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Water and welfare: Free basic water revisited

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ABSTRACT

This paper reviews South Africa's efforts to realise the right to water from a welfare policy perspective. 'Free basic water' (FBW), initially a water sector policy, was later recognised to be part of the country's wider social protection framework. However, while the principle of providing poor households with free basic services has been sustained, FBW has not provided reliable access for many of its intended beneficiaries. Analysis of the policy, implementation and performance of the programme identifies unresolved policy tensions between welfare objectives and other government priorities, reflected in the choice of targeted rather than universal welfare strategies. It is concluded that these welfare policy tensions have weakened the outcomes of the free basic water policy which are more usually blamed on operational and institutional failures. While the FBW principle is generally accepted, practical performance is often weak.

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1. Introduction: The concept of 'affordability'

The design and implementation of the institutional, technical and financial arrangements for water supply systems becomes more difficult if a primary requirement is that all households should be able to afford the water provided. Affordable access is now a formal public policy goal and affordability is an indicator of progress to achieve UN Sustainable Development Goal SDG 6.1, 'the proportion of population using safely managed drinking water services'.

However, affordability is a challenging concept. The conventional assumption that households should not spend more than between 3% and 5% of their income on water is unhelpful since

> … . it would not be desirable for them to reduce their spending on other basic needs, such as housing, education, health, or food items. This suggests the continued need for channelling some form of public subsidy or cross subsidy to poorer and more vulnerable households to ensure their financial access is not compromised (JMP, 2019).

In response, current global efforts are considering how the 'affordability' of a basic water supply can be assessed in the context of the broader economic circumstances of the households and communities concerned (JMP 2021). However, targeting financial support to reach poor households is a longstanding challenge (Komives et al., 2007).

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Over the past two decades, South Africa's 'free basic water'(FBW) policy has sought to address these challenges. This paper outlines the trajectory of the free basic water policy and its linkage to constitutional rights and social welfare policies. It locates the policy and programme in the wider economic, institutional and political context, presents and analyses the available data and considers, from a welfare perspective, apparently contradictory findings about the programme's outcomes.

2. Background: Why 'free basic water'

Colonial settlement displaced South Africa's native populations from productive lands and formalised that displacement through *apartheid* racial segregation which distorted settlement patterns and aggravated poverty and inequality. One outcome of this history was that, in 1994, 12 million people, a third of the population, did not have physical access to adequate and safe domestic water supplies nor to the financial resources to provide them. To address this basic need, the new democratic government established a national programme to expand water supply infrastructure and 'take responsibility for building competent local and provincial agencies that are capable of delivery' (ANC, 1994).

The centrality of this programme was reinforced by the country's new constitution which included a 'right to sufficient water', requiring the state to 'take reasonable measures within its available resources to achieve the progressive realisation of this right' (Republic of South Africa, 1996). The challenge was to turn that legal 'right' into a practical reality at a time when the transition to a non-racial democracy required a complete transformation of all government institutions (Muller, 2008).

The constitution also outlined a new system of local government based on municipalities with extensive autonomy and exclusive functions, including the provision of water and sanitation services. Local government boundaries were drawn to enable the municipalities to provide services to communities 'in an equitable and sustainable manner', to address historic geographical inequality, entrenched along racial lines.

The new municipalities, many of which were only formally established in 2001, faced many challenges in the management and financing of those basic services. *Apartheid* had left 50% of the population living in poverty, 27% in extreme poverty (PIR, 1998) and funding arrangements had to recognise that many households would indeed be choosing between food and water.

Ahead of the first municipal elections in 2001, the South African President announced that 'the first 6000 litres used every month by poor families would be free' (Mbeki, 2000). That intent was translated into formal policy by the publication of national norms and standards for tariff setting in 2001. Critically, this included the option of using a rising block tariff with the first block free or, more precisely, '. . . . set at the lowest amount, including a zero amount, required to ensure the viability and sustainability of water supply services (Dept of Water Affairs and Forestry, 2001).

