

*Review*

# Challenges and Innovations in Urban Water Supply: A Study of Blantyre, Malawi

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The provision of potable water in the cities of developing countries has been of concern for a long time. Most of the urban population, especially in unplanned settlements, relies on small-scale informal service providers. The challenge with such an arrangement, however, is that it has been associated with high charges, provision of poor quality water, unreliable and intermittent water supply, and a general deterioration of water infrastructure. Based on the literature and data on the institutions, organizations and demographics of Malawi, this paper argues that privatization of water supply in developing countries may not work for all income groups. However, there are other modes of delivery which if formalized and institutionalized may extend the coverage to the low-income neighbourhoods in a transparent and inclusive manner, and may be offered at affordable rates e.g. State-Civil Society, State-Informal Sector and the State-Civil Society-Informal Sector partnerships. This paper also argues that national authorities in Malawi need to spearhead public policies that will effectively regulate the operations of water service providers.

**Key words:** water supply, unplanned settlements, institutions, privatization, developing countries.

## INTRODUCTION

Malawi falls under the category of least developed countries in the world. The National Human Development Report of 2010 ranks Malawi at number 153 out of 169 in terms of human development index (United Nations Development Programme, 2010). Access to potable water is still a very big challenge in Malawi and nearly 50% of all illnesses are related to water borne diseases (Zezeza-Manda, 2009; Mkandawire and Banda, 2009).

Blantyre is the largest and commercial city of Malawi and is one of the oldest urban centres in the East, Central and Southern Africa. It is situated in the southern part of the country and was established in 1876 by the Church of Scotland. This was followed by developments of three commercial centres that is, Blantyre, Mandala and Limbe.

However, due to geographical positioning and asymmetries in growth Mandala became integrated into Blantyre commercial centre. Further, Blantyre is one of the cities experiencing rapid urbanisation in Southern Africa, estimated at about 8.1% per annum. It is estimated that the city's population increased fivefold from 106641 to 519033 between 1966 and 1999. And, in 2008, the city covered an undulating area of about 228 km<sup>2</sup> with an estimated population of 661, 444 with an annual growth rate of 2.8% (NSO, 2008). In the colonial era settlement patterns in the city were controlled resulting in high and middle income residential areas concentrated around the central business districts of Blantyre and Limbe, and the low income absorbed in the peri-urban traditional areas (Njamea, 2003).

With the current urban growth, there are several mixed high-middle-low income residential areas (usually referred to as townships) especially in previously low income areas. Figure 1 shows the distribution of

