Governance in water resources management: progress in South Africa

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1. Introduction

South Africa has a total area of 1,219 million square kilometres inhabited by 40.5 million people[1], of which 89,1% are from the designated groups (African/blacks, Coloureds and Indians). Living standards are closely correlated with race. While poverty is not confined to any one racial group, it is concentrated among the designated groups, particularly black Africans. According to the 1999 Household survey, 52% people are poor[2]. Africans/blacks make up 78% of the population and they account for 95% of the poor. 17% of the Couloureds are poor, in comparison with rates of less than 5% among Indians and Whites. 74% of the poor live in rural areas and 62% of the rural population are poor [3]. Eight million South Africans still do not have access to safe drinking water, about 40% of households are poor, and some 25% of 'black African' South African adults are illiterate[4] The poor live in the old Homelands- Bophutatswana (North West), Ciskei and Transkei (Eastern Cape), KwaZulu Natal, Lebowa and Venda (Limpopo) Provinces. Over and above, South Africa receives half the world average of rainfall with marked spatial and temporal variation.

The South African Vision for managing its water resources is presented below from Chapter 1 of the National Water: Act (NWA) of 1998: the purpose of the Act which is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst others;

(a) Meeting the basic human needs of present and future generations;
(b) Promoting equitable access to water;
(c) Redressing the results of past racial and gender discrimination;
(d) Promoting the efficient, sustainable and beneficial use of water in the public interest;
(e) Facilitating social and economic development;
(f) Providing for growing demand for water use;
(g) Protecting aquatic and associated ecosystems and their biological diversity;
(h) Reducing and preventing pollution and degradation of water resources;
(i) Meeting international obligations;

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[1] *Statistics South Africa, 1996. The People of South Africa Population Census. Report No. 03-01-11 (1996).*
[2] *Poor means a household income is less than R800 per month (Woolard, I., 2002. An overview of poverty and inequality in South Africa. Report prepared for DFID (SA). iwoolard@iafrica.com*
[3] *Statistics South Africa, 2000. 1999 October Household Survey, raw data.*
[4] *SA Country Report: African Charter on Human and People's Rights, 1998.*

(j) Promoting dam safety;
(k) Managing floods and droughts'

And for achieving this purpose, to establish suitable institutions and to ensure that they have appropriate community, racial and gender representation.

2. WRM institutional reform

In accordance with the new democratically elected government, SA is a long way through developing new revolutionary policies following national and globally recognised best practices. In the water management arena, the NWA ensures equitable, efficient and effective management of water resources. As reviewed above, the Act also encompasses the principle subsidiarity under which water resources management is to be devolved to the lowest appropriate level. Other principles include the integration of surface and groundwater management, self financing of water management by user groups, public participation and community involvement in water management, the preservation of water for ecological purposes, demand management of water resources and a shift from administrative to hydrological basin boundaries.

The success in the implementation of the Act heavily depends upon the establishment of stakeholders dialogue and management platforms at different scales of hydrological boundaries. Generally abiding by the hydrological boundaries, the country has been divided into 19 Water Management Areas (WMAs). A schematic representation of the linkages between the various institutions involved is depicted below;[5]

