

# **The Water Crisis in Blantyre City and its Impact on Women: The Cases of Mabyani and Ntopwa, Malawi**

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## **Abstract**

Water crises tend to impact women and men of different ages differently. In most cultures, women of different ages are primarily responsible for the use and management of water resources, sanitation and health at the household level. They are the ones who fetch water, use water for domestic purposes and therefore are affected by the impact of water crises and poor sanitation. The women and girls especially in rural areas walk long distances to fetch water while men rarely participate in such activities. This therefore puts women at a more disadvantaged position when water is scarce or when there are disruptions in the supply systems in the case of urban areas. This paper documents the experiences of women of different ages in the advent of water scarcity in the city of Blantyre. The study utilized a participatory method in collecting data. Literature was also consulted to complement field findings. The data was manually transcribed, coded and analysed by using narratives and content analysis thus highlighted the main themes and sub-themes which provide the basis for presentation of the results. The study found that women especially girls experience the impact more than boys and that their school attendance and performance is disrupted. Provision of the water facilities allow girls and women to equitably compete with the boys in productive activities.

*Keywords:* Water crisis, Malawi, water and gender

## **Introduction**

Water crises are common in Malawi's major urban areas; women and girls' activities are disrupted as a result of these crises. Although access to safe water is a basic human right and essential for achieving gender equality (freeing women and girls from spending long hours fetching water), sustainable development and poverty alleviation Blantyre city in particular is facing a lot of water scarcity challenges. This does not spare any particular group of people but it is more acute among the poorest urban dwellers. This paper assesses the impact of a water crisis on households in Blantyre city focusing on the urban poor and it also documents some of the coping strategies that have been adopted by the community. The paper is based on the study on access to water conducted in Blantyre as part of the "Cities without Slums" programme and a study on gender and generation under the Gender Research on Urbanization Planning, Housing and Everyday Living (GRUPHEL). The two studies among others identified the problems that slum dwellers face in accessing water and also how the households cope with such problems. The paper highlights the experiences of households in the low-income housing area of Mbayani and Ntopwa in Blantyre. Firstly it presents the right based approach framework to water; it then covers the methodological approach to the study, and then documents the experiences of the women in Mbayani and Ntopwa.

The main objective of the paper is to document the experiences of the women in Mbayani and Ntopwa in relation to water problems. This includes documenting the problems women face in accessing water, the coping strategies that they use to sustain

themselves in times of water scarcity and then analyze the policy and institutional framework for the provision of water and the challenges that water providers face. Finally recommendation and way forward will be suggested.

### **Access to Water as a Human Right**

Lack of adequate water to meet their daily needs is a reality for many people around the world especially in developing countries and this has serious health implication (WHO 2007). The lack of water is critical among the poorest people and it has been reported as the main cause of ill health and death among the poor in developing countries. According to United Nations World Water Development report, water related diseases are among the most common diseases causing death in the developing countries. For example in 2000 insufficient sanitation and hygiene claimed about 2,213,000 lives and presently about 1.1 billion people lack access to improved water supply and 2.4 billion lack improved sanitation. If access to water is not considered as a right and more people are likely to continue dying from water related diseases then the healthy for all will not be attained.

There is a general consensus among scholars that access to water is a human right although it was not specifically spelt out in the earlier universal protocols (Gleick: 1999, UN 2005). Scholars have argued that since article 11 of Human rights, recognizes the right of everyone to an adequate standard of living, including adequate health, sufficient food and shelter, it is obvious that these require access to clean water (Turk et-el 2003). Article 24(2) of the convention of Rights of the child (1989) also requires that states parties combat diseases and malnutrition through the provision of adequate nutritional food and clean water. However, more recent human treaties include explicit reference to the right to water (Turk et-el 2003). In 2000, the United Nations Committee on Economic, Social and Cultural Rights, the Covenant's supervisory body, adopted a General Comment on the right to health that provides a normative interpretation of the right to health as enshrined in Article 12 of the Covenant. This General Comment interprets the right to health as an inclusive right that extends to those factors that determine good health such as access to safe drinking-water and adequate sanitation. In 2002, the Committee further recognized that water itself was an independent right. Drawing on a range of international treaties and declarations, it stated: "the right to water clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival". [http://www.who.int/entity/water\\_sanitation\\_health/rtw1.pdf](http://www.who.int/entity/water_sanitation_health/rtw1.pdf) 28-03-09

