

Redressing Racial Inequities through Water Policy: The South Africa Experience

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South Africa's constitution states that water is a basic human right and the National Water Act stipulates that municipal governments provide all citizens with sufficient water in order to correct past racial discrimination. I argue that South Africa's water policy places an unfunded mandate on municipal governments and therefore will not succeed because the decentralized system, subsidy approach and pricing and cost-recovery mechanisms for the provision of water to rural residents is incompatible with the weak infrastructure and poor capacity of municipalities. First, I provide a discussion of the general theory behind water pricing and decentralization. Then, I assess the institutional arrangements, implementation strategies and financial resources used in the provision of water. Finally, I assess whether or not the water policy is meeting its objectives and conclude by making recommendations that South Africa should fund municipalities to help build and strengthen their capacity and infrastructure; implement mechanisms for cross-subsidizing poor municipalities from wealthier neighborhoods by adjusting the pricing system whereby the per unit price of consuming water increases when more of it is consumed; and set realistic distance within which consumers are expected to walk to fetch water.

Introduction

The Constitution of the Republic of South Africa states that water is a basic human right and requires local governments to provide all citizens with access to sufficient water. The National Water Act, ratified in 1998, further reinforced the idea of water not only as a basic right, but also as a means for correcting past racial discrimination. This paper argues that South Africa's water policy places an unfunded mandate on local governments and therefore, it will not succeed in its effort to redress past racial inequities through the allocation of water services. The policy will not succeed because the country's decentralized system, subsidy methods and pricing and cost-recovery mechanisms for the provision of water to poor rural residents is incompatible with the weak infrastructure and poor capacity of municipalities.

Rationale for Water Pricing

The rationale behind imposing user fees on consumers of water include improving the efficient use of resources by governments, encouraging conservation of scarce resources, ensuring equity, gaining information about the level of demand for water from consumers and recovering costs to finance services. Bahl and Linn (1992) argue that user charges "discipline planners and users to limit service standards so users are able and willing to pay for their costs, permit the replicability of services, and raise resources for the expansion of services required" (p. 213). Bird (1999) also argues that user fees promote economic efficiency through "providing information to public sector suppliers as to how much clients actually are willing to pay for particular services and by ensuring that what the public sector supplies is valued at least at (marginal) cost by citizens" (p. 235). This theory suggests that not charging user fees would lead to over-consumption, while overpricing would lead to under-consumption, resulting in inefficiency.

The argument in support of user fees as the basis for economic efficiency is grounded in the assumption that

services that are provided at the lowest feasible cost per unit will lead to production efficiency. This assumption, however, requires that producers provide services at minimum cost possible while charging the correct price from consumers. According to Bahl and Linn (1992), there is a relationship between pricing of services and production efficiency because when consumers have to pay for services, they are likely to place pressure on authorities to provide the service at the lowest cost possible.

Improving vertical equity and promoting income redistribution are also objectives pursued through user fees. Bahl and Linn (1992) suggest that because national taxes in developing countries rarely have the capacity to improve income distribution, central governments should consider applying user fees on public services such as water as a means to distribute income. However, the authors acknowledge that their suggestion can only be accomplished in countries where the provision and pricing of services are under the direct or indirect control of the national government. By designing user fees that place the heavier burden on wealthier consumers, it is assumed that governments can use the money to subsidize services for low-income consumers (Bahl and Linn, 1992). This is especially important because studies show that poor people pay higher proportion of their income for water compared to high-income people despite the fact that they consume less water (World Bank, 2004b).

In addition, water pricing is also used to encourage conservation of water. The most common form of user fee structure for water is known as "rising block tariff," which involves increasing the per unit price as consumption of water increases. The main objective of user fee structures is to encourage people to reduce their water consumption. And finally, user fees are placed to ensure cost recovery in order to enable governments to continue to finance services. It is recommended that user fees should generate enough revenue to cover the cost of supplying water (Jordan, 1998).

The literature on the delivery of public services and allocation of scarce resources such as water also supports the decentralization of such functions to local governments. This is because it is assumed that decisions made by representatives of people at the local level will really represent the interests of the local constituency. Decentralizing the provisions of services is believed to meet locally preferred goals because local people would participate in the design and implementation process of programs (Mawhood, 1993). The World Bank (as cited in Kasfir, 1993) also advocates for the decentralization of some public services by stating that “local governments are best suited to meet the needs of local communities,” because “solutions imposed by central authorities are likely to fail” (p. 157). The monopoly of service provisions by a central government is believed to lead to inefficiencies, whereas local governments can carry out their mandates more efficiently than central governments because transaction costs will be cheaper. Decentralization is also supported on the grounds that it will strengthen local institutions and infrastructures so that they can play a more representative and responsive role in the lives of the local populations (Ribot, 2001a).

