Critical Sustainability Pillars for service delivery in the Water Sector

Overview

WATER IS LIFE. The general consensus is that in developing countries the development and management of water resources are critical in wealth generation, risk mitigation and poverty alleviation. Community access to basic services is core to addressing poverty and stimulating economic growth.

Whilst it is important to keep a clear focus on the delivery of basic services, there are also two other significant factors in water infrastructure to be borne in mind:

1. Ensuring sustainability and
2. Moving beyond the provision of water services towards planning for economic growth and development using water as the catalyst.

To achieve this aim, appropriate sector strategic planning taking into account the synergy that exists between water resource and water service, is required. The introduction of the Masibambane – Water Sector Support Programme in 2001 created an ideal platform from which to address these cross cutting issues - often referred to as ‘soft issues’, which are identified as pillars in the process of ensuring sustainability. Given the pressure to provide basic services to the majority of disadvantaged communities, these so called soft issues are often overlooked and as a consequence, sustainability can be compromised.

In this document we showcase the following cross cutting issues and assess their role and impact on the water sector as a whole:

- Water for growth & development
- Environmental Management
- Gender mainstreaming
- Appropriate technology
- Mainstreaming HIV/AIDS in the Water Sector
- Civil society Participation

Water for Growth & Development

Following the March 2006 4th World Water Summit’s declaration of “Water for Growth and Development (WfGD)” as the overarching theme, South Africa followed suit when the Minister announced during Water Week later that month that ‘WfGD’ would be adopted as the theme for the third phase of the Masibambane program. This theme firmly underpins the objectives of the Government’s Accelerated Shared Growth Initiative of South Africa (AsgiSA) which places due emphasis on the building of capacity at local government level, thereby increasing growth and employment opportunities and reducing poverty.
Whilst limiting its destructive impacts, it is essential that we harness the productive potential of water in order to ensure that water is a sustainable resource which can leverage growth and development. The Department has therefore committed itself to a sector wide approach of support and shared information, in order to achieve this goal.

**Definition of WfGD**

WfGD seeks to:

- Acknowledge that water is a key element in ensuring economic growth and development;
- Manage and develop water resources in order to promote economic growth and alleviate poverty;
- Focus beyond the provision of basic services and eliminating backlogs by planning ahead for economic and social development, linking in with Local Economic Plans (LED), Provincial Growth and Development Strategies (PGDS) and National Spatial Development Frameworks;
- Have an impact on both the first and second economies. Access to water to alleviate poverty will impact on the second economy and re-thinking the existing use of water in the first economy, will help accelerate growth; and
- Align existing projects such as Water Allocation Reform, Multiple Uses of Water, Water Services/Water Resources Linkages and planning of new dams, with the concept of WfGD

**June 2007 – Public Lecture on WfGD**

In June 2007 a public lecture and a high level panel discussion by a group of experts on Poverty Alleviation and WfGD as it pertains to AsgiSA was held. Flowing from this, the following outcomes and conclusions were reached:

- Water is a basic and constitutional right, central to the livelihood of the rural poor;
- Recognition and acceptance of the importance of a sector wide approach;
- Recognition of the importance of good governance and political leadership to build strong institutions;
- Institutional capacity has to be in place for the program to be successfully implemented;
- Access to water and implementation of basic services must not be at the expense of the WfGD program;
- The affordability of basic services is key to the WfGD program and poverty alleviation;
- WfGD must be considered within the context of the MDGs, AsgiSA and the Cabinet’s Medium Term Strategic Objectives (CMTSO);
- There is a need to engage in a process of developing a strategic framework that reflects the needs of communities. This in turn must be informed by
distinguishing between various water sources and matching water needs, uses and availability; and

- There is a need to bridge the first and second economies, water allocation reforms, job creation, skills development and small business development.

It is essential that the Department ensures that all people, industries and businesses have access to continued and well-functioning water supplies and sanitation services, otherwise growth and development will not be possible. Active engagement with all levels of government, the private sector and all the relevant stakeholders is needed to ensure sustainability and increase the possibilities for growth and development. At the same time, funds and program support offered by Masibambane should be actively used to unlock the true potential of civil society participation in service delivery.

**Environmental Management**

As the demand for water in the burgeoning agricultural, industrial and domestic economies of South Africa grows, it is important that environmental issues are integrated into national, provincial and municipal level planning within the water sector.