The interpretation of the human right to water by the General Comment 15 is that: "The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. It also assets that it is important that both women and men should participate in decision making process regarding the provision, location and technology of water and sanitation facilities in the community and household [http://www.who.int/entity/water\\_sanitation\\_health/rtw1.pdf](http://www.who.int/entity/water_sanitation_health/rtw1.pdf) 28-03-09

Water and sanitation are a primary need, as recognized in the MDGs. At the Millennium Summit in 2000, Heads of State pledged to halve the proportion of people who are unable to reach or to afford safe drinking water by the year 2015. This "Millennium Development Goal" (MDG) was reinforced by a similar goal for sanitation

contained in the Johannesburg Plan of Implementation (JPOI) agreed to at the World Summit for Sustainable Development (WSSD) in 2002. Interagency Task Force on Gender and Water (2005) [http://www.who.int/entity/water\\_sanitation\\_health/rtw1.pdf](http://www.who.int/entity/water_sanitation_health/rtw1.pdf) 28-03-09

The decade 2005-2015 has been declared ‘the International Decade for Action: Water for Life 2005-2015’ to promote efforts to fulfill international commitments made on water-related issues by 2015 (WHO). The Dublin conference on Water and Environment (1992) set out four principles and the most important ones to this paper include: water development and management should be based on participatory approach involving all stakeholders who include the policy makers, users and planners at all level: women should play a central part in the provision, management and safeguarding of water.

Agenda 21 produced by the UN conference on the Environment and Development (UNCED) in 1992 set areas for action some of which related to water such as ‘to half the proportion of people without access to safe drinking’ water and to ensure that all children boys and girls equally, complete a course of primary education. The Hague Declaration of March 2000 adopted 7 challenges concerning the management of water resource and encouraging participation by all stakeholders and also taking into consideration equity and the needs of the poor and vulnerable. It specially recognized the situation of water in urbanizing world. In the 2002 the World Summit on sustainable Development the UN Secretary General Kofi Annan recognized water and sanitation as integral to a coherent international approach to sustainable development. The Nijmegen expert consultation organized by Women’s Environment and Development Organisation (WEDO) the women set guidelines for implementing government commitments, gender equality, poverty eradication and access to water and sanitation. In this consultative meeting issues of integration of gender in water policy were recommended and reaffirmed that water is a human right. It also recommended women empowerment and equitable provision of water services and encouraged national government to adopt and implement gender policies in consultation with poor women.

### **Conceptualizing the right to water**

There has been confusion between the human right to water and water rights and it is necessary to differentiate the two. Favre (2008) defines human right to water as accessing or using water for specific purpose while water rights defines who can use water and what circumstances, it deals with licensing. However the two concepts are related in the sense that the right to water focuses on the amount of water necessary for basic human needs such as 20 to 100 litres per person per day. The right to water is a precondition to the enjoyment of other rights such as right to food, health, education for all, etc. The Human Rights Council does not refer to a stand-alone right to water and sanitation but talks about human rights obligations related to safe-drinking water and sanitation (Office of the High Commissioner for Human Rights 2007). This means that access to a regular supply of safe water is a basic human right, just as it is to access other basic necessities. However many people have not recognized this right as evidenced by lower number of world’s population (1.1 billion out of 6 billion) who do not have available sources of clean drinking-water, such as protected springs and wells. Lack of access to safe water has a major effect on people’s health. Poor health constrains

development and poverty alleviation. Poor water and sanitation have an impact on education, but when safe water and appropriate sanitation are provided in schools, increased attendance and a reduction in drop-out rates results. [http://www.who.int/entity/water\\_sanitation\\_health/rtw1.pdf](http://www.who.int/entity/water_sanitation_health/rtw1.pdf) accessed 28-03-09) of 6 billion people, at least.

### **Conceptualizing access to Water**

There are divergent opinions on the interpretation of access to water but there is also a general consensus. The United Nations (2007) refers to access as the physical accessibility and affordability but stresses that economic accessibility does not mean water should be provided free. The WHO definition of access to water varies according to location, but averages 20 litres per person per day within one kilometre walking distance from the household. African women may walk over six kilometres per day in search of water, spending as much as eight hours collecting water.

