ABSTRACT

Developing country governments are struggling to meet the basic needs and demands of citizens, and especially so for the rural poor. With tightly constrained budgets, these governments have followed the lead of developed countries that have sought to restructure public service delivery through privatisation, contracting out, public private partnerships and similar reforms. Such reforms in service delivery are generally welcomed when it is believed that private sector partners are better equipped to provide certain services than are governments. With respect to basic and essential services however, a higher degree of uncertainty and apprehension exist, as the focus shifts from simply minimising the costs of delivering services to broadening access to all citizens. Accordingly, the Bill of Rights (section 27(1)(b)) of the 1996 Constitution, stipulates that everyone has the right to have access to sufficient food and water. Affordable and/or subsidised water, then, is not a privilege but a basic right of all citizens. Citizens elect political representatives to serve in office with their sole mandate being to provide for the needs of the citizenry. As governments pass on, some amount of responsibility for service delivery to private businesses, these governments must be able to exercise control in order to account to the people for the work done by private partners.

This paper examines the legislative and policy frameworks as well as the environment within which PPPs take place in South Africa, and the extent to which accountability can be strengthened in this environment. Within the aforementioned backdrop of PPPs and accountability, the constricted focus area of the paper aims to assess the extent to which the provision of clean and safe
consumable water in South Africa are sustainable, cost-effective in terms of provision, and affordable to all.

INTRODUCTION

Air, food and water are the basic elements upon which human existence depends. Aristotle once argued that government exists to not only to make life possible, but to make life good. To analyse Aristotle’s treatise within a more modern paradigm, one may consider, inter alia, Maslow’s hierarchy of needs and its premise that it is not possible to make life good until it happens that life has been made possible. In this regard, Maslow’s hierarchy of needs can be liberally interpreted to mean that attempts to satisfy the higher order needs of the general public would be pointless, unless and until sufficient progress has been made towards addressing lower order basic needs, such as the need for food, water, shelter and clothing.

Water has been described as the central human need and human right, without which many of the other internationally recognized basic human rights cannot be fully experienced. This point resonates in the following statements of the WHO (World Health Organization 2003:7):

“Lack of access to safe water has a major effect on people’s health. Poor health constrains development and poverty alleviation...[and] education”.

Barrett and Jaichand (2007) stress the importance of consumable water for the affairs of nation states (and especially so for developing and under-developed states) and justify why its management and provision should be prioritised: (Barrett and Jaichand 2007:543):

“Water is life: we can live for only a few days without it. Water is death: contaminated, it can be as deadly as poison. Yet 1.1 billion of the 6 billion people on this planet have no access to an adequate water supply and 2.4 billion have no access to proper sanitation”.

The current discussion is focused on the South African government’s policy and approach to the provision of water as a basic/essential service. More specifically, attention is given to considering whether water provision must be undertaken exclusively by government, or whether there is scope for partial or complete privatisation of this service. Central to this discussion is the issue of government being accountable to the citizenry for water services, regardless of whether that water is supplied publicly or privately. The paper begins by explaining the concept of market failure, which in essence aims to differentiate goods and services that should be provided by governments, from those that ought to be provided by the private sector (either exclusively or in collaboration with the public sector). The discussion thereafter takes account of a few of the many challenges of public provision of water in South Africa. Lastly, privatisation of water supply is considered as an alternative.
service delivery modality, and discussed and contrasted with the constraints of South Africa’s legislative framework on water provision.

**Market failure – public or private provision?**

Market failure is brought about by three basic conditions, which are the characteristic nature of public goods; externalities; and increasing returns to scale. Each will be briefly explained hereunder.

**Characteristics of public goods**

Goods and services that exhibit characteristics of being non-excludable, non-rival, un-apportionable; and have no direct- *quid pro quo*, are normally not supplied by the private sector as there is no incentive or guaranteed profit for doing so. Thus, non-excludable goods (e.g. national defense) are those goods (or services) for which it is impossible to exclude non-payers from consuming the good. Similarly, non-rival goods are goods that are available in abundance (e.g. fresh air), such that one person’s consumption does not limit anyone else’s. Un-apportionable goods cannot be easily divided up into measurable units that can be priced and sold. Water, for example, is apportionable, as it can be measured in liters, or by mass, and sold per unit as is the case with bottled water. Water can thus be either privately or publicly provided. In contrast, clean air as an example, cannot easily be measured, packaged, priced and sold. It is therefore un-apportionable and, therefore, its provision will be ensued through government regulation. With respect to the last characteristic of public goods, there is no direct *quid-pro-quo* as there is no clear relationship between the amount paid and the benefit received (e.g. taxes paid and social services received).

