



## PRIVATIZATION AND THE POLITICS OF SOLID WASTE MANAGEMENT IN GHANA: LESSONS FROM EXPERIENCES

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### Abstract

*Advocates claim that market-assisted policies involving public-private partnerships (PPP) promote economic development and improve efficiency. Counter arguments are that such partnerships often favor the private sector while the underprivileged and service beneficiaries are forced to make difficult compromises. PPP is a triple helix enterprise with the State as a supervisor, the private sector as service provider, and households as consumers. This paper examined households' satisfaction with PPP in solid waste management in Kumasi, Ghana, after 25 years of implementation. Using multiple methodological approaches and draped in the SERVQUAL model, gaps between performance and customer expectation were revealed. The gaps were observed to be due to limited household understanding of the contractual relationship between the private sector and other industry players, a relationship that is often cloaked in secrecy under the pretext of business confidentiality which conceals the public gaze. It is argued that community participation foregrounds the everyday processes that help such policies to get traction in particular locations. Building on this, the paper outlines very important issues for the State in pursuing PPP as an approach for managing solid waste.*

**Keywords:** Customer Satisfaction, Ghana, Privatization, Waste Management, SERVQUAL

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### Introduction

Population growth, rapid urbanization, and increased industrial activity globally have challenged the public sector with the duty of delivering of urban services and infrastructure (UN-HABITAT 2010). Within the urban environment of sub-Saharan Africa, funding and governing of urban infrastructure particularly those relating to solid waste management are difficult issues for national, city-regional, and city governments to contend with (World Bank, 2015). Given the negative externalities of poor solid waste management, policymakers are compelled to explore more and more innovative and non-traditional sources for financing their solid waste infrastructure and organisation needs. Existing literature acknowledges conclusively, the gross mismatch between the escalating demand for and supply of both technical and social infrastructure services in sub-Saharan Africa (Borthakur 2015). This is often the outcome of increased poor planning, institutional bureaucratic barriers, and limited or dwindling State resources. From the perspective of managing

solid waste, more than 40% of the population do not have access to proper waste management services (Oteng-Ababio et al. 2017a) and this situation is likely to increase given that Africa's urban population is expected to increase two-fold over the next twenty years and even triple to over 1.3 billion by 2050 (UN-HABITAT 2010). This general picture literally and symbolically fits very well in the Ghanaian situation where the State is unable to functionally solve the problem of escalating garbage generation (Adama 2012; Oteng-Ababio et al. 2017b). The country has been confronted with a contradictory situation, whereby increasing investment in the waste management sector over the years has been accompanied by ever-increasing inaccessibility.

This inclination offers a disturbing situation because according to the Ghana Statistical Service (GSS) by the year 2030, the overall waste quantities that will be generated will be about three-times the current figure (GSS 2012). The conventional mainstream arguments have been that the demand and supply-side policies that virtu-

ally allowed the government to tinker with the problem without innovation can no longer suffice. To address the growing problem of disjuncture between supply and demand for basic solid waste management infrastructure services, the government of Ghana has adopted what Bacho (2008), describes as the escapist approach by introducing the private sector (PS) into the service delivery scheme through public-private partnership (PPP) model. Outsourcing or contracting out city sanitation infrastructure services to private entities was at the time seen as holding the silver bullet to public sector management (USAID 2013). Studies (USAID 2013) suggest that the PPP model has been adept since the 1970s with greater success (UN-Habitat 2014; World Bank 2015). This trend assumed rapid popularity in the 1990s when private-sector thinking of mobilization were introduced into the public management structure especially in the developing world (Oteng-Ababio et al. 2017).

With the funding arrangement under the PPP, the government keeps ownership and control most of the waste infrastructure but the private company who provides the waste management services pay financial compensation to the government for the use of solid waste management infrastructure. The reason for this form of agreement is that the private company have the capacity to mobilize both financial and nonfinancial resources; they can help reduce losses; expand the scale of operations and eventually enhance service delivery (Baud 2001; Helmsing 2002). The World Bank (2015), also indicated that the private sector has the ability to reduce cost of operations forging close collaboration with civil society partners through the pulling of skills and resources. They further advocate that encouraging a cooperative method to solid waste management between different stakeholders can lead to win-win situations among the different interested groups (World Bank 2015).

