

## **How National Water Policy is Helping to Achieve South Africa's Development Vision**

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### **1. Introduction: a product of political transition**

The simple goal of South Africa's new democracy was captured in the slogan "a better life for all." Since the first democratic elections in 1994, the challenge for all sectors, including water, has been to translate that goal into social reality.

Policy reform since 1994 has, for obvious reasons of history, been focussed upon the promotion of basic human rights and the democratic values of human dignity, equality and freedom throughout the society. In the water sector, these values have had to be given effect within a demanding physical environment as well as at a time of dramatic social and political change. As a consequence, it has been possible to introduce radical approaches in an environment normally characterised by a relatively slow pace of change.

The objective of presenting this paper is to offer South Africa as a case study, illustrating the context within which South Africa's new water policy has been developed and, in particular, to describe the innovative approaches and instruments which have been developed to reflect the values and principles upon which the new society is based. It is hoped that both the process and the specific instruments may be of value in the discussions that follow.

### **2. Historical perspective: the development context**

To understand the approaches taken, it is perhaps helpful to begin with the recent past and the vision for the future. South Africa entered a new phase in its history with the election of its first non-racial democratic government in 1994. The new government was elected on the promise of "a better life for all". It had a vision for South African society encapsulated in its Reconstruction and Development Programme (RDP) which was described as "an integrated programme based on the people, that provides peace and security for all and builds the nation, links reconstruction and development and deepens democracy."

The RDP thus emphasised that growth and development are not two opposing goals but essential components of a common strategy; that without an improvement in the quality of life of the majority of South Africans, the political conditions for growth would not exist and that without growth, the economic conditions needed for an improved quality of life and to sustain the political system could not be created.

The RDP was thus not primarily about houses, services and education but first and foremost about opportunities. It was intended to tackle the development crisis

in South Africa that found more than 30 percent of the working population without jobs and many without the basic skills they need to be gainfully employed. It addressed the fact that the most needy people live in rural areas or informal peri-urban settlements, often artificially created in areas that offer the least opportunities.

In the final analysis, it was about achieving a vision of a South Africa in which people have opportunities to develop their skills and opportunities to use them productively to work and earn an income with which they can meet their basic needs. It was about a vision of a country in which, because there are these opportunities, people could live at peace with one another, in dignity and security; where, because of our wise management, the environment in which we live, work and relax is healthy and pleasant and can be kept so.

The ambitions of the RDP were underpinned by the adoption of a new constitution. In the two years following 1994, the whole nation engaged in the process of drafting a Constitution, which entrenched a Bill of Rights, including extensive social, economic and environmental rights. It also allocated responsibility for the governance of water to government at a national level and the function of providing water services to local government. While providing very clear direction to government, the Constitution also recognised that social rights cannot be realised overnight. The state is required "to take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights."

### **3. Water management reaches the political crossroads...**

The ambitions of the RDP and the requirements of the Constitution would present a formidable challenge for any country, the more so for one which has so recently emerged from a history of oppression and division, exploitation and deprivation which has left South Africa with huge inequalities between extremes of poverty and substantial wealth.

To address this challenging agenda, all sectors of society have had to review their policies and programmes and, for the water sector as in many, the implications have been dramatic. At this juncture, it is helpful to look further back, to get some broader historical context through which to understand the specific reforms in the water sector.

The political transition of 1994 was the culmination of a long process which included the colonisation of South Africa in the 17th century and subsequent subjugation of the indigenous peoples, its transformation through the South African war 100 years ago into an independent-settler state; the transfer of power to the nationalist majority of the white minority in 1948, the state's continued aggressive and painful exclusion of the majority of the population from political (and economic) life and the inevitable, but no less stressful, transition to democratic government.

As in all countries, the governance of the water sector over that period reflected the political changes in the society. Water management moved from the pre-colonialist collective realm to become a publicly regulated resource in terms of Roman-Dutch law, and then, under Anglo-Saxon jurisprudence and the pressures

for settler expansion and economic development, was captured as a private resource for the minority.

In support of these processes, institutions were developed which increasingly intervened in the development of water resources in favour of the white agricultural community. Meanwhile, the development of water services, the supply of pure water and the provision of sanitation, were devolved to local level. This allowed white communities to serve their needs using the financial base of industry and commerce in the white cities while black communities depended on budgetary handouts. It ensured an inheritance, in 1994 of profound inequalities whether in access to water as a resource or to the domestic services it provides.

### **... as water managers seek new legal instruments to cross the physical watershed**

In parallel with the political developments, another equally important drama was being played out in the physical realm. South Africa is a relatively arid country. As in many parts of the developing world, its rainfall is also extremely variable and erratic in time as is reflected even in its largest rivers whose total flow can vary ten-fold from one year to the next and a further ten-fold from one month to the next. (There was a dramatic demonstration of this during the February 2000 floods when two years of average flow passed down the Limpopo at Beit Bridge in just eight days.)

The social and economic development of South African society was inevitably accompanied by a continued increase in the demands placed on the nation's capricious water resources. By 1994, almost 50 percent of the rainfall that reaches the country's rivers was being captured and used. This is a very high proportion and can only be achieved and reliably sustained by means of extensive storage reservoirs and transfer systems.

