



## Sanitation infrastructure by the private sector

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WITH OVER A billion people worldwide and two thirds of the population of African countries still lacking adequate means of excreta disposal as we approach the millennium, the need to provide adequate sanitation in developing countries has never been greater.

Hundreds of thousands of African children die annually from diseases attributed to unsafe water and poor sanitation. Poor people, often living on the fringe of urban conurbations, suffer disproportionately than other sectors of society as they lack the resources to improve their living conditions.

Although significant advances were made during the International Drinking Water and Sanitation Decade (1980-90) it appears that progress regarding access to adequate sanitation has stagnated since then, and amazingly even more people do not have adequate means of faecal disposal now than in 1990 due to population growth rates averaging 3 per cent in many countries of the South. Africa in particular has had difficulty in holding onto the gains of the past. The situation is compounded by the fact that Africa receives less of a share of international development assistance than it did in 1990.

### Constraints to progress

Some of the constraints to progress have been and continue to be:

- Institutional responsibility for sanitation services operates in an uncoordinated and inefficient way.
- The legislative framework and enabling environment are often inadequate.
- Poor institutional management and low cost recovery has led to infrastructure falling into disrepair leading to a reduction in the quality of service.
- Sanitation and hygiene promotion has been given a low priority in sector programming and allocation of resources.
- The pivotal role of women and children as providers and custodians of watsan facilities has not been sufficiently recognised in institutional arrangements for watsan facilities.
- Networking of key sectors of health, nutrition, environment, and education, has not been accorded enough attention resulting in lost opportunities for synergy and the exchange of ideas.
- Lack of reliable data and monitoring mechanisms have resulted in poor planning and inadequate and poorly targeted resource allocation.

- The sector has not responded adequately to problems of rapid urbanisation resulting in grossly inadequate services to residents of peri-urban areas and informal settlements.
- Safe disposal of human waste does not by its nature enjoy the same donor appeal as providing drinking water. This has led to this aspect of infrastructure being seriously neglected.
- Many countries lack a formal sanitation policy and so there is a lack of focus as to how best to address the myriad problems concerning sanitation.
- There is a narrow range of technological options. The available technologies are not user-friendly to the disabled and where they are available, the costs are high.
- Entrenched beliefs and traditional norms exist in many rural communities that restrict women and children's use of pit latrines.
- Shortage of professional staff, a lack of motivation and a high turnover of staff moving on to greener pastures.

Access to a safe and affordable supply of drinking water and adequate sanitation has been described by the UN as a basic human right but it is one that few people in Africa enjoy.

### The way forward

Now that governments in developing countries have been forced by structural adjustment programs to cut back on their service provision, government departments and donor agencies and NGOs have been forced to explore new and innovative ways of providing the kind of sanitation facilities that are essential if community health is going to improve. Evaluations of numerous water & sanitation projects have shown that providing safe water alone is no guarantee that peoples' health will automatically improve.

### Uganda

It is estimated that 53 per cent of the population does not have access to adequate means of faecal disposal. The situation is worst in the low-income areas of towns and cities.

In 1998 the Government of Uganda published its first Sanitation Policy document which was a major step toward ensuring that all of the population of 21 million (1991 Census projection) had a safe and hygienic means of disposing of faeces by 2005.

One of the principles of the new policy is that households are responsible for improving their sanitation conditions.

However, it has been shown that in rural areas at least, many households' regard improving their latrines as a low priority. During the 1990s the Rural Water Supply and Sanitation Project (RUWASA) operating in eastern Uganda, encouraged the formation of nine casting yards for sanplats and VIP latrines. Some of these yards were run by women's groups and some, like the Masese Women's Group in Jinja, have been very successful. But others have suffered from a lack of demand for their products and have closed down. Even when sanplats are subsidised to the tune of 80 per cent, householders were unwilling to pay 2000/- (US\$ 1.80) for a sanplat. This is because people, faced with many other financial obligations, put a low priority on improving their pit latrines.

### **Eastern centres water and sanitation project**

In 1997 the Government of Uganda entered into an agreement with the Government of Denmark to provide water supplies and to promote sanitation and hygiene in 11 small towns in eastern Uganda. The Eastern Centres Water and Sanitation Project is being implemented by the Directorate of Water Development of the Ministry of Water, Lands and Environment.

As well as providing water supplies based on a demand-negotiations approach, the project is promoting sanitation with a target of 20 per cent of households having improved their level of sanitation by the year 2002. The project is also providing latrines at public places and at all government primary schools and Health Centres.

This schools latrine component was included as a result of the Universal Primary Education mandate of the government that all primary education in Uganda should be free. This resulted in a huge incise in the number of pupils attending government primary schools resulting in an increased demand for proper latrines. In some schools the average number of pupils/stance was 328:1 whereas the target for the Eastern Centres project is 30:1.

To provide sanplats and VIP slabs to households in all 11 towns, the project has entered into a contract with the Masese Women's Group. This group was formed with the help of Danida in 1990.

Members of the group have been trained in various skills such as management and quality control.

Now the Eastern Centres project is also using this group to produce and transport sanplats for householders in all the towns. In order to promote decent sanitation, the project is subsidising the purchase of these sanplats to the tune of 80 per cent but this will be reduced as demand increases.

