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## **Partnerships in sanitation service management and infrastructure provision in Kumasi, Ghana**

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*This paper investigates the potentials of the private sector in the development and management of sanitation infrastructure and services within three Sub metros in the Kumasi Metropolitan Assembly (KMA). A case study approach was used and data on public toilets under Build-Operate-Transfer (BOT) and franchise management were collected. Results showed that users of BOT facilities were generally satisfied with the services they receive but the KMA-owned toilets under franchised management receive low patronage because of the poor management and political interference. Some factors plaguing the partnership include mistrust between the partners, political interference and socio-cultural behaviour of the users.*

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### **Introduction**

Public-Private Partnership (PPP) is a sustained collaborative effort between the public sector and the private sector to achieve a common objective while both players pursue their own individual interests (Pessoa, 2007). The factors that affect PPPs include the degree of mutuality of interest between the actors concerning the specific goal of the partnership, trust among the partners, mutual accountability and transparency, effective and able leadership of the partnership arrangement. Furthermore, a strong political will is needed to support partnership activities in the long run. According to Mwangi (2002), successful partnerships should provide an efficient way of identifying different and changing needs; adequate trust between partners; clarity concerning the purpose of the partnership and the individual roles of partners within it; adequate leadership; possibilities of all partners to fulfil their roles; adequate access by all partners to essential information; necessary financial and other resources; compatibility with the prevailing political and legal climate; potential for wider application.

Despite the increasing role of PPP in infrastructure development, Kumasi still faces sanitation challenges in terms of coverage and access to sanitation. In Kumasi sanitation coverage is clearly inadequate: 38.8% of Kumasi's population relies on public toilets, over three-quarters of the population rely on shared toilet facilities, and tens of thousands of urban residents rely on open defecation (Thrift, 2007; Maoulidi, 2010). The recent census also reveals that 2.5% of inhabitants in KMA have no facilities, 38.8% use public toilets and KVIP, 0.3% Private bucket/pan latrine (GSS, 2013). This development therefore calls for concern on how the private operators are performing in their involvement in the sanitation services provision in achieving the MDGs target (Dima, 2004). As of 2000, most of the toilet management contracts were in the hands of Assembly Members (Ayee and Crook 2003).

A study was conducted in 2012 to examine the PPP arrangement to provide sanitation infrastructure and services, specifically public toilets and sewerage services in three sub metros within KMA. The objective of the study was to assess the roles of partners in the provision of sanitation infrastructure and services and the factors that affect PPP in service delivery.

## Methodology

### Study area and sampling

Three sub metros within Kumasi Metropolitan Authority (KMA), Oforikrom, Asokwa and Subin were selected for the study. The criteria included proximity to ensure easy communication, knowledge of the Metro to ensure easy access to information, and small land size that gave the researcher easy access to selected communities. Data was collected on perception of use of public toilet and sewerage system, user fees, management of public toilet and sewerage systems. The respondents for the interviews and surveys are shown in Table 1.

<b>Parameter</b>		<b>No of respondents</b>
Key Informants	KMA -	2
	Sub-Metros – key informants	3
	Private Operators – Public Toilets	11
	Private Operators – Sewerage Systems	3
	Public toilet Attendants	11
Users	Public Toilets under BOT	55
	KMA Owned Public Toilets	15
	Sewerage system	15
<b>Total</b>		<b>115</b>

### Data collection

The study mainly focused on private sector involved in sanitation infrastructure development Build-Operate-Transfer (BOT) and Franchise arrangements for sanitation service delivery. The external factors affecting the PPP and the performance of the PPP which were assessed include: the partnership relationships (nature of contract, transparency, accountability, trust and confidence, mutual benefit). The performance of the PPP was assessed based on user's perception (based on odour levels, user charges, and cleanliness of facilities) and the factors affecting PPP in KMA (political, technical, financial, socio-cultural).