There is a limit, however, to how far storage and transfer can be taken. While water resources are relatively plentiful, the water manager's task is to harness them. We build dams to store the flood for the drought, canals, aqueducts and pumping stations to move it to where we need it. As the resources are developed (and the floodwater becomes too costly or too unreliable to be worth storing) the task is to manage with the resources available and within the constraints that are given. That is the stage which South Africa has now reached. In physical terms, water resource development has reached its own watershed.

The policy framework and management approaches needed in the two phases, that of plenty and that of scarcity, are necessarily different. There is a very real danger that if the transition from resource development to resource management is not provided for, the instruments used in the first phase may become obstacles to the application of instruments appropriate for management in the second phase.

South Africa's historic approach to water allocation provides a classic case that is reflected, to a greater or lesser extent, elsewhere. The riparian principle, which underlay water allocation, made some sense while the country needed to encourage landowners to use water to develop their land and thus the broader economy. It provided landowners with security and guarantees of access to water for use on their land.

Such a riparian system makes less sense when there is growing competition from consumers who are far more productive in their use of water but do not have riparian access. Industry generates far more jobs per kilolitre, the value added by each kilolitre they use is orders of magnitude greater than in agriculture. Yet a riparian system gave historic agricultural users (from whose activity society derived relatively less benefit) entrenched rights to use the most reliable proportion of the nation's water. Further, under the old law, riparian users were not usually allowed to transact water so that it could be applied for more productive purposes, away from the land to which it is attached. Other users were compelled to invest in storage and transfer schemes.

Further, as the pressure on the resource grows, it becomes increasingly important to focus on activities which indirectly impact upon the availability of water. So, in South Africa, controls were placed on pollution (which impacts on "usability"), which were in many cases stricter than similar controls in developed countries. Measures were introduced for the regulation of commercial afforestation since its impact on the water resource had been demonstrated as early as the 1970s.

This highlights the fact that the post-94 development of South Africa's water policy has been driven not just by the demands of equity and social transformation. Even without the political change, the basic reality would still have to be addressed; the same amount of water has to be shared between a larger number of users and the growing needs of our developing society.

#### **4. Approaches taken in South Africa's water policy review**

The review of the water policy was guided by a set of basic principles developed through an intensive process of consultation. One was that the use of water, in all its dimensions, should be for the optimal benefit of society as a whole. The right of all citizens to have access to basic water services was emphasised and it was stated that the water required for basic human needs as well as for the environment should enjoy priority of use by right, while use of water for all other purposes would be subject to authorisation.

The basic physical realities were addressed by recognising that all water, wherever it occurs in the water cycle, is a resource common to all. The principles emphasised that resource development and management should, where possible, be done at a catchment or regional level. They also further clarified the role and objectives of the state in the management of the nation's water and recognised the importance of ensuring that the interests of those whose livelihoods depended on water use and who had invested to achieve this were protected. They indicated that institutions for water management should as far as possible be self-driven with minimum need for state intervention.

Driven by the constitutional distinctions, the management of water as a natural resource—crudely, natural water in rivers, lakes and underground—was treated differently to the management of water services, the activity of providing a pure water supply and using water for sanitation purposes—water in pipes—although the link between the two was noted.

The specific nature of water services and the fact that responsibility for their management was dealt with in a different manner to water resources in the Constitution, led to further considerations. Thus it was recognised that water services must be regulated in a manner consistent with and supportive of the aims and approaches of the broader local government framework and that, where water services are provided in a monopoly situation, the interests of the individual consumer and the wider public must be protected and the broad goals of public policy promoted.

Finally, it was stated that international water resources, specifically shared river systems, would be managed in a manner that optimises the benefits for all parties in a spirit of mutual co-operation. Allocations agreed for downstream countries would be respected.

## **5. Key instruments**

A number of key instruments and concepts were introduced to give effect to these principles in policy and legislation:

- the concept of the Reserve, through which water requirements to meet basic human needs and sustain the environment are given priority;
- a system to classify water resources in terms of desired environmental protection levels which will guide the technical determination of the environmental reserve;
- a flexible allocation system that allows changes of use to achieve equity and meet changing social and economic priorities by regulation rather than administration or expropriation, but limits the duration of use rights to a maximum of 40 years;
- institutional arrangements to manage water at a catchment level within a national framework articulated in a National Water Strategy;
- a pricing strategy to ensure that payment for water use covers development, operational costs and resource management costs and reflects the value of water while still achieving equity objectives;
- separate legislation for water resources and water services, distinguishing between the regulation and management of water in rivers and water in pipes.

## **6. From principle to policy, legislation and implementation**

These principles were translated, first into a statement of policy (White Paper on a National Water Policy, 1997) and thence to legislation (Water Services Act (1997) and National Water Act (1998)). The resource management framework is currently being implemented.

Considerable effort is currently being expended to develop the detailed instruments required. These include regulations governing the process of registration of existing water uses as a precursor to allocation; the development of regulations for classification of rivers and other resources to enable the determination of the Reserve. New institutional arrangements and the pricing framework have also to be established and regulated.