Prior studies (UN-Habitat 2014; Oteng-Ababio et al. 2017), show that the increasing introduction of private-public partnerships arrangement is an attempt to solve issues of escalating poor waste collection; political interference; transportation costs; weak organizational accountability, and shortfalls in performance that is common with public sector projects. The introduction of private-public partnerships arrangement is also a method that is seen as an attempt by governments who are cash-strapped to take advantage of the private-sector who is perceived to have access to capital to provide funding for finance solid waste management projects. Although useful studies have already been conducted on the issues of privatization of public services in the context of Africa in general and Ghana in particular, (see Makalou, 2001; Nellis, 2003; Oduro-Kwarteng & Dijk, 2013; Peres, 2021),

the subject still needs deeper research for two main reasons.

First, available data on its implementation is sketchy, and the researches available relied on partial data from implementing agencies, making findings from such studies one-sided (World Bank, 2020).

Second, discussion on Ghana's privatization process have often focused on typological and logistical issues without looking at customer satisfaction of service delivery (see Peres 2021; Oduro-Kwarteng & Dijk 2013; Oteng-Ababio et al. 2017b). Meanwhile, privatization is supposed to be a triple helix enterprise (with the government as the regulator, the PS as a service provider, and the general public as a consumer or service beneficiary). Paradoxically, the consumer is often left out of the equation, and therefore, despite the much-touted positive claims of PPP and the hypothetical advantages it brings to the waste management table of discussion by stalwarts in the industry, it remains an open question whether service beneficiaries are satisfied with the performance of the PPP arrangement. This study reports on the lessons from Kumasi, Ghana.

The study has two-fold objectives. First, it analyzes the evolution of PPP in SWM in Kumasi, Ghana's second-largest city where city authorities have implemented the model for the past 25 years, and second, it examines the level of household's satisfaction with services provided by private solid waste management companies using the "SERVQUAL" model.

## Methodology

### Study Area

Kumasi, often described as the cultural city of Ghana due to the rich traditional practices of the people is located approximately 251 km south of Accra, the capital city of Ghana and this where the study was conducted. The city is the second-largest in Ghana with a strategic location such that it has both political and economic significance (Figure 1). It is a center where major commercial routes converge. Research indicates that originally three communities namely Adum, Krobo, and Bompata formed the foundation for the growth of the city (GSS 2012). The city has grown in size with time such that the population and socio-economic life have become much modernized. The pattern of Kumasi's expansion has been in concentric form and covers a geographical space of about ten square kilometres. The city's growth pattern is influenced by the direction of arterial roads. The city has more than 130 suburbs, of which many were not subsumed by rapid expansion (GSS 2012).

The population of Kumasi has grown from 346,336 in

1970 and 487,504 in 1984 to over 2,022,919 people in 2010 with a yearly growth rate of 5.4 % (GSS 2012). The rate of growth is reported to be among the highest among the sixteen countries in the West African sub-region (Owusu-Sekyere 2014). The unprecedented population growth has occasioned an increase in the number of persons staying in very over-crowded settlements. Overcrowding is more pronounced in the numerous, marginalised and unplanned settlements within the city where more than 50% of the city's population reside. The City's social infrastructure facilities are unable to provide adequate social services that are commensurate with the rate of population growth. More importantly, majority of solid waste management facilities have exceeded their carrying capacities. The daily solid waste generation has increased from 1,000 tons in 2005, to 1,500 metric tons in 2010 (GSS 2012). Current statistics from WMD shows that Kumasi is now producing over 2000 tons of solid waste daily.

