



Government of Kenya

BUILDING KENYA TOGETHER

Conference on Private Sector Participation in Kenya's Infrastructure

Background paper on water and sanitation

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Water Supply and Sanitation

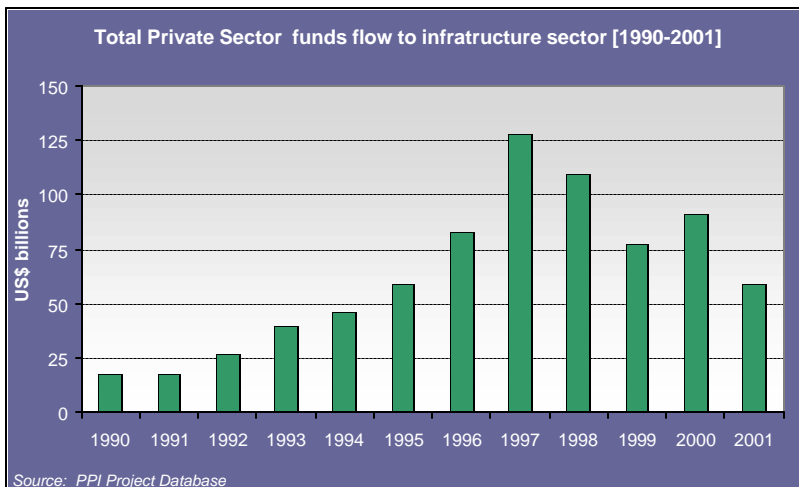
Table 1: Acronyms

Acronym	Definition
BOO	Build Own Operate
BOOT	Build Own Operate Transfer
BOT	Build Operate Transfer
DBFO	Design Build Finance Operate
GOK	Government of Kenya
GSM	Global Satellite Mobile Telecommunications System
IPP	Independent Power Producer
KenGen	Kenya Electricity Generating Company
KShs	Kenya shilling
NWCPC	National Water Conservation and Pipeline Corporation
PPP	Public Private Partnerships
PR	Public Relations
PSP	Private sector participation
TKL	Telkom Kenya Limited
US\$	United States of America Dollars

Introduction

Kenya's National Water Policy targets 100% access to clean water for the country's population by the year 2010. Current access levels are estimated at 65% making the achievement of this development goal a significant challenge for the government.

In recent years, the sector has been subject to a large number of technical studies, improvement plans, and re-organisations, but there has been little actual investment, inevitably leading to crumbling infrastructure and deterioration of services. Recent surveys estimate that US\$ 1.4 billion¹ would be needed for immediate rehabilitation and for medium term expansion of piped WSS systems in Kenya. This is almost 40% of Kenya's annual expenditure budget of KShs 314² billion (approx US\$ 4 billion) for 2002. Whilst improved water supply and sanitation services are justifiably high priorities for government, public sector financial resources are clearly inadequate to meet this requirement, even with donor support, meaning that looking for private sector investment is the only long term solution.



Worldwide, the private sector is playing an increasingly important role in WSS operations, including financing. Investment flows (see chart) to infrastructure projects with private sector participation grew strongly between 1990 and 2001 reaching a peak of US\$128 billion in 1997. The WSS sector attracted about US\$ 40 billion of this private investment and US\$ 23.4 billion flowed into Sub Saharan Africa. It is clear therefore that the WSS sectors and Sub Saharan Africa have not been the priorities for these investment flows. Nevertheless where there has been PSP in the sector it has yielded benefits in terms

of improved management and service delivery as well as relieving some of the burden on the public purse.

State of the Water and Sanitation Sector in Kenya

According to the World Bank Survey¹, there are approximately 742,000 water connections in about 680 piped systems in Kenya. In addition there are over 350

¹ Review of the WSS sector in Kenya, 2001, The World Bank

² Economic Survey 2002





community run water schemes in the country. But a good percentage of the connections are inactive due to poor maintenance. Overall the average access to safe water is about 65%. This is 30% in rural areas and declining³.

About 2 million people in urban areas are connected to 35 sewerage systems (about 145,000 connections), with the remainder of the population relying mostly on pit latrines and septic tanks (in urban areas). About 11 million people have no access to decent⁴ sanitation services.