The FBW policy was controversial. Economic and social conservatives warned that its poorly targeted approach would misdirect finances and lead to service failure. Radical social activists claimed that FBW was a neo-liberal programme to 'commodify' water and maintain privileged access for a rich minority and challenged elements of it in court.

In practice, results have been mixed. In urban Gauteng Province, 84% of households reported that they were 'satisfied with access to water' (GCRO, 2021). During Cape

Town's multi-year drought, the city's response respected the FBW principle that all households should be able to meet their basic needs and restricted all users equitably to that level (Kaiser & Macleod, 2018; Brühl & Visser, 2021).

However, while infrastructure had been built to reach 95% of South African households by 2018, only 65% had reliable services with service failures concentrated in poorer, more rural areas. It is important to understand the reasons for these failures from a welfare perspective since a reliable supply is a precondition for successful FBW and the failures are often attributed to non-payment for water even where the majority of users are eligible for FBW and would not be expected to pay.

3. Implementation context and policy design

3.1. Implementation framework

In 1994, the new democratic government's Reconstruction and Development Programme (RDP) (ANC, 1994) included proposals on water tariffs which reflected the then conventional wisdom that at least some of the costs of water supply should be paid by all users. To that end, tariff structures had to include a 'lifeline tariff' affordable for all and a 'progressive block tariff' to cover the costs of supplying 'large-volume users' and to cross-subsidise the poor, particularly in rural areas.

It was soon found that many households could simply not afford to pay for water. In response, the Water Services Act (Republic of South Africa, 1997) gave national government the power to regulate norms and standards for services and the structure (but not levels) of tariffs. The initial regulations provided for a zero tariff for a statutorily defined basic supply (DWAF, 2001), complemented by FBW policy and implementation guidelines (DWAF, 2002a; DWAF, 2002b; DWAF, 2002c).

While the priority was to help new local government to implement FBW, the regulations were also intended to promote efficient water use and recognised that FBW might become part of a wider social welfare strategy, thus contributing to the goals of strengthening social solidarity and cohesion. Initially a water sector initiative, the provision of free basic services was later affirmed by the National Development Plan as an element of the social protection strategy: '… through a social wage, which includes no-fee schools, free basic services and subsidised public transport'. (National Planning Commission, 2012).

3.2. Service levels and tariffs to ensure universal access in diverse contexts

The RDP's short-term goal was to supply households with six thousand litres per month. For the 95% of South African households comprising eight people or less, that would provide at least 25 litres per person daily (lpd); for the 'average' household of just under four people, at least 50lpd. To enable that apparently simple standard to be delivered across South Africa's diverse socio-economic and physical geographies, the 1997 legislation (Republic of South Africa, 1997) allowed tariffs to differentiate between

(1) different users of water services;
(2) different types of water services; and

(3) different geographic areas, taking into account the socio-economic and physical attributes of each area.

The 'block tariff' envisaged by the RDP could only be implemented where households had metered connections that were read and billed. In poor, peri-urban and rural areas, an alternative was to provide supplies through communal standpipes since households that carry water from outside the yard seldom used more than the 'basic needs' allowance. Another technical solution was to use prepaid meter systems, programmed to dispense the basic allocation without charge.

Work already underway in Durban (WSP, 2007) and elsewhere served as 'pilots'. Durban was integrating many different administrations and populations, from the formal 'first world' urban to poor rural households at a subsistence level. Its experience informed the national norms and standards regulations which required municipalities, when setting household tariffs, to consider differentiating between:

(a) the supply of water to a household through a communal water services work;

(b) the supply of water to a household through a water services work or consumer installation designed to provide a controlled volume of water;
(c) the supply of water to a household through a water services work or consumer installation designed to provide an uncontrolled volume of water' (DWAF, 2001).

These norms allowed large municipalities to charge high-income high-volume consumers on a block tariff that would provide the cross-subsidisation envisaged in the RDP; meanwhile, the other options could reduce the administrative burden of managing large numbers of small payments from poor users. Municipalities were encouraged to choose appropriate technical alternatives to meet their 'free basic water' obligations, using the participatory planning processes that were, perhaps optimistically, built into the local government management framework.

