

Improved transparency and service using site selection as a tool

Kathy Shordt, Laurent Stravato, Tettje van Daalen

When we mention transparency and honesty, the focus is often on the misuse of funds. However, transparency and honesty deal with a wide range of phenomena beyond finance and tendering in the water and sanitation sectors. As a development institution, our premise is that projects and programmes should be designed on the basis of best agreed practice. This implies that transparency and honesty are undermined when designs and plans are knowingly formulated in ways that do not represent such acknowledged principles. This paper shows that certain phenomena can invitingly open the door to corruption, that is, the planning of water service projects without consultation or public involvement in site selection for shared water points and without developing accurate maps.

The Transparency group at IRC shows in this paper based on a number of case studies, that consultative site selection, mapping and the monitoring of physical access to new water points are important for ensuring transparency, and ensuring that the services reach those for whom it is intended. These activities also reflect good management, which is in itself an important tool for limiting corruption.

This article also provides further evidence for policy makers on the need for improved site selection and better monitoring to ensure that effective projects can reach the poor and under-served. The examples deal with piped water schemes in peri-urban areas and towns, although many of the principles are applicable to other types of technologies as well.

Why transparency in site selection is important?

Site selection refers to the process of identifying the physical location of water points, which theoretically should be done transparently with user and community involvement. Shared or public water points are often meant to serve the poor. The importance of effectively locating these is illustrated by the fact that a household of five members which carry 20 litres per person per day from a point 300 metres away, represents three kilometres of walking per day. If little attention is given to site selection, the water points can become owned by more powerful families who may limit the amount of water available to other households. If new water points are located far from the household compared to other sources, then families tend to return to the less safe water source, if they are more conveniently located. The gender aspect is also important in the location of the water point as women and young people usually collect water, and thus they should have a voice in deciding on the location of the water point and their special demands such as locating the water point to allow greater privacy, should be taken in account.

Indicators

As a point of strategy, it is important that all groups (households, extension workers, local government, engineers and contractors) agree on the site selection indicator. Site selection for water points requires attention to a number of issues starting with the walking distance to a safe drinking water source which should be less than an agreed distance for a large proportion of the population. The exact site should be identified by those who use it, usually women.

Below, we gave some examples of indicators which should be taken into account.

Hydrology: Viability of the water source, drainage, and quality of the water sources are relevant issues. Water availability within the community, including earlier existing schemes should be mapped. Too seldom is the question seriously considered about the possibility of repairing an existing scheme rather than building a new one. Distance from the source to the scheme is another planning

issue. The case has been forcefully made that the distance from the scheme to the source should be as short as possible. Long mains lines, when not needed, contribute to corruption.

Social structures: It is important to identify the habitations of different economic or ethnic groups. Their demands for water may differ. Often the poor households are less conveniently located, for example off the paved roads. Without good participation and mapping, it is possible to overlook populations in less accessible areas.

Environmental considerations: Discussions about site selection should take into account environmental factors such as water absorption, permeability of the sites and drainage.

Ownership: This refers to both actual ownership (of land on which points or stand posts may be constructed) as well as perceived ownership (around the water point and by local government). The facility (the water points) are usually constructed by or transferred to local community groups who operate them. Procuring permission to lay pipes on private property and then ensuring the sites stay in the communities' hands is important.

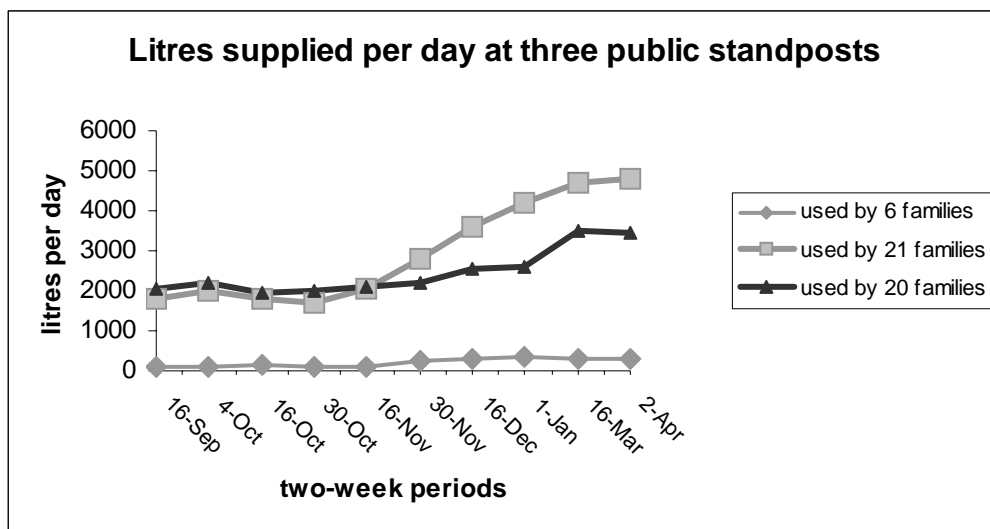
These factors help ensure that the mapping and site selection processes are effective. Making accurate maps and selecting sites with the households and local government should be done to ensure that the site selection rules are followed and the households that need it most will benefit. Different steps and methodologies can help improve transparency via monitoring.

