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## SUSTAINABLE DEVELOPMENT OF WATER RESOURCES, WATER SUPPLY AND ENVIRONMENTAL SANITATION

**Why customers don't pay their water bills promptly: Evidence from small urban water utilities in Uganda***Josses Mugabi, Sam Kayaga, UK*

*This paper examines the motivations of water utility customers when it comes to paying their water bills promptly. Through an exploratory study of five small urban water utilities in Uganda, we find evidence of a positive attitude towards regular and prompt paying of water bills among utility customers. However, what motivates a customer to settle an outstanding water bill seems to relate mainly to the overall quality of the service provided by the utility. Contrary to the usual explanation that low-incomes typical of small urban centers are responsible for low cost-recovery in those areas, we found evidence that supports the view that poor service quality (i.e. unreliable supply, poor customer relations, poor billing and collection systems, etc) is a key consideration for customer decision-making when it comes to paying water bills regularly and promptly. Implications for small urban water utilities and their regulators in Uganda and elsewhere are discussed.*

**Introduction**

Field studies carried out in many developing countries have shown that cost recovery is a key prerequisite for sustainable water services provision. The chief means of recovering the costs of service provision is through user-payments for the services provided. However, available data shows that bill collection efficiency for some urban water utilities in Africa can be as low as 50 percent. Many utility customers struggle to pay up their water bills and eventually get disconnected, leading to accumulation of huge unpaid bills. It appears that this problem is not unique to developing countries. According to a recent study commissioned by Ofwat (the economic regulator of the UK water industry), the levels of arrears, the amount of revenue written off, the numbers of customers in water debt within the UK water industry have continued to rise since 1998-99 (the last full year in which disconnection of domestic water supplies was permitted for non-payment of water bills). The report estimates that the total household revenue outstanding for up to 48 months for the period 2002-03 stood at £781 million, an increase of £115 million (17%) since 1998-99 (Accent Marketing and Research, 2003).

The effect of delayed bill payments and huge arrears on a utility's capacity to deliver water services is evident. If a water utility is not able to collect in time, all the bills that are sent out, cash flow problems set in, which in turn, impacts on the ability to cover operating expenses and extend service coverage. Such a situation may result in low service coverage, and potentially, poor customer service – leading to customer dissatisfaction - which may breed more 'non-payers' and trigger a cycle of poor performance. Thus, minimizing the levels of 'bad debts' and increasing the rates of revenue

collection is critical for sustainable urban water service provision. In order to respond to problems involving delayed or irregular payments, utility managers need to determine precisely why customers might not pay their bills. Unfortunately, very little information is available in the literature regarding the reasons for customer non-payment. As part of a wider research on bill payment behaviour in small urban water utilities in Uganda, we examined customer attitudes towards paying water bills regularly and promptly, and explored what they perceive to be the facilitating factors and barriers to engaging in that behaviour. We also interviewed water utility managers in the study areas to compare their understanding of the reasons for irregular and delayed payments, and that of their customers. The current paper draws on this exploratory research to shed light on the motivations of water utility customers when it comes to paying for water promptly. Basing on these insights, we identify possible ways in which small urban water utilities could encourage prompt and regular payment of water bills.

**Study area**

The study was conducted in 5 small towns, with populations in the range of 5000 to 25000 inhabitants. The towns included Nkokonjeru, Kamuli, Kayunga, Ibanda and Rakai. The study towns were randomly selected from a sampling frame of 32 towns with more than 10 percent inactive customer accounts in the 2004-2005 reporting period. Water services in all five study towns are managed by private operators under management contracts with the respective town water authority. Table 1 shows basic customer data and collection efficiency for the 2004-05 reporting period (Water Authorities Division, 2005). From the table, we note that Kayunga town had half of its customer accounts

inactive during that period mainly due to disconnections for non-payment. It should also be noted that average monthly collection efficiency of more than 100 percent as reported in Nkokonjeru and Rakai, is evidence that there is a problem of accumulation of customer arrears. All the five water utilities require their customers to pay their water bills within 15 days after receiving the bills (which are distributed between 29th and 31st of every month). Disconnection of service is usually effected shortly after Day 15, although the actual deadlines set by the different operators vary from town to town. Those customers with bills outstanding for more than 2 months are usually disconnected first.