In most countries, girls often are given the task of collecting water, carrying 15 to 20 litres of water from the water point home. Access to water and sanitation is therefore related to the time that girls need to attend school, and can be the reason why they are kept out of school. In many developing countries, furthermore, girls are often not permitted to attend schools that do not have latrines out of concern for their privacy and modesty.

Therefore, access to fresh water and sanitation does not only improve the health of a family, but it also provides an opportunity for girls to go to school, and for women to use their time more productively than in fetching water. It is estimated that the investment required to meet the Millennium Development Goals for safe drinking water and basic sanitation would require an additional investment of approximately \$30 billion a year, twice what is now spent in those countries which currently have large numbers of people without access.

### **Gender Equity in Access to water**

Although there has been recognition of the importance of gender balance in water management it is important to understand the role and responsibilities of men and women. In most cultures men and women have different roles and responsibilities in the use and management of water. Women and girls are responsible for collecting water for cooking, cleaning, health and hygiene and in rural areas they walk long distances to access water often spending four to five hours per day carrying heavy containers and suffering acute physical problems (Khosla 2004). While this is true for rural areas in urban areas women and girls spend many hours on a queue to collect water at water points. The burden of fetching water inhibits women and girls from engaging in other productive activities such as education, income generation, cultural and political involvement, rest and recreation (Öman et.al 2007). Women are caretakers of children the sick and lack of access to safe drinking water overburden them more as they spend time taking care of the sick suffering from waterborne diseases. This disrupts women's participation in income generating activities and also disrupts girls from school. According to WHO (2007) about 80% of the all sickness in the world is attributable to unsafe water and sanitation. Lack of basic sanitation and safe water is an acute problem for girls and women who live in poor and overcrowded urban slums and rural areas of

developing world (WSSCC 2006) quoted in Öman 2007. It is therefore important that women and girls should be involved in water and sanitation services to achieve a more equitable provision of water and sanitation services.

### **Obligations of the State in the Right Based Approach to water**

The human rights-based approach to water supply and management has stipulated responsibilities and obligations on the part of the users and the government, these include: obligation to protect, to respect and to fulfill. The obligation to protect requires that governments refrain or prevent third parties from unjustly interfering with individuals' access to safe-drinking water and sanitation. The obligation to respect demands that governments ensure that third parties, including individuals, groups, corporations and other entities under their authority do not interfere with individuals' access to safe-drinking water and sanitation. The obligation to fulfill, demands that States adopt the necessary measures directed towards universal access to safe-drinking water and sanitation.

### **Methodological Approach**

This research is based on a study conducted in the two unplanned areas of Blantyre, namely Ntopwa and Mbayani. The two areas were purposively selected targeting the most deprived areas in the city. Ntopwa is located in the peri-urban area while Mbayani is centrally located but these two share similarities in terms of access to water. The samples were purposively selected depending on the respondent's availability. The study utilized qualitative methods with its related techniques of focus group discussions, key informant interview and life histories. The data was analyzed manually using the narrative analysis. Themes were identified and grouped and have been used as the basis for analysis of the data.

### **The City of Blantyre**

Blantyre city is the commercial capital of Malawi and it is located to the southern part of Malawi. It is one of the historical towns in the Southern Africa associated with the early missionaries and named after 'Blantyre in Scotland the home of Dr. David Livingstone. Blantyre's present population is 661,444 (NSO 2008) and it has been rising at an average of 7.5% per annum (Table 1. refers). It is the largest city in Malawi followed by Lilongwe the capital city. Considering population growth, it is expected that the demand for water services might reach proportions difficult to satisfy.