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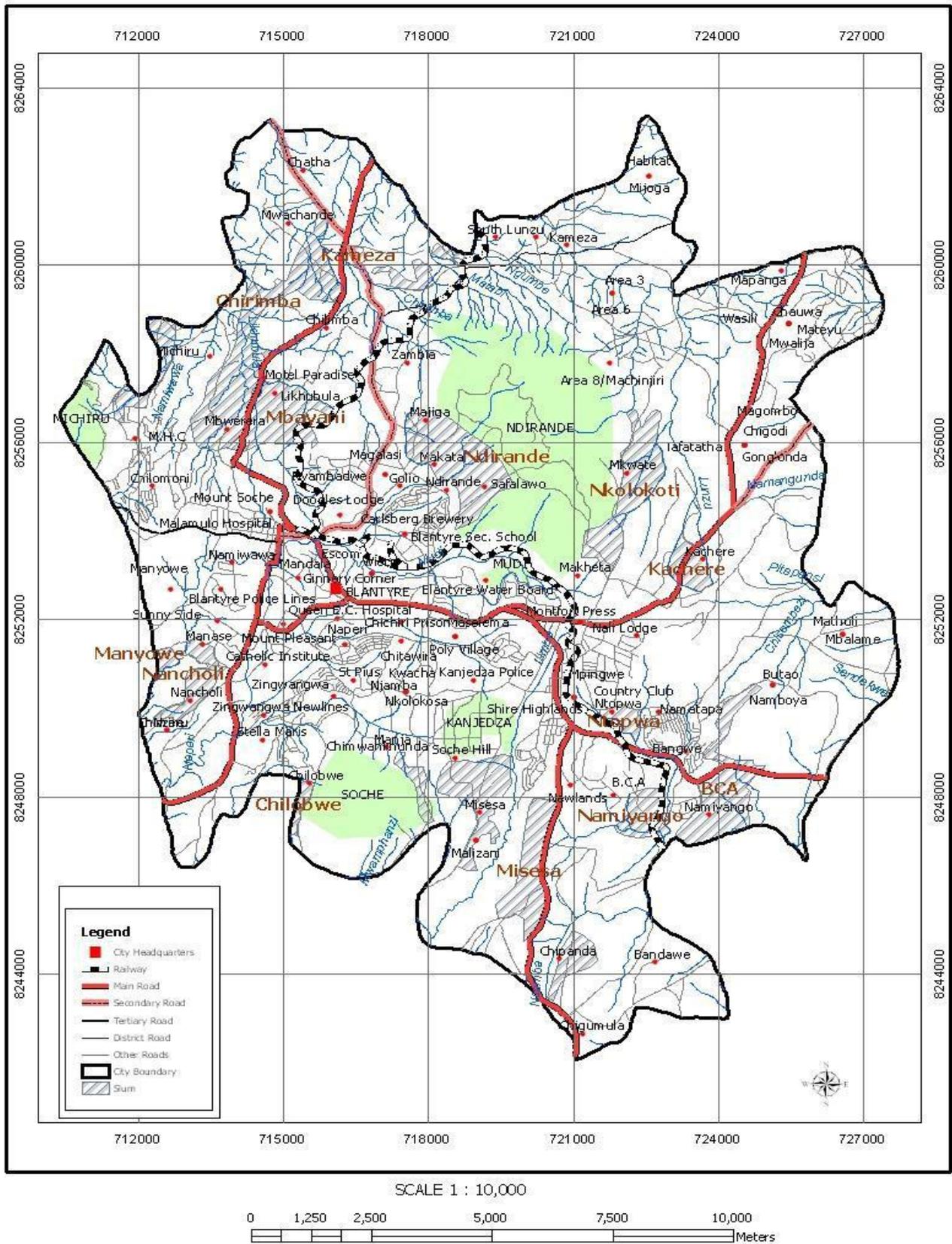


Figure 1. Showing unplanned settlement regions in Blantyre City.

unplanned settlement regions in Blantyre. Despite being a commercial and industrial city, urban poverty is prevalent in Blantyre with an estimated 65% of the urban population being below the poverty line. Further, the poor spend 60% of the earning on food alone which greatly jeopardises their ability to pay for urban utilities. The condition is aggravated by high levels of unemployment estimated at 38% that is, employed figures include both formal and informal employment. About 46% of slum dwellers access water through kiosks, 11% have piped water at home, 13% walk long distances to access piped water, and the rest acquire their water from other sources. About 80% of formal settlements' residents have access to piped water (NSO, 2008).

Blantyre's reticulation system runs from Nkula on Shire River situated 48 km from Blantyre central. The system was commissioned in 1929 and has been state run since then. This system serves 80% of the city population through piped water, kiosks and standpipes. Estimates of access to water in 2000 showed that about 40% of Blantyre's population had in-house water connection, 25% were served through yard taps while the rest relied on kiosks, boreholes or traditional water provision (WHO, 2000; UNICEF, 2000). And, in general, the populations not served by public water provision increased by about 11% between 1990 and 2006 in the cities of Malawi (Zezeza-Manda, 2009). Water provision other than in-house connection is common in informal settlements (that is, previously traditional areas) and prevalence of traditional systems of water provision increases towards the city's periphery. It may therefore be argued that most of the urban poor's access to reticulated water supply is limited. Further, the urban poor's situation worsens because of the pollution of water surfaces through "mass deforestation of the water catchments; effluent discharges from industrial, domestic and commercial sources; seepage and overflow from pit latrines and septic tanks; and open defecation and urination" (Matope, 2000) which in one way or another find their way through to traditional water sources. Several policies and acts in relation to water delivery and management have so far been approved and enacted to address some aspects of the gaps.