**Table 1.** Customer data and Av. bill collection. Efficiency for the study towns

| Town     | Popn (2002) | Total customer accounts | % Inactive | % Collection efficiency |
|----------|-------------|-------------------------|------------|-------------------------|
| Nkokonje | 11,095      | 171                     | 27         | 130.4                   |
| Kamuli   | 11,344      | 706                     | 16         | 80.2                    |
| Kayunga  | 19,797      | 545                     | 54         | 78.1                    |
| Ibanda   | 22,728      | 574                     | 10         | 88.2                    |
| Rakai    | 5,974       | 194                     | 21         | 104.3                   |

## Methods

The objective of this study was to discover why water utility customers in small towns fail to pay their water bills promptly. This made a qualitative approach the most appropriate methodology for this study. A qualitative approach is concerned with developing explanations of social phenomena. It is concerned with opinion, experience, motivation, feeling, reasons for decision-making and behaviour. This approach thus produces largely subjective data, with limitations to the extent to which results can be generalised. This limitation should be taken into consideration when using the results of this study. Nonetheless, similar and consistent responses obtained from different areas in a qualitative research provide strong indication of a single pattern of behaviour.

In this study, we used a combination of face-to-face interviews and focus group discussions. Between Nov and Dec 2005, a total of 10 interviews were conducted with utility managers in each of the towns. The interviews mainly targeted area managers and commercial managers of the respective private operators charged with the management of water services in each of the towns. The interview with managers was designed to obtain, among others, basic information relating to customer accounts, tariff structures and revenue levels, billing and collection procedures, as well as their perceptions of the reasons why customers fail to pay water bills regularly and promptly.

Following the interviews, access was made to the domestic customer databases, and with the help of the commercial managers, names of potential participants for the focus group

discussion were identified. Participants were purposely selected to maximise attendance, gender mix and differences in water bill payment patterns. Invitation letters (written on company headed paper and signed by the area managers) were sent out to 20 potential participants in each town. The turn up ranged from 6 to 20 participants, with Kayunga focus group registering the lowest number of participants (6) and Rakai registering the highest (20). The low attendance in Kayunga was probably due to a late change we made in the date and time of the discussion which was not communicated adequately. One focus group discussion was conducted for each town, making a total of 5 discussions with a total of 60 participants. The discussions were relatively structured with high moderator involvement. Competent and experienced moderators were recruited and briefed on the objectives of the study. Discussions were conducted around the following guiding issues/questions:

1. What do you believe are the advantages and disadvantages of paying your water bills within 15 days of receiving the bill?
2. What factors or circumstances would enable you to pay your water bills at the utility office within 15 days of receiving the bill?
3. What factors or circumstances would make it difficult or impossible for you to pay your water bills at the utility office within 15 days of receiving the bill?
4. Are there any other issues that come to mind when you think about paying your water bills within 15 days of receiving the bill?

The combination of focus group discussions with customers and face-to-face interviews with managers enabled us to obtain valuable insights into ways paying for water services promptly is perceived by both the water utility managers and their customers. Responses from interviews and notes from focus group discussions were reviewed and written out properly using a word processor. As is customary with qualitative research, analysis of the resulting information involved identifying important factors, themes and relationships and making sense of emerging meanings. To aid this process, a procedure was adopted in which emerging issue based on the above discussion questions were each given a count equal to the number of participants in the group. If a particular issue did not emerge from a group, it was given a count of zero for that group. The counts for each theme were summed across all the five groups to generate an aggregate count, which was used to rank the emerging issues and give an indication of the most commonly held perceptions.

## Paying promptly – Benefits and sacrifices

Across all the five study towns, customers generally believed prompt payment behaviour has a lot more benefits than sacrifices (see Box 1). They generally consider the water bill to be an essential bill that has to be paid in time, although many admitted to deliberately delaying payments, especially

when the service is unreliable.

*“It is very frustrating to pay in time and yet the water supply continues to be on- and off. I rather keep my money to pay the water vendors”*

[Nkokonjeru focus group]

Box 1 shows what most customers believe to be the benefits and sacrifices of paying water bills in time. The primary benefit of paying promptly seems to be the assurance of uninterrupted services – as it is the only way to avoid disconnection. This is not entirely surprising given the vigilance of the utilities in disconnecting non-paying customers.

