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Solid waste collection in Accra: The impact of decentralisation and privatisation on the practice and performance of service delivery

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7

Attitudes and Perceptions Related to Solid Waste Management

The problem of solid waste collection in Accra is not only due to the escalating volumes of daily waste generation as a result of rapid population growth with its corresponding increasing pressures on existing logistics, but also to the attitudes of residents and officials. Poor or lukewarm attitudes to waste removal constitute one of the most important threats to any sustainable solid waste collection programme in Accra. In this chapter, we will look at this problem from two perspectives: those of the residents and those of officials. Next, we will analyse the perceptions of consumers and providers of waste collection services, as well as those of the policy makers dealing with solid waste management.

7.1 Attitudes

7.1.1 *The attitudes of residents*

Whilst residents in rich areas try to avoid littering in their area, those in poor areas often do the reverse: they indiscriminately dump waste instead of putting it into waste containers or litter bins. Some residents in the poor areas dump waste indiscriminately into open places, drains and gutters, thereby choking the drainage and creating fertile grounds for breeding of mosquitoes. Some commentators blame these negative attitudes on poverty though. It is quite understandable that improved incomes allow people to invest more in waste collection. However, without demeaning the poor, one does not have to wait for income improvement before avoiding littering or illegal dumping; practices which have serious health consequences for people.

Most people do not care about waste as long as it is not on their compound or immediate surroundings. Such behaviour forced Van der Geest (2001) to note in his study on a rural Ghanaian town that:

“...I came across a peculiar paradox in people’s way of dealing with waste. On the one hand, they were extremely concerned with cleanliness and removing dirt from their bodies, on the other hand, the way they actually got rid of their waste was so inefficient that they were continuously confronted with what they most detest: filth...”

As soon as waste leaves the house, it becomes a public matter for which no individual of the house takes responsibility anymore. The government is expected to remove the filth. In this section, we will use a few examples to illustrate the 'paradoxical' attitude of residents to solid waste management.

Protests by residents against the placing of containers near their homes constitute one such paradox. Whilst residents want more containers and complain of containers being too far away, using it to justify indiscriminate dumping at unauthorised places, they simultaneously object to placing containers near them, apparently because of irregular emptying of containers and the filth at the container sites. On the other hand, the location of dumpsites and landfills near residential areas brings into question land-use and building permit policies of the local authority. The recent waste wars between the AMA, on one hand, and residents in Mallam, Gbawe and Kwabenya, on the other, attest to this fact. It also points to the fact that rich areas or cities may sooner than later realise that they cannot always expect to transfer their waste to somebody else's environment. It also shows how city waste affects the built-up areas. We will provide two incidents to illustrate the implications of this attitudinal problem in waste management for urban planners, city managers and policy makers.

But what are the causes of such paradoxical attitudes towards solid waste management? At least five reasons can be deduced. The first reason is environmental awareness. The dilemma facing the local authorities is that whilst people cite environmental concerns for objecting to the placing of waste containers or the locating of dumpsites near their homes, they simultaneously use the lack of such facilities or the long distance to a nearby facility as a reason to justify the indiscriminate dumping of waste in unauthorised places. The second reason refers to the unwillingness of residents in one area to allow somebody's waste problem in another area to be transferred to them. This seriously questions the basis on which cities transfer or export their waste to their neighbours within the cities' built-in area. However, this shows that it is not disregard of the problem, but fundamental belief that it is not their responsibility. The waste is not theirs, it is a public matter rather than a private worry. The third reason has to do with some residents getting up to no good. Waste, no matter its source (from rich or poor areas in an urban centre), has to be disposed of in one way or another. In urban areas, the most acceptable way is for the local authority or its appointed agents to transfer the waste to a dumpsite. In that sense, waste from households protesting against the location of waste dumpsites in a particular area will also be transported or exported to their neighbours' area sooner or later, since they cannot keep their waste in their homes or plots forever. Though some residents resort to digging holes and to burying or burning their

waste, they cannot do this all the time. Burning waste causes severe air pollution and creates breathing problems for residents in the immediate vicinity. The fourth reason questions the country's land-use policy and the related burning issue of land-ownership. An improper land-use policy, ineffective supervision and corrupt officials have resulted in encroachment onto public land and lawlessness in land administration. The problem of an ineffective land-use policy is compounded by the fact that neither the government nor local authorities in Ghana own any land, not even the ones under their control. This hampers effective control and undermines the enforcement of land-use policies. The fifth reason refers to lawlessness. The weakness in the enforcement of the rule of law in areas such as Accra means that people do not have to fear any sanction for their offences. This is where the free rider problem comes in; people do not want to contribute to a cleaner environment unless their neighbours are obliged to do the same; the local government is not strong enough to sanction offenders and there is no communal institution that could force citizens through social control to abide by the rules either. This is why some critics think lack of funding or capital is not the sole requirement for solving the solid waste management problem, but that social capital, which is built on trust and networking, is also an essential ingredient in the input equation for ensuring sustainable development of solid waste collection systems.

Though street vendors, like many other unemployed Ghanaians, work tirelessly to fend for themselves, their activities must conform to laid-down regulations and byelaws of the local government authority. What is unlawful according to the byelaws should not be condoned. Laws are made to regulate human activities. If the laws are not enforced, then they are of no use.

7.1.2 Attitudes of officials

Similarly, the attitude of officials does not help to realise effective and efficient waste collection in the metropolitan area. Officials do not send the right signals to residents with respect to solid waste collection. Lack of enforcement of the city's bylaws is one of the major obstacles to achieving efficient solid waste collection. Laws and byelaws are meant to be enforced in order to ensure law and order in society; otherwise they are of no use. For instance, the city authorities continue to collect taxes from street vendors who operate on the roads of commercial and principal streets, thereby causing considerable daily littering and perpetuating the problem. Hawkers have no right to sell their products on the streets since they have not been issued with permits and the practice goes contrary to the bylaws of the AMA. However, the city authorities neither sanction waste offenders strongly enough, if at all, in accordance with existing bylaws in order to deter others, nor do they educate the residents enough on the negative impacts of poor solid waste management practices (such as

littering and indiscriminate dumping into gutters, drains and streams) on the environment and on the health of people leading to illnesses like malaria, typhoid and other diseases. The reason why the city authorities tolerate street vendors is that they respect their intentions of simply seeking to make a living under harsh economic conditions and from that perspective it should be applauded! However, it beats one's imagination to see city authorities collecting levies from people sitting right in the 'middle' of a road (such as in Kaneshie near the overheard bridge, the Kwasea Guaso near the Electricity Corporation at Tema station and Okaishie, where the road is totally blocked by illegal vendors selling their wares). Such practices must be stopped. Though it costs the AMA far more money to collect litter than to provide and collect waste containers and litter bins at vantage points, particularly along the road, at bus stops and recreational places and parks, few containers are provided. This has terrible consequences: there is litter everywhere in most poor areas and along commercial streets. The fact that even the few litterbins that exist are not emptied regularly encourages would-be littering offenders to justify their actions. But how can we explain the attitudes of officials?

- a) Usually public health is one of the major worries of local government.
- b) Attitudes are negatively affected by lack of resources.
- c) The lack of appropriate actions is partly explained by the lack of resources, partly by low motivation (remuneration) and partly by lack of sanctions on ill-performed services by officials.
- d) Incapacity and unwillingness.