**Table 1: Population Growth in Blantyre City**

<b>Year</b>	<b>Population</b>	<b>% pa</b>
1947	16,408	12
1966	109, 461	8.0
1977	219, 011	6.4
1987	333120	4.25
1998	502,053	6.0
1999	519,000	

2008	661,444	8.5%
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## **Legal and Institutional Framework**

### *Water Policy*

Water is one of the important infrastructures that requires attention especially in the upgrading of informal settlements. Most of the informal settlements lack access to clean water close to their houses. The Water Policy objective is to expand and improve level of water services by providing infrastructure that will promote economic development. Section 6.2.2 of the water policy aims at promoting sustainable development concepts in the delivery of water services based on participatory and demand responsive approach (DRA), value based investment and consultative approaches. Therefore, there is a policy shift in the provision of water from paternalistic to demand driven approach. The water policy also aims at empowering user communities to plan, operate, maintain and manage their water supply systems and associated conservation measures. The policy intends to reduce cost of provision especially to those areas that individually require connection and to create an enabling environment for private institutions to effectively participate and invest in water services delivery. This provision has not been systematically followed except where donor conditions like World Bank stipulates that water be a prerequisite to the loan. However, provision of water to unplanned areas, as a condition for World Bank Projects funding has made those areas attractive thereby enabling them to expand and to gradually being densified. The expansion has been so high that the water authorities have not managed to meet the demand and has created a crisis in the city of Blantyre.

### *Institutional Responsibility*

The water supply in the city of Blantyre (population 661,444) is managed by Blantyre Water Board (BWB), a parastatal organization. Blantyre Water Board, established in 1929, pumps water 48 km away at Walkers Ferry on Shire River and has a stand by dam at Mudi (Blantyre) where treatments works are located. BWB aim is to provide connection to all people by meeting full demand of treated water. Blantyre Water Board (BWB) operates on the basis of the level of income of its clients therefore, supplies water on the basis of affordability. But to make sure that they reach all their clients in the unplanned settlements and considering different levels of income, they apply a group 'pooling' policy. In this policy either the individuals, BWB take water to strategic points in the settlements. It's under this policy that community water kiosks operate. They are considered a cheaper method of supply. Besides, those that can afford private direct lines to their compounds are encouraged to do so. However, it has covered 75% providing 86,800m<sup>3</sup> per day (78,000m<sup>3</sup> from Walkers Ferry and 8000m<sup>3</sup> from Mudi Dam) against a demand that is reaching about 98600m<sup>3</sup> per day (Blantyre City Assembly 2006). The BWB does not have adequate funds to extend reticulation nor upgrade the aging infrastructure. As the BWB cannot meet the cost of financing mains extension throughout the city, communities are encouraged to raise their own funds (from their members, NGOs, donors and other funding agencies) in order to speed up the implementation of water projects of their areas. However despite the benefit of this approach in increasing the rate of coverage, the problem has been related to use of materials of varying quality and substandard workmanship which has led to leaks, wastage and lack of pressure. The lack of availability of spare parts and other problems exacerbated the situation. Blantyre

Water Board has provided assistance for community projects on request in order to rectify this problem and maintain the benefits from community or NGO/donors financing extensions. The BWB decided to standardized procedure and play a more active role in the planning, implementation and monitoring of community initiated extension projects. BWB now accepts application for water development in low income housing but stipulates a procedure and provides supervision at all stages. This is to maintain quality and avoid contamination through leakage of pipes. This new arrangement gives a chance to communities to fully participate in the affairs that concern them. This relieves the BWB of its great pressure to supply water in the city. However despite this effort and arrangement, low income housing areas are still facing water problems. According to BWB the set maximum distance to access safe water in informal sector is 200m but this has not been attained in some cases the distance is more than 500m.

The communal water points are run by the community or private entrepreneurs. It is observed that though supply can meet demand, the informal settlements are not adequately supplied (Kabanga, 2002:25) Further since the pumping is dependent on power availability, there has been instances where supply has virtually ceased for up to a week in the whole city due to power failure. The frequent power cut has negatively affected the operation of the Blantyre Water Board in supplying water in the city.

Water is also provided through various NGOs that have endeavoured to assist the water crisis in unplanned areas; such organizations as World Vision International, Water Aid have assisted in the area of water and sanitation. These organizations provide shallow wells and sensitization of communities on use of water, hygiene and maintenance of these wells. Although these organizations mandate was mainly to assist rural areas, they have now extended to peri-urban areas which share characteristics of rural areas. These operate through community water committees. These work well in rural areas but are problematic in urban areas because people are not permanent dwellers and have no secure tenure as most of them are tenants. One other problem that affects the performance of these organizations on provision of water is lack of support from the City Assembly. According to sources from the World Vision Coordinator the City Assembly was not corporative enough and they decided to work more with the District Health Office in matters of water and sanitation (Blantyre City Assembly 2006).