3.3. Funding free basic water – A diversity of sources

Funding arrangements for local government, explicitly intended 'to redistribute national revenues with a view to equity and poverty alleviation' (IDASA, 2005), provided the financial framework for FBW implementation. While the details varied according to local contexts, there was a limited set of *funding* sources available at different scales for the planning, development and operation of water supply systems (Table 1). Private or public loan *finance* to *fund* infrastructure investment was only available to the handful of large municipalities that could show credible future cash flows needed to support loan repayment.

Municipalities needed to use a mix of these sources to fund infrastructure investments and operations, setting tariffs that provided sufficient income to cover service costs after allowing for funds from other sources, such as national grants. Costs were calculated based on the profile of the community (numbers at each level of service; extent of cross-subsidy available from higher service level users) and the coverage levels and service standards to be provided. For the poorest municipalities, where most users

Table 1. Funding sources for water supply.

Scale	Funding sources
Local:	User charges for specific services
	Municipal rates and taxes.
Prov/Regional:	'Homeland'[a] budgets (from national govt during transition)
	RSC levies (tax on company payroll and turnover – until 2006)
National:	Local government equitable share of revenue (LGES), an unconditional grant
	Conditional grants for local govt infrastructure and institutional support

[a]'Homelands' were regions set aside under *apartheid* for black South Africans, many of whom were forcibly relocated when their original places of residence were designated for white occupation.

received only a basic service, the primary funding source was usually the LGES. In better-off municipalities, high volume users might provide sufficient cross-subsidies to allow all users a 'zero tariff' first block.

Tariff determination thus required socio-economic data as well as estimates of the costs of operating existing infrastructure and planned investments. Compliance levels were also uncertain: According to the then-Minister, payment compliance in 2000 ranged from 95% in the old 'white' suburbs to under one percent of O&M in schemes run by national government in poor rural areas. The problem was to separate out 'the won't pays from the can't pays' he noted.

3.4. Water, welfare and the social wage

Initially presented as water sector policy, FBW had wider relevance. While the Constitution (s.227(1)a) provided for local government to receive 'an equitable share of revenue raised nationally to enable it to provide basic services and perform the functions allocated to it', those basic services had not been defined. It was suggested that this was intentional because 'municipalities should have some flexibility as to how a basic service is defined, and this is facilitated by the unconditionality of the equitable share allocation' (Joseph, 2002).

But free basic services also contributed directly to broader social welfare objectives, a policy domain that had initially been neglected. Only in 2000 was a Committee of Enquiry established to outline the long-term objectives and targets of a national social security system and to propose options based on the country's immediate needs, level of development and affordability.

The water sector was thus leading rather than following welfare reforms. 'South Africa faces a continuing challenge of alleviating poverty and meeting basic needs. The Government has committed itself to reducing inequalities through providing basic services to poor households' the committee's report noted (Department of Social Development, 2002). Its primary recommendation was thus that 'an appropriate social security concept for South Africa must prioritise the needs of people without any incomes, with insufficient incomes or who are engaged in informal activities'.

The report showed that free basic services could make only a limited contribution to addressing the country's structural unemployment and poverty. But their contribution was recognised when President Mbeki described free basic water as part of 'the social wage' which, he explained, complemented direct social grants and included water and electricity as well as schools, primary health care and housing (Mbeki, 2003).

In ongoing policy discussions, free basic services were included as part of government's overarching 'comprehensive social security framework'.

> The concept of the "social wage" … provides a way of reflecting composite state spending on education, health social security, housing and related expenditures, whose progressive realization is guaranteed by the Constitution (Friedman & Bhengu, 2008).

Government's limited funds for social security had to be balanced between direct cash grants to households and funding for the basic services which the Constitution guaranteed (Meth, 2004), raising issues of 'dependency', targeting and indigency. As explained below, this welfare 'turn' impacted upon FBW design and implementation and exemplified the long-standing debate about the pros and cons of universalist versus targeted welfare strategies (Korpi & Palme, 1998; Mkandawire, 2005).

