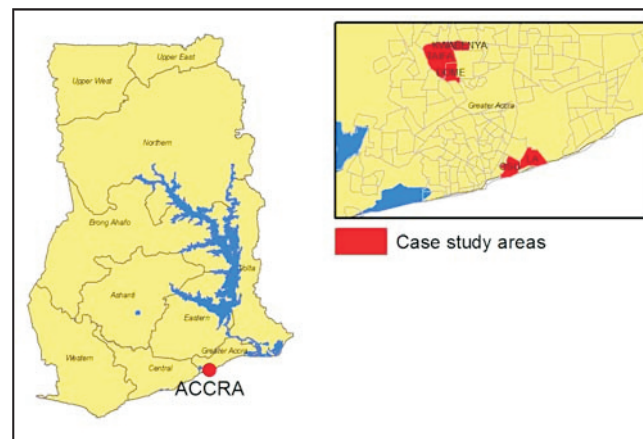


This fact sheet provides an introduction to the evolution of Tanker Water Supply Services in Ghana. It describes the feasibility of using Tanker Water Supply, as an alternative supply mechanism for the urban poor, who do not have a direct connection to the utility mains. This fact sheet, specifically, looks at the case of the AVRL Tanker Supply Project in selected parts of Accra.

### Introduction

In Ghana, water tanker services started to provide water supply service in Accra in the 1980s, mainly to meet the growing needs of the construction sector in that period. Given the continuous decline of the reliability of Water Supply by the Ghana Water Company Limited (GWCL), some domestic consumers installed tanks to store water from GWCL, as a measure to cope with the shortages and to resell to neighbours who also faced supply challenges. With time, as the problem of unreliable water supply from the Utility (GWCL) continued, consumers identified tanker supply as a supplementary source for their water needs. The phenomenon continued to spread, as the supply from the National Utility (GWCL) continued to be unreliable. This led to a point at which some tanker operators started drawing water illegally from the Utility's fire hydrants. This water theft further disabled GWCL to supply adequate and regular water to its customers. The utility therefore started dialoging with the tanker owners. This led to the establishment of designated tanker service points, where tanker operators legally drew water to sell. In addition, it led to the establishment of Tanker Operators' Associations to serve as the mouth piece of the operators and protect the interest of members (Kariuki and Acolor 2000).

In Ghana today, especially in Accra, tanker services have become a key component of the water supply system, especially, in areas with no or unreliable water supply. However, the services do not directly serve the poor, since the prices are high, up to 10 times the tariffs approved by the Public Utility Regulatory Commission (PURC). In 2008, AVRL implemented a pro-poor Tanker Service Model as a response to the acute water shortages in various poor areas of Accra.



### The Model

Under the model, AVRL, the implementing agency, funded the provision of poly tanks at 20 vantage points (selling points) in the poor communities including, Osu, La Central, Dome, Kwabenya and Taifa. It also contracted two private tanker operators to fill these poly tanks regularly. Although, the Management of the selling points was the responsibility of the communities, through appointed co-ordinators or caretakers, the ownership of the facilities remained that of AVRL.

To facilitate community mobilisation and management, a private organisation was contracted to facilitate community entry and involvement processes. The day-to-day management of the selling points was the responsibility of the co-ordinators in each of the beneficiary communities. However, these co-ordinators worked independently without community involvement. Their main responsibilities included the appointment of vendors to sell the water, and paying for and facilitating supplies to the selling points. Whenever there is the need for supply at a selling point, the co-ordinator pays for the supply at AVRL office and he is issued with a way bill. He then gives the way bill to the tanker operator (driver) who takes it to the service hydrant to fill and supply at the selling points.

### The Reality

Under the contract agreement between AVRL and the tanker operators, the tanker operators received fixed monthly compensation of GHC250 per tanker from AVRL. In addition, the tanker operators were provided with a weekly amount of fuel of 180 litres per tanker for their operations. The mandate of the tankers was to fill only the AVRL selling points. The tankers were kept at the AVRL premises when they were not in use. This was to check abuse and ensure that they were readily available when needed. The tankers filled all locations which depended on the needs and requests of the co-ordinators of the selling points, mostly daily or every other day. To curtail the problem of traffic, areas such as Dome, Taifa and Kwabenya with heavy traffic situations were put on night supply. Though

