For sustainable development in water supply and sanitation

Socially Responsible Commercialisation

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supported by

DEVELOPMENT IN KENYA

NATIONAL WATER COMPANY (NWC)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BoD</td>
<td>Board of Directors</td>
<td>WAB</td>
<td>Water Appeal Board</td>
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<tr>
<td>DED</td>
<td>German Development Service</td>
<td>WB</td>
<td>World Bank</td>
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<tr>
<td>GTZ</td>
<td>German Technical Cooperation</td>
<td>WRM</td>
<td>Water Resources Management</td>
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<td>KfW</td>
<td>German Financial Cooperation</td>
<td>WSB</td>
<td>Water Services Board</td>
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<td>LVN</td>
<td>Lake Victoria North</td>
<td>WSP</td>
<td>Water Services Provider</td>
</tr>
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<td>MC</td>
<td>Municipal Council</td>
<td>WSRB</td>
<td>Water Services Regulatory Board</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
<td>WSS</td>
<td>Water Supply and Sanitation services</td>
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<td>SPA</td>
<td>Service Provision Agreement</td>
<td>WSTF</td>
<td>Water Services Trust Fund</td>
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</table>
Kenya’s population is 32 million and growing. Nearly one-fifth of our people live in fast-growing informal settlements and urban slums that lack even the most basic hygiene facilities. Public water and sanitation services, stretched from years of poor management and lack of investment in infrastructure, have been unable to keep pace with urban growth.

To tackle these challenges, the Government of Kenya has embarked on deep-rooted reforms in the water sector. The key to the success of these reforms is the commercialisation of water and sanitation services.

Commercialisation must not be confused with privatisation. Commercialisation is pro-poor. Socially-responsible commercialisation means water companies with autonomous private-sector-like management providing water supply and sanitation services, while ownership of assets remain firmly in the public domain.

The success of this concept has been outstanding. In urban centres where commercialisation has been introduced, water quality is better, customer services are better, cost recovery is higher, and affordable water and sanitation services have been brought to low-income areas to benefit the people who need it most. Commercialisation, combined with the clustering of utilities to generate economies of scale, is proving an excellent approach to achieving Kenya’s Millennium Development Goals.

I commend the Water Services Regulatory Board for promoting commercialisation and making it socially responsible. I also appreciate the long-term partnership with the German Development Cooperation through GTZ and KfW for their efforts in getting us so far.

Eng. Mahboub M. Maalim, C.B.S.
Permanent Secretary
Ministry of Water and Irrigation, Kenya

March 2007
The Kenyan experience in commercialisation over the last decade

Kenya faces serious challenges with regard to water supply and sanitation services (WSS). These arise from:

- a rapidly growing population, now estimated at 32 million people
- declining availability of water resources
- inadequate management / maintenance of existing infrastructure
- failure to replace assets or extend infrastructure according to the needs

This has led to a situation where the existing facilities do not meet the ever-increasing demand for safe water.

Challenges in Water Supply and Sanitation

12 million people live in urban areas, out of which an estimated 7 million live in densely populated low income areas such as informal settlements, slums, degraded formally-planned areas and peri-urban areas. These are the fastest-growing areas in the country and are set to multiply.

Most of the 7 million now living in low income areas are the urban poor. The living conditions in these settlements are deplorable. According to a World Bank report, the percentage of population with adequate access to water can be as low as 19% and sanitation is worse than elsewhere in the country. Overall access to safe water in urban areas is estimated at around 60%. Despite recent increases in sector investments due to water sector reform, improvements in WSS coverage have not kept pace with population growth. This means that the overall WSS service provision is still degrading.

The key challenges are:

i. Low performance level and little interest from the utilities to serve the poor. Excess staff, especially at lower cadres, explains most of the low productivity evident in public water utilities. Ratios of 25–50 employees per 1,000 water connections are common. Coupled with this is the inability to engage and retain professional managers and skilled manpower. The utilities do not have a concept of service that includes the urban poor. To a large extent, service provision has been left to informal service providers, who supply water of uncontrolled quality and at much higher price than that charged by formal providers.

Ongoing reform in the water sector is essential if Kenya is to achieve its Millennium Development Goals of sustainable access to safe water and basic sanitation for a majority of its population.
ii. **High water losses.** Levels of unaccounted-for water reach 40–70% of the water produced due to inadequate system maintenance, illegal connections, non-metered consumption and inadequate customer management.

iii. **Water wastage.** Very low or non-existent consumer metering leads to wastage of water, e.g. in the year 2000 the metering ratio for Nairobi was only 25%. As a result, billing is often based on estimates or ‘flat’ rates rather than actual consumption. Utilities are therefore unable to equitably distribute costs among the consumers based on regular and accurate meter readings.

iv. **Low efficiency in collection of revenue.** Only about 40–60% of the water billed is actually collected. This is a result of poor consumer records and inefficient collection practices. The low collection rates reflect weak management of the water utilities. Under these conditions, revenues are generally not sufficient to operate and maintain the infrastructure, let alone expand services.