Table 7.1 The first most important waste collection problem mentioned by respondents in each selected research locality

Dissatisfaction with	Area (selected research locality)								Total
	Achi-mota	Abe-lenkpe	La	Nima	Kane-shie	Dzor-wulu/ Roman Ridge	Airport R.A/ Cantonments	Ada-braka	
	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	
	%	%	%	%	%	%	%	%	%
Frequency of collection	46.0	86.0	92.0	60.0	8.0	78.0	72.0	52.0	61.8
Cost of collection	36.0	8.0	2.0	2.0	24.0	4.0	6.0	30.0	14.0
Cleanliness of service	4.0	4.0	2.0	36.0	64.0	14.0	20.0	12.0	19.5
Other problems	14.0	2.0	4.0	2.0	4.0	4.0	2.0	6.0	4.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Chi-Square value = 180,676 (a); Sig. (2-sided) = 0.000; a. 8 cells (25.0%) have expected counts of less than 5. The minimum expected count was 2.38.

Table 7.2 The first most important waste collection problem per mode of waste disposal

	Mode of waste disposal		Total
	House-to-house collection	Collective container collection	
	(n = 150)	(n = 250)	(n = 400)
	%	%	%
Dissatisfied with frequency of collection	78.7	51.6	61.8
Dissatisfied with cost of collection	6.0	18.8	14.0
Dissatisfied with cleanliness of service	12.7	23.6	19.5
Other problems	2.7	6.0	4.8
Total	100.0	100.0	100.0

Notes: Chi-Square value = 30,034 (a); Sig. (2-sided) = 0.000; a. 0 cells (0%) have an expected count of less than 5. The minimum expected count was 7.13.

7.2 Consumers' view of institutional arrangements in solid waste collection

7.2.1 Solid waste collection problems

Table 7.1 presents the responses of all consumers on the ranking of first and second most important solid waste collection problems in all the eight research localities. According to the consumers, the most important problems facing their areas, ranked in order, are low frequency of waste collection (including the unreliability of service provision), cost of collection and the cleanliness of service (including problems related to vehicles and equipment which are inappropriate for waste collection). Areas where the collective container collection system is operative have the additional problem of inadequate communal containers. Each locality has its peculiar problem. The intensity of a problem may differ from one area to another.

Frequency of collection is a larger problem in areas serviced through house-to-house systems, whilst cleanliness of service is more problematic in the areas with collective container collection systems (Table 7.2). In Kaneshie, for example, almost two thirds of the respondents said they were dissatisfied with the cleanliness⁷⁸ of collection, whilst only 8% of the residents are dissatisfied with the frequency of collection. This is in sharp contrast with other areas where the collective container

⁷⁸ The service provider in Kaneshie (Gee Waste Ltd.) sometimes uses the same containers for both solid waste and liquid waste collection in the day and night, respectively. The containers are either not thoroughly cleaned or not cleaned at all after using them in the night to collect night soil before being used during the day for solid waste collection. This results in terrible stench in the vicinity where the containers are located to receive the solid waste. Gee Waste Ltd. provides these containers itself. In the third (feedback) phase of the fieldwork, a further check on this allegation was carried out with AMA (the public provider) and the residents to verify and validate the practice. It seems the AMA could not sanction the company. The practice was stopped.

collection system is functioning and it demonstrates the uniqueness and peculiarities of the localities with respect to waste collection problems and the consumers' appreciation of services. Nevertheless, most people in all the areas investigated cited dissatisfaction with the frequency at which service providers empty the collective container collection.

Tables 7.1 and 7.2 show that frequency of collection is the most important problem with regard to solid waste management facing residents in Accra. The cost of collection and cleanliness of service follow. Even for those who choose other indicators as their first most important problem, a sizeable number again chose frequency of collection as their second most important problem. The tables show that over 95% of the perceived waste collection problems in Accra are associated with frequency of collection, cost of collection and cleanliness of service. There are no significant differences in terms of problems between private and public institutional arrangements, which implies that the type of provider is not really a major issue.

At this juncture, it would be worthwhile to dwell a little bit on these three most important solid waste management problems facing residents in Accra in general and the research localities in particular. In the next sub-sections we analyse the appreciation of consumers of the degree of these problems with regard to their localities.

7.2.2 Appreciation of frequency

As indicated in Table 7.1, the frequency of waste collection is the single most important problem facing most residents in Accra. The intensity of this problem differs from place to place (Table 7.3), which is closely related to differences in mode of waste disposal (house-to-house or collective container collection) and with institutional arrangement (public or private; Table 7.4). As regards people's appreciation of the frequency of waste collection services in the various localities, between 70% and 100% of the respondents in Achimota, La, Adabraka and Nima, felt the frequency of collection under the collective container collection system is too low, whilst in Kaneshie about 90% think it is acceptable. The former four areas have a publicly provided collective container collection service, whilst the latter is provided privately. In Airport Residential Area and Cantonment, which are serviced through the house-to-house system, 56% of the respondents think the frequency of collection is normal, whilst this same thought is shared in Abelenkpe and Dzorwulu/Roman Ridge by only 28% and 10% of the residents respectively. Though these four areas – all serviced through house-to-house collection – are all classified as rich areas, there are marked differences in their level of development. The Airport Residential Area and Cantonment could be classified as super-rich areas with a standard of amenities and services comparable to similar places elsewhere in the

world. It is no wonder that there is sharp difference between them and the other two research localities in terms of the consumers' appreciation of the frequency of collection. The truth is that Airport Residential Area and Cantonment have the largest concentration of prominent government officials, top foreign dignitaries and embassy officials, high-level businessmen and the wealthiest in the society. They could tip service providers, particularly the waste collection workers, to provide comparatively better services for their area. In actual fact, waste is sometimes collected twice a week in some of these rich and high profile areas.

Table 7.3 Consumers' appreciation of frequency of waste collection per selected research locality

	Area (selected research locality)							Total (n = 400)	
	Achi- mota (n = 50)	Abe- lenkpe (n = 50)	La (n = 50)	Nima (n = 50)	Kane- shie (n = 50)	Dzor- wulu/ Roman Ridge (n = 50)	Airport R.A/ Canton- ments (n = 50)		Ada- braka (n = 50)
	%	%	%	%	%	%	%		%
Normal	28.0	10.0	8.0		88.0	26.0	56.0	6.0	27.8
Too low	72.0	90.0	92.0	100.0	12.0	74.0	44.0	94.0	72.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Chi-Square value = 159,095 (a); Sig. (2-sided) = 0.000; a. 0 cells (0%) have an expected count less than 5. The minimum expected count is 13.88.

Table 7.4 Consumers' appreciation of frequency of waste collection by waste collector

	Waste Collector		Total (n = 400)
	AMA (n = 200)	Private contractor (n = 200)	
	%	%	
Normal	23.0	32.5	27.8
Too low	77.0	67.5	72.3
Total	100.0	100.0	100.0

Note: Chi-Square value = 4,501 (a); Sig. (2-sided) = 0.034; Exact Sig. (2-sided) = 0.000; a. 0 cells (0%) have an expected count less than 5. The minimum expected count is 55.50.

