



## Challenges in developing an institutional framework

by International Ecological Engineering Society (IEES)

### NETSSAF Coordination Action



Project supported by the European Union under the 6<sup>th</sup> Framework Programme  
Start date: 1<sup>st</sup> of October 2006  
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### – About Institutional Framework –

The term “institutional framework” refers to a set of formal organizational structures, rules and informal norms for service provision. In the field of water supply and sanitation, this involves outlining the responsibilities of water services institutions for various aspects of the water sector, including the following areas: water resource management, allocations, monitoring and licensing water services provision, regulation, contracts with service providers and consumer charters. The key principles informing the institutional vision are as follows (adapted from DWAF 2008):

- The need for a clear definition of **roles and responsibilities**;
- The separation of **regulatory and operational responsibilities**;
- Local government is responsible for ensuring water & sanitation services provision;
- Flexibility in terms of scale and type of water & sanitation services provider;
- The **private sector** and **civil society** have a role to play;
- **Management** must take place at the appropriate level;
- Building on **existing capacity**;
- The need for transformation and policies sensitive to **gender** differences.

Lack of sound institutional frameworks is the root cause of many failures in service delivery – and a major cause of failed sanitation provision. Such institutional weakness often results from the lack of a clear institutional “home” for planning and management, together with limited capacity within institutions to co-ordinate and manage initiatives. The all-too-common outcome is declining services leading to poor cost recovery and ultimately failed investments that do not meet either current or future demand (Scott et al. 2003).

The capacity to provide services effectively and efficiently is critical for the long-term sustainability of service provision, not only in the field of sustainable sanitation, but in general. Most of the constraints to accelerated delivery of service are due to capacity problems at provincial and municipality levels. Appropriate management models are required to ensure that sanitation service delivery is sustained beyond the implementation of infrastructure projects (WRC 2003).

Institutional frameworks for sustainable sanitation have to meet major challenges in achieving both sustainable and equitable service provision. Central is the improvement of cost recovery to generate the resources for maintaining and improving services, to meet both existing and future demand. This requires a sustained effort and long-term commitment to addressing key issues that require greater emphasis, such as (WELL 1998):

- Water resources allocation and management;
- Improved integration of water supply, sanitation and hygiene promotion;
- A commercial orientation including improved financial management, investment planning, and tariff setting;
- Improved organizational autonomy, transparency, and accountability as well as decentralization and delegation to the lowest appropriate level;
- Improved equity and gender perspectives through dialogue with low-income communities and well-targeted subsidies, seeking to minimize perverse subsidies;



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- Demand responsive approaches including participatory methods and the provision of appropriate marketing and customer services;
- Private sector participation and regulation with appropriate incentives;
- management of operation and maintenance (O&M); and
- Human resources development (HRD) and management development that supports improved capability in all these aspects.

Promotion of substantial institutional reform may be appropriate in many cases and could include providing support to a variety of initiatives in the WS&S sector, such as (WELL 1998):

- Decentralizing;
- Commercializing or corporatizing of institutions;
- Unbundling or rebundling of functions;
- Organizational restructuring;
- Changing roles of government from service provider to regulator and facilitator;
- Appropriate forms of public private sector partnerships; and
- Instituting agreeing targets performance between different organizations or levels of government.

Decentralization will bring government closer to rural communities and is a positive factor for better services and for the use of local capacity. However, a phased transition is needed to address several issues (The Water Page 1999):

- local authorities generally lack capacity and resources;
- they tend to take over community management;
- the relationships between sector agencies and local authorities need to be clarified.

Experience has proved that benefits are only achieved when hardware installation is fully integrated with properly planned and implemented arrangements for the long-term operation, maintenance and financing of an improved service.

### **References:**

Department of Water Affairs and Forestry of the republic of South Africa (DWAF) 2008.  
[http://www.dwaf.gov.za/dir\\_ws/waterpolicy/default.asp?nStn=policy\\_detail&Policy=22](http://www.dwaf.gov.za/dir_ws/waterpolicy/default.asp?nStn=policy_detail&Policy=22)

Water Research Commission (WRC) 2003. Sanitation Research Strategy. Available from:  
<http://www.wrc.org.za/downloads/special%20publications/SanitationResearchStrategyFinal1.pdf>  
(last accessed: Mai 6th, 2008)

Scott, R., Cotton, A.P. and Govindan, B. (2003) Sanitation and the Poor. Available from:  
<http://www.lboro.ac.uk/well/resources/well-studies/full-reports-pdf/satp.pdf>  
(last accessed: Mai 6th, 2008)

