Private sector involvement in rural water supply: Case studies from Uganda

L. Koestler, Norway

Introduction
For the last two decades, community management has been promoted as the most appropriate and sustainable management approach for rural water projects in developing countries. The approach is based on important investments in mobilisation and capacity building and puts the entire responsibility for operation and maintenance of the water system on the rural communities. This includes management of operation and maintenance and recovering recurrent costs through a voluntary water committee. However, without the continuous presence and mobilisation by an external agency, most communities fail to perform these tasks and the water system falls into disrepair. Failure is often blamed on poor implementation or lack of support from government. This paper is based on a larger study that was carried out as a part of a Masters programme, and argues that it is time to recognise the elephant in the room and question the management model per se.

Private sector involvement in rural water supply
Instead of the pure community management model, one of the possibilities is to look at ways to extend private sector involvement from urban to rural areas. The private sector is motivated and sustained by the possibility of making a profit. This assumes a cash-backed demand, and also the possibility to get inputs at a reasonable price to supply a satisfactory service. However, the rural setting in developing countries puts serious constraints on all these aspects. Many rural communities are small and remote with low purchasing power, high input costs and no possibility for economies of scale. This is due to lack of adequate infrastructure such as roads, power and communication services, and a dispersed population with irregular cash flows. In addition, most rural areas in developing countries are seeing a strong rural-urban migration, and the first ones to move are the entrepreneurs and the educated. This leads to a low capacity of the private sector, and crucial support services such as access to finance and credit are also scarce and extremely expensive. How can the private sector be attracted to such a scenario, and once there, how can it be convinced to stay?

In addition, there are several risks attached to privatising rural water supplies. Experiences from the urban water supply sector show that if entirely privatised, the poor neighborhoods are left without services since the private sector does not see any profits there. Water services also represent a natural monopoly, and this
can lead to exploitation of users and hiking of prices. Critics also argue that letting the private sector take over the management of rural water supplies will erode the social capital that the sector has been struggling to build for the last decade, through community (and especially women’s) empowerment and education (Woodhouse et al 2004). A crucial factor for sustainability; community ownership, will also be threatened.

At the same time, involvement of the private sector can considerably improve the efficiency of public services; it makes a business more adaptable and consumer-oriented and manages the resources more efficiently (Howard 2005). It can bring expertise in to rural communities and even create employment and development.

Terms such as private sector and privatisation have many definitions. In the context of this study, private sector involvement in rural water supplies was understood as the involvement of an entity or person, on a formal or informal basis, to supply operation and maintenance services in exchange for money. The private entity should be formally asked by the owner, government or community to deliver a certain level of service, and the responsibilities should ideally be outlined in a contract. The private entity should also to a certain extent be motivated by the possibility of making profit. The private sector in rural areas is therefore mostly informal, with little capacity and only a few employees.

Four case studies in Uganda

In order to analyse what is happening on the ground in terms of private sector involvement in rural water supplies, four case studies were selected in Uganda. The country is interesting because even in small rural communities people often pay for water from vendors, and trade and the cash economy are increasingly spreading to even small villages. In addition, the private sector plays an important role in managing water supplies of small and large towns through performance and service agreements.

<table>
<thead>
<tr>
<th>Case study</th>
<th>Ownership</th>
<th>O&amp;M management</th>
<th>Day to day operation</th>
<th>Preventive maintenance</th>
<th>Minor repairs</th>
<th>Major repairs</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katakwi-Amuria handpump mechanics association</td>
<td>Community (District)</td>
<td>Water source committee</td>
<td>Caretaker</td>
<td>Caretaker/ HPM</td>
<td>HPM</td>
<td>District</td>
<td>HPM Association, District, Donors</td>
</tr>
<tr>
<td>South Western Towns Water and Sanitation Project</td>
<td>Sub-county</td>
<td>Water board</td>
<td>Scheme operator</td>
<td>Scheme operator</td>
<td>Scheme operator/ Umbrella</td>
<td>Umbrella</td>
<td>Sub-county, Umbrella, District</td>
</tr>
<tr>
<td>Namasale</td>
<td>Community</td>
<td>Water committee</td>
<td>Technicians</td>
<td>Technicians</td>
<td>Technician/ Scan-Water in theory</td>
<td>District</td>
<td>Scan-Water on a temporary basis, in theory</td>
</tr>
<tr>
<td>Kabango</td>
<td>District</td>
<td>Water board/private operator</td>
<td>Private operator</td>
<td>Private operator</td>
<td>Private operator</td>
<td>District, WaterAid, MWE</td>
<td></td>
</tr>
</tbody>
</table>

