National Water Policies and Water Services at the extremes: What Challenges must be faced in bridging the gap? Learning from the South Africa Experience

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Abstract

This paper argues that there is a gap between national water policies and water services in most African countries, which compound the drive to achieve the Millennium Development Goals (MDGs) for water and sanitation. It explores important lessons (good practices) from South Africa and applies them to justify possibility to significantly bridge the gap between water policies and services. Furthermore, the case is made that these lessons can be applied to other countries, making it possible to develop a generic model for water and sanitation. It concludes that the immediate challenge that must be faced in bridging the gap is a strong political will in policy implementation and moving resources in the right direction.

***Keywords*:** Water, Policies and Services, South Africa, Development Goals, Policy Implementation

1. Introduction

At the 2000 Millennium Summit, the global community adopted the challenge of attaining the eight Millennium Development Goals (MDGs). Countries pledged to meet specific targets aimed at eradicating extreme poverty by 2015 (United Nations 2000a). Central to all 8 goals is water. The central role of water in human and physical development and its intrinsic value in sanitation, health and poverty reduction was formally recognised in target 10:

"Halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation" (UNDP 2003)

Subsequently, there has been an increase, both at National and International levels, of dialogue, conferences, and workshops on what approaches could accelerate the achievement of this goal. Recently, some nations have been giving commendable attention to water policies issue; be it in developing new water policies or modifying

existing ones. Unfortunately, despite the attractiveness of many such policies, national water services have typically not witnessed commendable improvement. This paper argues that national water policies and national water services are at extremes due to lack of political commitment in moving resources in the right direction, giving rise to what is herein referred to as a gap between policies and services. The case is made that to attain the MDGs target 10 or at least attain an appreciable level, it is essential to bridge this gap. The question then is what challenges must be faced in bridging the gap? The challenges can be brought to focus by attempting answers to some key questions such as:

i) Is it the absence of policy or wrong policies in the water sector?
ii) Is it the issue of implementation; ranging from lack of adequate institutions, knowledgeable personnel with integrity, public involvement, and lack of political will or simply ignorance?
iii) Are policies and/or directives enough or do countries require legally binding law?
iv) What is the role of natural factors?

To adequately address questions of this nature, it is important to examine some "success stories". In this paper, South Africa is used as a case study with the objective of identifying and exploring;

1. What are the unique lessons in the South African case that have accounted for their progress?
2. Can the lessons from South Africa be applied to other African countries?
3. Is it possible to develop a generic model that would assist in bridging the gap between policies and services?

Prior to examining South Africa water policy and services, a brief discussion on the challenges in meeting the MDGs shall be presented. Section two shall be devoted to the South Africa Water Sector. A general overview of the current water resource management situation in South Africa shall be discussed before focusing on water supply services in particular. Water supply services as used in this paper shall mean the provision of water services to support human life and personal hygiene, although much bias shall be on supporting human life. In section three, attention shall be on some lessons learned and the possibilities for application in other African countries.

Finally, in section four a generic framework for bridging the gap between water policies and services shall be proposed prior to conclusion.

1.1 Challenges in meeting the MDGs

Although critics hold that the MDGs will not be attained (De Paladella Salord 2005, Gleick 2004), they however recognise that the weakness lies not in the goal itself as being ambitious but lack of human commitments in the mobilisation of resources in the positive direction. De Paladella Salord (2005,120) coined the challenge as such;

"*…The international community will fail to reach the MDGs if significant resources are not diverted to meeting the goals…northern governments actually begin to address some of the issues of poverty, including increased and better overseas development aid, more equitable trade rules and debt forgiveness. Without action on these significant areas, the MDGs will not be met whether the deadline is 2015 or 2115".*

Gleick (2004) perceives the challenge as such:
"*… are unlikely to be achieved given current levels of financial and political commitments…. Despite growing awareness of water issues, international economic support for water projects of all kinds is marginal and declining...The lack of agreement about how best to proceed, however makes it increasing unlikely that the goals will be met".*

Based on the above arguments, it could be said that the main challenge is human commitment in moving resources to the right direction. This author pushes it further that in sub-Saharan Africa where a rigid, yet porous system of government exist, the classic top-down approach which characterise decision-making demands that top management (ministers and politicians) must express authentic commitment for anything good to happen.

2. The Case of South Africa

South Africa water supply sector, which has been characterised by immense challenges, can pride itself today as champion in water supply development in Africa based on government determination to deal with those challenges and formally recognising water as a human right. To elucidate on the achievements made in the

water sector, it is important to picture briefly the hydro-geography and water policies.