## **INSTITUTIONS AND INSTITUTIONAL RELATIONS**

The management (thus organisational and practices) of water systems in Malawi is mainly regulated by two acts that is, the *Water Resources Act (1969)* and the *Water Works Act (1995)*, and the former has been amended awaiting approval (Ferguson and Mulwafu, 2004; Mulwafu et al., 2003). Most of these institutions have been and are being reformed after the dawn of popular politics in 1994. The *Water Resources Act (1996)* focuses on the ownership and right to water while the *Water Works Act* stipulates the operations of implementing

agencies in the delivery of water systems (Mulwafu et al., 2003). The ownership of all water resources in Malawi rests in the President whose prerogative is sometimes delegated to the Ministry of Water Development (Ferguson and Mulwafu, 2004). Hence the minister has the authority over "granting of water rights; revision, variation, determination and diminution of water rights, pollution of public water; miscellaneous powers to declare controlled areas; and schedules for the establishment, composition and *modus operandi* of the Water Resources Boards" (Mulwafu et al., 2003). However, access to water for domestic consumption is granted without claim (Kafakoma and Silungwe, 2003) which means harnessing available water resources for domestic purposes is a national right. The *Water Works Act (1995)* guides the water boards in implementing water management policies and government strategies in both water and water borne sanitation services. This Act is complemented by the *Blantyre and Lilongwe Water Works Acts (1971 and 1987, respectively)* which stipulate the responsibility of water boards in the two cities. The aforementioned manifests in the *National Water Policy* albeit with some contradictions and confusions in regards to right of access and delivery responsibilities particularly in the Malawian cities. For example, while the *WRA (1969)* identifies the president as the custodian of water resources, the *National Water policy* bestows that onto the central government (Mulwafu et al., 2003).

The *National Water policy (2000)* aims at guiding the management of water systems in urban, rural and district areas in Malawi. The vision of the policy is to expand, improve and sustainably provide water and sanitation services in order to facilitate socio-economic development (UN-Habitat, 2008). Further, the national water policy aims at creation of an enabling atmosphere for participatory consultative approaches hence empowering user communities and enabling the private sector to be involved in investing, planning, operation and maintenance of water supply systems (Chipeta, 2009). In Malawian cities the focus is on decentralization, organisational reform and capacity building in urban water and waterborne sanitation services (Ferguson and Mulwafu, 2004). Further, the national water policy promotes the creation of government owned but commercially managed water bodies in the urban centres. This has led to the reconstitution of the four urban city water boards in Malawi with an authorisation to provide services on a full cost recovery basis. And it may be envisaged that the promoted involvement of the private sector combined with the commercialisation of urban water services is a vehicle for the enablement and institutionalisation of formal privatisation. However, one of the priority issues in the national water policy (2000) is the extension of services to the "undeserved" especially the low income urban areas (UN-Habitat, 2008). On the other hand, the policy advocates community ownership coupled with external assistance of NGOs and

community based organisations (CBOs) in district and rural areas (Mulwafu et al. 2003). In the latter, the policy promotes the empowering of user communities in planning, funding, operating, maintaining and managing water systems.

Other issues contained in the national water policy (2000) are: operating and delivering of services at affordable rates and tariffs, shifting from supply to demand management tactics but Ferguson and Mulwafu (2004) rightly argue that the coverage of water systems in Malawian cities is too low to start thinking of demand management), devolution of management authority from the Ministry of Water Development to lower levels, participatory and consultative approaches to planning and implementation of water projects, value-based investment, capacity building, and the broadening of water boards jurisdiction to provision of sanitation services. Further, sanitation provision under water boards is to be based on full cost recovery and open to private sector participation.

The *Local Government Act (1998)* mainly focuses on the reorganisation of line ministries and having the authority of such ministries devolved to district levels (Mulwafu, 2004). This is in line with the structural adjustment programmes that have resulted in the transferring of most administrative and political functions of the central government to the district and municipal levels (ibid.). Therefore, in terms of the water systems, the head of the Water Department at city level reports to the District Commissioners and not to central ministries as previously was the case. This coupled with the promulgated participative and consultative approaches in planning and implementation of programmes is envisaged to increase accountability, transparency and responsiveness in the conduction of duties on city assemblies at the local level. Hence from the aforementioned it may also be deduced that the city assemblies have in some way be granted regulatory authority of private sector in urban water systems.

The *Environmental Management Act (1996)* and the *Environmental Policy (2004)* guide the management of all the natural resources in Malawi. In terms of water systems, these legal documents promote the “devolution of management powers to individuals, communities, user associations and other entities” (Mulwafu, 2004). Table 1 shows a summary of the Acts and Policies relevant to water provision in Blantyre City at the central and local levels.

