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**Redressing Racial Inequities through
Water law in South Africa: Revisiting
Old Contradictions?**

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based on race and gender as well as poverty eradication as major guiding principles of the new nation. The application of these principles to the management of one of its scarce resources, viz., water, makes South Africa one of the few countries in which water is seen as a fundamental tool for achieving social justice and pro-poor economic growth. This is especially significant because, worldwide, professionals in the water sector tend to confine their concerns for poverty alleviation in water management to water supply for domestic purposes. It is true that the lack of access to clean, near, and affordable water for domestic purposes is a critical dimension of poverty. However, poverty is a much broader phenomenon and encompasses a range of interrelated dimensions of deprivation. Income poverty and socio-political exclusion are other dimensions of ill being, which are directly related to water. The water law in South Africa seeks to redress inequities and to contribute to poverty eradication in productive uses of water as well (Kasrils 2002).

The early years of implementation of the National Water Act (NWA) highlight how formal law can be made to either serve or subvert these ends. The process of implementation, therefore, has to be understood in light of the socio-political and economic context of the past (section 2) and its links with the present, including the new governance structures in which water management in South Africa is embedded (section 3). The three actors in the contemporary scenario are the new Department of Water Affairs and Forestry (or DWAF), the former vested interests (whites and their institutions), and the group that was historically disadvantaged (black individuals and communities). Both whites and blacks respond very differently to DWAF's actions in its role as the initiator of the implementation process. The former vested interests seek to maintain the inequities of the past by trying to restrict any changes to cosmetic ones and also by actively scanning the new law for opportunities they can exploit, for instance, the space it provides for public participation. In contrast, black individuals and communities—including the newly elected local government, which is predominantly black—challenge such attempts made by these vested interests while articulating their own needs and aspirations. In this contest about the intentions and aims of the nation's new legislation for people's lives, DWAF acts as an arbiter that continuously interprets the law and as an implementer of programs meant to empower the poor, once and for all, in the arena of water management.

The establishment of the Catchment Management Agency (CMA) in the Olifants River Basin provides a good illustration of the outcomes at stake in this struggle (section 4). Decentralization of water management and the gradual devolution of power to water users organized in new Catchment Management Agencies are central to the new water law. The Olifants River Basin is the country's second pilot project. Hence, the lessons that can be learnt from it (section 5) are important for future CMAs in South Africa. These experiences are also relevant for many other governments in the developing world today, which are engaged in water reform and which attempt to combat poverty by devolving water management authority to the public through new river basin organizations (Wester, Merrey and de Langc, forthcoming).

2. History of Water Law in South Africa

South Africa, in the apartheid era prior to 1991, was a country riven by formal racial divisions. Under a comprehensive policy of racial segregation, implemented in an attempt to isolate and subjugate the black majority, the government of the white republic of South Africa instituted a

program of “Separate Development.” One of its actions therein was to carve out a number of black “states” within the country’s boundaries.’

Comprising no more than 13.5 percent of the country’s area, these ten arbitrarily created administrative territories—called *Bantustans* or Homelands (figure 1)—were allegedly the original areas of settlement of what the state had identified as the country’s nine main African ethnic groups, which accounted for more than 75 percent of the population. Within these territories, several of which were highly fragmented, black South Africans could ostensibly aspire to self-rule (Ross 1999:135).² In reality, these areas—whose nominal autonomy went unrecognized internationally—served merely as dumping grounds for blacks who were deemed in excess of numbers acceptable within the white republic. They acted as pooled reserves of labor from where black men—and women, to a lesser degree—went to work for long periods in white South Africa. Those who were left behind, women for the most part, were relegated to the roles of sustainers of households and caregivers for children, the sick and the elderly (Omer-Cooper 1994: 193-221). Moreover, the Homelands were rendered economically unviable given that forced removals led to huge population densities that often far exceeded the land’s carrying capacity (Ross 1999: 126, 145-148). Thus, the black population was strictly controlled and its members made to assume the role of laborers in the white economy while their own agriculture in the former Homelands was systematically underdeveloped (Yawitch 1981; Unterhalter 1987). The new multiracial government of South Africa, which was elected to power through universal franchise in 1994, continues to be bedeviled by the institutions put in place by its predecessor.

One of the most noticeable legacies of apartheid in South Africa is the huge extent of poverty and the prevalence of stark inequities in access to all manner of resources. In 1994, 12 million South Africans had no access to basic water supplies and 18 million were without sanitation (Kasrils 2002). Unemployment rates in 1999 were 52 percent for African women between 15 and 65 years, and 37 percent for men in the same age group (Statistics South Africa 1999). Almost 50 percent of the country’s population is income poor, spending less than Rand 353 (or US\$ 30) per adult equivalent per month.

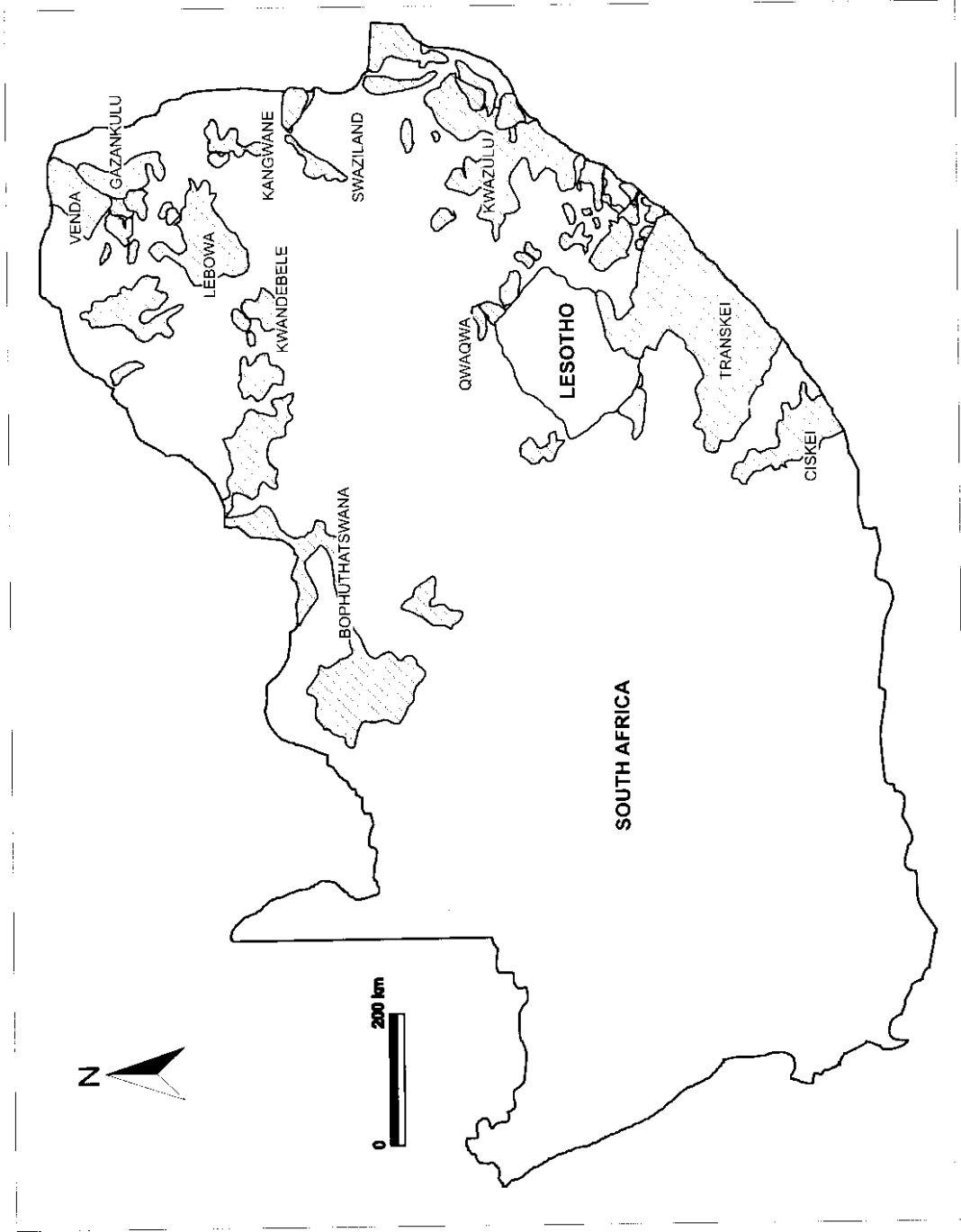
Furthermore, 70 percent of the country’s poor live in rural areas. In few other countries is income distribution as unequal as it is in South Africa (UNDP 2002: 194-197). In South Africa’s water sector, as elsewhere in its economy, the fault line between rich and poor closely mirrors that between white and black users, respectively.

