Allocation discourses: South African water rights reform

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Abstract

Perceptions of increasing water scarcity have caused many countries to reform their water legislation. South Africa, in the vanguard of reform efforts, passed the National Water Act in 1998. The Act was lauded as a progressive piece of policy as it posited the redress of past injustices as one of its overarching aims. But there has been little progress in terms of redistribution of water use rights. This paper argues that bringing water under the ambit of the state, in combination with the particular political conjunctures in post-apartheid South Africa, opened up space for the emergence of narratives around water use rights that framed the continued use of existing users as pivotal for sustainability and that redistribution is associated with a high degree of risk. Although water allocation reform is essentially a deeply political issue, the increasing technocratisation and bureaucratisation of the reform process served to mask contested understandings through, for example, the use of innocuous-sounding terms such as “existing lawful use”. This, in combination with a highly under-resourced water management sector tasked with the responsibility of shouldering a heavy and complex system of licensing, resulted in reform efforts ending in a temporary impasse.

Keywords: Allocation discourses; South Africa; Water law; Water rights reform

1. Introduction

Water, crucial for human survival, is an inherently dynamic resource, an ephemeral substance that cannot be exclusively possessed. The increasing recognition of water as a truly vital substance for which demand is spiralling has resulted in scenarios of scarcity and tales of “the looming water crisis” becoming staple fare at international conferences and gatherings. Numerous efforts to quantify how much water is actually available have produced “water poverty” indices that provide numerical estimates of the amount of water present in a given country (Falkenmark & Widstrand, 1992; Lawrence et al., 2002). Although attention has largely been focussed on the physical aspects of water scarcity, recent research (see e.g. Mehta 2005a, 2005b) has questioned these assumptions, highlighting the fact that the water issue is not only about physical availability, but involves social, political and distributional issues.

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However, the perceived threat of water scarcity has prompted many countries to engage in reforming their water legislation and systems of water use rights. The dominant discourse of integrated water resources management (IWRM) has been highly influential on such reform efforts. It promotes the devolution of decision-making power to the lowest possible level (the principle of subsidiarity) and argues the case for market-oriented solutions for allocating water resources, whilst simultaneously advocating holistic and integrated management which necessitate greater bureaucracy and centralisation (Biswas, 2004). As a consequence of the latter aspect, water resources have increasingly been brought under the ambit of the state through the imposition of administrative water use rights such as licences (Burchi, 2004). The rationale for instituting such rights is often to facilitate more efficient allocation. Questions that emerge in this respect include: How do such reform efforts play out in practice? How are use rights and allocation mechanisms conceptualised at policy level and how do different understandings of sustainability manifest themselves? What role is played by science and technology in facilitating reform? South Africa, in the vanguard of global reform efforts and unique in its emphasis on equity, provides an interesting example to explore.

This paper will argue that investing the state with the discretionary power to determine use rights led to the emergence of ‘allocation discourses’ that were also deeply influenced by the particular political context in post-apartheid South Africa. The overriding notion of achieving equity was subsumed by framings of socio-ecological-technological dynamics that represented redistribution as a potential environmental risk and presented the continued use of already privileged users as vital to sustain South Africa’s economy. Furthermore, the increasing technocratisation of the policy process, the failure to deal with local dynamics and the inability to determine the extent of existing users combined with a lack of administrative capacity to handle the water licensing bureaucracy contributed to leading the reform efforts into an impasse.

The paper is organised as follows: It first sets the scene in terms of the South African political context, then goes on to describe the water legislation and policy in brief, highlighting how particular allocation discourses emerged during the policy-making process. It then goes on to discuss ways in which the reform process can be understood, drawing out the wider implications for water reform in South Africa and elsewhere.

2. The political context of post-apartheid South Africa

In order to understand the nature of the water policy process, it is necessary to locate it within the specific historical and political context. South Africa’s bloodless transformation in 1994 from an oppressive apartheid state to a multi-racial democracy was hailed as nothing short of a miracle (Sparks, 2003), but 300 years of turbulent history takes time to remedy. The historical trajectory resulted in South Africa becoming a country of ‘plenty amidst poverty’ (Nattrass, 1983: 12, quoted in May, 2000: 16), with staggering levels of inequality. This legacy of inequality can be traced back to the early history of colonial conquest by the Dutch in the 17th century, followed by the British in the early 18th century.

The exploitative nature of colonisation deepened and hardened in the modern era, through more than 40 years of segregationist and deeply repressive policies under the apartheid regime. The ending of apartheid with the transition to democracy in 1994 saw the inauguration of Nelson Mandela as the country’s elected president and placed the leader of the liberation struggle, the African National Congress (ANC), firmly in the corridors of power – a new era had begun. The Constitution of 1996 enshrined
equality and respect as cornerstones of the fledgling ‘‘Rainbow Nation’’ and reforming the country’s legislation, particularly that governing land and access to natural resources, became a key concern for the new government. Water, perceived as a scarce resource that was very unequally distributed, was high on the agenda. The water legislation was one of the first to be overhauled and aligned with the principles of the Constitution.