#### SERVQUAL model

This is a tool for assessing service quality and by extension, customer satisfaction developed by Chingang & Lukong (2010). The model is a multi-item scale that assesses customer perceptions of service quality. The model examines customer satisfaction using attributes such as Tangibles-which comprises physical facilities, equipment, personnel, and communication materials; Reliability which refers to the capability to accomplish the promised which is determined by the difference between (E) and (P) that determines the level of customer satisfaction (Parasuraman et al. 1991). The questionnaire had three different sections. Section one was on participants' bio-data. In section two, and perhaps the most important section of the questionnaire, the SERVQUAL model was used to assess clients' expectations regarding the service quality they receive from private waste management companies. Each SERVQUAL component had a four-item question as shown in Table 3. Both expectations and performance were gauged by a 7-point scale to rate customers' level of agreement or disagreement – ranging from 1-strongly disagree to 7-strongly agree. The closed-ended questions were phrased in descriptive statements, as recommended by Parasuraman (1991). This was used to gauge beneficiaries' levels of satisfaction with the services of private solid waste management companies.

## Results

### *The Evolution of Private-Public Partnership in Solid Waste Management in Kumasi*

Private sector participation in solid waste management is a much-debated issue in the global north as it often calls into question the functions of state government in social

service delivery. Contrary in Africa, PS participation in service delivery is rather seen as a recent phenomenon (World Bank, 2020). In Kumasi, Ghana, the results revealed that the policy of private-public partnership commenced in the 1990s when the World Bank sponsored an environmental sanitation program called the Urban Environmental and Sanitation Project (UESP) (MLGRD 2001). Apart from providing the needed funding for the project, the World Bank also helped in providing the needed technical support for the private-public partnership so that the arrangement can have some form of grounding (MLGRD, 2001). The purpose of providing this support was to relieve the increasing funding pressure on the local government; enhance efficiency and provide the needed motivation for better service delivery performance (Post et al. 2003). Supposedly, the PPP model aimed to infuse the spirit of competition into public service delivery as a way of increasing efficiency while at the same time maintaining the control of the state in the distribution of resources and also protecting the interest of the public. The reason was to improve efficiency and also effective delivery of services through the introduction of competition in the market. In this sense, zones were demarcated for the PS providers to compete for a zonal monopoly and to offer waste management service over an agreed period. The total cost of service delivery was shared between the State and the service beneficiary. Service beneficiaries pay not more than 20% of the total cost while the State pays the remaining 80%.

The rationale for introducing this kind of cost sharing was to place a certain level responsibility to the waste. It was a subtle introduction of the polluter pay principle. It was also to reduce the burden on government by reducing the huge amount of money that was used in the management of solid waste in the metropolis.

The reforms brought in the house-to-house collection (HH) scheme, a system that has been in place to date. The research revealed that apart from the HH collection, the Communal Container Collection (CCC) model was also introduced as well. The HH collection was carried out in the high-income neighborhoods and some middle-income neighborhoods as well as some public institutions. The study further revealed that under the HH system, beneficiaries were first required to sign a memorandum of understanding with service providers which indicated the fees to be paid. After the memorandum of understanding has been signed, the service provider then provides a free refuse bin to the client.

The service provider collects the solid waste on agreed days while a monthly payment of GH¢ 50.00 (about \$10.00) is made, but the rate was reviewed based on the

cedi-dollar exchange rate. The CCC model was also carried out in the low income but highly populated suburbs. In these communities, clients were required to pay an amount of GH¢ 1.00 (\$0.3) per waste bin before discharging their waste into the central containers. So far, the study revealed that there were more than 200 communal collection points in Kumasi where waste is deposited by households. The public liaison officer of the KMA revealed in an interview that this policy which mandated consumers to pay part of service delivery was because of the inability of the local Assembly to pay private solid waste companies for services they have rendered.

### ***Equipment Capacity***

One area that was also of interest to the researchers was the equipment holding capacities of the companies. It was of interest because research indicates that the technical resource capacity of private companies has a significant bearing on their ability to deliver effectively and efficiently (Baud, 2001; Helmsing, 2002). In an interview with the Coordinator of Research at the Kumasi Metropolitan Assembly, he revealed that the capacity of the Assembly to manage waste was woefully inadequate as it had less than the needed tipper trucks, ay loaders, and compactor trucks, regarded as the basic equipment in the solid waste management business. He continued:

*“Even these were almost malfunctioning as they kept breaking down with high frequency, a situation that worsened the solid waste management problem in the Metropolis. With the involvement of the PS, the solid waste management situation has improved because of the comparatively adequate technical capacity of the private companies”*, he concluded.