The distribution of land resources is highly skewed with 13 percent of the population—who are white—owning 87 percent of available land (Lahiff 1999; Cousins 2000). Available evidence shows that inequities in access to water may even be wider. As much as 95 percent of water for irrigation is used by large-scale farmers, while smallholders only have access to the remaining 5 percent (de Lange 1998). In the Mhlatuze Basin in KwaZulu-Natal Province, a mere 10 percent of the population has access to more than 97 percent of available water resources, and only a very small part of the benefits from the bulk of the water that this minority uses trickles down to the remaining 90 percent of the basin’s population (Steyl, Versfeld and Nelson 2000).

¹As far back as 1913, it had created “African Reserves” under the Native (now “Black”) Land Act, which not only stipulated that blacks could only own land within specifically demarcated territories but also denied them access to sharecropping arrangements in areas outside these reserves. In 1948, racist policies got a boost with the election of the National Party, which was exclusively Afrikaner. Forced removals of blacks from so-called white areas to the reserves, later termed Homelands, officially began only after 1961 (Ross 1999).

²In fact, four of the ten Homelands achieved “independence” from the Republic of South Africa, while the others were considered as being on the path to such self-determination when liberation from white rule was achieved.

Figure 1. South Africa, pre-1994, with the Homelands depicted.



Apartheid Government Law

Under apartheid, the open embodiment of racism in law carried over into the water sector as well. As a result, control over water in South Africa prior to 1994 is best understood in terms of the co-existence of two formal but separate legal systems. These are: 1) the apartheid-era laws, enforced within the white republic; and 2) the former Homeland laws. Although superseded by the laws of the democratic South Africa, the two legal systems of the apartheid era continue to profoundly influence the implementation of the post-apartheid water law because of the strengths, in the case of the white republic, or the inherent weaknesses, in the case of the Homelands, of the institutions they put in place.

Jurisdiction over water followed the geographical segregation of the apartheid regime. The Department of Water Affairs (DWA) served the former white Republic of South Africa (RSA). Here, water rights were primarily vested in riparian rights holders. Commercial farmers, an important constituency of the apartheid government, greatly benefited from the services of the DWA (later renamed the Department of Water Affairs and Forestry or DWAF) through highly subsidized scheme and dam development. Gradually, however, the DWA started shifting its focus to other important water users, such as power generation and industries, and also intensified water quality management. By the mid-1980s, the first basin studies were undertaken in collaboration with consulting firms that accumulated expertise for the area in which they were active. The first ideas for Catchment Management Agencies also date back to this period (DWA 1986).

A considerable degree of self-management crystallized among the water users in the white RSA. Democratically elected Irrigation Boards managed large-scale irrigation schemes and their representatives participated effectively in national farmer organizations. Portions of rivers, in which farmers had built weirs, were governed collectively. Large-scale water users also started to organize at basin level. For example, in 1992, the Olifants River Forum was initiated to promote better coordination between mines and a national park downstream of the Olifants River, on the one hand, and the upstream mines, industries and the country's largest electricity generation company, on the other—all in common pursuit of a "healthy river."

Thus, during the apartheid era, the white government, large-scale farmers, mining firms, forestry enterprises and tourist companies established well-defined, formalized laws and well-organized institutions, based on riparian rights, which ensured their permanent access to the country's scarce water resources.

Homeland Law

In contrast, in the former Homelands, formal authority over water was vested in the Homeland governments, which were represented at the community level by tribal chiefs and councils (hut cf. Thompson et al. 2001: 16).³ Each Homeland government implemented its control over water

³These repressive governments were, for the most part, vassal states of the white RSA. With its backing, they dismantled the structures of traditional chiefdoms as they had existed for centuries and replaced them with their minions who were hardly accountable to the local communities they were in charge of administering (Ross 1999: 127, 135-136, 177). Therefore, as chiefs became salaried government officials, staying in office at the whim of a government that was beholden to the white South African state, they also risked losing their legitimacy to rule in the eyes of their followers. This nexus between Homeland governments and the apartheid state explains some of the animosity people feel towards chiefs even today and may also explain the attempts made by the post-1994 governments to replace the authority of the chiefs with that of newly instituted local government councils, which consist of representatives of the community.

and delegated managerial responsibilities in its own way. As documentation and analysis of these various formal legal systems have been extremely limited, only broad and impressionistic remarks can be made here. Generally, these governments undertook some rural drinking water supply schemes. Within rural communities, chiefs and their headmen were the main contact persons for the Homeland government and any other outsiders intervening in issues concerning water supply facilities. Specific tasks, such as the operation and maintenance of water supply systems, were usually delegated to members of the tribal council, who then formed the relevant committees.

Most Homeland governments also initiated state-subsidized irrigation schemes in collaboration with Development Corporations, which were parastatal organizations investing in rural development. These schemes were usually the only effort to improve agricultural development and, for that matter, access to irrigation water in the Homelands. These endeavors were dominated entirely by outside agencies, with neither any formal power for the local chiefs and councils nor any empowerment of the farmers themselves, the majority of whom were women. Formal ownership and management of land and water in these irrigation schemes and, sometimes, the management of farming and water management operations, credit provision, and marketing remained with these parastatals. Formal water rights for irrigation schemes were also in the names of governments or agencies. However, chiefs played important *de facto* roles in land reallocation. The domination of the state and of parastatals in these irrigation schemes became particularly evident when the new government suddenly withdrew support in the late 1990s, as a result of which most of these irrigation schemes collapsed in whole or in part.⁴

Mines intending to operate in territories of specific chiefs also approached them for permission. Even where Homeland governments gave them formal permission, none of the concomitant responsibilities were adhered to. The mines, which considered both land and water resources in the Homelands as open access resources (*i.e.*, resources that were not owned), used this unwarranted assumption as a *carte blanche* to pollute such resources without taking on the commitment to clean up.

While most questions about the interface between government officials and chiefs in formal water law in the former Homelands are yet to be answered, even more study is required to understand the arrangements within black rural communities that governed water development and management in the Homeland areas. As the authority of chiefs typically concerned all resources of the community, the ultimate say over water infrastructure development — such as small reservoirs for use by humans and livestock, water allocation, and water pollution issues — also fell to the chief and the tribal council. Anecdotal evidence describes how chiefs set and enforced rules to solve problems of water pollution, or convened meetings to resolve conflicts between users of water for domestic purposes and irrigators. These practices and norms were embedded in a

⁴Until now, the government has done little to reinstall farm support systems and to accord farmers formal title to water and land rights. In some cases, large-scale farmers, white or sometimes black, have used this **legal** impasse to occupy the collapsed schemes and **start** cultivating, using the idle irrigation infrastructure and extracting water without any payment. In one such case, a white farmer took over a large tract of land in the Flag Boshielo (former Arabie) scheme in the Olifants Basin **by** paying a substantial bribe to the local chief and petty amounts as "land rent" — hut only for the first year — to the farmers that occupied the land previously. In order to cultivate this land, this farmer brings along his own laborers but also creates limited unskilled agricultural employment for some laborers from the area itself. This minimal "gain" divides the local population and blocks any attempts at effective protest against his **modus operandi**. The provincial government sued the farmer in a court case **over** the land issue. But despite 2 years having passed, the case has seen no progress.

particular cosmology that regarded water as a powerful resource? This comprehensive set of socio-political arrangements of rules, norms as well as practices of water use and control that prevail in poor rural communities can be called “communal water tenure,” analogous to the much more common concept of communal land tenure, which often derived from the same sources of authority (cf. Cousins 2000).