2.1. Impact of the negotiated settlement: Getting into GEAR

When the ANC was voted into office in 1994, it entered the government on the basis of its ‘‘election manifesto’’, the Reconstruction and Development Programme (RDP). This was a piece of development policy with a socialist resonance aimed at redressing past inequities through socio-economic and institutional reform, including educational and cultural programmes, employment generation and human resources development (Villa-Vicencio & Ngesi, 2003). Key to the RDP was the emphasis on basic service provision and the view that the state needed to be restructured in order to facilitate a more equitable distribution of resources, in order to deal with the socio-spatial distortions of the apartheid era (Maharaj & Ramutsindela, 2002; see also Bond & Khoza, 1999).

However, this initial socially oriented policy was relatively quickly subsumed by the Growth, Employment and Redistribution policy (GEAR) in the initial years of Mandela’s successor, Thabo Mbeki’s, term of office. GEAR was a macroeconomic strategy that emphasised liberalism, deregulation and giving a loose rein to market forces with a concomitantly reduced role for the government (Villa-Vicencio & Ngesi, 2003) and was ‘‘blatantly misrepresented as the concrete form of the ditched and more ambitious and progressive RDP’’ (Fine, 2003: 571). This marked turn in policy generated considerable controversy and presented a government facing budgetary constraints and social pressures with the major dilemma of reconciling a ‘‘social, rights-based, gap-filling and developmental approach with an approach based on productivity and efficiency’’ (Perret, 2002).

But how and why did this happen so fast? One would have expected an organisation that played such a pivotal role in the anti-apartheid struggle not to have succumbed so easily to the flawed logic of the Washington consensus. Instead, the nature of the ‘‘negotiated settlement’’, where the ANC was thought to reach a compromise with powerful economic interests in order to secure political power, paved the way for the rise of the neoliberal paradigm in much of post-apartheid politics. The irony, according to Fine, was that the ANC ‘‘discovered neo-liberalism just as it was at its most extreme and its most vulnerable, in light of theoretical, empirical and policy failings’’ (Fine, 2003: 572, emphasis in original). It is ironic that the political capital built up by the ANC during the liberation struggle is now being spent to enforce neo-liberal structural reforms. (Carmody, 2002; see also Bond, 2000, 2004). According to Carmody (2002: 260, footnote omitted):

…the negotiated nature of the settlement meant the basic maintenance of the previous economic system, including respect for private property ‘‘rights’’. Thus, rather than enforcing redistribution and resource mobilisation internally, ‘‘industrialisation by invitation’’ – drawing capital from overseas – became an attractive strategy for the South African state.

Thus, although the new Constitution (Government of South Africa, 1998) was lauded for leading on social issues – for example recognising access to drinking water as a human right – it also protected existing property rights through section 25, or what became known as the ‘‘property clause’’, in the interests of economic growth.
2.2. Broad-based black economic empowerment and the notion of two economies

In terms of redressing the inequities of the past, black economic empowerment (BEE) became a buzzword in the post-apartheid political atmosphere. In the RDP, the notion of BEE was initially conceived of as a means of facilitating redistribution of productive resources to those groups that had been oppressed and disadvantaged under the apartheid regime. However, the notion of BEE over time evolved into a process of affirmative action that provided black individuals, rather than groups, enhanced opportunities (e.g. through the preferential granting of shares). It became more concerned with how black people could access the returns of higher economic growth rates, than with real redistribution of productive assets (Ponte et al., 2007). This rendered the BEE initiative vulnerable to criticism that it was enriching a small black elite and prompted the government into launching a second phase of BEE, redubbed ‘‘broad-based’’ black economic empowerment (BBBEE), to emphasise the intended broadly inclusive approach and to make its policies more palatable to the ranks of the Congress of South African Trade Unions (COSATU) and the South African Communist Party (SACP). Some observers hold that the BBBEE is an attempt to legitimise the government’s neoliberal policies through facilitating the establishment of a black capitalist class, which in turn guarantees the survival of the white capitalists and their property rights (see e.g. Malikane & Ndletyana, 2006, cited in Ponte et al., 2007: 934). Others argue that fostering a black capitalist class would provide a feasible route to achieving the much-vaunted ‘‘trickle-down effect’’. Hence, the BBBEE approach contains contradictory objectives.

Pervading these issues is the ubiquitous tendency to describe South Africa’s socio-economic condition deploying the metaphor of ‘‘two economies’’ (Bond, 2007; Cousins, 2007; Du Toit & Neves, 2007). This metaphor construes the South African situation as comprising two isolated economic realms that exist in disconnected parallel, the realm of ‘‘traditionalist’’ modes of production and sustenance and the realm of modernised, industrialised production.

In agricultural terms, subsistence agricultural production is pitted against the modern agricultural sector, where modernising is equal to consolidation and commercialisation of farming activities. The gist of the ‘‘two economies’’ discourse is that those ‘‘stuck in the backwaters’’ need to be given a route of access into the ‘‘first economy’’.

Having laid out the main characteristics of the political situation in South Africa, the next section deals with how the water act and ensuing water allocation reform aligned with these debates.