**Externalities**

Externalities refer to the unintended effects of a transaction on non-participants to that transaction, and can be either positive or negative. In the case of externalities, governments do not normally *enter the market* to provide goods (or services), but will rather *intervene in the market* by regulating the market in question.

**Increasing returns to scale**

Another condition that will determine whether a good (or service) will be publicly or privately provided is that of *natural monopoly status* which is also referred to as increasing returns to scale. For certain goods, increasing returns to scale exists such that costs decrease steadily and in proportion to the amount of the good that is produced. This cost structure in effect means that the cost savings from increasing amounts of production can be passed on to consumers who in their numbers will pay a nominal and affordable price (examples include such goods as electricity and water). With electricity and water,
it is only possible/feasible for one large organisation to be the sole producer of the good as smaller organisations would not have the necessary start-up capital and infrastructure investment in place to provide the good on a cost-effective basis.

**Challenges to public provision of water – urban and rural water supply**

A number of challenges exist to effectively supply affordable, clean and safe water to communities. Key among these challenges is the issue of balancing the costs of providing it with the tariff (price) that consumers must pay for receiving it. The concept of cost recovery, although highly contentious, is salient to address the dichotomy between cost and price. Cost recovery, in the context of water supply, generally refers to the situation in which all of the costs of providing water are absorbed by those who consume it. Thus, the price that consumers pay for water is calculated on the basis of a fixed component to cover startup and infrastructural costs, and a variable component to cover actual usage. Service providers have the option of full or partial cost recovery (McDonald and Pape 2002:17).

In many developing countries, however, the real challenge for governments is to broaden access to safe water supply, whilst dealing with the reality that poor urban and rural people cannot afford to pay for the water they may receive. This means that the burden of supplying water to the poor and indigent must fall to those who currently receive water (or can afford to receive water). The three most common tariff structures/approaches that aim to take account of equity considerations are (Pauw et al., 2002:283-4; see also WHO 1987:5):

- The life-line tariff – based on the basic human right of every person to safe consumable water. In South Africa, life-line is factored into water tariffs as 6 kiloliters of free water supply per month per household.
- The two-part tariff – a fixed monthly charge is levied to cover the fixed costs of water provision, and a variable portion of the tariff reflects actual consumption.
- The block-rising tariff – the tariff per liter based on the amount of usage as categorised into blocks. A different tariff is charge for each block, and consumers pay for amount consumed multiplied by the block tariff for that level of consumption.

An example of the block-rising tariff would be where consumption of 0-6kl is charged at the rate of R2 per kl, whilst consumption of 6-20kl is charged a rate of R2.15 per kl and so on. The advantage of block rising tariffs is that they reflect not only volume used, but also indirectly reflect ability to pay. Almost universally, further challenges to effective and efficient water provision have been identified. Common among these are (WHO 1987):

- tariffs which are in principle correctly designed fail to generate sufficient cash revenue to cover cash expenditures;
- the existence of non-revenue water (which is defined as leakage, wastage and un-registered/illegal usage) drives up the cost of provision and thus the tariffs charged to consumers;
• non-payment by consumers result in actual revenue representing a less than significant proportion of receivables due;
• the economic cost of water increases in most urban areas as a result of distance from main water resources and pollution of future resources; and
• the economic cost of water in rural areas is high due to low population density combined with the high geographical dispersion of that population.

In the search for remedies to the above challenges, many governments have sought help from the private sector, either through public private partnerships or some other form or permutation of privatisation. The section that follows hereunder, deals with the extent to which privatisation is considered to be consistent with government legislation and policy.

**LEGISLATIVE AND POLICY FRAMEWORK**

The existing legislative and policy framework ought to serve as a feasible point of departure in coming to terms with the water privatisation debate in South Africa. Water has been a concern of government in South Africa long before the democratic reforms ushered in after the 1994 general elections. Some of the legislation, which has now been repealed and replaced, dates back as far as the 1940s (e.g. Vaal River Development Scheme Amendment Act, 1948 (Act 21 of 1948); the Hartebeestpoort Irrigation Scheme Act, 1948 (Act 22 of 1948); and the Water Act, 1956 (Act 54 of 1956). Although successive apartheid regimes undertook to serve as the faithful custodians and caretakers of the nation’s limited water supplies, the race-based policies of these governments created and entrenched a legacy of un-even access and benefit from the nation’s water (White Paper on Water Supply and Sanitation Policy 1994:4-6). In this section of the paper, post-1994 Acts of Parliament, as well as the Reconstruction and Development Programme (RDP) and the Growth, Employment and Redistribution (GEAR) strategy are briefly examined to provide a contextual understanding of current water supply policy, and the extent to which the privatisation of water supply in South Africa is being regulated to ensure accountability.

