Access to Privatized Solid Waste Collection by the Urban Poor In Informal Settlements of Dar es Salaam, Tanzania

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Abstract

This article examines issues of access to services by the urban poor at the wake of market oriented reforms in local government set-up in Tanzania. It explores the effects of the market reforms and a transformed institutional and financial structure for providing services to the lives of the urban poor as, theoretically, privatization of urban services is envisaged to provide the urban poor with better access to services. In particular, it addresses the issues of access by the urban poor to privatized solid waste collection services, where private providers are in place and user charge is in effect. The article attempts to answer the question: Are the urban poor able to access privatized solid waste collection services?

Keywords: Privatization, urban poor, informal settlements, access, informal waste collection

1. Introduction

While third world cities have been undergoing tremendous socio-economic changes, the public discourse associated with urban service delivery has also been subject to reforms all over the world, as a part of the global trends in which the resurgence of its economic liberalism is promoting public sector/state reforms as well as political and economic liberalization (Walsh, 1995). These reforms have taken the form of a policy shift from the interventionist approach characterized by state dominance to market-oriented policies that encourage the adoption of market-based strategies in urban service provision in pursuit of improved efficiency (Batley, 1996; Nellis & Kikeri, 1989). The drive for reforms has been prompted by perceived poor performance, inefficiencies, and mismanagement of the public sector in provision of services (Kikeri et al., 1994; Van de Walle, 1989). The reforms have mainly focused on the supply side, targeting the public sectors' administrative, financial, service delivery mode, and organization structures. Consequently, market based strategies have been adopted, like increased role of the private sector in the provision of services through reassignment of the traditional functions of the public sectors to the private sector (Walsh, 1995; Starr, 1990; Savas, 1987).

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Many countries from both the developed and developing world have embraced these market-based strategies. Generally, there has been a dramatic increase in the use of private sector for delivering various urban services. With increasing private sector participation, it is postulated that markets will increase supply side efficiency (which presupposes the existence of competition and lower transaction costs), effectiveness, and responsiveness to users demand relative to the public sector (Hodge, 2000; Batley, 1996; Walsh 1995; Bishop and Kay, 1988; Fisk et al,. 1978). The argument is that private sector incentive and constraints structure-characterized with competition, consumer choice, and financial discipline-is compatible with, and promotes, the pursuit of efficiency (Boardman & Vining, 1989; Domberger & Piggott, 1986). Privatization has, therefore, been conceptualized as a way of addressing public sector inefficiencies.

2. Research Problem

The participation of the private sector in solid waste collection has also increased dramatically in the last two decades. In the developing world context, a number of cities have adopted privatization of solid waste collection. These include: Ibadan, Benin City (Ogu, 2000); Kumasi (Post, 1999); Dar es Salaam (Coad, 2001; Majani, 2000; Kironde, 1999); Nairobi (UNCHS, 1999); Caracas, Santiago, Buenos Aires, Sao Paulo (Bartone et al., 1991), Bulawayo and Mutare (Batley, 1996). Dar es Salaam, like many other cities in developing countries, has enthusiastically adopted privatization of solid waste collection. Ostensibly, the main goal has been to improve coverage and quality of services, following decades of poor solid waste management. Consequently, a number of private firms, micro enterprises, NGOs and, CBOs have been granted short-term contracts of 3 years by the three municipalities (Ilala, Temeke, and Kinondoni) to collect solid waste in the 70 urban wards of the city.

The adoption of this neo-liberal policy with privatization as a cure for inefficient service provision by the public sector in developing countries has been very challenging, drawing considerable debate (Heald, 1990; 1988; Molz, 1990; Van de Walle, 1989). Privatization has been credited with the creation and consolidation of inequalities; prompting the questioning of the applicability of this policy to developing countries conditions (Heald, 1990).