Even though the stipulated frequency of collection is once a day and once a week for collective container collection and house-to-house collection respectively, in some cases the service providers do not collect waste in the areas according to agreed schedules. In the collective container collection system, the appreciation of the frequency of collection is clearly affected by the type of service provider. In the

areas serviced by the WMD (AMA), the consumers perceive frequency of collection to be worse than in the areas operated through private contractors (Table 7.4). This is probably related to the perception that private sector providers have the motivation to perform because the AMA pays them according to the number of waste containers they evacuate to disposal sites. The public sector does not have such motivation since its salary is guaranteed and does not depend on the number of containers removed. Despite this general tendency, however, tardy payment by the local authority of private contractors in the collective container collection system can and does lead to frequent interruptions of services.

Table 7.5 Consumers' appreciation of cleanliness of service by waste collector

	Waste Collector		Total
	AMA	Private contractor	
	(n = 200)	(n = 200)	(n = 400)
	%	%	%
Normal	65.0	54.5	59.8
Bad	35.0	45.5	40.3
Total	100.0	100.0	100.0

Notes: Chi-Square value = 4,584 (a); Sig. (2-sided) = 0,032; a. 0 cells (0%) have an expected count of less than 5. The minimum expected count is 80.50.

Table 7.6 Consumers' appreciation of cleanliness of service by area (selected research locality)

Appreciation	Area (selected research locality)								Total
	Achi-mota	Abe-lenkpe	La	Nima	Kane-shie	Dzor-wulu/Roman Ridge	Airport R.A./Cantonments	Ada-braka	
	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 400)
	%	%	%	%	%	%	%	%	%
Normal	86.0	94.0	78.0	-	6.0	98.0	96.0	20.0	59.8
Bad	14.0	6.0	22.0	100.0	94.0	2.0	4.0	80.0	40.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Chi-Square value = 270,516 (a); Sig. (2-sided) = 0,000; a. 0 cells (0%) have an expected count of less than 5. The minimum expected count is 20.13.

7.2.3 *Appreciation of cleanliness*

Table 7.5 shows that in the AMA-serviced areas, 35% think cleanliness is bad, whilst in the areas serviced by private service contractors 45% of the respondents think so. Table 7.6 provides the picture for the selected localities. In Nima, Kane-

shie and Adabraka, more than 80% or more of the respondents categorised cleanliness at the waste collection points as bad, saying they were filthy. This results from irregular frequency of waste collection. The survey results show that other factors might also be responsible, besides the public versus private divide. First, whilst the frequency of collection is higher in the case of privately provided collective container collection or house-to-house services, cleanliness is worse. So the correlation of higher frequency with higher cleanliness is doubtful. Nevertheless, consumers overwhelmingly support privately provided services over public ones. Other factors that also affect the cleanliness of an area include the following:

- i. *Same container for solid waste and night soil collection:* As already remarked in Section 7.2.1, respondents in Kaneshie indicated that the service provider in that area sometimes uses the same container for solid waste and night soil collection for the day and night, respectively, without washing it properly, if at all. This practice is illegal and poses potential health hazards.
- ii. *Dilapidated vehicles:* Because of low tariffs, private contractors use old and dilapidated vehicles, some of which pollute the area as waste falls from moving waste vehicles, which are not covered with a net. These vehicles also frequently break down, causing interruptions to services with obvious implications.
- iii. *Labour conditions:* Poor remuneration and benefits for workers negatively affect the quality of work.
- iv. *Collection points:* The service provider is not in charge of sweeping and cleaning the area. His responsibility is just to haul the container to disposal sites. The responsibility for cleaning the collection points is not well organised.
- v. *Inadequate collective containers:* The volume of waste generated in poor areas is more than the available containers can absorb. This leads to spillage and could also incite some residents to opt out of the official mode of disposal.
- vi. *Commercial activities and street vendors:* These practices, which are very prevalent in poor areas, but absent in rich neighbourhoods, can lead to littering in the area.
- vii. *Tips:* Residents in rich areas tip waste collection workers, which motivates them to work better in such areas.
- viii. *Capacity to pay:* In addition to waste service providers, rich people can also pay other people to organise cleaning in their area, while their poor counterparts are unable to do so.
- ix. *Children in charge of waste:* In poor areas children carry waste to collection points, which in some cases may be far away from their houses. Sometimes, the waste ends up at open spaces, gutters or is even dumped improperly at the collection point. In contrast, in the rich areas, waste is usually handled by grown-up house-helpers, who make the waste available just at the front of the house for the service provider to collect.

- x. *Illegal dumping*: Some service providers in the house-to-house collection system dump at illegal sites in order to escape paying dumping fees.

Cleanliness of an area is determined by a combination of factors other than just the type of provider and it may differ from place to place. Opinions are divided on whether waste is a problem or not in the research localities, with 56% and 43% agreeing and disagreeing to the assertion respectively. Waste collection is not considered a problem in areas such as Adabraka, Kaneshie, Airport Residential Area, Cantonment, Dzorwulu and Roman Ridge. With the exception of Adabraka and Kaneshie, these are high-income areas with a house-to-house collection. This is in contrast with Achimota, La and Nima where many people think waste is a major problem. The latter category consists of middle-income and predominantly poor areas using the collective container collection system. Adabraka is a middle-income area, which combines the free collective container collection system with private waste pickers. The waste pickers provide house-to-house collection services for a fee, hence the relative satisfactory situation in the area. Apart from the low frequency of waste collection, most of the people in the rich neighbourhoods where a house-to-house system is operative do not have major problems with waste collection. The problem is mainly in the poor and some middle-income areas where the collective container collection system is operating.

Table 7.7 Desired improvements in waste collection by mode of waste disposal

Desired improvement	Mode of waste disposal		Total
	House-to-house collection	Collective container collection	
	(n = 150)	(n = 250)	(n = 400)
	%	%	%
Provide more collective container collection sites and containers and labour	2.7	41.6	27.0
Increase frequency of waste collection	60.7	30.0	41.5
Service providers should be more reliable	8.7	2.0	4.5
Privatise waste collection	10.0	25.6	19.8
Satisfied with present waste collection arrangement	18.0	0.8	7.3
Total	100.0	100.0	100.0

Notes: Chi-Square value = 132.943 (a); Sig. (2-sided) = 0.000; a. 0 cells.

7.2.4 *Desired improvements (household demand for improved services)*

Virtually every household would like some form of improved services. Only 7.3% of the households are satisfied with the present arrangement (Tables 7.7 and 7.8).

Table 7.8 Desired improvements in waste collection by area (selected research locality)

Desired improvement	Area (selected research locality)							Total (n = 400)	
	Achi-mota (n = 50)	Abe-lenkpe (n = 50)	La (n = 50)	Nima (n = 50)	Kane-shie (n = 50)	Dzor-wulu/ Roman Ridge (n = 50)	Airport R.A./ Cantonments (n = 50)		Ada-braka (n = 50)
	%	%	%	%	%	%	%		%
Provide more collective container collection sites and containers, and labour	38.0	2.0	70.0		72.0		6.0	28.0	27.0
Increase frequency of waste collection	62.0	68.0	30.0	4.0	4.0	72.0	42.0	50.0	41.5
Service providers should be more reliable		10.0		4.0		2.0	14.0	6.0	4.5
Privatise waste collection		8.0		92.0	22.0	12.0	10.0	14.0	19.8
Satisfied with present waste collection arrangement	-	12.0	-	-	2.0	14.0	28.0	2.0	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Chi-Square value = 412.296 (a); Sig. (2-sided) = 0.000; a. 16 cells (40.0%) have an expected count of less than 5. The minimum expected count is 2.25.