On the other hand, the monopoly provision of water services by the public sector is favored. This is because providing utility services such as water requires large fixed costs, which creates the condition for a “natural monopoly” (Loehman, 2002). According to this rationale, allowing many firms to enter the market will lead to inefficiencies and therefore, it is more efficient to produce and allocate such services within a single firm (Follmi and Meister, 2002). Because water is a public good that has special characteristics such as being scarce, essential to life and economic development, non-substitutable, and has high mobilization cost (Savenije, 2001), the public sector is often believed to be the ideal distributor of water services. Additionally, the belief that water is a basic human right and that the management and provision of water by the private sector might result in the exploitation of consumers has given the public sector heavy involvement in the allocation of water services (Dosil, Cesare and K. William Easter, 2003). While there are a number of reasons in support of treating water as a public good and for its monopoly provision, there are a number of problems as well, which include not having adequate cost-recovery schemes to cross-subsidize services for the poor, build local government capacity and infrastructure as well as require high administrative cost on local governments. These problems are addressed for the South African context below in the section titled “Impact of Policy.”

Background

South Africa has a population of 45.3 million and is considered a middle-income country with a Gross Domestic Product of US\$159.9 billion in 2004 (World Bank, 2004b). However, about 9 million people live below the international poverty standard of a dollar a day, while

an additional 8 million live on less than US\$ 2 per day. In South Africa, poverty is concentrated among blacks, suggesting that being poor is highly correlated with race. A 1999 Household Survey shows that while blacks make up 78 percent of the population, they account for 95 percent of the poor with 52 percent of blacks being poor compared to only 5 percent of whites (Woolard, 2002).

Distribution of land and access to water in South Africa reflects the inequalities that exist between its black and white citizens. 87 percent of available land is owned by 13 percent of the population and 95 percent of water resources for irrigation in the country is used by industrial farmers who are mostly white, leaving only 5 percent of the water for small-scale black farmers (Van Koppen, Jha, & Merrey, 2002). Moreover, 74 percent of South Africa’s black population is concentrated in what is formerly known as “homelands,” located in Bophutatswana (North-West), Ciskei and Transkei (Eastern Cape), KwaZulu as well as Lebowa and Venda (Limpopo Province). Among these provinces, the Eastern Cape and Limpopo are considered to be the poorest (Woolard, 2002). Mobility outside of Homelands and entrance into white neighborhoods is restricted for black South Africans because of the way residential neighborhoods are organized and stiff opposition to integration by property owners and developers. Even though Homelands were abolished in 1998, segregation still persists in South Africa because low-income housing are built in Homelands in order to “preserve the residential character” of predominantly white neighborhoods and to ensure that “high-densities do not cause depreciation of adjoining properties” (Cashdan, 2000, p. 4-5).

It is widely accepted that the racial inequalities that exist in South Africa are a result of decades of discriminating policies practiced by the apartheid regime. The differences in quality of life within the country are illustrated by the fact that the Human Development Index (HDI) of White South Africans in 1995 was 0.92, which is the same as developed countries such as Denmark’s, compared to an HDI of 0.67 for black South Africans (UNDP, 2003). The reason for this discrepancy is the fact that the apartheid regime in South Africa provided services such as water and sanitation, health and education to the white minority, while the black population was denied access to these basic services and resources. Since 1994 however, the first time democratically elected government of South Africa has made commitments to provide services and improve access to resources in an attempt to redress racial inequalities. One of the actions taken by the government of South Africa to correct the harm caused by the decades of discriminating policies is through the management and provision of water services (Van Koppen, Jha, & Merrey, 2002).

Ratified in 1996, the Constitution of the Republic of South Africa specifically states that water is a basic human right. Chapter 2 of the Constitution, which lists the Bill of Rights, states that “everyone has the right to have access to sufficient food and water” and stipulates

that “the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realization of these rights” (South Africa, 1996). Additionally, the Water Services Act of 1997 set the standard of quantity and quality of water and sanitation services South Africans would be guaranteed to receive by their government and identified the institutions that would be responsible to carry out these tasks (South Africa, 1997). And finally, the National Water Act, which was ratified in 1998, further reinforced the idea of water as a basic right as well as a means to correct past discrimination. Throughout the Act, “redress the results of past racial and gender discrimination” is mentioned as the main reason for the need to reform the management and provision of water resources (South Africa, 1998). By ensuring the equitable allocation of natural resources to all citizens, the water policy is also seen as a necessary part of the government’s economic development programme (Goldblatt & Davies, 2002).

