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## ***Viewpoint* – Why Has the South African National Water Act Been so Difficult to Implement?**

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**ABSTRACT:** The South African National Water Act (Act 36 of 1998) was hailed by the international water community as one of the most progressive pieces of water legislation in the world, and a major step forward in the translation of the concept of integrated water resources management (IWRM) into legislation. It has been widely quoted and referred to, and a number of countries ranging from China to Zambia have used it as an example in the revision of their own water legislation. And yet, 15 years down the line, implementation of the act has been only partially successful. In a number of critical aspects, implementation has, in fact, been weak. This paper sets out some personal reflections on the challenges facing the implementation of this remarkable piece of legislation and on the failure to achieve the initial high ambitions within the South African water sector. Through this process, it may be that there are lessons for other countries and for South Africa itself as it continues to face the challenge of implementation of the National Water Act (NWA).

**KEYWORDS:** Integrated Water Resources Management, institutional capacity, implementation challenges, accountability, water law, South Africa

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### **INTRODUCTION**

The South African National Water Act (Act 36 of 1998) was hailed by the international water community as one of the most progressive pieces of water legislation in the world, and a major step forward in the translation of the concept of integrated water resources management (IWRM) into legislation. It has been widely quoted and referred to, and a number of countries ranging from China to Zambia have used it as an example in the revision of their own water legislation. And yet, 15 years down the line, implementation of the act has been only partially successful. In a number of critical aspects, implementation has, in fact, been weak.

This paper sets out some personal reflections on the challenges facing the implementation of this remarkable piece of legislation and on the failure to achieve the initial high ambitions within the South African water sector. Through this process, it may be that there are lessons for other countries and for South Africa itself as it continues to face the challenge of implementation of the National Water Act (NWA).

In this regard, it is best to explain my connection to the legislation. Firstly, I was an advisor to Minister Kader Asmal at the time that he was driving the revision of the water legislation of South Africa. Subsequent to this, I joined the management team of the (then) Department of Water Affairs and Forestry (DWAF), leaving the department in 2007 after 5 years as Deputy Director General: Policy and Regulation. I was, thus, involved in the water reform programme of the South African government from the inside, from 1995 to 2007. Since then I have continued to be involved from the position of a consultant in the water sector, a member of the Business Process Re-engineering Committee appointed by the minister to address a number of challenges facing the department, and most recently, as Chair of

the Board of the Water Research Commission. All of these have given me useful, although no doubt imperfect, insight into the challenges facing the implementation of the NWA.

### **SCOPE OF ANALYSIS**

The NWA was published four years after South Africa voted in its first democratic elections, and aimed at fundamentally reforming the previous Water Act of 1956 which was not only racially discriminatory in how water was allocated, but was based on the legislation of water-rich Europe which was not appropriate for a water-scarce country such as South Africa. Central to the NWA of 1998 is the principle that water is a scarce natural resource that belongs to all of the people of South Africa and that it must be used beneficially and in the public interest. The act is premised on balancing the three legs of social benefit, economic efficiency and environmental sustainability and sets out the legal framework for the national government to protect, use, develop, conserve, manage and control water resources in the country. It also incorporates the principle of subsidiarity – management of water resources at the lowest appropriate level, through catchment management agencies.

It is not possible, in the scope of this paper, to deal in detail with all of the aspects of the NWA or all of the challenges that have hampered its successful implementation. As a result, I will outline some of the key challenges as I see them.

Let me begin, however, by outlining briefly some of the key aspects where implementation of the NWA has been inadequate.

### **Institutional arrangements**

On the institutional front, the act makes provision for the establishment of catchment management agencies, the transformation of existing irrigation boards into water user associations, and the possible establishment of an agency to manage the national water resources infrastructure. Neither of the first two processes has yet been completed: only two out of a proposed nine CMAs have been established since 1998, and the transformation of irrigation boards, which was to take six months according to the act, has not yet been completed. Nor has a firm decision yet been made on how best to manage national water resources infrastructure.

