Public Private Partnerships *and the* **Poor**

Small enterprises and water provision in Kibera, Nairobi

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About this series

The purpose of the project *Public Private Partnerships and the Poor in Water and Sanitation* is to determine workable processes whereby the needs of the poor are promoted in strategies which encourage public-private partnerships (PPP) in the provision of water supply and sanitation services. One of the key objectives is to fill some of the gaps which exist in evidence-based reporting of the facts and issues around the impacts of PPP on poor consumers. This series of reports present the interim findings and case studies of an analysis of both the pre-contract and operational phases of a number of PPP contracts. A broad view of PPPs has been taken and situations where the public sector is in partnership either with formal private sector companies, or with small scale local entrepreneurs, or with NGOs employed in a private sector capacity have been included.

M. Sohail Series Editor

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Executive summary

Nairobi is one of a number of cities in Sub-Saharan Africa planning to increase private sector participation in water provision, through what has come to be termed 'public-private partnership'. Kibera is Nairobi's largest informal settlement, and the home of a large share of its urban poor. The project that forms the basis for this case study had two major objectives:

- 1. To extend the water supply network in Kibera (thereby providing infrastructure needed to improve the health and welfare of the low-income residents);
- 2. To enhance the role of the independent private sector in the delivery of water in Kibera (thereby providing the institutional setting needed to take advantage of the water network).

The appropriate role of the private sector and public-private partnerships in water provision is widely debated internationally. The Kibera project differs from most attempts to increase private sector involvement in several important and interrelated respects. First, most public-private partnerships involve large, often multinational, companies. In Kibera, the private enterprises are small operators, working within the informal sector. Second, for most public-private partnerships the challenge is to create a new partnership, while in Kibera the challenge was to reform old ones. Private operators were already playing a critical role in distributing water in Kibera before the start of the project, although neither market competition nor public regulation was functioning to ensure efficiency or equity. Third, most public-private partnerships centre on a centralised water network, which in most African cities serves predominantly the more affluent households. As already noted, Kibera is one of the poorest settlements in Nairobi and much of the water distribution takes place after the water has left the formal network.

The project devoted considerable effort to gaining an understanding of the local context, involving stakeholders in the planning process, ensuring that the proposed water distribution system would be financially sustainable, and that it would provide reliable water to poor households at an affordable price. In some respects, the Kibera project could be taken as a model for how to ensure that private sector participation works for the poor.

At the time of writing of this report, however, the project stands as a failure. The project came to a halt with the water network completed as planned in only 4 out of 9 villages of Kibera. Even in these villages, the anticipated institutional reform has not been realised. In the other 5 villages, part of the piping has been laid, but without the necessary connections. For these 5 communities, the project has had no benefits.

From the community perspective, the failure of the Kibera project had little to do with its operations in the field. Numerous difficulties were encountered locally over the course of the project, but these were by and large overcome. The project stalled because the externally funded work stopped. While local stakeholders were consulted during the early stages of the project, they were not informed of the funding situation, were given no warning that the project might be stopped, and were given no explanation when it was.

The Kibera experience does not fit neatly into the international debates on the relative merits of the private and public sector. As indicated above, private water sellers were already operating in Kibera, selling water originally obtained from a public utility. Informally, there were already partnerships between government officials and private entrepreneurs. However, rather than combining a democratically-driven public sector concern for the poor majority with a market-driven concern for efficiency, these partnerships often combined the worst features of each sector, with neither efficiency nor the public interest being served.

Proposed reforms were developed during the course of the project, to complement the infrastructure improvements, and to:

- Make the private market for water provision more competitive, without creating undue conflict between existing operators and new entrants;
- Increase the reliability and accountability of the public provisioning, while decreasing the role of the public provider in Kibera itself;
- Transfer some of the regulatory responsibilities to local stakeholders, without creating a new basis for rent-seeking and corruption.

Since the project stalled before these reforms were implemented, it is not possible to say whether they would have been successful. Nevertheless, there are important lessons that can be drawn from the Kibera project. As indicated above, several of these lessons suggest that recent attempts to generalise about what does and does not work in low-income settlements fail to address with the challenge of improving water supplies, and the extent to which it depends on the local context. Thus, for example:

Land tenure problems do not preclude improvements in water supplies, but do tend to politicise water provisioning (even if the water operators are private)

It is often assumed that tenure issues must be resolved before adequate water supplies can be provided, since people living on land subject to ownership disputes are unwilling to invest in local improvements and governments are unwilling to support infrastructure investments. The experience in Kibera suggests that this is misleading. Better water provisions could actually improve tenure security for local residents. Moreover, improving water provision is less politically sensitive than conferring land titles, and could be a first step in addressing land issues. However, the tenure problems in Kibera undoubtedly politicise water provisioning, even when the water providers are private operators. Attempts to improve water supplies must take account of these politics.

The private sector includes a wide range of operators, including many informal providers

In discussions of water privatisation, private water providers are usually taken to be large private utilities. The case study of Kibera focuses instead on the small informal providers, who are known to be important in many low-income areas, but are often neglected in discussions of private sector participation. The Kibera experience suggests that these small-scale operators play an important role. They are extremely varied, however, and there is considerable room for improving their efficiency and reducing prices.

The benefits of private sector provision depend on the level and forms of competition

It is widely acknowledged that competition provides the basis for many of the proclaimed strengths of the private sector. The opportunities and obstacles to introducing competition among large-scale water providers are well documented. The situation in Kibera suggests that introducing competition among small-scale informal providers can also be very important, and does not depend solely on the number of providers. In order to increase market competition, it may be necessary to change the nature of the existing public-private partnerships.

The benefits of public-private partnerships depend upon the nature of the partners and the partnership

Public-private partnerships are often assumed to combine the strengths of both the private and public sectors. In Kibera, however, there are situations where public officials and private operators work together to undermine the competitive nature of the private sector and the public accountability of the public sector. Under such circumstances, simply promoting 'public-private partnerships' is unlikely to secure improvements, and could even make things worse.

The benefits of consultation and local engagement depend upon the overall quality of the relationship between the project and the local stakeholders

Consultation and local engagement are increasingly seen as important to the success of projects intending to improve conditions in low-income settlements. Among other benefits, they are intended to give stakeholders a sense of ownership over the projects, and to help elicit local contributions. The Kibera project devoted considerable attention to consultation and local engagement, and initially this approach appeared to be successful. However, the team hired to mediate between the project and the local stakeholders was not kept informed of the funding situation and in any case the consultation was restricted to the early stages of the project. When the project proceeded to stall as it neared completion, no attempts were made to inform or consult with local stakeholders. This not only reversed the early successes, but turned them into liabilities.

In short, the central challenge in Kibera is not to involve the private sector and create public-private partnerships, but to enhance the role of the private sector and create the basis for better public-private partnerships. The Kibera project does not provide any easy answers, but it does provide important lessons for those working to develop public-private partnerships that work for the urban poor.

1.

Background and introduction

1.1 Kibera and the project

This report is based on the experience of a water project in Kibera, Nairobi's largest informal settlement. Informal settlements are home to about 60% of Nairobi's population. Most informal settlements have no formal land rights. The house owners often have quasi-legal rights of occupation. The majority of the residents in these settlements, however, are tenants. The lack of secure land tenure is directly related to the poor provision of environmental and social services.

This water project included ambitious attempts to engage with a wide range of private stakeholders. The principal author of this study provided sociological support to the project and facilitated the cross-sectoral collaboration (the report itself is also based on more recent discussions with key stakeholders undertaken for the purpose of the study).

In addition to assessing the advantages and disadvantages of involving various stakeholders in the planning and implementation of water provision, the study has also drawn out key lessons for public-private sector partnerships in informal urban settlements.

Kibera is situated about 6 km to the west of the city centre, sandwiched between more affluent neighbourhoods, and strategically placed to provide labour to the industrial area and neighbouring residential areas. Kibera is composed of nine villages of different sizes and population. It is currently the biggest single informal settlement in Nairobi, with a population estimated at up to one million.