Several things may be drawn from the aforementioned institutions. The overarching dimension is the pervasiveness of the ingredients of the international agreements to which Malawi is signatory (for example, *Dublin Principles*, the Rio Summit’s *Agenda 21*), and international donor and financial institutions statements such as those contained in the World Bank and International Monetary Fund (IMF) documents. These statements include “redefinition of central government

roles to focus on policy making and monitoring with delegation of administrative and management roles to other authorities; market-based, demand-driven strategies to reduce government funding obligations and expenditures through cost-sharing, user pay and other fiscal principles; and consultative, participatory approaches involving civil society to promote transparency and increase ownership” (Mulwafu, 2004). The aforementioned are termed by Easterly (2007) as prescriptive, universalistic, „western-expert-led” and collective „remedial recipes” to economic, social and political prosperity. And these are seen as imposed on underdeveloped nations by the international funding institutions without regard to prevailing circumstances in those nations (Toye, 1993). And, such are feared not to work automatically in cases where such templates are instituted without adaptation (Harvey and Reed, 2007; Ferguson and Mulwafu, 2004). Whether these will be implemented successfully and work for the benefit of the urban systems in Malawi is still not known. Interestingly, the 2011/2012 national budget allocation to Blantyre City Council for water management has been increased from 232.11 million Kwacha in the 2010/2011 financial year to 262.82 million Kwacha (1 USD ≈ 163.450 MWK) (Government of Malawi, 2011). However, with regard to Blantyre city, the Acts and Policies offer several opportunities and constraints as far as the water delivery is concerned.

Firstly, the Policies and Acts facilitate the increased involvement of the private sector in the provision of water in line with the prevailing development ideologies advocated by the international donors and financing organisations. However, it is apparent that the private sector in question is either large but local formal establishment or multinational industries. The aforementioned is drawn on provisions within the policies and phrases like „leveraging private sector finance”, „formation of consortiums that could invest in water”, „investment returns”, „sharing risks” and „prospective concessions” which are common in government officials statements (for example, in *Daily Times*, 2007/2009). However, there is no mention of the informal private sector within any of the water related Acts and Policies. Hence any promulgations of the private sector only mean formal private sector in this case. Therefore, it may be argued that the focus on large formal private sector in water provision may defeat the ethical distribution especially to the poor neighbourhood as evidenced by „cherry-picking” tendencies and raising costs of formal private sector water provision which most urban poor struggle to pay for in most cases (Bayliss, 2009). Further, it is apparent that social justice institutional questions of transparency, inclusivity and accountability remain disputable whether the state or the private sector provides services, while responsiveness greatly improves with privatisation but only where revenue collection is guaranteed (Bayliss, 2009; McGranahan and Owen, 2006).

**Table 1.** Acts and policies relevant to water provision in Malawi.

<b>Act/Policy</b>	<b>Objective/focus</b>	<b>Central responsibility</b>	<b>Local responsibility</b>
Water Resources Act (1996)	Stipulates ownership and rights to water resources in Malawi	OPC	Blantyre district assembly
		MWD	WRD
		NWRB	
Water Works Act (1995)	Stipulates operations of implementing agencies in Malawi	MWD	BWB
		NWRB	BCC
			District assembly
			NGOs
			Private sector
Blantyre Water Works Act (1971)	Stipulates operations of implementing agencies in Blantyre	-----	Communities
			BWB
			BCC
			District assembly
			NGOs
Local Government Act (1998)	Devolution of decision making to local levels	MLG	Private sector
			Communities
			BCC
Environmental Act (1996)	Stipulate responsibilities of environment conservation of Malawi	MNREE	BCC
		EAD	BWB
National Water Policy (2000)	Guides the management of water systems in Malawi	MWD	BWB
		OPC	BCC
		MLG	Districts assembly
			NGOs
		WSSD	Private sector
		NWRB	Communities
Environmental Policy (1996)	Guides the management of natural resources in Malawi	MWD	BCC
		WSSD	NGOs
		NWRB	CBOs

OPC= Office of the President and Cabinet; BCC = Blantyre City Council; BWB = Blantyre Water Board; MWD = Ministry of Water Development; WAR = Water Resources Division; WSSD = Water Supply and Sanitation Division; NWRB = National Water Resources Board; EAD = Environmental Affairs Department ; MLG = Ministry of Local Government; MNREE= Ministry of Natural Resources, Energy and Environment.