As a country with known water scarcities and one which shares its water resources with other countries in the region, we need to develop a water efficient economy, a social ethic of water conservation and a culture of sector sustainability. It is thus clear that efficient Water Demand Management measures are critical to the preservation of our fresh water supply; alternative measures such as desalination of salt water remains a costly undertaking and therefore not a viable alternative at this point in time. Demand for water has traditionally been met with the construction of dams and reservoirs, but these projects are costly and in our region, most of the opportunities for damming have already been exploited.

The conclusion is that the critical factors affecting our fresh water supply and which need to be addressed are the following:

1. **Climatic and atmospheric changes:**
   Water is crucial to the preservation of essential eco systems and therefore efficient water resource management and development are essential to mitigate the risks of climatic variability to which South Africa is so prone.

2. **Social dimensions:**
   Pollutants such as industrial effluent, domestic and commercial sewage, acid mine drainage; agricultural run-off and litter are all social factors impacting on water quality. In addition, halting the degradation of our aquatic systems—which are threatened by amongst other things alien invasive plant species - to ensure the sustainability of the country’s natural water supply for future generations, is fast becoming a priority.
3 Policy i.e. the national management of water resources:
In addition to sustainable domestic policies, the sector has to secure policy compliance with other neighboring countries who share our water resources.

Environmental management is aimed at making sure that environmental concerns are considered during the projects life cycle, and that possible alternative procedures are followed to minimize negative impacts. Core issues such as removing plants, possible pollution, environmental degradation and the effect of the design of infrastructures on the landscape, are significant; with rehabilitation and monitoring of the environment, sustainability can be maintained.

**Gender Mainstreaming**

The Constitution of the Republic of South Africa rejects any discrimination based on gender or sex. This and the country’s National Policy Framework for Women’s Empowerment on Gender Equality - whose objective is to ensure that gender considerations are effectively integrated into all aspects of governmental policies and programs - inform DWAF’s position on gender mainstreaming in all its activities.

Gender mainstreaming is a process which ensures that gender equity and concerns are taken into account in all policies, programs, administrative and financial activities and organizational procedures, thereby contributing to a profound organizational transformation of the water sector. Gender mainstreaming is a strategy to rectify the exclusion of either women or men in the participation of decision making that lead to the provision of sustainable services such as water and sanitation. Gender mainstreaming is thus a necessity for the delivery of sustainable services.

The water sector has identified a number of challenges which in turn have been translated into 12 key strategies, structured as a guide to gender interventions and earmarked to provide useful entry points into mainstreaming gender at a national, regional and local level. The key strategic issues are the following:

- Policy formulation: focusing on WS policy development and/or review, as well as ensuring that current policies are analyzed for gender sensitivity;
- Institutional support: focusing on the need to put structures in place associated with roles and responsibilities that will support gender mainstreaming processes;
- Programme management: focusing on ensuring that gender equity is built into all facets of the project cycle management through assessment, analysis and planning;
- Resource mobilisation: focusing on making adequate resources (both financial and human) available for implementation at every level for gender mainstreaming;
• Communication management: focusing on ensuring that communication strategies include the broader stakeholder community and supports the transformation agenda;
• Internal transformation: focusing on the internal dynamics of transformation within institutions that will support not only gender equality but also women’s empowerment;
• Economic transformation: focusing on the need to link women’s empowerment and gender equality with economic transformation and the control of resources;
• Partnerships and networking: focusing on partnerships and joint initiatives that will support an integrated, multi-sectored approach to gender mainstreaming;
• Monitoring, evaluation and reporting: focusing on monitoring, evaluation and reporting the impact of gender transformation from a qualitative perspective (looking at improved health, welfare and quality of life);
• Capacity building: focusing on the need to align all capacity building programmes, skills development programs and training to women’s empowerment and gender equality processes;
• Advocacy and the raising of awareness: focusing on the need to ensure that gender mainstreaming impacts on societal perceptions and supports transformation;
• Research and development: focusing on practices that are gender sensitive, reflective, that use appropriate instruments and share good practice.

Whilst the water sector may continue to face challenges in gender mainstreaming, there are nevertheless many women in the sector who have made their mark; one way in which DWAF is able to acknowledge their role is by utilizing the annual Women in Water, Sanitation and Forestry Awards (instituted in 2002) for this purpose. Supported by the Water Institute of South Africa (WISA) and the Water Research Commission, the Women in Water, Sanitation and Forestry Awards recognize the part played by professional and community based women in the field of water management.