The policy was also intended to conserve water since it is a very scarce resource in South Africa. Studies show that half of the rainfall in South Africa falls on only 13 percent of the land that is located in the southeastern part of the country, while half of the country’s land only receives a quarter of the rainfall. In addition, because South Africa has very little groundwater and lakes, it relies heavily on freshwater from rivers and streams. However, population growth, the usage of irrigation for agriculture as well as high rates of evaporation and geological chemicals has major impact on the amount of water that is available to be distributed among consumers. Currently, South Africa has 1110m³ of water available per person compared to an average of 7045m³ per person globally (Allan, 2003).

The National Water Act identifies equitable water allocation as a means to eradicate poverty as well as to ensure social and environmental justice. The idea of using water as a tool to eradicate poverty is also supported by Van Koppen, Jha and Merrey. They argue that “water deprivation is intrinsic to poverty” because “lack of access to safe and nearby drinking water and proneness to water-borne diseases are widely recognized as poverty dimensions” (Van Koppen, Jha, & Merrey, 2002, p. 2). Furthermore, because water is essential to participate in revenue generating activities such as crop cultivation, lack of access to water is said to contribute to the marginalization of the poor. Therefore, it is argued that by improving poor people’s participation in the development, management and control of water resources as well as ensuring equal sharing of water services between poor and wealthy consumers, governments can have a direct impact on eradication of poverty since water can improve poor people’s health as well as their economic status (Van Koppen, Jha, & Merrey, 2002).

Thus, South Africa chose the monopoly provision of water by the public sector because of the belief that government has the responsibility to take action in order to ensure that redistribution of wealth takes

place (Schreiner & Naidoo, 2000). The South African government favored the provision of water through local governments as opposed to the private sector so that the water allocation process would be equitable and ensure that the water policy was implemented in a way that is consistent with the country’s goal of eradicating poverty and promoting growth. The government also believed that the provision of water through the public sector would ensure that historically marginalized individuals including the poor would participate in the management of the country’s water resources. Because South Africa’s water policy is designed to promote the usage of water in the interest of the public, local governments are seen as the ideal agents for the provision of water services in order to ensure the promotion of social stability (South Africa, 2005). Moreover, this system of water provision is favored by South Africa because it is believed that the public sector would ensure that water required to meet basic human needs would be provided while requiring people to pay for additional consumption at the rate of water which reflects its value and scarcity (Reed & de Wit, 2003).

Consequently, the South African government made a commitment to provide 25 liters of free water per person per day, which equals to about 6000 liters per household per month, in order to ensure that poor people received the WHO recommended minimum amount of water to maintain their well-being. However, local governments are given the discretion to determine whether or not they are able to provide this much water for their residents (South Africa, 2001a).

Institutional Arrangements and Implementation Strategy

The institutions that deal with the provision of water services in South Africa are the national government agencies and district as well as sub-district level water service organizations. In 1998, with the establishment of the new water law, Homelands were abolished and the Department of Water Affairs and Forestry (DWAF), under the Ministry of Water Affairs and Forestry, was given the authority to manage the country’s water resources and to guarantee that all citizens had access to water. DWAF is also responsible for formulating policies pertaining to national water usage. Water services institutions on the other hand, are water service providers such as district and rural councils, community based organizations and water boards that deal with residential and industrial users in order to ensure that they get access to water services. These institutions are endowed with the authority to regulate how water is to be provided and who should provide it (James, 2003).

Although DWAF is the custodian of the water resources in the country, the provision of water services, however, was decentralized to the municipal level and consequently local governments were given the responsibility to self-finance while ensuring that “basic

human water needs” for the poor are met (Van Koppen, Jha, & Merrey, 2002). This arrangement was preferred with the assumption that because local authorities are elected by consumers, they would be obligated to cater to the needs of their constituency better (South Africa, 2001a).