v. **Tariffs do not reflect true economic cost.** Existing tariff policies are often influenced by political and other interests. This leads to the poor financial state of most utilities. The level of tariffs does not adequately reflect the true economic cost of the services.

vi. **Inadequate sewage collection and treatment systems.** There are 104 urban centres in Kenya with populations above 19,000. Only 29 of the 104 have developed sewerage systems. Where sewerage systems exist, the connectivity to properties is very low. Relatively large numbers of households and business premises are not connected to the public sewerage system. They dispose of their sewage through cesspools, septic tanks and streams, which contaminate shallow groundwater aquifers from which the informal providers, the community and consumers draw their raw water. Most utilities discharge effluent without proper treatment thereby causing pollution and outbreaks of disease.

vii. **Poor corporate governance.** The municipalities that own WSS systems often use the revenue collected for other purposes, such as paying salaries of staff in other departments.
Council members influence the day-to-day management and operation for short term political gain. Since they often lack professional knowledge, their actions are counterproductive to the sustainability of WSS systems and the improvement of service provision to the poor.

The need for reform
In order to tackle these challenges the government of Kenya has embarked on deep rooted institutional reforms in the water sector within the new legal framework provided by the Water Act 2002. To avoid duplication of roles and to inculcate focus and professionalism, separate institutions have been established to ensure specific functions, namely policy formulation, regulation, water services provision and water resources management. One of the most significant forerunners that proved an icebreaker for the ongoing water sector reforms was the formation of commercially-oriented service providers—commercialisation of WSS. The aim was to establish water companies with private-sector-like management, allowing them sufficient autonomy in decision making while ensuring that asset ownership remains within the public domain. The pilot towns for commercialisation were identified in 1996 and received support from the German Development Cooperation in capacity building and investments (GTZ and KfW respectively).

The success of this concept is outstanding and commercialisation of WSS is now fully embedded in the water sector reform process.
Since the mid-1980s the majority of water-undertaking municipalities have been the focus of systematic staff training and technology transfer with support from the German Technical Cooperation (GTZ). The first step of capacity building concentrated on training of the service delivery units of local authorities that were, at the time, established within the Town Engineers’ departments. Other WSS utilities at this time were operated by the ministry responsible for water through the Director of Water and National Water Conservation and Pipeline Corporation (NWCPC).

**Early attempts to improve performance**

**STAFF**
- Difficulty recruiting and retaining professional staff
- Overstaffing and unskilled staff due to undue interference
- Few or no incentives for performance

**COST EFFICIENCY**
- Diversion of revenues to unrelated expenditure
- Short-term political considerations to the detriment of sustainability/cost-covering tariffs
- Delays in approval of tariffs and budgets

**MANAGEMENT AND TECHNICAL DEFICIENCIES**
- Lack of adequate resources: finance, transport, test kits, offices etc.
- Low billing and collection efficiency, high unaccounted-for water
- No objective orientation and use of performance management tools

Despite training, technology transfer and investment in infrastructure, performance up to 1996 was still below par.

In 1996, a review carried out showed that despite the systematic training, technology transfer measures and investments, the management of water and sewerage systems was still not satisfactory in terms of service quality, water losses, revenue collection, maintenance and response to consumer needs. There were problems in recruiting and retaining skilled managers and other personnel. In addition, municipalities diverted WSS income to unrelated areas. WSS service provision was overstaffed especially at lower levels, thus absorbing financial resources that were critically needed to support optimal operations of water and sewerage systems.

**Staff training and technology transfer not achieving objectives**

Support to the water-undertaking municipalities included capacity building to improve operations, maintenance and financial management. However, a review carried out in 1996 showed that in spite of the systematic training, technology transfer measures and investments, the management of water and sewerage systems was still not satisfactory in terms of service quality, water losses, revenue collection, maintenance and response to consumer needs. There were problems in recruiting and retaining skilled managers and other personnel. In addition, municipalities diverted WSS income to unrelated areas. WSS service provision was overstaffed especially at lower levels, thus absorbing financial resources that were critically needed to support optimal operations of water and sewerage systems.

**Enabling framework and a business-like approach**

Despite the efforts put in place by GTZ and the rehabilitation and extension of the systems through KfW, results were disappointing.
Thus, the 1996 review recommended the establishment of an enabling framework at local level in order to obtain sustainability of the investments. Key to this was the autonomy of management, the introduction of commercial and business principles (private-sector-like management) in the water services sub-sector and a strong emphasis on consumer orientation.

The approach was to reduce council involvement in the day-to-day operations and decision-making while increasing the role and responsibility of professional managers with autonomy over staff as well as technical and financial management. The acceptance of this approach led to the acceptance of commercialisation as a viable option to improve performance of WSS in Kenya for the benefit of all consumer groups, particularly the poor. Commercialisation also offered to fulfil criteria outlined in the Millennium Development Goals and the Human Right to Water, such as sustainable access to outlets and guaranteed quality of water and service provision in general.