Communal water tenure is intrinsically integrated. In poor rural communities, the same water source is often used simultaneously for (un-piped) drinking water, other domestic uses and a diverse range of productive purposes. Sanitation and waste management often directly affect water sources as well. For instance, water-focused development, with government aid, for one group of villagers can easily detract from the welfare of other users and may jeopardize the fulfillment of people’s basic needs. In short, water tenure in rural communities forms a seamless whole as different members of such communities use the same water source for multiple purposes. It is only in the view of theorists that this phenomenon—when adequately magnified, say, to basin level—is accorded the term “integrated water resources management.” This contention is not as obvious as it may seem.

At least in the case of South Africa, the realization that one is dealing with two vastly different social and economic realities is crucially important. The level of socioeconomic and infrastructural development in areas that were under white control far exceeds even the current state of development of areas that were under the former Homelands. It would be misguided then to apply a solution that works or worked in the former to a problem that confronts one in the latter (cf. Shah, Makin and Sakthivadivel 2001). The majority of poor black communities are still resident in the ex-Homeland areas. In these places, greater community mobilization is needed to resolve problems of water supply and management.

Consider figure 2, in which the entire cube represents integrated water resources management (IWRM). The x, y and z axes of the cube represent, respectively, (**x**) the multiple uses and users of water; (**y**) the scale of the water resource under consideration, or else the site of its application; and (**z**) the essential task(s) of water management related to the use in question. This view of **IWRM** does nothing short of redefining all water management, both for domestic and productive uses, in terms of multi-tiered basin organizations where the lowest tiers function within a frame set by more aggregate decision-making. Important aggregate tasks concern upstream and downstream allocation (or aquifer abstraction), flooding and drainage issues, pollution and soil erosion. Localized infrastructure development and operation — nce allocation for water abstraction is agreed upon—are examples of tasks to be dealt with by users in the lowest tier in the way they see fit. The subsidiarity principle would call for such optimal autonomy at the lowest levels. This means that a frame of operation is set at each level, while all possible decision-making on operation below that level is left to the lowest level water users (see figure 2). Also, higher-level tiers would

⁵One such belief concerns the Mother River Serpent. She is claimed to own the water and live in water bodies, such as dams, streams or groundwater. Above all, the Mother River Serpent needs to be kept content. Polluting water or, reportedly, drilling modern boreholes are said to anger her and cause her to move away leaving chaos—in the form of tornados or heavy flooding—in her wake, which in turn adversely affects the existing water body or water course. Traditional healers and prophets are said to stay for long periods in deep waters to commune with her and acquire powerful knowledge. Some of these traditional healers and “rainmakers” were renowned for their knowledge about the weather and seasons and were consulted about the right time to start cultivation. Further, some springs were

ideally be composed of representatives of the lower tiers and only override decision-making at lower levels, if necessary, for still higher interests. For example, governments safeguard transboundary water sharing, which then sets the frame for management in the national parts of basins.

Unfortunately, conventional views of water management tend to take into account one user sector or at most a few sectors at a time. This tunnel vision is not conducive to the simultaneous consideration of all uses or user sectors in a particular catchment when, in fact, this is exactly the manner in which basin-level management occurs and must, therefore, be viewed.

The fact that South Africa's new National Water Act concerns itself with all these uses within any basin is commendable and it stimulates thinking along the lines of comprehensive water management. In this model, small-scale uses and users who use water for consumptive and productive purposes need to be paid as much attention as large-volume uses and users of the same water source. What figure 2 does not indicate is that each user sector may be further subdivided into large- and small-scale users of water. In South Africa, the dilemma is one of separating out small-scale users of water from large-scale ones and seeing how both can be adequately satisfied. The IWRM cube drives home the point that the need to manage water in an integrated way is a daunting but inevitable task.

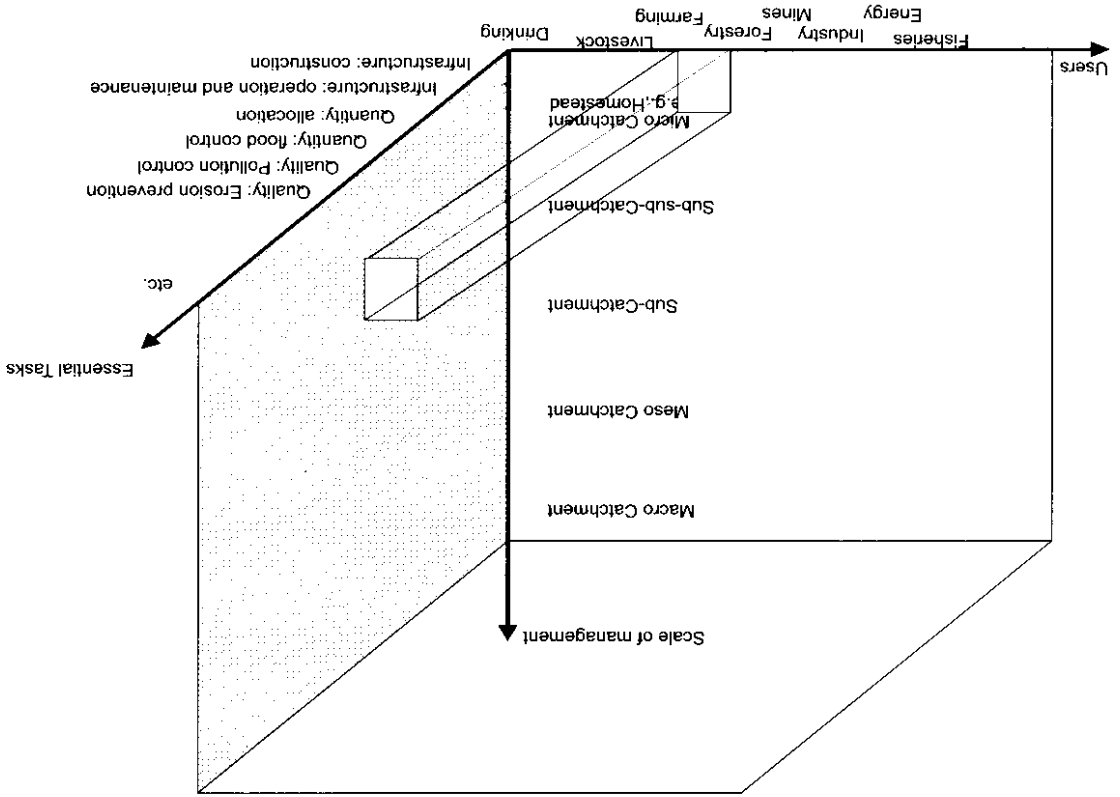


Figure 2. The integrated water resources management (IWRM) cube.

3. Water Law in the New Dispensation

Overall Aims

The transformation from the aforementioned legal systems to a new legislative framework for the country in general and for water management in particular was a fundamental part of the political events resulting from the end to the apartheid era in 1994. First, a new Constitution was promulgated with the primary aims of (a) redress of past inequities based on race and gender and (b) poverty eradication. The basic human right that “everyone has the right to have access to sufficient food and water” is firmly anchored in Section 27 of the Constitution (RSA 1996). Other overarching principles stipulated in the Constitution that are relevant for the new water law include (1) horizontal cooperation among and within government departments, and vertical cooperation among the national, provincial and local levels of government, and (2) “Batho Pele,” which means high quality service delivery by the government to all citizens.