4. Implementation: Progress, challenges and responses

4.1. Monitoring implementation

Effective implementation of FBW required capable water management institutions and a supportive regulatory environment. The Municipal Finance Management Act was only approved in 2003 and fragmented administrative arrangements still had to be aligned with new policy and regulation.

While formally 'white' urban areas had been consolidated during the political transition, new local administrations still had to be established in the former 'homelands' where the majority of 'displaced urban' and poor rural black Africans lived (Crankshaw & Parnell, 1996). Only in 2009, when national government completed the transfer of former 'homeland' water schemes into the final 53 new municipalities, could tariff policy and FBW be implemented systematically across the country (National Treasury, 2006).

Effective implementation also required ongoing monitoring and evaluation for FBW to achieve its desired outcomes. While there have been many sources of information about FBW, including well-constructed surveys, long-term monitoring did not use consistent definitions. As a result, data is not always compatible and sometimes presents ambiguous results.

Initial monitoring reported on the proportion of households with access to public water supplies that were formal beneficiaries of FBW. The diversity of water supply contexts made this a complex task. In municipalities where existing 'stepped' water tariffs were changed to include a 'zero block', all metered users automatically enjoyed free basic water. But that was not possible in many poorer, less formal and rural communities where other mechanisms were needed.

Other ambiguities arose. National household surveys reported that the proportion of users 'not paying' for water was growing while those formally receiving 'free basic' supplies was falling. And in areas where supplies were interrupted for long periods of time, households might be recorded as having free basic water even though they did not have safe and reliable access to water in practice. Understanding and responding to these substantial anomalies is an ongoing challenge for both policy and practice and bedevils efforts to assess FBW performance.

4.2. Assessing coverage, levels of service, affordability and targeting

Physical access to an adequate source is a precondition for water supply. Nationally, households with physical access to safe *piped* water rose from 84.4% in 2002 to 88.7% in 2021, a period in which the total number of households grew by 6 750 000 (StatsSA 2022). Physical access in the country's eight metropolitan municipalities ('metros') had reached 98.3% with physical access challenges now mainly in smaller towns and rural areas (StatsSA, 2019).

Government had acknowledged that definitions of 'access' should 'consider not only whether the infrastructure to deliver the service is in place, but also whether the price charged for the service is affordable'(South African Cities Network, 2020). This was difficult to determine when FBW coverage claimed by municipalities was compared with user reports.

In urban areas, there was concern about individual connections that served multiple households, since affordability was compromised if they supplied only a single household's 'basic' allocation. This was evident where the number of 'consumer units' (metered connections) reported by municipalities to be receiving a 'free basic allocation' was less than the number of 'households' using piped water.

Even in metro municipalities with reasonably detailed reporting, divergences were found between households that reported not paying for water and those recorded by municipalities as receiving free water; similarly, between recorded free water 'recipients' and formally identified 'indigent' households (Table 2).

Users' reasons for non-payment differed substantially between provinces and metros highlighting policy diversity as well as a rural/urban divide (fig 1) (StatsSA, 2016). They included 'use a free water source', 'permission from municipality not to pay' as well as 'cannot afford to pay'.

4.3. Reliability and users' perceptions of service quality

The reported reliability of and user satisfaction with services also varied significantly across the country. The formal reliability measure, supply interruptions of more than two days at a time, or more than 15 days annually, averaged 25.8% in 2019. But there was a dramatic difference between rural and urban provinces, with interruptions ranging from 55% in rural provinces to just 9.5% and 4.6% respectively in predominantly urban Gauteng and Western Cape.

Table 2. Divergences: non payers vs free basic water recipients vs 'indigents'[a].