The Malawi Social Action Fund has also been instrumental in providing services in peri-urban areas. This organization also encourages community participation but there is a problem of effective participation in urban areas due to lack of commitment of residents as a result of non permanency of the residence. The above documented case of the organization providing water to unplanned settlements indicates that there is obligation to facilitate provision of water through government and, NGOs and private institutions. However, this obligation is constrained by the higher demand as a result of the growing urban population.

### **Access to Safe Water**

It is assumed that access to safe drinking water consists of two parts: those who use water from treated water, ground water or bottled water and the rest who use water from surface water. Water that is treated, ground or bottled is assumed to be safe and clean. Only a limited percentage of the population has access to this water. The remaining population uses surface water including: water from rivers, lakes, and

reservoirs, which can be easily polluted. The percentage of surface water that is safe to drink is related to the amount of pollutants (only BOD in the current version of T21Malawi) in surface water. The higher the average pollutant concentration, the lower the percentage of surface water that is still safe to drink. Pollutants are from sewage, agriculture runoff and industry discharge. Safe water coverage for the first part is assumed low for Fortress World, a bit higher for Market Force, still higher for Policy Reform, and highest for Great Transition. The national average of access to safe drinking water is calculated using the coverage of clean water for the first part and the percentage of safe surface water from the second part McDermott L (2005). The WHO definition of access to water varies according to location, but averages 20 litres per person per day within one kilometre walking distance from the household is regarded as having access to water.

Access to safe drinking water is one of the Millennium Development Goals (MDGs) and Malawi poverty reduction strategy targets (MPRSP). Two thirds of the household have access to safe water and the proportion is higher in urban areas at 85% than in rural areas at 64% (NSO 2005). The higher income groups have higher proportion of people who have access to water than the lower income groups. Although the picture show that access to water is higher in urban areas the situation is different for Blantyre City where about 57% have access to improved water source, with only 3.8% piped into the dwelling, 45% piped outside /communal standpipe, 7.1% hand pump/borehole, 20.4% unprotected wells and 23% river (NSO 2005). This indicates that in Blantyre City a good number of households still use unsafe sources of water even though Blantyre is a city where majority are expected to have access to portable safe water. This is an indication that the service providers are failing to meet the demands of the majority of urban dwellers, thus putting in danger a good number of people.

Blantyre city has not been able to meet the demand even though its water service was installed much earlier than in other cities. Blantyre despite having well established Water Board has experienced a number of problems in servicing the city. One of the problems is related to lack of resources both human as well as financial resources to revamp their own reticulating system. The other problem is that the city has been overwhelmed with population increase that it has failed to stretch its tentacles to meet everyone's need. Majority that lack access to portable and safe water are in peri urban areas. These areas are located in periphery where major water points are not yet installed. Service providers shy such places because it is costly and provision is done on ad-hoc basis. Therefore majority living in these areas do not enjoy their right to access water. Similarly they do not benefit from the rural programmes as they are located outside the rural area of jurisdiction as a result they suffer double blow as result of their location. The other problem of Blantyre is that it has expanded its boundaries incorporating village with rural characteristics in terms of its livelihood systems as well as their physical structure. These communities are unable to demand an urban water service which is supplied basing on effective demand rather than on need. The communities' per capita income is relatively too low to afford urban water service. Such being the situation women and girls suffer to try to get money for domestic use. The various experiences are documented.

### **Water Situation in ‘Ntopwa’ PWA’**

Ntopwa is one of the unplanned settlements in the City of Blantyre and it is located in Blantyre’s second centre known as Limbe (fig 1 refers). This is one of the areas that has been marginalized in terms of water provision. A study conducted by City of Blantyre (2005) under cities without slum programme, indicate that most households in Ntopwa depend on unprotected wells due to almost non existence of portable water supply. For example there is only one borehole in the area. From site observation and key informant discussion with the residents in Ntopwa it was evident that this peri-urban informal settlement is completely ignored in terms of water and other services. This area depends on natural sources of water from shallow wells and rivers. This puts the residents at risk and deprive them the right to enjoy in the city. Having water points nearer the homestead will reduce the distance women and girls walk , thus allowing time for other activities including training, child care, growing food and income generation (UNDESA 2005). Unfortunately provision of water in Ntopwa is far below that standard. This heavily affects women’s hygiene as well as their welfare and consumes much of their productive time fetching water. One of the girls Esnat in Ntopwa narrated her experiences as follows:

‘in times of water scarcity especially when our near neighbours’ taps go dry we completely depend on shallow wells or water from rivers. We are advised to boil such water but our income is too low to afford the firewood to boil the water therefore we do not boil it. There are times that we go without a bath just to save the water for other domestic use’

The above situation compromises the hygiene requirements of girls and puts them at risk of contacting sanitary and water related diseases. Women should be part of the decision making as far as water is concern because they are to fight for their rights to access water especially in peri-urban areas. Although women are now being involved in water committees this is common in rural areas but urban committees are still dominated by men who do not feel the pain of having no water around the house. Women participation at higher decision making level such as at Assembly level would improve the chance of lobbying for water services at community level. Studies have shown that women do not participate fully in Assemblies affairs therefore deny them a chance to lobby for water requirement in their areas (Chipeta 2005).

### **Water Situation in Mbayani**

Mbayani unplanned settlement lies to the eastern part of the Blantyre city centre on Zalewa road (fig 1 refers). In 1954, this area was designated as the town planning area and encompassed Mbayani, and other villages. The present unplanned settlement of Mbayani originally developed as village stretching from the North East of Likhubula River (near the present Mt Soche Hotel) to Chirimba stream, thus making boundary with Kameza village. Mbayani unplanned settlement has developed on private land called Chirimba and Ngumbe Estate shown as SD/2864 between Nyambadwe and Kabula hills and very close to the Blantyre CBD. The settlement has developed on private, public and what is thought to be customary land. The private land is known to be owned by two



pipes. As a result of the above, people resort to unsafe sources such as wells and streams. However the Water Board indicated that they had problems to service the unplanned areas because of lack of roads and space where they can lay their pipes. One of the Blantyre Water Board officials indicated that:

‘servicing some areas means passing the pipes under someone’s house or there is need to demolish some properties which can be very expensive for us. On the burst pipes he said that most of them remain unreported and people abuse these points by taping free water.’

Mbayani is one of the densely developed unplanned settlements where there is virtually no open space that can be utilized for provision of water services without demolishing some of the houses. It is therefore very difficult to make individual connection or to make detection of water leakages. As a result of poor water supply, people resort to unsafe water sources of shallow well or nearby rivers. This has contribute to the outbreak of cholera especially during rainy season there have been various press report on the outbreak of cholera in Mbayani, and other parts of unplanned settlements including Ntopwa. This has necessitated emergency relief which could have been avoided if proper water and sanitation services were available. This has also added more burden on women as they take care of the sick who have suffered from waterborne diseases.

### **Problems Relating to Type of Water Provision and Management**

In most unplanned areas water is mainly provided through communal pipes or kiosks which are run by the communities or individuals. In Blantyre unplanned areas only 11% have a tap water inside their houses while 13% have stand pipes outside their houses and the rest depend on either kiosks or communal water points. The reason for the low level of taps inside houses appears to be the higher tariffs, whereas communal water points pay MK23/cm<sup>3</sup>, individual taps pay MK40/cm<sup>3</sup> Blantyre City Assembly (2005). Although the tariffs seem to be cheaper for communal water points it does not benefit the communities as the committees and individual kiosks owners charge higher prices as they need to make profit and also there is no liberty of accessing water at anytime households need water. In Mbayani for instance there is Kabula Development Association which is responsible among other things to coordinate and manage communal water points and kiosks. The communities in Mbayani indicated that they face a number of problems with the operation of the communal kiosks and the communal water points. Some problems include lack of access at particular times, high water charges and disconnections. The kiosks are not opened on 24 hour basis therefore both women and men have problems to access the kiosks especially early in the morning and after work. The opening times are not convenient for example kiosks would open at 8.00 am and close at 5.00 pm, these times are not convenient for those families and individuals that are formally employed even those that are in informal businesses (see fig two showing a kiosk by 1pm it was closed). Some employees manning these communal kiosks and water points indicated that they close because they want to rest. At times the community taps and kiosks get disconnected because of non payment of water bills. This is not uncommon in most unplanned areas, the committees default payment for the taps and sometimes misuse the funds that are collected and the water Board disconnects.