One of the fundamental issues consistently raised with regard to privatization of urban services relates to the fate of the marginal groups such as the urban poor, or the residents of informal settlements (Estache et al., 2001; Post, 1999; Lee, 1997; Crane, 1992; Whittington 1992). The discussion on privatization of urban services and the urban poor is centred on the role of user charges in determining access for this group of users. User charges, as an important component of the privatization strategy, is levied to ensure cost recovery and consequently improved services.

Proponents of user charges argue that cost recovery would improve the quality and sustainability of services offered. It is hypothesized that the payment of user charges gives the consumers the rights to demand higher quality services (Savas, 2000). Poor consumers are expected to benefit from improved services, and consequently will be more willing to pay for services.

On the other hand, there is strong belief that user charges may exclude the urban poor from accessing urban services. Previous studies on urban services have shown that generally, urban service deficiencies are highly prevalent among the urban poor even under public provision, where no charges are levied. If public provision—which has often been justified by concern for equity—was not able to address the needs and demand of the urban poor, it is tempting to foresee privatization further marginalizing this group. The critics of privatization argue that the deleterious social consequences of these economic reforms for the urban poor in developing countries have been overlooked in the name of efficiency. This concern for the urban poor emanates from the argument that privatization, which is associated with introduction of user charges, often pushes the charges to a level unaffordable to the majority of marginal groups with poor affordability. This is succinctly echoed by Post (1999: 202): "... privatization on the basis of the ability to pay principle is likely to exclude those who are beyond effective demand."

Indeed, the concerns make sense particularly considering the nature of the third world cities which are characterized by rapid growth in size and population, high levels of poverty, and existence of extensive informal settlements. Earlier experience with public provision noted distributional inequities, systematically marginalizing the informal settlements and the urban poor. The exclusionary attribute of privatization has been observed in some cities where privatization of solid waste collection has been adopted (Paris, 2000; Moreno, 1999; Lee, 1997). There is evidence that privatization has systematically left out informal settlements and targeted the high income settlements. Lee (1997: 153) notes that:

... there is also no indication that private firms have extended services to previously un-served groups who primarily reside in low income settlements. There is of course, no economic reason why profit-seeking private enterprises would be interested in serving poor communities. In all the Asian cases we have discussed in which urban waste collection and transport services have been privatized the target groups were invariably middle- and high-income neighbourhoods.

Private sector reluctance to serve informal settlements is mainly attributed to fear of disrupted consumption in case of eviction as most of these settlements occupy land illegally (Lee, 1997; Arrossi et al., 1994). Since profit motive and public interest are traditionally considered trade-offs, how is the private sector with its profit motive expected to consider the needs of the poor, or in other words, serve the public interest?

Unlike the case of privatization in South-east Asia observed by Lee (1997), the current wave of privatization of solid waste collection in Dar es Salaam has been extended to informal settlements, allowing them for the first time to be part of the city's formal solid waste management system. However, with the assertion that privatization can inadvertently marginalize the poor, it is worthwhile establishing what is the situation in Dar es Salaam. This article is primarily concerned with the fate of the urban poor in the event of privatization as far as access to collection service is concerned. Issues addressed include: Is this neo-liberal approach to service provision relevant to the social-economic context of informal settlements? Do poor people take part in private service delivery? Do they pay? If not, how do they deal with their waste? How should the private motives and public interest be reconciled to ensure that the needs of the urban poor are met? These are questions addressed by this study in the course of establishing the position of the urban poor in solid waste collection in the wake of privatization. The take-off point of the study is the premise that to charge the urban poor for services that were previously subsidized, is more likely to push them out of the consumption circle than to enhance their ability to access services.

3. Research Objectives and Questions

In the light of the above raised issues, this article sets out to investigate the widely held proposition that the privatization of urban services can result in exclusion of the poor within the context of solid waste collection in informal settlements of a rapidly urbanizing third world city. In particular, the paper investigated, from a household perspective, the effects of the introduction of private provision of solid waste collection to informal residents' access to solid waste collection services in Dar es salaam city. The objectives of the study were to:

- (a) Gain a better understanding of the position of the urban poor after privatization of solid waste collection services as far as access to the
- (b) Establish the effects of user charges on urban poor access to privatized solid waste collection services.