An observation at some of the private companies revealed that the majority had invested in modern equipment that has enhanced operations. Among the equipment that was being used by KWML for instance included CAT Waste Compactors, CAT 826G; CAT D6 Dozers; Excavators; Traxcavators; Pay Loaders, and Dumpers among others. Overall, the research revealed that skip trucks were the most dominant among the equipment, representing 40%, even though the exactness of numbers varied across companies. There were twenty-five compacting machines which is one of the important equipment for the house-to-house collection. Comparatively, equipment holding had seen tremendous improvement after privatization than it was before privatization.

The last section of the questionnaire offered respondents the opportunity to state some of the challenges and prescribe some recommendations. This was supplemented with seven key informant interviews with officials from the environmental services association regarding their tangibles, reliability, responsiveness, assurance, and empa-

thy. While a team of 10 trained researchers conducted the questionnaire survey, the author conducted in-depth interviews. It took three months to complete the entire data collection process. Additionally, historical records and scholarly literature on solid waste management in the study area were reviewed.

Two types of data analysis were done. The quantitative data were analyzed using simple excel and spreadsheet. Using the Wilcoxon Signed-Rank Test for Paired Samples, median and significant differences were computed for each component of the customer expectations and their perceived performance. The gap score analysis was adopted to examine how consumers perceive the quality of service they receive from private solid waste management companies and to identify what dimensions of service quality they are satisfied with. The level of household satisfaction was assessed regarding 20 SERVQUAL questions in table 1. The confirmation/disconfirmation model was adopted to estimate the difference between expectation (E) and performance (P). The difference was then used as computed gab values (G) representing customer satisfaction level. Negative G levels.

The qualitative data on the other hand was analyzed thematically. This analytical approach was to explore the participants' views to understand and integrate the perspectives of households.

(-G) indicates customer dissatisfaction and positive G (+G) indicates customer satisfaction. This was done at two different levels-SERVQUAL component and the overall satisfaction.

### ***Customer Satisfaction Through Gap Score Analysis***

The results of household satisfaction, that is expectations (E), performance (P), and gap score (G) of each question and their respective significant differences are shown in Table 4. As opined by Parasuraman et al. (1991), a more positive performance (P) score minus a less expectation (E) score represents perceived service quality and higher level of customer satisfaction and vice versa. In this regard, the gap scores were calculated based on the difference between the consumers' expectations and the actual performance of the solid waste management companies. The results show that all the questions had negative gap values representing customer dissatisfaction. From Table 1, households' expected rating of service quality was 7 but the performance of the companies was rated 6, producing a gap value of -1 (dissatisfaction) concerning the following SERVQUAL questions: This company has modern collecting containers; The vehicles of this company are nice looking; The company gives you (customer) individual attention; Employees compassionately deal with you; The company has your best interest

at heart and Employees have time for you. Again, the companies scored a gap value of -2 representing dissatisfaction concerning the following SERVQUAL questions: Employees of this company look neat and safe; Employees of this company communicate exactly when its services will be done; Employees of this company are constantly ready to help you, and Employees in this company always solve your problems.

Out of the expected value rating of 7, the companies were rated 5 in terms of performance producing a gap value of -2 also indicating dissatisfaction. With regards to SERVQUAL questions such as Picking points of this company do not give bad smell; The company picks waste as promised; The company renders services without any mistakes; The company renders its service when it vows to do it; Employees of this company are constantly ready to help you and the employees are knowledgeable, the performance of the company was rated as 4 re-

sulting in gap value of -3. For the rest of the SERVQUAL questions, the companies scored gap values of -4 and -5 respectively, all indicating customer dissatisfaction. After assessing household satisfaction at the level of individual SERVQUAL questions, the study also examined household satisfaction at the SERVQUAL Component levels (Table 5).