With the abolition of the Homelands, the jurisdiction of the Department of Water Affairs and Forestry (DWA) became countrywide. It promulgated two laws that enshrined the new political directions of the country in the domain of water management: the Water Services Act of 1997 (RSA 1997) and the National Water Act of 1998 (RSA 1998a). In line with the Constitution, water management was expected to contribute to the principal objectives of meeting basic food and water rights for all, eradicating poverty and redressing inequities from the past.

Cooperative governance, as stipulated in the Constitution, also figures prominently in the new water law. In fact, it is even more relevant for water management as indicated above.

Strong cooperative governance entails, first and foremost, cooperative governance *within* DWA. In this case, it implies coordination in implementing the Water Services Act and the National Water Act and collaboration among divisions of DWA that are in charge of water supply, water quality, groundwater, catchment management and institutional development, water resource planning, information, modeling, and so on. An integrated delivery of water services is especially important in rural areas where a single water source may be used for multiple purposes with uses by one party often directly affecting uses by others.

Second, cooperative governance implies collaboration *among* the various government agencies. This is also critical for the poor. In the past, high-volume users obtained access, often with considerable state support, to the range of production factors that make a water-related enterprise profitable. As a result, they succeeded in establishing large-scale and lucrative enterprises. In contrast, poor people still lack access to the range of inputs, skills, technologies and markets that render water-related enterprises more cost-effective. These arrears are to be overcome through DWA’s collaboration with the government departments of agriculture, land reform, health and welfare, etc. Inasmuch as poverty is multi-dimensional, the attack on it warrants precisely such an integrated approach.⁶

Another major issue in cooperative governance for pro-poor water management from the local to basin level is the role of the local government (see below).

⁶An example of improved collaboration between DWA and the National and Provincial Departments of Agriculture is the drafting of a new national policy to mainstream the marginalized through an integrated approach to agricultural water use that also encompasses access to land, markets, credits, skills development, etc. Links are being created with the Integrated Rural Development Program — established by Presidential decree — that is to be implemented through

The Water Services Act

The Department of Water Affairs and Forestry promulgated the Water Services Act in 1997, even before it drafted and disseminated the National Water Act. Political expediency was the main reason for doing so as the backlog in rural drinking water supply inherited from the apartheid era was enormous, especially in the former Homelands. In the new dispensation, DWAF had also become responsible for rural water supply, including reticulation. This was a new task for DWAF, because until 1994 it had only supplied bulk water to municipal water boards in the white areas, which then took care of reticulation. In 1994, this task was taken up by DWAF in cooperation with democratically elected local government, which was just being put in place at that time. The Department was further supported in this task by the Mvula Trust, an NGO specializing in institutional and technical aspects of community water supply. In the long term, local governments all over the country are expected to take over full responsibility for providing water services.

Right from the start the government took the policy decision to guarantee a domestic water supply of 25 liters per person per day and committed itself to the provision of the infrastructure required to deliver this quantity of water within 200 meters or less of all homes. In 2000, the government further pledged that it would ensure that 6,000 liters of water for domestic purposes would be delivered for free to each household, every month. (Larger quantities are to be charged according to stepped tariffs.) In the years since it made these commitments, the government's efforts to achieve a minimum state of welfare—still a distant ideal for millions of poor black South Africans—have been considerable, both in terms of infrastructure development and the organization of delivery for free basic water.⁷ The National Water Act refers explicitly to the Water Services Act and underlines the need for coordination in implementing these two complementary pieces of legislation.

The National Water Act

Under the leadership of the first Minister of Water Affairs and Forestry, a nationwide process was launched to elicit and incorporate public views and to harness global knowledge for the formulation of the National Water Act, which was promulgated in 1998 (de Lange 2001). Thus, the National Water Act not only broke radically with previous policy aims but also incorporated what by then were nationally and globally recognized as “best principles for integrated water management.” Such principles include the integration of surface water and groundwater management, the gradual decentralization of water management to the lowest appropriate level, 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, last but not least, a shift from administrative to hydrological basin boundaries for water management, ultimately to be implemented by Catchment Management Agencies (CMAs).

In the Act of 1998, the government put an end to the former system of permanent riparian rights. In the new system of water rights, the government, as the custodian of the nation's water

⁷The many problems of implementation on the ground notwithstanding, DWAF's efforts to provide a basic quantity of domestic water for free and also improve sanitation were the chief reasons why a poll in the weekly *Mail & Guardian* (2001/2002: 12) ranked the Minister of Water Affairs and Forestry as one of the best performing ministers in the cabinet.

resources, *guarantees* water provision for uses stipulated in the National Water Reserve as a basic human right and *authorizes* water use for other ends. International obligations and strategically important uses are prioritized. Authorizations take the form of either licenses,⁸ general authorizations or, for minor uses, permissions under the so-called Schedule One. The Act also introduces water demand management and efficient water use in order to reduce water use by some people and sectors, thus freeing up water for others.

The National Water Act emphasizes cooperative governance between DWAF and local government, in conjunction with the cooperation stipulated in the Water Services Act. The Local Government Act of 1998 also explicitly mentions the constitutional responsibilities of the local government for water supply reticulation, sanitation and storm water management (RSA 1998b: 58). The President's Integrated Sustainable Rural Development Strategy (RSA 2001), which targets local governments in the poorest former Homelands, articulates the development of water resources for use in small-scale agriculture. Thus, the Integrated Development Plans (IDPs) of local governments encompass, in principle, domestic and productive water uses besides other aspects of integrated water management.

However, the capacities of the nascent local government are still fragile. After two rounds of national elections since 1994 and stabilized administrative boundaries since 2000, this democratically elected layer of government is still "finding its feet," especially in poor rural areas where no such structure existed previously. Hence the constant capacity building of local government is already recognized as a major precondition for the successful implementation of the Water Services Act. Although the Integrated Development Plans are yet to become effective planning tools for productive water use, the role of local government as the lowest-level governance body for integrated water management will only gain in importance.

Thus, the government of South Africa seeks to be reconciled with the previous formal law in the former Homelands, which vested local resource management authority in only the traditional chiefs. The new Constitution and the National Water Act recognize the primacy of the recent, democratically elected local governments, which are frequently at loggerheads with the traditional chiefs whose de facto influence continues (RSA 1998b: 56, 58).⁹ Therefore, depending on the area in question, this equitable governance body—i.e., local government—continues to be challenged either by the traditional, black authority structures or the former white municipality leaders, both of whom retain some of their erstwhile power.

The questions of how these new governance layers concur with or contest, first, communal water tenure arrangements embedded in the traditional power structures, second, attempts of the former vested (white) interests to continue their own de facto control of water and, third, DWAF's own responses to the scenarios that confront it, are probably the most critical to answer whether or not the goals of the Act of 1998—to redress inequities from the past—will be achieved.

⁸Licenses are granted for a maximum limit of 40 years, but can be revised every 5 years. Pre-1994 "permits" are gradually being changed into licenses, provided water is available or can be exchanged with others who are willing to give up a part or all of their allotment. All those who want to engage in new water uses have to apply for licenses, which are only issued under similar conditions. Requests for licenses by historically disadvantaged water users receive priority. "Stream flow reduction activities" by large-scale forestry estates, for instance, are also being licensed.

⁹This is over and above the fact that, subject to certain restrictions, traditional leaders may also participate constitutionally in local governments (RSA 1998b: 56). However, the extent of overlap between their mandate in customary matters

Relevant Components of the National Water Act

Besides the overarching aims of the Constitution, the Water Services Act, and the National Water Act to redress inequities from the past and contribute to poverty eradication, and to ensure cooperative governance, there are other components of the National Water Act that are extremely relevant for understanding not only how the Act can potentially transform society but also how certain provisions built into the Act may thwart its stated objectives.