These objectives were pursued through the following research questions:

- (a) How has privatization influenced the access of the urban poor to solid waste collection services?
- (b) Has privatization of solid waste collection affected the urban poor?
- (c) Are user charges important determinants of access to privatized solid waste collection services by the urban poor?

The research problem is explored from the context of third world cities. This type of city is very dynamic in terms of rapid rate of urbanization and a web of effects it creates, making it difficult for local authorities to provide efficient urban services.

Although acknowledging the existence of a whole set of urbanization effects that have had positive effects on the structure, development, and the functioning of the third world city,1 this study focuses on the challenges posed by its negative effects, particularly the development of informal settlements and the increased incidence of poverty in the provision of urban services.

Using classification of informal settlements identified by Kombe and Kreibich 2001) and Kironde (1997), which combines location and level of development attributes, the city was divided into zones: Central Business District (CBD), intermediate, and peripheral. Three settlements, which were considered rich in information,2 were selected. The three informal settlements selected depicted these variants of the characterization adopted in the following way:

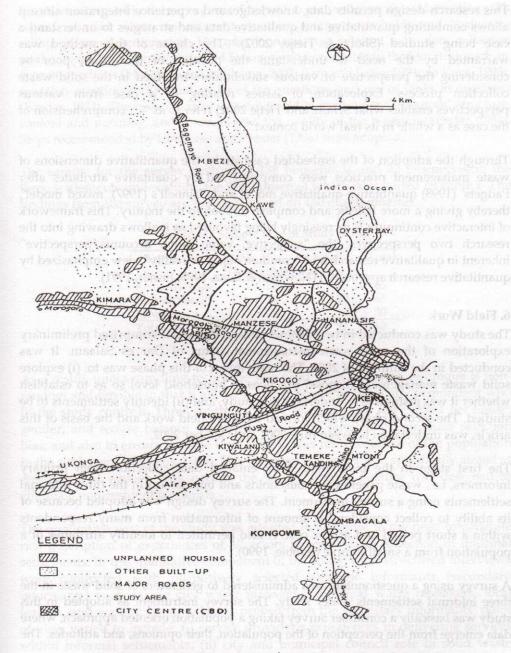
- (a) Keko Mwanga: Saturated, inner core location
- (b) Hanna Nassif: Consolidating, intermediate zone
- (c) Mbagala Kongowe: Infancy, sparsely developed, periphery/outer zone

The selected settlements, although not statistically representative of informal settlements, were 'nevertheless illustrative of the informal settlements as they existed in 2002/2003. The three settlements portray many of the features of informal settlements in Dar es Salaam.

Findings from this study are based primarily on a household survey and interviews conducted in 2001/2002 with residents of three informal settlements within Dar es Salaam City, Tanzania. The respondents included residents who live within the settlements, residents who live and have businesses in the area, and in a few cases individuals who own a business in the area but live elsewhere. In an attempt to assess other discourses among the stakeholders, interviews were conducted with City and municipal officials, solid waste collection service providers, and local leaders. The study adopted the embedded case study design to explore issues of access to privatized solid waste collection by the residents of informal settlements in Dar es Salaam.

Urbanization process impacts the city's physical form, socio economic and cultural structure in a number of ways. These may be classified into: 1) positive effects such as its contribution to urban productivity, growth of mega cities which serve as engines for economic growth and the formation of urban systems. 2) Negative effects such as urban services crisis, development of informal settlements, increased incidence of poverty and social exclusion all of which contributes to urban management

² Information rich in the sense that the cases can provide considerable information regarding the central research issue from three different perspectives



Map 1: Location of three case study areas in Dar es Salaam

Source: Sustainable Dar es Salaam Project, 1994

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This research design permits data, knowledge, and expenses integration since it allows combining quantitative and qualitative data and strategies to understand a case being studied (Sholz & Tietje, 2002). The choice of this method was warranted by the need to understand the position of the urban poor by considering the perspective of various stakeholders involved in the solid waste collection process. Exploration of issues relating to a case from various perspectives enables what Scholz and Tietje 2002) refer to as "... comprehension of the case as a whole in its real world context."