In 1989, the Nairobi City Council (NCC) with the assistance of the World Bank started implementing the Third Nairobi Water Supply Project (TNWSP). One of the objectives of the project was to extend water supply to low-income areas of the city in order to improve the living conditions and health status of the urban poor. Kibera, one of the oldest and largest informal settlements was selected as a "pilot" area for the extension of water distribution network. It was hoped that lessons learned from the pilot would be used as a basis for extending services to other informal settlements in Nairobi.

Kibera Water Distribution Infilling Component marked the first comprehensive attempt by the Nairobi City Council to provide an adequate reliable and cost effective

water supply system within an informal settlement. Implementation of the project was expected to improve the availability of water within the settlement, leading to better access and reduced prices for water sold at kiosks or other such outlets, and to provide a new pool of revenue collection for the City Council. It is known that most of the water used in Kibera is unaccounted for, as the revenue is collected mainly by privateers.

The infilling works comprised the construction, testing and commissioning of 21.6 km of galvanised steel pipes of diameters 50 mm, 80mm and 100 mm at an estimated cost of US\$360,000. Bulk metering, mapping and other measures aimed at providing better tools for managing water supply to Kibera have been included as part of this project.

Distribution for the nine villages of Kibera was planned as follows; Soweto (3.2 kms), Siranga (2.9 kms), Laini Saba (2 kms), Kisumu Ndogo/Kambi Muuru (1.5 kms), Gatwikira (2.6 kms), Lindi (2 kms), Kianda (3.4 kms), Mashimoni (1.3 kms) and Makina (3.2 kms). The variation in distribution is based on the differences in the existing system and the outcome of the verification process undertaken by the project with leaders of the community.

The overall objective was to extend water supply to low-income areas in Nairobi in order to improve the health of the urban poor. This was to be achieved through the construction of Water Distribution and Infill Mains in Kibera area. Potential benefits include:

- Reduced water prices (20 litres cost between 2 and 3 shillings, but would rise as high as 15-20 shillings during shortages: Ksh. 77 = US\$1)
- Increased reliability of water supply
- Better water management within the settlement
- New business opportunities within the settlement
- More time for residents to engage in other social and economic activities
- The Nairobi City Council and the other participating agencies would draw lessons from Kibera and extend the experience to other informal settlements in Nairobi and elsewhere.

From the start there was a concern that the City Council did not have the institutional and behavioural capacity to handle a project of this scale. In addition, it was not clear that the Council was committed to the innovative approach adopted for this project.

It is important to note that the price of water after partial completion of the project has remained at the level it was prior to the initiation of the project and that during shortages it goes up as high as before.

1.2 Pre-existing private and community-based water provisioning

In Kibera, water was (and still is) accessed through two types of official water outlet. The first includes water kiosks and individual connections. An assessment conducted before the project estimated that this was how 85% of Kibera residents obtained their water. The vital roles played by the small-scale investors and operators were not fully appreciated prior to the initiation of the project, however.

Secondly, there are a number of strong community based organisations which play a leading role in the provision of water in some villages. A good example is the Ushirika Wa Usafi Group (a CBO), which is the main supplier for one village, and also supplies a number of households close to the village boundary. To ensure a constant and efficient supply of water to its customers, the group invested heavily in laying its own pipeline, separate from those of the Nairobi City Council. As is the practice for most other local suppliers, these pipes have been connected to the more reliable mains, including especially those of more affluent neighbouring estates.

The performance and success of this CBO has given hope to other self-help groups. More importantly, the supply of water has become a major income generating activity, which in turn has given the CBO considerable voice in the community and has led to its members frequently being consulted by aid organisations.¹ Members of this group say that profits from water sales are shared out, and used for a range of income generating projects. In addition, through this group, water has become a rallying point of agitation for improved services.

The private water vendors, who play a key role in most villages, are mostly community members who provide water to other residents especially in times of shortages. The vendors often buy water from existing outlets. Some have invested in their own water points, installing tanks to enhance their ability to supply water. When there is a local water crisis, vendors will transport water in jerricans from the neighbouring estates, and then sell it to Kibera residents. An important difference between these private suppliers and the CBO is that during times of shortages they hike their prices. Water from the private vendors retails for a price between Ksh.10-20 per twenty-litre jerrican during normal times, rising to Ksh20 during shortages. The CBO sells the same amount of water at Ksh.2.00 even during shortages. These water vendors are not the private sector providers normally considered in discussions on privatisation, but they are most certainly private, and provide an important service.

There are also water connections owned by individuals who may not be in the water business, but supply water within the informal settlement. These individuals have also invested heavily in water supply, installing water tanks or water points. Some draw water from distances exceeding four kilometres, especially if they live far away from the Nairobi City Council mains. Some of these people sell water to cover at least a share of their costs.

¹ The CBO has also benefited from technical and financial support from Maji na Ufanisi (Water and Development), formerly Water Aid, Kenya.

A small but significant number of residents have private connections and provide water to their neighbours, not necessarily demanding a cash payment, but often expecting something in return. They could be seen as a further group of ambiguous private sector participants.

In spite of its professed commitment to flexibility and stakeholder consultation, the project by and large failed to recognise these last two categories as stakeholders in the provision of water in Kibera.

1.3 A local vision of private sector participation in water provision

In Kenya, the concept of private sector participation in provision of various services has not been fully embraced. The political commitment to lay down a framework for privatisation is lacking. Nevertheless, the Nairobi City Council considered the introduction of an alternative management arrangement system for Kibera settlement, relieving the Water and Sewerage Department of its leading role in the provision and financing of water. The idea of allowing the private sector to play a greater role in Kibera brought to the fore various issues involving the viability of the existing systems and the institutional set-up that was being proposed for implementation.

Stakeholders who were interviewed supported the formation of a Kibera-wide organisation made up of members from all the villages. This new organisation would then become a Village Water Sellers Association (VWSA), and would be charged with the responsibility of buying water in bulk from Nairobi City Council and selling it to the residents.

The VWSA was seen as one way of reducing the mismanagement and bureaucracy that have characterised the current water supply system. By giving the new body the autonomy to deal with new connections in matters pertaining to licensing, metering and billing, the interaction between the Water and Sewerage Department staff and consumers would be reduced.

This could have the desirable effect of eliminating the gatekeepers who seek to profit from controlling access to any new connection, and fail to transfer the appropriate fees to the relevant authorities. Water supply problems in Kibera are compounded by the difficulties involved in obtaining a licence from the council to operate a kiosk. The obstacles imposed by lower level council staff make people more tolerant of those imposed by village based power brokers, and even confer the appearance of 'legitimacy' on unofficial fees. Similar problems arise with illegal connections. These problems combine to make water provision non-competitive, inefficient, costly and technically inadequate. Removing these obstacles would help reduce the price of water without preventing normal profits to be made from water provisioning.

Reducing the benefits to the gatekeepers does pose a challenge, however. Under the proposed new arrangement, reductions in the bulk prices to VWSA by the council should translate into lower prices for kiosk owners as well as for the end-users. The potential formation of the VWSA was nevertheless seen by some of the existing water operators as introducing an unwanted competitor, and disrupting the cosy

relationships which underpin the current (mismanaged) water services. Kiosk operators who benefit from the present ineffective revenue collection procedures already pay very little for water. Further investigation would be needed to determine whether the kiosk owners who perceive a new management systems to be a threat are only a small group and whether they have much influence. There is a risk that some current water sellers would engage in intimidation or vandalism, deliberately destroying new installations, in an effort to scare away the new entrants.

During focus group discussions, participants felt that a scenario where new entrants take control of the new business is unlikely to be tolerated, however beneficial it may seem to the end users. End users apparently shared this concern, as they believed that the pre-existing operators wielded a great deal of power owing to their close association with various village based power brokers. This issue could potentially be addressed by involving all the stakeholders in key decisions, and discussing who stands to benefit (and who stands to lose) from different scenarios for management change. This could also make the proposals more transparent.

Ideally, stakeholders should have ample opportunity to deploy both voice and choice in determining a preferred alternative. This is the essence of participation. The way the project was carried out did not always provide stakeholders with either voice or choice. A number of critical decisions were made by the project. The community was simply expected to concur. Thus, despite the emphasis on stakeholder involvement, it should not be assumed that the project always succeeded in engaging effectively with these stakeholders. The box below summarises the views of one participant.