In 1999 the Masese Women's Group is to supply 600 sanplats to Community Mobilisers, paid a Performance Related Allowance by the project, who sell sanplats for 2000/- (US\$ 1.80) whereas the actual production cost is 4,500/- (US\$ 3.20) per sanplat.

The project, however, purchases the slabs off Masese Women's Group for 6,000/- (US\$ 4.30) which is the production cost plus a modest profit.

This group has proved to be very efficient in producing and delivering good quality sanplats at a reasonable price and is also providing much-needed employment to 700 people including 500 women in the project area.

### **Latrine contractors**

In order to improve upon quality and efficiency in constructing improved latrine facilities at primary schools, public places and government health centres, the project has contracted small-scale local firms.

For the construction of latrines at schools, which consist of two units of five-stance VIP latrines for boys and girls, each contract is worth around two million shillings (US\$ 1500). Local firms were invited to submit letters of interest through the Town Councils/Sub-county Councils. The project then held meetings with these local firms to explain the design and what was involved. The firms then submitted tenders and the project selected the most technically competent and the most realistic financial proposal. For the communal latrines in taxi parks and markets and at health centres the value of the contracts was higher at around 10 million shillings (US\$ 7000).

Here, larger firms were issued with tender documents and invited to submit tenders to the various Town Tender Boards. These Tender Boards were given a short training course by the project to improve their capacity in evaluating tenders in a professional manner and to emphasise the need to exercise accountability and transparency in their work.

In the case of smaller Trading Centres without a Tender Board, the tenders are evaluated by the District Tender Boards, which sit in the District Towns.

### **How the private sector performed**

The private sector in Uganda is now gaining in experience following the governments' decision in the 1989 Constitution to decentralise local government and to promote the use of the private sector in carrying out construction activities rather than doing it through its own line ministries which were not very efficient in terms of time and cost-effectiveness.

In the case of the smaller contractors building the schools latrines the project has been satisfied with their performance. But the following points have been noted:

#### **Supervision**

Contractors need continuous supervision and guidance to ensure that work is done on time and according to the specifications.

#### **Poor preparation of tenders**

Contractors have not undertaken detailed on-site investigations prior to preparing their tenders. For example, failure to predict that pits would need lining because of collapsing soils which has resulted in extra cost to the contractor.

### **Quality of materials**

Sometimes raw materials are not up to the quality required. For example, locally made bricks do not always conform to the standard size. This means contractors tend to use more cement which increases their costs.

### **Skilled labour**

Small contractors cannot afford to permanently employ skilled artisans like masons and carpenters. They can only employ them when they win a contract. So there is little loyalty between artisans and contractors, and contractors cannot always rely on having skilled artisans available when needed. The better artisans are also attracted to the cities where they can charge higher rates and where there is more work.

### **District tender boards**

There have been problems getting contracts approved by DTBs because as the construction is not in their town the members are not going to benefit directly, therefore they accord the evaluation of such contracts as a low priority. Also there is the expectation that informal inducements will be forthcoming from contractors in order to get a contract. This procedure is being discouraged by the project but the practice persists. It can take months to get a contract awarded.

### **Capacity of local firms**

There have been some problems with the capacity of local firms to perform as expected. In one case this was because of wrangles between the directors of the company whereby the advance payment was misused and so work came to a stop.

In other cases there has been poor site management due to inexperienced site foremen being employed. This has resulted in materials not being delivered on time. This not only delays progress but is also costly to the contractor in that he has to maintain skilled artisans on site but they are redundant through lack of materials.

In some cases contractors have underestimated the amount of work involved and have underbid for the contract. In one case, for example, the contractor found that the pit was collapsing so had to build a retaining wall which was not included in his initial costs.

Despite these problems, the project is encouraged by the way in which contractors have benefited from their interaction with the project and contractors are now performing much better.

### **Lessons learned**

The project has learned the following lessons regarding the private sectors' involvement in latrine construction:

### **Capacity building**

There is need to build up the capacity of small firms in terms of management of time and resources and in the writing of tenders.

Donors need to recognise this element when designing projects and not be so obsessed only with physical outputs. It takes a lot of time in terms of training and supervision to develop contractors' ability to do jobs on time and within budget to the quality desired.

Up to now donors have not really realised the amount of time it takes to build up the capacity of both the private sector and local government structures in small towns and rural areas. Projects need to increase the resources devoted to the so-called software side. Allocating 5 to 10 per cent of total project budget to capacity building is not enough when one considers that in some places the capacity is rather limited. Therefore, the capacity has to be strengthened in stages and gradually built up.

### **Governments' role**

The governments' of developing countries also have a role to play in building capacity.

For example, civil servants should have to sign a contract that they will remain in their posts for a reasonable period after they have been trained and not be transferred to large towns where benefits are perceived to be greater. The brain drain from the countryside to the cities must be stemmed. Government needs to make it more attractive for qualified staff to continue to live and work in small towns and trading centres.

Short courses to improve the management of small businesses need to be offered at affordable rates and these need to be widely publicised throughout the private sector.

Such courses could be built into projects at the design stage so that funding is allocated.

Exchange visits to neighbouring countries for the managers of small-scale companies should also be funded by donors to enable managers to learn from each other's experiences.

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