**Appropriate Technology**

Appropriate technology is technology that is appropriate to the environmental, cultural and economic situation it is intended for. An appropriate technology, in this sense, typically requires fewer resources, as well as lower costs and has less impact on the environment.

Proponents use the term to describe technologies which they consider to be suitable for use in developing nations or developing rural areas of industrialized nations, which they feel cannot operate and maintain high levels of technology. Appropriate Technology usually prefers labor-intensive solutions over capital-intensive ones, although labor-saving devices are also used where this does not mean high capital or maintenance cost.
In practice, it is often described as using the simplest level of technology that can effectively achieve the intended purpose in a particular location.

Technology choices are critical to the success and sustainability of South Africa’s water supply and sanitation projects. A particular technology needs to be understood by the people who operate and maintain it. Maintenance needs to be affordable to those users and the technology needs to match the behavioral, cultural and social needs of the end users. An appropriate technology therefore in this sense, is one that typically requires fewer resources as well as lower costs and which has less impact on the environment.

Technology choices which imply an understandable technology within the capability of the person responsible for both operation and maintenance and one for which spare parts are easily obtainable and are affordable, must be culturally acceptable by the end users, even if the appropriate technology choice is not necessarily a low cost option.

What exactly constitutes ‘appropriate technology’ in any given case study is a matter for debate, but it puts into question the choice of a higher level of technology which can involve excessive mechanization, human displacement, resource depletion or increased pollution. It is therefore important that as a developing nation, South Africa ensures that in all sectors, it makes appropriate technology choices best suited to its own particular circumstances.

Technology is not a solution to all problems and decisions regarding technology should take more than just technical issues into consideration. A cost effective, affordable, easy to use and understandable technology for a population which is lacking in basic skills, is imperative. Above all, within the government’s aim with regards to poverty eradication, appropriate technology recognises the need for job creation not job destruction; it should therefore not replace people.

Examples of Appropriate Technologies:

**Water Supply:**
The hippo water roller which allows more water to be conveyed with less effort; rainwater harvesting; roundabout play pump; treadle pumps for household irrigation.

**Water Treatment:**
Community scale measures including mixed media filtration applications combined with ultraviolet and/or reverse osmosis treatment.

**Sanitation:**
Reed beds can help to purify sewage and grey-water.

**Construction:**
Adobe, rammed earth, Dutch brick and cob are examples of the use of natural building materials.

**Energy:**
Whilst high capital costs of some alternative energy sources should be taken into consideration, there are many choices including solar energy, wind power and bio gas.

Mainstreaming HIV/AIDS in the water sector

During 2005 the Water Services Sector Leadership Group (WSSLG) took the decision to mainstream HIV/AIDS within the water sector. Its overall aim is to determine what the sector’s contribution is to the epidemic, how the epidemic has affected its goals and objectives and how best it can respond to the impact of HIV/AIDS when performing its core business.

1 Internal mainstreaming:
   This area focuses on the reduction of susceptibility of the sector employees to infection and on giving support to those already infected by HIV. It also includes workplace policies and guidelines that inform day to day activities. Worker awareness, prevention, care and treatment are at the centre of this intervention.

Situational assessment of Water Utilities (WU) with regard to HIV & AIDS Workplace programs conducted in 2006.

- **Purpose**: To understand where the WU are, as far as mainstreaming HIV & AIDS in the workplace is concerned and to enable the team to identify the gaps in the utilities.
- **A Best Practise Model (BPM) has been developed for WU.**
- **Purpose**: This will serve as a guideline that various water utilities can adapt to their unique circumstances.
- **Planned Actions**: Dissemination of the BPM to all WU and ensuring that their programmes are adapted to the BPM

2 External mainstreaming:
   Insufficient access to water contributes to the slowing down of the development of water-borne and water washed diseases to those infected by HIV and suffering from AIDS. Current health and hygiene education does not adequately address issues of best practices and therefore the sector is looking at ways to assist individuals, households and the community at large to cope with the impact of HIV/AIDS.

   Pilot project done at Ehlanzeni DM
   - **Purpose of pilot**: To extrapolate factors necessary to create an enabling environment for effective HIV and AIDS mainstreaming within municipalities
   - Analysis on how policies, guidelines and legal framework for municipalities can be used to enhance HIV and AIDS mainstreaming within municipalities done with recommendations.
Identification of existing inter-governmental and inter-sectoral partnerships that promote collaboration and can enhance HIV and AIDS mainstreaming in Water Sector within the Ehlanzeni district

A report detailing approaches that promote systematic involvement of civil society in water and sanitation service delivery when mainstreaming HIV and AIDS, based on lessons learned in the WHELL programme.