**Table 1 : Household Satisfaction Questions**

<b>Tangibles (Tan)</b>	
Tan 1	This company has modern collecting containers
Tan 2	The vehicles of this company are nice looking
Tan 3	Picking points of this company do not give a bad smell
Tan 4	Employees of this company look neat and safe
<b>Reliability (Rel)</b>	
Rel 1	The company pick waste as promised
Rel 2	The company renders services without any mistakes.
Rel 3	The company renders its services agreed
Rel 4	The company insists on error-free bills
<b>Responsiveness (Res)</b>	
Res 1	Employees of this company communicate exactly when its services will be done
Res 2	Employees of this company give prompt service
Res 3	Employees of this company are constantly ready to help you
Res 4	Employees in this company always solve your problems
<b>Assurance (Ass)</b>	
Ass 1	The employees are knowledgeable
Ass 2	The employees make customers feel safe in their transactions
Ass 3	The employees are consistently courteous
Ass 4	The employee can convey trust and confidence
<b>Empathy (Emp)</b>	
Emp 1	The company gives individual attention
Emp 2	Employees deal with clientele in a compassionate manner
Emp 3	The company has the best interest at heart
Emp 4	Employees have time for clientele

The results show that all SERVQUAL components had negative gap values (Table 2) representing customer dissatisfaction with the services provided by the private solid waste management companies using the Wilcoxon

Signed-Rank Test for expectations (E) and performance (P). The Wilcoxon Signed-Rank Test was done to test whether or not the difference between (E) and (P) were significant. In other words, there were gaps between

customer expectation and company performance with Reliability (G = -5) as the worst followed by Assurance (G= -4), Responsiveness (G= -2), and both Empathy and Tangibles with a gap score (G) of -1 (table 2). Finally, the

**Table 2: Gap Results for Individual SERVQUAL Questions**

Tangibles questions	Expectation	Performance	GA P
This company has modern collecting containers	7	6	-1
The vehicles of this company are nice looking	7	6	-1
Picking points of this company do not give a bad smell	7	4	-3
Employees of this company look neat and safe	7	5	-2
<b>Reliability questions</b>			
The company pick waste as promised	7	4	-3
The company renders services without any mistakes.	7	4	-3
The company renders its services agreed	7	4	-3
The company insists on error-free bills	7	2	-5
<b>Responsiveness questions</b>			
Employees of this company communicate exactly when its services will be done	7	5	-2
Employees of this company give prompt service	7	5	-2
Employees of this company are constantly ready to help you	7	4	-3
Employees in this company always solve your problems	7	5	-2
<b>Assurance questions</b>			
The employees are knowledgeable	7	4	-3
The employees make customers feel safe in their transactions	7	3	-4
The employees are consistently courteous	7	2	-5
The employee can convey trust and confidence	7	3	-4
<b>Empathy questions</b>			
The company gives individual attention	7	6	-1
Employees deal with clientele in a compassionate manner	7	6	-1
The company has the best interest at heart	7	6	-1
Employees have time for clientele	7	6	-1

**Table 3: Households' Satisfaction at SERVQUAL Component Levels**

SERVQUAL Component	E	P	Gap	T-crit	p-value	Sig
Tangibles	7	6	-1	16179.55	2.46E-46	yes
Reliability	7	2	-5	51157.66	1.62E-79	yes
Responsiveness	7	5	-2	45360.1	1.44E-68	yes
Assurance	7	3	-4	45152.14	8.7E-73	yes
Empathy	7	6	-1	40110.15	7.29E-53	yes

**Table 4: Overall Household Satisfaction**

E	7
P	6
Gap	-1
count	478
T-crit	13690.7131
p-value	1.66E-39
sig	yes

study assessed the overall household satisfaction level (table 4) rated 6, producing a gap-value (G) of -1. A negative value is an indication of customer dissatisfaction with the overall service provided by solid waste management companies under the PPP model. This by implication means in all the areas of measurement in terms of service quality, residents' perception fell short of their expectation and this certainly has implications for the future direction of the PPP policy. It also means that companies must do more to win the trust of clients for sustained business operations.