1. *Basic Human Water Needs:* The National Water Act stipulates that the government must, before catering to any other use, allocate a Reserve “to satisfy basic human needs by securing a basic water supply as prescribed under the Water Services Act (1997).” As indicated above, the government’s policy also entails the commitment to develop the infrastructure required to meet these basic human needs and to ensure a minimum quantum of water delivery for free. The Ecological Reserve is also a priority allocation under the National Water Reserve.
2. *Demographic Representation:* According to the National Water Act, governance bodies should be representative in terms of including sections of the population that were previously unrepresented in governance forums—especially, blacks and women. The Minister of Water Affairs and Forestry has far-reaching powers to ensure proportional or demographic representation in new legal governance structures such as CMAs.
3. *Compulsory Licensing for Water Reallocation:* The legal tool in the National Water Act that allows reallocation of water from high-volume users to poor water users is termed Compulsory Licensing. DWAF can call for “compulsory licensing” where and when needed. A project of compulsory licensing concerns all water users in a specific area. It cancels all existing licenses and replaces them on the basis of a new allocation schedule. Redressing race and gender inequities from the past is a key criterion for such a reallocation. This is the case even if the reductions result “in severe prejudice to the economic viability of an undertaking in respect of which the water was beneficially used.” Normally, in such a situation, a person may appeal to the Water Tribunal for “compensation for any financial loss suffered in consequence” (National Water Act, Sections 22 (6) and 43 to 48).¹⁰ The inclusion of this clause weakens the possibility of reallocating water. Fortunately, there is a safeguard built into the Act that exempts the payment of this compensation if water is reallocated to “(i) provide for the Reserve; (ii) rectify an over-allocation of water use from the resource in question; or (iii) *rectify an unfair or disproportionate water use* (italics added)” (National Water Act, Section 22 (7)). It is vital, therefore, that this safeguard be implemented effectively.

The above-mentioned elements of the Act potentially foster the transformation of South African society towards greater equity. However, the drawbacks of the Act are that it (1) retains, unaltered,

¹⁰Marna de Lange (2001) describes the process of formulation of the Water Act, saying that, “Initially, the Minister was opposed to any form of compensation for reduced or lost water allocations. **However**, in meetings with the Minister and through the press, the agricultural sector pointed out that this would be unconstitutional, a position that was confirmed by constitutional lawyers advising the Minister.”

the status **quo** of the apartheid era in two fundamental ways, and (2) introduces legal tools that risk marginalizing small-scale water users even further. These drawbacks are as follows.

1. ***Existing Lawful Use:*** The National Water Act recognizes all existing water use in the two years preceding the promulgation of the Act as lawful and, hence, also accepts the inequities prevailing at that time. Moreover, the acceptance of “existing lawful use” as the starting point of institutionalizing formal water rights favors those who had written documents, such as permits recognized under apartheid law in the white areas. These provide much stronger proof of lawful water use in the past when compared with what the inhabitants of the former Homelands can marshal as evidence of their prior use of water. At best, the latter can refer to notions of established use embedded in what were typically verbal contracts or communal water tenure arrangements.
2. ***Composition of the Civil Service:*** Nationwide, there were no forced retrenchments in the government administrative services in the new dispensation. This resulted in the new approach to water resources management being implemented by many of the officials responsible for executing the previous, inequitable legislation.
3. ***Basic Human Income Needs:*** Water for productive purposes, which help income-poor women and men to improve the harvests of their homestead gardens or fields, or use water for their poultry and livestock enterprises or cottage industries, is not covered explicitly in the National Water Reserve. Even Schedule One, which specifies uses of small quantities of water that are permissible under any condition—without need for registration, authorization, or payment, also in (sub-) basins that are declared as being “water-stressed”—is not clear on whether the use of water is permitted for producing goods that will be sold for a minimal income is permitted. “Schedule One Water Uses” deal only with water used for reasonable domestic use, livestock other than feedlots, and “small gardening not for commercial purposes.” However, at least a part of the harvest obtained by poor farmers from their farms and gardens is market-oriented, a proportion that is only expected to grow in the future. As the numbers of those who already have or who hope to obtain the requisite infrastructure in order to irrigate small portions of their homesteads or use water for other productive purposes increase, the competition with the few high-volume users present in the same (sub-) basin is likely to intensify. The protection of the water rights of the former group—which an amended National Water Reserve would assure—rather than merely the grant of permission to use small amounts of water without any guarantee, which an amended Schedule One would give, will probably make a difference to the security of rural livelihoods.

However, the practical implementation of any protection or authorization of low-volume productive use requires different tools than those available now. Tracing millions of low-volume water users for formal registration and authorization through licensing would be a logistical nightmare. The formal registration of water use, which is currently underway, for example, excludes irrigated farms below two hectares. Legal tools, such as (compulsory) licensing are effective and indispensable to vest rights in and to regulate a small number of high-volume users. But they are inappropriate for even assessing the quantum of current water use by a large number of small-scale users let alone for providing (1) any of the benefits of (tradable) licenses to them, or (2) any legal protection to these users against the efforts of the high-volume users to wrest control

over scarce water resources. Similarly, **disempowerment** also occurs when formal entitlements to water are a precondition for membership of, for example, former Irrigation Boards and current Water Users Associations. Other forms of entitlement should ensure that the formal rights of poor, small-volume water users—versus high-volume users—become stronger than what they were under apartheid. In any case, whenever decisions about the interpretation of the text of the National Water Act are made, the communication of this decision to the rural poor is essential. Currently, few, if any, of them are even aware of the possible implications of the National Water Act for strengthening their rights to water for productive uses.

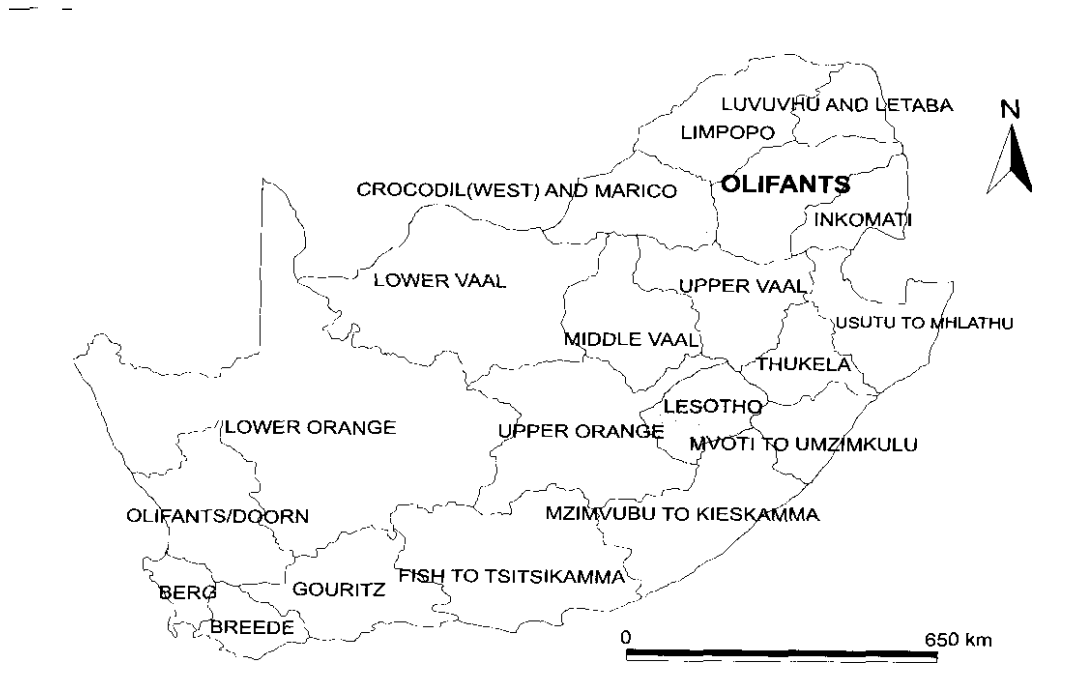
To conclude, the compromises struck between changing and maintaining inequities in South African society undoubtedly contributed to what is probably the most remarkable achievement of the formulation of the National Water Act, which is that most of the highly diverse stakeholders in this "Rainbow Nation" not only endorsed the law but also take pride in this unique piece of legislation.