Involvement of the whole community

"...Kibera settlement has a lot of people. This area has so many problems that we sometimes believe that no one really cares about us. When calamities like fire or floods strike we suddenly become important and different organisations bring relief. But our real problems such as lack of water, poor sanitation, lack of roads, poor housing, insecurity etc are rarely addressed. We have the labour resources required to undertake these improvements. What we lack is capital. We need outsiders who are ready to involve the community in seeking solutions that take care of our future with our participation *here in Kibera*. These water people have tried to involve us in the project but not to the full extent" said one resident."

Attempts to improve management of the water system, and involve the private sector in these improvements, also ran into opposition from both technocrats and politicians – each group with its own fears.

As mentioned elsewhere in this paper, the council staff were seen as the biggest losers in a privatised system. A major proportion of the proceeds from unofficial collections are believed to end up in the pockets of staff. The form of private sector involvement called for by the local stakeholders threatens these unofficial collections. As the fight against illegal connections was gaining pace within the project, rumours started to the effect that council staff, colluding with some technical project staff, had put in place numerous illegal connections. Since no water was running in the new pipelines, this was difficult to confirm. In the four villages where water is now being supplied, such connections are known to exist. There is no longer much incentive to challenge these connections, since the proposed alternative arrangements for running the Kibera water supply have been abandoned. They do, however, point to the many pitfalls and difficulties that can arise if adequate control mechanisms are not evident at the ground level.

While many officials in the Water and Sewerage Department (WSD) of the City Council accept the need to extricate the department from its inordinate management load, some councillors and other politicians are against WSD's water assets being operated by other organisations. Also, there are suspicions surrounding Kenya's privatisation process, and whose interests are really being promoted. As indicated above, developments in Kibera are inherently political, and privatisation cannot escape this.

The very existence of such a large number of poor people in such a small area invites interest from political actors. Support from Kibera alone could probably secure a place for a politician, even in parliament. The land issue in Kibera further politicises local developments, since the land is legally owned by the government.

In these circumstances, proposing the rearrangement of service delivery in Kibera, and the organisation of a small fraction of the population into the VWSA, was bound to attract considerable political attention. One can speculate that with the current political stalemate and suspicion between the party in government and the myriad of opposition parties, the control of such a group could be a major battle ground for supremacy. Such political manoeuvring could easily have a negative effect.

Struggles for control between leaders within and outside the settlement are also potentially disruptive, and there was some evidence of this during the early stages of the project. When local labour was required, the local councillor belatedly sought to bring in persons for employment. This was promptly ruled out as it went against the understanding that this was the responsibility of elders. It appeared then that the battle lines for control were being drawn.

Within the settlement, there was also the potential for conflict between new and long term residents with an interest in the water system. During the study, it was established that a large number of new immigrants come into these villages yearly, many of them looking for a cheaper lifestyle. Ill-planned transitional procedures could easily create conflicts between established water operators who would want to protect their "preserve", and new entrants treating the water re-organisation as a means to gain a foothold. Instead of acting as a unifying force, water could become a divisive tool, especially taking into account that we are talking of a single water market for up to 1 million people.

Whether these difficulties could have been overcome will never be known, since the project took a different course, and eventually stalled. It would seem that participation and stakeholder involvement are necessary but by no means sufficient conditions for achieving the sort of reorganisation envisaged.

2.

The Kibera Project and stakeholders' involvement

2.1 The physical problems

2.1.1 Insufficient distribution

Historically, the informal settlements of Nairobi have lacked environmental services. For almost 20 years after independence in 1963, the government policy was to demolish informal settlements. In pursuance of this policy, the Nairobi City Council Water and Sewerage Department was unwilling to provide basic services to informal settlements for fear of legitimising them. From 1988, however, the government seemed to shift its position and has advocated upgrading of the settlements as part of its housing policy. Unfortunately this has not been carried through to practice.

Such discriminatory policy practices have led to a situation whereby a large population is deprived and unserved by the major city water networks, resulting in insufficient distribution outlets and acute shortages. This in turn has encouraged the proliferation of unofficial ways of accessing water services. Technically as well as institutionally these systems are inadequate, even if they are far better than no systems at all. Providing adequate systems would go a long way in ensuring the provision of sufficient water to Kibera. The position taken by the project was that the new pipe network would solve the technical insufficiency.

At the start of the project, water supply was distributed through small diameter pipes of 1.5 to 2.0 inches serving multiple users. These are individually owned parallel pipes drawn (illegally) from small diameter mains serving neighbouring residential areas. At the same time, there exists a limited distribution network provided by the Council in some villages. However, the suppliers/operators are not technically coordinated within the distribution network managed by the Council, are generally not officially recognised, and do not pay the regular dues.

2.1.2 Drainage and sanitation problems

The unplanned, crowded housing and lack of infrastructure have led to acute drainage and sanitation problems. In Kibera, water does not easily flow out of the compounds. Blocked drainage channels, overflowing pit latrines (especially during rainy season), stagnant pools of dirty water and heaps of uncollected garbage are all too evident. The poor drainage and sanitation system has contributed to the emergence of breeding sites for mosquitoes and flies. Where the flow allows, the waste enters directly into the Mbagathi river, thus further polluting an important source of water for washing, bathing and, at times of extreme stress, for drinking.

This environmental situation is not simply a result of inadequate water supplies. Even if private sector participation were to help provide sufficient clear water, this would only address part of the problem. With more water, people would still be living in unsanitary conditions. The anticipated health benefits might not materialise. Contamination of the river water would continue, and drainage problems would increase along with the increased supplies of water. Inadequate excreta disposal would still be a major health risk. Some of the residents might start blaming the project or the private suppliers.

2.2 Stakeholders and project implementation

In the broadest sense, stakeholders include all individuals and groups whose interests may be affected by the project. In most sections of this report, the term stakeholders is used primarily to refer to those with a long term interest in the outcome of the project (e.g. intended beneficiaries, and actual or future water providers) rather than those with a short term association to the project (e.g. external funding agencies). In the implementation of the project, engagement with stakeholders was primarily taken to mean engagement with the residents of Kibera, as intended beneficiaries. It is important to recognise, however, that it is not just the intended beneficiaries who had a stake in the project and how it developed.

2.2.1 Identifying the stakeholders

Several organisations were engaged in the implementation of the project. Nairobi City Council (NCC) led the implementing team in its capacity as the agency responsible for the provision of infrastructure and delivery of services to the residents of Nairobi. This role included the supervision of the contract and the maintenance of the mains upon completion.

A survey was conducted to inform, create awareness and promote an understanding of the community and their representatives as major stakeholders. Several types of local stakeholders were identified:

- The final consumers of water, who had a stake in an affordable, safe, sufficient and reliable water supply.
- Water sellers (i.e. kiosk owners, water vendors or individual/neighbours) who were either dependent on water sales for a living, or use water sales to supplement family/individual income.
- Elders and other power brokers who were recognised as influential and had the power to allocate premises for business etc. (Even armed with a water licence from the City Council, a water vendor cannot operate without the approval of the elders.)
- Owners of structures potentially affected by the laying of water pipes.

- CBOs and religious-based organisations helping local residents with water provision and other environmental services.
- Casual labourers potentially employed by the project from the community.

Another category of stakeholders is external agents, either directly involved in the project or with a vested interest in how the project develops. Project staff from the different participating agencies, and the World Bank, were all stakeholders. Howard Humphreys were the consulting engineers and their role was limited to supervising the engineers for the project from Zakhem Joint Venture Limited, who were the contractors for the works. Community Management and Training Services (CMTS - EA) provided sociological support and participated in the planning meetings to monitor the project. The UNDP - World Bank Regional and Sanitation Group for Eastern and Southern Africa (RWSA- EA) provided technical support to the project.

As indicated above, various external politicians could also be said to be stakeholders, including some not involved in the project, who could not be identified. Future migrants who might play a role in the new water delivery system could also be said to be stakeholders, but also could not be readily identified.