In addition to bearing the burden of providing free basic water services for the poor, municipal governments are given the power to determine how to distribute water services as well as to set the rate of user fees within their jurisdiction. Although local governments receive detailed guidelines with options as to how to implement the free basic water service, they are given the discretion to make decisions that best serves the interests of their residents as long as they do not violate any national laws pertaining to the provision of water services (South Africa, 2001a). It was believed that decentralization would lead to the efficient provision of these services by ensuring that services are financially sustainable because the pricing system would enable local governments to be self-sufficient through raising taxes as well as providing services for reasonable profit from wealthy residents (Cashdan, 2000).

Municipal governments provide water services to residents within their jurisdiction through water providing bodies such as water boards, community based organizations as well as contracting services to the private sector (Pollard & Toit, 2005). While the water boards, which are established by municipal governments, are most active in urban areas in providing water and sanitation services, they are increasingly becoming engaged in rural areas as well. Community based organizations (CBOs) on the other hand, are voluntary associations that bid for contracts from local governments to provide water services in mostly small settlements where less than 5000 people reside. Finally, private sector water service providers also bid for contracts from municipal governments to provide services (South Africa, 2001b).

Financial Sources

Providing free water to meet basic needs also requires designing a mechanism to measure and control the amount of water that is supplied for free. Therefore, DWAF endorses the use of communal taps and low-pressure tanks with measuring meters as well as conventional house connections with prepaid metering to charge for additional water consumption. However, decentralization required the transition of responsibility from an arrangement where DWAF used to fully subsidize the operating and maintenance of water to cost recovery schemes and the usage of fund transfers from the central government to municipalities to provide subsidized water (South Africa, 2001b).

In order to ensure the provision of water free of charge, DWAF has designed three cost recovery measures: rising block tariff, targeted credits or subsidies and service level targeting. The pricing guide formulated

by DWAF encourages municipal governments whose water consumers are mostly middle and high income households to implement the rising block tariff in order to cross subsidize low-income households within their jurisdictions. On the other hand, the credits or subsidies targeting approach is supposed to be used by municipalities that have residents that are predominately poor or just above the poverty line in order to identify those that need full subsidy from partial subsidy. And finally, the service level targeting is to be used by municipalities that have poor capacity and whose consumers are mostly poor in order to provide only the required amount of “basic needs” water (South Africa, 2001b).

Financing of free basic water, which is calculated as the average cost of supplying the water with the amount of water provided free of charge, requires municipalities to utilize internal as well as external sources of funding. DWAF acknowledges that the level of cross-subsidization local authorities can utilize depends on the ratio between wealthy and low-income consumers as well as the ratio between industrial and domestic consumers. Municipal governments are given the responsibility to gather adequate information in order to determine the appropriate cost-recovery and control mechanism (South Africa, 2001b).

Furthermore, municipal governments are instructed not to charge high fees from industrial consumers. Instead, local governments are encouraged to use the “equitable share” transfer they receive from the central government to provide free basic water to low-income households. The argument behind this policy is the belief that in order to encourage and strengthen local economic development, it is crucial to keep input costs of businesses as low as possible while ensuring that they pay the full cost of the water they consume. As a result, rising block tariffs for industrial consumers are also discouraged because such schemes would make businesses pay for consumption of water in the top bracket and therefore would be inequitable (South Africa, 2001b).

As far as external sources are concerned, municipalities can use the “equitable share” transfers and conditional grants they receive from the central government to subsidize water services for the poor (Mase, 2003). The central government distributes the “equitable share” to provinces and municipalities based on a formula that takes into account household per capita income and by measuring the rural economic activities in the region. This formula is intended to create equal allocation of resources in the provision of services. This is seen as an important and necessary step for South Africa in its effort to correct disparities between black and white South Africans (South Africa, 2001b). In addition municipal governments in South Africa receive two types of grants to assist them with their duties: S grant, which makes up a large proportion of the overall equitable share to be used for delivery of basic services and the I grant, funding that is earmarked for infrastructure improvement. The I grant is calculated based on a formula that accounts for the size of population and average income so that local

governments with higher proportion of poor residents receive higher grant than wealthy municipalities (Mase, 2003).

Impact of Policy: Challenges in Achieving Objective

The 2000 UN Development Report on South Africa states that the country has achieved a great deal since the formulation of the water act. The report states that even though about 30 percent of South Africans did not have access to water in 1994, by 2000 an estimated 3 million households gained access, which reduced the number of people needing water to 20 percent (UNDP, 2000). Household survey conducted in 1993 confirms the findings of the UNDP that 33.24 percent of South Africans lacked access to water before the formulation of the water policy (Huynh, 2004).