During apartheid, there were huge inequalities between blacks and whites with regard to access to such natural resources as land and water. The predominantly White Republic of South Africa (RSA) created reserves that came to be known as ‘‘Homelands’’ or ‘‘Bantustans’’ for black people, thus depriving them of both freehold title and dignity (Van Koppen et al., 2002; Villa-Vicencio & Ngesi, 2003). The inequalities still prevail, reflecting the extent of overcrowding and land deprivation resulting from the apartheid policy. Some progress is being made in terms of land redistribution, but it is painfully slow (Lahiff, 2008). There are even greater inequalities in access to water. As much as 95% of irrigation water is consumed by predominantly white, large-scale farmers, with the remaining 5% accessible to smallholders, mainly blacks (Schreiner & Van Koppen, 2002; Cullis & Van Koppen, 2007).
In 1998, South Africa ratified one of the most sophisticated and progressive water acts in the world, the National Water Act no. 36 (Government of South Africa, 1998), which explicitly emphasises equity as being the primary objective for instituting a water use rights reform.

The act introduces a novel concept, that of the reserve, which refers to both an ecological reserve in terms of retaining a minimum level of in-stream flow to ensure ecosystem sustainability and that of a human reserve, which refers to the quantities of water necessary to meet basic human needs. Over and above the reserve, the act categorises water uses into schedule one uses, which include water used for domestic purposes such as drinking, washing, watering livestock and home gardening; general authorisations (non-transferable), which cover water uses in specific geographical areas or for particular purposes that are deemed to have a low impact; existing lawful uses which refer to uses that were actively taking place within two years of the new act being promulgated and which were recognised as lawful under the previous legislation; and finally water use licences, which cover all other uses. All water use, bar schedule one, needs to be registered in a national database, the Water Authorisation and Registration Management System (WARMS). What constitutes “use” is also defined in terms of the nature of the use and divided into 11 categories, including taking water from a water resource, storing water, impeding or diverting the flow of water in a watercourse and engaging in stream flow reduction activities (such as plantation forestry).

In the National Water Act (NWA), licences were conceived in terms of facilitating reallocation of water resources through the process of compulsory licensing in which all water uses in a stressed basin would be cancelled and new uses licences issued according to the criteria of equity and efficiency set out in the act (section 27.1b). Basically, compulsory licensing is a mechanism whereby all the water uses in a specific area are cancelled and a call for licences issued and will primarily be used in areas where there is considered to be water stress, which was considered to be the case for 11 out of the 19 WMAs (Director: Water Utilisation, interview 15 August 2006).

In terms of management, the country was partitioned into 19 water management areas (WMAs), based more or less on drainage regions, that were to be governed by a Catchment Management Agency. The purpose of the CMA was first and foremost outlined as “co-ordinating and promoting public participation

1 In the NWA, the whole of chapter 3 is devoted to protection of water resources and deals with the development of a classification system for water resources and resource quality objectives, determination of the reserve and pollution prevention. Hadley Kavin, the lawyer and member of the Water Law Drafting Team, emphasised the importance of the technical aspects and that the “hijacking” of the process by environmentalists had profound technical implications – he was primarily worried about the feasibility of the ecological criteria.”(…) we are now ten years down the line and I haven’t seen a draft of the regulations yet” (interview, 10 August 2006).

2 27. (1) In issuing a general authorisation or licence a responsible authority must take into account all relevant factors, including:
(a) existing lawful water uses;
(b) the need to redress the results of past racial and gender discrimination;
(c) efficient and beneficial use of water in the public interest;
(d) the socio-economic impact. (…..)
Moreover, according to the NWA section 43(1), undertaking compulsory licensing should be considered in order to:
(a) Achieve a fair allocation of water from a water resource which is under water stress, or when it is necessary to review prevailing water use to achieve equity of allocation
(b) Promote beneficial use of water in the public interest
(c) Facilitate efficient management of the water resource
(d) Protect water resource quality.
in water management” (Anderson, 2005: 1; see also Brown, 2005), although it was envisaged that these responsibilities could be expanded to include setting and collecting water use charges and issuing water use licences (Schreiner & Van Koppen, 2002). Moreover, the NWA outlines the development of a National Water Resources Strategy as the overarching instrument for managing national water resources. Its purpose is to “set out the strategies, objectives, plans, guidelines and procedures of the Minister and institutional arrangements relating to the protection, use, development, conservation, management and control of water resources” (Department of Water Affairs and Forestry, 2004: 8).

The NWA represented a significant departure from the previous 1912 Irrigation Act and the 1956 Water Act which both rested on the principle of riparianism. Riparianism essentially held that only those owning land adjacent to rivers – riparian land – were entitled to use water “reasonably”. Water use rights were therefore dependent on land ownership and all landowners along a stretch of river would have to cooperate to ensure that no one infringed on another’s ability to enjoy his or her entitlement to reasonable use of water. Riparianism was essentially a “closed commons”, each individual’s use right being in principle correlative to the use of others (Rose, 1994; Tisdell, 2003; Backeberg, 2005). The problem was, of course, that this was an elite closed commons, comprising people that had access to land, which through the passing of the notorious 1913 Land Act had been an asset almost entirely reserved for South Africa’s white minority.