About 10% of the residents in house-to-house collection areas and 25.6% of those in collective container collection areas would prefer private contractors to public ones (Table 7.7). The desire for privatised waste collection is highest in Nima (92%) (Table 7.8). This is certainly a matter of image. Private providers are expected to deliver a better service. In actual fact, proof of better performance is open to some discussion. The demand for increased frequency of waste collection cuts across all the areas investigated, with an average of 41.5% of all respondents, but there are differences in what it entails per mode of waste disposal. It is therefore important to distinguish between them. For consumers subject to the collective container collection system, increased frequency is not so much an increase in the number of times per day the waste is collected, but more the regularity of collecting it. Many residents consider the officially stipulated once a day rate of collection as high enough. The main problem with regard to this category of waste collection is that the once a day is hardly observed. In the case of house-to-house collection, in contrast, the problem is not just the regularity of collection, but also the rate of collection. Some consumers want the frequency of collection increased from once to twice a week. About 79% of the residents under the

house-to-house collection system think the once a week frequency of collection is inadequate and too low for a country in the tropics and therefore want the frequency increased from once to twice a week (figures not presented in the tables).

In the areas where the collective container collection system is operative, 41.6% of the consumers think the local authority should provide more sites and containers (Table 7.7). Generally, the collective container collection system areas are often densely populated, but have few containers. As a result, the containers get filled up very early in the morning and some households may not be able to dump their waste through the official channels. Where such waste ends up is anybody's guess. These areas need more containers and also more frequent removal of waste. The majority of residents in all the localities where the collective container collection system operates think that the best way to improve solid waste collection is to ensure regular frequency of collection and to provide more containers and sites for the collective container collection system, employ more cleaners, improve the quality of waste collection vehicles/equipment and insist that service providers cover open trucks with nets in order to prevent spilling waste on the road during transportation.

The desired improvements require money and are possible only if the stakeholders agree to effective cost-sharing arrangements. The questions are whether consumers are prepared to pay user fees, how they appreciate the cost of services and whether they are prepared to pay for the desired improvements in solid waste collection. Can they afford the desired improved services as they have indicated? The next three sub-sections discuss payment for user fees, appreciation of cost and willingness to pay, and affordability, respectively.

7.2.5 Payment of user fees

There is a major distinction between the collective container collection and house-to-house systems in terms of user fees: collective container collection is free of charge whilst house-to-house collection is carried out in return for user fees.⁷⁹ Under the collective container collection system, there are exceptions to the rule: in Achimota, Adabraka, and Kaneshie residents pay various fees, even though the collective container collection system is free. In Achimota and Kaneshie, residents pay a fee of ₵100 per dumping of waste to the assemblymen in the areas. This works out at between ₵2,000 and ₵3,000 per month. In parts of Adabraka, about

⁷⁹ In November 1999, the local authority approved new rates for solid waste collection services in Accra (including collective container collection) based upon area classifications. However, as at the beginning of 2002, the collective container collection system was still free of charge.

90% of the residents pay waste pickers to carry their waste to a container. The local authorities pay service providers to operate the collective container collection system. In areas where house-to-house collection operates, households pay between ₺8,000 and ₺10,000 per month (depending on the size of approved container) as user fees directly to the service provider.⁸⁰ In compound houses, the amount is shared proportionately among the households. In Adabraka, about 92% of the respondents pay between ₺8,000 and ₺12,000 per month to waste pickers.

Adabraka's situation is interesting in many ways. Even though it operates a collective container collection system, about 90% of the residents use waste pickers to collect their waste from their houses to the communal containers for a fee. Therefore the fees they pay go to the private waste pickers and not to the local authority or its accredited private contractor who operates the collective container collection system in the area. This equals the amount residents in high-income areas pay for house-to-house collection. The relatively high fees are probably due to high collection frequencies (on a daily basis). Besides, Adabraka is a commercial residential area in the city's centre, where residents in virtually every house perform a commercial activity of one kind or another and are therefore willing to pay for the evacuation of their waste in order to maintain a clean environment. If the residents can pay that amount of money to waste pickers, then they can also pay for twice a week house-to-house collection.

7.2.6 Appreciation of cost, willingness to pay more and cross-subsidisation

The majority of residents in areas where the house-to-house system is operating, think the cost of collection is acceptable (Table 7.9). In La and Nima, the collective container collection service is free. However, in Achimota, Kaneshie and Adabraka, residents pay fees to the assemblymen and waste pickers, respectively. In these three areas, about a quarter to more than a third of the respondents think the cost of service is too high for the kind of services they receive (Table 7.10). The irony is that all these fees for the collective container collection system do not end up in the coffers of the local authority.

⁸⁰ Before mid 1999, there were two forms of payment of services for the private contractor. The house-to-house and collective container collection operated on a franchised and contact-out basis, respectively. Under the franchised house-to-house collection system, each service provider (AMA and private contractors) collects user fees in its area of operation. In the case of the collective container collection system, the local authority pays the private contractor. Since mid 2000, the AMA collects user fees for all house-to-house services in Accra irrespective of who provides the service, and then pays the bulk amount to CCW which, in turn, pays the service providers.

Table 7.9 Consumers' appreciation of cost of waste collection by mode of waste disposal

	Mode of waste disposal		Total
	House-to-house collection	Collective container collection	
	(n = 150)	(n = 250)	(n = 400)
	%	%	%
Too high	13.3	19.6	17.3
Normal	86.7	41.6	58.5
Not paying	-	38.8	24.3
Total	100.0	100.0	100.0

Notes: Chi-Square value = 92.882 (a); Sig. (2-sided) = 0.000; a. 0 cells (0%) have expected count less than 5. The minimum expected count is 25.88.

Table 7.10 Consumers' appreciation of cost of waste collection by area (selected research locality)

	Area (selected research locality)								Total
	Achi-mota	Abe-lenkpe	La	Nima	Kane-shie	Dzor-wulu/Roman Ridge	Airport Cantonments	Ada-braka	
	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 400)
	%	%	%	%	%	%	%	%	%
Too high	38.0	14.0			24.0	26.0		36.0	17.3
Normal	62.0	86.0	6.0		76.0	74.0	100.0	64.0	58.5
Not paying	-	-	94.0	100.0	-	-	-	-	24.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Chi-Square value = 422.788 (a); Sig. (2-sided) = 0.000; a. 0 cells (0%) have an expected count of less than 5. The minimum expected count is 8.63.

There are three categories of residents in terms of preparedness to pay for the service. Firstly, in both the house-to-house and collective container collection systems, about 64% and 50% of the residents respectively want to pay the same rate as before (Table 7.11). In the case of the collective container collection-system, this includes those who currently pay nothing and might want to pay nothing. This group of service consumers thinks that resources are ineffectively and inefficiently utilised and that better services could be derived from the same amount they are already paying as user fees. According to one resident, whose story was corroborated by several other residents, they paid more than the stipulated rate (*i.e.* free of charge) for solid waste collection in the areas operating under the collective container collection system. "... We did not raise a finger, because we were made to

believe that the excess amount would be used to cater for desired improvements in one way or the other, but nothing improved....”, a fuming resident told the researcher during a focus group discussion at Akweteman/Achimota in 2000.

