

PAYMENT SYSTEMS FOR LOW INCOME URBAN COMMUNITIES IN LUSAKA, ZAMBIA

Case Study A - Monthly payment card system

The Practice

The **monthly card payment system** used in Chipata compound, in Lusaka for the collection and management of water charges. This includes collection of revenue, expenditure and savings. The system is common to several compounds where water systems are owned and managed by the community.

The involvement of the Lusaka City Council (LCC) as an independent advisor, auditor and signatory was important as a means of providing the necessary oversight to assure people that the risk of mismanagement is minimal.

The purpose of the practice is to implement a cost recovery programme for water supply which enables the community to pay hiring costs, wages, maintain the water service and invest in replacement and expansion of the system. The design of the system aims to facilitate payments by consumers, minimise misuse, efficiently collect revenue, ensure effective maintenance and create employment.

The monthly payment cards were introduced by Care International as part of their support for the RDC managed Chipata compound water supply (see separate summary case study).

Technology and Costs

In operating the monthly payment system, the RDC uses a combination of normal accounting procedures, bank accounts and receipts. The user is issued with a monthly payment card that allows the family to draw water from a "manned" communal tap as often as necessary up to a maximum of seven-20 litre buckets of water per household per day. (Each cardholder or family is entitled to 140 litres of water daily.) The card is presented each time water is drawn and the tap attendant stamps the card.

Payment is made once monthly and there is no provision for payment in kind by those people who cannot raise the membership fee and user fees. They are left to either continue drawing water from unprotected sources, neighbours or from outside the compound where some areas are still getting free water from LWSC. The community has determined that elderly people may clean the area surrounding taps in exchange for water.

Financial Management

Two bank accounts have been opened by the RDC. One account is for capital replacement and the other for operating costs. The signatories are the RDC Chairman, RDC Treasurer and an LCC representative. Consumers pay the water charges at a central office in Chipata compound manned by cashiers and the senior accountant. Charges go toward capital replacement, or investment funds for future development, and operations and maintenance which includes electricity, chemicals and salaries for the employed staff. At the end of every month the cash book is reconciled with the bank statements before a financial report is prepared.

Revenue collected for annual replacement cost is deposited in the capital replacement account. Revenue for operating costs in the operating account:

USER PAYMENTS

Annual replacement cost

Total = K 9000

Payment either:

- K 9 000 at the beginning of the year, or
- K 3 000 at the beginning of the year and K 500 instalments for 12 months

User fees

K 2 500 per month.

55% of revenue collected meets the wage bill
40% meets operating costs (electricity, stationary etc.), and
5% is deposited into the investment fund for future development

Simple daily checks and other control measures have been instituted in the accounting system, such as use of membership fee to offset costs of water collected but not paid for.

Impact and Constraints

Service provider -RDC

From the perspective of the RDC, the water supply system is judged successful. The number of households subscribing rose steadily from 16.5% to 61% over the course of the 1998 and the cash reserves from K4.5m to K14m over the same period. The success of the scheme can also be seen in continued and reliable water supply. However, problems with interruption of supply have come from power cuts which in some cases can last as long as two days.

Consumer

The residents appreciate that the scheme is theirs and they do not want to go back to the days where they had to buy water from street vendors at higher prices. On the one hand, tap attendants are seen to minimise vandalism at water points, however the community has reported tap attendants selling water to non members and relatives at tap points. This clearly presents a problem of unauthorised access and affects monthly payments..

Beneficiaries like the easy access they have to the Chipata compound RDC office for making payments. Consumers of LWSC water in other compounds make payments at LWSC offices The community note that the system is transparent and also expect that the profits will be ploughed back into their own community. The system has resulted in employment of 46 people from the community on full time posts and the employment of others such as plumbers, as the need arises. This recycles money back into the community creating wealth and reducing poverty.

The service is considered accessible and reliable. Water is available at 39 points in the compound at fixed hours. *A number of people in the community cannot afford to meet the monthly contributions and would prefer if the payment was broken down to weekly installments.* However, the majority of residents feel that this would complicate the accounting system and prefer the monthly payment system. There have been complaints that the repair of taps can take a long time.

Replicability

The system is being used, with slight variations in other towns and compounds. Where a compound is drawing water from a utility rather than its own source like Chipata compound, then the RDC pays a proportion of the money collected to the utility. An alternative system used by the LWSC and some towns is to put vendors in place. This system does not rely on an RDC or community organised structure and may be appropriate where there is no RDC or the communities are fractured. The RDC may also wish to establish vendors to replace tap operators.

Sustainability

The system would appear to be sustainable provided the present trends continue. The healthy and increasing bank balance both for operation and maintenance as well as for capital development show that the community will be able to replace, repair and even

extend the system should they need to do so. It is a sign of strength in the system that the community was able to increase the fee in early 1998 from K1,500 per month to K2,500 and this has not had any effect on the number of households subscribing.

People employed on the project want to ensure that their jobs are secure and the only way is to ensure continuity of the water supply project by maintaining a good payment practice. LWSC's continued providing free water through outlets at one end of Chipata compound is a risk to sustainability of the system. The community would like to see the LWSC begin to charge for this water or close it down. This shows the commitment of the community to keeping their own system working.