## Results and discussions

### Nature of partnerships

Table 2 presents a summary of partnerships arrangements in sanitation delivery in KMA. The partnership involving the construction of Public toilet facilities is Build-Operate-Transfer (BOT) arrangement and is backed by a signed written contract which covers a period of 20years after which the facility is reverted to KMA. After installation of the facility, KMA performs a test- run for three months to ascertain the number of people expected to visit the facility daily, as well as the daily/monthly expenditure made. Based on the results of the test-run, a moderate user fee is set to help the private investor recover the investment cost over the contract period. Operations and maintenance expenditure are all covered by the user fees collected. The test-run also helps KMA to calculate 15% surtax for the investor to pay to KMA every month. In the event of the private investor's inability to recover the investment cost by the end of the contract, the contract may be extended. This model of PPP is very beneficial to both KMA and the private investor. This is because; it relieves KMA of the burden of sourcing for funds to perform its responsibility of providing sanitation infrastructure for the inhabitants. The private operator on the other hand, gets an investment with a relatively longer duration (20 years).

<b>Aspect of Contract</b>	<b>BOT contract</b>	<b>Franchised contract</b>	<b>Service contract for sewerage System O&amp;M</b>
Ownership	Owned by investor.	Owned by Assembly	Owned by Assembly
Operation	Investor is solely responsible for the operation and maintenance of the facility.	Franchisee is responsible for the operation of the facility	Private operator is responsible for operation and maintenance of the facility
Formality of Contract	Formal; involves signing of contract agreement	Formal; Signed contract	Formal; Signed contract
Contract duration	20years	2 years from the day of the agreement.	No specific duration set

Quite unlike what pertains within the BOT, in the franchised management, KMA has already built the facility but delegates the management to a private company/individual. The contract duration is 2 years which is subject to renewal based on the operator’s satisfactory performance. No case of contract termination has been recorded. Investors seek for an extension of contract when they are not able to recover their investment cost within the contract duration. Operators employ the services of attendants and cleaners to collect user fee and keep the toilet clean respectively. Cost of operations and maintenance are catered for by the user fees collected. The operator is expected to pay a franchise fee to KMA every month.

The nature of the management contract between KMA and a private company for the management of the Asafo sewerage system is summarised in Table 1. Ever since the private company was contracted to manage the Asafo system in 2006, the contract has never been transferred to another. Under the initial contract arrangement, the private operator was paid to manage the system. But due to pressure on the funds allotted for sanitation, the private operator was not receiving payments on for the operations and maintenance of the system. The private operators were later commissioned to collect an approved user fee to finance their activities while the Assembly was relieved of the financial burden of paying the private operator. Hitherto, the assembly paid the operators, while they in turn rendered accounts to the assembly. In the current situation, the operator pays no surtax to the assembly nor renders accounts to the assembly with regards to the revenue generated. At the end of the month, the operator serves every household a demand note, which is a bill of the services rendered. KMA approved the user fees as follows: non-storey blocks are charged GhC3/month (US\$0.80), GhC5 (US\$1.40) for one-storey and GhC7 (US\$1.80) for two-storey or more. Beneficiaries are charged to pay for clearing in the event of a blockage within their property which discourages pushing unwanted materials down the sewers.

### **Partnership transparency and accountability**

Table 3 presents the external factors influencing the partnerships. The accountability for results in the partnerships was assessed to find out information flow and the evidence of information asymmetry in sanitation. In the case of the BOT, the private operators said they render no accounts to the public sector apart from paying surtax. KMA also does not interfere with their income and expenditure as long as they pay their surtax. If an operator fails to pay surtax, the operator is served a warning letter and subsequent closing down of the facility if the operator still fails to pay the surtax. Within the Franchised management of toilets, franchisees pay up to GhC50.00 (US\$ 14) to the Sub metro as Franchise fee per month. But the operator of the Asafo Sewerage system pays nothing to KMA as surtax or franchise fee.

KMA and the Sub-metros have noted that there is a bit of dishonesty on the side of the private operators when it comes to accountability of revenue and payment of surtax. According to KMA, the operators who fail to pay do so with the excuse that they were running at a loss. But surtax is calculated based on the outcome of test-running the project after installation for about three months. The test-run does not predict the patronage levels in the longer term. And so KMA has a fair idea of how much expenditure and revenue comes out from a project every month, taking into consideration variations in interest and inflation rates.

The direct involvement and interference of faithful political party supporters in the management of the public toilets is a serious threat to franchised management of public toilet facilities. According to KMA, most of these franchisees are affiliated to the ruling party and so they refuse to be accountable to KMA.