Kenya's access to clean water and to improved sanitation services is low compared to similar countries in Africa and other developing countries. At the heart of the problem is a population that has grown far beyond the capacity of an infrastructure that has deteriorated through lack of investment. Kenya's population has increased from 6 million at independence to about 30 million in 2002. Further, the migration trends have led to a significant concentration of this population in urban centres, many in unplanned informal settlements. The patterns of land use have also changed drastically from pastoral to arable farming, leading to destruction of important water catchment areas.

Financial Situation of Piped WSS Operations

	NWCPC	Nairobi	Other WSS Cos	MENR systems
	KShs m	KShs m	KShs m	KShs m
Total Billings**	1,200	1,980	255	150
Total expenses	1,250	1,500	N/a	600

Source: Kenya review of WSS sector, 2001 World Bank

N/a - not available

** Collections are estimated as low as 50-60% of the billings

On top of this, a study conducted by the World Bank in 2001⁵ concluded that the "piped" WSS sector in Kenya is essentially bankrupt, largely due to inefficiencies in distribution, billing, and revenue

collection (see table opposite). The tariffs, at an average of KShs 30/m³, plus a sanitation surcharge of 75% are adequate for operating cost recovery. However total billings for piped systems for the year 2000 were estimated at KShs 3.6 billion, whilst actual collections were only 50-60%, leading to uncollected billings in excess of 360 days. A further critical concern in the WSS sector is that even when cash is collected from customers, all too frequently it is used to finance activities not related to WSS – this is particularly true in council run set ups. All of this has led to a cash and funding crisis in the sector leading the government to suspend the servicing of WSS development

³ in this context, access to improved water sources refers to the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as household connection, public stand pipe, bore hole, protected well or spring, and rainwater collection. Reasonable access is defined as the availability of at least 20 litres per person a day from a source within one kilometre of dwelling.

⁴ considered to be adequate excreta disposal facilities, private or shared that can effectively prevent human, animal and insect contact with excreta

⁵ Kenya, Review of the WSS sector, 2001, the World Bank



loans. A case in point is NWCPC, which has been unable to service its loan, which is now in excess of KShs 1 billion, including accumulated interest.

	Kenya		C D'Ivoire	Senegal	Ghana	Uganda
	NWCPC	Nairobi				
1999 GNP per Capita	360	360	710	510	390	320
Un accounted for Water	40%	50%	18%	25%	55%	47%
Staff/1000 connections	6.2	16.2	3.3	5	17.7	30
Tariff level (US\$/m ³)	0.40	0.40	0.50	0.56	0.27	0.73
% age contribution to Capex	N/A	N/A	N/A	44	36	16

Source: World Bank Kenya Review of WSS Sector 2001

Low productivity, financial mismanagement and lack of investment has resulted in a deterioration of the distribution system - some networks are more than 70 years old. As a result distribution and transmission losses run at levels of up to 50%. The table opposite shows how

poorly Kenya compares, particularly against countries that have embraced PSP in the sector, for example Cote d'Ivoire and Senegal.

Unfortunately, it is the poor who bear the brunt of this inefficiency, and under-investment and also inappropriate tariff policies which tend to subsidise more the better off. According to the World Bank Survey, households with private connections spend about KShs 240/m³, when taking into account not only piped water but also complements from kiosks or tankers to cover the intermittent supplies. The poor, who have to rely on kiosk vendors for treated water, pay an average of KShs 845/m³ compared to the official water tariffs of KShs 20 to 100 /m³. These statistics demonstrate a number of ironies in water pricing in developing countries, and Kenya is no exception:

- Household piped water supplies are invariably subsidised, meaning that government is often subsidising consumers who could afford an economic tariff, and the more these consumers consume, the more government subsidises them, meaning that government has less resources available to subsidise those who need it
- At the same time, poorer communities are not supplied at all by publicly run systems meaning that no or little subsidy reaches them, instead they are left to pay private operators whose margin negates or reduces any subsidy which may be in the bulk price the operator has paid
- A common obstacle to PSP in the sector is the notion that tariffs would become unaffordable for the poor, yet they are often paying above their means under current arrangements, and a restructuring of tariffs would enable a transfer of subsidy away from those who do not need it, towards those who do.