#### Box 1. Benefits/sacrifices of paying promptly

Benefits:

1. Uninterrupted supply of water to my home (no disconnection)
2. Staff of the utility will have the necessary facilities, equipment and motivation to serve me better
3. Utility will be able to meet all operation and maintenance costs so I can continue to get a reliable water supply
4. Avoids accumulating big debts
5. Gives me a peace of mind
6. There will be funds for helping other community members to gain access to piped water
7. Ensures good home and personal hygiene
8. Guarantees good customer service
9. Demonstrates integrity and keeps a good social image

Sacrifices:

1. Unreliable service after paying your bills promptly
2. Foregoing other household needs and making water payment a first priority
3. Difficult to remain consistent

However, there are also indirect benefits that emerged across all groups. Many customers believed that when they pay their water bills promptly the utility will be in position to cover operational costs, and most importantly, utility staff will have the necessary facilities, equipment and motivation to serve them better. This demonstrates customer awareness of the importance of paying for water in time, and perhaps a major shift in attitudes towards paying for water.

### Paying promptly– Barriers and facilitators

In addition to assessing attitudes towards paying water bills promptly, we also inquired into the factors or circumstances that might facilitate or make it difficult for customers to engage in the behaviour. Boxes 2 and 4 show what most customers believe to be the main facilitators and barriers respectively. With the exception of the factors related to tariffs<sup>1</sup> and whether or not a customer has a regular paying job, all the other top five barriers and facilitating factors that emerged relate to service issues that are within the full control of the water utility.

#### Box 2. Facilitating factors/circumstances

1. Reduction in tariffs
2. Reliability of supply
3. Bills delivered in time
4. Having a paying regular job
5. Threat of disconnection
6. Selling water to neighbours
7. Reminder visits/radio announcements
8. Budgeting
9. Regular promotions/discounts to promote prompt payments
10. Quick responses to repair requests
11. Good water quality
12. Good customer care
13. Flexibility and choice in payment options
14. Presence of reconnection fees

However, when asked what they considered to be the main factors preventing customers from paying their water bills promptly, the responses of utility managers differed significantly from what the customers perceived as the main barriers (see Box 3). In particular, all the 10 managers interviewed pointed to the low-incomes as the main barrier to paying water bills promptly, in contrast to their customers who pointed mainly to service delivery issues related to reliability, poor customer service, poor billing systems and delivery, faulty meters, etc.

Therefore, what motivates a customer to settle an outstanding water bill seems to relate mainly to the overall quality of the service provided. This has implications for water utilities and their regulators in terms of policy, operations, and incentive mechanisms for promoting prompt and regular payment of water bills. Basing on the qualitative insights obtained in this study, the next section briefly looks at policy and managerial actions that can be implemented in the short to medium term to encourage prompt payments in the present context.

#### Box 3. Utility Manager's perceptions

What do you consider to be the main factors preventing customers in your service area from paying their bills promptly?

1. Low incomes
2. Customers not used to paying for water
3. Political interference
4. Intermittent supply
5. Low production
6. Water quality problems
7. High water consumption leading to high bills

### Encouraging prompt and regular payments

The first step in seeking to respond to problems involving irregular or delayed payments is to determine precisely why customers might not pay their bills. We attempted to gain

**Box 4. Barriers to paying bills promptly**

1. Poor customer care/complaints not addressed in time
2. Incorrect bills and mistakes in reading meters
3. Unreliable service
4. Faulty meters
5. High water tariffs
6. Lack of money
7. Irregular income (especially during dry season)
8. Unexpected circumstances such as death or illness
9. Poor water quality
10. Failure to understand the bill
11. Presence of alternative water sources
12. Lack of control over household finances
13. Misappropriation of funds by authorities
14. Ignorance about government water policy

insight into some of the reasons with a view of making some recommendations in the context of small town water services in Uganda. Obviously, it is difficult to make sound proposals for action considering the myriad of factors that emerged<sup>2</sup>. However, by isolating those issues that are within the full control of a water utility, it is possible to identify strategies that can be implemented at the micro level to promote prompt and regular payment of water bills by customers.