### **Reallocation and equity**

Equity in both access to water and the benefits derived from water (through water allocation reform) is a key principle of the legislation, and yet, 14 years down the line, remarkably little has been achieved in this regard, and the biggest users of water remain white commercial farmers. South Africa remains one of the most unequal societies in the world and this is mirrored in access to water for productive purposes.

### **Licensing of water use**

The process of issuing licences to water users has seen serious challenges and delays, hampering much needed economic growth in the country. It has been found that prior to a recent project aimed specifically at removing the backlog in water use licences, some licence applications had been with the department for up to eight years without being finalised. In parallel, the system of registering water use across the country is not up to date and reflects incorrect water use figures, resulting in significant billing and revenue collection challenges and difficulties in ensuring compliance with registered water use.

## Protection of aquatic ecosystems

While internationally recognised methodologies for determining the water requirements of aquatic ecosystems have been developed by South African scientists, and these have been used to determine the requirements in more than half of South Africa's water resources, ensuring achievement of such requirements in practice has been much more difficult.

## DRIVERS OF POOR IMPLEMENTATION

What then, have been the drivers that have resulted in failure to deliver effectively on the legislation? The assessment contained in this paper is from the individual perspective of the author and is, therefore, both subjective and qualitative – taking the form of a personal rumination, rather than a scientific study.

### Leadership, transformation and power

The major restructuring of the South African water legislation was made possible by the transfer of power from a white minority to a democratically elected government representing *all* the people of South Africa. As a result, there was a fundamental shift of power that undermined previous power blocs that had worked against major changes in the water legislation, such as the changing of riparian rights to time-bound authorisations to use water.

This change in power, however, also played out in a number of ways within the then DWAF. Prior to 1994, DWAF had been a highly technical department, where the technical staff (engineers, scientists, lawyers, etc) were almost entirely white men. After 1994, the drive to transform the public sector resulted in an employment equity approach that saw large numbers of black and female appointments into the department. It would be foolish to pretend that everyone was comfortable with this – of course there were tensions, driven by race and gender, and political perspectives. There was also an unintended consequence which saw an outflow of white officials with years of technical experience, many of them into the consulting world. In their place a number of people were appointed who, because of the apartheid legacy, had limited technical training or experience in the water sector. The drive to appoint black staff across government and the private sector from a limited pool of people with technical training also saw high levels of staff turnover in the department as officials with two years' experience were offered promotions into other departments or the private sector. The result saw, amongst other things, a transfer of skills from the department to the private-sector consulting community, increasing the dependence of the department on consultants to support the implementation of the new policy and legislation. Actual implementation however remained in the hands of the civil servants, with all the challenges arising from lack of experience, lack of technical capability and high staff turnover. An added complication in this picture is the challenge of path dependency – the challenge of turning around the focus of a department where technical skills remained, at least for a period, primarily in the hands of a group of people who did not necessarily share the political vision of government or the departmental leadership. For example, in discussing water allocation reform some years ago, one of the old-guard white officials in the department articulated clearly that taking water away from white commercial farmers to give to small-scale black farmers was inappropriate in a water-scarce country – the transformational requirements of building a racially inclusive economy being seen as secondary to the perceived superior farming capabilities of commercial white farmers.

The ideological and political divisions within the department were, of course, mirrored in the external environment. During the drafting of the NWA, for example, the white farming community made it very clear that they did not support the idea of the department taking water away from them without compensation to allocate to black farmers who had been disadvantaged during apartheid. They

indicated clearly that this was a matter that they intended fighting all the way to the Constitutional court. That this has not yet happened may be due to the changing of positions in the past 15 years, but is more likely due to the fact that little has happened in the reallocation of water.

Compounding the political divisions was the fact that despite political change, the economy remained firmly in the hands of a white elite, still equipped with significant bargaining power and skills, access to the seats of power, and to legal support when necessary. By contrast, the poor black majority, and particularly the rural poor have limited, if any, access to these types of power, thus limiting their ability to take up the fight for access to water.

The issue of the capacity of the department to implement the new legislation has been compounded by leadership challenges at both ministerial and director-general levels. For a variety of reasons, including issues of competency and internal politics, in the past nine years, the department has had three directors general and two acting directors general. The current director general has been suspended after only one year of being in the position. Ministerial turnover has also been high, with three ministers holding office (in four terms) during the same period. This high rate of leadership change has not served the effective implementation of the NWA.