The step-wise approach that led to the concept of commercialisation

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\begin{tabular}{l|l|l}
\hline
\textbf{LOCAL AUTHORITY} & \textbf{COMMERCIALISATION} & \textbf{Results:} \\
\hline
Water Section established within Town Engineer’s Department & \textbf{Water Company} & 1. Trigger for overall sector reform \\
& Autonomous company with shareholders, board of directors, management and staff & 2. Best practice for large scale implementation of commercialisation, including clusters of towns to improve commercial viability \\
\hline
\end{tabular}
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- Diversion of revenue to unrelated expenditures
- Poor operation and maintenance of facilities
- Poor performance and service delivery
- Diversion of revenue to unrelated expenditures
- Inadequate maintenance
- Inability to attract qualified managers
- Interference in decision making
- Improved commercial and technical performance
- Potential to attract funding for investment
- Professional management
- Cost reduction

Efficiency in collection of revenue
Attention to pro-poor approaches/social responsibility
Good corporate governance
Water losses, wastage, costs

Kenya’s urban water sector has undergone tremendous transformation in recent years. Large-scale implementation of commercialisation is an integral part of it.
Realising that the concept of WSS service provision by a public department of a municipality, government ministry or a state corporation does not lead to satisfactory services for consumers, the Kenya Government opted to implement commercialisation of WSS on pilot basis.

Commercialisation was carried out in three medium-sized towns — Nyeri, Eldoret and Kericho — where each of the municipalities incorporated limited liability companies within the provisions of the Companies Act Cap. 486. The companies became the agents of the municipalities in WSS provision, the terms of the agency defined in an agency agreement. Asset ownership was left with the municipal councils and hence in the public domain. This concept of commercialising operation of public assets is today duplicated in other sectors such as transport, energy etc. Policy making and management of WSS systems was clearly separated at local level. WSS service provision could now be professionalised.

The role of overseeing and giving direction to management was transferred from the local authorities, represented by council members of the municipality, to a board composed of stakeholders and professionals. This was a precondition to move to acceptable performance in WSS by giving management the needed autonomy in day-to-day operations. Decisions could now be focused on clear and long-term goals and these were no longer influenced by short-term political gains.

Management is now judged according to performance with indicators on self-financing/sustainability, consumer satisfaction, access to services, service hours, cost of production, etc.
Ring fencing the revenues to ensure financial sustainability

Commercialisation enables “ring fencing” of revenues generated from WSS services. WSS service provision is no longer seen as a cash cow to finance expenditures not related to the water and sanitation sub-sector. Through commercialisation an increasing amount of internally-generated funds are now available for operations, maintenance and re-investment to improve and sustain delivery of services. Self-sustainability of the WSS infrastructure is increasing due to ring fencing, growing efficiency of operations and better maintenance of the systems.

Autonomous board of directors steer the company, practice good corporate governance

The local authorities retain ownership of the companies and exercise control through an annual general meeting. Direction giving is left to the board of directors of the WSS company and day-to-day operation to professional managers, headed by a managing director. The autonomous board of directors (BoD) oversees the performance of managers and employees of the company. The BoD is gender sensitive and composed of stakeholders and professionals representing various sectors—finance/business, domestic consumers, central and local governments, professional bodies and non-governmental organisations. Depending on the size of the water company, the number of directors on the board range from 7 to 11. Generally, the composition of the BoD is such that there is a balance in numbers between the private sector and civil society on one side and public institutions (local authorities and central government) on the other.

The BoD is responsible for the recruitment of corporate management teams through a transparent and competitive process. It sets the strategic vision and give direction for the company. It is also responsible for monitoring the performance of the management team against performance targets/benchmarks.

Incentives offered by autonomous operators to their staff result in higher performance and thus leads to lower costs for the same services than operation by national and local public administration. Operators such as ministries, municipalities and parastatals are more subject to political interference following short-term interests. In addition, their salary schemes are less likely to attract and retain good managers.

Reforming the sector will lead to a conducive environment for investment. This will attract increased support from development partners and establish potential for private sector investment.

Commercialisation leads to increased efficiency, effectiveness and investment in the water sector
and practicing good corporate governance. This is done through committee meetings, BoD meetings and general meetings.

To begin the commercialisation process, support is required to build consensus among stakeholders, incorporate an acceptable entity, activate and consolidate company business operations. Steps are taken to:

- Build consensus and support among stakeholders
- Develop memorandum and articles of association for the company
- Incorporate the company in accordance with the provisions of the Companies Act Cap. 486
- Recruit corporate management team
- Develop business plans — 5 to 10 year strategic plans, 5 to 10 year corporate plans, and annual budgets
- Establish organisational design and staff appraisal focused on optimising human resources
- Induce culture change to build a commercial and consumer responsive culture, establish corporate identity and positive corporate image
- Implement efficient meter reading processes
- Implement efficient billing and financial management and accounting systems
- Carry out capacity building to improve corporate governance, ensure efficient and effective operations and maintenance
- Proceed to asset identification, inventory and valuation
- Provide computer hardware, office equipment and furniture

These support initiatives are geared towards ensuring steady improvements in performance in order to reach sector benchmarks. Only by achieving sustainability and efficiency of the systems can services be extended to the poor.
Such support was offered to the establishment of the 3 pilot companies Nyewasco, Eldowas and Kewasco.