Table 7.11 Preparedness to pay for better waste collection methods by mode of waste disposal

	Mode of waste disposal		Total
	House-to-house collection	Collective container collection	
	(n = 150)	(n = 250)	(n = 400)
	%	%	%
The same as present rate	64.0	50.0	55.3
More than present rate	24.0	22.4	23.0
Does not know	12.0	27.6	21.8
Total	100.0	100.0	100.0

Notes: Chi-Square value = 13,920 (a); Sig. (2-sided) = 0.00; a. 0 cells (0%) have an expected count of less than 5. The minimum expected count is 32.63.

Table 7.12 Preparedness to pay for better waste collection methods by area (selected research locality)

	Area (selected research locality)							Total	
	Achi-mota	Abe-lenkpe	La	Nima	Kane-shie	Dzorwulu/Roman Ridge	Airport R.A./Cantonments		Ada-braka
	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 50)	(n = 400)
	%	%	%	%	%	%	%	%	%
The same as present rate	70.0	82.0	2.0	4.0	90.0	76.0	34.0	84.0	55.3
More than present rate	30.0	14.0	60.0	2.0	6.0	18.0	40.0	14.0	23.0
Does not know	-	4.0	38.0	94.0	4.0	6.0	26.0	2.0	21.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Chi-Square value = 307,828 (a); Sig. (2-sided) = 0.000; a. 0 cells (0%) have expected count less than 5. The minimum expected count is 10.88.

The second group refers to those who are prepared to pay more than the present rate for better solid waste collection methods. Under the house-to-house system, this group comprises about 24% of the residents (Table 7.11) or 14%, 18% and 40%, respectively, of the residents in Abelemkpe, Dzorwulu/Roman Ridge and Airport Residential Area/Cantonment (Table 7.12). Remarkably, 30% and 60% of the respondents respectively in Achimota and La, which are serviced by the collec-

tive container collection system, say they would be prepared to pay more than the present rate to help maintain and keep the place neat, in spite of the fact that the service is free (Table 7.12). It is equally remarkable to note from Table 7.12 that in Kaneshie and Adabraka, respectively 90% and 84% of the residents say they are prepared to pay the same as the present rate. Incidentally both of these areas, which are commercial centres that operate under the collective container collection system, pay a substantial amount for their waste collection. Thus, they are prepared to continue paying, in order to ensure better waste collection. The survey shows that majority of the respondents in all the localities are willing to pay for improved services. It is interesting to note that even residents in areas such as Achimota, La, Kaneshie and Adabraka, which officially enjoy free collective container collection waste collection services, are willing to pay for improved services.

The third group refers to residents who do not know whether or not to pay. They simply *do not know*. This group consists of various interest groups. It includes those residents who think that additional costs for improved services should be borne by the local authority. This group includes people from both the house-to-house and collective container collection operated areas. Some of the residents think that part of the revenue of the taxes that residents pay to the local authority should be used for solid waste collection. This implies that there is always a group of residents who are inclined to opt out or to engage in free rider practices. For example in Nima, about 94% of the residents are indifferent to whether to pay or not for improved services. In fact, residents in Nima are hesitant when it comes to paying for improved services. In the case of this poor area much will depend on the affordability of the charge. Nonetheless, with the exception of Nima, the majority of residents in all the selected localities agree that waste collection should attract a 'reasonable' fee since consumers already pay various taxes to the AMA. Many residents are prepared to pay even more for better services. This has far reaching implications for policy makers, the local authority and service providers in their search for better ways to fund solid waste management. However, in terms of cost-sharing arrangements, the majority of those surveyed in all the selected research localities disagree that the wealthy in the community should pay more for the same services than the poor. This means that they do not support the idea of cross-subsidisation; consumers should bear responsibility for the cost of clearing the waste they create. It also means that the local authority must always make provision for people who cannot or will not pay.

7.2.7 Affordability

Practically all respondents in the three areas with public waste collection under the collective container collection system (*i.e.* Achimota, La and Nima) say they can

afford a collective container collection at ₦100 per dump, *i.e.* pay-as-they-dump (Table 7.13). Coincidentally, these three areas are the poorest among the eight selected research localities in terms of socio-economic status. In Kaneshie, about 78% of those surveyed would prefer a collective container collection system at ₦100 per dump, while 16% would prefer twice-a-week house-to-house collection at ₦10,000 per month. In Adabraka, however, which also enjoys a collective container collection system at the moment, all the residents say they can afford a house-to-house collection of either once-a-week at ₦8,000 per month or twice-a-week at ₦10,000 per month. The Adabraka situation is not surprising at all, since the majority of residents use waste pickers to collect waste from their houses to the central communal containers for a fee. The total amount of money the residents pay for a month as fees to the waste pickers is very similar to those paid by residents in other localities with house-to-house collection. In the areas where house-to-house collection is already operating, it is only in Abelenkpe that the majority of residents wants to continue with a once a week frequency of collection. Elsewhere, in the Airport Residential Area/Cantonment and in Dzorwulu/Roman Ridge, about 98% and 94% of all the residents, respectively, want a twice-a-week frequency of waste collection.

Table 7.13 Affordability of better waste collection methods by area (selected research locality)

Affordability	Area (selected research locality)								Total (n = 400)
	Achi- mota (n = 50)	Abe- lenkpe (n = 50)	La (n = 50)	Nima (n = 50)	Kane- shie (n = 50)	Dzor- wulu/ Roman Ridge (n = 50)	Airport R.A/ Canton- ments (n = 50)	Ada- braka (n = 50)	
	%	%	%	%	%	%	%	%	
Twice a week house-to-house collection; ₦ 10,000/month					16.0	94.0	98.0	60.0	33.5
Once a week house-to-house collection; ₦ 8,000/month	2.0	100.0			6.0	6.0	2.0	40.0	19.5
Collective container collection; ₦ 100/dump	98.0	-	100.0	100.0	78.0	-	-	-	47.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Chi-Square value = 611,923 (a); Sig. (2-sided) = 0.000; a. 0 cells (0%) have an expected count of less than 5. The minimum expected count is 9.75.

Table 7.14 shows that 64% of those already serviced through house-to-house collection, and 15% of those currently serviced by the collective container collection system can afford a twice-a-week house-to-house collection, whilst 36% of those already serviced through house-to-house collection still would prefer the once a week house-to-house collection. In addition, 9.6% of those currently being serviced through a collective container collection system would also prefer once a week house-to-house collection. Therefore in the sampled frame, about 33.5% can afford a twice a week house-to-house collection, while 19.5% can afford once a week house-to-house collection. The remaining 47% can afford collective container collection system around the corner of their houses for ₵100 per dump. The pattern that emerges from the survey is that affordability is a function of income status, independent of who provides the service. Those who can afford it are even prepared to pay more for increased frequency of collection as a better way to improve waste collection in their area.