### **The perfect vs. the practical**

A second critical challenge in the implementation of the NWA was achieving the correct balance between technical or scientific excellence and the ability to manage a process. So, for example, the aquatic ecosystem scientific community of South Africa, working closely with experts in the department, developed internationally recognised and path-breaking methodologies for determining the water requirements of the ecological reserve. In this process, there was considerable engagement between managers and scientists about what was required to achieve scientific rigour and what was required for adaptive management decisions, with scientists initially arguing for a much higher level of scientific investigation than managers felt there was the time or resources to implement. As a result, a practical approach was developed which allowed for different levels of comprehensiveness of ecological reserve determinations.

This, however, was followed by a further challenge – the challenge of turning monthly flow regimes into licence requirements and into actual practice on the ground. In many cases reserve determinations have not been achieved in the field. According to Pollard and du Toit (2012) for example, not one of eight rivers examined in the province of Mpumalanga was meeting the reserve requirements. There are a number of reasons for this, including, for example, that many dams are not designed to allow for controlled releases of certain flows per month – they either spill, or they let through a relatively constant flow. As a result, regional office staff of the department were perplexed about how to translate the monthly flow regimes in the reserve determinations into licence requirements. In addition, the monitoring regime was insufficient to keep track of whether ecological flows were being maintained as per licence conditions or not. Pollard and du Toit (2012) also found a lack of understanding of the value of, and need for, the reserve amongst stakeholders, which further hampers implementation.

### **Too much too fast**

A third, critical challenge was that the department, as a result of the sweeping changes in the water sector and the country as a whole, found itself trying to implement a vast swathe of new functions simultaneously. Thus, despite the NWA having been written in a manner that allowed phased implementation, the reality was that the department was faced with an overwhelming implementation challenge with limited resources. A great deal of effort was put into planning the implementation of the new legislation, with the establishment of something called TINWA – the team for the implementation of the National Water Act. Under TINWA, a number of task teams were developed to focus on the

implementation of particular elements of the act. As implementation progressed, however, it became clear how much the task had been underestimated.

The pressure to implement the NWA at speed was driven by a number of factors, including the urgent political need to address the racial socio-economic inequities arising from the apartheid era, and the need to resolve significant water challenges such as balancing supply and increasing demand and ensuring appropriate water quality.

In addition, after 1994, the department took on a water services function that had not previously been part of the department's functions, including running a massive national community water supply and sanitation programme. This programme came with a major budget, which required significant technical capacity for implementation. While new capacity was brought into the department, technical staff were also drawn from the water resources functions of the department, further depleting the capacity to implement the water resources legislation.

Within the water resources functions of the department, staff were faced with implementing ongoing functions, developing methodologies for the new functions, and implementing new functions – fixing the plane in flight, as it were. This imposed a significant burden on officials, compounded by the departure of experienced officials from the department and a relatively high turnover of new staff. This played into a negative cycle, with staff leaving the department for better working conditions elsewhere, or receiving rapid promotion within the department or into other departments, leaving the remaining staff facing an additional workload. Technical positions have proven difficult to fill in many cases, and positions in critical management and technical areas have remained vacant for too long, with acting officials in place.

### **Decisions, decisions, decisions and accountability**

A final weakness in the implementation of the act has been the failure to stick to and speedily implement decisions taken. A case in point relates to the establishment of Catchment Management Agencies (CMAs). The first National Water Resources Strategy set out the legal basis for the establishment of 19 catchment management agencies across the country. This was after extensive consultation on this matter and the support of most stakeholders in the water sector. However, establishment of the CMAs has been poor, and to date, only two are actually functioning. The decision has now been made to establish nine, rather than nineteen, and to ensure that they are established within a limited time frame.

Two critical factors allowed the establishment of CMAs to fall behind the original schedule proposed in the NWRS. The first was that those responsible for the establishment of the CMAs (heads of regional offices) were not held accountable for not achieving their targets. Lack of capacity in the regional offices was often cited as a reason for not achieving targets, but proper performance management and accountability were weak. The culture of the organisation, for example, led to a large number of managers receiving annual performance bonuses, despite targets not being reached.