Firstly, in the current context, ensuring reliability of supply – i.e. consistency and adequacy of supply as per the promised service level - seems to be the single most important action that managers can take to promote prompt bill payment. In the long term, this may require additional investment to increase production levels in areas such as Ibanda and Nkokonjeru, where there is a substantial supply deficit. Secondly, managers need to work on improving customer relations through appropriate and timely communications in case of service failure, quick response to customer complaints, payment reminder notices/visits, and generally improving the quality of service pertaining to the interaction process between customers and the organisational elements like staff and the service environment.

Thirdly, there is need to improve billing systems and procedures - ensuring minimal errors in billing, timely delivery of bills to customers and providing flexibility and choice in payment options. In line with this, utilities need to segment customers into categories based on how quickly they react to water bills. This would enable managers to design targeted strategies for debt management and recovery. For instance, those considered to be high risk would be flagged for personal follow-up immediately a payment is missed; those deemed low-risk would be sent a reminder letter and vulnerable customers, who are struggling to pay, can be offered additional help and advice. Adopting such a proactive customer-centric strategy has potential not only to transform revenue collection but also to increase customer satisfaction. Small urban water utilities need to take advantage of their relatively small number of customers by adopting a customised approach to debt management and recovery.

Fourthly, incentive mechanisms in the form of discounts or vouchers for prompt and regular payment could be ex-

plored, perhaps for a limited period of time. These could be designed to incentivise payment by customers who have found it difficult to pay their water bills, rather than reward those who can afford to pay.

Fifthly, although the disconnection strategy seems to be working well in the current context as a facilitator for prompt payment, it appears that in some instances this strategy is being implemented indiscriminately without due consideration to the particular circumstances of customers. For instance, it would be particularly inappropriate to disconnect customers who are facing short-term payment difficulties resulting from non-permanent situations such as incurring extraordinary medical bills, school fees etc. These circumstances do not warrant the disconnection of service. Nor would the disconnection of service in these circumstances protect the utility against any future loss of revenue. Instead, it has the potential to affect customer relations and hence satisfaction levels, which might be damaging in the long term. The key message is that utility managers should adopt a customised approach when dealing with customers in arrears.

At the macro level, the key lesson for policy makers is to appreciate that cost recovery through water customer payments is affected by so many factors and so many different aspects of project design and operation. There is strong evidence in Uganda and elsewhere (Komives and Prokopy, 2000) that many urban water projects begin without fully acknowledging the importance of these factors. When cost recovery is viewed as the need to collect enough revenues from users to cover the cost of installed systems, the challenge of getting people to pay becomes apparent. Although there may be strategies that can be adopted at the operational level (such as those discussed above) to promote payments, we contend that there are also long-term policy issues that need to be addressed, particularly those relating to tariff structures, technology and service level choices. Getting customers to cover the cost of services provided is a well established approach to improving cost recovery. However, utilities and their regulators need to realise that changing the cost or the characteristics of those services can also contribute to improving cost recovery (Komives and Prokopy, 2000).

## Conclusion

This paper has provided some insight into the motivations of water utility customers when it comes to paying their water bills promptly. Through an exploratory research in five small urban utilities in Uganda, we found evidence of a positive attitude towards regular and prompt paying of water bills among utility customers. However, what motivates a customer to settle an outstanding water bill seems to relate mainly to the overall quality of the service provided by the utility. Contrary to the usual explanation that low-income levels (typical of small urban centres in many developing countries) are responsible for the low cost recovery levels, we found evidence that supports the view that poor service quality (i.e. unreliable supply, low service levels, poor customer relations, poor billing and collection systems, etc) is

a key consideration for customer decision-making when it comes to paying water bills regularly and promptly. This has implication for small urban water utilities and their regulators in Uganda and elsewhere. In particular, cost recovery strategies that rely heavily on revenues from customers are unlikely to succeed if aspects relating to the service its self (such as service quality, reliability, operational costs/tariffs etc) are not addressed appropriately at both the micro and macro levels.

### References

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### Notes

1. Tariff setting for small towns water services is currently being done by the Ministry of Water, Lands and Environment
2. A key objective of our current research on bill payment behaviour is to determine, using a suitable theoretical framework, the factors that significantly contribute to variations in prompt bill payment behaviour.

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