Through the adoption of the embedded case study, the quantitative dimensions of waste management practices were complemented by qualitative attributes after Padgets' (1998) quantitative-qualitative model and Grimnell's (1997) 'mixed model', thereby giving a more holistic and complete outlook to the inquiry. This framework of interactive continuum is increasingly being favoured as it allows drawing into the research two perspectives: the "subjective, value laden accounts/perspective" inherent in qualitative research and "common objective reality" view emphasized by quantitative research approaches (Newman & Benz, 1998; Eisner, 1991).

6. Field Work

The study was conducted in two distinct phases. Phase one comprised preliminary exploration of the solid waste management status of Dar es Salaam. It was conducted in the summer of 2000. The main intent of this phase was to: (i) explore solid waste management disposal practices at household level so as to establish whether it was justifiable to undertake this study, and (ii) identify settlements to be studied. The second phase which formed the main field work and the basis of this article, was undertaken between June 2001 and October 2002.

The first stage in the main field work entailed data collection from primary informers, i.e., waste generators (households and businesses) in the three informal settlements using a survey instrument. The survey design was adopted because of its ability to collect considerable amount of information from many respondents within a short period and at low cost. It also permitted to identify attributes of a population from a small sample (Babbie, 1990).

A survey using a questionnaire was administered to generators of solid waste in the three informal settlements under study. The survey instrument as adopted in this study was basically a consumer survey taking a population oriented approach, where data emerge from the perception of the population, their opinions, and attitudes. The

³ In embedded case study, depending on the issues being addressed, it is possible to have hypotheses formulated as well as research questions, use surveys, questionnaire and interviews

questionnaire used in the survey was designed to gather descriptive information with regard to solid waste management practices among households and businesses within informal settlements. The questionnaire was selected as a data collection method, and its design was guided by suggestions available in the literature such as: type of questions (Mowbray & Yoshihama, 2001; Berg and Latin, 1994; de Vaus, 1990); question wording and format, order of the questions, and use of ranks in questions (Fowler, 1984). The questionnaire was pre-tested to improve the questions' structure, content and meaning, and consequently, the quality of the research (Fowler, 1984). Steps recommended by Converse and Presser (1986) were adopted.

The sample for the survey comprised 138 households and 22 businesses in the three settlements under study, the breakdown of which is provided in Table 1. The findings from the survey are therefore based on 160 questionnaires.

Table 1.0: Sample Size in Study Areas

| Settlement | No of Households | No of Businesses | Total 65 | |
|--------------|---------------------|---------------------|-------------|--|
| Keko Mwanga | 55 | 10 | | |
| Hanna Nassif | 55 - | 01 al w 10 | 65 | |
| Mbagala | 28 | Tanita 2 | 30 | |
| Total | 138 | 22 | 160 | |

As a result, quota sampling technique was used. This sampling technique is non-random and flexible in that it allows the interviewer to select any respondent who fit the study controls. Three controls guided selection: one respondent per house, gender, and tenure balance. These controls were selected to minimize selection bias; and also to ensure that the final sample was representative of the population in the settlement (de Vaus, 1990). The inclusion of gender was specifically aimed at ensuring that women took part in the survey. Tenure balance was designed to eliminate non-resident landlords.

The qualitative part of the study was adopted in response to the need to generate rich description of experiences of all actors in solid waste collection in informal settlements. In this qualitative component of the study, semi-structured interviews were conducted with purposively selected strategic informants (secondary informants) such as the city waste manager, municipal waste managers, local leaders, and waste collectors. Issues probed from the secondary informants' point of view varied to include: (i) service provider's experiences in delivering services within informal settlements; (ii) city and municipal council role in solid waste management; (iii) local leaders' views regarding the status of solid waste management services; and (iv) secondary informants' views with regard to solid waste management practices in the study areas.