The three pilot water companies were incorporated in 1997.

- Nyeri Water and Sewerage Company Limited — Nyewasco (operational 1998)
- Eldoret Water and Sanitation Company Limited — Eldowas (operational 1999)
- Kericho Water and Sanitation Company Limited — Kewasco (operational 2003)

The first steps carried out after incorporation included appointment of directors, recruitment of management teams, establishment of strategic plans and business plans, orientation on consumer responsiveness with the implementation of billing, collection, consumer complaint systems etc., as well as updating consumer databases, implementation of a human resources management plan to offer training and ensure optimum staffing levels within sector benchmarks, and asset inventory and management systems.

Nyewasco commenced operations in July 1998 as an agent of the Municipal Council of Nyeri providing water and sewerage services. The terms of the agency were spelt out in an “agency agreement”. The agency agreement placed an obligation on the company to ensure WSS service provision to low income areas.

Support to the newly-commercialised water companies was provided for their incorporation, organisational design, improvement of financial, commercial and technical performance, as well as for human resources development and capacity building.

**COMMERCIALISATION OF WATER SERVICES PROVIDERS: NYERI**

**INPUT**
- GTZ
- Ring-fencing

**NYEWASCO**
- KtW GTZ
- Organisational Development
- Induction and corporate governance training
- Improve commercial operations
- Culture change, capacity building by training and learning by doing
- Business planning
- Procurement of equipment
- Improve responsiveness
- Establish good corporate image

**KtW**
- GTZ
- Improvement of Business Systems
- Office space and work place equipment
- Basic IT equipment
- Upgrade of existing production and distribution facilities
- Investment for expansion

**NYEWASCO**
- KtW GTZ
- Improvement of Operational Performance

**Necessary precondition**
- Management at arm’s length of Nyeri Municipal Council
- Organisational design
- Staff appraisal
- Staff training
- Rightsizing

**Autonomous company (NYEWASCO) established**
**Staffing levels approach benchmark levels**
**Consumer-responsive business culture**
**Cost reduction and savings**
Eldowas commenced operations in July 1999 while Kewasco only commenced in July 2003. The delays in commencement by Eldowas and Kewasco were because of attempts by the local authorities to reverse council decisions to commercialise. The main motive was to keep the income of WSS under the control of the local authorities — not to lose the “cash cow” of WSS despite the deterioration of services and infrastructure. Due to these delays Nyewasco absorbed the bulk of the support provided by German Technical Cooperation for the three pilot commercial companies.

The rapid performance improvements achieved by Nyewasco provided a strong incentive for the other pilot companies to come on board and commence operations as commercial entities. Nyewasco is presently the best practice model for Kenya and provides a benchmark for other water companies.

The memorandum and articles of association for WSS companies

The memorandum of association sets out the objectives for which the company is incorporated, gives shares to each shareholder and stipulates the value of the shares. The memorandum of association for water companies must satisfy the Companies Act Cap. 486 in order to fulfil the requirements for incorporation, and the Water Act 2002 in order to qualify for appointment as a water services provider.

The articles of association sets out the internal regulations of a company. In addition to fulfilling the requirements of the Companies Act, the articles of a water company should be in line with regulation e.g. on standards of service provision and good corporate governance.
Two success stories of commercialisation

Nyewasco and Eldowas

Commercialisation of WSS has increased efficiency and effectiveness in the delivery of WSS services. The performance improvements realised by the pilot water companies in Nyeri and Eldoret provide a convincing case to promote commercialisation on a large scale. Although there are challenges remaining, the progress of Nyewasco and Eldowas shows that they can be overcome.

The pilot companies Nyewasco and Eldowas developed business plans (strategic plans, corporate plans and annual budgets) that defined their vision, mission and strategic objectives. These plans have continued to be reviewed and revised to respond to emerging issues and developments to ensure they realistically focus on achieving the objectives of the companies.

Key targets and performance achievements

Since commencement of operations, Nyewasco and Eldowas have improved efficiency and effectiveness in service delivery as shown by key performance indicators. These significant achievements on technical and management development have enabled a gradual move towards sector performance indicators/benchmarks.

Nyewasco today has achieved all major targets set in 1998. It doubled the annual revenue, expected to reach KSh 120 million in 2007. The revenue collection efficiency is about 98% on average. 10–25% of the revenues are reinvested to improve service provision, especially to the poor, through water kiosks in densely populated low income and informal settlements. Other achievements include:

Customer feedback

The results of a public opinion survey carried out in 2002 captured the consumer perceptions on services provided by Nyewasco:

- 81% of the respondents expressed satisfaction with the improvements in service delivery
- 81% of the respondents expressed satisfaction with the quality of the supplied water
- 78% confirmed that they received a correct monthly bill
- 76% expressed satisfaction with the customer services
- However, only 53% expressed satisfaction with sewerage services—indicating that while water services have improved, much still remains to be done for sanitation
Two success stories of commercialisation

The pilot commercialised utilities have realised improved performance and provide the best practice for upcoming commercial utilities in Kenya.