2.1 Background

South Africa has an average annual rainfall of 500mm, characterised by high annual variability and unpredictability, (43% of the rain falls on 13% of the land), almost 60% of the country as semi-arid to arid (Nomquphu, 2005, Abrams, 1996).

Prior to 1994, water supply responsibility was fragmented, with no single national government department responsible for its management. This resulted in different levels and quality of services between the white and black areas. Further compounding the issue was the lack of any coherent national water legislation or support structure (Muller and Lane 2002).

As noted by Abrams (1996), the policy and functions of the Department of Water Affairs and Forestry (DWAF) were limited exclusively to irrigation and forestry. This had far reaching consequences for the water sector and the environment in general. Out of a total population of about 41 million at the time, an estimated 15.2 million (12 million of whom lived in rural areas) lacked access to basic water supply and 20.5 million, lacked basic sanitation.

2.2 Water Sector reforms

The first non-racial democratic government of 1994 was sensitive to the urgent need for a new policy for the country, of which the water sector was just one. A strong political will was demonstrated to implement sustainable water development through sound water governance. This lead to reforms in water policies and institutions, some of the outstanding policies are summarised below:

a) **Water Service Policy, (White Paper) 1994**. Addresses the backlogs in the country's water service and the institutions and mechanisms needed to remedy the backlogs
b) **Republic of South Africa Constitution (Act 108 0f 1996).** Establishes a human right dimension for access to adequate and sustainable water supply and services and enshrine the Bill of Right.
c) **Water Service Act (WSA) of 1997 (act 108 of 1997**) ensures the right of access to basic water supply and sanitation, and also provides a

regulatory framework and establishment of water services institutions such as water boards, water services providers etc. It creates a comprehensive legislative framework for the provision of water supply and sanitation services to support life and personal hygiene and recognises the need to operate in a manner consistent with the broader goals of water resources management. It encourages cooperative governance with emphasis on capacity building at all levels. It spells out the role of DWAF in the event of non-performance by provincial and local governments.

d) **National Water Policy of 1997 (DWAF 1997**) redefined ownership and allocation of water. It declares that all water irrespective of where it occurs in the hydrological cycle is public water, and that the national government will act as a public trustee.
e) **National Water Act of 1998 (Act 36 0f 1998).** Founded on 2 pillars: sustainability and equity, it amongst other things required the establishment of a National Water Resource Strategy (NWRS) to set out a national framework for managing water resources.
f) **National Water Resource Strategy (DWAF, 2004a)** provides the national implementation framework and divides the country into 19 water Management Areas (WMA).
g) **The National Water and Sanitation Program,** an international partnership aimed at enhancing accessibility to safe and affordable water supply and sanitation for the poor.

It should be mentioned that the above legislations or policies could not have been established by error or as a requirement but clearly demonstrate a strong political commitment from the government. This means that the problems are acknowledged and the need for solutions given adequate attention. The above policies focus on water resource management in general and collectively have;

i) Provided clarity in the water sector which was formally in disarray
ii) Created a framework for investment
iii) Provided an avenue for the outworking of political objectives and above all,
iv) Reduced institutional fragmentation that characterised the sector.

The institutional framework of the water sector can be broadly simplified to three tiers:

At the1st tier is the National government (Department of Water Affairs and Forestry), responsible for water resource management, support to local government, setting of norms and standards, monitoring and administration of the Water Act.

The 2nd tier consists of Water Boards, with principal responsibility being the supply of bulk treated water on a commercial basis.

Finally, the 3rd tier made up of Local Governments charged with the supply of water and sanitation services to consumers.

2.3 Water Supply Services

As mentioned earlier, prior to 1994, there was great inequity in water services between different groups; where only about 45 % of blacks had piped water against nearly 100 % of the other groups. Thompson et al. (2004), attribute the inequity and inadequate water services to:

a) The absence of a coherent policy,
b) The absence of an institutional framework, which established clear responsibilities,
c) The overlapping of institutional boundaries as well as the exclusion of many areas of great need,
d) A lack of political legitimacy and will,
e) Failure to make resources available where they were most needed, and
f) The low level of economic activity in vulnerable areas.

However, post 1994, there was a drastic change to harmonise service provision and reach out to the rural masses, evident by reforms made in the water sector (see section 2.2). Certain principles and objectives, (Fundamental Principles) were developed, of importance to water services are:

Principle 1, which promotes the values enshrined in the Bill of Rights.

Principle 8, the water required to ensure that all people have access to sufficient water shall be reserved.
Principle 10, the water required to meet the basic human needs referred to in principle 8 and the needs of the environment shall be identified as “the Reserve” and

shall enjoy priority of use by right. The use of water for all other purposes shall be subject to authorisation.

