BC); &quot;This will disadvantage suppliers who are perhaps equally qualified but do not know about SPP. So, if all stakeholders are not trained or conscientised on the sustainability requirement, it will be somehow difficult to implement&quot; (procurement officer 1, entity CA).</td>
</tr>
<tr>
<td><strong>Poor monitoring and inspection systems</strong></td>
<td>&quot;... we also lack SPP compliance inspectors. How are we going to get people to inspect it to make sure that people are complying? As we are sitting down here, even PPA, the whole staff, we are not up to 100. How do we get to know that each institution in Ghana is complying with the SPP issues?&quot; (procurement officer, entity FB); &quot;... the supplier side, it is not easy to produce with SPP standards. So most of the suppliers may fake things and because people do not have money, they will end up buying&quot; (procurement officer, entity DC); &quot;... if PPA is able to put in the right monitoring mechanisms to check this type of procurement activities of government institutions, I think it will help to achieve that target&quot; (procurement officer 2, entity AB); &quot;... it is left with how to get our suppliers and entities to be SPP compliant. For example, if we are buying A4 paper and we use SPP criteria, if we are not careful, we may not get anyone to supply from Ghana here&quot; (procurement officer, entity BC); &quot;... if we are going to introduce sustainability variables, then we need to design the system that is able to measure what it has to do so that it is not subjective ... I'm not using it just because I know somebody. That is the problem generally in implementing these things. So we want a system that will be able to withstand those kinds of biases.&quot;</td>
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<tr>
<td><strong>Lack of political will and budget constraint</strong></td>
<td>&quot;... One aspect can be lack of political will. Without strong political will, there will always be that hindrance&quot; (procurement officer, entity FB); &quot;... the issue is that those who are the policymakers have to show commitment and which needs a lot of resources and all that&quot; (finance director, entity BC); &quot;If they are able to do that, I think it will help the economy, and the country in every aspect of our life. So the commitment and the political will should be there&quot; (procurement officer, entity FA); &quot;... they have a perception that if sustainable products are too expensive, we can even use the money to buy two or three of ordinary products. So they will in a way resist its implementation&quot; (procurement officer, entity FB); &quot;The country may not be able to finance the high budget. When you use SPP criteria to buy anything, it will be expensive. There might not be enough funds to finance the reasonable budget&quot; (procurement officer 1, entity CA); &quot;... we have to change our Stand Tender Documents and put in sustainability requirement ... that is a lot of work, ok. So, basically, my challenge is funding&quot; (operations officer, entity FA).</td>
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**Source:** Compiled by authors, based field data.
The double-agency perspective of sustainable public procurement (SPP) | "In Ghana, government has decentralised the procurement process. So every government agency or entity does their own procurement from their budget allocations—whether central transfers or internally generated. I think the rationale is to ease government of the burden of performing the procurement service" (procurement officer, entity Fb); "Beside restricted tendering and single sourcing that we seek PPA’s approval for and that of the Cabinet, through the new procurement ministry, for procurement beyond Ghc 50 million, we do all the procurements here by ourselves" (procurement officer 2, entity Eb); "... those who are in charge of our funds are mostly politicians. They have a perception that if sustainable procurement is too expensive, we can even use the money to buy two or three of that. So they will in a way resist its implementation" (procurement officer, entity Fb); "... the concept should be practical and tested as some politicians use the sustainability procurement concept to make money in their own smart way. Even though it’s good" (director, entity Af); "... because it is expensive, people will just dodge it" (procurement officer, entity Fb); "To the supplier, for instance, it is not easy to sell SPP products. So most of the suppliers will fake things and because people don’t have enough have money, we will end up buying the fake SPP products at low prices" (procurement officer, entity Fb); "Information asymmetry exists along the procurement cycle. Therefore, SPP information must be understood and publicly shared among stakeholders" (procurement officer 1, entity Eb); "... enough education and monitoring the systems to make sure that issues of sustainable public procurement are explained clearly to officers and potential suppliers as well as the general public" (procurement officer 1, entity Eb); "Information on qualified invited bidders, losing bids, records of SPP must be maintained and made public" (procurement officers 2, entity Cb); "Suppliers should have access to information on social and environmental criteria and other regulations, plans, strategies, procurement plans, and quantification results" (procurement officers 1, entity Cb); "Relevant stakeholders like regulatory agencies and civil society organizations must be included in relevant aspects of the SPP practice and policy to maintain its integrity and accountability" (procurement officer 2, entity Eb); "The efficiency star ratings are standards from the Ghana Standards Authority and Energy Commission and ranges from 1 to 5 stars" (procurement officer, entity Dc); "... the EU micro project ... demands the use of properly sawn lumbers. If you use ... what is sawn in the bush with chainsaw ... in fact, they will blacklist your district because it’s dangerous" (director, entity Af); "... supplier and the general citizens must have easy access to SPP evaluation reports from entities and their tender evaluation committees including other regulatory decisions on SPP for transparency and verification purposes. In this manner, all aggrieved suppliers can take the matter on" (operations officer, entity Fb); "... to ensure that suppliers have the capacity to execute the said contract. For example, we ask whether the company has financial and technical capacity to undertake this contract. The financial capacity is demonstrated by presenting a bid security. This is an introduction letter from bankers that this organisation is working on this project at a particular cost, which we will be supporting. Sometimes we also look at the key personnel that they have - the availability of engineers, and the certain technical people to get the work done" (procurement officer 2, entity Aa)

Source: Compiled by authors, based on field data.