Deterioration in water and sanitary conditions has seen a marked resurgence of water borne diseases and a deterioration in the environment. A case in point is the Nairobi River, which is said to be so polluted that it is *worse than a sewer*. Defecation and indiscriminate disposal of faecal waste in open spaces and rivers is likely to harm marine life and cause groundwater contamination (by direct percolation to bore holes and wells),

It is the poor who bear the brunt of this inefficiency, under-investment and inappropriate tariff policies.





especially in densely populated areas - where space for pit latrines is no longer available. Malaria, typhoid, diarrhoea, and other water borne diseases frequently strike the poor living next to such environmental hazards. Water related diseases were estimated to be responsible for up to 27% of total morbidity in Kenya between 1994-1996.

Aside from loss of life, there is also a high economic cost of poor sanitation. The increased costs to government of healthcare leads to higher taxes. And the cost of medicines to individuals and sick off days reduces the population's spending power and impacts productivity. Further, lack of water for industries has frequently caused manufacturing plants to shut down or to ration production.

But there have been some recent positive developments in reforming the institutional and regulatory set up of WSS sector in the country, including enactment of Water Act 2002 and creation of National Water Services Board and Regulatory Board. This is discussed in more detail below.

Current institutional, policy and regulatory arrangements

The Ministry of Water Resources Management and Development, the National Water Conservation and Pipeline Company (NWCPC), and the local authorities are the main players in the WSS sector. The ministry runs approximately 630 piped systems (280,000 connections), while the NWCPC runs 40 piped systems (approximately 230,000 connections). Ten⁶ municipalities are responsible for a further 230,000 connections, over 160,000 of these in Nairobi. The ministry is responsible for overall policy formulation and currently has the main regulatory roles.

The NWCPC was created in 1988 to take over from the ministry responsibility for water supply, those water systems that could be run on a commercial basis. It currently manages 40 piped systems as specified by the Minister with its largest operation being in Mombasa and Coastal Region. It is responsible for operation and maintenance of these systems as well as investment for rehabilitation and expansion. The responsibility for investment, collection, and disposal of wastewater in the urban centres where NWCPC operates water supply remains with the respective local councils.

The ten Municipal Councils operate their own WSS services, either provided by departments within the councils, or through autonomous companies that effectively fall under the Ministry of Local Government. The towns that have already established companies to operate and maintain WSS in their areas of jurisdiction include Nyeri, Eldoret and Kericho. These have shown a noticeable improvement in service delivery.

The definitive policy for the sector is contained in the National Policy on Water Resources, Management, and Development as set out in Sessional Paper no 1 of 1999 and the Country Strategy Paper for Water Sector. These call for decentralisation of operational activities, private sector participation and increased community involvement.

There have been recent positive developments in reforming the institutional and regulatory set up of WSS sector in the country, including enactment of Water Act 2002 proposing the creation of National Water Services Board and Regulatory Board

⁶ Nairobi, Nakuru, Kisumu, Eldoret, Kericho, Nanyuki, Nyeri, Kitale, Thika and Nyahururu





The documents also recommend reforms in the institutional and regulatory framework, pricing, financing of the sector and capacity building.

The policies have been reinforced by the enactment of the 2002 Water Act, which is just now being "operationalised". Operationalisation requires first of all the signing of the gazette notice by the Honourable Minister. But beyond that, the Act provides for a Water Services Regulatory Board to be established as the national regulator, Water Services Boards (WSB) to be set up with responsibility for the provision of WSS in defined areas, Water Service Providers to act on a delegated agency basis for the WSBs and a Water Appeals Board to provide dispute resolution between various parties. These bodies are yet to be formed.

PSP models, successes and failures

The Second World Water Forum held at The Hague in March 2000 called for greater involvement of the private sector in financing and management of the WSS sector. A number of PSP alternatives have been applied in the sector with varying degrees of success. These include service and management contracts, lease –operate arrangements, Build Own Operate contracts, and variants (BOOs, BOOTs, BOTs), concessions and divestiture (full or partial privatisations). To optimise the public-private relationship and to take full advantage of the delegated management of public services, Kenya needs to draw upon the valuable lessons from the successes and failures of these past partnerships. The paragraphs below illustrate where the various models have been employed, and the lessons that can be learned.

