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# Community Management and Water Service Delivery in Africa

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## Abstract

Access to affordable and clean water has remained a challenge globally. Most states in Africa states have championed the provision of water to its citizens through state driven approaches. Despite the evidence that community water supply has contributed positively more than any other single approach to provision of water supply in Africa, it is still regarded as an informal approach. Most states in Africa still prefer other conventional approaches like Concession and Affermage in Francophone Africa and Commercialization through Management contracts in Anglophone Africa at the expense of the community water management. Either the state has not used the right approach or has neglected the community. Using evidence from Kenya, Tanzania, Malawi, Ghana and Nigeria, the paper has argued that the failure by the governments to acknowledge the disconnect between the community needs and state priorities has been responsible for the poor state of water provision in Africa.

**Keywords:** community management, service delivery, public private partnerships, community water, state

## 1. Introduction

Community water supply may acquire region or county specific definitions. However, it is generally identified by the people it serves, the purpose it serves and the manner in which it is operated. The meaning ranges from a public water system that serves at least 25 residents throughout the year and may consist of one or multiple wells or reservoirs as in Sri Lanka. Ref. [1]; an alternative to private sector participation in water supply, particularly with respect to urban areas [2] to a community-run small-scale water projects which play a crucial role in the provision of an essential service, especially in the absence of any other alternative [3]. Irrespective of the finer details of the typologies, there is a consensus on the nature and purpose of community water management. Typically, local community groups or 'community-based organizations' (CBOs) bring together people for a common purpose and are agreed on how to achieve the objective through their own management, in the pursuit of which they could be partnered in their operations by NGOs which facilitate technical and financial resources and help relax the prohibitive restrictions regarding land tenure [3]. They could also be partnered by the government or other communities for the realization of the same objective. The Community-based self-provision allows communities to form their own institutions for water delivery without formal connections or partnerships with utility operators or municipal governments. Community self-help initiatives tend to be smaller

in scope than formal utility-community partnerships and often operate in small towns [4]. The rise of community water initiatives in different parts of the world gained momentum after the UNDP led Community Water Initiative (CWI) to support decentralized, demand-driven, innovative, low-cost, and community based water resource management and water supply and sanitation projects in rural areas through participatory development approach for water supply scheme planning, construction and scheme management.

From 1990s, the community water management has gained more credence as an alternative source of water supply especially in the rural areas and informal settlement areas in the urban centres. Community management of rural piped water supplies is now widely established in many countries and will become even more common in future [5]. This increasing emphasis on institutional dimensions of service delivery is also reflected in the Delhi Statement<sup>1</sup> of 1990, which was to provide guiding principles for water supply and sanitation in the 1990s. While maintaining a focus on the use of low-cost appropriate technologies, the Statement include principles for institutional reforms, institutions of community management of services and sound financial practices [6]. In Latin America, the disadvantaged segments of the community get supply from leased regular water pipelines operated by richer businessmen on behalf of the government. In Cochabamba-Bolivia, 74% of the poorest residents lack access to municipal water service and therefore rely on communities built commonly managed wells and water systems. Although Sub-Saharan Africa is making the slowest relative and aggregate global progress with one in three people (30%) without improved drinking water access [7], most clean water is delivered via community-managed water points, either hand pumps or piped gravity-fed systems. In Bolivia the dissatisfaction of the community against privatization of water services caused serious riots that resulted into the cancelation of Multinational Water supply contract. There are scholars who have little faith in service delivery under the community management mode. In separate studies, argued that community management is less impressive than theory suggests and has serious problems have regarded the concept of community management approach as 'myth' in common pool resource management in Africa [7–10]. This is further lent credence by the fact that whether at central, regional or local, governments play dominant role in all-Africa infrastructure assessment except in water. It is only in the area of providing and maintaining water services that local communities have a leading role.