4. Water allocation reform: emerging narratives of equity and sustainability

The passing of the 1998 Act invested the state with the authority to issue licences; the earlier system of user-user correlative rights was transformed into a relation of state-user administrative rights (Movik, 2008). “User-user correlative rights” refers to the fact that the riparian doctrine essentially is a “closed commons”, i.e. that all riparian water users along a river stretch have water rights that are relative to other riparian water users; everyone has an entitlement to a “reasonable” share relative to that of other users. However, with a shift to administrative user rights, this “closed commons” is done away with, and individual users now only holds an obligation to honour what the state has dictated as appropriate conditions for water use. This shift in relations meant that the state gained a large degree of discretionary power in terms of making decisions about how and to whom to allocate water, rather than water use rights deriving from a legal principle such as the riparian doctrine (Burger, 2006). This implied that the way use rights and potential users were conceived would be open to particular framings at the policy level (Rein & Schön, 1993; Fischer, 2003), creating space for contestations and ambiguity. “Framing” in this context refers to the way notions of sustainability and equity were understood, in particular how different characteristics of social, ecological and technological system interaction and functions were highlighted and others downplayed, effectively shaping the nature of use rights themselves (Movik, 2008).

Scoones et al. (2007a) argue that the term “sustainability” is not only an objective concept that refers to a system’s ability to maintain its structures and functions in the face of short-term or long-term disturbance, it is also a normative concept open to particular framings, as different people will emphasise different system functions as being of more importance than others. They distinguish these two dimensions of sustainability through referring to normative Sustainability with a capital S. Sustainability, then, refers to the particular goals that are identified by different actors and these goals are inherently value-laden and political, reflected in the particular framings that emerge in policy discourse. I will argue in the following that particular notions of Sustainability were allowed to dominate through the emergence of privileged accounts, which emphasised particular features whilst downplaying others.
On the face of it, the main driving force for the implementation of administrative licences was that it facilitated the reallocation of water from the haves to the have-nots (Minister of Water Affairs Buyelwa Sonjica speech, 4 May 2006). But even though the NWA contained the core principles of reallocation, it did not spell out in detail how redistribution should be carried out in practice. A more pragmatic and practice-oriented policy to guide allocation reform was therefore needed and work on putting together such a guiding document, the Water Allocation Reform (WAR) began in 2003.

An expert panel was put together, consisting of lawyers, environmental advisers and representatives from the Department of Water Affairs and Forestry (DWAF), the Water Research Commission (WRC) and non-governmental organisations (NGOs). However, nobody on the expert panel had much competence on land issues, as the one person asked to join the panel who could have provided inputs on the land reform process had to opt out for personal reasons (Movik, 2008: 91). Thus, the water reform process missed an early opportunity to connect with the land reform process and all its internal dynamics (see e.g. Hall, 2004 for an overview). The final draft of was completed in November 2006. A pillar of the WAR was the concept of compulsory licensing. The process of drafting a practical policy to detail how allocation of rights should be carried out in practice gave ample room for particular narratives on how rights should be allocated to emerge.

In the NWA, the notion of “existing lawful uses” was defined as part of provisions to deal with the transition mechanism from the riparian principle to an administered authorisation system. Thompson (2006) states that “for practical reasons, the change could not occur immediately”. DWAF officials, however, explained the retention of existing lawful uses primarily in economic terms. The energetic Director for Water Allocations stated how, even though the existing users had greatly benefited from skewed landownership and the associated access to water through riparian rights, their uses were allowed to carry over “because the economy depends on that kind of use” (interview 31 October 2006). Drafting a policy for how to reallocate water would either downplay or strengthen this notion of existing lawful uses and could potentially even ditch the term altogether. In the Water Allocation Reform Programme draft dated January 2004, the section on “principles to guide water allocation” contains no less than three principles dealing with existing lawful uses (ELUs), under the heading “promoting accountable and fair governance”. The principles are:

- Existing lawful uses will only be curtailed as a last resort and only after all other options to find water for the poor and BEE have been exhausted.
- Existing lawful uses of water will not be curtailed unless there are clear procedures and support programmes established to promote the productive use of water by emerging users.
- No existing lawful consumptive use of water will be completely curtailed.

In later versions, these three principles are condensed into one:
- It is critical to address equity needs, but attempts to deal with this must be balanced with the consideration that many existing lawful water users are making productive, efficient and beneficial use and are contributing to socio-economic stability and growth.

During the process of crafting allocation reform, two broad views emerged, namely the economic productivity perspective, which essentially held that water rights should be allocated to the most productive uses in economic terms, and the livelihoods perspective which emphasised the need to spread water resources more evenly and focus on water’s role as a means to sustain the livelihoods of poor people in rural areas, in particular focusing on the potential to reallocate water for subsistence agriculture.
The economic productivity narrative maintained that existing uses were making productive and beneficial use of water and needed to be protected. The productivity perspective resonated with the principles of the GEAR macroeconomic policy that focussed narrowly on how to stimulate economic growth and promote investor confidence. The main message was that redistributing water away from existing lawful uses would threaten environmental degradation; Sustainability was therefore understood to hinge on the continued practice of existing lawful uses.