The objective of the study was to analyse strengths and weaknesses of management approaches for rural water supply, and to identify potential management models that involve the private sector. In this context, four management models were studied in detail through field visits and desk studies. Key informants such as the project coordinator, committee members, technicians, private operators and local leaders were interviewed through semi-structured interviews, and the performance of each project was assessed by using the sustainability snapshot tool developed by Sugden (2001). In addition, four experts were interviewed about community management, private sector involvement and the Ugandan water sector in general.
The four management models included different technologies, socio-economic settings and support mechanisms. One scheme was involving handpump mechanics (HPM) associations, whereas the other three cases were piped water schemes using different technologies such as gravity flow, boreholes with electric pumps and surface water treatment. The focus of the research was on the responsibilities for financial management, technical operation and maintenance, minor and major repairs and support in terms of technical and managerial advice and funding. The distribution of responsibilities of the different case studies is represented in the table above.

**Private sector involvement and community management**

In the different case studies, various degrees of private sector involvement could be found. Using criteria taken from the literature, the degree of community management and private sector involvement was analysed, as was the extent to which the models benefit from positive effects from both approaches. The main conclusion is that all models use a mixture of private sector involvement and community management elements, and that in this way they can largely benefit from positive effects of both approaches such as creation of ownership feeling and efficiency, better financial management and higher expertise. The main benefit of private sector involvement, however, was the increased motivation of the communities and private operators to maintain the systems.

**Private sector involvement and economic development**

After an analysis of the case studies and their degree of private sector involvement, the correlation with economic development is striking. In communities where there was little cash in circulation and few commercial activities, a higher degree of community management was found. In villages that have a booming trade and commercial activities, a higher amount of tasks was confined to the private operator and the relationship was more formal. The relationship between economic development and degree of private sector involvement can be simplified by the graph below:

![Figure 1. From community management to private sector involvement](source: Koestler)

It has to be noted that this relationship is only a general trend, and that in addition to economic development other factors such as socio-political characteristics of the community, remoteness, the cost of water, political leadership, type of support mechanism and the implementation approach also will affect the degree of private sector involvement and whether it is a success.

**The management model**

Through the discussion above, it is now possible to identify some of the most important actors in the management of a rural water supply, and the relationships between them. This is illustrated by the figure below. The figure underlines the need for a support mechanism, either through local government structures or through an independent support mechanism that is sustainable and has a working relationship with the authorities. The division of tasks between the water committee and the private operator will depend on local conditions and on the economic development as described above.

**Conclusions**

From the case studies and the discussion, several conclusions can be drawn:

1. As rural communities move upwards on the ladder of development, the spirit of voluntarism diminishes. This calls for new approaches that do not assume a high amount of voluntary work.
2. Private sector involvement represents a viable option that can have positive impacts on sustainability.
3. Private sector involvement can be combined with traditional community management structures and create benefits from both approaches in the community.
4. The degree of private sector involvement can be linked to the degree of economic development in the community, although other factors also play a role.
5. It is important to adapt the nature of private sector involvement to local conditions and needs of the community.
6. In poorer communities, including elements and methods of the community management approach can make the operation and maintenance affordable and remedy to some of the constraints set by the rural setting.
7. Although many projects have subsequently adopted private sector involvement, ideally the approach should be considered already in the planning and implementation stages of the project.
8. It has to be recognised that communities cannot bear the full responsibility for operation and maintenance in the long term and that sufficient resources have to be allocated to provide effective support mechanisms.
9. Private sector involvement can reduce the cost of support mechanisms since the element of motivation is provided by payment.

![Figure 2. Proposed management model for rural water supplies](image)

Source: Koestler

**References**


**Note**

This paper is based on the findings of an individual research project carried out for the completion of a Msc in Water and Environmental Management at WEDC, UK in 2008. The complete version of the study can be obtained on request from the author.

**Contact details**

Lucrezia Koestler
Bernhard Herres vei 3, 0376 Oslo, Norway
Tel: +4748357913
Email: lucrezia.koestler@fontes.no