**Revenue collection efficiency**

<table>
<thead>
<tr>
<th>Year</th>
<th>Efficiency in %</th>
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<td>2004</td>
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</tr>
<tr>
<td>2005</td>
<td>180</td>
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**Improvements in coverage by water services**

- **Nyewasco**
- **Kewasco**
- **Eldowas**

**Growth in revenues of the pilot commercialised WSCs**

<table>
<thead>
<tr>
<th>Year</th>
<th>% with initial base year</th>
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<tr>
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<td>2004</td>
<td>90</td>
</tr>
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<td>2005</td>
<td>100</td>
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**Percentage of re-invested revenues 1998 - 2003**

<table>
<thead>
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<td>2003</td>
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**Staff per ‘000 connections (W&S)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Staff per ‘000 Connections (W&amp;S)</th>
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<tbody>
<tr>
<td>1998</td>
<td>30</td>
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</tr>
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<td>2006</td>
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Improved quality
- Satisfactory water quality achieved and sustained. Complaints on high turbidity of water that were very frequent in the past have disappeared.

Cost saving
- The use of alum powder instead of lumps reduced the alum usage by over 50% leading to cost savings on chemicals.
- The recirculation of wash water resulted in energy savings of more than 30%.
- Unaccounted-for water dropped from 46% in 1999 to 30% in 2006.
- Staff per thousand connections down to 7 in 2006 from 24 in 1998.
- Cost coverage increasing / O&M cost coverage achieved.

Service hours
- Water production capacity increased from 5,700m$^3$/day to 27,000m$^3$/day increasing service hours from an average 10 hours to 24 hours.
- Pipe bursts are attended to on a 24-hour basis.

Eldowas, although in business for a shorter time, has also made several performance improvements. Water losses dropped from 60% to 38% in the year 2003. Consumer meters have been installed with a great positive impact on customer satisfaction and reduction of unaccounted-for water.

Water and sewerage services have been extended and water kiosks established in the low income areas.

Revenues increased considerably. In the year 2001/2 the company made an operating surplus of KSh 32.8 million compared to KSh 8.6 million the year before. In 2004 and 2005 the revenue collection efficiency was on average 100% compared to 60% in 2000, including collection of old debts.

<table>
<thead>
<tr>
<th>NYEWASCO</th>
<th>ELDOWAS</th>
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<tbody>
<tr>
<td><strong>Vision</strong></td>
<td>To be a model of self sufficiency and effective service provision and continue to be viewed as a pathbreaker in the commercialisation of the Kenya water sector.</td>
</tr>
<tr>
<td><strong>Mission</strong></td>
<td>Being committed to supplying clean water and rendering sewerage services to all the residents, industrial, commercial and business interests in Eldoret in a sustainable manner.</td>
</tr>
<tr>
<td><strong>Strategic Objectives</strong></td>
<td>1. Expedite implementation of a capital expansion programme to increase production capacity. 2. Create individual responsibility and customer orientation on the part of employees through transformation of internal culture. 3. Increase operational efficiency and eliminate wastage by improvement and enhancement of internal business processes and management systems. 4. Direct attention to paying customers enlarges the geographical coverage to all areas of unmet demand, and increases the number of connections.</td>
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<tr>
<td></td>
<td>1. Adopt a customer-oriented approach, efficiency and quality management in service delivery. 2. Capacity building, training, and motivation of employees and workforce. 3. Promote public health, prevent water pollution and protect the environment in liaison with the community and all relevant stakeholders. 4. Promote best practices in catchment protection, conservation and management by working in partnership with the communities, stakeholders and government agencies. 5. Contribute to investment, industrialisation, alleviation of poverty, and employment generation in Eldoret. 6. Extend service network. 7. Educate the public on the need and importance of using treated piped water and safe disposal of sewage. 8. Rehabilitate old infrastructure and install modern equipment and systems. 9. Reduce unaccounted-for water in technical and commercial fields.</td>
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## From pilot to large-scale implementation

<table>
<thead>
<tr>
<th><strong>Policy Formulation</strong></th>
<th><strong>Expected Outcomes Under Water Act 2002</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Poor coordination and duplication of roles</td>
<td>- Improved coordination in water sector under one ministry</td>
</tr>
<tr>
<td>- Poor accountability</td>
<td>- Clear policy and accountability</td>
</tr>
<tr>
<td>- Poor attention to water resources management</td>
<td>- Focused attention to water resources management</td>
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<table>
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<tr>
<th><strong>Regulation</strong></th>
<th><strong>Expected Outcomes Under Water Act 2002</strong></th>
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<tbody>
<tr>
<td>- Lack of clear regulatory framework resulting from dual roles</td>
<td>- Clear regulatory framework</td>
</tr>
<tr>
<td>- Lack of performance monitoring and evaluation</td>
<td>- Performance monitoring and evaluation as part of sector control mechanisms</td>
</tr>
<tr>
<td>- Poor performance of water undertakers</td>
<td>- Promotion of competition among water services providers</td>
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### Establishing the enabling framework

Commercialisation lays the foundation to increase access of the urban poor to sustainable systems, adequate service level (low cost technology) and cross subsidisation. This becomes increasingly important as urban centres grow rapidly in terms of population and economic activities.

