INDIVIDUAL VENDING FROM DOMESTIC TAPS

Study of individual water vendors and water vendors association at Teshie-Nungua and Nima, Ghana


The Practice
The vending of water by individuals from domestic taps often from houses situated at the ends of the utility (GWCL) water reticulation system. Others sell from home built underground tanks and reservoirs, and are supplied with water from private water tankers. In many cases, however, the vendors sell from both sources.

The purpose of this system is to facilitate water access to poor households who are outside the reach of the mains of the GWCL, experience infrequent water flows or do not have the legal permit needed to acquire water through the GWCL.

Management
Water vending remains individual business entities, managed by the respective households. The water management, settling of meter charges and financial management lies with the individual vendor or household.

The GWCL treats the vendors like any domestic consumer without any concessions or penalty. The vendors, in seeking recognition and special arrangements by GWCL are in the process of forming a Water Vendors Association. The initiator, however said, “for one and a half years, the effort has not yielded much fruit as those vendors on fixed rates are very comfortable with the current arrangement and are thus sceptical of what a formalisation of their activities would lead to”.

Technology
The individual vendor has to acquire a domestic tap, often fixed in the yard on a concrete platform and a connected drain. A meter is fixed to the tap by the GWCL. An underground storage tank with, an average size of 3x3x4 metres, is also constructed within the yard.

The individual potential vendors approach the GWCL for domestic taps to be fixed in their compounds. In most recent cases, many of those who acquire these taps were not given meters due to the non-availability of the equipment, therefore vendors are given fixed monthly rates.

The vendors contract local masons to construct the underground water reservoirs, which become buffer stock and is sold when the taps are not running

The dimensions of the underground reservoir, in most cases is 3x3x4 metres. The interior is plastered with cement. An opening of one-meter square is kept at the top where water is drawn from and another open vent is kept to allow for ventilation.

The maintenance of the reservoir is the most crucial part of the operation process. When water stays in the tank for too long, it stinks and therefore if it is filled and not sold out after two weeks, the water has to be collected out and the reservoir cleaned. This is not only tedious but expensive as the water in the reservoir is wasted.

Payment and Pricing
None of the water vendors had any agreement with the GWCL to sell water. The rates charged are for domestic users, which is just about $6.00² for the first 6,000 gallons of consumption for a month. The next bracket, which is 600 gallons, is charged 12 cents per gallon. Given the underdeveloped economic state
The payment contract on domestic rating basis with the GWCL are of two kinds;
- those with meters, whose consumption are recorded by the meter, and
- those with fixed rates who pay fixed charges.

### Monthly Tariff Payments by Water Vendors to GWCL GGGWCL

<table>
<thead>
<tr>
<th>Amount Paid Per Month in Cedi</th>
<th>Fixed Rate</th>
<th>Metered</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30,000</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>31-60,000</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>61-90,000</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>91-120,000</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>&gt;120,000</td>
<td>0</td>
<td>0.05</td>
</tr>
</tbody>
</table>

The pricing of water by the vendors had no fixing body nor established basis and is generally left to the individual vendor. The vendors, however, respond to two elements, which are the level of the GWCL water tariffs and the demand for water at any given time. In periods of water shortages or when the taps are not flowing the rates are higher than the ordinary times. The table below gives some of the prices of the vendors.

### Average Sales Per Day for Vendors

<table>
<thead>
<tr>
<th>Amount of sale in Cedis</th>
<th>Taps Running</th>
<th>Not Running</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2000</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>2000-4000</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>4001-6000</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>6001-8000</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>&gt;8000</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Impact

Service providers
Within a span of five years the number of “recognised” vendors in Nungua for instance has increased from three to 18 but this has not significantly affected individual sales. The vendors are gradually creating enclaves of service areas with each serving an average of 20 households. The participation of more literate people, (for example retired policemen, teachers and civil servants) in the water vending business has led to proper keeping of individual records thus reducing the rate of default in tariff payments.

Success lies principally in the vendors’ ability to have continuous access to water to serve their ever-increasing customers. The urge to form the Water Vendors Association and go into formal agreement with the GWCL is an indication of the strides of the vendors in participating in the privatisation process. This would also facilitate the periodic checking of the quality of the water sold especially that from the reservoirs.
Consumers
Consumers were generally satisfied as they had access to potable water closer to their homes and businesses. The relationship between the consumer and the vendor could be so informal to the extent that one can even purchase water and pay on weekly or monthly basis for a lot of the fishmongers. The consumers, nevertheless, have problems with the arbitrary changes in the price of water by the vendors.

Replicability
The water vending system, which is largely in line with the privatisation of water provision in Ghana remains a major means of potable water supply to many low-income communities in the country. It only requires access to potable water or a means to make bulk purchase, store and sell to customers. It does not involve high initial capital outlay and it could be done alongside other domestic business activities.

Sustainability
- Once the greater part of the low-income areas are considered to be unplanned or out of range of the reticulation systems of the utility (GWCL), the business of the water vending will continue to grow.
- The rapid increase in population in the low-income communities (3% rate) is an indication that the market potential for this system is assured.
- The individual/household-based nature of the water vending system presents a simple process devoid of unnecessary institutional complexities.
- The entire relationship between the consumers and the vendors is based on pure economic relationship of demand and supply and once the suppliers continue to satisfy the customers, this system is assured of its sustainability.
- The low income levels of the consumers will prevent them from making bulk water purchases, hence they would continue to rely on vendors.
- The down payment required by the utility for connection to the mains makes it practically impossible for the low-income consumers to have access and therefore they continue to rely on water vendors.
- The proximity of the consumers to the vendors is an intervening opportunity for the low income consumers.

Outstanding Issues
- The formal recognition of the operation of the water vendors by the GWCL will be necessary for the utility to educate the vendors on the billing system and how it affects the management of their business. This will also be necessary for the streamlining of the tariff payment procedures and other arrangements to augment the great service being offered for the low-income community.
- The formation of the Water Vendors Association is also necessary for the checking of the quality of the water sold and other hygienic concerns.
- Some of the vendors may also require some support in the preparation of their accounts and record keeping. This would help the GWCL remove a lot of illegalities in the water sector.

Lessons Learned/Conclusion
- Water supply can be a business with an active role being played by the private sector even in low income communities.
- Consumers are prepared to pay for the full cost recovery of water if it is reliable and the means of payment fits their means of spending.