Water and Environmental Health at London and Loughborough (WELL) 1998. Guidance Manual on Water Supply and Sanitation Programmes. Available from:  
<http://www.lboro.ac.uk/well/resources/Publications/guidance-manual/guidance-manual.htm>  
(last accessed: Mai 5th, 2008)



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The Water Page 1999. [http://www.africanwater.org/mpumalanga\\_statement.htm](http://www.africanwater.org/mpumalanga_statement.htm)  
(last accessed Mai 13th, 2008)

### ***Further Readings:***

WHO/UNEP 1997. Water Pollution Control - A Guide to the Use of Water Quality Management Principles. Available from: [http://www.who.int/water\\_sanitation\\_health/resourcesquality/watpolcontrol.pdf](http://www.who.int/water_sanitation_health/resourcesquality/watpolcontrol.pdf)  
(last accessed Mai 14th, 2008)

World Bank & PPIAF 2002. Design of Institutional Framework for Water Supply & Sanitation in Kathmandu Valley, Nepal. Available from:  
[http://wbln0018.worldbank.org/ppiaf/activity.nsf/files/A080800-S-WTS-RF-NP-Final\\_Report.pdf/\\$FILE/A080800-S-WTS-RF-NP-Final\\_Report.pdf](http://wbln0018.worldbank.org/ppiaf/activity.nsf/files/A080800-S-WTS-RF-NP-Final_Report.pdf/$FILE/A080800-S-WTS-RF-NP-Final_Report.pdf) (last accessed Mai 7th, 2008)

### **- Building on existing capacity -**

For the development of an institutional framework for the sustainable sanitation project it is very important to understand if there is an existing institutional framework with respect to water and sanitation and solid waste management and if so, how the framework works. For the new to be developed framework it may be advisable to build on and strengthen the existing institutional structure rather than starting from the scratch.

### **Water Governance Assessment Framework**

*Water Governance Assessment Framework* is a computer software application (MS-Excel) that has been developed in collaboration between the Swiss Agency for Development and Cooperation (SDC), the Swiss State Secretariat for Economic Affairs (seco) and the Swiss Reinsurance Company (SwissRe) for assessing the state of governance in a municipality's water and sanitation services. The assessment tool provides (i) statements regarding the state of governance, (ii) a rough picture of strengths and weaknesses, (iii) visualization of stakeholders' perceptions regarding governance and (iv) indications of priority setting. The assessment looks at 10 key questions of governance (proactive risk management, sound financing mechanisms, transparency, accountability, poverty responsiveness, customer focus, water resource protection, power-balanced partnership, shared incentives and results orientation).

Source: Public-Private Partnerships for Water Supply and Sanitation 2008. Water Governance Assessment Framework. Available from:  
[http://www.partnershipsforwater.net/psp/web/w/www\\_7\\_en.aspx](http://www.partnershipsforwater.net/psp/web/w/www_7_en.aspx)  
(last accessed May 14th, 2008)

### **Guidelines for Institutional Assessment Water and Wastewater Institutions**

The institutional assessment procedures presented in the *Guidelines for Institutional Assessment Water and Wastewater Institutions* (WASH 1988) assist in the diagnosis of institutional deficiencies of organizational entities, which are responsible for providing water and sanitation services in either urban or rural areas.

The assessment procedures presented in these guidelines are based upon the use of pre-identified institutional performance categories. A performance category is a set of related skills,



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procedures and capabilities, which define a particular area of institutional function or performance. The nine categories are listed below:

1. Organizational autonomy
2. Leadership
3. Management and administration
4. Commercial orientation
5. Consumer orientation
6. Technical capability
7. Developing and maintaining staff
8. Organizational culture
9. Interactions with key external institutions

Source: WASH 1988. Guidelines for Institutional Assessment Water and Wastewater Institutions. Available from: [http://pdf.usaid.gov/pdf\\_docs/pnaaz336.pdf](http://pdf.usaid.gov/pdf_docs/pnaaz336.pdf) (last accessed May 13th, 2008)

### **-Roles and responsibilities-**

Unless the roles and institutional responsibilities between the different independent spheres of government, community organisations, and the private sector are clearly defined, established, recognised and agreed upon and the necessary support provided, then sustainability in the field of service provision is unlikely to be achieved. Fragmented and/or overlapping mandates between different organizations and stakeholders have to be avoided.

### **-Regulatory and operational responsibilities-**

Wherever possible and practical, the roles of regulation and operation should be clearly separated and preferably fulfilled by separate institutions (DWAF 2003).

### **-Management and administration-**

The institutional vision provides for management, decision making and control of water services projects to be devolved to the lowest appropriate level whilst taking into account efficiency benefits related to economies of scale (DWAF 2003).