Despite the general dissatisfaction among service beneficiaries, city authorities believe that the collaborative approach has created a win-win situation. Available records from the Metropolitan Assembly indicate a marked improvement in solid waste collection and disposal. Post et al. (2003), indicate that in 1999, the Metropolitan Assembly collected about 350 metric tons of solid waste representing about 40% of the total waste generated daily by households. Current data indicate that out of the 2000 metric tonnes of solid waste being produced in Kumasi per day, the private waste management companies collect and dispose of about 1470 tonnes representing about 73 percent.

Our research further shows that before privatization, about 67 percent of the population disposed of their solid waste at an unauthorised disposal site. The director of waste management explained in an interview...

*"This was due to city authorities' inability to provide central containers in the highly populated communities and waste bins in the middle and high-income communities".*

He further explained:

*"The introduction of the private companies has injected the much-needed capital, infrastructure, and human resource and this has*

resulted in the reduction in the number of households engaged in illegal dumping to about 23 percent”.

He explained further that the number of people serviced by the central container system has increased from 28% before PS involvement to about 62% after privatization. Again, beneficiaries of the house-to-house collection services have also increased significantly from a low of 9% before privatization to about 91% after privatization. The research further revealed that the majority of the illegal refuse disposal sites have been converted to central container points while additional central container points had also been created. The frequency of emptying the containers and bins had also seen some significant improvement. Responding to some of the concerns from the household interviews on their ratings of the services being delivered, a key informant from the environmental service providers association opined: “

*I am not surprised by the public ratings because there are many places we have not delivered as expected but it is not our fault. We need to blame both the people and the government. About 80% of the solid waste we pick are not paid for. The government that is supposed to pay is in areas for many months. Some of the clients too who enjoy the house-to-house collection have refused to pay for months. The problem is even worse in the low-income communities where the people prefer to dump the waste anywhere instead of putting the waste in the container for a fee”.*

Despite the blame game on the part of the service providers, the key informant admitted that some of the companies had not lived up to the contract agreement of better service delivery. He explained further that some of the companies do not have the needed skills, infrastructure, and the needed ingenuity for efficient solid waste management. Some of the companies have the equipment on paper but not on the ground. Again the assembly has also not engaged the public adequately on the policy. He conceded that there was to have been an intensive assessment of the problem before the PS was introduced so that they can judge the extent of success.

## Discussion

As already alluded to, many governments in the developing world have looked to the PPP policy as a solution to the chronic underfunding embedded in their solid waste management system (Awortwe 2004; Adama 2012). In pursuance, they have pursued the policy by making some operational, and managerial variations in the existing public system to accommodate the private players. However, the findings indicate that the massive promotion of the PPP effort in Kumasi has not fully lived up to the expectation of the public. The results of the study indicate that generally, service beneficiaries are not satisfied with the services they receive from private waste management

companies.

It is important to emphasize that the Kumasi situation is not an isolated case. In recent times, waste collection in most cities in Ghana is in the hands of the private sector and this transition is well documented (Fobil et al. 2008; Peres 2021). In practical terms, all available research on consumer satisfaction have been encouraging. Awortwi in 2004 for example, found that 25% of respondents who participated in a study on the topic in three cities in Ghana indicated improvements in the quality of service from their service providers. In another study, the World Bank in 2010, revealed that 70% of study participants described the cities in Ghana as “dirty” even in the face of increasing involvement of the PS and a huge expenditure of over \$491,730 a month on waste collection and disposal (Oteng-Ababio et al. 2017a). There are reasons for the perceived unsatisfactory performance of the private solid waste management companies. Chief among them is a lack of community involvement in the planning and implementation of such programs. Despite the well-acclaimed positive diffusion of reinvention knowledge of the PS, one impact of their transference that is fairly unmapped is their relationship with the general public such as community involvement and social equity. Such a situation affects social acceptability and participation. These results defeat the theoretical arguments forwarded by academics such as Savas (2000), Flyvbjerg et al. (2003), and Oteng-Ababio et al. (2017) and supporting private-public partnerships.