**Fig 2: Water kiosk in Mbayani**

Sometimes disconnections are effected because the customers steal water from the water Boards especially in areas where Water Boards directly man the kiosks but in many areas this has been decentralized to the local communities. At times the taps run dry in Mbayani, this is a common problem in Blantyre

### **Coping with Water Problems**

The concept of coping mechanism refers to activities of those with little choice, with coping defined as a short-term response to an immediate problem within the prevailing rule system or moral economy (Davies 1993) quoted by Beall & Kanji (1999). According to Frydenberg & Lewis (1991) the notion of coping as developed by psychologist has acquired a variety of meanings, which are often used interchangeably with such concepts as mastery, defense and adaptation. However in this paper the definition by Lazarus et al (1974) will be adopted which define ‘coping as consisting of efforts, both action oriented and intra-psycho, to manage (tolerate, reduce minimize) environmental and internal demands and conflicts. Comprehending the set of coping strategic options may be very complex. While there are constraints imposed on actors as agents, the kind of choices people make, and their subsequent actions, lead to certain outcomes, whether intended or not (Muzvidziwa 2003).

In order to cope with situations of water inaccessibility communities have devised coping strategies some of which are precarious and expensive. Some of the strategies include, storing water in large 50 - 100 litres containers, buying water from privately owned taps, drawing water from wells and nearby rivers. Sometimes households have to recycle the water and reduce number of bathing times. These strategies have advantages and disadvantages. For example the storing of water in large containers while it helps to have a reserve the water is vulnerable to pollution during storage and use. There is also

possibility of using too much water as water is readily available. Buying of water from private owners has proved to be expensive for example one of the resident, Rosemary in Mbayani said:

‘my family of 10 requires about 400-600 liters of water per day for bathing, washing and cooking. This means that I have to walk for a long distances to access water and if I buy I have to spend a lot on water, since my family is too big it would be very expensive to buy water as my family income cannot accommodate that therefore we supplement with water from wells’.

As a result of lack of reticulated water people have resorted to digging their own well which they use and also sell part to the water as an income generating activity. Fig 3 above shows one of the well in the unplanned settlement of Bangwe. However Rosemary indicated that:

Although we access water from buying from our neighbours stand pipes or wells the cost of water is too high for example we pay MK2 per 20litres from the Water Board source but we pay MK4 per 20 litres from other sources. It is very expensive for us and we cannot manage to meet our basic daily needs without sacrificing maybe bathing or other activities.



**Fig 3 : Alternative sources of water – a well protected well**

The strategy of fetching water from alternative sources far from home has an impact on the productivity of the family. Women and children, especially girls suffer most in situations of inadequate access to water and sanitation. Girls will often stay away from school helping their mothers collect the family’s daily supply of water. With as many as half of children under five years suffering from diarrhoea, mothers cannot engage in productive activities as they tend to ill children. According to the HDR, achieving the water and sanitation MDG target would save about US\$ 2 per capita-

equivalent to about 12% of public health spending in sub-Saharan Africa (UNDP 2006). It also makes women vulnerable to attack and abuse as they wake up too early to fetch water early enough to engage in their other reproductive and productive roles.

The buying of water from private tap owners is a drain of the household incomes and may affect household's nutritional status. Some tap owners take advantage of the scarcity of water in the unplanned areas and overcharge the water to make profit and institutionalize this as a profit making activity and in the process exploit the most vulnerable group who cannot afford to make individual connection. The water buyers have to trade off their nutritious meal for water thereby affecting their nutritional value and making them more vulnerable to diseases.

Drawing water from unsafe sources is a precarious strategy as it makes people vulnerable to waterborne diseases. Various media reports have indicated frequent cases of waterborne diseases such as cholera in Mbayani unplanned areas. This is a drain on the country's coffers as the country provides treatment of these diseases. It also disrupts other productive activities especially for women who are care givers to the sick.

Other coping strategies include water recycling; this may involve recycling water for washing dishes, or using the same water for bathing several children. This is an unhygienic way of coping with problems of water. Relate to this coping strategy is skipping a bath this may not be very hygienic to girls and women who require frequent baths, similarly it may not be good for the children and it may lead to hygiene related diseases like scabies.