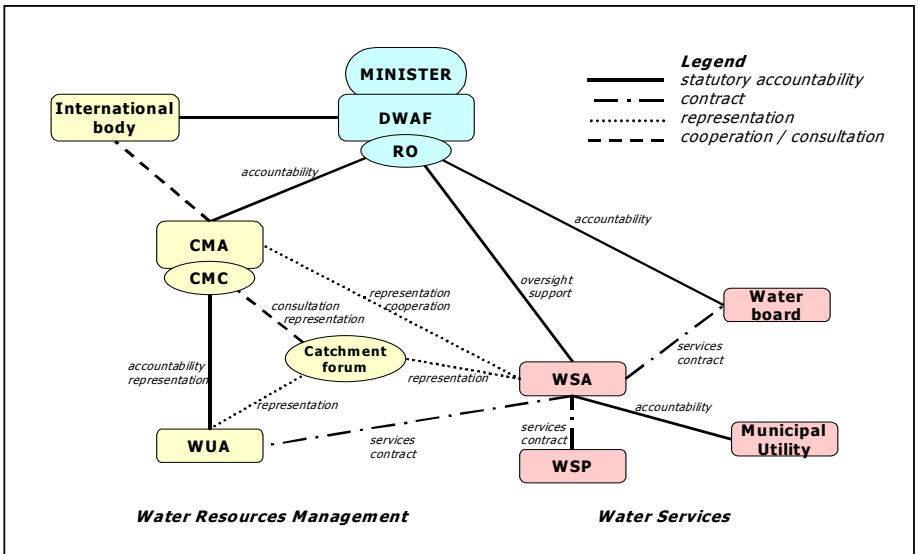

Figure 1. Primary institutional relationships between various water sector institutions

The challenging institutional reform implementation as per NWA necessitated, on the one hand, the development of various policy clarifications, guidelines and regulations that are at progressive stages of

[5] *RO=DWAF Regional Office; CMA=Catchment Management Agency; CMC=Catchment Management Committee; WUA=Water User Association; WSA=Water Services Authority; WSP=Water Services Provider. Source: Mazibuko, G and Pegram, G (2002).*

development. On the other, the actual implementation with regards to institutional development that is progressing at different rates;

3. The WRM Institutional Hierarchy

At the **national level,** the general requirement is transparent and accountable public administration in all spheres of government. The NWA requires the Minister to ensure that all aspects of water resource management, which will affect users and the public, are drawn up with their involvement. This is done through the gazetting of a National Water Resources Strategy (NWRS) as a legally binding document where all interested and affected parties are provided an opportunity to have input. As custodians of the national water resources, the Minister has the responsibility to define how the resources will be managed for the national benefit in consultation with the stakeholders.

The NWRS will be finalised towards the middle of 2003. Currently, it has been drafted, gazetted in the government notice for public comments. More than 20 national workshops were held where the strategy was presented allowing for intensive interaction between the departmental staff and the public at large. Thousands of comments were received which are being scrutinised, some are effected within the strategy while others are not. All stakeholders who contributed will be informed whether their input was included and if not why. By and large, this remains to be the largest public consultation attempt carried out ever by the department with justifiable expense that goes with the magnitude of such an undertaking.

At a **Water Management Area *(WMA) level***, of which there are 19, Catchment Management Agencies (CMAs) are responsible for managing, using, conserving, protecting, controlling and developing water resources in each of the WMAs.

Their role is to ensure the equitable access to water resources to all stakeholders especially the historically disadvantaged individuals while maintaining efficiency and sustainability of the resources. A governing board representative of all the sectoral interests will lead each CMA. The Minister appoints the board after receiving nominations from an Advisory Committee specifically set up for that purpose.

Typical issues that could be handled by this level could include, amongst others according to Chapter 7 of the NWA;

1. development of a Catchment Management Strategy (CMS) which defines the how, where, when, by who, for whom and the how much of resources can be managed, used, developed, protected, conserved and controlled.
2. water allocation principles to existing and prospective users.
3. coordination of related activities of water users and other relevant institutions.

promotion of community participation in protecting, using, developing conserving, managing and controlling water resources.

4. promotion of coordination of its activities with the relevant water services authorities responsible for water services and sanitation delivery targets.
5. setting up Resource Directive Measures aimed at sustainable water use.
6. the principles for determining the reserve (basic human needs, environmental and international requirements).

A number of factors determine the success of institutions at this level where most of the water resource management decisions are made, such as;

1. identifying the appropriate mechanisms and structures for sharing information and reaching people on the ground within resources limitations. The spin offs could be;
    - Adequate participation
    - Equally empowered stakeholders co-managing resources
    - Powerful watch-dog/whistle blower role played by stakeholders/civil society organisations
    - Ensured adequate services delivered by Water Management Institutions.
2. Identifying the current lowest appropriate level of management while promoting the slogan “devolve as it evolves”
3. Fostering cooperative governance where good working relationship are developed for the benefit of the people.