Service contracts involve the subcontracting of core or non-core services to the private sector. They are widely used in *India*, for example the *Madras Metro Water* has contracted services ranging from the provision of staff cars to the operation and maintenance of sewage pumping stations. The water utility in *Santiago de Chile* has contracted out services accounting for about half its operating budget, including computer services, engineering consulting services, and repair, maintenance, and rehabilitation of the network. To enhance competition, the Santiago utility has at least two service contracts for each kind of task. But service contracts are at best a cost-effective way to meet special technical needs for a utility that is already well managed and commercially viable. They cannot substitute for reform in a utility plagued by inefficient management and poor cost recovery.

Management contracts involve contracting out full management responsibility for the entire utility, not just specific functions. They can lead to operational performance improvement and can provide a valuable first step towards fuller privatisation/ private sector participation. This can be particularly useful in circumstances where there is a lack of information on existing assets, institutional or regulatory uncertainty, unacceptable levels of market risk or affordability issues which would make more significant forms of PSP difficult to implement. Such a phased approach to PSP has been used in Trinidad & Tobago, Puerto Rico and Mexico City, and could well provide lessons for Kenya.





In *Trinidad & Tobago*, the government let a three-year management contract for the provision of water and sewerage services linked to a US\$80m loan from the World Bank. The government's intention was to convert the initial management contract into a full concession after 3-5 years of operation. This approach was selected because of the poor information on existing assets and systems, and uncertain regulatory and institutional arrangements. A management contract offered a flexible means of bringing in private sector expertise while allowing the government further time to consider longer term options and put in place regulatory and institutional reforms. The private operator was subject to performance improvement obligations, with over 60% of the management fee and the right to negotiate the proposed longer term contract contingent upon its achievement of agreed performance improvements. Whilst the private operator achieved significant operational improvements, it is understood that its ability to meet its performance targets was inhibited by delays in the public sector capital investment programme required to upgrade and expand the system. The management contract expired in April 2000 and the government has currently put on hold its plans for a longer term PSP arrangement. The decision of the government not to continue with conversion to a concession is understood to be linked to political factors, including the election of a new government less well disposed towards privatisation and PSP.

In *Puerto Rico* where the government engaged a private operator to manage and operate the water supply system to service 3.5 million customers for a four-year period from 1995-99. Despite reports by the regulator indicating that performance targets had not been met, the contract was extended and expanded in early 1999 suggesting that performance improvements had been significant.

In *Mexico City*, a complex three-phase PSP approach has been implemented. The model commenced with a two-phase performance based management contract arrangement under which four ten-year contracts were awarded, with the successful bidders having preferential rights of negotiation for each of the two remaining phases. During the first phase, the private operators were required, among other things, to establish detailed information on existing systems and customer demand. In the third phase, the contracts will be extended to full concession style arrangements, with capital expansion and operational performance targets being set on the basis of the improved system information.

Lease/operate contracts have some similarities with management contracts in that the operator takes on responsibility for operational management. However the key differences are that in a lease the operator pays the asset owner for the right to use the assets, and is rewarded from the revenues the assets generate. The operator is also responsible for the condition, and hence maintenance of the assets. Lease/ operate contracts are a well-tested method of introducing PSP having been used in *France* for many decades. More recently, leases have been used in developing countries particularly in Africa. Successes to date include the national water supply in Senegal and the Niger.

In *Senegal* a lease contract has been implemented and there have been significant network efficiency gains over the six years of operation. These include a reduction in unaccounted for water (over 11 million m³ per annum), free social connections representing more than 85% of new connections, water leakages repaired within 12 hours and improved management transparency.





Lease/ operate contracts have emerged as the preferred PSP option for Africa



Another example of a lease/operate contract is the 10-year renewable contract recently awarded in *Niger*. Under the lease arrangement the PSP operator will be required to undertake a US\$5m programme of work to install new connections. The contract has strong support from the international agencies, principally the World Bank, who will finance an associated rehabilitation and extension programme worth over US\$35m. The operator will be required to improve technical and operational efficiency and to rapidly expand the existing customer base over the next 5 years.