In Africa, community water supply operates mainly as an informal sector. Whereas in some countries, the supply has been a deliberate move by the government to distribute water to the disadvantaged through water communal points like in Uganda, Ethiopia and Malawi and Tanzania [11], in others especially, Kenya; community water supply has been orchestrated through self-help initiatives by local communities with no direct involvement by the government. It is prevalent in both rural and urban sectors. Once established, the community water projects seek support from donors which may include the government and its agencies; nongovernmental organizations, Church and even individuals to help them increase water access, first to the members of the organization and secondly to customers. To that extent, community water has increasingly become an alternative means to water supply to increasingly larger and economically disadvantaged segments of the society. Despite the evidence that the community water supply has contributed positively more than any other single approach to provision of water supply in Africa, it is still regarded as an informal approach.

The paper argues that community water management approach has not been pursued through its optimal level. Either the state has not used the right approach or has neglected the community. The argument is that the state ought to have used deliberate and formal approach to facilitate the management of community water

supply. It is therefore the absence of a strategic approach which paved way for the community to be engaged through some semi-formal Public Private Partnership especially in Kenya.

To what extent has failure of the governments to source and distribute water to the deserving population responsible for mushrooming of community water management approach in Africa? The obtaining trend is the observation that the government is inadvertently acknowledging its inability to provide water to its citizens in the required quantity, quality and time and thereby inviting alternative suppliers/communities. Are the communities competitors or partners of the government in this endeavor? By analyzing community water management systems in Kenya, Tanzania, Malawi, Ghana and Nigeria, the paper argues that Community water management increases access to water through enhanced PPP, popular participation, and institutional governance.

### **1.1 Theoretical framework**

The paper is based on the theory of New Public Management in the delivery of public services as propagated by Hood 1990, Kaboolian, 1998, and Page, 2005. The assumption is that governments need to disaggregate public services to their most basic units and focus on their cost management. In this context, the government shall increase access to water by recognizing and establishing community water organizations by focusing upon entrepreneurial leadership under community management, each of which will initiate their own innovations to ensure result based outputs. The community water organizations that will then be subjected to input-output control and evaluation upon performance management and audit. By doing this, more efficiency, public private partnerships and innovation shall be realized resulting into increased access to affordable water to the undeserving segment, currently unprioritized. This is informed by the argument that as currently constituted, community water management has largely been ignored. They either operate informally and independently as in Kenya, direct control under local governments like in South Africa, managed public private partnership as in Ghana or with under loosely managed and unmonitored outfits in countries where the government had initiated the projects like in Ethiopia, Malawi, Uganda and Tanzania, hence gross underperformance.

### **1.2 Methodological approach**

The paper has used a comparative case analysis method to discuss community water governance in Kenya, Malawi, Nigeria, Ghana and Tanzania. The countries present a geographical diversity; Kenya and Tanzania in East Africa, Nigeria and Ghana in West Africa while Malawi in Southern Africa. All are part of Anglophone Africa. All except Nigeria have gone through water sector reforms and adopted mainly commercialization of water services. Whereas Kenya and Nigeria have non institutionalized community water management approach, the other three have institutionalized government driven community water management approach, with Ghana most vibrant. Tanzania and Malawi are cases of overwhelmed state projects, which are steadily giving space for private community water management interventions. Finally the states form different categories of role of state in community water management. Whereas, Kenya demonstrates an Inspector/Prefect role, Tanzania and Nigeria are Mediator category while Ghana and Malawi are Benevolent States. We evaluated (1) the different sources of water for the communities, (2) The membership of community water organizations (3) the role of government in community water management and (4) The role of public private partnerships in community water service delivery. We conducted a desktop analysis



of the interactions of the actors involved in community water management systems in each country ranging from source to distribution. Of particular importance was the role of the government in each of the activities and how that impacted on water access to the consumers and with what results. The fundamental question was whether or not community management improved water service delivery in the five African counties.

### 1.3 Results and discussion

We have discussed in this section, the dynamics of community water management in the five counties namely, Kenya, Tanzania, Malawi, Ghana and Nigeria by evaluating four processes of: sourcing and distribution of water; the role of government; the community membership; and the involvement of public private partnerships.