	De facto – do not pay for water (Households with piped water)	*De jure* – receive free basic water (Consumer units)	'Indigents': (i) with FBW & (ii) of all consumer units
Percentage reported	55.4%	21.8%	75% (16%)
Number reported	7 547 000 (of 13 621 000)	3 015 120 (of 13 822 191)	2 163 000 (of 2 895 000) 2 163 000 (of 13 822 191)

[a]The term 'indigent' was introduced in 2005 by the minister for local government to guide policy for municipalities that only provide FBW to households that they assess are unable to pay.
Sources: StatsSA (2019) and StatsSA NFCM Annual Series.

When FBW implementation began, social activists claimed that most interruptions were cutoffs for non-payment (Hemson & Owusu-Amponah, 2006) However, in 2005 issues reported by users were mainly operational: pipe bursts, pump breakdowns and lack of maintenance accounting for 57%; resource problems (lack of a water supply or drought) for 17%; non-payment cutoffs 10%; with the balance due to vandalism (17%) and other (3%) (StatsSA NFCM Annual Series).

Interrupted supplies were reflected in household ratings of service quality. Provinces with low rates of interruptions were rated as 'high quality' (Figure 1) although, on this metric, households in the metros had higher expectations of service performance and lower tolerance of poor performance than elsewhere (StatsSA, 2019).

An indicator of the impact of unreliable supplies are the alternative sources households used when their formal supplies failed. Many households depended on water vendors and tankers, sometimes because of corruption involving the sabotage of public infrastructure by private suppliers (Muller & Schreiner, 2020).

4.4. Targeting: Assessed indigency or lived poverty and the implications

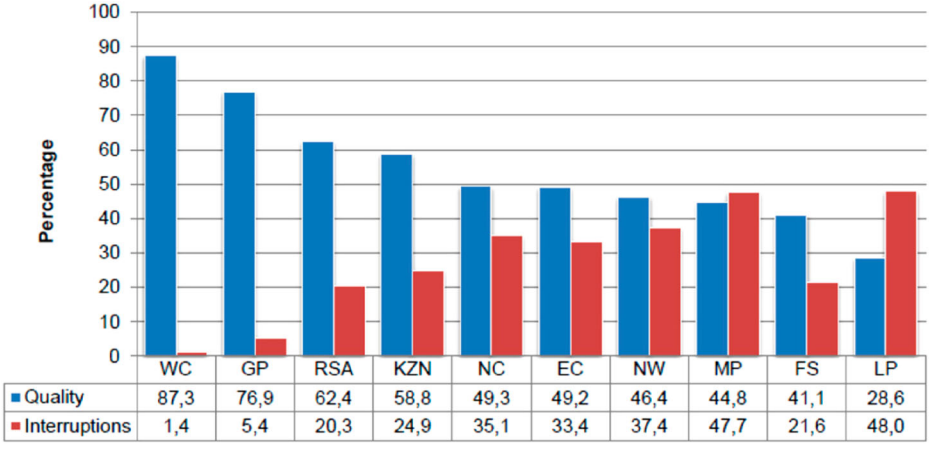
Administrative targeting to ensure that benefits reach the intended beneficiaries is a primary measure of 'welfare' programme efficiency; where finances are constrained, it is balanced by a concern to limit 'leakage' to unintended recipients. South Africa's FBW programmes have used a number of different sets of generic targeting approaches as outlined in 2009 (StatsSA NFCM Annual Series):

Broad-based – All consumer units are on the same municipal billing system.

Geographical – tariffs for particular areas, assuming users share socio-economic profiles.

Self-targeting – only households identified as indigent by municipal criteria receive FBW.

Technical – technology such as smart/prepaid meters used to regulate FBW provision.



	WC	GP	RSA	KZN	NC	EC	NW	MP	FS	LP
Quality	87,3	76,9	62,4	58,8	49,3	49,2	46,4	44,8	41,1	28,6
Interruptions	1,4	5,4	20,3	24,9	35,1	33,4	37,4	47,7	21,6	48,0

Figure 1. Percentage of households rating the quality of water services provided by the municipality as good and those reporting service interruptions by province, 2018.