The *Guinean National Water Company* let a ten-year lease/operate contract, covering the production and distribution of water, to an internationally backed private sector consortium in 1988. The government is responsible for regulatory oversight of both the National Water Company and the private contractor, including general policy and planning, tariff approval and dispute resolution. A World Bank funded tariff subsidy, conditional upon initial and ongoing tariff reform, was granted for a ten-year period to cushion tariff increases. The project has been largely successful, with the introduction of tariffs for water usage, reduction in illegal connections and implementation of water conservation education.

But the *Maputo lease* contract, where Saur was awarded a 15-year lease, has faced problems after the main operator pulled out. Views on the reasons for the failure vary, but concerns have been expressed that the PSP process was perceived to be donor driven, doubts have been raised on how the contract was awarded, and stakeholders, whose expectations were poorly managed, have complained of being left out of the process.

In *Caracas, Venezuela (1992)*, five international consortia pre-qualified, but no bids were received. Bid failure was attributed to

- poor quality of information about the existing asset base and operational characteristics which made it impossible for firms to formulate credible bid proposals.
- uncertain regulatory framework and absence of unified political support for the proposed framework did not give sufficient confidence to bidders.
- Low tariffs insufficient to meet investment targets.
- Country and exchange rate risks unacceptable to potential bidders.
- Lack of clarity of contract terms

The *Indah Water Konsortium sewerage concession, Malaysia* failed because of inadequate information leading to a severe underestimation of capital expenditure requirements with the result that the performance targets set in the contract were unachievable, and an unaffordable tariff level was required to meet full cost of operating and capital investment.

The *Manila water and wastewater concessions* was generally successful but concessionaires faced difficulties and delays in obtaining long term private sector financing despite the large scale of the project, high demand growth potential, thorough preparation and strong political backing while in *Karachi*, the bidders were unwilling to commit to a concession proposal because of high political, commercial and financial risks.





Concessions potentially offer the greatest benefits from PSP since the private sector takes on full responsibility for operations and capital investment planning, implementation and financing, and production and distribution activities – in summary all the major activities of a WSS operator. However, as a result, this approach also passes the greatest degree of risk to the private sector, which in circumstances where tariffs are low, infrastructure is heavily degraded, and the legal and regulatory framework is flawed can mean that this form of PSP is not viable. The following examples illustrate the difficulties that concession type PSP contracts can run into where investors perceive too much risk in the transaction.

BOT arrangements are essentially concession contracts used for the construction, financing and operation of new, as opposed to existing, assets. Such structures have been successfully employed in the industrial and emerging markets of Latin America and East Asia. The approach has been used internationally to deliver substantial volumes of new investment in the WSS sector in water treatment in such countries as Australia and Malaysia and for sewage treatment in Chile, New Zealand and Turkey. Other examples include the Delfland Wastewater Treatment Plant currently under bid in the Netherlands, and the Scottish Wastewater treatment programme in the UK.

Divestiture involves the sale of assets to the private sector either through a direct sale to one strategic investor or through a stock market. It is a form of privatisation widely used in other infrastructure sectors, but has been limited to England and Wales in the Water Supply and Sanitation sector, although private water companies have also long operated in the United States. Given the national economic importance of infrastructure services, governments are often unwilling to divest water supply and sanitation assets without introducing safeguards. The U.K. government retains “safety net” powers to appoint another operator in case a water company fails. It also limits the length of the licences under which water companies operate.

Key lessons from the experience with PSP to date include:

- *PSP, especially concessions, requiring substantial financing requirements are best suited to large urban centres.* To date, concession contracts have been implemented successfully in a number of large cities in the developing world, such as Buenos Aires, Santiago, Sofia, Lima and Manila, which are characterised by large and concentrated populations, significant non-domestic customer base and typically higher average income levels than secondary cities and towns. Even with these favourable attributes, the experience in Asia has been that long term private finance necessary to support a concession is difficult to obtain, as demonstrated in the case of Manila. Obtaining the confidence of bidders and private financiers is likely to be considerably more difficult in secondary cities and towns.
- *A lack of information on existing systems can undermine the PSP's success.* The experiences in Caracas and Malaysia highlight the importance of adequate information regarding the existing asset base and operations for attracting bidders and ensuring the sustainability of the contract. This issue, in particular, is likely to be a factor in Kenya





Key lessons in PSP implementation include early involvement of the private sector in designing structures which sell, political commitment and consensus building among the key stakeholders.