Although South Africa has taken steps to address the needs of its low-income citizens, evidence suggests that the cost-recovery schemes have made it difficult for users to enjoy sustainable use of water. UNDP states that thousands of water services have been disconnected because of users' inability to pay. In fact, the report concludes that the free water project had "become dysfunctional or fallen into disrepair" (UNDP, 2000, p. 29). An estimated 12.5% percent of the population in South Africa still relies on water from rivers and streams. Furthermore, as of 2000, only 27 percent of blacks have access to piped water in their homes compared to 98 percent of Indians and 96 percent of whites South Africans (UNDP, 2000).

Moreover, even though block tariffs are intended to ensure the provision of subsidized water services to poor South Africans and the conservation of water, evidence suggests that the pricing system benefits wealthy suburbanites over poor homeland residents and does not result in significant water conservation. McDonald argues that because water prices increase quickly in the second and third blocks of consumption and then level off at the top end of consumption, it reverses the effects of receiving subsidized water. While most poor residents cannot afford consuming second and third blocks of water, the tapering off of the price at the top consumption enables residents in wealthy neighborhoods to consume water not only for domestic use but also for luxurious activities such as gardening. McDonald further claims that "in some cases, middle-class suburbanites are paying even *less* than low-income township dwellers for the same (or better quality) service" (McDonald, 2002c, p. 5). As a result, while South Africa is striving to provide its rural residents with 25 liters of water per day, white South Africans are using an average of 3,000 liters of water per household per day, most of which is used for gardening and maintaining swimming pools (Klasen, 2002).

South Africa's water block tariff pricing system also ensures that water is used by those who value it highly, which benefits white South Africans at the expense

of blacks. Klasen (2002) argues that because white South Africans have built large endowments during the apartheid regime, they can afford to consume and pay for large units of public services including water. On the other hand, this rationing system will limit the ability of black South Africans to advance economically because it makes higher consumption of services such as water unaffordable, which places extra burden on their efforts to catch up to the white population.

Moreover, even though the objective of South Africa's water sector reform is the equitable allocation of water resources, the policy places greater emphasis on economic growth rather than redistribution or subsidies. For example, the informal caps that have been placed on tax increases that local governments could impose on wealthy neighborhoods and businesses limit the potential for cross-subsidies at the local level (McDonald, 2002c).

Additionally, the cost-recovery mechanisms that are designed by DWAF, which require municipal governments to implement them, places high administrative costs on municipalities because all three of the measures: rising block tariffs, targeted credits and subsidies as well as service level targeting require well organized metering, billing and control systems (South Africa, 2001a). Furthermore, while the national government transmitted the responsibility of providing water for the poor, intergovernmental transfers from central government to municipal governments was cut by 85 percent between 1991 and 1998 and additional cuts of 55 percent from 1997 to 2000 (McDonald, 2002b), leaving local governments to raise 90 percent of their own revenue in order to carryout their constitutional duties (Mase, 2003). Although the fact that local governments are given the independence to raise their own revenue in order to provide services should be applauded, the lack of adequate funding is responsible for the lack of infrastructure improvements in many South African municipalities (McDonald, 2002b; Cashdan, 2000).

In addition to meeting their responsibility of providing free water, from the little funding local governments do receive through the "equitable share" scheme or "poverty eradication" conditional grants from the central government, municipalities have to divide it among the provision of other basic services such as housing, sanitation and electricity. In 2003 for example, 23.3 percent of funding from the equitable share was used to supply water while 41.9 percent was spent on electricity, 11.6 percent on sanitation services and 23.3 percent on garbage removal (Mase, 2003). South Africa also faces additional financial constraints on its limited resources in providing services such as water, electricity and housing because it now has to deliver the same standards of services it previously provided to its wealthy and privileged citizens while trying to meet "the needs" of its poor and previously marginalized citizens by using its limited resources. This places serious burden on the government's plans to expand subsidized services to its rural black population (Klasen, 2002).

Moreover, the South African water policy has several

additional shortcomings that prevent it from being effective. One of the reasons is the fact that South Africa did not take into account the lack of willingness of high-income consumers to subsidize the water consumption of the poor. Studies show that 69 percent of South Africans that are in the upper income bracket (R15,000 to 20,000 per month) are opposed to paying increased taxes in order to cross-subsidize low income households (McDonald, 2002a). This has negative implications in South Africa's effort to eradicate poverty and reallocate resources equitably. The water policy also does not take into account the fact that municipal governments had inherited former homelands that have weak and at times non-existent infrastructure that require considerable amount of funding to replace and upgrade (Alence, 2002). Mase (2003) argues that because improving infrastructure requires a lot of money, the current level of intergovernmental transfers do not adequately cover the needs of local governments. Moreover he argues that the S grant creates horizontal inequity because by determining the amount of funding a municipality receives based on the number of households in poverty, it may favor urban areas with larger population and more resources at the expense of rural areas with smaller population and fewer resources.