Outstanding Issues

- The new Water Supply and Sanitation Act may change the ownership and management structure of the system. There are concerns in the community that the LCC may try to assume control of the assets, and include the Chipata compound system in the contract for the utility contracted to provide water to Lusaka Municipality.
- Under the new Act the Chipata compound RDC would be considered an independent service provider registered by the National Water and Sanitation Committee (NAWASCO). What this means for the RDC is not yet clear.

Lessons Learned/ Conclusions

- Clear and accountable financial management is essential for community confidence and willingness to pay for community managed water services. Residents are willing and able to pay a full cost recovery rate for water if the system is reliable and efficient.
- Whilst there are a variety of options for the recovery of costs for water services, community management provides an attractive alternative to utility management where utilities are struggling to meet service needs.
- Monthly payment cards, while easier to manage, may be difficult to use in communities where a large number of consumers earn a variable daily wage and have no access to banking facilities or means for saving.

Case Study B: Daily pre-payment systems

The practice

The use of tokens to pay for water from water kiosks in Mchini Compound of Chipata Town for the collection of fees. The system is based on privately managed water kiosks from which the community purchases a given volume of water using pre-paid tokens.

The purpose of this payment system is to ensure cost recovery for water supply thereby enabling CWSC to operate in a commercially viable manner. The system was initiated by the CWSC in collaboration with KfW on the basis of past experience and persistent problems encountered.

Management

Alternative organisational concepts were developed, discussed and tested by CWSC, CMC and community members in the compound before the kiosk system was eventually adopted. KfW played a key facilitative role in piloting the new systems and engaging in the community discussions alongside the Community Relations Officer of the CWSC. The kiosks are run by independent operators licensed by CWSC and revenue collected is remitted to CWSC. Kiosks are owned by CWSC.

The attendants at kiosks are contracted by LWSC and provided with a Kiosk Attendant Duty List to guide their operations. The kiosk attendants are expected to ensure that: service to customers is at a high level; tap sites are well maintained and kept clean; vandalism is at a minimum and damage is reported quickly; wastage is kept at a minimum. Two attendants are assigned to each tap and women are preferred as traditionally women fetch water and clean the surroundings of the house and water sources. Environmental Health and Hygiene are important features of tap management and responsibility of the attendants. Whilst employing attendants from within the compound has obvious logistical advantages, it was found preferable that they not be from the immediate community using the tap due to jealousies, favoritism and other factors.

The Public Relations Officer of CWSC supervises the Attendants and spends two to three days per week monitoring 15 kiosks. The kiosk system has led to considerable improvements in hygiene around the taps which previously were surrounded by large pools of stagnant water. This is because of the role of the attendants in maintaining environmental health and hygiene and the shift of laundry activities from the tap to the household.

Impact and Constraints

Service provider - CWSC

The water kiosk system has now been in operation for almost six years. Surveys in communities close to Mchini (carried out in 1998) showed that other service areas within Chipata town wanted the kiosk tokens system in their community. Each kiosk established caters for a population of 2,000, meeting all social and hygienic objectives of the system. The level of 2,000 people was considered to be economic. Serving smaller populations would require only one attendant per kiosk and shorter opening hours.

An analysis of Mchini kiosks in 1995 showed that the amount of water piped into the compound reduced from over 4,000 cu. m per month prior to implementation of the kiosk system to 2,000 cu. m. The average per capita consumption is currently 7.5l litres per day. Where taps are too far away, people only collect water for drinking and cooking, with water for other activities being collected from nearby wells and streams. A small number of disabled and destitute households are given a card to allow free access to a limited quantity of water. An interesting aspect of the kiosk service is that anyone is allowed to drink at the tap for free and water is also provided free for cleaning out the water container before collecting water.

During the first six months of operation the kiosks have made a profit for CWSC. Two of the five kiosks made a loss in one or two months of the year. (Recent data was not available). The utility has reacted to losses by reducing the number of attendants for the kiosks and restricting opening hours. Careful management of the kiosk system has shown that it ensures an adequate water supply to consumers; contributes to the viability of the CWSC; and reduces wastage.

The attendants are considered to be performing well and the monitoring system shows that more than 93% of metered water is sold. When compared to the pre-kiosk situation where water ran almost continuously irrespective of whether people were fetching water or not, this is a significant improvement.

Consumer

Overall the consumers have reacted positively to the kiosk system. Problems sited include

the long distances between kiosks and households, especially for the elderly. Eighty percent of the households use the kiosks as the main source of water for drinking. Water for washing and bathing is also obtained from wells. The water supply system is considered to be in good condition and the water quality is good.

The three main advantages identified by consumers were the clean taps (63.9%), the organised system for collecting water (55.8%) and that everyone pays according to the quantity consumed (41.1%). The three main disadvantages of the kiosk system identified by consumers were distance (29.9%), congestion (19.8%) and expense (17.3%).

Lessons Learned/Conclusions

The kiosk system provides a good option in situations where communities are not well organised or there are deep community divisions due to political or other reasons. Privatised kiosks can result in widely differing levels of income between kiosk attendants but on the other hand the employment of kiosk attendants by the utility may raise costs and create viability problems if not well managed and supervised. Utility managed kiosks, will tend to reflect the minimum to reduce investment costs thus creating accessibility problems. Community managed kiosks are more likely to meet accessibility needs but may compromise on viability.

The replicability/viability of token systems has been shown by its continuation and expansion in Chipata Town over the last four years.