**Constitution of the Republic of South Africa**

The Constitution of the Republic of South Africa, 1996 in its founding provisions (chapter 1) makes it clear that it is the supreme law of the land, and that all other laws, regulations, policies and conduct must not contradict or contravene the Constitution. In fact most, legislation comes into effect through provision being made for it in the Constitution. In the latter regard, the Constitution (section 2) states:

“…the obligations imposed by [the Constitution] must be fulfilled.”

Section 1 (a) of the Constitution as the opening passage of its founding provisions states that South Africa is a democratic state that founded on a number of values, including that of “…human dignity, the achievement of equality, and the advancement of human rights and freedoms.”
The provision of water as a basic human right, and an obligation of government is first and foremost stated in the Bill of Rights of the 1996 Constitution (Chapter 2). Other legislation in this regard, including the National Water Act, 1998 (Act 36 of 1998) and the Water Services Act, 1997 (Act 108 of 1997), exist to give effect to the obligations called for in the Bill of Rights of the 1996 Constitution. According to section 27 (1) and 27(2) in the Bill of Rights:

**Section 27(1)**

Everyone has the right to have access to:
- health care services, including reproductive health care;
- sufficient food and water; and
- social security, including, if they are unable to support themselves and their dependants, appropriate social assistance.” And;

**Section 27(2)**

“The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights”.

This obligation in the Bill of Rights is supported by and gives effect to section 24 of the Constitution’s Bill of Rights which relates to the rights of all to an environment that is not harmful to health and a commitment by government to attempt to promote conservation whilst preventing pollution, ecological degradation.

**The Water Services Act**

The Water Services Act, 1997 (Act 108 of 1997) is the first act of Parliament in the post-apartheid era that gives effect to the right of access to basic water supply and basic sanitation required in terms of the 1996 Constitution. This Act is wide ranging in its scope, and confirms the National government’s role as custodian of the nation’s water resources, as well as confirming the key role of municipalities in directly delivering water supply and sanitation services. The Act further provides for national and provincial monitoring, oversight and intervention in municipal water services delivery; and calls upon all spheres of government to work together in the spirit of intergovernmental co-operative government to ensure clean, safe, and affordable water for all.

In terms of the debate over public or private provision of basic water supply and sanitation, this Act provides a regulatory framework for the operations of water services institutions and water services intermediaries, and also prescribes the manner in which national norms and standards for tariffs will be set. Consideration is given to fact that municipalities have an obligation to ensure that consumers of water in their jurisdictions receive efficient, affordable, economical and sustainable access to water (section 11(1)). This, however (in the case of private providers) must be balanced against the need of providers to earn a reasonable profit (i.e. return on capital invested)(section 10(3)(f)).
The National Water Act

The *National Water Act*, 1998 (Act 36 of 1998) takes a broader view of water policy for South Africa than does the *Water Services Act*. The *National Water Act* gives further effect to constitutional principles and prescripts to which the *Water Services Act* falls short of effectively addressing. In this regard, the aim of the Act is to:

- to provide for fundamental reform of the law relating to water resources...
- [and] to provide for matters connected therewith.

Areas of water policy addressed by the National Water Act include, among other, the protection of the quality of water resources; public provision and user pricing strategies; the establishment of bodies to implement international agreements; and safety of dams.

RDP 1994 AND GEAR 1996

According to the *Reconstruction and Development Programme* (RDP) (Schwell in Parker and Saal 2003:295-6)

> The process of commercialisation and privatisation of parastatals must be reviewed, to the extent that such processes may not be in the public interest...The democratic government will reverse privatisation programmes that are contrary to the public interest.

The RDP served to affirm and signal the new direction in which post-apartheid policies would go. Although there is no specific mention of water supply, it is significant that the RDP sought to redress uneven development and its associated lack of access to basic services for the majority of the population. It is also worthwhile to note the skeptical approach towards the privatisation programme of government (started in the late 1980s under the apartheid government). The RDP programme was only two years later superceded (especially with respect to privatisation) by the *Growth, Employment and Redistribution* (GEAR) strategy document of 1996 that clarifies government’s new policy direction vis-à-vis privatisation as follows (Schwell in Parker and Saal (eds) 2003:295-6):

> ...the process of restructuring state assets is now proceeding. The nature of such restructuring may involve the total sale of the asset, a partial sale to strategic equity partners or the sale of the asset with government retaining a strategic interest...