The basic approach is for water resource management to occur at the catchment level, and an institutional framework is being established for this purpose. But the policy recognises the need for such management to fall within a national strategy. Based on experience in other countries, provision has been made for a national water strategy to provide the overall framework within which catchment management can be carried out and this is currently in preparation.

In the field of services, the National Water Policy specifically provided for a distinction to be made between the role of local government (as the authority for ensuring access to water services) and that of direct service provision. Legislation has also been passed which provides for the application of best practice instruments such as water services development planning (or facilities planning as it would be known in other countries) in a manner which is integrated with broader local government development planning. Technical norms and standards as well as approaches to tariff setting are also now regulated. Finally, since the services legislation formally enables the participation of private-sector providers, provision is made for these contracts to be regulated, a delicate task in view of the contentious nature of water supply privatisation.

Given the fact that democratic local government is a new, still fragile institution, the focus of the National Department is at this stage on support—through capital and technical assistance rather than the enforcement of regulation.

## **7. The outcome so far**

The measure of any policy must be the extent to which it successfully achieves its objectives. To what extent has desirable economic activity been promoted—or hindered? Has the state of the environment improved—or deteriorated? Have objectives of equity such as access to water and water services been realised—or has inequity been reinforced?

A definitive evaluation of such impacts in a field as complex and diverse as water can necessarily only be made over a long period. The preliminary indicators of the response to South Africa's new water policy are however encouraging.

There is always the danger that far-reaching policy of this nature will have unintended consequences. In particular, it was suggested that the approach taken could discourage investment in critical areas of agriculture and industry, that it could foment conflict rather than promote co-operation.

Happily the reverse has so far proved to be true.

Since 1994, over nine million people, 20 percent of the nation's population, have had their access to basic water supply services significantly improved, albeit often still to a relatively low standard. Despite the acute resource shortages in many areas and the residual conflicts, access to water resources to provide basic services has hardly ever been an issue.

Within the framework of the policy, new partnerships are being developed to ensure the expansion of water services. Two private concessions have been awarded and others are under study including one for Johannesburg, South Africa's premier city. In the (publicly managed) city of Durban, application of new approaches made possible under the Water Services Act has seen free basic-needs water supplied without undermining the financial viability of the service provider.

Meanwhile, in the area of water resources, the careful distinction made between unacceptable expropriation of water use rights and the gradual regulatory deprivation of less productive uses seems to have been accepted. There has been extensive investment in private sector water-related projects. Hundreds of millions of rand has been spent by private farmers in dams and other infrastructure for the expansion of high value irrigation, in vineyards, sub-tropical fruit and sugar helped by post-1994 opening of export markets. The switch from low value field crops to high value perennials is invariably associated with substantial gains in employment, contributing directly to government's broader development strategies.

In addition, investors have often included a substantial component of social investment, giving access to newly irrigated land or other opportunities to formerly disadvantaged communities as well as using water more efficiently. This investment has been explicitly encouraged by the recognition that investment in water infrastructure is an important criterion to be taken into account when water allocations are reviewed.

Innovative approaches are being used to address water quality problems. The multi-million rand Amanzi project, being promoted to treat gold mining wastewater to potable quality, has attracted extensive international investor interest. A scheme to provide an important Northern Province town with water, and use the treated domestic wastewater for other mining process purposes, is also under consideration. In Durban, a substantial investment has been made in water reclamation, delaying the need for expansions in river abstractions.

The continued expansion of the scope of water management to include land use activities, which impact on the water cycle, is also proceeding successfully. The plantation forestry industry co-operates actively in restricting their activity so as not to impact negatively on other water users, although it still contests the fairness of being the only dry-land water user to be charged for its water use.

The picture is thus an encouraging one.

## **8. Conclusions**

For South Africa, political transition has provided a window of opportunity for the radical transformation of the country's water policy. In a broader context, it would be unwise to propose that the reforms necessary to achieve the goals of water security and sustainability should wait for such momentous periods of national history. The nature of the policy process is likely to be different in each national context.

What the South African case does serve to highlight are certain specific principles and instruments that may usefully be applied to the management and use of water resources in other countries with resource constraints similar to ours.

These include recognition of the role of the state as custodian of the resource, as well as of the need to manage water as a unitary resource, while distinguishing between service provision and resource management. The systematic recognition of the right of access to basic services and of environmental requirements is also critical. In a country where the resource is close to full utilisation, the provision of a framework that allows for flexibility in allocation between uses must be put in place if the needs of a changing society are to be met.

While some of these issues might not be seen as critical to resource management in their own right, there is no doubt that the detailed attention to the provision of basic water services contributed substantially to the sector's political mandate and the legitimacy of its resource management proposals.

Success in achieving water security will depend on effective co-operation through new institutions, as well as the establishment of practical systems to allow both environmental protection and the justifiable economic development provided for in our Constitution.

Perhaps the key message for this presentation is that the success or failure of South Africa's water policy will depend on our ability to address the practical challenges imposed on us by our physical realities in a manner which enables us to meet the social imperative of a better life for all. So far, we can report that we have used the window of opportunity provided by our political transition to lay the foundation we need.