Consider the following excerpt from the first WAR policy document draft: ‘‘If reallocations occur too quickly, the country will suffer economic and environmental damage as emerging users struggle to establish productive uses of the reallocated water’’. In particular, the second component of the argument, that ‘‘environmental damage’’ will occur as ‘‘emerging users struggle to establish productive use’’, posits putative causal links (Roe, 1991) and implicitly draws on a larger meta-narrative of environmental myths (Adger et al., 2001; Forsyth, 2003). In this case, the meta-narrative is the ‘‘poverty–environment–degradation’’ hypothesis, a myth that has gained a strong hold on the imagination of both international development agencies and policymakers (see e.g. Angelsen & Vainio, 1998). There is an implicit assumption that reallocating to those that are not existing lawful users will result in environmental degradation, thus disregarding the potential environmental threat – such as the pollution from the mining industry – posed by the consumption levels of existing users (see e.g. Duraappah, 1998).

The phases of the work to craft a Water Allocation Reform generally strengthened the productivity discourse. Through ‘‘privileged accounts’’ (Freudenburg, 2005), existing uses were largely portrayed as productive and ‘‘beneficial in the public interest’’, downplaying the negative impacts associated with these uses such as inefficiency and pollution, not to mention how water use rights had come to be appropriated in the first place; through discriminatory land laws (see e.g. Ntsebeza & Hall, 2007 for an overview of South Africa’s land politics). The potentially negative impact of certain mining enterprises in particular were downplayed (Marshall, 2008; Prinsloo, 2009; Salgado, 2009a; 2009b; see e.g. Limpitlaw et al., 2005)\(^3\). The end result of the process was that the existing users were entrenched and the case for redistribution to historically disadvantaged individuals (HDIs) was tightly tied to their potential for economic productivity. This was reflected in the phrase ‘‘(…) start people along the journey to becoming commercial and competitive users’’ that occurs in the final draft, implying that potential water users will be judged on their capacity to make economically productive use of water.

The decision to retain existing lawful uses meant that these would have to be accurately determined before compulsory licensing could commence, to avoid any accusations of arbitrary reallocation and also to enable a smooth conversion to licences at a later date. Any such allegations would render the state liable to go through expensive litigation procedures with existing users to establish whether or not reallocations were deemed to be ‘‘fair’’. Existing uses, therefore, would have to be validated, meaning that the current use had to be accurately quantified and verified, that is the legal status of the use had to be checked (whether it was considered as lawful under the previous Act).

\(^3\) The threat to water quality by the mining industry has recently led to a storm in South Africa’s water circles. Anthony Turton, a former senior researcher at the CSIR, was expelled from the institution after publishing a paper that brought to the fore the issues of how industry, in particular mining, are threatening to degrade the quality of South Africa’s water resources.
4.1. Preparing for compulsory licensing

As a necessary corollary of retaining existing lawful uses, a validation and verification project had to be undertaken prior to implementing compulsory licensing. The first part of the project, concentrating on the validation of existing water use in the Inkomati and Olifants WMAs, started in early 2003 and was completed in June 2006. This paper focuses on the Inkomati, as it was one of the pilot areas for reform. Validation entailed confirming how much water the user was actually using in the qualifying period, how much they said they were using (or registered), as well as how much they were currently using. Verification determines the extent of existing lawful water use, but the terms caused much conceptual confusion and misunderstanding. In effect, verification should determine if any previous laws would have limited the use in the qualifying period. If not, the use in the qualifying period is lawful.

Validation of water use was carried out through combining modelling approaches, LANDSAT and cadastral data, field visits and telephone interviews. Since historical water use was rarely measured, determining use in the qualifying period represented the most challenging element of the project and plenty of problems were encountered. The SAPWAT model used to estimate water abstractions basically provides estimates of crop-water requirements. Results generated by SAPWAT vary greatly depending on the quality of the information attributes it is fed — crop characteristics, crop requirements, crop type, planting dates, soil type, infrastructure, irrigation practice, slope gradient, etc. — and the variable interpretation of operators. Even estimates of the model’s error margins differ substantially.

In the Inkomati, farmers were often quite unwilling to provide data to project members, or at least the type of information asked for: ‘‘They wanted to know everything in detail, e.g. how many mangoes you grow, etc. Thing is, I’m not necessarily going to stick to that specific regime what they asked about at that specific point in time – things are going to change. The lady [the project leader] was sweet enough, but they wanted very specific data, very accurate data’’ (Commercial farmer, Lomati River, interview 24 May 2006).

From the commercial farmers’ point of view, the project was too engrossed in its own ideas of scientific detail to be of any relevance: Science was regarded by those affected by it as an ‘‘illegitimate and exploitative set of discursive practices’’ (Lidskog & Sundqvist, 2002; cited in Haas, 2004: 571).

With regard to verifying water use – that is confirming whether a specific water use was lawful or not – the nature and history of land transactions served to render this exercise fraught with problems, as the dynamics of continuous land transactions influenced the legal status of water rights. Where land had been subdivided, it was often not possible to determine to which plot the riparian water right was now attached; similarly with consolidations. The dilemmas inherent in using a relatively static database to mirror dynamic land relationships have been extensively documented in research on land titling efforts across Africa (see e.g. Benjaminsen & Lund, 2003), but the implications for water rights have seldom been explored.

In addition to land dynamics, informal trade in water rights contributed to complicating the picture. According to the previous legislation – the 1956 Act – users were permitted to trade riparian rights as they

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4 The qualifying period was defined as the two years prior to the promulgation of the National Water Act 1998.