2.2.2 Working with the stakeholders

Residents within Kibera participated in the verification of the plans. They were involved in the exercise of walking the potential routes, and later verifying the routes for the pipes and laying down guidelines for engagement. They also participated by assisting in the removal of any obstructing structures before trenching. Some provided manual labour to the project. In addition, they formed sub-village groups to monitor the relationships, both physical and social, between the construction and the community. NGOs, CBOs and other civil society institutions were consulted on their future plans in Kibera and often gave support in the form of community mobilisation, and participated in educating residents on possibilities for collaboration.

The technical staff working for the contractors and the sociological team were based in the field and directed technical works and community participation respectively. However, the sociologists were part-time and were only available in the project twice a week.

The existing water operators and potential water sellers were not directly involved in the project and their interests were meant to be represented by the village leaders who regularly held sessions with project staff. As mentioned elsewhere, this representation was questioned, as some of the stakeholders perceived the elders to be an artificial creation by outsiders.

2.2.3 Co-ordination and consensus seeking

A planning group was formed in an effort to ensure consistency and to facilitate the flow of up to date information and interaction between the various participating agencies and with the community. Representatives of the project partners met the planning group to report and deliberate on the progress of the project. Meetings were held twice a month. A team of sociologists, assisted by city council personnel, was hired to facilitate communication and to liase between the external parties and the stakeholders in Kibera. The sociological consultants were available twice a week in an office that was specifically set up at the Kibera Divisional Administration compound. The location was selected to be accessible to all village leaders and community members. This set up helped community representatives and other stakeholders to clarify issues. The sociological team brought up, and reported back to the planning group, on issues involving community participation.

The various agencies involved in this meeting, which was co-ordinated by the World Bank, did not always share information relating to project operations, and it was not particularly surprising that when the project stalled, no one took responsibility. Attempts to hold a meeting to explore a way out of the impasse have failed. Meanwhile, the local stakeholders are hopeful that someone will be bold enough to say what went wrong.

2.3 Critical issues

2.3.1 Hindrances to private sector participation in supplying water in Kibera

The attitude and behaviour of city godfathers was considered by many to be the greatest hindrance to private sector participation in Kibera. It has been difficult to pass decisions aimed at improving distribution networks, billing, metering and putting together a coherent and sustainable system involving the various interested parties. In addition to this, it is known that City Council workers collude with unscrupulous persons to frustrate officially recognised connections. The lack of an agreed tariff has also been a major stumbling block to a more constructive involvement of the private sector.

A number of suggestions were put forward, and various actions were taken in an effort to resolve some of these problems. With regard to the wayward behaviour of city council water officers, it was proposed that the new procedure for connection would be implemented through a community based vetting system. Such a move would ensure that the responsibility for policing the lines was vested in the community. Furthermore, this procedure was intended to ensure that no illegal connections would be tolerated, as the people would have information on designated areas for public standpipes or connections. It was suggested that in order to play this vital role the community would need education on a whole range of issues and aspects pertaining to the new procedures.

This solution relied on empowering the local level players and involving them in the management of the system. The problems within the council were seen to be too complicated to warrant exhaustive discussions at the project level. Rather, a more transparent organisation and operation at the grassroot level was viewed as the first of a series of necessary steps to curtail the underhand dealings at higher levels.

2.3.2 Interference with the social structure of the community

In Kibera, there are power structures within the community that benefit from the opportunities for rent-seeking associated with the existing water supply system. There are vested interests within the local administration, to some extent embodied in the

positions of the village elders. Political parties have also contributed to the form of the current water system, and people's positions on water issues are influenced by party affiliations. Opinion leaders and other institutions may also have interests in the water sector.

As mentioned earlier, water sellers in the settlement are often linked to these power structures. The village elders are close to the government and act as the eyes and ears of the Local Administration. Even though they are on the whole quite unpopular as leaders, they are seen as necessary. Residents of the settlement rely on them to acquire, for example, licences and land to construct structures within the settlement. The elders at least implicitly sanction the laying of individual lines and the selling of water. Moreover, they also play a key role in conflict resolution in all types of local disputes. For instance, during the laying of pipes they were involved in cases where connections had to be made in areas where someone's existing pipe or structure had to be removed. The same applied to the other leaders as well, depending on what type of leadership was more readily recognised in a particular village. There is a degree of acceptance of this practice, and people tend to view many of the benefits that the leaders get as legitimate.

It has been argued that initiation of the VWSA would mean a rearrangement of the way things are done and hence would interfere with the unofficial work of these leaders, potentially undermining their power base. Therefore any new entrant who does not recognise the role played by these leaders is likely to have a difficult time, as the leaders may have the power to incite the residents to go against the new investors. The fact that residents consider some of the benefits going to these local leaders to be legitimate suggests that it could be possible to gain acceptance for more formal benefits less destructive of the water supply system. However, achieving such a fundamental reorganisation is inevitably difficult.

2.3.3 Insecure tenure

Both the control and use of land are critical to the welfare of local residents. Land allocation has been a contentious and politically 'hot' issue in Nairobi, often accompanied by accusations of "land grabbing."

In effect, those living or constructing in informal settlements do so at their own risk, and informal settlement means insecure tenure. Kibera is gazetted as government land, and the residents' structures have been subject to constant threats of demolition by the City Council. This insecurity of tenure has affected the level of service provided by the City Council and landlords in the area, and the willingness of residents to invest in improvements. More often than not, the structure owners are reluctant to invest in anything more than simple temporary housing. In the past, people living in deprived settlements have woken up and found bulldozers razing their structures (including licensed business premises) to the ground in order to pave way for new landlords. The risk that this may happen in the future inhibits the residents, and entrepreneurs too are reluctant to invest in providing services.

The project did not consider the land issues to be open for negotiation. However, for the residents, water provision itself was seen as increasing their security of tenure. While tenure insecurity inhibits local infrastructure investment, external investments in infrastructure can be taken to signal greater security.

2.3.4 Potential stakeholder involvement after the end of the project

It is difficult to know what the future roles of the stakeholders will be if and when the Kibera water project is completed. Proposals were made during the early stages of the project, and an agreement seemed to be within reach. The interruption of the project changed everything, however. It not only left the physical developments incomplete, but reversed the social progress that had been made, undermining future opportunities for stakeholder involvement.

The laying of pipes and status of other technical works is reported to be 85% complete. However, taking into account that only four of nine villages have some access to water through the new project lines, the technical outcomes achieved are far below 85%. Moreover, a major expectation was the initiation of an alternative management system, and this has not taken place.

It was envisaged that at the end of the project an alternative management arrangement system would have been instituted in the form of some private – public sector combination. A study of potential alternative management arrangements was concluded in early 1999. Its recommendations were never taken up, however – a fact that has thrown into confusion what the future management system is to be if the project proceeds. It is only possible to speculate on the basis of what has actually been happening.

The Nairobi City Council, through its water and sewerage department, has continued to control and manage the distribution of water from the project. This is taking place in only 4 out of 9 villages. This means that the communities have different views as to the outcome of the project.

In the four villages served by the project, no purposeful change in management has been established. Additional water kiosks have sprung up as a result of illegal connections (which are silently tolerated by NCC) and the number of people connecting to the new lines is set to increase. Illegal connections were greatly disliked and widely condemned in stakeholder discussions, and it is unlikely that they are viewed more positively now. On the contrary, discussions of how these illegal connections might be replaced with official and transparently managed connections are likely to have increased the level of frustration.

Since water vendors and kiosk owners are private enterprises, it can be said that there is private sector participation. However, the relationship between these private enterprises and local officials is not the kind of public-private partnership envisaged by proponents of private sector participation. The partnerships, if that is what they are, are not designed so as to ensure that the profit seeking of the private enterprises provides public benefits. Rather, they are designed in such a way as to provide private benefits to public officials. In addition, there is no role for NGOs. It is possible that some organized CBOs may find a role to play, but this has not happened in the four served villages. The NGOs and CBOs that were involved in the consultation process during implementation are obviously frustrated. As there is no transparent control or regulation, and the competition that was expected has not materialized, the likelihood is that services will deteriorate, water distribution will be poor and the price of water will be high.