Secondly, although there is an acknowledgement of the need to extend services to the urban low income neighbourhoods at affordable rates, prevailing Policies and Acts limit technology for water delivery in cities of Malawi to reticulated systems (Chipeta, 2009). This eliminates other technologies like boreholes which are cheaper and more affordable to the urban poor than the reticulated water systems. Further the undulating topography of Blantyre increases the connection charges that are already considered unaffordable for most urban poor in informal settlements. Hence such moves will result in denying the urban poor access to water which is materially socially unjust.

Thirdly, the National Water Policy (2000) stipulates the involvement of NGOs, CBOs and communities in the delivery of services but only in rural areas where funding responsibilities are being shouldered by the communities more than before. This limits further the management of urban water systems to the state owned utility agencies and the formal private sector. It may be argued that policy promulgations in regards to cities are premised on the notions of a fully functioning reticulated system. But, in the event of underperforming water systems like in Blantyre city where the state is rapidly withdrawing subsidies and backlogs in water provision increasing, the need to involve NGOs and CBOs is undisputable. Further, although, there is much a talk about community participation and consultation, the policy does not stipulate how such will be facilitated in cities especially in the face of fully commercialised water systems. This raises the question of whether the provision of water systems will be transparent, inclusive and responsive. However, the provisions for consultations and participation within the Acts and Policies provide a clear space for pressure of political constituency.

Fourthly, The National Water Policy (2000), the Environment Management Act (1996) and the to-be-amended Water Resources Act (1969) proposition for the transfer of sanitation provision responsibilities from city councils to water boards provide an opportunity to manage urban water systems in an environmentally sustainable manner. However, it may be argued that the propositions, if effected will put unprecedented pressure on Water Boards which are presently failing to provide water systems within the cities of Malawi. Nevertheless, it is apparent that the proposals to shift sanitation responsibilities to Water Boards are in anticipation of the privatisation of urban water systems. Thus, as in the cases of Mozambique, South Africa and Argentina, the bundling of sanitation and water services are envisaged to create economies of scale in the management of urban water systems which would be an incentive for the multinational and formal local companies. The provisions stipulated by the aforementioned Acts manifest in the organisations and organisational relations within the urban water systems in Malawi that are basically similar in all cities of Malawi.

## **ORGANISATIONS AND ORGANISATIONAL RELATIONS**

There are nine main responsible bodies in the management of urban water systems in Blantyre City that is, the Ministry of Water Development, the National Water Resources Board, the Environmental Affairs Department, Blantyre Water Board, the Blantyre City Council, NGOs, CBOs, the informal private entrepreneurs, and the consumers. At strategy level, the Ministry of Water Development and the National Water Resources Board are responsible for the formulating and monitoring of water policy, and environmental monitoring and control. Their establishment and duties are provided for in the Water Resources Act (1995). At the tactical and operation levels, the Ministry of Water Development consists of the Water Resources, and Water Supply and Sanitation divisions. The former is responsible for planning, protection, conservation and monitoring of both the ground and underground water resources. However, its responsibilities extend to the installation of boreholes in the rural areas (Kalua, 1999) The latter is responsible for piped water provision in rural areas and the coordination of water provision by the Water Boards and the management of sanitation services by the district assemblies and city councils. The operations of the Water Resources Board, the Water Resources and Water Supply and Sanitation divisions are government funded part of which is donor supplemented (Mulwafu et al., 2003).

Blantyre Water Board is responsible for the water abstraction, treatment and distribution, and the water quality monitoring within Blantyre City. Its area of jurisdiction has been extending rapidly due to the extension of the city boundaries and its responsibilities intensifying due to the rapid urbanization underway in the city (Chipeta, 2009).