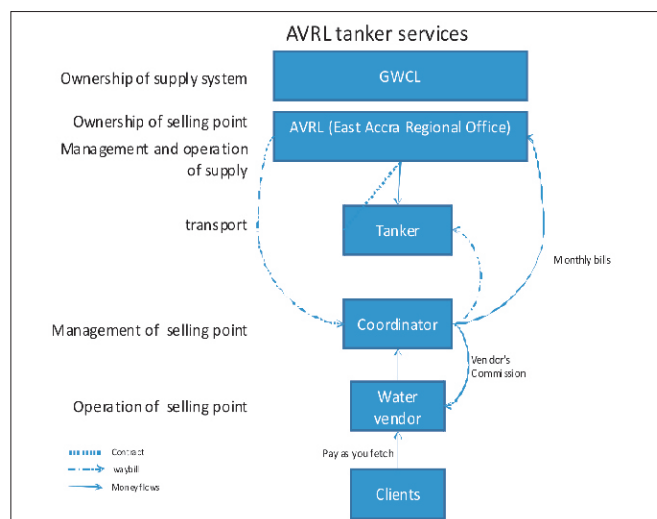


Figure 1: Roles and responsibilities of stakeholders



Figure 2: Water Tankers installed by AVRL at a selling point

supplies were found to be fairly regular, there were occasional delays, resulting from the number of supply requests from the co-ordinators at a particular time, the number of trucks (length of queue) at the water hydrant (filling point) and the availability of water at the hydrant.

The major objective of the intervention was to ensure that the beneficiary communities get basic supply of potable water on regular basis. In addition to this, the intervention also sought to supply water at comparatively affordable price of 5GP/20l, as against the prevailing prices of 10Gp to 20GP by private vendors. This was also planned to force the private vendors in those communities to eventually reduce their prices to the benefit of the poor. AVRL therefore, absorbed the cost of tanker operations which amounted to about GHC14,000 per month on both tankers. It was however realised that, though the AVRL selling points sold their water at the proposed price of 5GP, the private vendors did not reduced their prices. This was due to two main reasons: firstly, the number of selling points (and for that matter, their distribution and amount of water supply) were not adequate to meet the demand of many communities. Private vendor services were therefore still in high demand. Secondly, the price at which the private vendors had to pay for their water supply from the non-AVRL tankers was twice that of AVRL contracted tankers.

At community level, four varied management arrangements were put in place to suit different local situations. In La Central and parts of Osu, the co-ordinators were the respective Assembly Members and they appointed vendors to sell the water on their behalf. In the case of Dome, the project identified individual opinion leaders as co-ordinators who appointed their own vendors, while in Taifa, the co-ordinators themselves sold the water. The variation identified at

kwabenya was where identified local group (Kwabenya Residents' Association) was in charge of the selling points and contracted vendors to sell water on its behalf. In each of these arrangements, the general community was not directly involved. The process was facilitated by the private consultant. Proceeds (profit) from the operations went to the co-ordinators, who were responsible for operation and maintenance at the selling points.

The intervention was generally beneficial to the poor, who got their supplies from the selling points in the following respects:

- **Cost saving:** 20 litres of water which used to cost between 10GP and 20GP from private vendors, was sold at 5GP at the selling points. This meant between 50% and 75% savings.
- **Time savings:** The turn over time which used to be a minimum of 30 minutes (even more in the dry season), drastically reduced to an average of 15 minutes. Long queues generally reduced.
- **Health benefits:** Customers have general perception that water from AVRL sources was of high quality.

These benefits notwithstanding, the continuing reliance on the services of the private vendors by some consumers due to distance and perceived unreliability, means that consumers preferred accessibility, reliability and convenience to price of services and quality, especially in the situation of scarcity.

## Challenges

The monthly cost of subsidising the operations means that, to provide potable water to the poor through tanker services, requires a huge sum of money for subsidy and therefore unsustainable in the long term. The provision of such service to the poor, does not necessarily affect the cost of selling water by private operators if their operation cost is not reduced or if the intervention is not adequate to meet the total demand of the beneficiary community.

## Applicability of the Model

Tanker supply as a model of water delivery is generally expensive and not appropriate for the delivery of affordable water services to the poor on sustainable basis. This can only be done when adequate and sustainable external financial support is mobilized outside the community. However, it can be applied as a short-term interim measure to emergency situations. In the event of its application, there is the need for control of prices and efficient monitoring mechanism, to ensure services delivered are of the right quality and at the right price.

**Key References:** The factsheet is based on a case study on tanker services, written by Benedict Tuffuor, under the TPP project. The full report can be found on [www.ghana.watsan.net/page/777](http://www.ghana.watsan.net/page/777)

This Fact Sheet has been produced under the Tripartite Partnership (TPP) Project in collaboration with the RCN Ghana Secretariat. The Resource Centre Network (RCN) Ghana is an institutional partnership of organizations who have committed themselves to improve WASH sector learning, through knowledge development, knowledge management and knowledge sharing/dissemination. For more information, please visit [www.ghana.watsan.net](http://www.ghana.watsan.net). The TPP project seeks to tackle the core problem of weak sector capacity for planning and delivery of WASH services in poor urban areas through the demonstration of new approaches to pro-poor WASH service delivery in three pilot areas involving Tripartite Partnerships of NGO, Public and Private sectors. For more information, please visit <http://www.ghana.watsan.net/page/687>