4. Well defined performance criteria for achieving pro poor service delivery
5. Effecting the right composition and balance of the governing board to represent all sectoral interests, including the environment and the historically disadvantaged groups with the, racial and gender demographics in their respective areas.
6. Adequate monitoring and evaluation of their performance by the regulator, the state, to ensure fair dialogues and the creation of adequate performance criteria. The role of the referee is essential in the South African context because of the vast disparities between the different user sectors in terms of power. The mechanism used to play this role is through the submission of an annual and a 3-year strategic plans as well as an annual report of achievements. Although the accountability of these board members should lie first and foremost to their constituencies, the current social and economic environment does not allow for a fair play.

To date, four CMA establishment proposals have been officially submitted for evaluation; the Inkomati, Breede, Mvoti to Mzimkhulu and the Crocodile West Marico CMAs. The Inkomati CMA is currently gazetted for wider comment while the Minister has established an Advisory Committee for identifying the sectoral groupings for its governing board. It is envisaged to be formally established by the middle of 2003.

At a **catchment level**, there are two legal organisations that would provide the platforms for stakeholders to discuss issues of mutual interest at a more localised level. Catchment Management Committees (CMC) are advisory in nature and can be set up as and when needed by the CMA to advise on defined issues. The CMA might delegate some of its functions to CMC. They also play a vital role in acting as conduits of issues of common concern from within the respective catchments. They could also act as coordinating structures for a number of WUAs.

Typical issues would be those entailed in the CMS such as setting up water quality objectives for water resources to define the balance between the development aspired for in the area and the subsequent environmental tradeoffs that need to be made. Identifying and prioritising water resources related issues that need to be addressed by the CMA would be another aspect.

The commitment of the stakeholders for sustained involvement at this scale is proportionate to the level of interest in water resources from the protection, use, control, management, development, and conservation perspectives.

At this catchment scale, the challenge would be to ensure that the playing fields are levelled to minimise the dominance of the stakeholders with strong vested interests. This responsibility would mainly reside with the CMA, which has to demonstrate that adequate efforts have been exerted to build the needed capacity in marginalized groups especially women to

relate to water resources management issues eventually contributing to the betterment of their lives.

One of the lessons learnt in stakeholder involvement at a basin level is that financial compensation as incentive for continued participation fulfils this expectation as long as the incentive is there. This is not perceived as being sustainable where internalisation of the issues discussed is not demonstrated. A longer term and probably resource intensive approach for sustained participation can be possible through;

- Information sharing using suitable media and in the relevant language at an appropriate level,
- Identifying and mapping out overlapping needs and aspirations,
- Conducting catchment tours, and
- Developing a catchment vision using participatory methodologies.

At a **Water user Association *(WUA) level*,** which is mostly of an agricultural scheme scale, the commitment and sustained involvement is a function of the services/benefits derived from being part of the association. The WUA would cease to exist without its members. The intrinsic need to belong to a user association is because of the overlapping needs amongst the members.

The goals of government in encouraging WUA formation are to improve the access of citizens to water in an egalitarian way, to reduce long-term government subsidy to irrigators, to foster a culture of proactive associations, to promote self-determination in local water management, to stimulate economic development, especially among the poor and to utilise existing water management capacity to the benefit of the population[6].

The transformation of irrigation boards into water user associations (WUA) has progressed very slowly. This is beside initial policy guidelines that have been developed to guide the process. As it stands, 43 irrigation boards have been transformed into 20 WUAs while one irrigation board has been disestablished. This is because some of them have decided to merge. Three water boards have been transformed into water user associations too.

Several challenges surround the transformation of irrigation boards into water user associations[7] mainly information sharing and awareness creation of defined beneficiaries from marginalised individuals, limited access to productive water by the same target group, etc. Better coordination has been achieved between several government departments; Agriculture, Water Affairs, Land Affairs and Public Works for the revitilisation of the Old

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[6] DWAF, Government policy on support to Water User Associations. Draft, Sept, 2002.

[7] *The Act (NWA section 28) stipulates the essential requirements of water use licences. A licence must specify the* ***person*** *to which it is issued and the* ***property or area*** *in respect of which it is issued. No mention is made of the land owner. The intention is that the licence will be issued to the water user, and that this same person will become the member of the Water User Association. The condition of title deed for membership of Irrigation Boards under the previous Water Act has been removed, because it excluded historically disadvantaged individuals from membership. In communal areas this holds important potential for gender inclusivity in WUA membership, since the productive water users are predominantly women, while a focus on PTO certificates are likely to result in a predominantly male membership. In commercial areas it opens up membership to all sectors affected by WUA activities.*

Homeland Schemes. The target for the Limpopo Province is the revitilisation and transfer of ownership of 150 schemes in the coming four years.