Principle 25, the right of all citizens to have access to basic water services necessary to afford them a healthy environment on an equitable and economically and environmentally sustainable basis shall be supported.

3. Lessons from South Africa Water Supply Services

Much has been done in South Africa to move rhetoric to substantive progress, which can be heralded. In this section, some of the specific issues shall be addressed to reflect what lessons emerged from them. The issues range from political will expressed in policy development, organisational issues (institutions and capacity development) to public participation, monitoring and feedback.

3.1 The political will and clear policy framework

Critical to the progress made in South Africa, water sector is top-level political will and support. DWAF was completely innovated with a substantive budget to draw up and implement water service projects, which will turn "the right to water" into reality (NWA, Act 36 for 1998). The commitment in enacting clear policies cannot be over-emphasised. Clear policy is the first step towards implementation at scale, without which development strategies cannot be easily established. Without clear policy, the political will to genuinely address the problems cannot be easily generated. A clear political framework paves the way for the development of water supply management plans including structure and responsibilities. If resources have to be moved towards a positive direction, it is essential to define who has to do what, how it must be done , when it should be done and why it should be done. Informed by local and international experiences, clear policy principles constitute a legal framework for water services. The South Africa principle is based on universal human rights and equality of all persons and amongst others advocates that:

a) Development should be demand-driven and community based.
b) Basic services are human right.
c) "Some for all" rather than "All for some".

3.2 Establishing the enabling environment

Cognisance of the huge challenge inherent in proving efficient water services, division of labour was introduced and the role of the different levels of government defined (Water Service Policy 1994).

The national government is charged amongst others with establishing policy guidelines, development strategy, criteria for State subsidies, minimum service standard as well as monitoring and regulating service provision, while the provincial government assures service provision through the promotion of effective local government. Ensuring access to services for all persons in a sustainable manner is the task of the local government. NGOs and the private sectors are regarded as important components whose resources could be harnessed to foster the policy implementation. Such recognition and division of labour will no doubt impact a sense of responsibility and create meaningful linkage in the delivery of services. As a case to elucidate the issue of enabling environment, DWAF budget was substantially increased within 18 months following the reforms (Abrams, 1996). The government also made available capital grants for the construction of basic infrastructures, finances for the training of communities to undertake the governance, administration, operation and maintenance of the water services (Muller and Lane 2002).

At the level of DWAF, a new Chief Directorate of community water supply and sanitation was created, with the responsibility of, inter-alia, ensuring the effective ongoing operation of the water supply systems and the planning of the expansion of these services in collaboration with the other spheres of the government.

A well-established structure, which defines roles and responsibilities, reduces institutional conflicts and at the same time promotes cooperative governance. Internal and external communication will also facilitate while making it less cumbersome for the public to address concerns as they become aware where specific issues can be addressed.

3.3 From Rhetoric to Action; Policy Responsiveness

It is not uncommon to find excellent policies stay on paper forever-rhetoric, and also for leaders to be indifferent when a policy is not yielding fruits once implemented. This has not been the case in South Africa, at least for water services.

First, the NWA mandated the creation of Catchment Management Agencies (CMAs) in 19 delineated Water Management Areas; this has already been done (Versfeld 2000). Water User Associations (WUAs) were also recognised and encouraged.

These bodies at minimum provide for customary input in decision making and enhance sustainability of projects as such community-driven projects are usually more fluid (Malzbender et al, 2005).
It has been reported that of the 13 million people who lacked access to basic water services in 1994, a minimum of 8 million were given that access as of 2002 (Muller and Lane, 2002). This represents an increase of 62% within a period of 8 years. How has this been achieved is a logical question which leads us to some of the actions taken by the national government. Three major issues shall be addressed; defining access to basic water services and setting goals, on the ground action and policy responsiveness.

3.3.1 Defining Access to Basic Water Services and setting goals

In the terms of WSA, the standard for basic water supply is as follows:

a) For low-density areas, a minimum quantity of 7 litres per person of potable water, available on a regular, daily basis
b) For high-density areas:
    - A minimum quantity of potable water of 25 litres per person per day
    - Available within 200 meters walking distance
    - At a minimum flow rate of not less than litres per minute available on a regular, daily basis
    - Supplied from a source of raw water, which is available 98 % of the time, not failing more than 1 in 50 years with effectiveness of not more than 1 week interruption in supply per year.