Kenya WSS sector lacks accurate operating data, a key prerequisite for successful engagement of private operator. Recent studies have shown the sector is poorly managed and that it is often difficult to accurately assess the condition of the infrastructure network, extent of water losses, operating costs, billing and recovery of revenue and debt.

- *Ideally tariff levels should be sufficient to cover both operating and capital costs whilst remaining affordable.* If a concession type PSP contract is the target, the aim is to pass responsibility for both operating and capital expenditure to the private sector. Therefore the underlying project economics should be such that tariff revenues are sufficient to meet the full costs (operating and capital) of providing the services. Some level of government subsidy may be appropriate in the short term, to bridge any transitional gap between the potential revenue base and the full costs of the project, and to soften the blow for consumers whilst they wait for improved service delivery. However, while ongoing government subsidy can in theory be provided through “shadow tariffs” or similar mechanisms, such long-term support may lead to a lack of transparency and reduce the concessionaire’s incentives to improve performance – a consumer paying a full tariff is the best regulator of an operator’s performance. Recent experience in Caracas and Malaysia highlights this problem. Extended reliance on public sector support may also represent an unacceptable risk to the private operator.
- *The need for an established and equitable regulatory framework.* The very nature of water supply means that it is impractical to introduce competition into significant parts of the service, in particular distribution. Transferring responsibility for these services to the private sector therefore requires the establishment of a robust regulatory framework to monitor and regulate the operator’s performance and to protect the interests of consumers. The regulatory framework plays a central role in terms of the operator’s revenues (through tariff adjustment procedures) and costs (through performance obligations). The PSP operator’s willingness to perform, and in particular to finance, his obligations over the long-term, will therefore be substantially dependent on the existence of an established and stable regulatory regime, which enables the operator to assess with confidence how the regulator will carry out his functions.
- *Open and transparent bidding:* There are relatively few water companies interested in PSP opportunities globally, so introducing competition into the bidding process can at times be difficult. Nevertheless an open and transparent bidding process remains the best way of securing best value for money for government from the transaction.
- *The need for realistic risk allocation.* Too many transactions fail to get off the ground, or stall in the process, or fail to complete because of unrealistic expectations as the amount of risk that private operators will take on compared to the potential rewards available. Involvement and commitment by multilateral institutions can play a key role in mitigating financial risks, but their involvement is only of benefit when the underlying viability of the project is secure.
- *The benefits of keeping water supply and sewerage under one utility.* As can be seen from Annex 1 the majority of the PSP operations in WSS to date have combined both water supply and sewerage or concerned water supply only. There are fewer examples of stand-alone sanitation companies. Providing water and sanitation services under one utility offers potential advantages in terms of operational efficiencies - especially billing and revenue collection.

A selection of PSP experience in WSS worldwide is presented in Annex 1.





But are there PSP opportunities in Kenya WSS?

In answering this question one needs to consider separately urban and peri-urban/ rural communities, since different solutions may be appropriate for different types of supply and different customer bases. This paper has focused primarily on the urban and neighbouring areas but options for PSP also exist outside these areas.

In *urban areas*, as we have seen, the overwhelming need is for investment capital. Prima facie this calls for a PSP approach involving private capital i.e. a sale or a concession. However, these options raise some issues:

- we would imagine that the government would be reluctant to sell water assets given their national importance, so that leaves concessioning
- however, a concession is only likely to be viable in towns with large populations, Nairobi and possibly Mombasa
- and the sector in Kenya, like most developing countries, lacks accurate operating revenue, cost and asset data, a key prerequisite for a successful concession contract.