South Africa's poverty stricken citizens are often trapped where their water supply system is not improved because it is assumed that since consumers are willing to pay very little if anything at all for the service they receive, improvement or maintenance of water services is deemed unnecessary and too costly. Because local governments (especially in rural areas) do not have the capacity to manage and maintain facilities and because residents that rely on the free water cannot afford to fix broken facilities, studies show that water services in some areas are interrupted 50 to 90 percent of the time (Wellman, 1999).

Furthermore, studies conducted by DWAF show that the administrative costs of targeting the poor has absorbed a large proportion of the transfer it receives from the central government (South Africa, 2001b). Municipalities in rural areas with scattered settlements in particular often have shortage of funding to provide free basic water services for the poor and therefore the equitable share they receive from the central government is not adequate to cover the cost of water services (South Africa, 2001a). High capital and operating costs per unit of service that is associated with low population densities and distances further away from water source has made it particularly difficult for rural municipalities to provide water services to their residents. As a result, when municipal governments do manage to supply water in these areas and apply cost-recovery measures, the user fees consumers pay are much higher than urban consumers pay for the same unit of water (McDonald, 2002a). In this case, having access to water does not benefit consumers when they are not able to pay for it.

Additionally, South Africa's definition of the "poor"

is outdated and neglects to include important elements into account. For example, currently households with monthly income below R800 are considered poor and therefore qualify to receive free water. However, this definition has been used to determine qualification for free water for the last ten years without being adjusted for inflation. Furthermore, South Africa's definition of poor does not include household size as a means to identify those that cannot afford to pay for water services (South Africa, 2001a). As a result, it does not differentiate between consumers that may by definition be considered poor but can afford to pay partial or full price for water services. Thus, the water policy is inequitable because it allows "a couple with two incomes and no dependents" in the suburbs to receive the same amount of free water as a "single, unemployed mother with seven dependents" in a former homeland (McDonald, 2002a, p. 16). Because the administrative cost associated with means-testing households is too expensive, some middle class South African households end up paying less for water service than the poor because they too receive the subsidized "free" water (McDonald, 2002c).

The water policy of South Africa also neglected to account for the impact of segregation of low-income households in the former homelands and the inability of municipalities to cross-subsidize free water usage for low-income households. As a result, even though cross-subsidization mechanisms are encouraged to be used by municipal governments in order to provide free water to low-income people, it has become difficult to achieve this goal in provinces such as Eastern Cape because of the concentration of poverty. As a result, in Eastern Cape for example, only 59 percent of residents have access to clean water (UNDP, 2000). This suggests that the monopoly provision of water by municipal governments makes it difficult to create a mechanism whereby the wealthy households are charged higher prices in order to cross subsidize poor households.

A national survey conducted in 2001 shows that 57 percent of households earn less than R1000 per month, while the average bill for services including water and electricity is R224. This suggests that households spend about a quarter of their income on basic services. However, for poor households with large extended families, the cost is much higher, which suggests that poor people are forced to choose between receiving basic services or other necessities (McDonald, 2002a). When asked about their ability to pay for municipal services, 29 percent of the survey respondents answered that they are only able to pay for services if they "cut back on other essential goods like food and clothing," while 18 percent answered that they "cannot afford to pay for these services no matter how hard I try" (McDonald, 2002a, p. 8). When comparing South Africa's claim that it has connected 3 million households to water, these figures suggest that 870,000 of these households have to make the difficult choice between consuming water and food or clothing, while an additional 540,000 households are

unable to pay for the service at all, which will likely lead to their service being cut off.