The absence of written policies and strategies in the past, prior to the Sessional Paper No. 1 of 1999, left room for sector actors to implement isolated projects devoid of a holistic approach, which could not contribute to achievement of sector objectives.

The Water Act 2002 changed the sector significantly by defining clear roles for sector actors according to new sector principles such as decentralisation, separation of key functions in order to reduce conflicts of interest and avoid duplication, introduce commercial orientation and application of sound business principles, activate private-sector-like forces, etc. This shall continuously improve sector performance.

The ongoing water sector reform follows principles such as:

- separation of the management of water resources from the provision of water and sanitation services
- separation of policy making from day-to-day operation and regulation
- decentralisation of functions to lower level organs
- involvement of non-government entities in the management of water resources and WSS service provision.

The Water Act 2002 defines clear roles and responsibilities for all sector actors. This will result in improved performance as the sector moves from pilot projects to large-scale implementation of commercialisation.
Commercialisation has proved to be a successful way to improve delivery of WSS services through formal service provision. The next step is to factor the lessons learned into the sector reform process, in order to move to large-scale implementation.

The new legal and institutional framework on the national and regional level requires water services to be provided on a commercial basis and in accordance with sound business principles. In addition, the concept of commercialisation was better adjusted with developments such as MDGs, international declarations including Human Rights to Water and Donor Harmonisation (Paris Agenda), as well as embedded in a sector-wide approach to planning (SWAP). Commercialisation is now pro-poor oriented, aligned to the national pro-poor regulatory framework.

The Water Act 2002 promotes sustainability of WSS systems operation and investments by specifically requiring that WSS services be provided on a commercial basis. Section 57(5) of the Act: “The application (for services provision) shall not be granted unless the Regulatory Board is satisfied that (d) the applicant, or any Water Services Provider by whom the functions authorised by the licence are to be performed will provide the water [and sewerage] services authorised by the licence on a commercial basis and in accordance with sound business principles”.

The Water Act 2002 therefore promotes commercialisation of water services, which is now being undertaken not only by the pilot cases, Nyewasco and Eldowas, but on a larger scale.
Within the Water Act 2002, companies incorporated by local authorities with the specific object to provide water and sewerage services may be appointed as WSPs by the licensee (WSB).

**INSTITUTIONAL FRAMEWORK WATER ACT 2002**

- **WAB**: Water Appeal Board
- **WSTF**: Water Services Trust Fund
- **WSB**: Water Services Board
- **WSRB**: Water Resources Regulatory Board
- **WSS**: Water and Sewerage Services
- **WRMA**: Water Resources Management Authority
- **CAACs**: Catchment Area Advisory Committees
- **WRUAs**: Water Resources Users Association
- **NWCPC**: National Water Conservation and Pipeline Corporation
- **MWI**: Ministry of Water and Irrigation

**Diagram:**
- **Users, Consumers**
- **WSFs**
- **WSRs**
- **Regional**

**Legend:**
- **Local level**
- **Regional level**
- **National level**
- **Water Resources Management**
- **Water and Sewerage Service**
- **Regional WRMA Office**
The reform created a new structure in the water services sub-sector, which is now separated into macro-, meso- and micro-implementation levels.

On the national level, the Water Services Regulatory Board (WSRB) licenses the regional Water Service Boards (WSBs), asset holders on the meso level, and monitors performance in the sector. Furthermore, the WSRB develops rules and guidelines e.g. on tariff setting, procedures for customer complaints, reporting standards on performance. The WSRB through regulation strikes a balance between economic goals (sustainability) and social principles (access of the poor), and promotes good governance practices.

The 7 WSBs as asset holders enter into contracts with Water Services Providers (WSPs) as agents in service provision, the terms of the agency defined in a Service Provision Agreement (SPA). The SPA spells out the role of a WSP: to manage, operate and maintain the infrastructure.

There are other institutions on the national level such as the Water Services Trust Fund (WSTF) and the Water Appeal Board (WAB). The WSTF is a financing basket focusing on the service provision to the poor (poverty basket). The Water Appeal Board (WAB) acts as a dispute resolution mechanism in the water sector. It hears and determines appeals on orders, decisions, permits and licences.
Clustered Utilities in LVN WSB
1. NZOWASCO: Kitale, Webuye, Bungoma
2. WESTERN WATER: Kakamega, Shitoli, Mumias, Butere, Nambale, Busia
3. AWASCO: Mbale, Kaimosi, Maseno, Sosiani, Vihiga

Clustering: Economies of scale to benefit the poor

Water sector reform is now moving towards large-scale implementation of commercialisation of urban WSS. The promotion of commercialisation is part of the regulatory framework put in place by the WSRB. This is also a focal area for support by German Development Cooperation (GTZ, KfW, DED).

The lessons learned from commercialisation not only indicate that it has to be pro-poor focused in order for the poor to benefit (socially responsible commercialisation) but also that the consumers — particularly the poor — would benefit much more if the customer base were increased through syndication of utilities into viable clusters. This leads to reduced overheads and therefore to reduced costs of production, to more professional management and the potential to increase cross-subsidization to benefit the poor.