The challenges facing the establishment of WUAs could be the following;

- Equitable representation in its membership and management structures of all current and potential water users affected by the activities of the WUA;
- Sustainable and efficient service provision in response to the collective need of its membership (usually this entails fair and reliable water supply to its members);
- Effective interaction with other water management institutions and representation of the needs of its members at higher level decision-making structures;
- Performance of ancillary functions without jeopardising its own sustainability and its basic relevance to its membership;
- Facilitation of support from other institutions to the benefit of its members, especially historically disadvantaged farmers; and
- Encouragement and brokering of mentorship arrangements for historically disadvantaged farmers with established commercial farmer members of the WUA.

At a **micro-catchment level**, although not statutory organisations, Catchment Management Fora (CMF) have made significant contributions to water resources management at a local level by, among other things, providing essential local knowledge, expertise and information. In this respect they may eventually be expected to play an important role in the operation of CMA when they are established. The Department will continue to support existing forums, and encourage the creation of new ones where the necessity arises.[8]
CMF have already been established in many areas to involve stakeholders in decisions about water resources management. These for a have now become important bodies representing stakeholders in the establishment of CMAs and are envisaged to play an active role in assisting these CMAs after their establishment. CMF are particularly important in the development of the Catchment Management Strategy to address local priority water resource management issues, but also provide a vehicle to facilitate the coordination and/or integration of water resources management with spatial planning and land use management.

The focus for initiating a forum is most often driven by a water resources management agenda. However, where adequate water supply and sanitation do not exist, they, understandably, dominate the discussions and unless they have been satisfactorily addressed, the involvement of the poor in water resources management would be marginal. In bridging this gap, attempts to create liaison between the different grass roots institutions such as Community Development Committees, Water Committees, NGOs and other CBOs proved to provide a reasonable mechanism for sharing information demanded by the stakeholders. The role that can be played by

[8] Extract from: NWRS Summary, August 2002

NGOs in this instance for continued facilitation and communication cannot be emphasised enough. However, building a partnership with NGOs is not always easy. The capacities of these organisations particularly black dominated, are often weak. Their accountability and their complex internal politics, as well as the fact that they sometimes view government as adversary rather than an ally, pose considerable challenge in sustaining long-term capacity building and community development programmes in rural areas.[9]

It is envisaged that the true integration between water services and water resources management can best be achieved at this level. Although the reserve guarantees the availability of water to meet the basic human needs, 8 million people still have no access to safe drinking water. Many more do not have access to water for productive uses. Infrastructure development remains to be high in the South African agenda mainly for water treatment and distribution.

A layer of complexity is added where the water resources are not sufficient and vary widely in their geographic distribution. Some more complexity is due to the fact that water services and sanitation are now the responsibility of local government, under the Water Services Act of 1997. The two rounds of elections since 1994 and the revised municipal boundaries stabilised only in 2000. As a result, municipalities are at their infancy and have a long way to go to fulfil their mandate. In the quest to minimising the delays in service delivery resulting from this transition, the DWAF has an extended handover period of responsibilities with capacity building being a prerequisite for successful devolution.

Forum experience to date has shown that some stakeholders become frustrated with fora that are simply consultative. In many cases, there is considerable pressure for the forum to secure more 'power' and to become more influential in the water resource management domain[10]. Commonly, the route to 'power' is seen to be that of legislation, where the forum aspires to become a statutory structure (normally a Committee or a WUA) to have more 'teeth'.