5 One internal DWAF source reports SAPWAT as having an error margin of up to 40%, whereas others quote figures as high as 60% (DWAF internal memo, 2006).
saw fit, but not rights attenuated through government-issued permits or quotas. Illicit trade had nonetheless taken place with the covert consent of local irrigation boards (Bate & Tren, 2002). Another aspect of the need to attach water rights to land was the uncertain nature of land tenure in former homeland areas. These factors led to the rather disheartening result, for DWAF, that in only about 17% of the cases could the project team determine water use as “possibly lawful”. Further work was needed in terms of verifying water use and the project was tendered to a different group of consultants. However, their contract was not extended and DWAF considered scrapping the whole verification project as it was too costly and resource intensive.

Since SAPWAT was so inaccurate, DWAF realised that “it will be very difficult to prove a water use that exceeds the allocated verified volume in a court (or Tribunal) with the presently available mechanisms and legal framework in the NWA” (DWAF internal source). Garduño & Hinsch (2005) point out that the support of compulsory licensing requires much more sophisticated modelling techniques and it would take 10 consulting teams approximately 20 years to complete. Interestingly, the proposed way out of this dilemma was to argue that unlawful use was inefficient (DWAF internal note):

> If users may have registered more than the SAPWAT requirement, [they] may argue that they used more [than] this during the qualification period. As it may be difficult to prove that this was not the case (and hence to prove this use as unlawful), the use could be flagged as inefficient and be considered as such during the compulsory licensing process.

Thus, the early discourses of existing lawful use as “efficient and beneficial” are now undergoing scrutiny. The failure of the state to curb unlawful use is, in a sense, closing the circle. Since they are not technically or scientifically able to pin down unlawful use, the “weapon” resorted to is again a discursive one, in labelling users as “inefficient”.

5. Impasse

DWAF was increasingly realising the shortcomings of the scientific approach to determining lawful use and beginning to outline alternative means of coping with this, through, for example, labelling existing users as “inefficient” (in direct contrast to the earlier focus on ELUs as efficient and productive). The people within the Directorate for Water Allocations were growing impatient in terms of providing water to the HDIs; they wanted to speed up the reform process and needed to find new ways of doing so in light of the increasing difficulties.

One possible pathway that emerged was to develop further the notion of general authorisations. General authorisations were one of the four categories of use rights defined in the act. However, at that time, it was viewed primarily as a means of lessening the administrative burden associated with licensing and intended for use in unstressed catchments that did not yet need to go through the compulsory licensing process. But as the water allocation reform dragged on into its seventh year without much progress, the idea of developing general authorisations (GAs) as a tool to be integrated into the compulsory licensing process slowly formed, although opinions on its potential differed within DWAF. Nevertheless, a team of consultants was asked to develop the idea further and in November 2005 an inception workshop was held for interested stakeholders.

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6 The stakeholders comprised the regional directors, as well as representatives from other interests, such as the International Water Management Institute (IWMI) and officers from the Department of Agriculture and Land Affairs and various financial institutions.
GAs were seen as sitting in the ‘‘grey area’’ between schedule one users – water for small-scale domestic use and non-commercial purposes – and licences, which were viewed as providing access to water for commercial purposes. The view that emerged at the inception workshop was that GAs should be reserved for small-scale use by people with their own abstraction technologies and that water should be allocated primarily to users who were able to take up the water and use it productively, not simply because the users were HDIs. There was no mention of infrastructure in terms of enabling access to water for HDIs. The consultants had been asked to prepare fictitious case studies to illustrate the potential benefits and drawbacks of GAs. The UK’s Department for International Development (DFID) consultant stated that the case studies did not need to ‘‘actually work in practice’’ but were ‘‘useful in understanding the approach outlined in the methodologies’’. Whilst this may be the case, it strengthened the impression of ‘‘centralised’’ and rather abstract knowledge-making.

The then Deputy Director at the Inkomati Regional Office pointed out that prioritisation of GAs would become a problem, stating that ‘‘[the] scary thought about GAs is that this one guy can get as much as he likes, but not that other… Who do you give it [the water] to?’’ (interview 8 September 2006). He continued:

It’s a nice idea (…) but I’m very scared of the term ‘‘general authorisations’’. It implies that you don’t need control. If 5% of the water [is] set aside for general authorisations and you don’t monitor it, you don’t authorise it, you don’t keep records of it (…) it means you don’t have control.

He noted that there was a study underway to assess the water availability in the system, which was planned to take about two years and added:

…if the politicians say they can’t wait to reallocate, then there’s going to be a huge risk. I have a major problem with that. To do [compulsory licensing], without having all the data is very risky. You cannot reallocate without the necessary information. They haven’t even set the international requirements yet.

At a meeting some weeks later with the then Director, Water Allocation at DWAF; he observed that:

Hydrologists, modellers, they want great detail; you can’t, you’ve got to take some risk (…) It takes them too long (…) How much should you study a system before making a decision? (Director, Water Allocations, interview 31 October 2006)

The above quotes succinctly sum up the crux of the situation, the perception of uncertainty and risk and the continuous attempts of the modellers and hydrologists to reduce, if not eliminate, uncertainty and the differing perceptions of risk and need for control.