Privatisation of water supply in developing countries?

The recent drive towards privatisation of water in developing countries has been strongly linked to the influence and dictates of the so-called former Bretton Woods institutions – i.e. the World Bank and the International Monetary Fund (IMF) (Barrett and Jaichand 2007:545-6). It is commonly understood that as a condition for poor developing countries to receive funding from these institutions, specific conditions must be met by potential
and current recipients. These conditions (commonly referred to as ‘conditionality’) include the privatisation of state owned enterprises and public utilities. Some poor developing countries, however, reject the idea that conditionality is the rationale behind their attempts at the privatisation of water and other basic essential services. Instead, many point to extensive failures experienced through public provision, as the reason for reform by way of privatisation (see for example Young in von Weizsacker, Young and Finger 2005).

It cannot be taken for granted that privatisation of state assets and responsibilities will be accompanied by effective measures for ensuring state accountability in the process. When one speaks of public accountability of water supply, consideration should be given to the issues of regulation and de-regulation. In the case of the privatisation of a public utility, de-regulation would mean that government removes, reduces or simplifies the amount of restrictions that were in place under public provision in order to remove barriers to entry to the industry and allow for fair and equitable competition amongst a number of potential service providers (Wikipedia on-line encyclopedia, 2008). With regulation, government may allow a single and sufficiently large service provider to obtain ownership and management control of the public utility, essentially transforming it from a natural/public monopoly to a private monopoly. In such cases, fairly strict regulations on price and service levels must be in place to protect consumers from potential abuse of monopolistic power (WHO 1987:7; see also Sudhoff in von Weizsacker, Young and Finger 2005:298). It can thus be argued that accountability of the state to the citizenry, for the supply of water, ought to be exercised through effective regulation. Alternatively stated, Barrett and Jaichand (2007) present as cavea emptor the following comments concerning privatisation and accountability:

When the responsibilities of the state are privatised a further barrier is placed between people and their rights.

Experience has shown that a delicate balance between privatisation and accountability must be exercised by the state in order for privatisation to be successful. Although a number of case studies have shown privatisation of water supply in developing countries to have been successful, an equal number of case studies have shown the opposite to be true. In some (but not all) cases, the role of accountability and regulation in the success or failure of the privatisation exercise is clear.

**Privatisation of water – the un-successful case of Manila**

With 12 million residents, the metropolitan area of Manila in the Philippines is one of the biggest and fastest growing in the world. By the mid-1990s, one third of the population had no access to the public water system. The public water system was characterized by water losses due to leakages from badly maintained pipes and extensive illegal withdrawals. The local government officials were faced with a situation of insufficient revenue to re-invest in the repair and upgrading of the system, and thus finding themselves in an un-breakable and vicious circle of poor service delivery with respect to water supply (Bernhardt in von Weizsacker, Young and Finger 2005:25-7).
On advice from the World Bank, a privatisation and international bidding process was started for the supply of water in Manila. Maynilad Water won the bid by promising to run the concession by charging only a quarter of the existing tariffs. Shortly after being awarded the contract, the first of many rate increases were announced, and tariffs more than doubled (within the first year) those that existed at the signing of the contract. Maynilad Water was unable to contain costs and to realise the revenue potential of the assets assigned to it, its creditworthiness was at stake. Maynilad tried to pull out of the contract, but failed in its legal bid to so. The contract is still in force, whilst at the same time there is an on-going government bail out plan in process (Bernhardt in von Weizsacker, Young and Finger 2005:25-7).

**Privatization of water – the unsuccessful case of Dar es Salaam, Tanzania**

In 2003 City Water, a subsidiary of United Kingdom’s BiWater, was awarded a lucrative ten year contract to manage water supply in Dar es Salaam. Despite extensive start up capital of in the form of loans from the Tanzanian government, the World Bank and the African Development Bank ($145 million, $98 million and $47 million respectively), within six months of the finalisation of the contract, there were complaints of massive cut-offs to entire communities enforced by City Water as a way of ostracising non-payers. Mis-management also led to problems associated with poor billing systems that resulted in people paying for water that they did not receive. City Water's contract was successfully terminated by the government for repeated failures to meet targets on access to water as well for excessive price hikes (Barrett and Jaichand 2007).