First of all, it is important to determine the indicator and criteria for site selection by consulting a small number of people from each group that will be involved.

- Training and orientation are important steps because in each location: the different people involved should know their roles and agree publicly with the site selection indicator and criteria. Households are informed in advance about the time and day the site selection will occur.

- Mapping and selecting proposed sites with potential users: potential users from nearby houses walk along the roads and paths with members of the water committee and a facilitator such as a field worker, draftsman, or someone who draws the map. They make the map together and decide on possible sites. They make sure, together, that the rules of site selection are followed. Women are, in particular, asked to select the preferred sites and sign, showing their agreement to possible site. The people drawing the map collect information on the households that are left out. It can also help control political pressure and can help establish trust among the community and the users at the beginning of a programme.

- Public meetings are held. Representatives of local government, the water committees and some users meet to discuss and approve sites for water points. They use the maps to verify locations and check to see which households are left out.



Improved transparency at larger scale

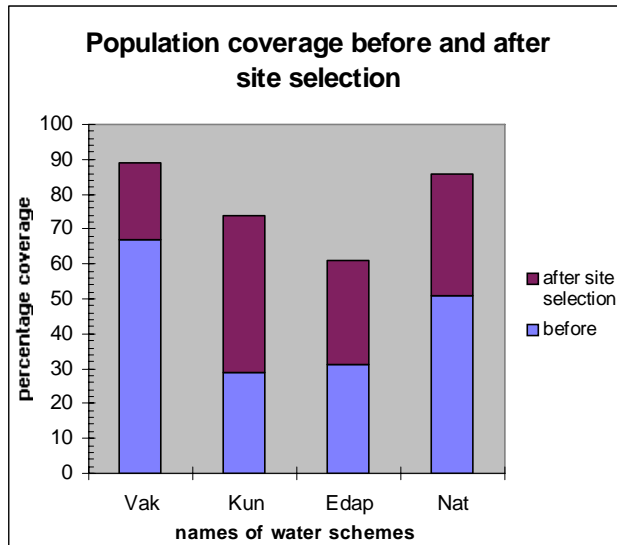
Participation of local government and householders (including women) helps ensure that the local stakeholders are served and understand the design of water schemes. It is a primary element of transparency in water services. It can save money and extend coverage.

Here, for example, are data from four large piped water schemes in the state of Kerala in India. The large water schemes were implemented by the Kerala Water Authority with the support of the governments of Denmark and the Netherlands. The population size in the catchment area of these rural, peri-urban and small-town schemes ranged from 115,000 to about 330,000 in a 1991 census. These were piped schemes with public water points, about half of which had already been constructed when permission was asked to redo the maps of the areas and the site selection with the active involvement of the local governments and the householders, particularly the women who collect water. The original plans stated that about 80% of the current population were covered by each of the original water schemes designs, but subsequent mapping and site selection with the help of the community showed that coverage was much lower.

Access to water was defined as the proportion of the population living within 250 meters walking distance from a water point¹. As the construction was proceeding, there were some complaints. A local team supported by the main donors then checked the original maps and location of the water points. This was done by drafting students who worked together with community members (both men and women) who, in fact, redid both the maps and the site selection. The new water sites were checked by the water department and were approved, after detailed discussion, by the local government. Rather than 80%, it appeared that the original plans would cover between 30% and 70% of the population as shown in the chart below. The original maps were not accurate and some of the water points shown on the maps had been shifted to other locations.

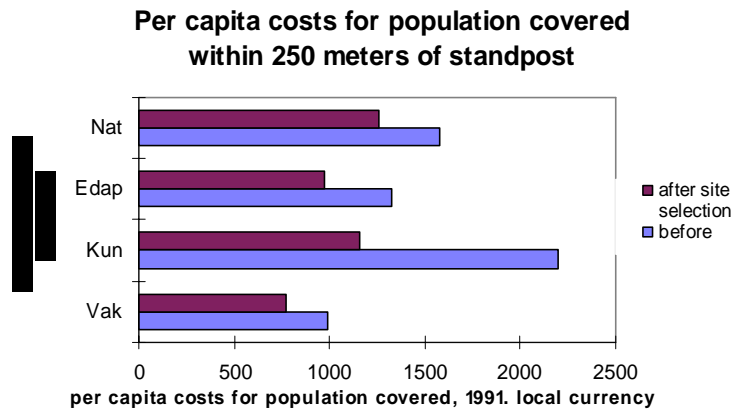
Below, the light shaded bars show coverage and per capita costs before monitoring. The dark bars show the changes made in schemes after improving the engineering maps and selecting better locations for public stand posts. Real coverage increased by 20% to 40% as shown below. Per capita the costs of the schemes were reduced because more people were served. Monitoring the location of water points and public site selection can also result in dramatic improvements on the larger scale.