6. Understanding water reform: allocation discourses, dynamics and uncertainty

This paper started out by highlighting how perceptions of scarcity have triggered reform efforts across the globe, emphasising the trend of bringing water resources under the ambit of the state and highlighting the fact that policies often tend to ignore and downplay dynamics and incertitude. A main point was that, in the shift from a riparian to a licence-based system of water allocation, the onus is now on the state to flesh out conceptions of use rights and to justify particular allocation mechanisms as well as shoulder the administrative burden of implementing a resource-intensive system of authorised water use rights. The shift towards greater state authority provided a fertile ground for the emergence of particular narratives with respect to who should have rights to water.
Water policy reform is not simply a tabulated, neutralised exercise of applying certain given principles, but a protracted struggle for meaning; policy discourse itself actively shapes use rights (Movik, 2008). This notion builds on the idea of rights as social relations, that is that use rights are constituted through the social recognition of certain claims and categories over others. Eggertsson (1996: 157) argues that property rights, as all social phenomena, “abstract from the real world by stylizing select characteristics of human behaviour, organization and physical environments”. It is the nature of this “stylizing” that is of interest, how it gives rise to certain narratives and how the forging of particular subject positionings (Fairclough, 1995; Laclau & Mouffe, 2001; Fischer, 2003) in policy narratives define certain categories’ relations vis-à-vis each other and the resource. Fairclough (1995), drawing on Willig (2001) states that a systematic exploration is required “…of the ways in which discursive constructions and the subject positions within them open up or close down opportunities for action. By constructing particular versions of the world and by positioning subjects in particular ways, discourses limit what can be said and done”.

Through the exercise of categorising water uses, users are created correspondingly; subjects have been created in the process of transformation, being invented and reinvented. Where before there were mainly irrigators, the National Water Act has created a host of new categories and correspondent subject positionings: stream flow reducers, ELUs, HDIs, potential water users, and so on. The water allocation reform largely revolves around these main categories, that of ELUs and that of HDIs, with an additional category of the “commercial HDI”. The notion of ELU was formed through creating an “equivalential chain” of users, that is emphasising what is equal, what is held in common, by a diversity of actors (Laclau, 1996). Through this process disparate identities are brought together into one overarching category in order to serve a particular purpose. In Laclau’s words, “the more the chain expands, the more differential features of each of the links will have to be dropped in order to keep alive what the equivalential chain attempts to express” (1996: 208). The equivalential chain, in this instance, is all the different water users: mining, agriculture, industry, domestic, urban; these are all collapsed into the basket term existing lawful uses, converting all possible subject positionings into a monopolising dichotomy of existing lawful and historically disadvantaged.

Discourse, according to MacDonald, can be regarded as form of “ideological practice” (MacDonald, 2003: 153), in the sense that it contributes to construing certain goals and system functions as more worthy or sustainable than others and this process of construction will be deeply influenced by the prevailing political terrain. Similarly, the notion of subject positioning hinges on the idea that the construction of the subject in discourse is inherently political, asserting the primacy of politics in terms of determining subjects and their relationships.

Understanding how these discourses and subject positioning emerges, then, requires the teasing out of the wider socio-historical and political setting. The legacy of inequality left by apartheid laid the ground for the focus on redress and redistribution, but the nature of what became known as the “negotiated settlement” under the transition, where the ANC was thought to reach a compromise with powerful economic interests in order to secure political power, paved the way for the rise of the neoliberal paradigm in much of post-apartheid politics. This paradigm influenced in various ways the water reform, as for example in the heavy emphasis placed on the role of water for economic productivity and the recognition of existing lawful uses, justified through the fear of disrupting the economy. It is also reflected in the emphasis on the notion that those who had been wronged in the past should be given access to water, but with the general ideal that they should become commercial and economically productive users of water. What this does, is to tie a tight knot between the constitutional claims of HDIs to greater access to water and their capacity for productive use.
Greater equity can thus only be achieved through either HDIs gaining capacity to use water productively, or by getting access to “benefits accruing from water” through being employed by someone who uses water productively. Through the emphasis on scarcity and making efficient use of scarce resources, the notion of redistribution is hinged on the capacity to use water efficiently. Even if this rendition may seem self-evident at first, it arises from particular framings of social and ecological dynamics, which in turn point to equally self-evident solutions. By questioning the manner in which the problem is framed in the first instance, this also opens up the “closure” (Fischer, 2003; Stirling, 2005) achieved in terms of advocating a particular solution. Through the privileged account of existing lawful uses as beneficial and productive, then, the orientation of the problem effectively obscures from view the fact that large-scale supply schemes serving mining and agricultural interests and the huge subsidies lavished on the agricultural sector also contributed to wasteful and inefficient use.

These privileged accounts arose from and were nurtured by the prevailing political economy conditions. In particular, the emphasis on the notion of “two economies” served to portray the commercial sectors as the modern engine of economic growth, which the “traditional” sectors needed to be integrated into. The BBBEE policy further contributed to reinforcing the legitimacy of this view, in terms of providing black people with access to the benefits of economic growth occurring in the “modern” sector. This was particularly true with respect to the mining sector. The ubiquitous notion of the “two economies” and the need to integrate the traditional sector into the commercial one also explains much of the emphasis on HDIs making commercial use of water in the water allocation reform, defining the problem narrowly as one of scarcity and how to distribute scarce resources. This framing of the problem, coupled with the nature of the “negotiated settlement”, which in effect preserved colonial land grabs by constitutional sanction (Hendricks & Ntsebeza, 2000), provided the rules of formation for the discourse on existing users as making beneficial and productive use.