When additional 'free basic' services (electricity, sanitation and refuse removal) were provided, new variables (property values, plot size and consumption levels) were introduced although, in 2019, 93% of municipalities' used self-targeting 'indigent' criteria (StatsSA NFCM Annual Series).

Differences in the definitions of indigency and the variables considered makes comparative assessments of FBW performance difficult. A 'State of Cities Finances' report found substantial differences between metros in the proportion of the LGES actually used for formal FBW (South African Cities Network, 2020).

However, when informal FBW ('don't pay') users are included and the wider socio-economic situation was considered, it became evident that different municipalities were using different approaches to suit local circumstances and financial pressures. This led the SACN to suggest that 'it is time for a significant change and a review of how cities and other municipalities deliver on their constitutional mandate to ensure the provision of services'.

Targeting has become an important focus. Registration approaches are controversial because they often represent 'a significantly complex and onerous process for beneficiaries to prove their indigent status' (Tissington, 2013). As a consequence, indigent registers often suffer from high errors of exclusion, where 'households who should qualify for a subsidy do not receive it because they are not accurately identified' (South African Cities Network, 2020).

Where 'beneficiary targeting' fails to address 'lived poverty' and many of the 'can't pay' population (as shown in Table 2), communities and administrators may adopt less formal strategies to mitigate the exclusion of poor households. One wide-spread response has been less vigorous collection of water use charges in communities where affordability is a generic challenge.

Johannesburg provided a formalised example of this when it opened the door for more 'deemed' consumption and geographical exclusions from payment but it is not clear whether the beneficiary households are counted as receiving FBW. This is significant because, since 2018/19, all metros had stopped providing a city-wide FBW allocation in favour of either automatic or registration-based targeting.

Analysis of municipal targeting is a complex task, requiring clear policy definitions and good data. But the perception given is that

> ...the conditions attached to indigent relief more often than not suggest a deep suspicion of the poor, and a tight-fisted attitude to the provision of any meaningful assistance … .. They seem less concerned with ensuring the widest possible access to basic services for those who are in dire need. (Tissington, 2013)

4.5. Institutional and financial capacity and local government reform

Support for FBW implementation focused primarily on the challenges of municipal finances and 'institutional capacity' which differ markedly between the cities, smaller towns and rural areas. For cities, the primary source of finance for service provision has been user payment with the LGES calculated to provide free basic water only for formally defined indigent households. Smaller towns generally have a smaller user payment base while predominantly rural municipalities depend almost entirely on national grants to fund most of their operating costs, not just FBW.

Current evidence suggests that, the overall quantum of transfers to poorer municipalities is inadequate, leading to the diversion of funds for other purposes. For water supply, the consequence is increased service failures, leading commentators to conclude that: 'municipalities need to have an additional allocation for maintenance … through an increase to the basic services grant allocations'(PARI, 2019).

But national financial constraints require uncomfortable decisions: Which households and what levels of service can be supported, how will that support be provided and how will much it cost?

From a welfare economics perspective, FBW thus became part of already polarised welfare policy debates. Public finance traditionalists sought to limit the use of subsidies in local government; the 1998 White Paper on Local Government's principles for tariff policy stated that all households (except the undefined 'indigent') should pay the full costs of the services consumed (Mosdell, 2006). A theoretical analysis of data from a low-income area of Gauteng's Tshwane metro, claimed that, abolition of FBW would 'improve welfare even for the indigent households, who were likely the target of the free water policy to begin with' (Szabo, 2015).

Other critics simply rejected fiscal constraint and cross-subsidy limits. Advocates of community wide approaches to targeting continued to criticise systems that support only those 'deserving poor' who register and qualify as 'indigent', characterising it as a demeaning and often corrupt process (Ruiters, 2018). Another suggested that, since free basic services make little difference to poverty, a national basic income grant should be introduced instead (Meth, 2004), not explaining whether this would complement or substitute FBW.