7. Limitations of the Study

The major limitation of the quantitative part of the study is that:

- (a) The sample used in the survey consisted of households from three settlements and thus findings may not be representatives of or be generalized to informal settlements residents in respect to their solid waste management practices at household and settlement level.
- (b) The use of quota sampling technique and the subsequent relatively small size of the sample for the various settlements and their respective service providers introduce the potential for bias because the conclusions are only based on households and service providers who took part in the study.
- (c) The way households deal with their waste is likely to change over time. The survey reflects a snapshot in time, i.e., the solid waste collection practice within the 1998–2002 time period.⁴ No data were collected for the purpose of observing trends and patterns over time.

8. Analysis of Data

The first step in data analysis was to check on completeness and accuracy of the answers recorded for each question. This was done every evening after conducting interviews. All questionnaires were checked whether there was any question that was not answered, which questions were incomplete or needed further probing, etc. Data collected in the survey were analyzed using SPSS 10.0 for Windows. Data were coded to allow easy processing. Descriptive statistics in the form of frequency distribution and mean were run.

Data analysis for the qualitative component of the research was an ongoing process that started at the early stages of data collection to allow significant themes to emerge or to be identified at the moment data is collected. A content analysis on the transcript to identify emerging insights, patterns, and major themes was carried out. The analysis was done to capture the meanings attached to various themes by respondents, and to seek explanations for observed patterns and relationships that explicate the experiences of respondents. The interpretation recorded emerged from the construction of realities by respondents about solid waste management practices in the study areas.

Considering the descriptive nature of the study, descriptive analytical categories were developed to facilitate interpretation of each of the data sets. These codes were developed from the main issues the study was interested in. A two stage

⁴ Note that the process of appointing new contractors was taking place at the time of the fieldwork. The new by laws were also about to be gazetted. This means that, some issues observed in this study may not arise in the new phase.

coding procedure ⁵ (Charmaz, 1983) was adopted. Descriptive codes were initially assigned to the text resulting from the interviews. These codes were not context-specific, but rather described the experience, activities, events, and relationships (Biklen, 1982). Focused coding that entailed sieving the codes identified in the initial coding resulted into the identification of central issues, i.e., themes.

9. Findings and Discussion

The main objective of the study was to gain a better understanding of the position of the poor residents of informal settlements in solid waste collection within a milieu dominated by neo-liberal economic practice. It was designed to explore the implications of the current change from free/subsidized public provision to private provision where each household has to pay for solid waste collection. The thesis explored in this study was that privatization of solid waste collection is likely to limit access of the urban poor to collection services. The main underlying assumption was that the introduction of user charges, which is a key feature of private provision of waste collection services, may act as a deterrent for the urban poor, who have low income, to access solid waste collection.

9.1 Privatization has marginalized the Urban Poor

This study has empirically demonstrated that the mounting crisis of accessing adequate and affordable urban services by the urban poor in third world cities continues to prevail in the era of privatization. The privatization of solid waste collection, which was meant to improve services, has marginalized a considerable proportion of the urban poor, through overlooking their particular needs; hence limiting their access to this service. In this study it was observed that only 36% of the respondents in Keko Mwanga, and 46% of respondents in Hanna Nassif, were able to access privately provided solid waste collection. The structure of the private delivery system (i.e., formally contracted service delivery) was seen to be too rigid for the socio-economic status of the urban poor, e.g., the monthly payment mode is not in line with the flow of income of the residents; frequency of collection does not consider lack of space facing many households in informal settlements, etc. As such the urban poor have embraced informal waste collection (i.e., by individuals not legally recognized by the local authorities) that operates illegally in the settlements. At least 50% of the respondents in Keko Mwanga and Hanna Nassif settlements indicated using services of informal waste collectors.