Francis (2005: 15), drawing on John Pilger7, notes that “the prevailing political rhetoric, which placed an emphasis on the reallocation of land, water and other natural resources to the people, was merely expedient during the decades of struggle for liberation and the early years of democratic transition”. Hence, property was protected through the “existing lawful use” category. The issuing of licences was made conditional on the productive capacity of new entrants. Retaining existing lawful uses also meant that such users would have to be accurately determined before compulsory licensing could begin, an issue which was to bedevil the whole reform process.

Although the economic productivity perspective spurned commercial agriculture for its perceived marginal contributions to the economy and the livelihoods perspective concentrated on the notion of “emerging” in terms of agriculture, viewing it more as a route to emancipation, the particular political economic conditions prevailing at the time, which saw the protection of property rights as key to gaining investor confidence, meant that the agricultural lobby was indirectly favoured by the reform’s insistence on retaining the notion of existing lawful use. This points to another feature, namely the tendency wherein issues of a political nature come to be “bureaucratised” and how technical and “self-evident” terms – such as existing lawful use – come to cloud the inherent political decision making.

The state effectively tripped itself up with the retention of existing lawful uses and the reliance on scientific certitude to determine unlawful use that ignored dynamics. As, Scoones et al. (2007b) have pointed out; uncertainty is inherent in dynamic systems. The problem is that policy does not deal with it.

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7 World-renowned Australian journalist, author and documentary film-maker.
head-on, but implicitly assumes some sort of equilibrium state. These contestations in terms of the inability of scientific and technological expertise to determine use rights led to an impasse in terms of redistribution efforts. This paper has focused on the processes leading up to the 2006 Water Allocation Reform. However, in September 2008, a thoroughly revamped version of the WAR was published, called the Water Allocation Reform Strategy, which set quantified targets for redistribution; 30% of water resources is to be in black hands by 2014, and 50% by 2024. This is a highly ambitious new policy, which takes its cue from the land reform policy in terms of identifying quantifiable goals. Following the approach outlined in this paper, it would be interesting to understand in more detail how this shift developed over time, how it fits with the broader national visions of development, and also to follow to what extent it will be translated into practice, given the prevailing constraints of uncertainty and lack of capacity.

7. Conclusions and wider implications

The shift from a riparian system of water use to formal licences was akin to a shift in emphasis from individual acquisition to state authorisation, which invested the state with a large degree of discretionary powers in terms of determining water use rights. I contend that the nature and effect of this shift is best understood if one regards property rights as constituted not only through social relations and material characteristics, but also through policy discourse, as this new “discretionary space” permitted policy actors to engage in competitive story-telling, investing the idea of use rights and associated users with particular meanings that influenced the allocation and content of use rights.

Moreover, although the allocation of water resources in the South African context was initially explicitly political – with the aim of bringing about a more equitable distribution – the process of allocation reform ended up couching inherently political issues in innocuous-sounding and neutralising terms such as existing lawful use. This is the risk in other settings as well, that questions of water allocation that were previously founded on more or less easy-to-define legal principles are now subject to state deliberations through the issuing of state-authorised licences or permits. Even if seemingly objective criteria are deployed to aid decision making in favour or disfavour of any given individual applicant or group for a water use right, these criteria are liable to be deeply influenced by the particular political economy context and the associated discourses that emerge. Over time, this influence is likely to be camouflaged in technical or legal language and may mask inherently political decisions as purely technical or bureaucratic ones. It is, therefore, necessary to be aware of the way that the policy process can contribute to obscuring the power constellations present in particular narratives around rights and rights holders.

In addition, by providing the state with the authority to issue use rights, the onus of defining the content of such rights is also placed on the state. In situations where government capacity is stretched to the limit, as is the case in many developing countries, this may be an almost insurmountable task and a questionable use of government resources. Even in developed country settings, the process of attempting accurately to quantify the portion of a resource to which a user holds rights is fraught with problems. The tendency towards rigid determination of use rights is undermined by the presence of incertitude, which further renders the task of backing legal claims with reference to scientific quantification moot. The difficulties in terms of quantifying and legally backing up state-authorised use rights, then, seriously bring into question their merit. Finding ways to deal with incertitude would be likely to provide a more fruitful pathway to managing water resources than sticking with the current pattern of attempting accurate quantifications.
These observations open up broader questions about state–citizen relationships. Implementing IWRM and institutionalising use rights ultimately concerns issues of state versus citizen authority over resources and how that authority is negotiated. This insight implies that attempts to implement permit or licensing systems in different contexts need to be explicit regarding the political nature of such reform efforts, rather than treat them as purely technical or management exercises. There is, then, a need to raise awareness in terms of the ways in which discourses arise and how language at the policy level is deployed in such a manner that it contributes to fashioning property relations and to making sure that the inherently political nature of defining and allocating use rights does not become obscured.

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