Such benefits of economies of scale can already be seen in Lake Victoria North (LVN) where the WSB with the support of German Development Cooperation is promoting the concept of utility clustering. The result is an improvement of the commercial and technical viability of small and medium-sized urban WSS systems.

Clustering is the grouping of several urban centres/towns into a single commercially-oriented Water Service Provider (WSP). The creation of a larger customer base helps to render services more efficiently and at a lower cost. Clustering enhances further the efficiency and effectiveness of a commercialised WSP and thus improves the overall sub-sector performance. By rule of thumb, it
has been recommended that the lowest threshold for clustering be approximately 10,000 consumer connections.

The first pilot cluster, Nzoia Water Services Company (Nzowasco), in Lake Victoria North WSB was incorporated by three local authorities — Kitale MC, Webuye MC and Bungoma MC. It started operation in February 2005. The company took over the operations of four utilities (Kitale, Webuye and Bungoma water supply and sewerage utilities, and Ndivisi-Makuselwa water supply that serves Kimilili town and its environs) with infrastructure in a very poor state. Although Nzowasco has made progress since its establishment in the areas of water production, distribution, wastewater management, cost optimisation and customer care, there is still much left to do. The cluster company Nzowasco faces an uphill battle due to:

i. **High energy costs**: The technical design of the system utilised pumping as opposed to cost-saving gravity options.

ii. **High water losses**: Unaccounted-for water averaged over 70%. The majority of the customers are not metered, most consumer meters installed in the system are defective and meter reading is inadequate.

iii. **Non-cost-covering tariffs**: Tariffs were fixed based on short term interests without any economic consideration and do not cover the full cost of providing the service.

iv. **High costs of treatment**: Poor quality of raw water leads to high treatment costs.

v. **Lack of performance orientation**: An appropriate mechanism for reporting, monitoring and evaluating performance of personnel was missing.

vi. **Lack of incentives and planning**: There were no incentives to improve performance. Due to poor planning and lack of clear targets, management was pre-occupied with “firefighting” rather than developing a planned and systematic response to problems.

Nzowasco managed as the first cluster to come on course and has gradually realised performance improvements. It has concentrated on:

- Enhancing operations and maintenance of water and sewerage infrastructure, which was rewarded by the reduction of technical
and commercial losses. In Feb 2005 unaccounted-for water was very high, ranging from 64–95% with an average across all towns of 77%. By Oct 2006 unaccounted-for water had fallen to 57–76% with an average of 63% across all towns — and still improving.

- Acquiring appropriate human resources and improving capacity to move to rehabilitation of existing systems and to improve production and distribution. In Feb 2005 total water production across all the four towns was 57% of design capacity (total production at 12,527 m$^3$/day against design capacity of 22,060 m$^3$/day). By Oct 2006 the capacity utilised was on average 71% of design capacity.

- Improving coverage. In Oct 2006 the active water connections across all the four towns was 8,103 compared to the initial 6,589 in Feb 2005, an increase of 23%.

- Improving business systems by implementing effective and efficient meter reading, billing and revenue collection processes. In Feb 2005 the average monthly billing and revenue collection (including collection of arrears) was Ksh 4 million and Ksh 3.2 million respectively. By Oct 2006 the average monthly billing had risen to Ksh 6 million while revenue collection was equal at Ksh 5.6 million leading to a collection rate of 91% (inclusive of collection of arrears).

In the meantime, two other cluster companies have been established within the Lake Victoria North WSB area. They are:

- Western Water Services Company to operate and manage six utilities namely Shitoli WS, Kakamega WSS, Mumias WSS, Butere WS, Nambale WS, Busia WSS

- Amatsi Water Services Company to operate and manage five water supplies namely Mbale WS, Kaimosi WS, Maseno WS, Sosiani WS and Vihiga WS

The two cluster companies entered into a Service Provision Agreement with the WSB and began operations in May 2006.

It is encouraging that other WSBs have followed the approach of clustering such as Lake Victoria South, Athi, Rift Valley, Northern and Tana.

The large-scale implementation of commercialisation is now gaining speed. Over 70 commercially-oriented WSPs have signed Service Provision Agreements with WSBs approved by the WSRB. Out of these, 13 are cluster companies. All these companies are modelled along the lines of commercialisation piloted by Nyewasco and Eldowas while the clusters have been established based on the experience of Nzowasco pilot cluster.
Building capacity for sustainable development

Support given to the pilot companies focused on medium and long-term goals and followed GTZ principles of capacity building for sustainable development, particularly at individual and corporate level. This consisted of:

- Transfer of knowledge by formal training and training on the job (learning by doing)
- Promotion of behaviour change
- Introduction of incentive schemes
- Improvement of work processes and management tools

From the start, the concept for the support of commercialisation included:

- A holistic approach with a package of interventions in all areas of corporate management (human resources, technical, financial and commercial), balancing social, economic and ecological goals
- Long term support with ownership at every stage by the supported utility
- Anchorage of all actions into the partner’s structure
- Orientation to the needs of the target group and beneficiaries (staff, management, board, owners of the utilities)
- Impact and monitoring of changes on consumer and staff level

Both sides proved crucial to the success of the transition

The partners: Openness of discussion and willingness for self-reflection (criticism), determination of staff and management to
take on responsibilities, and good corporate governance throughout the process by BoD and owners of assets.