This last point is particularly important. Recent studies have shown how difficult it is to assess accurately the condition of the infrastructure network, extent of water losses, operating costs, billing and recovery of revenue and debt. These problems argue for a "step-wise" approach to the introduction of PSP. For example, the first step could involve the private sector operating existing infrastructure under a management contract or a lease with a key performance target to improve data quality. Later steps could involve the contracts being converted to full concessions. This phased approach does, however, have its critics since private operators can tend to entrench and position themselves against future competition. Johannesburg is a good example where the initial PSP contract only concerns technical assistance for improvement in the network efficiency and it is feared that the operator is gaining an unfair advantage for future bids. That said, the approach can also be used to help extract improved performance from the contractor if they know that the carrot of an extended contract exists.

The government, with the support of the Public-Private Infrastructure Advisory Facility (PPIAF), has recently commissioned studies for review of PSP options in WSS in Nairobi and Mombasa and Coastal Region. A similar study for Kisumu and the Lake region commenced in February 2003. The Nairobi and Mombasa studies study are complete and both recommended a lease operate contract. There is already PSP in the WSS sector in Malindi, where HP Gauff operates the town's water supply under a management contract, with support from KfW. The performance is seemingly well regarded locally.

PSP studies for Nairobi and Mombasa have recommended lease-operate arrangements

In *informal settlements in the urban or peri-urban areas and in rural areas* more innovative PSP techniques are required. To illustrate:

- private water vendors (kiosks) already operate in areas with no direct grid connection but they need to be well regulated in terms of price and quality





- community based schemes can be successful in rural areas, although they typically need support in terms of asset (e.g. pump, borehole) maintenance. A licensed operator in adjacent urban areas could provide this under contract, and indeed providing such service could be made an obligation of their licence.

Required conditions for successful PSP in WSS sector

For successful PSP in Kenya's WSS sector there are a number of conditions precedent that must be in place:

- Viability of the infrastructure
- Political will
- Legal, institutional and regulatory framework conducive to PSP
- Implementation capacity within government
- Revamping of Kenya's image.

Viability:

Whilst PSP structures can accommodate subsidy mechanisms to support viability, stand-alone commercial viability is generally at the heart of a successful PSP transaction. As highlighted earlier there are a number of factors impairing the viability of Kenya's WSS systems, in summary:

- Systems need rehabilitation estimated to cost US\$ 1.4 billion
- Volumes are low since there are relatively few connected customers even in the major cities
- Tariffs are uneconomic and it will take time for them to be raised to economic levels
- There is a lack of reliable data meaning that it is impossible for prospective operators to assess accurately the viability of the operations.

These are very fundamental problems. They do not mean, however, that PSP is impossible, only that it will take time to achieve the degree of PSP necessary to address the investment constraints. In order to address these issues government should:

- consider adopting a 'step-wise' approach to the introduction of PSP as described above
- seek cooperating support for rehabilitation financing alongside the introduction of PSP into management
- revise tariff levels and structures so that moves are made towards full cost recovery and government subsidies are not wasted on those who do not need them
- consider clustering potential utility areas together to achieve higher volumes and a more viable utility. This is currently being considered for Kisumu and the greater lake region, as well as Mombasa and the Coastal Region.

Political will:

Political will is vital to overcome the resistance that typically comes from many quarters when privatising WSS assets. The biggest concern tends to revolve around tariff levels and the notion of private operators making a profit from what is still considered by many

Conditions for successful implementation of PSP in WSS includes

- Viability
- Political Commitment
- Comprehensive legal & regulatory Framework and
- Implementation capacity





to be a social good. Government needs to be resilient in overcoming these concerns and also have its arguments lined up to defend its position:

- water, of course, is a social necessity. But clean water, collected, treated and delivered costs money. The private sector has demonstrated a greater ability to collect it, treat it and deliver it clean to customers than the public sector, and in many cases more cheaply (e.g. in Senegal and Niger)
- whilst tariffs may increase, government needs provide assurances that the poorer off will be protected through targeted subsidies and tariff rebalancing
- any increase in tariffs will be accompanied by improved quality of service and quality of water

Legal, institutional and regulatory framework:

Progress has already been made on legal reform in the sector that should support PSP. However, institutional reform is still awaited, the new laws were not developed with the specific intention of actively stimulating PSP, and there are a number of areas in the legislation which require clarification.