While the government of South Africa blames “culture of non-payment,” for the lack of maintenance of facilities and the usage of cutting off services as a punishment (Wellman, 1999), McDonald argues that inability to pay is the major reason for non-payment (McDonald, 2002 b). South Africa’s unemployment rate as of March 2005 is 26.5, with unemployment rate among blacks being significantly higher than among whites, Indian and Asian as well as colored. Unemployment among blacks is 31.6 percent compared to 19.8 percent among colored, 18 percent among Indians and Asians and 5.1 percent among white South Africans (Statistics South Africa, 2005). South Africa uses the official ILO definition of the unemployed as “people within the economically active population” who are not employed, want to work, are available to start working and are actively seeking employment. This definition does not include people who are “out of the labor market or who are not economically active and are not available for work.” (Statistics South Africa, 2005, p. 32). Unemployment in rural South Africa is 40.3 percent (Global Poverty Research Group, 2005) with unemployment rate of 54.6 percent in the Eastern Cape and 49 percent in KwaZulu-Natal and Limpopo (Human Sciences Research Council, 2005). As a result, currently 22 to 33 percent of households in rural areas do not pay for the water services they receive (McDonald, 2002a). Therefore, on an ability to pay bases, the implementation of South Africa’s water policy has not resulted in equity. This explains the reason why municipalities are facing serious difficulty collecting user payments from rural low-income households, which has severely jeopardized the ability of local governments to expand and build their infrastructure and capacity (Alence, 2002).

Although the government of South Africa claims to provide water to additional 3 million people since the implementation of the water policy, the widespread use of cut-offs has placed the figure into question. According to McDonald, since the implementation of the water policy, an estimated 10 million people have been impacted by water cut off that resulted from non-payment. In fact, the author suggests that because many households are in debt as a result of their inability to pay, their prospect of getting water connection is highly unlikely. For example, a survey conducted in Soweto shows that 80 percent of households have water service related debt with 30 percent of households accumulating as much as \$4180 debt, an amount they cannot afford to pay (McDonald, 2002a).

UNDP accuses the government of South Africa for placing financial consideration as a priority “over the developmental objectives of service provision and the socio-economic conditions of the poor” (UNDP, 2003, p. 105). Furthermore, UNDP states that a system solely centered on efficiency and cost-recovery mechanisms have also contributed to the failure of South Africa’s objective of achieving equity. The fact that over 100,000

were infected by cholera in 2000 because of lack of access to adequate and clean water due to service cutoffs, for example, is cited as the impact of the emphasis placed on cost recovery schemes that do not pay attention to management and maintenance of facilities. As a result of cost-recovery mechanisms, concludes the report, inequities in access to basic services that existed during the apartheid regime are still realities for many poor South Africans (UNDP, 2003). McDonald also argues that the emphasis placed on cost-recovery on the provision of basic services in South Africa “has largely been counter-productive to the goals of equity and environmental sustainability and threatens to undermine post-apartheid reconstruction and development efforts” the country has made since 1994 (McDonald, 2002a, p. 16).

Although water resources are scarce in South Africa, AJ James (2003) argues that “scarcity of water resources is not as much of a problem as are the financial, institutional and managerial resources required to tap these sources sustainably” (p. 1). As a result of South Africa’s inability to adequately implement an equitable water policy, every year an estimated 43,000 people, who are mostly black children under the age of five, die because of water-borne diseases (McDonald, 2002a). Manzungu (2004) also confirms that the main causes of diseases and poor health in the poor regions of South Africa are primarily water related.

Van Koppen, Jha and Merrey (2002) also question whether South Africa’s water policy, even if successfully implemented, would have meaningful impact in improving the economic conditions of the country’s black population. They argue that because the national water policy only guarantees domestic usage and does not stipulate for income-poor South Africans to have access to water for economic activities such as improving “harvests of their homestead gardens or fields, their poultry and livestock enterprises or small crafts,” it does not adequately address the existing inequities (p. 10).

Conclusion: Recommendations

Although the government of South Africa has taken steps to redress racial inequities through the provision of water services, for millions of low-income black South Africans, access to clean water still remains a distant dream. Challenges posed by institutional arrangement, implementation strategy as well as internal and external sources of funding continue to hamper South Africa’s effort to address the water needs of its citizens. Although it is too early to expect dramatic changes from South Africa’s water policy in reversing decades of past racial discrimination, the trend shows that it is highly unlikely that it will achieve its objectives if the country does not take steps to correct mistakes in the formulation as well as implementation of the policy.

It is evident that South Africa chose to enshrine water as a basic right in the constitution without thoroughly assessing what it would take to provide free

water for the poor. The government adopted a politically popular policy and yet transmitted the responsibility to local governments with very little capacity and weak infrastructure to carry out what can essentially be considered an unfunded mandate. Currently, over half of South Africa's municipalities are in financial difficulty (Cashdan, 2000) and it is estimated that 50 to 80 million Rands is needed within the next ten years just to deal with the backlogs of providing water services in urban areas alone (Jackson, 1997).