¹ The rules were such that a minimum of 15 households were needed within 250 m. in order for a water point to be constructed.



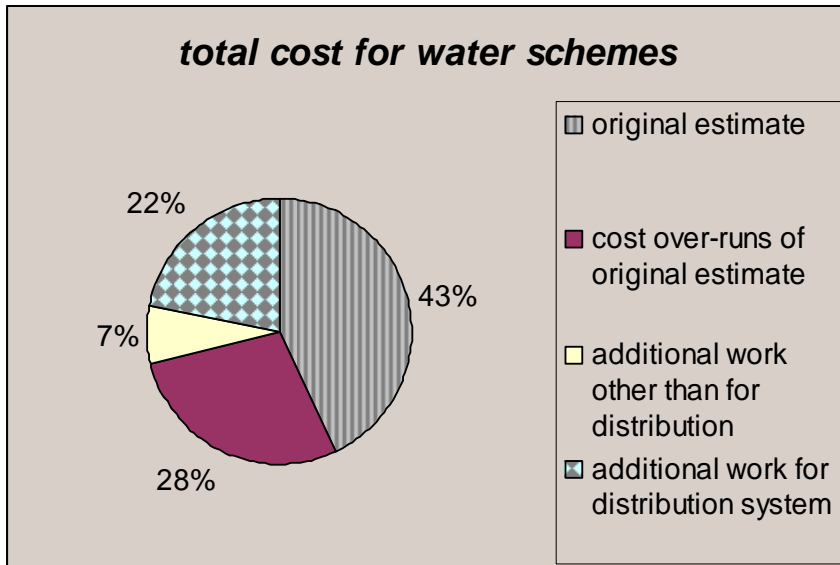
Source: Shortt

New water points were identified and locations of water points were shifted. Some undeserving water points were eliminated in negotiation with local government, community members and local politicians. The result was an **increase** in the real coverage by about 20%, 30%, 35% and 40%. Of course the mapping and monitoring of stand post locations also decreased the per capita costs of the schemes in these examples. The cost of the whole site selection exercise was about US\$0.10 per person served.²



The new site selection with the communities meant a redesign of some parts of the distribution networks and some additional work. This increased the total costs by 22%. The amount would have been less if the schemes had been designed with better mapping and public site selection from the beginning. However, as shown in the following chart, the additional costs were still less than the amount needed for cost over-runs to the original estimates and other additional work.

² The cost of the schemes, on the whole, increased by about 15% as a result of the increased coverage. However, this was relatively modest compared to an increase of 27% due to cost overruns and delays in the original works.



Above all, the community, and particularly the poorer households benefited from this public mapping and site selection process. They were very enthusiastic about being involved, and understanding what they were paying for, as shown on the maps which they had helped develop. Cost recovery from local governments was easier as they had approved each water point in public meetings. Communities and the water authority also had accurate maps for subsequent operation and maintenance.

Conclusion:

Mapping and site selection with the participation of local government and householders is an element of good management. It also enhances transparency and reduces the opportunities for corruption in construction. With accurate maps and locally selected and approved sites for water points, the contractors and engineering staff have clear and detailed directions to follow for their implementation work. This helps ensure that those who are meant to be served, really do have access to improved water services. Thus, the process helps ensure that poor households, which are often to be found off paved roads, will benefit as intended. Transparency in the site selection also helps involve communities in monitoring the construction when the schemes are being implemented.

WaterAid also advocates for monitoring to allow better site selection. During household surveys and Global Positioning System technologies for one of their project in Malawi, they found that the targeting of resources had not been pro-poor. The work showed that “if the resource allocation is effectively targeted at the unserved areas, the MDGs would be achievable even if the level of investment fell to 30% of what it had been over the last five years.³” We believe that the WaterAid example from Malawi and the experience in southern India are not isolated examples. Community participation in mapping and site selection will not solve all of the challenges related to corruption but is an important element that helps enhance transparency and reduce corruption.

So, the open question which should conclude this article is: Can we meet the MDGs without sharing quality information and being transparent in the process of site selection?

³ See <http://www.wateraid.org.uk>