The second was the questioning of decisions taken. Despite the NWA giving the mandate for the establishment of the CMAs, some years into the process, senior management members in the department questioned the wisdom of establishing such bodies, and to all intents and purposes the establishment process was put on hold until further work had been done on the matter.

The debate around CMAs reflected a larger debate that was happening in the country around the 'agentisation' or 'corporatisation' of government. The trade union movement and left groupings in government were concerned about the growing transfer of government functions, and government employees, into parastatal organisations and agencies. This process seen as part of the neo-liberal approach to the role of the state was distrusted partly because it was seen as a move towards privatisation of some of these bodies, and partly because it moved government employees out of the protection of direct public-sector employment. On the other hand, the argument was that CMAs would

be more directly accountable to water users in the catchment than a government department because they would have both direct stakeholder representation in their governance structures, and a direct accountability line to water users in that their financial sustainability would depend on stakeholders paying their water use charges.

Resolving this debate dragged out over years, with the establishment process put into a kind of limbo waiting for a decision that was delayed and delayed and delayed. It is only recently (2012) that the minister took a clear and firm decision to go ahead once again with the establishment of the nine CMAs over the next three years. However, there is still an unresolved debate about what functions will be delegated to CMAs and over what time frames. The power to authorise water use is at the centre of this debate.

## LESSONS?

The discussion above begs the question: what can be learned from this experience?

Firstly, there is the Volkswagen vs. the Rolls Royce issue. The South African National Water Act was, as I have mentioned, hailed internationally as the Rolls Royce of IWRM legislation. But implementation has proved extremely difficult. It would, perhaps, have been better to write a Volkswagen piece of legislation, one that is more suited to the technical and human resource capabilities of a developing country.

Linked to this is the issue of focusing on getting the basics right. In the process of implementing a sophisticated and nuanced piece of legislation, and all the challenges outlined above, many of the basics like maintaining the monitoring infrastructure, and ensuring compliance with licence conditions, have been poorly addressed. The challenge of implementing IWRM is that it can result in a shotgun focus, trying to do everything at once. Where there is limited capacity, which is true in all developing countries, it is, in my opinion, better to focus on the *key* challenges in the particular context, than to strive to do it all at once.

Finally, I think it is important to recognise that capacity resides in a number of places in society, not only in government. To address the issue of capacity, participatory water management should result not only in consultation with stakeholders, but in partnerships with key players from the local to the national level. Such key players include community-based organisations, water user associations, catchment management forums, NGOs, the academic, scientific and research communities, and the private sector, whether in consulting firms or private enterprises. Harnessing the capacity and commitment of these stakeholders in determining water management priorities, finding innovative solutions, implementing actions, and monitoring implementation can go a long way to bolstering the capacity needed to protect, develop, conserve and manage the nation's water resources.

## CONCLUSION

The South African Department of Water Affairs is currently amending the NWA to address some of the challenges that have arisen during implementation over the past 15 years. Without, however, addressing the significant implementation challenges raised in this paper, there is unlikely to be substantial improvement in delivery of the intended policy outcomes.

It is, therefore, critical that the department develop a proper implementation plan, based on available resources, and with clear deliverables and time frames against which managers can be held accountable. Such a plan needs to be both ambitious and realistic and serve to guide implementation, building on the lessons of the past 15 years. I hope that the development of the second National Water Resources Strategy, currently under way, and the development of an implementation plan based on that strategy, will provide precisely such guidance to the department and the sector as a whole.

Finally, let me remark that while there are specific lessons that can be drawn from the South African example, South Africa is also a special case in many ways. While there may be capacity constraints in government, South Africa does have a relatively high level of technical competence compared to many other developing countries. South Africa is also a middle-income country, with more finances available to government than in many other countries, particularly in sub-Saharan Africa. At the same time, South Africa has particularly difficult challenges to overcome in terms of the legacy of apartheid and very high levels of inequality. It is within this context that any lessons from the South African experience must be viewed.

## REFERENCES

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