<b>Table 3. External factor affecting partnerships</b>			
<b>Factors</b>	<b>BOT contract</b>	<b>Toilet management Franchised contract</b>	<b>Sewerage management contract</b>
<b>Transparency</b>	Dishonesty on the part of the private investors	Franchisees dishonest about income generated from user charges.	No record of opacity
<b>Trust and Confidence</b>	KMA does not interfere with their operations	KMA does not interfere with their operations	KMA does not interfere with their operations
<b>Accountability</b>	Investors are not accountable to KMA	Franchisees fail to render accounts to KMA on user fees collected	Operators do not account to KMA but manage their own resources.
<b>Mutual Benefit</b>	KMA receives surtax monthly; Investors make profit after they have recovered their investment cost.	-facilities managed for and on behalf of KMA -franchisee makes profit from collection of user fees	Operators sometimes break even and at other times run at a loss.

Franchisees are not sincere in the payment of their monthly franchise fee with the excuse that they are not making enough. The franchisees also complained that their attendants were not transparent in accounting for the user fees collected and so, they were always running at a loss. Franchisees project their daily revenue based on the amount of toilet paper expected to be sold. According to them, the attendants bring along their own rolls of paper to sell instead of the Franchisees'. This affects the franchisees adversely as their expenditure do not match up with their income. KMA admitted that the franchise management has relieved them of the burden of managing the public toilets themselves even though the franchisees are not managing the facilities as best as they should.

### **Trust and confidence**

Interview with the investors (private operators) within the BOT revealed that they were satisfied with the partnership since KMA has given them enough room to operate with no stringent monitoring except for occasional inspection. According to them, KMA does not probe into their income and expenditure; neither interferes with their operations once the private operator faithfully honours the surtax. The private operators also revealed that the public toilet attendants were not trustworthy. Some of them related the events when some attendants had given out their own anal cleansing materials instead of what had been provided by the operator and kept the proceeds. This according to the private operator affects the revenue generated by the private operator and cripples their cost recovery rate. KMA on the other hand, trusts the private operators in terms of delivering quality service. However occasional visits (announced and unannounced) are made to the facilities to put the private operators on check. Since there is no direct overlap between the roles of the partners, the private operator could not emphatically say the transparency levels between the partners but KMA noted that they trust the operator is doing a good job and there is therefore no need to interfere with their operations. KMA does not conduct periodic customer satisfaction surveys.

### **Mutual benefit**

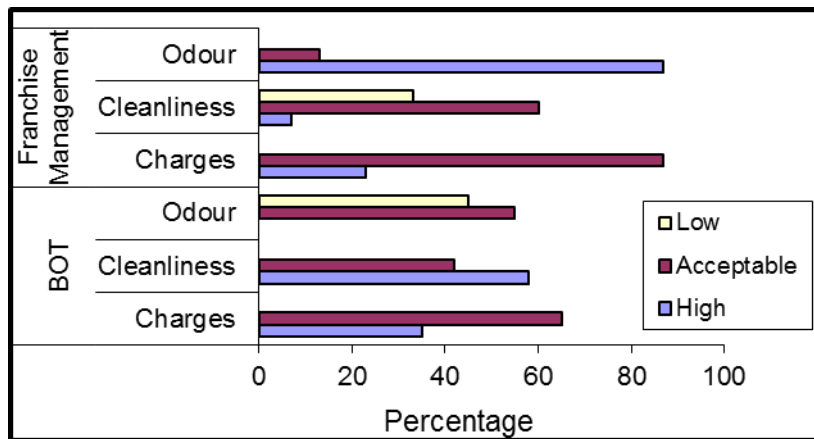
The private operators admitted that the partnership was very good business especially after they have been able to recover their initial investment. The contract is also renewable and so they can keep the facility as long as they can, and make good profit. A private interviewed at the Asokwa Sub-metro indicated that he had three BOT facilities running concurrently in three different Sub-metros and planning to build one more. According to him, the business is good that most investors would not want to hand over the facility to the Assembly. Instead they seek for extension under the prevarication of not having recovered their investment cost. KMA, on the other hand, admitted that the advantage of the PPP is the fact that the Assembly can discharge its responsibility to provide public toilets with no drain on its resources, but rather receiving an income (Franchise Fee/ surtax). The surtax may be adjustable by up to 15% in the event of variations in water, electricity or desludging tariffs. The private operator of the Asafo Sewerage system, however, claimed that they do not receive any external financial aid but run the operations and maintenance on the

user fees collected. Therefore, their revenue is not enough. Even though, they do not break even and run at a loss some times, the best part is that, they do not owe KMA any financial obligation.