The sector also needs to look at how it might, in the manner in which it provides water and sanitation services, be increasing the risk of infection. In addition the sector should ensure more efficient and effective planning in the utilisation of water supplies given that the high incidence of HIV and AIDS may undermine the security of water supplies in the country. The sector also needs to highlight and allow for guidelines to be developed that minimize the risk of HIV infection to workers working on water projects and communities with whom they interact.

The sector understands that AIDS weakens economic activity by squeezing productivity, adding costs, diverting productive resources, and depleting skills. This approach will enable the sector to undertake better planning which may minimize the costs for consumers and costs to human life.

3 Policy Review and Update:
The main aim of this intervention is to create an enabling environment for both the internal and external mainstreaming processes to take place using existing policy structures and the legal framework. The draft Water Sector HIV and AIDS Mainstreaming Strategy has been developed and we are busy with the consultation processes. The provinces are expected to develop their provincial Water Sector HIV and AIDS strategies that are aligned to the national strategy.

Civil Society Participation

The South African government has made a clear commitment to promote the meaningful involvement of civil society in the delivery of services. Partnerships with Non Governmental Organizations (NGOs) and Community Based Organizations (CBOs) are necessary to ensure appropriate and sustainable service delivery; a strong civil society sector is important for the strengthening of democracy.

NGOs and CBOs are well placed to assist with independent research, monitoring and evaluation of service delivery issues, choices of appropriate technology in the water sector and their involvement of communities in project work at grass roots level, goes a long way towards meeting targets for poverty alleviation through job creation.

Masibambane III (Lets Work Together) seeks actively to promote greater involvement of civil society in the water sector in particular with respect to the provision of training,
support and advocacy. The participation of CBOs in consultative bodies and the different water sector forums is essential in order to assist, implement and support the Water for Growth and Development (WfGD) implementation policies.

Greater involvement implies a strong awareness and an increased number of NGOs, CBOs and community members to be actively engaged in local level planning processes for water and sanitation services delivery, as well as in policy review and reformulation processes at provincial and national level. More NGOS and CBOs contracted by municipalities for water and sanitation services delivery leads to greater proportions of water and sanitation program financing flowing through and being managed by NGOs and CBOs and being channeled back into the community.

Roles & functions a CBO can perform in the water sector:

- Supporting municipalities in participatory planning processes, such as IDPs and WSDPs developments;
- Supporting municipalities in education campaigns to create awareness of and educate citizens in healthy living practices and the wise use of water;
- Implementation of innovative water and sanitation approaches that maximise local economic benefits and build social capital, including focus on sustainable livelihoods in support of LED;
- Project planning, design and implementation;
- Institutional and Social Development services, including training needs analyses, training and capacity building, setting up community based institutions, communication strategies, labour desk management, etc;
- Monitoring systems and approaches to revitalise failed or non operational projects;
- Post implementation support to CBOs involved in WSP arrangements;
- Gender mainstreaming, including development of policy, training and support;
- Health and hygiene awareness and user education;
- Environmental protection and conservation of water;
- Assisting CBOs and municipalities to raise funds from donors;
- Research and networking with international partners;
- Policy work to deal with ongoing social and institutional problems;
- Research and policy support for the development of models of best practice, monitoring and evaluation;
- Acting as consumer bodies to engage with municipalities around service improvements;
- Being contracted as WSPs, or providing services to WSPs to manage small water supply schemes.

The Masibambane Civil Society Support Programme (MCSSP) has gone far in its integration of CBOs into its policies and programmes. A CBO Strategy has been
implemented, and the team is involved with SALGA in drafting its policy on the role of
CBO in support of local government. In addition, Masibambane has established
coordinating and networking structures within the CBO fraternity i.e. National and
Provincial Steering Committees, which has lead to the engagement by a number of
district and local municipalities, of the services of CBOs.

Conclusion:
The Department of Water Affairs and Forestry as sector leader, is committed to
supporting and facilitating the implementation of these cross cutting areas as they play a
significant role in ensuring sustainability of water services. Furthermore they contribute
to the promotion of ownership and encourage beneficiaries to be independent