The Practice
The utility (Arusha Water Authority) works with local administration structures to manage public water services that it provides at subsidised bulk tariff for resale to end-users at affordable rates. The two types of communal water facilities are: kiosks (48 in total) and a mixture of standpipes as well as domestic points that number 100 in total. All the facilities are utility owned but operated by the various local administrative units acting through street chairpersons or Waku wa Mita\(^1\) for day to day operation of the water sales.

Service Coverage and Market Size
The 48 kiosks and 100 stand posts were designed for nine wards. The service ratio is 400 users per communal water point (CWP). The service coverage appears to satisfy current demand because water vendors were not reported within the peri-urban wards of Arusha. Handcart operators only come in during periods of drought. The kiosks are located along road reserves at an average distance of 700-500 metres apart.

Management
The utility manages the bulk water services to the meter of each communal water point (CWP) through its mainstream operational arrangements. The ward development committee for which the ward executive officer is the secretary determines the management protocols of the water service delivery at CWP level.

Stakeholder Matrix

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Roles</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
<td>Primary Provider</td>
<td>Provide Service, Monitor quality, O&amp;M support</td>
</tr>
<tr>
<td></td>
<td>Set tariffs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepare bills</td>
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<tr>
<td></td>
<td>Distribute bills</td>
<td></td>
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<tr>
<td></td>
<td>Collect revenue</td>
<td></td>
</tr>
<tr>
<td>Local Authority</td>
<td>Secondary Provider</td>
<td>Pay utility bills, Collect revenue, Remit revenue to utility</td>
</tr>
<tr>
<td></td>
<td>Appoint kiosk operator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervise operations</td>
<td></td>
</tr>
<tr>
<td>Consumer</td>
<td>End-user</td>
<td>Pay for the services.</td>
</tr>
<tr>
<td></td>
<td>Purchase water at Kiosks.</td>
<td></td>
</tr>
</tbody>
</table>

Technology and Costs
The kiosks were constructed by the utility through a KfW grant in 1993 at the estimated costs of:

- Cost of the kiosk building works----------US$ 600.
- Cost of the pipe work and plumbing---------US$ 150
- Cost of standpost or domestic point ------US$ 180

\(^1\) Every ten households constitute an administrative unit. Once every five years each 10 households elect its leader who is known as the Ten Cell Leader or Balozi Nyumba Kumi. Ten such leaders work with Muku WA Muta or street executive officer that is appointed by the government to supervise the social development activities of the street.

\(^2\) The Foreign Exchange Rate is TShs 800 to one US Dollar.
Administrative cost 15% of total installation costs
Wages of operators TShs. 10,000 per month

Water is sold to the kiosks by the utility at TShs 3/- per 20-litre jerrican and the kiosks are supposed to sell to the end-user at TShs 5/- thus making a profit of TShs.2/-. However all the CWPs surveyed charged TShs 10/- per 20-litre container.

**Legal Status and Contractual Arrangements**

A ward is eligible for the practice upon meeting the following conditions:
♦ The ward must have kiosks or standposts installed within its boundaries. Installation may be effected by the ward, a group of households or by the utility.
♦ The ward executive officer must complete and sign a service application form in accordance with Rule 5 of the Waterworks Ordinance, Annex 2.
♦ The utility connects supply to the kiosk upon receipt of TShs.600 as connection fees from the ward executive officer and service delivery is initiated.
♦ The micro-management of the service delivery operation at the CWP is the responsibility of the ward administration.
♦ The utility sends monthly water bills to the ward for the amount of water registered by the meter during that period.
♦ The ward executive officer must pay water bills regularly in order to remain in the practice.

**Institutional and regulatory framework**

*Management:* The utility is responsible for the bulk supply service up to and including the water meter. The ward executive officers manage the practice using the street chairpersons as the site agents.

*Monitoring:* The ward executive officers monitor the operation of the kiosks from monthly returns submitted by the street chairpersons. These are reconciled with the water consumption bills sent by the utility.

*Supervision:* The street chairpersons supervise the kiosk attendant to ensure that the daily as well as weekly returns tally with the meter readings.

*Enforcement of rules and procedures:* Utility rules like waste control at the CWPs and payment are enforced by the utility. Water services are usually discontinued if any rule is persistently broken by the CWR operations. The ward development committee enacts and enforces operational procedures.

*Financial management:* The management of revenue collection is exerted by the ward executive officer by applying the monitoring tools through the reports submitted by the ten-cell leaders. However revenue from water sales is treated as any income of the ward.

*Capital and O&M financing:* Utility is responsible for O&M financing up to and including the meter as well as the kiosk structures. The rest of the operational and maintenance needs are met from water sale revenue of the CWP.

**Impact**
From the public health perspective the practice purpose has been partially fulfilled. The residents of the peri-urban wards have reasonable access to clean water. However they are not benefiting from over 50% of the kiosks and the standposts that have since been closed.

The commercial objective at the utility level is to some extent being achieved but at a higher administrative cost than earlier envisaged. The utility deploys a lot of resources in the revenue collection effort especially because services are provided on credit.

At the ward level the social objective is partially fulfilled because residents have access to water services at varying levels of convenience and different prices.

Replicability
Water kiosks are a good means for increasing service coverage, particularly in areas where the utility is not able to provide connections. Lessons learned from this practice indicate that incomes from community managed kiosks can sometimes be diverted resulting in disconnection of supply. The arrangements for management of these facilities need to address the issue of supervision, monitoring and accountability. But the replicability of this practice in its present form is doubtful and is not even recommended because of the heavy administrative load that it imposes on the water service delivery operation.

Sustainability
The practice in its present form is not sustainable in the long-term because of the following factors:

The business concept applied in the design of the practice and therefore in the technology used for the kiosks. The market for water kiosks diminishes with the increase in private water connections in the peri-urban neighbourhoods. This however does not eliminate the demand for retail water trade altogether because the need shifts to new areas where utility infrastructure has yet to reach. The business concept and implementation strategy for communal water facilities ought to be designed to appropriately respond to the urban development process.

The basic strategy that the utility is applying in implementing this practice. Retail water operations are commercial undertakings and as such are adversely affected by non-commercial institutional impositions. Lessons learnt from this practice emphasise the need to limit third-party interference in water retail transactions beyond price regulatory measures that must be kept within the constraints of the prevailing market forces.

OUTSTANDING ISSUES
Non payment of utility bills by some wards due to poor management of individual kiosks that led to loss of revenue has resulted led in disconnection of many of the kiosks.

As socio-economic circumstances in the peri-urban areas improve, more residents obtain private yard connections and start selling water in competition with the kiosks.

The kiosks were installed without user consultations. Consequently, some were located too far from residential settlements. The ward administrations are charging higher rates than the utility recommends. This affects individual consumption as it impacts affordability of the services. Inflationary pressures may well be responsible for this action because the recommended price can no longer support the wages of the operators.