The stakeholders in the five unserved villages see the project as yet another failed initiative, or worse still another example of the poor being manipulated and ultimately denied basic services.

2.3.5 Summary of what worked and what did not

Viewed as a whole, the project did not work. The objectives of the project have clearly not been met. There has been virtually no improvement in distribution, and water prices have not fallen. What remains is a sense of failure and frustration that may well undermine future initiatives. It might have been better if the project had never been started.

On the other hand, certain components of the project were successful. If the rest of the project had lived up to expectations, these could have amplified its success. (Instead, they amplify the sense of failure and frustration.)

In short, the overall project was far less successful than the sum of its parts. The success in gaining local support, for example, became a negative factor once it became clear that the anticipated improvements would not materialise.

Through community participation and education, the project created considerable local interest in the project. Area meetings were held, and local committees participated in identifying routes for pipes, negotiating with owners of structures that obstructed the piping routes, organising unskilled labour and providing information to the planning teams.

During the verification process, and during the various consultative meetings with the stakeholders, a number of issues were raised and agreement was reached on ways of resolving them. For their part, the community understood that they had certain responsibilities, while external parties had other responsibilities. Despite a number of difficulties, most of these responsibilities were respected, at least up to the point when the project stalled.

Better mutual understandings were developed and nurtured among the various participating agencies, and between the agencies and the community. Relations improved as a result. Productive relations were evident in collaborative effort of the stakeholders to produce a poster that the community representatives pinned in public places. The poster detailed the responsibilities of the community in the implementation process, along with the responsibilities of the project team.

Some of these responsibilities were adhered to almost religiously by the community, to the surprise of the project team. This was particularly encouraging since some of the responsibilities, such as the demolition of obstructing structures without compensation and the removal of existing pipes to allow trenching, could easily have become very contentious. By taking up these responsibilities, the community displayed a high level of trust, inasmuch as local stakeholders had no means of

ensuring that the responsibilities of the external actors would be fulfilled. Unfortunately, this trust proved to be misplaced.

When technical work began, the role of the community declined, and the views of local stakeholders were often ignored in decision making. This created tensions, especially when it appeared that unskilled labour for the project would be drawn from outside the community. In an effort to make the community level stakeholders feel part of the process again, it was agreed that unskilled labour for trenching would be provided by locals employed by the project, who were identified and brought forward by the various village elders to the project sociologist. This 'concession' by the project team contractor helped ease the tension, and set everyone working once again.

The initial disagreement over the employment of unskilled workers was indicative of the different perspectives of the external and local stakeholders. To the project team and the contractor, the number of unskilled workers required seemed very small, and not significant enough to warrant consideration in the context of project-community relations. From the community perspective, the project was about to pay outsiders to do jobs that local people sorely needed. For community leaders, being able to help people get jobs is an important source of legitimization. It was perhaps not surprising that the legitimacy of the project was questioned when jobs were to be offered to outsiders, or that working relations improved when the project became a local employer, even on a small scale.

More serious problems arose when the project experienced funding delays and difficulties. The consultation was limited to the physical implementation of the project. The quantities and flows of funds were never openly discussed. But the physical implementation was, of course, dependent on the flow of funds. When the project began to suffer from financial problems, this was experienced locally as unexplained delays in implementation. Relevant information was not passed on to the sociological team, and hence the community remained unaware of the problems until they had practical consequences in the field. This created suspicion, since community participation and trenching continued, but without pipes being laid on schedule. People began to ask why. Planning meetings became less frequent, and finally the key players, Nairobi City Council and the supervising engineers, failed to honour pledges to disclose the nature of the problem that occasioned delays.

The failure to complete the project and especially the manner in which it stalled (without warning) left many residents wondering whether any of the consultations had been genuine. It would have been very easy to mobilise and hold discussions with village leadership. Thus there was no practical obstacle to creating a forum to inform the people of Kibera, through village leaders and others, of the impending difficulties and likelihood of not completing the project.

Ultimately, consultation and communication stopped just when it was most critical. The most serious problems only began to become apparent towards the end of the contract period. The role of the sociologists was officially over, since according to the original time schedule the project had entered its 'post-implementation phase' during which consultation with the community was not considered necessary. Also, the planning meetings decreased and ultimately not even the World Bank was able to

liase with the partners and get a quorum for these meetings. The reason for the interruption of the project remains unclear.

3.

Community perspectives on privatisation

3.1 Current views on privatisation in Kenya

Proponents of public-private partnership hold that governments are responsible but inefficient, that the private sector is efficient but not always responsible, and that through public-private partnership the efficiency of the private sector can be combined with the responsibility of the public sector. As indicated above, however, public-private partnerships can take many forms. In the wrong circumstances, publicprivate partnerships can combine the inefficiency of the public sector with the irresponsibility of the private sector. It is important to have an accurate and sensitive understanding of the local situation, and a clear commitment to creating a responsible and efficient partnership, to make public-private partnerships work for low-income communities.

In Kenya, public-private partnerships are seen as both an opportunity and a challenge. There is considerable excitement, but there are few local precedents to go by. The concept of private sector participation in the provision of water has not been fully embraced. There is a lack of political commitment and attendant goodwill, and no clear framework for action.

This may help explain the slow pace with which the Nairobi City Council has approached the issue of privatisation in Kibera. It should also be kept in mind that the proposed reforms would reduce the role of council staff in future management systems, and strengthen local institutions.

Corruption and inefficiency within public utilities has contributed greatly to people's dissatisfaction with these services. If private sector involvement could be seen to prevent this corruption and inefficiency, it would be widely endorsed by a large segment of the community. Although several municipalities have already embraced the notion of privatising water supplies, Nairobi lacks political consensus. Moreover, the council required ministerial blessings to act in Kibera. Although at one stage a green light appeared to have been given, this now appears not to have been the case. This vacillation has had the effect of delaying decisions for Kibera project.

Several initiatives are known to be in the pipeline to help NCC move towards private sector participation, with support of the World Bank and several other international agencies. Most local stakeholders are poorly informed on these developments, however.

In the project's discussions with local stakeholders in Kibera, there was widespread dissatisfaction with NCC's role as water provider, and stakeholders recounted stories about the many other services that the NCC had failed to deliver. Thus, for example, funds were believed to have been advanced to the council for the construction of access roads, but these roads were never built. There is considerable suspicion towards any NCC project, as the community fears it will not be seen through to completion. The water project is increasingly being put into this category.

Discussions with various stakeholders also revealed that many community members are tired of paying for services that they do not get, and would welcome any reliable provider, including a private operator. The potential benefits of the Third Nairobi Water Supply Project, once privatised, can easily be appreciated by local residents. In discussions on the role of NCC, it was generally considered acceptable for the NCC to play a role, in for example technical support, which in any case can be accessed in the market. For many residents, however, if the NCC were to retain a dominant role, this would signal that little is going to change.

As indicated earlier, current water operators in Kibera had several concerns relating to the project. There was the fear that the livelihoods of those who depend on water vending would be undermined. There was also the fear that value of existing assets (e.g. pipes) would be lost when the project was completed, and people were required to connect to the new mains. And there was a fear that operators would be required to register with VWSA, and then become subject to excessive monitoring and control. The plight of this group of stakeholders clearly needs to be addressed.

There are also more general concerns about the price of water. Currently, some of the service providers charge very high prices for the water, especially in times of shortages. It is the community's hope that through 'privatization' some of these shortages will be reduced, thus ensuring a constant price level throughout.

Some of the residents supported the project (as they saw it as a way of easing some of the problems they are currently facing) but also perceived benefits in having the government investing in the area. The level of government investment in the settlement is seen by some of the structure owners as indicative of the government's long term plans. With increased investment, structure owners would feel more secure in the belief that the government will give them title deeds to enable them to develop the area. This category of stakeholders is more ambiguous about the benefits of private sector involvement, to the extent that it displaces public sector investment.