4. Establishment of Catchment Management Agencies

CMA's in the National Water Act

The interactions between the old and new formal legal systems in South Africa are apparent in the establishment of Catchment Management Agencies (CMAs). In compliance with the National Water Act, the Minister of Water Affairs and Forestry has started the process of establishing CMAs in the nineteen Water Management Areas (or WMAs) of South Africa (figure 3). Gradually, he will assign considerable water resource management powers that are currently held by DWAF to these new governance structures. Each CMA is supposed to compile a Catchment Management

Figure 3. The nineteen Water Management Areas (WMAs) in South Africa.

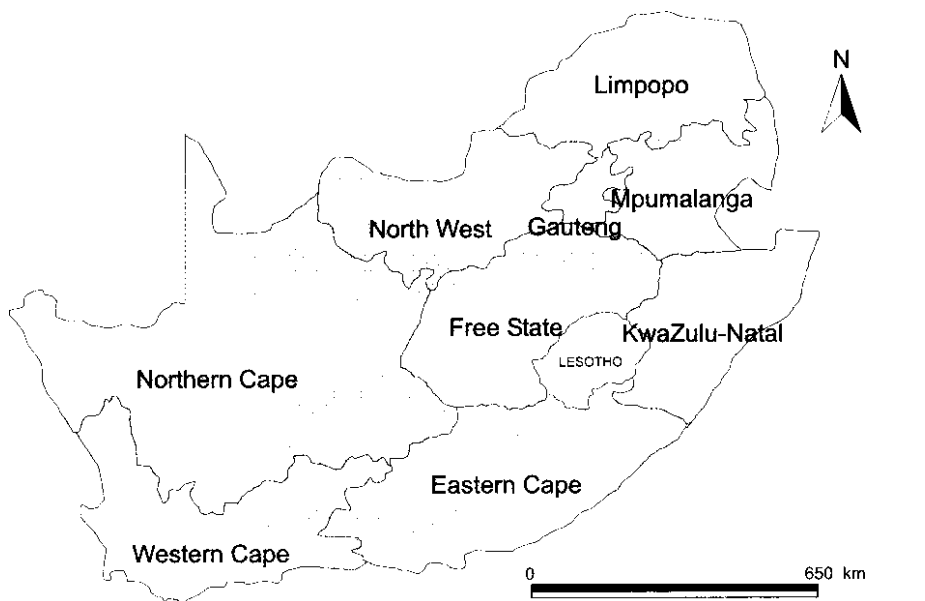


Strategy (CMS) relevant for the WMA under its jurisdiction and, ultimately, to carry out functions such as water resources planning in the catchment, registration, water charge collection, water authorization, and licensing (including compulsory licensing). CMAs are to become self-financing. Public participation in the process of establishing CMAs and fair representation of all stakeholders in the future Governing Board and activities of the CMAs are legally required. In the Governing Board, the interests of local and provincial government, current and potential water users, and environmental interest groups are to be represented. One of the five initial tasks of a CMA is "to promote the co-ordination of its implementation with the implementation of any applicable development plan established in terms of the Water Services Act (1997)" (RSA 1998a).

This change from a centralized management approach based on command and control from the nation's capital to a decentralized participatory model based on cooperative governance and coordination through CMAs is extremely significant (Muller 2001). Parallel to the process of establishing CMAs in the Water Management Areas, DWAF itself is being restructured. The remaining national functions of DWAF are being defined, and preparations for reorganizing DWAF regional offices into technical support structures of the CMA in the new Water Management Areas have begun. As long as CMAs are still being established and are maturing, DWAF will continue to carry out all functions not yet taken up by the CMAs themselves.

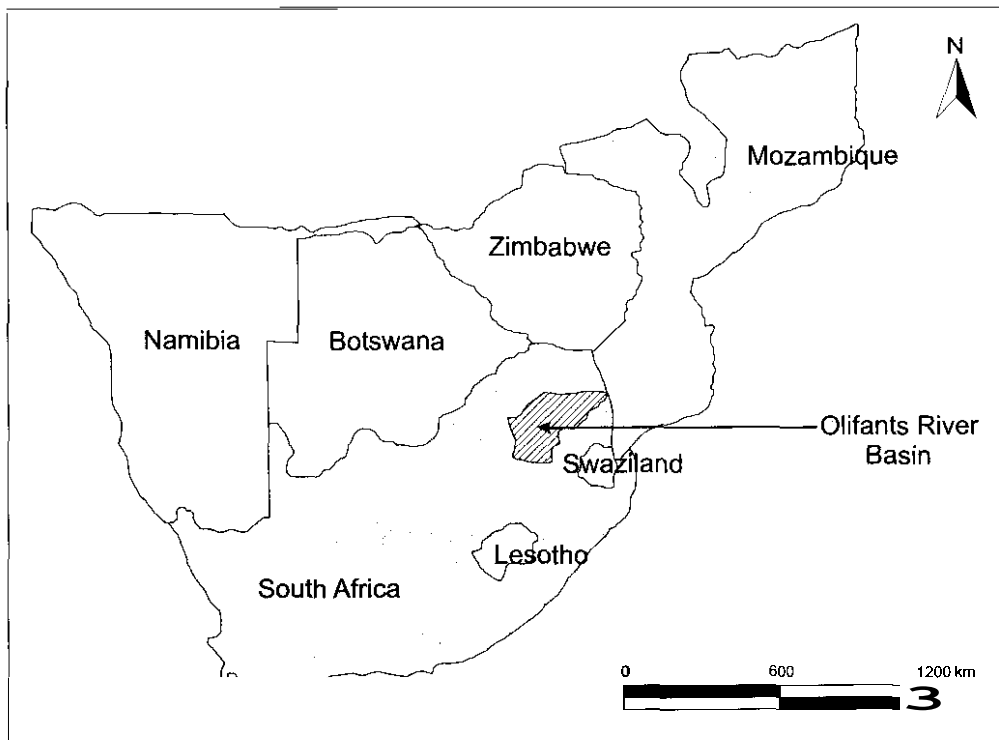
The focus of the rest of this paper is on the formal establishment process of the CMA in the highly water-stressed Olifants Basin, the nation's second pilot basin for this process." The Olifants River has its source in Gauteng province and passes through Mpumalanga and Limpopo provinces into the Kruger National Park, before entering Mozambique where it joins the Limpopo River (figures 4 and 5). More than three million people, the majority of whom are poor, live in this water-stressed basin. Further, many of these poor live in the congested former Homelands of Lebowa, KwaNdebele and Gazankulu

Figure 4. The nine Pmvinces of South Africa.



"Similar processes that are currently occurring in some five Water Management Areas elsewhere in South Africa are

Figure 5. Location of the Olifants River Basin in South Africa.



The DWAF Regional Office in Mpumalanga drives the process of CMA establishment in the Olifants Basin (Ligthelm 2001). This process is especially informative because, in the course of it, two highly contrasting approaches were devised and implemented. These approaches illustrate how various actors seek to use the design stage of this new institution as an arena in which to either change or further entrench the inequitable conditions of the past.