The marginalization of the urban poor or the residents of informal settlements as observed in this study is in line with the distributional inequalities inherent in urban services provision in developing countries. While privatization policy has

⁵ Coding is an important component of the analysis as it serves to organize field notes, transcripts.

extended services to many informal settlements, marginalization continues to take place because the policy only addresses central/inner core and intermediate settlements (Hanna Nassif and Keko Mwanga), and has systematically marginalized peripheral settlements like Mbagala Kongowe where alternative disposal means such as burying and burning have been sought. It was observed that about 93% of the residents of Mbagala Kongowe bury their waste; while 47% practice burying of waste and burning. Such trends have also been observed in studies of privatization in other developing countries (Post, 1999; Lee, 1997), where it has been demonstrated that marginalization has taken place through catering to middle and upper classes at the expense of the poor.

Likewise, at the individual level, marginalization of the urban poor occurs because of the way in which the policy in the private system is imposed rather than the illegal status of the settlements. In particular, the mechanism for supporting the successful implementation of the policy is lacking, hence creating an unresponsive delivery structure.

As mentioned above, the structure of the private delivery system has been too rigid for the socio economic status of the urban poor. Instead the urban poor have embraced informal collection that operates illegally as shown below.

9.2 Preference of Informal Waste Collectors

Surveyed households in both settlements preferred services provided by informal waste collectors over private collectors. It was noted that about 52% of households in Keko Mwanga, and 49% in Hanna Nassif use informal waste collection services; compared to 35% in Keko Mwanga and 46% in Hanna Nassif who use services of municipal recruited private firms as indicated in Table 2. It is ironic that, despite having been formally contracted and given exclusive rights to collect waste, the private providers are less preferred by the residents of the informal settlements studied over the informal waste collectors.

Table 2: Choice of Service Provider

| Income (Tshs.) | Keko Mwanga | | Hanna Nassif | | Mbagala | |
|---------------------|-------------|-----|--------------|-----|---------|------|
| | F | (%) | F | (%) | F | (%) |
| Private (formal) | 23 | 36 | 30 | 46 | - | MHS. |
| Informal Collectors | 34 | 52 | 32 | 49 | - | - |
| None | 8 | 12 | 3 | 5 | 30 | 100 |

This low utilization of services provided by formally contracted firms in the two settlements has mainly been attributed to the failure of the formal private collection system to promote frequent, reliable, affordable, and sustained safe

collection; prompting residents to resort to informal waste collectors. The households' dissatisfaction with private providers has not only been echoed in the survey, but has been translated into practice through rejection of this group of providers. The flexible nature of informal waste collection system was noted to have been able to meet the needs of the residents of informal settlements such as their low and irregular income, congestion of buildings, and lack of storage space. The private firms have been able to capture those with higher ability to pay, businesses, and market vendors, as these are easy target for law enforcers.

The consolidation of informal waste collectors in the collection system within informal settlements is to a large degree boosted by their lack of legal status. Unlike their private counterparts, they have no binding obligations with regard to any aspect of collection such as safe disposal or secondary collection. This allows flexibility on their part at the expense of private collectors. For example, the lack of legal provision to allow private collectors to charge collection fees has created an opportunity for them to take part in the collection of waste, as they are able to recruit households not interested in being served by the private collectors. Likewise, the absence of binding obligation to dispose waste at designated dumping sites has prompted indiscriminate dumping of waste. With such a practice, informal waste collectors incur less cost relative to their counterparts who have to transport waste collected to designated dumping sites. In turn, informal waste collectors are able to charge less collection fee compared to the private collectors.