For some politicians and other well connected parties, investment in Kibera appears likely to result in them owning and registering companies to supply water to the settlement. They are not particularly interested in knowing what the ground rules are for operating the Kibera project. The knowledge that it would operate as some form of enterprise is enough. They see an opportunity whereby they can quickly register their companies and bid for supplying water to Kibera. Being both players and referees, they are convinced that their chances are good. Others hope this conviction is ill founded. In short, the support given to the project varied from one group of the people to another. Much depended on their own perceived benefits. For the project to succeed, the interests of all of these stakeholders needed to be taken into account. It should however be noted that the overall objective of the project was to guarantee improved supply of water to the most deprived groups. From this perspective, the interests of low-income residents deserve special priority.

3.2 Towards a new public-private partnership

At the start of the project, both public and private sectors were involved in providing water in Kibera, but their relations were far from healthy. It is difficult to say whether a well-managed system could supply adequate water to all of Kibera's residents and achieve cost recovery. It was obvious, however, that existing shortcomings were undermining the very possibility of adequate service delivery.

The system was characterised by inadequate and irregular water supplies, high prices, and the misuse of revenues. Competition among private vendors was being suppressed, and there was little incentive for the private sector to invest in improving water supplies. Official water charges were not being levied (or in any case were not finding their way back into the Department of Water and Sanitation accounts). Rather than being subject to the rigours of a competitive market, or the regulations of public provisioning, the water system was being driven by perverse incentives that served neither the supplying agencies nor the end-users of the water. The end result was that the city authorities were losing revenue and the residents were being deprived of water. Some individuals were profiting from the poor collection procedures and the high water prices. But there can be little doubt that these profits were far less than the costs imposed on the city authorities and the consumers.

Some indications of these shortcomings are:

- Licensing of water kiosks only 59% of successful applicants were connected within 2 months, with many others being denied permission to connect.
- Meter readings less than half of the meter readings were being recorded, and consumers lacked confidence in meter reading, blaming faulty meters and irregular billing.
- **Billing** Bills were delayed and irregular, with 95% of consumers receiving only 3–4 bills per year.
- **Non-payment** only 13% of kiosk owners for whom records were available paid their bills between 1995 and 1996.
- **Unbilled water** Kiosks sold about 40,000 cubic meters of water a month, but the NCC only billed for about 3,400.

Obviously these are not encouraging figures, and a new form of public-private partnership may seem a logical step. Unfortunately, these issues have remained unresolved.

Discussions on alternative management arrangements addressed these shortcomings. Several consultations were held with various stakeholders to collect their views. The introduction of an alternative management arrangement for provision of water services within Kibera has been discussed at various levels.

In summary, most of the stakeholders support the following measures to improve efficiency and availability and move towards a more formal private sector participation:

- Establish a Village Water Sellers Association (VWSA) or cooperative in Kibera
- The VWSA buys water in bulk from WSD, replacing the current individual relations between WSD officials and account holders.
- Members of the VWSA purchase water from the VWSA.
- All the members (account holders) of the VWSA retail the water to end-users.
- Water transactions at all levels are based on pre-payments or payment at the moment of withdrawal.
- Unhindered competition between kiosk owners becomes the basis for setting the price of water for consumers.

Additionally, the proposed village associations could step up their ambitions and set up a higher organ, the Union of Kibera Water Sellers Association (UKVWSA). Such an organisation would provide centralised services, strengthen their bargaining power, ensure respectability and at the same time promote fair competition.

In spite of the widely shared optimism that a formal recognition and re-organisation of private sector participation can solve the water supply bottlenecks in Kibera, a section of the residents were not convinced by the proposed changes. They argue that the management of water services in Kibera is unlikely to improve by delegating responsibilities to Kibera-based organisations. Their fear is that such a system will place the Kibera-based organisation at the mercy of the city council water officers, who will be controlling the supply and flow of water into the settlement. Nairobi has been experiencing a severe shortage of water supply over the last four years. It is said that the erratic supply of water in some residential areas of Nairobi water is due to interference of council water officers.

This suggests the need for clear operating strategies, and the delineation of roles and responsibilities in such a way as to prevent political manipulation and profiteering. As already noted, people are very wary of the interference of political operatives whose main agenda is often to gain quick returns at the expense of the community. Many Kibera residents feel that the project has been implemented in such a way as to assist political operatives. The following four operational goals, suggested by various stakeholders and partners, reflect these concerns:

• Council staff should have no responsibilities relating to new connections.

- Council staff should not operate in the new project unless assigned specific technical tasks by the Kibera-based organisation.
- The price of water to end-users should be set in a competitive market, and mechanisms should be put in place to ensure that water supplies to the retailers are not artificially constrained (allowing excess profits to be taken).
- Transparent procedures should be put in place to ensure that all water transactions in the settlement are paid for promptly.

The realisation of these four operational goals could be facilitated by streamlining the staff responsibilities such that the council staff work within the project area only on invitation, as technical experts for specified tasks. The establishment of effective mechanisms for regulating performance, through competition and contracts for supply to designated village sub-units, could improve system performance provided there are regular and adequate water flows into Kibera all year round. A more prominent role for the stakeholders within the context of community management of water supplies, as proposed by the Department of Water Resources, would bring in the added benefits of capacity building.

4.

Challenges facing public-private partnerships in Kibera

Implementation of a new form of public-private partnership, such as that described in the previous section, faces a number of challenges, which may be grouped into three categories: political risk; institutional risk; and commercial risk.

Politically, a large number of poor people in such a small area as Kibera creates an almost inherently risk-prone situation. The perceived political affiliations of the settlement, for example, can affect policy changes. Furthermore, the unresolved land issues – with the land legally belonging to the government – create the potential for political conflicts that could easily undermine progress in water provision. Moreover, while officials in the WSD may wish to relieve the water department of the management burdens of distributing water in Kibera, having a Kibera-based organisation operate a large-scale water system serving up to a million people raises a number of political concerns for local councillors. It could also change the political balance within Kibera.

Institutionally, the proposed reorganisation would replace part of the existing WSD operations with management networks run by the VWSA. At Nairobi Dam Area Office some 256 personnel are engaged in WSD services. It is anticipated that only five of these employees would be directly affected; the other (251) provide services for other areas under a different institutional framework. If, however, as some suspect, WSD staff are benefiting financially from irregularities in Kibera's water system, it is unlikely that they would leave Kibera to the new organisation. Quite possibly, they would seek ways of benefiting from the new system, complicating attempts to ensure local accountability. Moreover, there is no local precedent for the institutional set-up envisaged in Kibera. Any attempt to give autonomy from the NCC to Kibera's water system raises a number of uncertainties.

Commercially, since a form of private sector participation is already in operation, reorganisation may meet initial resistance from those who currently profit from the dubious relationships that characterise the current mismanagement of water services. Any new player in the market place, and especially a potentially powerful one such as the VWSA, will automatically be regarded as a potential threat. The response could degenerate into vandalism, with new installations being deliberately destroyed by existing private entrepreneurs, such as kiosk owners. This could undermine the economic viability of the new entrants. More generally, with more water being sold,

the returns to vendors can be expected to decline (although market mechanisms should ensure that the most efficient vendors stay in business).

There are also a number of more specific challenges to devising a suitable means of improving water provision in Kibera. These challenges touch on a number of issues that are widely debated internationally – the need to resolve land tenure issues in order to facilitate water provision, the need for cost recovery, the potential benefits of privatisation, the importance of local involvement, the need to build consensus, and the importance of sanitation. The experience of Kibera does not conform to international stereotypes. Rather it tends to highlight the importance of understanding the local context, and avoiding over-ambitious generalisations. This helps to explain the ambiguous titles to the sections below which examine these challenges.

4.1 Accepting insecure land tenure: realism or defeatism

It is commonly assumed that a lack of land titles inhibits serious efforts to improve local infrastructure, including water systems. This is taken to suggest that tenure issues must be tackled first, before water issues can be resolved. An opposing view is that people have the right to access affordable water, and that this right does not depend on land ownership.

This argument is certainly relevant to Kibera. Over the years the residents of Kibera have been denied improvements in service provision. The government has been unwilling to invest in local infrastructure. This unwillingness has been explained by the fear of legitimising squatter settlements. Residents too are put off investing, on the grounds that, if they are evicted, their investments will be lost.