Formulation of a Technical Proposal for CMA Establishment

The leading approach in establishing the CMA in the Olifants Basin highlights how those who dominated water control during the apartheid era continued to exercise power afterwards. Although historically disadvantaged individuals were included in the decision-making process during the establishment of the CMA, theirs was merely a token presence. Furthermore, the participation of blacks in the functioning of the future CMA was envisaged as being even more limited than in the run-up to the CMA's establishment, notwithstanding the fact that the inclusion of historically disadvantaged water users in the process was emphasized by DWAF from the very beginning. For this reason, DWAF rebuffed a proposal by large-scale users to reinforce the control they had enjoyed during apartheid. This happened when the Olifants River Forum—comprising the white-dominated mines, industry, the public sector electricity supply company, and eco-tourism throughout the Olifants River Basin—proposed that they themselves would constitute the CMA and then take the process ahead. This suggestion was made as soon as the new governance structures of CMAs were adopted in the deliberations over the National Water Act. However, DWAF, rejected this suggestion.

DWAF launched the process of establishing a CMA in the Olifants Basin in mid-1999 by appointing technical consultants who had accumulated technical knowledge about this basin during

the previous decade. These consultants had also begun quantifying the Ecological Reserve for this basin. As stipulated in their terms of reference, the main purpose is to submit a formal proposal for a CMA to the Minister and to assist DWAF in establishing representative catchment management structures. Two rounds of public meetings were held in five places in the basin, in order to inform and consult people who would be affected. Approximately 700 people participated in each round. Invitations for these public meetings were sent not only to all contacts of DWAF and the consultants in question, but also to local governments, tribal authorities, traditional healers, etc. Although new contacts between DWAF and rural communities were established in this way, the procedure adopted was unsystematic. Local governments, which were still in their infancy at the start of the process, had no specific role. Furthermore, this oversight of local government officials was to continue in later phases even though they had become much better consolidated by then.

The first round of public meetings consisted primarily of information provision about the concepts of basin-level management through CMAs and public participation. After the first round of open consultations, DWAF and the consultants decided to add a second round in order to publicize the ideas that they had developed for the future structures of the CMA. In all public meetings, the main language was English with translators only providing summarized translations in local languages on request. By mid-2000, an incomplete draft proposal was finalized. The consultants were the main authors of this proposal, which was made up largely of technical information and water use projections that were essentially available even before the process of establishing CMAs had begun.

The black participants were certainly interested in establishing contacts with DWAF, often for the first time in history. However, they were also quite critical of the consultants and DWAF, especially with regard to the agenda of the meetings and the way in which their representation was treated. With regard to the agenda, they were particularly dissatisfied about the way in which the issue of drinking water supply was handled. Invariably, participants raised their pressing problems about the lack of adequate and/or clean drinking water during the meetings. However, DWAF officials as well as the consultants referred people to other divisions within DWAF, explaining that the CMA was one of the many parallel processes in which DWAF interacts with the public and, therefore, tries to avoid an inter-departmental duplication of tasks. Other problems included: frustration regarding English being the main language used in all meetings; suspicion about the dominance, once again, of white consultants as perceived process drivers and as the ones earning high salaries from a process that was seen as being very expensive; negative feelings after the consultants' explanation of the Ecological Reserve ("as if they find fish more important than our lives"); and complaints about a lack of time for proper preparation and discussion and inadequate explanations of what the issues really are. These were all drawbacks of the process according to the black participants.

The issue of representation also generated strong negative sentiments. A so-called Stakeholder Reference Group (SRG) was established to discuss the CMA proposal more in-depth. Originally, the SRG consisted of (white) user groups that were already in contact with the consultants and DWAF. They usually belonged to existing networks and reported back to those they represented. However, black participants for this SRG were invited in an ad hoc manner during the first round of public consultations. A restricted number of volunteers that could participate without being required to represent a constituency or report back to it was invited. Many black participants regretted that there was no opportunity to interact with a constituency and thus ensure that their

inputs were mandated. Instead of being able to give authorized views, they could only contribute their personal perspectives.

It was especially regretted that local government officials had not been officially invited to the public and Stakeholder Reference Group meetings, even when chiefs and their representatives were invited. Statements were made to the effect that some uninvited local government officials had threatened their traditional counterparts that they would make every attempt to derail any process of village-level development that did not have their explicit sanction or had not required their active participation or decision-making input. It is odd that local government had been excluded from the Stakeholder Reference Group when it is the sole representative body at the lowest level of the state's governance structure and a logical channel for the implementation of any development process.

After a long delay, in February 2002, a final meeting with the Stakeholder Reference Group was held before formally submitting the CMA proposal, which was not much different than the earlier draft. However, even at this meeting, the participation of black stakeholders was little more than nominal. Problems from the previous meetings had not been properly addressed and were repeated as a result. And once more, the wishes of many poor stakeholders for a more integrated approach to water management by the CMA—one that considered both the consumptive and productive uses of water in their communities—were preemptorily disregarded.

Ironically, albeit for different reasons, the process also ended up disappointing the self-organized high-volume water users and others who had worked closely with DWAF before 1994. Their hope that a reliance on formerly collected technical expertise and the emergence of a new public space for catchment management would easily enable them to continue exerting a de facto voice in water management is at least partly vanishing. This trend is true of both the Olifants Basin and the adjacent Inkomati Basin, which was the first pilot project where a similar approach of formulating a proposal through technical consultants had been adopted. In the Inkomati, for example, an active proponent of the National Water Act and strong defender of the interests of large-scale farmers acknowledged that the public (read “white”) participation that was expected through CMAs was a major reason to endorse the Act upon its formulation. However, later she felt that the expectations raised had been in vain (Pieter Waalewijn, personal communication, 2001).

Bottom-Up Institution Building for River Basin Management

Early on in the first approach of CMA establishment discussed above, the DWAF Regional Office quite rightly identified the problem that small-scale irrigators risked being overlooked. Whereas large-scale farmers were well organized and represented in the CMA process, the many small-scale irrigators were typically unorganized and had no avenue through which to voice their interests and concerns. Therefore, just after the first round of public meetings, a parallel process of consultations was initiated throughout the Olifants Basin, which aimed at a bottom-up reconnaissance of small-scale water users' needs and their suggestions for ways to ensure their effective voice, for example, through Small-Scale Water Users Forums. The lead implementer of the process was a (black) community development activist. Her network of contacts throughout the basin originated from her rural development activities during and after the anti-apartheid struggle. This network included most local governments and also various NGOs, which facilitated the logistics of the meetings.

Nine daylong workshops were held in the local language of the region with a total of 365 participants in attendance. These workshops generated overviews of the problems participants

experienced with regard to water, including drinking water—which was often most urgent—but also rainfed and irrigated agriculture, and disputes with large-scale users about water allocation. The debates also encompassed issues indirectly related to productive water use, such as the lack of markets, inputs and training for both irrigated and rainfed agriculture, and frustrations about the slow pace of land reform. The participants made concrete suggestions for the organization of multi-tiered Small-Scale Water Users Forums for effective representation in the future CMA Governing Board and Committees. These new CMA structures were also meant to enable technical support and exchanges on water issues and to address development issues that were less directly related to water. The report on these workshops (Khumbane, de Lange and Sibuyi, forthcoming) will be included as an appendix in the final technical proposal compiled by the consultants mentioned above. After submitting the report, the community development activist continued working on water-related and other issues in poor communities.