### **Conclusion and Way Forward**

This paper has shown that living in unplanned areas is no easy task especially due to lack of services. Unplanned residents have the right to live in the city, therefore there is need to adopt the right base approach in provision of services in urban areas. It is important that individuals should have access to water because 'water that is begged for does not quench thirst (Water for People 2006). The paper has shown that residents in unplanned settlements are facing a lot of challenges in accessing water. Water resource in Malawi is abundant but the problem is how to get it to people especially the low income residents. Cities are Magnet of Hope borrowing from the theme of World Habitat Day of 2006 and these will continue to attract rural migrants who will come to seek economic and social opportunities. Water is life therefore drinking or using unsafe water is destroying the life. Most of the migrants are the poorest and live in unplanned settlements where services are either in adequate or virtually absent. The absence of water increases burden on women and girls as they have to walk long distances to neighbouring housing estates or to rivers to access water which is normally unsafe. These women are deprived of the right to enjoy in the city as they spend most of the time fetching water. They either wait on long queues for safe water or walk long distance to access unsafe water which causes waterborne diseases. These women may then be responsible for taking care of the sick if members of their family get sick after drinking unclean water. In Malawi just like in any other sub-Saharan countries women are involved in multiple roles and adding the role of fetching water is overburdening them any further. If no water is accessible in physical and economic terms women's right to enjoy the city and to taking care of the family is disrupted. Since mothers and daughters

share the same responsibilities of fetching water and taking care of their sibling, the girls school life is heavily disrupted as well.

### **Enhance Community Participation in Water Delivery Systems**

It is therefore recommended that every resident should enjoy the city by having access to water. Access to water is human right, just like any other basic human right like access to food, shelter and health, access to water is equally important in fact good health may not be attained if households are drinking unsafe water or if they do not have access to sanitation facilities. Women require water for domestic use and also for hygiene purposes. Girls may not be able to go to school if they are overburdened by the role of fetching water from long distances or by waiting on long queues. Similarly girls would need water for hygiene purposes and if there is no water to bath when menstruating they may miss classes. This means that girls' school attendance will be disrupted and there will be no equity in education attainment between boys and girls. Water Boards in Malawi have adopted an effective demand driven approach to provision of water, this demand may not be evident in low income housing areas because of low incomes, therefore as much as we do not recommend hand outs it is proposed that certain conditions be waived.

The communities once connected, should be able to pay for services but what is required is that they should be a participatory approach to service provision. It is proposed that the communities just as it is with rural communities should be able to contribute to water provision endeavors by the various organizations. Among slum dwellers there is spirit of social/community cohesion and this can be enhanced. The communities are already participating in the Public works projects therefore they should be able to do the same in water projects. Participation of user beneficiaries would be very important especially women who are mostly affected with water problems. In some peri-urban areas in the country women participation in water management has shown to be very effective. When men are put in charge of the communal water points, they may not effectively service the women as they maybe absent during the day when water is needed most as they lack service orientation and financial management skills. In Malawi it has proved that women when given the responsibility of managing communal water management responsibilities both sanitation and water management improve significantly. But this increased the women's burden and a more balanced management consisting of men and women was constituted. For the success of programmes of service delivery among the urban poor this strategy should be emulated in all unplanned settlements. Engaging local communities to manage their water supply and claim their right to clean water is proving successful in urban and rural areas (UNDP 2006). This should be followed by change of policy and law.

### **Strengthen Institutional Policies, Strategies and Service Delivery Arrangements**

There is need for strengthening institutional policies, strategies and service delivery arrangements in facilitating service delivery to the urban poor. As there are so many institutions involved in water provision, the nature and characteristics of the laws and policy governing their operation varies greatly. However, despite these differences the lack of specific institutional policy and strategy for reaching the poor is a common constraint. It therefore recommended that Policy should be developed to explicitly target the urban poor. Policy should be backed by clear strategies and supported by the

allocation of adequate resources. Government should also honour its obligation by providing service providers with adequate funds for them to carry out implementation of water projects. There is need to make deliberate strategies to meet the needs of the poor who cannot manage to pay for individual connection. Water committees should be strengthened through training as well as awareness campaigns on their responsibilities and rights in the water provision. There should be information flow on how these marginalized communities can maneuver to get water to their communities. All this requires government support by providing enabling environments to communities and the local authorities responsible for water.

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