- Without adequate cost recovery, WS&S services will not be sustainable or replicable.
- Building on existing capacities.
- How to provide for a clear institutional "home", manage and coordinate the range of organisations involved to enable effective strategies to be carried out and ultimately service delivery to be achieved on a large scale?
- Management must offer leadership, to ensure that the organisation and its staff have a clear and shared view of their purpose and how this will be achieved.
- Staff must be adequate and with the right combination of levels of expertise.
- Personnel management must be dynamic, stimulating loyalty and minimising operational cost.
- The need for institutional reform has been recognized as well as the development of a coherent policy framework upon, which water services providers are chosen by water service authorities.



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- Institutional frameworks must be stable, transparent and based on the rule of law, respecting fundamental human needs and ecosystems conservation, and promoting local empowerment and appropriate cost recovery approaches.
- Detailed policies are necessary to govern the transfers of water services infrastructure to water services authorities.
- Elaborating modalities and procedures with the objective of ensuring credibility, transparency, predictability and efficiency of the involved institutions.
- Communities need to be able to call operators and public officials for accountability, requiring to be responsible for their policies, actions, and use of funds
- Horizontal and vertical coordination between various subnational levels and the national level has been planned for.
- Organizational structures:
  - organizational levels
  - chain of command
  - grouping of functions and objectives of those groups
  - responsibility and authority limits
  - job descriptions
  - formal and informal structures

### **Further readings:**

WSP 2005. A Private-Public and Social Partnership to Change Water and Sanitation Management Models. Available from: [http://www.agualatina.net/9/pdf-LAC/Decentralization and Management/Decentralization/BrochFinal3\\_alta.pdf](http://www.agualatina.net/9/pdf-LAC/Decentralization%20and%20Management/Decentralization/BrochFinal3_alta.pdf) (last accessed Mai 14th, 2008)

Department of Water Affairs and Forestry of the republic of South Africa (DWAf) 2003. Strategic Framework for Water Services. Available from: <http://www.dwaf.gov.za/Documents/Policies/Strategic%20Framework%20approved.pdf> (last accessed May 5th, 2008)

### **-Participation and involvement of civil society-**

Enhancing participation and effective involvement of civil society and other relevant stakeholders at all levels in consultations, planning, decision-making, the operation and management of sustainable sanitation services, in research and in other related activities, as well as promoting transparency and broad public participation is of paramount importance. This may be done through (DWAf 2003):

- Engaging civil society organisations in policy development, research and advocacy, and assisting with planning, implementation and management of programmes and projects at community level;
- Supporting the development of capacity in civil society organisations;
- Encouraging civil society organisations to help monitor sector performance at all levels;
- Engaging civil society organisations in creating a link between government and local communities;
- Engaging capacitated community-based organisations to manage water services projects at the local level, where appropriate; and



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- Assisting in the mobilisation of funds for non-government and community-based organisations where appropriate.

### **Further readings, tools, etc.:**

Department of Water Affairs and Forestry of the republic of South Africa (DWAF) 2003. Strategic Framework for Water Services. Available from:  
<http://www.dwaf.gov.za/Documents/Policies/Strategic%20Framework%20approved.pdf> (last accessed Mai 5th, 2008)

### **-Gender-sensitiveness-**

Poor sanitation affects some groups more than others, often related to gender. Internationally the need to address gender issues in sanitation programmes and projects has long since been recognised. The crucial role of women in ensuring the health of the family and therefore the need for their participation in sanitation programmes is widely appreciated (source: WEDC).

Women not only bear the responsibility and burden of water and sanitation issues at the household level, they also have considerable knowledge about water. It is therefore important to follow a gender-sensitive approach, recognizing that men and women have particular needs, knowledge, interests, and aspirations and thus contribute in different ways. This makes it possible to appreciate women's and men's different roles in the use, supply, administration, and conservation of water resources and also to reinforce equal participation of women in decision-making, in community organizations, and water users' organizations. Adopting gender-sensitive water policies empowers women, men, and local organizations to promote more equitable relationships between actors and stakeholders.

In order to mainstream gender at the institutional level - specifically for the water and sanitation sector - formulation, adoption and implementation of internal gender policies by organisation and institutions that are involved in the provision and promotion of sanitation and use of gender sensitive participatory approaches in needs assessments is recommended (source: WEDC - <http://www.info.gov.za/whitepapers/1995/sanitation.htm#fact>).