The implementation of PPP in Kumasi exhibits the conventional public tendencies, where a top-down approach appears to be the norm as if the opinion of other stakeholders in the decision-making process is irrelevant (Peres 2021). In both the rich and poor neighborhoods, residents are not involved in the planning and subsequent implementation of respective MSWM arrangements. Again, the PPP model in Kumasi has been made weak by predominant legal, organizational, and accountability processes. The central problem lay in weak guideline implementation, little public participation, and disintegration of decision-making procedures, and poor investment in solid waste infrastructures. Rather than laying a proper foundation before the implementation of the PPP agenda, city authorities have seemingly overnight, licensed a variety of private solid waste management companies purporting to have the needed infrastructure and human resource to deal with the problem under intense political and interest-group contestation (Altshuler & Luberoff 2003).

The findings from the study reveal some very important issues for the government to consider in taking decisions

to pursue PPP as the best approach for managing municipal solid waste. The first issue is the policy implications of government keeping ownership of state assets but transferring operations to a private company for a predefined time following a concession agreement. The PPP in Kumasi operates under an arrangement where private companies compete for zonal supremacy to offer waste management service over some time. In this sense, the ownership of a particular zone is transferred to a company to manage. Though the local government authority plays some supervisory role, the private company enjoys some form of freedom in decision making such as how much to charge and when charges can be increased; safety; employment status; environmental concerns; occupational health and safety standards (MLGRD 2001).

The second issue of policy implication is the magnitude of authority the Municipality relinquished under the PPP. Under the current arrangement, the private partners provide their infrastructure and personnel which fundamentally helps them to have a great deal of control over their concession. This concessionary agreement means that the local government authority has ceded some of its authority to the PS. This is because the agreement detailing the concession often has a list of operating standards which the government who is often the concessionaire is required to obey. With the concessionary procedure, the government plays a major role of the purchaser who acts on behalf of citizens through tax reliefs, while the PS is responsible for providing public services. The private entity is controlled by the government through its agencies so as to prevent the possible abuse and manipulation that may be related with its operations. From this perspective, the government plays double roles: as a buyer and as a supervisor. This is a way to maintain market discipline with the system (Cointreau 1994; van Dijk 2010). However many a time, the concessionaire abuses the terms of the contract and begins to arrogate to itself some extra powers that portray the concessionaire as the arbiter of power within the location of operations. While the municipal authority has the authority to end the contract and take back the operation of the concessionaire in times of breach, political interference and fear of backlash sometimes prevent such controls. The ultimate power of the local government authority is thus eroded.

### **Conclusion and Recommendation**

The study was purposed to examine the involvement of the PS in managing solid waste in Ghana and to assess the level of client satisfaction with services received from private solid waste management companies. The outcome has shown that the need to restructure the traditional model of solid waste management delivery was due to the

inability of the public sector entities mandated with that responsibility to provide value for money to the public. The PS, believed to have proper organization ability alongside infrastructure capacity was thus invited to take a major role in the delivery of what was once considered public sector services. The progressive increase in the role of PS providers over the past few years has brought about some level of improved effectiveness, efficiency, integration, and accountability. It was evident from the results that while structurally the PS has brought much improvement in service delivery, residents were not entirely satisfied with their performance in the areas assessed. The results showed a gap between residents' expectations and the actual performance of the companies. This situation the research revealed was due to limited public understanding of the performance contract between the state and the companies. The suggestion, therefore, is that massive public education and community engagement should be undertaken so that all stakeholders can appreciate the responsibility of each other. This process can serve as a platform for a good governance method to solid waste management. In pursuing the PPP model, the general public should share this vision so it can be successfully implemented. The cost of waste management may not only reduce but also enhance thoughtful usage of scarce resources. The caution, therefore, is that merely entering into a public-private partnership without due diligence relating to contract formulation, implementation and monitoring will only usher urban managers into a cyclical state of dissolution.

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None declared.

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