At the **international level,** 4 major rivers are shared between South Africa and Swaziland, Botswana, Mozambique, Zimbabwe and Namibia. A number of joint studies, agreements, bilateral committees and multilateral commissions exist between the different countries. The latest signed interim IncoMaputo Agreement between Mozambique, Swaziland and South Africa at Ministerial level took place in the WSSD in August of 2002. The IncoMaputo Task Teams affiliated to the Tripartite Permanent Technical

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[9] *UNDP and civil society organisations, building alliance for development. (http://www.undp.org/csopp/csobroch.htm).*

[10] *DWAF, 2001. Guidelines on the Establishment and Management of Catchment Forums, in support of Integrated Water Resources Management.*

Committee (TPTC)[11], representative of three countries provides the platform for dialogue.

The agreement represents the planning level of management of the Incomati and Maputo River systems. The agreement impacts on areas and activities like operating rules, monitoring, protection, information exchange, as well as capacity building and institutional development.

A number of studies have been commissioned to support the agreement;

1. Incomati River Basin Study is completed with the Danish support.
2. The Lower Usutu (Swaziland) smallholder irrigation project.
3. The Maputo Basin Study in the 3 countries.

Existing commissions between SA and Mozambique are;

- The Joint Permanent Commission for Cooperation (JPCC) and
- The Joint Water Commission (JWC).

Other Transboundary Initiatives include;

- Limpopo Basin Permanent Technical Committee and commission between Mozambique, Zimbabwe, Botswana and South Africa.
- SADC water sector Committees,
    - SADC Hydrological Cycle Observation System (SADC-HYCOS). A total of 40 of the 50 Data Collection Platforms (DCPs) have been installed already.
    - Further development of the flood warning systems and emergency/disaster management measures in the SADC region are under discussion.

The role of the State

In essence, National Government is the public trustee of the nation's water resources, in that it is legally obliged to administer the NWA to achieve its specified purpose and goals. In administering the Act, the state is ethically and morally responsible to facilitate and monitor the devolution of responsibility particularly with regard to the development of new institutions. Underpinning all of this is a watchdog role with regard to redress issues (such as representivity, equitable allocation and beneficial use in the public interest), promotion of environmental values and minimizing risks to the resource. With regard to the latter, the state has the power (as a backstop facility) to regulate the use, flow and control of all water in the Republic.

The transition from a state of total exclusion to that of participatory management in water resources is a formidable challenge to historically disadvantaged local communities, who are now expected to work in partnership with agriculture, industry, forestry, government and environmental groups. State support can be instrumental in easing the

[11] *Established by the Agreement between the Government of the Republic of South Africa, the Government of the Kingdom of Swaziland and the Government of the People's Republic of Mozambique for the establishment of the Tripartite Permanent Technical Committee, signed in Pretoria on 17 February 1983.*

transition for both historically disadvantaged and advantaged South Africans, and both proactively, through the preparation of guidelines and other tools, training and capacity building, and facilitating public participation processes, and reactively through review of proposals, business plans and other submissions, as well as responding to enquiries on an ongoing basis (through a "helpdesk" approach). The State could also be instrumental in helping to level the playing fields in lowesttier institutional development, particularly at inception stage when local communities could easily be overwhelmed or marginalized by stakeholders with controlling or vested interests.

The State also ensures implementation of measures or programmes to promote equity issues at a national scale, such as in its water pricing policy, training, capacity building and educational programmes, provision of subsidy schemes, and compulsory licensing initiatives.

The establishment of decentralized regional water management institutions through an evolutionary process of incremental institutional development is achievable, provided it is given the time and support it needs so that it is seen as an investment in empowerment and development of local communities and in local water resource management. It must also be accepted that the process of developing institutions will gradually adopt the technical issues of water resource management rather than take on that responsibility at inception, at the risk of alienating the large majority whose bona fides in participating in the process should not be judged by their current disposition or their ability to deal with the nuances of water resource planning. The better and more visibly water resource planning addresses the water needs of communities, the smoother assimilation will be[12].

Development Prerequisites

Transformation of the water sector in South Africa since 1994 has won international admiration from a legislative point of view, but from an implementation perspective, is of a scale that is without precedent in this country's and the world's history. The depth and complexity of imbalances created by past policies and practices goes far beyond widespread poverty and no access to water; it has created an enormous vacuum in the socio-economic development of a large sector of the community, which requires empathy, patience and planning to redress, a much longer process than the time required to draft and pass new legislation.