**User perception**

Results gave the reasons why some users prefer the BOT to the franchise as follows; 49% because of accessibility and proximity to their homes, 67% because of little or no odour compared to the franchise, 84% because of cleanliness and 4% because of the technology type (Water closet) which according to them was more hygienic and comfortable to use. Despite complain of heat and stench emanating from the facilities under franchised management, some users still prefer that to the facilities under BOT. A majority of the users relying on the franchise arrangement (80%) indicated that the KMA-owned facility was more reliable considering the opening hours of 4am to 11pm each day; and 60% said their reason was the relatively lower user fee charged. Majority of the users of BOT run facilities also admitted that the user fee charged (20-40 Ghana pesewa per visit) was fairer than that charged by the facilities under franchised management (10 Ghana pesewa) considering the expenditure the operators make on operations and maintenance and the service they receive. Figure 1 shows the users perception about the services they are receiving from the private operators. It was shown that 35% of users of facilities under BOT were not satisfied claiming the user fee was rather too high.

Results showed most private operators however acknowledged the expenditure made on operations and maintenance as well as the quality of service provided and expressed satisfaction about the user fee. Interestingly, they admitted that the fee was relatively low and required a review contrary to what the investors believed. For the KMA facilities, even though majority 87% of users said the fee was acceptable, 13% also felt it should be fee-free since the place is almost always unkempt and disinfectants are not used. Other complains were the stench, desludging problems, and dilapidated buildings. Other users are also not careful with the toilets and misuse them. Contrary to the situation at the BOT facilities, there is no water, soap and towels for hand washing.



**Figure 1. User perception of public toilets under PPP**

Concerning the level of odour at the facilities, while 55% of users of facilities under BOT said there was some slight odour, though not strong enough to make one take off his/her dress before entering the cubicles as pertains to the KMA owned toilet facilities whereas 87% of users of facilities of under the franchised management admitted that the odour was too much. An interesting scenario was observed in the Oforikrom Sub-metro, the case of septic tank latrines. The septic tank latrine under BOT at Anwiam is the flushing and squatting type while that under franchise management at Kotei is non-flushing but sitting type. At the time of visit, it was observed that the facility at Kotei appeared cleaner than that at Anwiam. This goes to affirm the 7% of users who rated the franchise managed facilities as very clean. So in the case of Oforikrom Sub metro, the type of technology is not a reason people choose the facilities under BOT over those under

franchised management. But conditions at these facilities show clearly that the assembly members are more interested in the revenue than the comfort of the users.

## Conclusions

This paper investigated the partnership between private sector and the city authority in the development and management of sanitation services and infrastructure provision. The introduction of partnerships in sanitation sector has been seen in an increase in the number of public toilet facilities serving residents and visitors of the sub-metros. The study showed that the facilities under BOT were better managed than the city authority-owned franchised managed based on the user perception indicators (odour levels, user charges, and cleanliness of facilities). This has resulted in a high patronage of the BOT toilets. Users are also more comfortable with the water closet (WC) type than the dry sanitation toilet, which is also a limitation to the operations of the facilities under franchised management. The city authority has currently drafted a policy to phase out all the dry sanitation and aqua privy toilets over time, hence new ones are not being constructed. However, the city authority does not have the means to replace all the dry sanitation and aqua privy toilets with WC all at once and thereby depending on private investors to achieve their goal in the long term. This can be done by creating more avenues to bring more investors into the sanitation sector to implement BOT. The city authority must come out with a clear policy on management of public toilets involving private sector participation to avoid political interference and also ensure accountability of franchisees. In conclusion, the future of sanitation will depend on how partnerships between the city authority and private sector are shaped to ensure access to sanitation and the sustainability of the service.

## Lessons learnt

The study provides some lessons for sustainable management of public toilets. These include:

1. The incumbent franchisee has advantage of managing the facilities for a long time since there was no effective post contract competition, which would allow other private organisations to bid. This is important to improve the service delivery through competition.
2. Effective regulation of the PPP is warranted as many aspects of the PPP arrangement could be improved. The lack of adequate regulatory mechanisms of public toilets involving private sector participation creates avenues for political interference. The management of the sewerage system appears to be open ended with no contract duration. The public toilets under franchise management are characterised by odour nuisance.
3. Inadequate monitoring by KMA (Supervising body) affects the level of service delivery by the operators as they usually do not operate in accordance with terms agreed in the contract

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