Even though the national government assumed that wealthy white citizens of South Africa would bear the cost of providing free water services for the low-income, evidence shows that the wealthy are unwilling to pay higher user charges in order to cross-subsidize services for the poor. Therefore, if South Africa is serious about providing water for all, the national government should provide the funding for not only covering operating costs, but also for maintaining facilities as well as building capacity and strengthening infrastructure. This process is especially important for municipalities in former homelands where racial segregation and concentration of poverty is prevalent, making it impossible for local governments to cross subsidize services or improve water provision mechanisms.

Local governments need adequate resources in order to become legitimate actors. Ribot (2001b) argues, "central governments have obligations to provide resources" and "provide basic infrastructure" in order to enable local governments "to provide services required by the central government" (p. 11). The author suggests that financial resources must adequately cover the cost of decentralized responsibilities. Otherwise, suggests the author, "the failure to empower local governments with fiscal resources undermines their effectiveness in the short run and their legitimacy over the long run" (p. 46). Decentralizing service provisions without adequate funding will only place blame on to local governments. This will result in the frustration of the local population who now has raised expectations of how their government is supposed to serve them.

Furthermore, evidence suggests that that pro-poor economic development cannot take place without strong infrastructure (Cashdan, 2000). According to the World Bank (1994), building infrastructure leads to economic development because "infrastructure represents, if not the engine, then the 'wheels' of economic activity" (p. 14). The Food and Agriculture Organization (as cited in Gardudno, 2001) also stresses the importance of building capacity and infrastructure in order to achieve sustainable development. Because the absence of strong infrastructure can lead to "financial deterioration" in the long run, it is important to upgrade and improve infrastructure "through efficiency gains, cross-subsidisation, creative financing and building on existing infrastructure" (Cashdan, 2000, p. 9).

Furthermore, South Africa's national government has made the mistake of setting very high and unrealistic

goals, which has contributed to the problem of providing water to those that need it the most. Although South Africa's commitment to redress racial inequity through the provision of water services is to be admired, providing 25 liters of free water even to those that can afford to pay for it in wealthy municipalities defeats the purpose of the policy. Instead, because water is a scarce resource that needs to be conserved and rationed to consumers, user fees should be applied to consumers that can afford to pay for the service in order to recover the operating and maintenance cost of providing water to consumers. This will still enable South Africa to provide the minimum of 25 liters of water to low-income citizens that cannot afford to pay (fully or partially) for the service they receive. Even though this strategy may not be popular among the wealthy who may not wish to pay for the services, the government can still maintain political support from the low-income households that would benefit from this strategy.

Moreover, equitable distribution of resources in countries such as South Africa can work well if cost recovery measures such as progressive block tariffs – a pricing system that enables the per unit price of a service to increase when more of it is consumed – is used to charge wealthy people more than the actual cost of providing water (McDonald, 2002c). Providing "lifeline" amounts of water free of charge for the poor by charging higher prices for "luxury consumption" such as maintaining swimming pools will also encourage the conservation of scarce resources (Cashdan, 2000).

Additionally, South Africa has set an unachievable goal by promising to provide easily accessible clean water to all citizens regardless of where they reside. In South Africa, accessibility to water is defined as having reliable, clean water within a walking distance of 200 meters (Jackson, 1997). Common sense would dictate that it is unrealistic to expect rural municipalities with low population densities to meet such a goal. Connecting households that are sparsely populated and located further from a water source is a massive undertaking most municipalities in rural areas and former homelands cannot afford. Therefore, in order to meet the objective of providing adequate water to all citizens, South Africa should set the distance people are expected to walk to fetch water more realistically so that as many households as possible are able to share one communal water tap or well. Since the average South African woman already walks more than 2 kilometers per trip, at least twice a day, to fetch unclean water from rivers and streams (World Bank, 2002), it can be concluded that providing them with clean water within a reasonable walking distance will be considered acceptable.

In conclusion, South Africa has yet to resolve problems related to implementation and funding of the provision of free water to low-income citizens. Municipal governments are often trapped between providing services and then charging user fees or not providing any service at all. In order to achieve the goal of providing adequate

water to all citizens and redress racial inequities effectively, the national government of South Africa should provide the necessary funding to municipalities in order to enable them to build their capacity and infrastructure so that they can carry out their responsibilities.

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