**Privatisation of water – the successful case of Sebokeng**

In South Africa, the privatisation of water in Sebokeng/Evaton is considered to be one of the most successful PPPs in the country (McKenzie et al., 2007). McKenzie et al., (2007) undertook a study of the recently (July 2005) commissioned Sebokeng/Evaton Pressure Management Project. Of the 1,2 million residents of Emfuleni Local Municipality, almost half (estimated at 450 000) live in the areas of Sebokeng and Evaton. These areas experienced some of the highest rates of water loss per capita, in the world. As a result of high unemployment and low income in the area, there developed a general deterioration in internal plumbing fittings which in turn led to leakage and loss of water in the order 2 800 m³/hour (or 2 Olympic sized swimming pools per hour). Internal leakages, combined with leakages as a result of the deterioration of the municipality distribution network, led to the crisis in which an estimated 80% of the water supplied to the area was being wasted. In 2004, the municipality partnered with (PPP) and commissioned WRP Pty Ltd to build an advanced pressure management system. Pressure management does not aim to repair and stop leaks, but instead reduces wastage by reducing water pressure during off-peak times and increasing it again when there is normal demand. The use of this system led to a reversal in wastage rates, thus bringing down the costs (by approximately R20 million in the first year and R27 million in the second) to the service provider and tariffs to end-users (McKenzie et al., 2007).
WATER SUPPLY IN SOUTH AFRICA

According to the 2001 Census (the last census done in South Africa), there were 44.8 million people living in South Africa, all of whom used domestic water services of some kind, but 5 million (11%) had no access to a safe consumable water supply and a further 6.5 million (15%) did not have access to proper sanitation. About 12 million who lived in rural areas did not have adequate access to safe water (Stats SA, 2001).

Despite efforts by government to ensure that the majority of people have access to water, it has recognised that progress has been constrained by a shortage of delivery capacity. Other challenges facing the country in ensuring adequate access to water include a lack of attention to maintenance and sustainability, and the uncertainty about the government’s ability to sustain current funding levels in the water sector (Brillantes and Cuachon 2002).

Financial concerns

The financial management systems of many municipalities often do not allow for identifying costs and revenue streams from a particular service (for example, it is rarely possible to work out the cost of water services provision and revenue gained from it). This in turn means that it is not possible for municipalities to calculate, let alone charge, tariffs that reflect the actual costs incurred for providing such a service (National Treasury, 2001).

Thus, national government departments argued that they have to keep a tight control over how funds are disbursed. This creates friction with municipalities, maintaining that the funds actually belong to them, and therefore, object to the conditions laid down by national government. With respect to financial capacity, Brillantes and Cuachon (2002) assert that inadequate funding of devolved functions such as water provision by municipalities result in an unfunded mandate where resources are lacking to perform a function. This inevitably results in the deterioration of the water service.

In terms of the distribution of resources, South Africa is a shared revenue model, meaning that national revenue is shared among the different spheres of government. However, national government decides on the allocation of the revenue between the three spheres. This may account for why the unconditional allocation to cover recurrent costs of basic services to the poor to municipalities for the financial year 2001/2002 was only 1.3% of total national expenditure (National Treasury, 2001). This translates to R108 per household per annum (National Treasury, 2001). It has been estimated that the typical cost of providing a basket of basic services (water supply, sanitation, electricity and solid waste) ranges from R840 per household per month in rural areas to R1,080 in urban areas (Palmer Development Group, 2002). Therefore, it can be seen that this allocation from the national focus should be increased eight to ten-fold if it is to adequately cover the purposes for which it is intended.
CONCLUSION

South Africa is one of the few countries in the world that enshrines the basic right to potable water in its Constitution. However, much remains to be done to fulfill this right. With the end of apartheid, South Africa’s newly elected government inherited huge service backlogs with respect to access to water supply. Since then, the country has made great strides, at least in respect of the promulagation of progressive legislation and policy to reverse this legacy.

How that policy bore fruit is another matter all together. In his State of the Nation address to Parliament in May 2004, the then President Thabo Mbeki promised “all households will have running water within five years”. Given recent statistical trends, this objective set for 2009 seems far from being attained. As with many other developing nations, South Africa has opted to allow municipalities to engage in the privatisation of their water supply if they so choose. As water is a basic necessity of life, privatisation of basic/essential services has drawn a great deal of attention from international organisations such as the UN, WHO, World Bank, as well as national, provincial/intra-regional and local governments. The current discussion argued that privatisation of public utilities can only be successful if done within the constraints of public regulation and accountability.

BIBLIOGRAPHY