Table 7.14 Affordability of better waste collection methods by mode of waste disposal

Affordability	Mode of waste disposal		Total
	House-to-house collection	Collective container collection	
	(n = 150)	(n = 250)	(n = 400)
	%	%	%
Twice a week house-to-house collection; ₵ 10,000/ month	64.0	15.2	33.5
Once a week house-to-house collection; ₵ 8,000/ month	36.0	9.6	19.5
Collective container collection; ₵ 100/dump	-	75.2	47.0
Total	100.0	100.0	100.0

Notes: Chi-Square value = 212,952 (a); Sig. (2-sided) = 0.000; a. 0 cells (0%) have an expected count of less than 5. The minimum expected count is 29.25.

7.2.8 Possible improvements

There is a clear distinction between the desired improvements for collective container collection serviced areas and those for house-to-house collection areas (Table 7.7). The residents mentioned several ways in which the services could be improved. Residents want any possible improvements to be tailored towards achieving these desires. This section reviews the possible improvements from four perspectives: desirability, preparedness to pay; affordability, and capability or feasibility (what is feasible). Both categories of consumers, *i.e.* those serviced through house-to-house and those serviced by collective container collection, have a list of preferences, some

of which are more pressing than others and deserve priority and swift action, whilst others are far more difficult to achieve. For instance, areas serviced through collective container collection, that have poor road accessibility cannot receive house-to-house services even if the people want it and indicate they are prepared to pay and can afford the service. From the survey results the following possible improvements could be effected:

- i. Increase the frequency of collection in house-to-house operated areas from once a week to twice a week for all areas that have good roads and where the residents indicate they can afford it.
- ii. Maintain once a week house-to-house services for those areas, which already enjoy house-to-house service and want to remain receiving once a week services, but with reliable services.
- iii. Upgrade the collective container collection system in areas with good road accessibility and where residents can afford house-to-house collection (e.g. Adabraka) to either once a week or twice a week house-to-house collection at their corresponding rates (of ₵10,000 and ₵12,000 per month, respectively) depending on the affordability. It is now ₵40,000 per month for once a week house-to-house collection.
- iv. Provide daily service around the corner for a fee of ₵100 per dump;
- v. Increase the number of containers and container sites for the collective container collection system;
- vi. Request providers to sweep and cleanse container sites.
- vii. Ask consumers to ensure that they dump waste into containers and do not litter the site.
- viii. Transfer more solid waste collection areas from public to private contractors. In this way, some improvement has taken place (see Section 6.3.3).
- ix. Effective supervision and monitoring of service providers and consumers.
- x. Provide more waste bins at vantage points and empty them regularly to reduce littering.

7.2.9 Views on privatisation

The survey results show a preference of private service provision over public ones. About 80% of the residents in all the localities prefer private contractors to public ones to provide waste collection services. About 90% of the residents in all the research localities where either the collective container collection or house-to-house collection systems are operating think –irrespective of the mode of collection (public or private) – that private contractors perform better than the AMA (Figure 7.1). This thought is shared, for example, in La and Dzowulu/Roman Ridge by 86% and 94% of residents respectively. Even in the Airport Residential Area and Cantonment, where there is a large concentration of very prominent

government officials, high officials of foreign dignitaries, embassy staff, and top business executives, as a result of which the AMA makes an extra effort, more than half of the residents in these areas think that private contractors would perform better than the AMA. This is a strong endorsement of the privatisation of solid waste collection. Opinion is, however, divided with respect to the effect of the privatisation of waste collection services on prices. With the exception of Nima and Kaneshie, about 85% of the residents are of the opinion that prices will increase if waste collection is privatised. People generally tend to believe that privatisation normally leads to increases in prices because of the private sector's craving for profit. Even though a large percentage (92%) of the respondents say private contractors perform better than the local authorities, 62% of the respondents think that prices of services would increase if solid waste collection services were completely handed over to private firms. To combat this, some residents think the local authority should not divest itself completely from service provision and should also stay involved in the fixing and regulating of user fees.

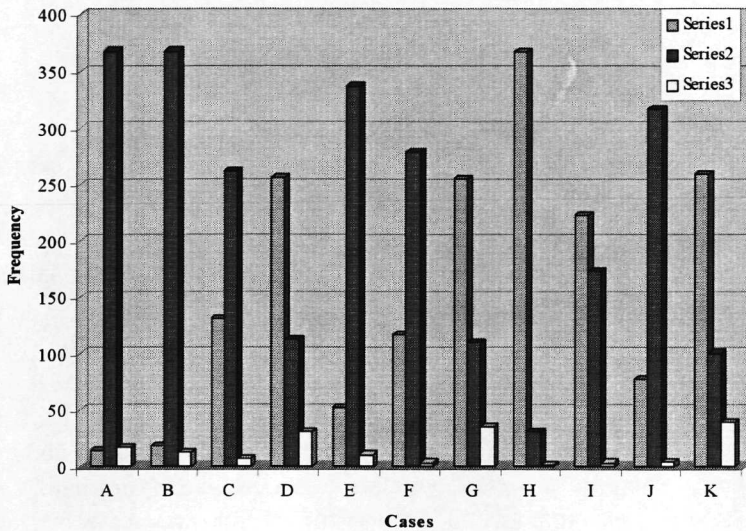
7.2.10 Other issues

The local authority has often regarded solid waste collection problems as local issues which in one way or the other require more involvement by residents. Though residents say the AMA is to blame for the deterioration of waste collection in their locality, the majority are of the opinion that they are to blame themselves for littering their area (Figure 7.1). About 90% of residents in Achimota, Nima and Kaneshie think the communities should take greater responsibility for waste collection in their area. However, residents in the other research localities do not share this view. Residents in rich areas like Abelenkpe, Dzorwulu, Roman Ridge, Airport Residential Area and Cantonment prefer to pay someone else to manage waste collection in their area. In La, the residents think that the community-based organisation – La Mansaamoo Kpee (LMK) – is well organised to take greater responsibility in solid waste collection, in contrast to the individual residents.

With regard to the use of waste, about 30% of residents in all the research areas think that useful waste is thrown away. Most useful waste is, however, reused or recycled (Chapter 6). Food leftovers, peelings, etc., are used to feed animals. The majority of the residents in the research localities think that food waste should be separated so that it could be used to feed animals and for compost as organic manure for agriculture. Whether waste is thrown away or food waste is separated is not related to the kind of institutional arrangement (*i.e.* collective container or house-to-house collection), or on the (public or private) mode of collection. It re-

quires policy intervention and local government action to further stimulate the re-use and recycling of waste materials.

Figure 7.1 Consumers' opinion on solid waste collection



Notes:

- A = Contractors do not perform better than AMA
- B = AMA cannot be blamed for poor solid waste management
- C = Community should be responsible for solid waste management
- D = Willingness to pay for solid waste management
- E = Wealthy should pay more for solid waste management
- F = Waste collection should be free
- G = Privatisation would lead to price increases
- H = Residents to blame for littering area
- I = Waste not a problem in my area
- J = Useful waste thrown away
- K = Separate food waste for compost & agriculture
- Series 1 = Agree, Series 2 = Do not agree, Series 3 = Do not know

7.3 Service providers' views on solid waste collection in Accra

Legally, the Accra Metropolitan Assembly (AMA) is the local government authority responsible for the provision of basic solid waste collection services and the environmental management in the area. This duty is clearly spelt out in the legislative instrument (LI 1500) that established the AMA. However, the AMA lacks the infrastructure, human and financial resources to deal effectively with the multi-dimensional and multi-facet problems of waste management in the metropolitan

area alone. The decentralisation and privatisation policies have opened up waste management to the lower levels of government and other service providers besides the public sector. It is appropriate to look at some of the actors and shapers of solid waste collection in Accra. Two main types of solid waste service providers have emerged in Accra. These are public (AMA) and private service providers, the latter comprising Gee Waste, Daben Cleaning Service, J.S. Owusu, Ako Waste, ABC, Liberty Waste, Meskworld, Almanuel, Yafuru, Yama and Zontec) (Table 7. 15).