The Environmental Affairs Department under the Ministry of Natural Resources, Energy and Environment is responsible for formulation and administration of policy guiding the sustainable use of water resources and the monitoring and control of water pollution at national strategy level (Matope, 2000). At the local level, in Blantyre, the City Council monitors and controls environmental pollution through the control of effluent discharges, especially from industries. Blantyre City Council is also responsible for sanitation services and the enforcement of standards for effluent discharges. The Water Resources Acts (1969) provides for penalties implementation of which is the responsibilities of the city assemblies. However due to financial and capacity deficiencies, and lack of updating of Acts and progressive penalties, most of the water resources especially rivers are polluted by industrial waste in Blantyre city (Mulwafu et al., 2003). According to the National Water Policy (2000), the activities of NGOs and CBOs are supposedly limited to rural areas in Malawi. However, the involvement

of NGOs and CBOs in deprived low-income urban and peri-urban areas is becoming a common phenomenon (Chipeta, 2009; Water Aid, 2008). These organisations are mainly involved in mobilizing consumers in low-income neighbours to communally pool resources for the extension of piped water to strategic points in their neighbourhoods (Chipeta, 2009). For example, community groups have been increasingly working with Blantyre Water Board in the installation of water points in low-income neighbourhoods. In such arrangements, the Water Board provides water mains up to strategic points and supervises, and stipulates the procedures and standards for the installations of water pipes in the area by the communities (Chipeta, 2009; Sansom, 2006). Further, in some cases, NGOs have financed the installation of alternative water supply systems for example, boreholes in the informal settlements of Blantyre city (Chipeta, 2009). Such NGOs, for example, include Water Aid Malawi and World Vision International. Recently, Water for People changed its focus on rural and district interventions to including low income neighbourhoods of Blantyre city. The NGO coordinates the installation of water kiosks and training communities in sustainably managing the kiosks. Finally, in Blantyre City, the Consumer Association of Malawi (CAMA) is the only active NGO in pressure of political constituency. Its activities cover a myriad of issues affecting consumers of which water is a minor aspect.

The informal private sector water provision to low income neighbourhoods has been employed before and is still being employed in a lot of urban low income neighbourhoods in Blantyre and in other cities of Malawi (Water Aid, 2008). However, the involvement of the informal private sector has been limited to managing water kiosks and is regulated by delivery contracts with Blantyre Water Board. However, in some cases the water kiosks are self-managed by the community groups (Chipeta, 2009). From the aforementioned organisations in water system in Blantyre city, four water service delivery modes may be identified. The first delivery mode is the purely state provision where government owned Blantyre Water Board operates at full commercial basis. This delivery mode is apparently de jure being provided for in the Water Works Act (1995) and the Blantyre Water Works Act (1971). This delivery mode is supposed to effectively and efficiently serve all urban areas through extended coverage and at affordable rates respectively as provided for in the National Water Policy (2000). However, evidence shows that the arrangement fails both in effectiveness and efficiency in serving all the income categories in the city. For example, the National Water Policy indicates that the existing portable water urban supply sometimes falls below 40% coverage due to breakdowns, low level water reservoirs, and operational and maintenance problems (Ferguson and Mulwafu, 2004). And actually the rich, the poor and industries have all been hit hard by the service interruptions in Blantyre

city (Nyasa Times, 06/2009). This is exacerbated by severe financial problems which are compounded by unpaid bills by some consumers and state run organisations (Mulwafu et al., 2003). It may therefore be argued that inability to pay that consequently jeopardises performance is indicative of the prevalence of low income consumers and the fewness of high and middle income consumers. The state's failure to honour its water bills confirms the financial hardships that most, if not all, low-income countries experience. Further the high cost of connections excludes a lot of the low-income neighbourhoods from the system (Chipeta, 2009) rendering the condition materially socially unjust. These conclusions are not intended to overlook the intra-organisational inefficiencies within Blantyre Water Board.

Secondly, the Water Board contracts out the management of water kiosks in low-income urban areas. Such arrangements, although serving a lot of low income neighbourhoods have sometimes been criticised due to overcharging (Water Aid, 2008), non-payment of bills due to Water Boards by the entrepreneurs leading to disconnections (i.e. irresponsible) politicking and lack of transparency in contract awarding (hence defying the institutional dimension of this study's performance criteria).

The third arrangement is between the state and the community groups and this is exclusively in very low income urban areas which to some extent depict rural area dynamics (Chipeta, 2009; Water Aid, 2008). In this arrangement Blantyre Water Board provides water mains up to strategic points, supervises and stipulates the procedures and standards for the installations of water pipes in the area by the communities (Chipeta, 2009; Sansom, 2006). These have tended to be both effective and efficient where communities have security of tenure (Chipeta, 2009). Nevertheless, most communities are still customary in Blantyre City. The State and the Community Groups arrangements are more transparent than the state-informal sector delivery mode (Water Aid, 2008) since communities participate in the decision making of, for example, the team to manage the water assets and the financing system.