**The advisors:** Acted as enablers, catalysts and facilitators; worked towards self-help in steering the change process. This ensured that the capacity gaps were closed by a partner eager to assume responsibilities.

**Continuing progress**

The result of this approach was substantial progress in sustainable development for WSS. The utilities have continued improving in their performance, five years after GTZ support was phased out.

The next step has been to support the reform process at national level — sector reform — ensuring that lessons learned are integrated in the design and moving to countrywide implementation of best practices. This has helped to create an enabling environment with a new legal and institutional framework and pro-poor regulation, following the approach of vertical integration and mainstreaming of key principles as another key condition for sustainable development.
Looking ahead with socially responsible commercialisation

The improvements that have been achieved with commercialisation and clustering of WSS services are remarkable:

- Improvement of water quality
- Increase in water production and water availability
- Improvement of service hours
- Reduction of unaccounted-for water
- Extension of WSS service provision to low income areas
- Improvement of customer services
- Improvement of cost recovery

Within the Water Act 2002, a legislative framework has been provided that promises a sustainable, effective and efficient provision of water and sanitation services. It is a sound basis that now has to be implemented on a wider scale. New institutions have been established and the responsibilities of each institution defined and clarified. Commercialisation has an enabling legal framework.

Looking ahead, coordination at governmental level has to be reached in order to achieve cooperation between the relevant ministries. In addition, the separation of water assets and staff from other operations under the ministries, and the establishment of performance standards, are needed.

Budgetary allocation from the government aiming at social goals and other financial support should be channelled directly towards capacity and system improvements. Strengthening and encouraging the institutional autonomy is a necessary precondition for successful commercialisation. The board and management
must be protected from political interference through appropriate regulatory mechanisms and instruments. A performance-based reward and incentive system and the implementation of an objective performance evaluation are important components as well. Comparative competition is a powerful regulatory mechanism to enhance the improvements in service provision.

**Sector reform has led to significant improvements in specific areas of WSS in a short time. It is now important to move to large-scale implementation of the achievements**

The formation of autonomous companies responsible for water and sewerage service provision is necessary for the performance enhancement of the whole water sector. Broadening the concept of commercialisation and its large-scale implementation all over Kenya provides an opportunity to rapidly improve the efficiency and effectiveness of service delivery and is a sure way forward to make it sustainable.

It is important to implement socially responsible and sustainable measures to safeguard water sources for the whole Kenyan population. Water is the basis of all life and everybody should have the right to access water of sufficient quantity and quality.

The WSBs and WSPs should now have an increased focus on serving the poor, especially in urban areas. These areas at the moment are served by informal providers not covered by the regulatory regime. The quality of water supplied cannot be ascertained while the cost is 5–10 times higher than that of individual house connections operated by the utilities. WSPs should be compelled to re-invest an increasing amount of revenue to improve service delivery since the success of sector reform shall, in the long run, be measured not only by improved viability of the new institutions but also by improvements in services and coverage.
Utilities operating under regulation can serve the urban poor more cheaply and with higher quality than informal providers

In many Sub-Saharan African countries the poor represent 50% and more of the urban population. This majority live in the settlements of the urban poor, which are in addition the fastest growing areas in the countries.

Consequently, providing sustainable access to safe water and basic sanitation in the settlements of the urban poor has the highest leverage in regard to attaining the Millennium Development Goals. Investments in the settlements of the urban poor must therefore have the highest priority.

As the graph shows, the poor pay much more for water when served by an informal (private) provider than connected consumers being served by a utility which operates under regulation. In addition, the poor receive inferior water quality from the informal providers as in general no systematic water testing is carried out. Often the water source (a borehole) is within the crowded settlements in proximity of traditional sanitation installations and prone to pollution.

Bringing access to the poor

The way forward is clear: either bring informal providers under regulation (water quality, tariffs, service level, etc.) or substitute informal providers with services offered by a regulated utility (commercially-oriented public enterprise) in order to enable the poor to access the advantages the connected consumer enjoys.

For this to be realised, it is crucial to link utilities such as water kiosks to a bigger supply system.

Sector reforms in the last few years have created new institutions with higher performance. Professionalism has gained ground thanks to commercialisation, private sector participation, and regulation.

Looking ahead with socially responsible commercialisation

Without formalisation of service provision, sustainable development in WSS will not be achieved

Data from World Bank (40 countries, 97 locations, WB presentation in Nairobi, May 2006)
Many commercial utilities are today ready to extend services to the settlements of the urban poor as this improves their image as service providers and helps them to achieve better tariffs during negotiations with the regulating authority.

For the urban poor, socially responsible commercialisation is bringing growing access to water and sanitation services in line with the Millennium Development Goals.
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