7.3.1 General characteristics

Different types of firms with different capabilities in terms of manpower and equipment have emerged in the solid waste business (Table 7.15), particularly since the privatisation of some aspects of the service in 1997. The strength and quality of staff, the type of office accommodation and equipment a company has and the type of technology it uses (simple or sophisticated), etc. are often an indication of its waste collection capacity and capabilities. The office facilities the firms use range from poor to excellent depending upon the service provider. Service providers such as J. Stanley Owusu, ABC and Gee Waste have excellent office accommodation equipped with all the modern gadgets a business firm should have such as computers and mobile telephones, whilst others like Yafuru and Yama do not have such office accommodation. Some firms do not even have offices at all and it is very difficult for consumers and monitoring agencies to locate them in case of difficulties in service provision. Again the means of transport the firm uses has an effect on the type of service it provides and capability. Service providers use compaction trucks, open trucks, mini-tractors, donkey-carts⁸¹, power tillers, wheel-carts or pushcarts for house-to-house collection. However, the type of transport depends on the contractor and the area in question. In the case of collective container collection system, the waste container is such that only a skip-loader could be used to lift and transport it. None of the twelve companies operate transfer stations.⁸² Waste pickers in Adabraka and elsewhere in the metropolis double as extra-service providers, particularly for houses in areas where the collective container collection system is operating. They pick waste from houses and send it to the central communal containers for a fee. Their waste services are in high demand because of the failure of the official service providers to provide the service as expected. The service providers employ between 18 and 35 people. Service providers

⁸¹ Yafuru Enterprise Limited, which operated the donkey cart, has stopped using this method since mid 1999, following the death of all the donkeys as a result of improper care and diseases.

⁸² Transfer station in this study refers to the intermediate point where the refuse collectors dump the waste and sort reusable or recyclable materials before sending the remaining waste to its final dumping sites.

pay drivers between ₦200,000 and ₦280,000, whilst refuse collectors get between ₦120,000 and ₦180,000 per month.

Table 7.15 Matrix of service providers as at December 2000

Firm	Categorisation of service providers			Number of equipment	Transfer station	House-to-house collection	Collective container collection	Number of workers	Wages		Set-up of enterprise	Quality of service
	High	Medium	Poor						Drivers	Refuse collectors		
WMD	+		()	-	+	+					Govt.	N
CCW	+		67	-	+	+	35	200,000	80,000		Govt.	VH
Daben				-	+	+	52	280,000	120,000		Own	N
GeeWaste	+		7	-	+	+	26	200,000	120,000		Own	N
J.S. Owusu	+		2	-	+	+		200,000	150,000		Own	N
Yafuru		+	3	-	+	-	26	200,000	180,000		Sponsored	P
ABC	+		4	-	+	+	20	250,000	180,000		Own	P
Yama		+	4	-	+	-	18	250,000	220,000		Own	VB
Ako Waste	+		()	-	()	()	()	()	()		Own	N
Liberty Waste	+		()	-	()	()	()	()	()		Own	P
Meskworlnd	+		()	-	()	()	()	()	()		Own	VP
Almanuel		+	()	-	()	()	()	()	()		Own	VP
Zontec		+	()	-	()	()	()	()	()		Own	VP

Notes: + means applies; - means does not apply; () means data not available; VH= very high; H = high; N= Normal; P= Poor; VP= Very poor.

7.3.2 Problems in waste collection

The service providers operating under the collective container collection system mentioned that they encounter seven main problems. These are an inadequate number of containers, the tardy payment by AMA, the insufficient contract fees set by AMA, labour problems, a lack of site cleansing by AMA, a lack of AMA support and the frequent interruption of services due to the breakdown of vehicles. The problem of inadequate containers for the collective container collection system has already been discussed in the previous chapter. Suffice to say that it is one of the major causes for spillage and untidiness at the collection points. It is also a contributing factor to the dumping of waste at open spaces and other unauthorised sites. Where containers are inadequate, residents have no other alternative than to dump more waste than necessary into the available containers, thereby creating overflows and spillage and overloading of the trucks during transportation. The public often accuses service providers of littering the streets with items falling from their mov-

ing trucks carrying the waste containers. However, the primary cause according to the providers is the limited number of containers for densely populated areas.

By July 1999, the AMA owed local private contractors over €800 million in unpaid services in the collective container collection system over a period of eight months. Service providers experience frequent interruptions to service due to problems associated with vehicles and equipment and they lack the money they need to pay their workers or buy fuel to run their vehicles. Service providers think there are areas, which are currently serviced under the central communal container system, which could be serviced better through house-to-house refuse collection. A most glaring example is Adabraka, which is a middle-income neighbourhood with one of the best road networks in the whole city. The easy accessibility of the houses makes it eligible for house-to-house collection.

7.3.3 The profitability of services

The twelve companies use various sources of funding for their waste collection business. Whilst some of the firms exclusively use their own means, others use outside sources or both. The outside sources may include loans from relatives or friends, the banks, or a sponsoring agency, or equipment which the firms already have in their possession. Yafuru, for example, acquired a loan from a sponsoring agency to set up its business, whilst J. Staley Owusu used some of its vehicles for road and building construction for its waste collection business. Others, such as the WMD, received technical assistance for training and equipment, *e.g.* from the Germany Technical Cooperation (GTZ). The WMD acquired almost all its vehicles and equipment using either a Ghana government grant or from international donor agencies. Unlike public institutions, the local private firms are not given equipment by international donor organisations.

All the local service providers in the collective container collection system indirectly indicated that the service is profitable across the board, if only the AMA would pay them regularly for their services. Under house-to-house collection, the local service providers prefer the franchised system. The local contractors are able to survive and make profit by using very old equipment and paying their workers incredibly low wages. There is also the problem of low subscription for the service in some middle-income areas such as Abekah-Lapaz and Adabraka, which can afford house-to-house collection. Some residents enjoying house-to-house collection do not pay their user fees regularly, whilst others default or free ride. This affects the cost-effectiveness of the service. This, in fact, points to lack of local government support for sanctioning free riders and irregular payers.

7.3.4 Opinions

Many of the service providers think that refuse collection is good business but an unhealthy job. They think the AMA is not supportive of local private contractors. They are neither happy about the granting of monopoly to CCW since July 1999. Refuse contractors recognise the fact that consumers may be willing to pay more for refuse collection if quality of service improves and would like to take advantage of this opportunity to improve their services. However, the problem is what comes first; the chicken and egg riddle. Whilst service providers think that consumers should pay more for waste collection to enable the former providing a better service, the latter thinks service providers should first improve their service delivery to justify any call for increased user fees. Service providers acknowledge the fact that poor people cannot afford commercial tariffs. As a result, there should be government subsidy and cross-subsidisation. The community should take greater responsibility, not only in the cost-sharing arrangement for refuse collection, but also by ensuring that they do not litter the area.