Finally, the state-civil society-private sector mode of delivery is apparently not entrenched nor institutionalised in Blantyre City. However, Chipeta (2009) documents the involvement of NGOs in water provision in Blantyre city especially in the deprived areas. Such arrangements have not been successful due to non-commitment of Blantyre City Council and Blantyre Water Board staff to such initiatives and, the lack of commitment from the community members since most of who are tenants. But the tripartite arrangements have worked in some of Lilongwe's informal settlements (the second biggest city in Malawi) whose context is equivalent to Blantyre City. This arrangement has been institutionalised among Lilongwe Water Board, the centre for community organization and development (CCODE), water aid, and

the community (Water Aid, 2008). The arrangement has proved effective in extending coverage, efficient in lowering prices, open and transparent in the undertakings, and is envisaged to be responsive in times of need (Water Aid, 2008).

Nonetheless, for all the delivery modes currently being employed in Blantyre, especially in low income neighbourhoods, water provision is mostly considered in isolation of wastewater provision which is environmentally unsustainable in this case. As noted earlier, waterborne sanitation coverage is very low in Blantyre City due to the undulating topography which makes it expensive to install the service partly due to the incapacities of Blantyre City Council to extend and manage the service, and partly due to the prevalence of low-income residents (Zezeza-Manda, 2009).

### **Would privatisation of water utilities in Blantyre City be a better option?**

The assertions by state officials and members of the formal private sector that privatising water utilities in Blantyre City would solve the water problems seem to be based on theoretical substantiation that does not fit the circumstances in Malawi at the country level and the city at a local level. Firstly, it must be stressed that the privatisation advocated within the city are concessions where the formal private entity assumes all the commercial risk in the operation of the water system. Such arrangements are in most cases designed for large private enterprises that may leverage international funding for the investment, maintenance and extension of the urban water system. However, Malawi in general and Blantyre in particular has two major disincentives for multinational companies and formal large private companies to invest in the water systems. Firstly, the economic base of Malawi is very weak and the country is ranked among the 10 poorest countries in the world. Further, the proportion of the urban population is very low and worse still the residents in Blantyre city are largely low-income. Further, the proportion of the urban population is very low and worse still the residents in Blantyre city are largely low-income (that is, the middle and high income very low) with 24% of the residents surviving on less than a dollar a day (UN-Habitat, 2011). This is unlike other countries like South Africa and Argentina, and cities like Durban to where the private sector has been attracted. The aforementioned jeopardises the prospects for cost recovery and sustained returns for the profit oriented large formal private sector. Secondly, the existing reticulated urban supply is in bad shape characterised by extraordinary breakdowns and water losses due to lack of maintenance. Hence, this calls for the prospective formal private sector to substantially invest in the water infrastructure before sustainably operating the system at

a profit. The two conditions render arrangements involving commercial risk transfer to the private sector (e.g. concessions) very risky for the private sector. In such risky situations the private sector normally opts for less risky service and management contracts. However, service and management contracts may put more financial pressure on the already handicapped state utilities. As Wiperman (2007) notes that in such contract arrangements "not only do municipalities have to pay an external company, they must also generate revenue for expansion", and evidently investment in extensions is usually not forthcoming. Therefore, despite having Acts and Policy that create an enabling environment for a socially just, environmentally sustainable and institutionally sound private sector involvement in water systems according to the prevailing international development ideologies, multinational and formal privatization cannot work in the Blantyre City context. In addition, privatization of public services requires good institutional structure for effective regulation of such issues as water pricing and water quality. In fact, attempts to privatize Blantyre and Lilongwe Water Boards have failed in the past (Bayliss, 2009) and as long as above circumstances prevail privatization efforts had better be shelved at least for now.