Furthermore, the prevalence of informal waste collectors in the studied settlements is also enhanced by informal collectors' intimate knowledge of residents in the settlements. As residents of the settlements themselves, they are very familiar with the social networks, socio-economic status of families, settlements politics, and dynamics. This allows the informal collectors to take full advantage of their social position within the settlement community. Their status as settlement residents facilitates the establishment of their business and recruitment of clients. In recruiting clients, they target neighbours, friends, families, and other people within their social networks. The trust built through these social ties allows informal collectors to be flexible in fee collection, to barter for other services and products in exchange for collection service, and to extend credit to clients. In contrast, employees of private collectors have to abide by the rules and regulations of their employers. Therefore, they cannot be as flexible and accommodating as the informal collectors.

In summary, informal collectors are more flexible and can respond to, and accommodate the needs and demands of settlement households. In contrast, the rigid structure of private providers does not allow them to make such accommodations.

9.3 User Fee is Not a Barrier

Privatization is basically the commercialization of social relations between the municipality and the citizens who in this study constitute the urban poor. The shift in the responsibility for financing services from the public sector/government to users through direct payment has been the main basis for concerns for the urban poor, or those with low ability to pay. Generally, the introduction of a user fee has been observed to have profound impact on the utilization of solid waste collection services in developing countries. It is argued that user fees deter some people, particularly the poor, from accessing collection services (Lee, 1997).

However, findings from this study shows that despite the low incomes observed, the concept of paying for collection services was widely accepted by households in all informal settlements studied. The households were also willing to use the private collection system established by the new reforms in solid waste management policy. However, the households are pushed away from private to informal collection by the rigid structure of the private collection system, which would not accommodate their needs. The private firms use a monthly payment mode which is governed by the city council's fee structure. Keko Mwanga is classified as a low-income residential area, and the fee set per month is Tsh 500; while Hanna Nassif is classified as a middle-income area, with fee of Tsh1000 per month. However, the residents of Hanna Nassif renegotiated with the municipal council to have the user fee reduced to Tsh500 per month.

Informal waste collectors, on the other hand, charges between Tsh100–500 per collection. It was noted from the survey that it was possible to negotiate the fee payable with the informal collectors. The majority of the respondents in Keko Mwanga (69%) pay between Tsh100–200 per collection. Most households reported paying Tsh100 per collection; while market vendors, bar operators, and shop owners reported paying Tsh200 per collection. In Hanna Nassif about 62% reported paying Tsh300–500 per collection; with many households paying Tsh300 and businesses Tsh400–500 per collection. This translates to an average of between Tsh400–1200 per month as many respondents indicated having their waste collected at least 4 times a month. It is worth noting that in many instances one house will have as many as 4 households, and these could dispose off their waste as a group, hence making the cost per household to be as low as Tsh100 per month. Likewise, market vendors and businesses join forces to pay for waste collection. However, this flexibility is not possible with private providers. Every household and business is charged as a unit, making collection fee payable high.

In both settlements, the respondents noted great flexibility with informal waste carriers when it came to payment of collection fee. The fee could be paid in piecemeal, or even in arrears in case the household did not have money to pay the whole amount. It was noted that many of the households have irregular income, which

makes it difficult for them to keep pace with monthly payments schedules. Those engaged in petty businesses noted selling their goods on credit, repayment of which may take days, and sometimes months. The retailers also noted the existence of credit transactions as the only way to make business in the informal settlements. Many households have an informal credit account with a retail store, and even with market vendors, which allows them to buy goods on credit and repay within a specified time.

As such it is evident that the charging of a fee has not been a major concern of the urban poor but rather the mode of charging it. Households in the two study areas have been paying user fees. However, concerns were raised on the monthly payment mode used by private providers. The majority of households, who reported using informal waste collectors, cited flexibility in payment mode as an important deciding factor for their choice. This flexibility is important to the urban poor because of the nature of their income: meagre, irregular, and uncertain.