7.4 Policy makers' views on solid waste collection⁸³

In this section, we will discuss the functioning of the institutional arrangements in solid waste collection from a policy maker's perspective. It is worth noting that almost all (if not all) of the policies for the institutional arrangements⁸⁴ for solid waste collection under review were put together by the policy makers (*i.e.* the local government authority AMA). It is therefore unrealistic to expect that they will be critical about their own policies. However, there were a few. References will be made to other important waste collection arrangements that result from activities such as those of the waste pickers in Adabraka, and illegal charges of fees by some unscrupulous agents for collective container collection, which is supposed to be free of charge to consumers. Despite differences in stakeholders' perspectives with regard to policy, they are usually able to agree on whether or not a policy yields a 'net' benefit to society.

7.4.1 Decentralisation

Policy makers think the aim of the decentralisation policy was to facilitate effective and efficient management. It was also in response to the concern that waste collection is a local issue that could be handled better at local level. According to the

⁸³ Policy makers in this section refer to the Accra Metropolitan Assembly or AMA. It is also referred to as the local authority.

⁸⁴ For the purpose of this analysis, institutional arrangements in solid waste collection refer only to those arrangements institutionalised by law, byelaw or accorded recognition and approval by the local authority.

AMA, the decentralisation policy in waste management was to strengthen the sub-metropolitan assemblies, the unit areas and the communities to take greater responsibilities in the planning and management of waste in their area. Unfortunately, the policy did not achieve the desired impact due mainly to the fact that decentralisation of responsibilities was not accompanied by adequate fiscal transfers. Policy makers think very strongly that the methods used by critics and researchers for analysing the case for government intervention often ignore the political determination of policies. While many people accept the thrust of this critique, when and how political determination exactly interferes with such analysis is not fully understood. One form of intervention is likely to have an impact on others through the political process. These spill-over effects may even provide a justification for interventions that the welfare economic approach may reject.

7.4.2 Privatisation

In 1997, the AMA gradually introduced the privatisation policy into waste management to supplement the efforts of the local authority. Though privatisation relieved the local authority of the burden of providing vehicles, equipment, manpower and management for waste management, it did not solve the main problem of funding to sustain the service, particularly the collective container collection system. In the absence of effective full cost recovery for the collective container collection system, the AMA only transferred management responsibility for the collection of solid waste to disposal sites. The AMA pays private contractors it engages in the collective container collection system. It also provides the sites and containers for the collective container collection system. The only relief the AMA gets, is in the case of the house-to-house collection areas.

7.4.3 Institutional arrangements

The AMA is satisfied with the institutional arrangement for house-to-house collection. It is, however, worried about the financial burden of the collective container collection system, which constitutes more than 70% of the waste collection in the metropolis. Since stopping the PAYD system, the AMA has tried in vain to devise better cost-sharing arrangements to mitigate its acute financial problems. In terms of performances, the AMA thinks the indigenous private companies are doing their best though albeit with occasional interruptions to services. According to the AMA, its withdrawal from solid waste collection is in line with the government privatisation policy. The AMA thinks the granting of a monopoly to the CCW was intended to afford the latter economies of scale. Besides, it felt the performance of most of the private contractors was below par. Since the AMA was divesting itself from waste management, it became necessary to find an organisation to fill the vacuum. Officially, the AMA felt that the CCW, which has the expertise and logis-

tics at its disposal, was better placed to take up that responsibility than the poorly resourced local contractors. In practice, the feelings of officials of the AMA are much more mixed.

7.4.4. The policy makers' perceptions of house-to-house and collective container collection arrangements

The local authority is of the opinion that consumers in the house-to-house collection areas are doing well to sustain the house-to-house system. The problem is with the irregular frequency of collection, as well as the use of inappropriate waste storage containers and its effect on service and the environment. Spillage and stench near to where the waste is stored are common problems. Another area of worry concerns the frequent interruptions to service delivery due to problems associated with the breakdown of vehicles, lack of fuel, etc. The AMA thinks the continued operation of the free collective container collection system is a major financial burden to it. Since the PAYD policy was stopped in 1990, the AMA has had to shoulder the financial burden for providing free waste management (including the provision of a collection site, containers, collection, transportation and final disposal at dumping sites) alone. According to the AMA, the delay in the payment of private waste collection contractors is not deliberate but due to insufficient funds at the time they have to be paid.

Policy makers assess the success or failure of their policies in solid waste collection through consumers' and service providers' appreciation of the institutional arrangements. However, it might not be able to meet everybody's needs all the time because of different interests and perceptions. Besides, as one level of satisfaction is fulfilled, another higher and more pressing one emerges, which might be beyond the capacity and capability of the local authority. It relies on other stakeholders (service providers and consumers) to join forces with policy makers in partnership to choose their priorities in solid waste collection based on what is feasible under given resource constraints, socio-economic considerations and environmental impacts.

According to the AMA, most of their policies exist as strategic statements, regulations or laws, underpinned by conceptual norms, formulated to address predefined problems. A lot of good policy exists which are not implemented properly, if at all, reflect a gap between policy making (the setting of objectives) and policy implementation (the strategies to achieve these goals). The result may turn out to be that the intended beneficiaries of the policy are, in actual fact, losers as a result of the policy. It is therefore important to assess the performance of a policy in terms of its

objectives and outcomes. Bridging the gap between intention and outcome will go a long way in solving most of the problems facing residents in service provision.

7.5 Conclusions

Deficiencies in solid waste collection services in Accra, like in many other cities of sub-Saharan Africa, are not only a reflection of absolute resource constraints and constraints related to the institutional arrangements of urban services delivery, but also of the attitudes of residents and officials to solid waste collection. Residents have a paradoxical attitude towards waste. Few people seem to care about waste unless it ends up near their front doors. Indiscriminate dumping takes place at the same time as protests against the placing of communal containers nearby the houses. Officials do not set a good example. They do little to enforce regulations and a lack of resources, capacity and political will do little to improve the situation.

In general, people serviced through the house-to-house collection system are more satisfied with the service than those serviced through communal container collection. The most common solid waste collection problems perceived by the residents are related to dissatisfaction with the low frequency of collection, the costs and the cleanliness of the service. Desired improvements therefore primarily refer to increased frequency and the reliability of the service. Consumers of the communal container collection service would like to have more collection sites, containers and labour available. Much is expected from privatisation, though some fear increased prices due to greater private sector participation in solid waste collection.

The major problem facing the private service providers is the lack of support from the AMA, reflected in tardy payments, low contract fees and deficient site cleaning. Policy makers, in turn, are generally satisfied with the arrangements that emerged after decentralisation and privatisation, particularly in house-to-house collection. What worries them, however, is the financial burden of the communal container collection service.

The most surprising finding of the survey is that the majority of consumers are willing to pay more for solid waste collection, if the services are better organised. This is precisely the dilemma service providers and city authorities now face. What comes first: more funds to provide better services or provide better services to get more money from user fees? In any event, there is hope: the survey shows that there is a growing realisation among even the poor that the *status quo* (i.e. free solid waste collection services for collective container collection) cannot continue.