In sum, the approach taken by the development activist is essentially bottom-up institution building for pro-poor river basin management. Besides continuity, an intrinsic feature of this approach is collaboration with local government, NGOs, community-based organizations, other development initiatives and with traditional chiefs. Poor people, especially women, are mobilized to innovate in tapping *more* water sources and using water *more productively*, for example, through water harvesting for homestead gardening and tree cultivation for food security. Mediation between large-scale water users and poor communities quarrelling over shared water sources is another important component. The development activist intercedes in disputes between communities, mines and DWAF to solve problems such as excessive groundwater abstraction by mines, which dries up boreholes for domestic water supply in neighboring communities. Wherever high-volume water users already recognize the need to improve social justice in their localities, she harnesses their willingness into an encompassing process of dialogue between the non-poor and poor for better sharing of water, water-related benefits as well as other benefits. Thus, white control over water and other resources, established during the apartheid era, is gradually being transformed into a more equitable sharing of benefits and decision-making, which incorporates the views of the black rural poor.

5. Conclusions: Redressing Inequities in the Future

The early initiatives to establish the CMA of the Olifants River Basin highlight, in a nutshell, very divergent interpretations of the broad legal framework set out by the National Water Act, in general, and this important new water management institution, in particular. Initially, DWAF steered the establishment process so as to ensure, that the historically disadvantaged groups would be included from the start. In doing so, it countered the ambitions of white self-organized water users who wanted to themselves take the lead in the process. Even so, in the subsequent process, considerable differences emerged in the way DWAF and its appointed consultants formulated the proposed CMA, on the one hand, and the manner in which members of rural black communities elicited and proposed suggestions to the CMA's design, on the other. The latter raised the issues that need to be part and parcel of the design of CMAs as well as other policies and institutions, if the *overarching* aims of water management in South Africa are to be achieved. These include the following:

1. Domestic Water Use in the Mandate of CMAs

The decision to promulgate the Water Services Act before the National Water Act risks leading to an exacerbated and artificial separation of water used for domestic and productive purposes. In this separation, it is presumed that water resources could be managed by ignoring domestic uses of the same water source. Poor water users in both rural and urban areas are supposed to conceive of and discuss their genuine needs for water for productive purposes while ignoring their still unmet needs for domestic water. It is also assumed that the local government, supported by specific departments in DWAF, is solely responsible for meeting domestic water needs of the poor. CMAs, Water User Associations and all other institutions concerned with “Water Resource Management” can, therefore, safely ignore these needs.

This separation may be justified in better-off areas, where domestic water supply is well catered for. However, such a disjunction would risk alienating all those South Africans whose domestic water needs are still largely unmet from mainstream water management. Moreover, it would be an abrogation of the basic principle of cooperative governance. DWAF’s Regional Office in Kwa-Zulu Natal found a way out of this dilemma. There, DWAF staff from various departments took the initiative to align their services on the ground into an integrated “one-window” service, in which integrated water use and management in the communities themselves was taken as a starting point. Incentives were created for staff within departments to cooperate in service delivery.

At the national level too possibilities for synergy in meeting both domestic and productive water needs—for example, in the design of drinking water facilities infrastructure—are increasingly being explored. Such initiatives need constant reinforcement.

2. Productive Water Use by the Poor Promoted through CMAs

CMAs will better convince historically disadvantaged water users that “there is something in it” for them if CMAs help them to increase their incomes, besides improving their health and liberating them from drudgery of fetching water from distant sources. This implies that CMAs are to stimulate access to affordable water infrastructure for productive water use in cropping, livestock, community-based forestry, fisheries, and so on. In the former white Republic of South Africa (RSA), the department—then the DWA—provided huge subsidies for massive dam development and large-scale irrigation infrastructure. To some extent, DWAF continues to do so for mines, industries and, to a lesser extent, for large-scale farming. The extension of similar benefits to those who failed to benefit in the past seems equally justified and should be a major consideration in Catchment Management Strategies. In new programs for pro-poor water development, recent insights are to be incorporated, for example, with regard to the importance of building upon existing communal tenure, promoting, where feasible, decentralized infrastructure such as village dams, treadle pumps, and other appropriate technologies; ensuring community ownership of new infrastructure and providing the required institutional capacity building; and guaranteeing access to agricultural inputs, markets, credit and entrepreneurial training. Financial and other support can be channeled via the CMA Governing Boards and related bodies of the CMA to local government, NGOs, newly established Water Users Associations in poor communities, and other grassroots organizations. Mutual learning and exchange among the historically disadvantaged communities can be stimulated through the CMA as well.

3. Poor People's Water Rights Protected

Poor people tend to lose out if they have to compete with the privileged large-scale water users, such as mines that over-abstract groundwater used by poor communities, or large-scale farmers who claim their former lawful use vis-à-vis the poor who want to use the same water source for cattle, homestead gardening and even for domestic purposes. These conflicts emerged during CMA establishment and will, in all likelihood, influence its future functioning. With the currently envisaged devolution of powers to the CMA, such issues will fall under the jurisdiction of the CMAs themselves. As unregistered Schedule One users, the poor will have no legal backing. Therefore, effective methods and skill development are needed to resolve conflicts between large-scale and small-scale water users. Legal tools to support equitable water allocation will also be indispensable. A better understanding of local notions of registration of use, legitimacy of use, allocation principles, dispute resolution mechanisms, and communities' collective rights vis-a-vis outsiders according to local law would inform policy makers about how to specify new regulations that effectively empower poor people. Moreover, more insights into communal water tenure could also help to solve intra-community conflicts over water, a field in which the National Water Act is as yet unable to provide any support.

4. Cooperative Governance with Local Government

The first CMAs are expected to be established soon. The National Water Act requires a demographically representative composition of the Governing Board and the Minister has far-reaching powers to ensure such a composition. However, even if the composition of the new CMA is equitable, what is less clear and more contentious is the issue of how the CMA will deal with the fact that only a limited group of water users in the Water Management Area was reached in the process of actually establishing the CMA itself. This is because the process of public participation is still largely incomplete. In general, there are two options.

One option is that the CMA basically continues with the "public" that happens to be on board at this stage, especially in the Stakeholder Reference Group (SRG). Activities such as the formulation of the Catchment Management Strategy that warrant public participation would primarily be discussed with this group. However, the ad hoc nature of this group, the lack of representativeness and, especially, the oversight of local government render the SRG hardly credible as a representative body for the historically disadvantaged.

At the same time, the well-organized water **users** in the SRG have a much stronger mandate from their constituencies. Moreover, they enjoy longer-term contacts with DWAF, are better informed, are comfortable speaking English, can read the CMA documents, are mobile, and have access to lawyers if there are conflicts. Therefore, the presence of blacks in the SRG seriously risks remaining nominal, merely providing a rubber stamp to the claim that inequities of the past are being redressed in the process of CMA establishment. Hence, another option needs to be developed.

The alternative—one that is much more appropriate—is that a new CMA should start a well-designed process to institutionalize public participation according to the subsidiarity principle, as one of its major tasks to ensure that those who were marginalized in the past are now the most empowered. Ultimately, the CMA would coordinate water management planning and implementation with the local government at local, district, provincial and national levels. The Catchment Management Strategy would basically be an aggregate of the integrated water

and priorities should be modified to account for priority areas identified for the recently launched Integrated Rural Development Program in those areas in the former Homelands where it is being implemented. Active participation by grassroots civic society is also to be promoted. The performance of CMAs would be monitored in the light of this long-term perspective.

Considerable support by DWAF will be needed to build the capacities of local government, other organizations, and (potential) large-scale and small-scale water users to engage effectively in local-level needs assessment, plan development and transparent, accountable implementation. Information provision to local government should be the very first step of any such strategy—including that of the National Water Resource Strategy, which defines the national framework within which all lower-level institutions have to function. Current water resource planning tools need to become much more user-friendly, more interactive and cheaper. Ultimately, even illiterate small-scale water users would need to see their realities reflected and negotiable in the decision-support tools and models.

If the National Water Act is interpreted in this sense, those who were marginalized in the past will increasingly be empowered by using more water more productively for multiple purposes. They will also be able to negotiate a better share in water and water-related benefits in a new dialogue with the large-scale users who less than one decade ago held virtually exclusive control over water resources in South Africa.

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