The over-arching issue is thus the adequacy of the broader local government fiscal framework and the ability of sub-national governments to use their funds effectively. While Steytler & Powell (2010), suggested that 'municipalities cannot be trusted with an unconditional grant to give effect to these national priorities', constitutional autonomy has shielded municipalities from national intervention.

However, it has recently been suggested that FBW might provide a useful focus for local government reform: 'Focusing on one clear issue, making a detailed list of what needs to be done to address it, and pursuing a long-term strategy would, we believe, increase the likelihood of positive change' suggests a recent NGO report on the local government fiscal framework. This would review FBW service standards and targeting and establish a new LGES allocation for services with robust systems to allow both service standards and coverage to be improved (PARI & WaterAid, 2019).

5. Discussion: Tensions between universalism and targeting

The trajectory and outcomes of South Africa's free basic water policies and programmes reflect the wider political and economic context of the times, with state and society in transition to a new social and political order. More generally, given the country's acute social inequities, FBW also had to address the generic tension in welfare policy between universalist and targeted approaches.

The FBW policy was acceptable to South African conservatives as a short-term response to the economic and social challenges posed by radical post-apartheid societal change. From this perspective, the supply of free water to domestic users would mitigate

the acute but temporary deprivation that resulted from the strains of the transition and subsidies from rich to poor users provided through stepped tariffs were accepted.

The radical critique of South Africa's water services policies turned to the very nature of public service provision. It contested the inherent 'commodification' implicit in any system that allocates public goods and services using a pricing mechanism, particularly where it allows privileged access for the wealthy and constrains it for the poor. However, while human rights activists focused on the newly affirmed 'right to water', they offered no alternative mechanism to constrain overuse and waste which impacted on 'downstream' users.

Public managers had to give practical effect to the policy and ensure that all South African households had affordable access to a safe and sufficient supply of water, using available physical, financial and institutional resources. Their challenge was to ensure that water use was monitored and managed at individual household level so that it did not exceed the capacity of the supply systems.

While the policy and regulatory framework was set at national government level, its implementation fell to new local government institutions that were already grappling with a larger set of challenges. It was argued that FBW provided a formal framework within which to operate, giving guidance to local government institutions about the management common water supply functions across previously separate jurisdictions. But it placed duties on and demanded resources from administrations that might have different priorities.

The financial requirements were particularly acute for poorer municipalities whose funding was largely dependent on national government transfers. Again, the guidance and associated constraints were often not appreciated by the administrations concerned. But they provided a practical focus for the design and application of new inter-governmental financial systems.

The identification of FBW as part of government's wider social welfare programme was another complication. The apparently technical task of supplying water now had to address a wider scope and satisfy a broader range of stakeholders and their expectations. As the first post-1994 Minister of Water Affairs put it, the job was now 'to make the Constitution work'.

As a consequence, the FBW programme was contested on two fronts.

Many municipalities, supported by provincial and national financial authorities, sought to limit the claims of FBW on their budgets and other activities. The bureaucratic mechanisms that they applied to reduce the extent and reach of the programme achieved this 'goal'. A relatively low number of households was reported to be registered for and receiving FBW, only 75% of those eligible under the already restrictive 'indigency' criteria adopted and over 700 000 eligible households were excluded (Table 2). However, there was still significant 'leakage' with approximately 900 000 households who did not meet the indigency requirement receiving FBW, a third of the total.

On the other front, the communities themselves, often supported by their political representatives, sought to expand the provision of free water as far as possible. The evidence from national household surveys suggests that this was achieved. Over 55% of households who said that they had access to piped water reported that they did not pay for it. This group included not just formal FBW beneficiaries as well as households which said that they had been told that they did not have to pay. Some claimed that they

had been given permission not to pay or were simply 'using a free source'. This may have reflected a formal decision to exclude a particular geographical area from payment obligations, an informal political decision to allow unpaid use or simply an administrative failure.

In this telling of the story, all interested parties won.

Formal FBW allocations were supplied to 2 165 000 households who were formally categorised as indigent with limited 'leakage' to non-qualifying households. Although over 700 000 potentially qualifying households were missed, municipalities could demonstrate reasonable compliance with policy.