It could thus be argued that flexibility, rather than ability to pay, is the concern to the urban poor in the two study areas. To these urban poor the amount charged is affordable as long as the payment is in line with the flow of their income, or can be paid in a manner convenient to them. The fact that these urban poor pay as much as the middle income group does not indicate equal affordability levels; but rather the poor will have to struggle or forego certain consumptions to be able to pay for collection services. The lack of space to store waste, as well as the hot and humid weather, forces residents in informal settlements to pay much attention to the collection of waste. Although this study did not explore expenditure pattern of the urban poor to establish the position of solid waste collection, a study undertaken in informal settlements in Indonesia (Yayasan Dian Desa, 1993), revealed that solid waste was given low priority. Given the fact that most other services like education, water, electricity, and health services are privatized too, it is likely that many households may opt to forego solid waste collection.

The low level of utilization of private collection services and the reasons behind suggests that private providers continue to treat the urban poor as invisible and passive recipients of services as was the case with the traditional model of service provision. The urban poor do not take part in the transformation process, as well as in formulating strategies for adoption of private provision in their residential areas. As such their needs are not taken into account in the new system. This is rather surprising given the emphasis on consumers by privatization policy. Or it would be interesting to know who constitutes a customer in the privatization language?

The organization structure of informal collectors allows them flexibility to charge per collection, negotiate fees, and accept alternative payment arrangements such as credit, micro payments, etc. Underlying this flexibility is the already noted illegal

status of the informal collectors that allow them to evade some responsibilities. The flexibility to accept lower fees can be partly explained by the fact that informal collectors are getting a free ride on secondary collection as they have no obligation due to their illegal operation. The fees charged do not take account of secondary collection costs.

10. Conclusion

The empirical findings from this study add to the literature on access to privatized services by the urban poor, particularly those living in informal settlements. First, the empirical findings from this study reveal that access to solid waste collection is not determined solely by availability of services. Second, the findings show that while user fees are important in determining access, to the urban poor the mode of payment, fee collection schedule, and the flexibility in fee payment arrangements are more important. The third key issue is the importance of social networks in the form of interactions and personal relationships at the local level in the successful implementation of service provision.

The emergence of informal collection parallel to private provision in informal settlements within Dar es Salaam has particular relevance to developing countries, where urban service provision is undergoing reforms. Generally, the study findings have put into light the fact that the urban poor as a social group have a diverse and different set of needs greatly shaped by the socio-economic characteristics of the settlement in which they live. The actions of the urban poor reveal that they do not just want services delivered by a standard system, but rather a service delivery system modelled within the context of their conditions and environment. It emphasizes the importance of understanding and incorporating user needs in service provision. Understanding the social and economic aspects of a settlement, and subsequently the needs of its residents, is a vital step towards coming up with solutions that are relevant and appropriate to local conditions. It has been a common practice for urban managers to assume that they are knowledgeable and capable of making rational decisions regarding the urban areas under their jurisdictions, ignoring the importance of local knowledge and adaptive problem-solving abilities of its residents. Whilst this has worked in the past, the dynamic nature of third world cities renders such practices inappropriate; requiring solutions which evolve from within its context, i.e., taking into account the local conditions.

Findings from this study offer some insights into the difficulties and challenges of adopting market strategies for informal settlement. It demonstrates the technical and operational hitches encountered by private providers in trying to meet the needs of a dynamic and diverse community. Private provision as a new delivery

mode is faced with barriers in its attempt to improve service, particularly with regard to the difficulties of private providers operation in face of the factors determining the choice of a service provider by residents of informal settlements. In particular, demand factors, physical factors, combined with a complex socioeconomic set-up, creates a unique part of the city.

The private sector's limited success in serving the needs of the poor and the informal collectors ability to provide efficient and viable services to meet the diverse needs of the poor in the informal settlements has significant implications for urban planning practice. The main issues emerging from these two major developments in solid waste management practice in informal settlements that need to be addressed by planners and urban managers include the diverse and unique needs of the poor, informality of income, social capital inherent in informal settlements, local conditions: all of which points to the importance of context specificity. The involvement of private sector in collection service delivery also needs to be accorded planning consideration.

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