### **Are there other delivery options that can achieve the same anticipated goals?**

The declaration that privatization will not work in Blantyre is but without advocating for the currently ineffective, inefficient and environmentally unsustainable status quo of water provision in the city. It may be argued that the water provision problems in Blantyre may be intra-organizationally addressed without privatization as promoted by other sectors that is, through fiscal discipline, lean management, capacity building and technical advancement, intra-organizational performance penalties and incentives for staff members and departments, anti-corruption initiatives, and reinvestment into water utility capital for example. In any case, 80% of the world's water utilities are publicly managed (Wiperman, 2007) and it seems more logical to emulate the majority's success than the minority's templates whose prerequisites for achievement are non-existent in Malawi in general and Blantyre in particular. However, such intra-organizational remedial measures to water provision in Blantyre does not automatically promise efficient and effective provision to address the low income neighbourhoods' predicament in the face of the already high connection fees and water tariffs. The fact that Blantyre Water Board will still operate on commercial basis such neighbourhoods may only envisage mass disconnections and increasing exclusion from the service. This is socially unjust. However, there are currently and previously employed (but some not formalized)

practices in water provision to poor neighbourhoods that can be institutionally supported and may eventually benefit the low income residents.

The first arrangement is the state-civil society (community groups) mode of delivery where Blantyre Water Board provides water mains up to strategic points, supervises, and stipulates the procedures and standards for the installations of water pipes in the area by the communities (Chipeta, 2009; Sansom, 2006). The communities then lay pipes to either a yard tap or a communal stand pipe. But, the Acts and Policy that guide the management of water in Blantyre City are silent on such arrangements which make them *de facto* this far.

Institutionalizing these arrangements may facilitate the scaling up of water provision to the poor neighbourhoods and may also relieve financial pressure on the financially struggling state provider. The second arrangement is the State-Informal private entrepreneurs in the management of water kiosks. Apart from not being stipulated in Acts and Policies these arrangements have been operational for a long time in Blantyre City (Sansom, 2006). However, the arrangements have been crippled with corruption, politicking, and overcharging in some cases (Chipeta, 2009). Instead of a purely prerogative operation of the private entrepreneurs, an emulation of the state - bailiffs arrangements in the Cato Crest-Durban water project (Sohail and Cavill, 2001) may prove efficient, effective, transparent, open, inclusive and responsive. In this case private entrepreneurs may have to be inclusively chosen by the community and rate of tariffs agreed upon by the community. The private entrepreneurs operations may then be monitored and regulated by the state. To sustain provision, the Blantyre Water Board may capacitate the private entrepreneurs in maintaining the infrastructure. Again this needs to be stipulated in the Acts and Policies. Thirdly, does the promotion of State-Civil Society (NGOs and CBOs) arrangements promise effective and efficient provision of water in Blantyre City? At present, the operation of the civil society especially NGOs is not recognised by Acts and Policy in Blantyre City which makes it difficult for the NGOs to effectively implement their programmes (Chipeta, 2009). Further, the provision of alternative water supply systems (for example boreholes) is not recognized by the Blantyre Water Works Act (1971) nor is it acknowledged at national level. However, these arrangements have proved effective and efficient in the Orangi-Karachi Awami tanks projects in Pakistan (Ahmed and Sohail, 2003). The recognition of NGOs in the management of water systems may ensure that the projects are integrated in the city wide water projects instead of being implemented on *ad hoc* basis as is the case now. The NGOs may then be responsible for identifying deprived neighbourhoods and mobilising communities in the implementation of services. Further, NGOs donor funds may be harnessed to fund implementation of projects. Blantyre Water Board's duties can be supervision of standards of materials to make

sure that reticulation systems are not being compromised by leakages. Further, Blantyre City Council and the Environmental Affairs Departments can be responsible for ascertaining that the alternative water sources (e.g. boreholes) are pollution free. Then communities may manage the water points with the technical assistance of NGOs.

## CONCLUSION

This paper argues that privatization of water systems in Malawi, especially in Blantyre City, may not work. This is based on the premises that investing in water services would be very risky for the private sector due to uncertainties in the ability to pay – that is, large proportions of low-income residents among small urban populations, the bad shape in which the water infrastructure is, as well as the lack of a regulatory body. However improving the operations of Blantyre Water Board alone cannot guarantee better water delivery to low-income neighbourhoods. There are other modes of delivery which if formalized can extend the coverage to the low-income neighbourhoods at affordable rates. These arrangements include the state-civil society, state-informal sector and the state-civil society-informal sector delivery modes all which need institutional recognition which is currently lacking. Developing countries also need to be cautious when adopting policies that may jeopardise public interest of not properly regulated.

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