From the community perspective, many households were receiving piped water and not paying for it. This number corresponds closely to the number of poor households who, using less stringent, arguably more appropriate poverty and affordability measures, deserved to receive the free supply. The politicians could thus claim that free water was widely available.

But this 'win-win' picture is too optimistic since supplies to a significant and growing proportion of households are unreliable. Service failures may be due to poor management and maintenance, to technical and financial constraints or simply to negligence and corruption. However, the FBW system as currently structured has two obvious flaws which aggravate the problem.

The smaller and weaker municipalities are poorly served because their LGES allocations are based on the number of registered 'indigents' rather than the number of poor households who do not pay for their water. This methodology automatically creates a financial shortfall for LGES-dependent municipalities, undermining their ability to manage their supply systems.

However, problems also arise because there is often no control over the volumes of water used. Water supply infrastructure is designed, and operational funds are budgeted, to meet the expected consumption. If many consumers use more water than projected and planned for, there will not be enough water in the system to supply all users leading to the 'dry tap syndrome' affecting households at the end of the distribution network.

Once households are accustomed to using water without restriction, it becomes administratively and politically difficult to bill them for consumption in excess of their free allowance or to limit their use to share water more equitably with 'downstream' users. The cost of constructing and operating additional infrastructure, including new bulk source infrastructure is often beyond the capacity of available budgets.

6. Conclusion: The FBW principle is in place but practice remains weak

South Africa's FBW programme cannot yet be described as a success. There is broad acceptance of the social solidarity principle that all South Africans must be able to access affordable and safely managed basic water supply. However, even in the larger cities, where there are high rates of access and reasonable levels of satisfaction with water services, practice is variable and many households that should qualify are excluded, while in the poorer, more rural, communities services are often failing.

Critics who seek a 'transformative 'commons' approach' to water rather than just a basic right to 'enough' reject financial controls or volumetric limitations on use.

However, they offer no practical way for communities to use the 'water commons' without measuring consumption and charging tariffs or simply spending more public funds on more infrastructure and its operation (Bond, 2011). They are reluctant to acknowledge that, in cities, the bulk infrastructure that keeps whole communities 'water secure' in times of scarcity is paid for by the tariffs of wealthy users in times of plenty (Muller, 2018).

When Cape Town was confronted by shortages because of drought, all domestic users were restricted to the same basic allowance. In 2021, despite financial challenges, Johannesburg reintroduced the free 6000 litres tariff block for all households recouping lost revenues from increases in the next tariff blocks for those using more than the basic amount.

However, it is difficult to make systemic diagnoses of service challenges across many diverse and decentralised local government administrations and to use these to evaluate policy performance. Even in individual localities, it is often not evident whether failures to deliver acceptable services, including FBW, are due to weak management and corruption, inadequate funding or lack of support and compliance from the user communities. Nevertheless, analysis of FBW and water services from a welfare perspective may contribute to a better understanding of the larger systemic socio-economic issues facing South Africa and inform strategic approaches to address them.

It is evident that the effective provision of sustainable water supply services requires trust, cooperation and coordination between ethical political leadership, competent technical and financial management and an engaged community of users. If these are absent, technical and financial policy innovations alone are unlikely to achieve the desired outcomes.

But returning to the original question: can the 'affordability' of a basic water supply be determined and tackled in isolation from the broader economic circumstances of the households concerned? (JMP 2021) this review of South Africa's free basic water policy suggests not. It does show, however, that asking simple questions of both communities and governments such as: 'how many people are accessing safely managed water supplies?', 'what proportion are paying for their water?' and 'how can performance be improved' can provide valuable insights into the causes and consequences of poverty and inequality as well as practical guidance for water managers and policy makers. Such reviews may, in turn, help practitioners and communities to co-develop approaches that enable them to access more affordable, equitable and sustainable services in the future.

Disclosure statement

The author was a senior official in the DWS between 1994 and 2005, the period in which FBW was first conceptualised and implemented.

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