Some of the key development prerequisites that are needed to facilitate a phased implementation of bottom-up CMA establishment are outlined as follows:

Addressing the services gap: stakeholders without access to a safe water supply understandably want to participate in management initiatives (such

[12] Extracts from; van Koppen, B, Mayet, M and Karar E, 2003. "Bottom up establishment of Catchment Management Agencies in South Africa". Paper presented at the International Association of Hydrological Engineers Symposium, Stellenbosch, SA.

as CMA establishment) when both their basic constitutional right of potable water *and* their needs for productive water are taken seriously. The challenge of delivering potable water to all has been tackled admirably, but therein lies a dilemma as well. Integration between water services and water resource management is a cornerstone of IWRM, but the slow rate at which this is seen to be happening within the Department creates further dissension amongst stakeholders. If officials steering water resource management processes incorporate water service issues in public participation initiatives, it would constitute a major leap forward in soliciting buy-in from marginalized stakeholders who are without basic services as well as those who rally around them. The trials, successes and plans of the water services sector should be a common feature on the public participation agenda. Officials should be well equipped with knowledge of water service programmes and achievements, and publicise relevant aspects in the public participation process to pre-empt any negative criticism that may arise and to reflect an image of integrated and common concern within the Department as a whole.

Catchment forums and Water User Associations: building an institution such as the CMA from the bottom-up, covering a large geographic area with wide ranging functions and with representative membership, is an evolutionary process. An essential element of this process is to have institutions at a local level that enables local communities to be sensitized to IWRM and to mobilize themselves and work collectively over issues affecting their environment and quality of life. Catchment forums and Water User Associations (WUA) are appropriate institutions for this purpose. As these institutions grow in number, confidence, and in accomplishments, they can form a network covering larger areas, gradually providing second and third tier institutions in readiness for involvement at CMA level. This type of "organic" growth in institutions for IWRM is the recipe for sustainable participation, as long as lowest - tier institutions uphold freedom of association and expression, focus on common good and have sufficient participation from local and provincial government to ensure maximum filtration of community issues through the widest possible network. There are several highly successful examples of meaningful public participation at a local institutional level from which lessons could be drawn for wider application.

Information, capacity building and education: with increasing usage of the term, one hopes that capacity building does not lose its significance as a concerted and methodical plan to inform and redress the level of readiness of previously disadvantaged communities to understand the water cycle at further distances, the importance of resource management and of working with others in a basin context to set and achieve goals. In its widest sense, capacity building can also anticipate resistance, pre-empt conflict and build trust, all of which is essential for sustainable participation. A useful point of departure in the case of previously disadvantaged communities is an audit of existing knowledge, skills and capacity, and existing community and cultural activities. This has the advantage of working from a position of strength

(within the community) rather than striving purely to fill a void that focuses on inherent weaknesses.

Co-operative governance: As a natural resource, water is not limited by boundaries, political preferences or divided responsibilities. The river is a natural integrator of a myriad of land uses, cultures, political boundaries and landscapes as it weaves its way from headwaters to the sea. It is only befitting that the society that derives benefit from the resource takes collective responsibility for its management. As a constitutional imperative for Government Departments to work collectively and avoid duplication, one should be safe in assuming that co-operative governance will take place. In practice, however, lines are still drawn between Departments, and sometimes within Departments, which does not create an environment conducive to working together. Many splintered efforts to integrate activities across Departments are launched, but a more comprehensive programme is needed, at national and provincial level. For CMAs whose boundaries cross several provinces and municipalities, the need for integration is even more pronounced.

Performance Indicators

In order to steer this broad, evolutionary process of institutional building on two fronts, namely the building block approach to community participation, and interim water resource management measures until fully fledged CMAs are in place, performance indicators are needed to serve as yardsticks for evaluating progress, acknowledging achievements and amending plans. Because of the inherent complexity of the task, there is no single indicator that stands out as the obvious choice, but a few crucial ones are listed below.

Goals: Based on the overall policy for integrated water resource management, the NWA outlines ultimate goals, and provides the framework within which these goals can be achieved. There is sufficient latitude in the NWA for communities to set their own goals that are more meaningful in their context, as long as they do not conflict with those of the NWA. The major challenge lies in interpreting the goals into short and medium term goals that are practically achievable with the resources that are available. Among the more difficult interpretations are those sections of the NWA that refer to equity, redressing imbalances, adequate representation, “enabling” public participation etc. Guidelines and other documents covering some of these issues have already been prepared by the Department, but a lot more is still open to interpretation.