On the other hand, Kibera has been able to attract what could be termed "piecemeal" development initiatives. The City Council, for example, financed some limited infrastructure in Kibera in the 1970s to contain a major cholera outbreak. NGOs have sponsored health facilities. Private individuals have invested in light commercial businesses and improved housing. Successful investments have changed people's attitudes.

Moreover, it is clear that the lack of tenure is not the only explanation for the poor water and sanitation. As indicated above, there are other political and economic issues involved. Powerful individuals and groups benefit from the current inadequate system, and fear that new developments will deprive them of their control and their return on "investments".

It is important to realise that land tenure is a complicated and emotive issue in Kibera. The project started immediately after the notorious ethnic clashes of 1997, and it seemed best to steer clear of the land issue. The stakeholders agreed that the people of Kibera deserved better social services – water being a priority – regardless of the land tenure. There appeared to be more likelihood of achieving an improved water system than securing land titles.

Moreover, a successful water supply initiative could be a first step towards resolving a range of other local issues, including those surrounding land ownership. Better water

provision in Kibera would give the settlement more legitimacy, and make the residents feel more secure. This is recognised by the government, the landlords, and the residents themselves. At the same time, the government can support water initiatives without formally recognising the legitimacy of the settlement, and water supply is a less emotive issue.

At the start of the project, many hoped that the circumstances were right, and that it would be possible to achieve better water without addressing the land issues. Now that the project has stalled, this may seem overoptimistic. But it is important to recognise that the success of the project depended on far more than land questions, and that there can be no unambiguous answer to the question of whether accepting insecure land tenure is defeatist or merely realistic. It not only depends upon the locality, but on timing and strategy. At very least, it would seem that there are circumstances where accepting insecure land tenure for the present, and pursuing other means of improving housing security, may provide the basis for resolving the land issues in the future.

4.2 Pursuing cost recovery: sustainable or inequitable

The issue of cost recovery comes up regularly in water projects these days, with some saying that it is inequitable to pursue cost recovery in low-income areas (while upper income areas receive subsidised water) and others saying that only cost recovery is sustainable.

Given the situation in Kibera, the issue of cost recovery in water provision is more complicated than this type of disagreement would seem to imply. Providing adequate water to the residents of Kibera at cost would be far more equitable than allowing the current inadequacies to persist. The people of Kibera are paying many times the official tariff in Nairobi, and if the project could ensure that they could obtain a reliable supply of water at the bulk water price plus the local distribution cost, this would be an important step towards equitable water provision.

The question of cost recovery became a public relations issue between the various stakeholders in the project. There was disagreement between the World Bank and the City Council on tariffs – that is, whether tariffs should include a component for recovering costs. But the more serious equity issue is how to ensure that the retail prices for water do not reflect water scarcity resulting from supply interruptions, rationing, restrictions on investment and the like.

Covering the costs involved in the project itself proved to be a serious practical concern. Eventually, this became the overriding obstacle to completing the project. But this had nothing to do with cost recovery through the tariff. More generally, the overall costs that residents of Kibera will have to pay depend far more on the success or failure of the project than on the particular mechanisms used to cover the basic costs of provision.

4.3 Promoting the private sector: partnership or profiteering

There has been a great deal of debate over the relative merits of private and public sector water provision, and the role of public-private partnerships. The proponents of

the private sector tend to argue that private operators are more efficient, while proponents of the public sector tend to argue that only the public sector can represent the public interest. Proponents of public-private partnerships typically hope to combine the strengths of both sectors.

The Kibera experience poses a challenge to the conventional view that the private sector is associated with competition and improved services. After all, private sector operators are an integral part of the current system, which clearly does involve profiteering (rather than the 'normal' profits achieved in a competitive market).

It also poses a challenge to the view that the public sector best represents the public interest, or that the role of the private sector should be kept to a minimum. Public sector officials contribute to the profiteering. There may be close relations between officials and local water operators, but if anything this would appear to help ensure that public water supplies are insufficient and private operators are not open to competition from new entrants.

The critical question for Kibera is not whether the private or public sector is better at providing water, but how to reform the combined public-private system, in both of its parts. Given the current situation, the favoured strategy is to push the public provider back, and create a more competitive water market, regulated to at least some degree by a locally accountable and transparent water sellers association. Even this strategy may prove to be unduly optimistic. But simply increasing the role of one sector and decreasing that of the other, without even attempting to reform either sector and how they interact, holds no promise at all.

If the needed improvements can be achieved under the banner of privatisation, then privatisation will have been a good thing. The solution proposed by local stakeholders does resemble efficient private sector participation. But this form of privatisation has little to do with the international debates on private sector participation, which typically centre on large companies and international investment. Moreover, 'public-private' partnership does not really seem to be the correct expression for the new system, wherein both the public and private parties would be subject to local control.

4.4 Involving the stakeholders: exploitation or participation

It is often argued that beneficiaries need to contribute to a project in order to achieve 'ownership', and that without local contributions there is no way of ensuring that the project really is serving local needs. Moreover, it is commonly held that local knowledge is critical to good project design, and that local participation gives the beneficiaries more control over local development. Against this, it is sometimes claimed that attempts to secure local contributions merely hide cost-cutting measures, that are more exploitative than participatory.

From inception, the project set out to inform and involve communities in the implementation. Channels of communication were identified to help the project team pass messages, seek consensus on decision and receive feedback. If transparency had been maintained, and expectations fulfilled, the local contributors could have been described as participatory in a positive sense. However, the fact that the project failed

to remain transparent, and ended prior to completion, changed the way in which these contributions were seen. Many local stakeholders now undoubtedly feel that they were exploited.

No attempt has been made to monitor or value the contributions that local residents made to the project, or how willingly they contributed. As long as the project was proceeding, what seemed important was to ensure that people were consulted, and had the opportunity to influence key decisions. In the demolition of obstructing structures, for example, the structures were identified during transect walks involving communities and project staff. The community representatives undertook to explain to owners of such structures the need and the necessity of such actions. Also, during recruitment of unskilled labour, the communities identified persons for interviews and recruitment, and had to deal with dissatisfied residents who missed out on employment. The residents who participated in these decision processes were not adequately compensated for their time. The hope that the project would be completed and thus that they would indirectly receive benefits has remained unfulfilled.

In some instances, consultation undoubtedly helped the local residents to influence the project. For instance, the contractor had a tendency to leave open trenches, which were dangerous to children and drunks in the village. After several consultations the stakeholders suggested that trenching needed to be done directly prior to laying the pipes. The contractor and project staff, who had previously exploited the opportunity of getting casual labour to trench as much as possible on a daily rate, had to be content with the new method.

In other instances, decisions were just imposed on stakeholders at the community level, and participation amounted to little more than working out how to deal with these decisions. For instance, the decision not to pay compensation to owners of structures that had to be demolished was imposed by the project with the support of local administration. It was contested. In one incident the project was forced to quietly make a payment, in order to resolve the issue without provoking further claims. In addition, the project had decided that it was the responsibility of owners of individual pipes to remove them, and that failure to do so could result in their destruction, for which the project did not take responsibility. This was not a negotiated agreement. Consequently, owners of damaged pipes protested, causing unnecessary delays and potentially explosive situations. Although never investigated fully, threats to project staff and the need for local security even during the day, were widely seen as signs of existing resentments by sections of the community.

Overall, involving local stakeholders was a challenge, and one that at times seemed to give local residents more control and more 'ownership' of the project. Ultimately, however, whether the local involvement was participatory or exploitative must be viewed in the context of the overall project. It is difficult to see how local stakeholders can or should feel 'ownership' of the project when the decision to stop the project can made unilaterally, with no consultation or explanation. This imbalance presents a serious challenge for achieving fruitful participation. In this case, when the project was stopped, the sincerity of past consultation was called into question, and the likelihood of future collaboration was undermined.

4.5 Working with local institutions: hindrance or help

Historically, government-led water projects have ignored pre-existing systems used to supply water. Some argue that by building on pre-existing systems and institutions, rather than replacing them with new ones, projects are much more likely to be successful.