Goals were also established to reflect short term, medium term and long-term objectives (Thompson 2002) with respect to water supply services. Although construction was funded, all recurring costs are to be borne by the communities, and those that desire a higher level of service must find the finance elsewhere. Keeping strictly to this policy has build trust and confidence in the water sector which have not only attracted local but also international finance to promote water supply development initiatives

(Abrams, 2002). The establishment of standards, goals and targets ensure that resources can be well directed, issues can be prioritised and progress can be monitored and evaluated providing feedback for alternative planning and management.

3.3.2 On the ground action; the capital works programme

The national water and sanitation program; an international partnership to help the poor gain sustained access to improved water supply and sanitation services constitute real action. Between 1994 and 2002, with substantial government funding of about US$ 400 million, DWAF, in collaboration with public and private sector constructed new water and sanitation services for a design population of seven million. Informed by shortage of delivery capacity, DWAF responded in 1996 (an example of policy responsiveness) by entering into partnership with the private sector to undertake Build, Operate, Train and Transfer (BoTT) services with the aim of achieving flexible mechanism for speeding up delivery and enhancing public-private partnership (Muller and Lane 2002).

3.3.3 Free Basic Supply: a case of policy responsiveness

Things were not all right even with the BoTT approach, there was much resistant to pay for water, pre-paid meters and privatization were criticised (Bond, 2003). Non-payment meant disconnection with negative consequences on the population. Responding to a NEW YORK TIMES front page report on South Africa water issues, on May 29, 2003, Minister Kasrils attested that there have been approximately 10 million people affected by the disconnections, and Africa's worst-ever recorded cholera outbreak can be traced to an August 2000 decision to cut water to people who were not paying a KwaZulu-Natal regional water board. Informed by demonstrations on the issue, the case of a Lutsheko woman seen (by a Minster during a field visit to appreciate operation of newly constructed water facilities) fetching water from a bore hole in village where a DWAF water scheme was fully operational (Kasrils 2000), and keeping to the December 2000 electoral promise, in July of 2001 the government responded with a free basic water policy (Bond 2003). The debate over the policy is beyond the scope of this paper; however, the objective of the policy will be briefly presented. It provides for free, the first 6000 litres per household a month, after which a rising block tariff is introduced as shown

by figure 1, (source: Bond 2003). Originating from Johannesburg, by 1 July 2002, the policy had been implemented in local government areas serving over 27 million people. The rationale for this policy is to ensure that people's right of access to basic water supply is not limited by affordability.

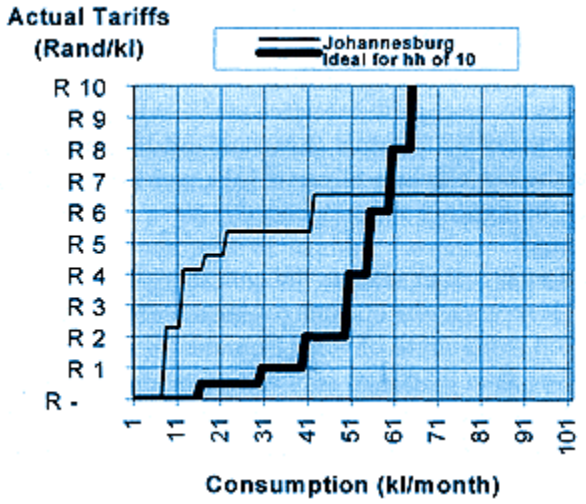

Figure 1: Divergent water pricing strategies
Johannesburg (2001) vs. ideal tariff for large household

3.3.4 Public Participation

Public Participation can be defined as *"A process of identifying and incorporating public concerns and values into a [public] decision. It provides an opportunity for all parties interested in or affected by a decision to contribute and [to] influence the decision"* (Canadian Environmental Assessment Agency, 1994, p. 34).

South Africa has a characteristic way of ensuring public participation in policy development. Before a white paper, which represents official government *policy* is published, a discussion document, usually referred to

as a ‘ Green Paper is made available to a wide group of interested parties through the country. This is often the topic of regional and national workshops and conferences, with special focus on previously disadvantaged sectors (Abrams 1996).

The importance and rationale of authentic Public Participation in water supply cannot be over-emphasised based on the fact that it has no substitute, *therefore* concern all and sundry. It should be noted that different individuals would have widely diverse knowledge and interest, contrary views and arguments to water supply projects, which demands integration. In order to improve fairness, trust and competence in decision-making, it is important to have a full understanding of public concerns.

In as much as public participation benefits the public by way of enhanced *responsibility* and a feeling of ownership of the project, it also imparts special knowledge to the decision-makers in the form of possible shortcomings of particular actions and processes as well as identifying cost-effective and sustainable alternatives.