A particularly illustrative way for the Department to present its interpretation of the NWA is through the development of Minimum Requirements Guidelines, particularly for interactions with stakeholders at all levels. These guidelines can be structured in such a way as to illustrate the elements of a process, and the “benchmark” requirements of each element that are deemed by the Department as a minimum requirement. The progression towards those goals is itself a performance indicator. A poignant issue that could be addressed in this regard is that of institutional

format and institution building. The traditional process of invitation through various media, public meting(s), establishment of a committee or forum and sub-committees/working groups with office bearers etc may be quite inappropriate and insensitive to preferences or customs of local communities. Other options need to be explored by tapping local resources, and to accommodate novel institutional arrangements that are more palatable to the communities, is to invest in their sustained participation.

Planning tools need to be more widely used to encourage communities to develop their own indicators and monitor them. Perhaps one of the most versatile tools in this regard is the Logframe Matrix, which as a planning tool is just as powerful at first tier organization level as it is for the CMA. It requires the establishment of assumptions and means of verification, in addition to goals, which serves as a dynamic tool throughout the project duration. It is important that PDIs have a planning tool that they can shape themselves, identify with, and own, rather than rely only on looking at Integrated Development Plans and Water Services Development Plans prepared by government structures. In fact it would be more useful to integrate or refer to these plans when developing the logframe.

Built-in performance indicators: Among the instruments prescribed by the NWA, are several built-in performance indicators that provide convenient check mechanisms at suitable intervals so that corrective action may be taken timeously. Some examples are as follows: the limited term of office for members of the Governing Board, the five year review period for a Catchment Management Strategy, submission of annual business plans by water management institutions, etc. Despite these mechanisms, the Department has a responsibility as public trustee and custodian to (initially support and) monitor the activities of water management institutions, and to ensure that the purpose and goals of the NWA are in fact implemented.

In the Mean Time

Despite the political will to devolve the management of water resources to the local level, numerous challenges are forcing the state to play the role of initiator, facilitator, referee and regulator, in the meantime. This should not imply that South Africa is compromising its vision but discovering that it would be realised in a phased and progressive manner. All efforts are made to overcome the reviewed challenges on essential imperatives such as capacity, empowerment, social justice, cooperative governance, information sharing, etc. Checks and balances are being developed to ensure that the future desired state becomes achievable over time.

This approach/conclusion is not static and should be viewed as work in progress which will be monitored and reviewed on a regular basis. There is an element of pre-emption regarding the establishment of CMA that are not established yet. Questions that still need to be explored, researched and answered, include;

1. the creation of incentives for the rural poor to engage in dialogue by providing a reasonable answer to the question "whats in it for you?" The developmental nature of water resource management institutions will contribute to social and economic development mainly canalised through local government initiatives. The recent transformation of local government and their new composition can delay the operationalisation and realisation of the CMA developmental contributions. Both institutions striving to fulfil their respective legal mandates under different Acts where there is no accountability from one to the other.
2. The long term vision for water resources management where equitable access to water is implemented, representative institutions are established, etc might not be "good enough" for those who are still waiting to feel the positive impact of the government they elected seven years ago on their lives.
3. In this hierarchy of governance structures in South Africa, "what is the most appropriate level for decision making, now and in the future?" This varies with the geographic scale of operation, as discussed earlier but appropriate methods for its identification are still to be developed.
4. The monitoring and evaluation tools for capacity building programmes aimed at ensuring the right impact is made through achieving the time-bound targets of the vision, need to be designed.
5. Attracting businesses and international developers to invest in old homeland areas to ensure the financial viability of dialogue platforms such as CMAs where they have been ear-marked as development nodes.
6. Instituting the right checks and balances to ensure adequate compliance, at all levels, over time can be cumbersome both on the side of the complier and the regulator. Performance indicators and auditing regulations need to be simplified enough for consistent implementation for timeous and accurate interventions.