Investors will look for a framework that provides certainty, inter alia, in the following key areas:

- Regulation – what form will it take (contract vs. independent regulator, or both), what areas will be regulated – tariffs, performance, environmental and by whom? independence of the regulator (theoretical and actual), capacity of the regulator
- Competition. This will always be limited in the water sector, but how, for example, will the overlaps in the licence area between the operator and private water vendors be dealt with?
- Future revenues/ tariffs/ charges, to the extent that these are subject to regulatory intervention, and not left to market forces
- Performance targets in the concession (or similar) agreements, measurement thereof and penalties for non-compliance/ rewards for compliance
- Terms of the agreements and termination provisions
- Dispute resolution procedures and equity therein.

The private sector traditionally responds fastest to regulatory measures that threaten its license to operate

A key issue central to this, is capacity. Regulation, economic regulation in particular, is a very specialist field. Other countries, Tanzania included, have looked to overcome this by establishing multi-sector regulators that help to spread the scarce resources available





for this activity across a number of sectors, recognising the similarity in the issues across sectors. Kenya would do well to look at this model. Increased PSP through concession type structures also requires effective monitoring and supervision of the concessionaire's performance, which again demands skills that are in short supply.

Establishing the regulator in the first place and also the initial running of them is likely to require external Technical Assistance including training and hands on support.

Implementation capacity:

The common models of PSP in the WSS sector are far more complex than any privatisation Kenya has yet handled. And Kenya has limited resources focused on privatisation as it is. If it is to achieve substantial PSP in the sector in any reasonable timeframe, then it will need: a dedicated team (or agency) focused on PSP in infrastructure, technical assistance i.e. specialist long-term advisers, and financial and legal advisers to work on specific transactions.

Revamping Kenya's image:

Regrettably, Kenya has a credibility problem in the area of privatisation and PSP, arising from: a sporadic privatisation programme generally, the failed Telkom Kenya Limited (TKL) sale specifically, well-publicised difficulties between KenGen, KPLC and the IPPs, accusations (whether justified or not) over the award of the second GSM licence, the issues surrounding the proposed award of a PSP contract for Nairobi water, and a general inability to convert policy into action.

To address this Kenya needs:

- Concrete action on reform for example a concession law, establishing a privatisation / PPP agency, or a separate agency dedicated to PSP in infrastructure (separating it from privatisation of other assets)
- Quick successes – the easiest would be the sale of Telkom Kenya and in the roads sector the concessioning of the Mombasa – Malaba Road (or a section of it), where there already seems to be interest
- Firm and consistent policy messages
- Investment grade rating – As at April 2002, only four sub-Saharan African countries had sovereign rating (Botswana, Mauritius, Senegal and South Africa.)
There are six key factors that are considered when assessing the sovereign rating for a country: per capita income, GDP growth, inflation, fiscal balance, current account balance, external debt levels, economic development and the default history.
- Improved international PR – highlighting the successes so far and confirming government commitment.

Conclusion

The case for PSP in the financing and running of Kenya's WSS sector is strong. It is needed to fund the large capital investments required. And it is needed to provide the





management expertise necessary to improve the quality of service and quality of water, without which the welfare of Kenya's citizens will struggle to improve.

Very many countries elsewhere in the world have found PSP to be the key to improving the performance of their WSS sectors. And there are a growing number of successful examples in Africa too.

Kenya is currently running the danger of being left behind. Introducing PSP into the WSS sector is challenging, but the fundamentals in Kenya are no worse than many other countries that have been successful. There are cities with large enough populations to support PSP transactions, and despite recent downturns, Kenya remains able to attract international interest. To achieve this, government needs to put in place a legal, institutional and regulatory framework that allows private sector investment to thrive, and convince the investor community that it means business.





Annex 1: Summary of PSP experience in WSS worldwide

The following table provides a selection of private sector contracts in water and sanitation globally.

Option	Water	Sanitation	Water and Sanitation
Management Contract	Colombia Gaza Malaysia Turkey	United States	Puerto Rico Trinidad and Tobago Gaza Bethlehem
Lease	Guinea Senegal France Guinea Italy Spain		Czech Republic France Poland
Concessions	Ivory Coast		Argentina Brazil France Philippines Morocco
BOT (and Variants)	Australia China Malaysia Thailand	Chile Mexico New Zealand	
Divestiture	England and Wales		England and Wales