Effective public participation in water supply projects can be viewed as a win-win paradigm which can be summarised under the following points:-

a) Opportunity for Social learning (knowing, based on experience and practice) and change
b) Access to specialized and lay knowledge
c) Capacity building and knowledge transfer

Social learning is of fundamental importance in achieving sustainable water supply projects as it helps the citizen to learn new skills needed to maximise their participation and protect their health. It also introduces both experts and citizen, through interaction, to multi-levels issues that affect outcomes such as process, attitudes, cultural, and institutional norms (Tippett et al 2005). This has the potential of broadening the scope of institutional governance in water supply through a learning-orientated approach, which can combine iterative management and responsive change in decision- making. However, for this to be effective, public participation has to occur early enough in the process and be on-going. The South Africa approach can enhance fairness and public confidence and even if it does not contribute to the final policy, the public at least has a feeling of what the policy is all about and would have been educated on it.

3.4 Can the Lessons from South Africa be applied to other African Countries?

To answer this question, it is important to note that South Africa is a middle-income country, with a strong tax base and a GDP per capita of US$ 10.700 unlike most African countries with range between US$ 1200 – 2200 (World facts and figures, 2003). Therefore it is evident that most African countries are not able to invest the dollar amount pumped into the water sector. However, this constitutes a very weak argument to justify the "do-nothing" or "window dressing policy" option evident in most African countries, Cameroon being a good example. In 1992, a robust water policy was voted by parliament but until date none of its provisions have been implemented. Just to highlight a few, the policy calls for the establishment of water boards, Watershed Management Agencies and prohibits the use of streams as car wash and elimination of domestic waste. During a personal field research, it was noted that all major streams along the high way serve as car wash and even government vehicles could be found here (Picture 1). Picture 2 shows the remnant of a stream in the middle of a town use as a waste dumpsite.

Picture 1. Domestic waste in stream

Picture 2. Stream serving as car wash

Cognisance of the fact that application of lessons learned is totally different from the crude importation of policies (a common practice in many African countries anyway), it is therefore possible to apply these lessons from South Africa and even adapt the policy to fit the local realities.

South Africa developed a clear vision for water services, defined and prioritized her goals, developed a framework for action and is continuously harnessing the necessary resources to achieve the vision (Mackay et al, 2003).

Cameroon has the potential, both human and financial, to initiate water policies and move resources in the right direction. The problem lies in the fact that environmental issues have not been integrated into economic development. The proliferation of ministries with overlapping and sometimes contradicting functions only worsen the situation. Corrupt practices, lack of an efficient tracking mechanism as well as an organised database are just some of the obstacles.

This author however argues that the lessons from South Africa are applicable to other African countries. Strategic Environmental Assessment is one of the many tools.

4. A Generic Model for Water Services

From the South Africa lessons and the do-nothing scenario in Cameroon, it is argued that although a clear and enforceable policy is very important, the political will of top leaders is paramount. Further more, a good policy that is not implemented can be parallel to a car without fuel while a good policy without committed political will of top leaders can be liken to a good car with a bad driver. Therefore a strong political will is paramount to initiate and implement reforms in the water sector. Everything being equal, once a clear and enforceable policy is adopted, administrative and implementation issues will follow in the positive direction. Resources will be moved into the right direction, projects will be implemented, monitored and evaluated, and policies will be responsive.

Enshrining certain sensitive issues such as the concept of the Bill of Right in the South Africa Constitution is worthy.

Based on the above arguments, a generic model for water supply services is hereby proposed as follows;

At the core of the model is water supply and related services, closely followed by strong political commitment; Policy, Administrative and Institutional reforms, which are then encapsulated in box of Good Water Governance, including but not limited to public participation, accountability, effective monitoring, evaluation, feedback and management review.

5. Conclusion

This paper has explored some challenges in improving water supply services. The case study cited (South Africa) demonstrates that the gap between national water policies and water services can be substantially narrowed and also that, meeting the MDGs is not an impossible task; all it takes is human commitment. South Africa has recorded an increase of 62% coverage by 2002. Although the need for new policies was important for the country, the political will to develop and implement the policies is worthy of praise. The case of Cameroon also cited, where a parliamentary act on water was adopted since 1992 with all provisions still on paper until date, demonstrates that policy alone is not enough (although a necessary first step); it must be backed by actions if success is to be achieved. In conclusion, while there will never be a perfect time to do something with 100% efficiency it could be worthy of effort for other African countries to emulate the lessons from South Africa. Thus the immediate challenge that must be faced in bridging the gap between water policies and services is a strong political commitment.

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