### **Further readings, tools, etc.:**

#### **Implementation Guidelines – Manual for Sustainable Municipal Water Services**

Implementation Guidelines – Manual for Sustainable Municipal Water Services has been compiled in collaboration between the Swiss Agency for Development and Cooperation (SDC), the Swiss State Secretariat for Economic Affairs (seco) and the Swiss Reinsurance Company (SwissRe) to provide assistance in (i) setting up and implementing PPP and (ii) restructuring public services.

Source: SDC/SwissRe/esco. Implementation Guidelines – Manual for Sustainable Municipal Water Services. Available in English, Spanish and French from  
[http://www.partnershipsforwater.net/psp/web/w/www\\_7\\_en.aspx](http://www.partnershipsforwater.net/psp/web/w/www_7_en.aspx)  
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### **An Analysis of Sanitation Policies in Southern Africa - The Case of Gender Policies in Sanitation in South Africa, Zambia and Zimbabwe**

An Analysis of Sanitation Policies in Southern Africa - The Case of Gender Policies in Sanitation in South Africa, Zambia and Zimbabwe addresses the importance of mainstreaming gender issues at the institutional level.

Source: WEDC. An Analysis of Sanitation Policies in Southern Africa - The Case of Gender Policies in Sanitation in South Africa, Zambia and Zimbabwe. Available from:  
[http://www.iied.org/HS/documents/MM\\_Gender\\_GWA\\_WEDC\\_Sanitation\\_Policies\\_Africa.pdf](http://www.iied.org/HS/documents/MM_Gender_GWA_WEDC_Sanitation_Policies_Africa.pdf)  
(last accessed Mai 13th, 2008)

### **-Private Sector Participation-**

Private Sector Participation (PSP) in the water and sanitation sector offers the potential benefits of introducing private sector incentives and management skills, and it can act as a catalyst for change (WELL 1998).

Private sector inputs may include:

- Preparing guidelines
- Technical assistance
- Planning, design and contract supervision
- Construction by large and small contractors
- Preparation of communications materials
- Training and capacity building
- Materials supplies
- Financing
- Monitoring.

There is a continuum of different types of contracts that can be used; from basic service contracts through to complicated concession contracts where the management of a whole city's water and sanitation is let to a private operator for 25-30 years (WELL 1998).

The different types of contract are briefly described below:

Service contracts are the simplest form of PSP. The public authority retains overall responsibility for operation and maintenance of the system, except for the specific system components that are contracted out. The contractor's responsibility is limited to managing its own personnel and services efficiently.

Management contracts are a more comprehensive arrangement, where the public authority transfers responsibility to a private contractor for the management of a range of activities such as the O&M of a service system. A typical contract duration is three to five years.

Lease contracts are used where a private operator or lessor rents the facilities from a public authority and is responsible for operating and maintaining a complete system and collecting the tariffs. The lessor effectively buys the rights to the income stream from the utility's operations and thus assumes a significant share of the commercial risk associated with those operations. The duration of a lease contract can be from five to 15 years.



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BOT contracts, (build, operate, and transfer) is a form of concession whereby a private firm or consortium agrees to finance, construct, operate, and maintain a facility for a specific period, before transferring the facility to a government or other public body. BOT arrangements are attractive for new plants that require large amounts of finance, such as large water treatment plants, but they are not suitable for water distribution or wastewater collection systems. The contract period is normally greater than 20 years, sufficient for the private contractor to pay off loans and achieve a return on investment. These contracts often require high tariffs and/or subsidies to meet the BOT operators' costs.

Concession contracts are very substantial in scope, where the private sector company takes on full responsibility not only for the O&M of the utility's assets, but also for investments, often for a whole city. Asset ownership remains with the government. Frequently the concessions are awarded according to price — the bidder who proposes to operate the utility and meet the specific investment and performance targets, for the lowest tariff, wins the concession. The contract, which is usually over a period of 25 to 30 years, sets out: the main performance targets; the mechanism by which prices can be adjusted over time; and arrangements for arbitration of disputes between the project partners.

Further readings, tools, etc.:

#### **Guidance Manual on Water Supply and Sanitation Programmes**

The Guidance Manual on Water Supply and Sanitation Programmes reflects the multidisciplinary nature of water supply and sanitation development by addressing themes such as social development and poverty, the water and sanitation sector, health and hygiene, institutional development, environmental sustainability, etc. in such a way that each specialist is aware of the needs and potential contributions of the others.

Source: Water and Environmental Health at London and Loughborough (WELL) 1998. Guidance Manual on Water Supply and Sanitation Programmes. Available from: <http://www.lboro.ac.uk/well/resources/Publications/guidance-manual/guidance-manual.htm> (last accessed: Mai 5th, 2008)



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