The Kibera project staff started out with little understanding of the dynamics of the local institutions that predated the project. However, in the early stages of the project a database of all local civil society institutions was prepared, covering church/mosque groups, women and youth groups, self-help groups, water and sanitation groups, the informal schools and other institutions. Various government and NGO field officers were identified for interviews and discussion. By recognising their existence and seeking their views the local institutions gave the project greater acceptance locally, and at least some of the views were accommodated by the project. It also became a means for ensuring the security of project staff equipment and materials.

Not all associations with these institutions were positive. Delays occasioned by poor attendance and the inability of some local organisations to take decisions quickly led to frustration on the part of the project staff. Quite often meetings had to be convened in an attempt to iron out differences of this nature. It became evident that working with local organisations requires a form of professionalism that is sometimes at odds with the standard operating procedures of contractors and project staff. This was a serious challenge.

More specific to the project, the proposed institutional re-arrangement of the water system was based on a modification of existing institutions, and a recognition of their strengths and weaknesses, rather than an abstract idea about the proper institutional form for water management. The important role of private operators was recognised, but their relations to the WSD were questioned. The WSD itself was viewed very critically, but more for its actual operating procedures, and its revealed character, than for being 'public' entity. A CBO's success in keeping water prices down during periods of scarcity was taken as a model for a new institutional association of vendors.

Since no new institutional arrangements emerged from the project, it is not possible to say how well this approach succeeded. Clearly, modifying existing institutions is a major challenge – no less so than introducing new ones. However, while a major concern was how local stakeholders with a vested interest in the existing system would respond, the larger challenge proved to be on the side of the external project partners themselves.

4.6 Improving sanitation: logical next step or new challenge

There is considerable debate internationally over the relative importance of improving water supplies versus improving sanitation. As indicated above, the drainage channels in Kibera are very poorly constructed and not lined. In many places, the drainage channels are just temporary gullies created by falling rain and erosion. In other structures, the owners have made effort to create and link with existing "drainage" channels. But by any standards, the sanitation problems in Kibera are just terrible.

From an environmental health perspective, sanitation in Kibera is the next most logical step, and one could even argue that it should have been given a higher priority than water supply. A project with support from the Word Bank, DFID and AFD was planned. Stating that it is the next logical step, however, is underestimating the nature and degree of new challenges that are likely to be faced.

Improvements in sanitation will call for improvements in excreta disposal facilities, wastewater and storm drainage and garbage disposal. These activities raise many of the same issues as water supply, and a few more besides.

Landlords are inclined to resist ceding their own land for latrines, on the grounds that residential space provides higher rents. Yet unless landlords provide more land, it is hard to see how sanitation can be improved. Landlords may have a collective interest in better sanitation, even though each has an interest in limiting the use of his/her own land. But it is not clear whether this collective interest can be used as the basis for achieving practical agreement. This challenge is compounded by the fact that it is often impossible to identify, let alone negotiate with, existing landowners.

Improving drainage in highly unplanned areas, with congested temporary structures, is inherently difficult. Digging drains is likely to be even more destructive of existing structures than digging for water pipes. Also, draining the effluents of Kibera into the Mbagathi River would itself cause major environmental problems.

As the project did not address environmental sanitation issues, efforts are underway to prepare a pilot project that would incorporate these concerns. As highlighted during community consultations, the project would include solid waste management, excreta disposal, drainage and wastewater management, roads and footpaths.

Whatever improvements may be envisaged, the ensuing activities will face resistance from some quarters. The failure of the water project has undoubtedly increased this resistance. In some contexts it may be appropriate to debate the relative importance of water supply and sanitation, and to treat them as competing demands on limited resources. In Kibera, however, the more important issue is how to ensure that the **failure** of a major water project does not undermine the very possibility of addressing the sanitary problems.

5.

Concluding remarks

Over the last 30 to 40 years, discussions, meetings and studies have been held throughout the world in an effort to improve the lives and wellbeing of millions of people who do not yet enjoy even the most basic of services. The water supply projects in Nairobi and Kibera have emerged, at least in part, from the resulting programme framework. The project completion has been officially put at 85%, reflecting the status of construction works.

What this study has highlighted is that a wide consultation process involving a range of stakeholders can be added on to a project, and can operate effectively to enable informed participation, but that this in no way guarantees the success of project and may not even give it a participatory character overall. As described above, the stakeholders worked quite well together, and at times had to work extra hard to reach consensus in order to implement painful decisions that left some parties bruised. Unfortunately, at other times and for unexplained reasons some (external) stakeholders were not always transparent and honest. Vital information and the "purse" were controlled externally. In spite of stakeholder consultation, making project operations more transparent is not always easy, since when things begin to go wrong there may not even be transparency within the funding or implementing agencies. In this case the project stalled even when stakeholders thought everything was fine.

A key lesson from this study is that principles like 'more participation', 'greater private sector participation' and 'stakeholder consultation' miss some of the more critical ingredients of a successful project. Despite all the consultation and information at the start of the project, local stakeholders ended up feeling that the project did not fulfill its side of the bargain, and that the most critical decision – to stop the project – was not made in a consultative manner.

In some ways, we are now no closer to the solution of making social services accessible in an efficient and affordable manner to the poor than we were 20 years ago at the beginning of the International Decade for Drinking Water and Sanitation. For some, the situation has worsened. Kibera is one such community where the answer is as far away as ever!

References

Rivera D. (1996): Private Sector Participation in the Water Supply and Waste Water Sector – Lessons From Six Developing Countries. WORLD BANK.

Cost Implications for Pump Purchasing: World Water and Environmental Engineering. Volume 23 Issue 3, (May – June 2000).

Small Scale Independent Providers of Water and Sanitation to the Urban Poor: A case of Kampala, Uganda World Bank/IRC. (November 1999).

Small Scale Independent Providers of Water and Sanitation to the Urban Poor: A case of Nairobi, Kenya World Bank/IRC, (November 1999).

Small Scale Independent Providers of Water and Sanitation to the Urban Poor; A case of Mombasa, Kenya. World Bank/IRC, (November 1999).

Demand Responsiveness, Participation, Gender and Poverty Making Links With Sustainability, Water and Sanitation Programs, East and Southern Africa, World Bank/UNESCO/UNICEF.

First Report on Poverty in Kenya: Volume 1, Ministry of Planning and National Development, Republic of Kenya, (June 1998).

Water and Sanitation Services for the Poor: Innovating through Field Experience: Field Experience UNDP-World Bank, Program Strategy (1999–2003).

B. Colligon and M. Kezina (April 2000); *Independent Water and Sanitation Providers in African Cities*. Full report of Ten country study: World Bank.

Economic Survey, Ministry of Planning and National Development, Republic of Kenya. (May 1999) *Water Supply and Sanitation Sub-Sector in Uganda*, World Bank, (April 1999).

Decentralization: Critical Implementation Issues for which Water Supply and Sanitation Sub-sector in Uganda, World Bank, (April 1999).

A Popular Version of the First Poverty Report in Kenya: Ministry of Planning and National Development, Republic of Kenya, (June 1999).

Reducing Contract Risk in Public-Private Partnerships: World Water and Environmental Engineering, Volume 23, Issue 5, (Sept–October 2000).

Water and Sanitation Service to the Urban Poor: Small Service Providers Make Big Difference in East Africa, World Bank/IRC, (2000).

Poverty in Kenya Volume II: *Poverty and Social Indicators. Ministry of Planning and National Development*, (July 1998).

Interim Poverty Reduction Strategy Paper: 2000–2003, Ministry of Finance and Planning, Republic of Kenya, (June 2000).

Kibera Water Newsletter, World Bank/Nairobi City Council: (1998).

Draft Strategy For the Water Sector : Ministry of Environment and Natural Resources. Republic of Kenya, (November 2000).

Dumol, Mark (July 2000): The Manila Water Concession, a Key Government Official's Diary of the World's Largest Water Privatisation, World Bank.

Private Business, Public Owners: Government Share Holdings in Water Companies, Ministry of Housing, Spatial Planning and the Environment, The Netherlands, (2000).