#### 1.3.1 Sourcing and distribution of water

The central question was to establish how water is sourced and distributed in Africa. Different countries use different methods to facilitate water access to the community. Although the categorization of water sources usually takes the form of rural–urban community dichotomy, the sources could also be categorized as natural and artificial/conventional dichotomy. There are mainly two sources of community water supply in Africa, Artificial/Conventional and Natural. Whereas artificial sources include pipes, bore holes, wells and dams, Natural sources include rain, rivers/streams, and ponds. The uniqueness lies in the management of the distribution of the water from the sources to the consumers and the actors involved in the process. The extent to which a large population depends on natural sources is a manifestation of low level intervention of the government, thereby leaving the population to depend on nature. Whereas the natural sources are free, the water quality is unsafe and depends on climate variability. The use of conventional sources, whether fixed point or mobile vendors require investments in pipe, treatment and other means of distribution and abstraction permits for Water service providers (WSPs).

Each of the five countries, in different proportions, has both natural and artificial sources of community water supply. In Kenya, community water projects have been recognized as alternative water Service Providers (WSP) and are registered by Water Services Regulatory Board (WASREB) after meeting the conditions set by the regulator. The community water supplies are mainly through Individual bore holes, shallow wells, and water connection (kiosks) main utility companies [12]. Whereas some households have shallow wells in their yards, which neighbors are able to access free of charge, others rely on a single tap from which they sell water by the jerry can. In Dar es Salaam, Tanzania, some entrepreneurs have constructed small-scale piped networks, supplying water kiosks (canteens) without a piped connection and sell water from Dar es Salaam Water and Sanitation Company (DAWASCO) even in areas that are beyond the reach of the utility's piped network. The Mobile Vendors include water tankers and trucks; pushcart and bicycle vendors who buy from a variety of water sources and resell to households. Another system is where DAWASCO supplies water to a community water public taps, managed by a Water Committee elected by the community for a three-year term [13].

Water shortages in the city of Dar es Salaam, Tanzania, had forced the community to seek for alternative ways of having clean and safe water. In other words, inadequacy in the quality and quantity of water for each of its intended purposes creates need for a communal approach as a coping response. The sources to

community approach to address the unmet needs. Even in cases where the government initiated water projects for the community, the management and sustainability of the project is left at the hands of the community. More often than not, citizens cannot access water without private efforts e.g. by installing water pumps or by colluding with water utility staff, or by tapping into informal networks of neighbors, water vendors and other intermediaries. Setting up a functional community water project takes high costs, a long time, complex processes of mobilizing citizens, government authorities, NGOs, and many other stakeholders.

Citizens increasingly lose hope and trust towards the government if they have to pay a high transaction costs in terms of time, money and other resources to access official improved drinking-water sources, hence encourage either the proliferation of informal water providers as alternatives or corruption within official providers [14]. Poor communities therefore either resort to buying water from water vendors, water kiosks, and other unapproved sources which inflate their household expenditure. Whereas in settlements with piped water close by, residents walk to fetch water or pay for people to cart water to their residence, where they are far from piped water supply, residents contract small-scale suppliers who deliver water in motorized tanks. To help alleviate the deficit, the government of Ghana encourages the communities to provide services for themselves in the form of self-help projects [15].

Like in Kenya, Ghana, Tanzania and Malawi, Nigeria's main sources of community water supplies, are both natural including rain water, rivers, stream and conventional ones which include public tap, borehole, hand dug well, neighbors and Water vendors formal or informal [16]. Daily water supplies either come from the natural sources or modern/conventional supply sources. While relatively over 80% of the rural population depend on the natural sources of supplies, the urban residents are mostly served with supplies whose regularity vary depending on residential areas and other socio-economic characteristics, mostly related with ability to pay as well as the relative influence of certain individuals and groups [17]. Unlike in Kenya and Tanzania, formal water vending in Nigeria is undertaken by formal bodies, such as water utilities themselves or registered associations, or by small scale informal supplies in tankers and the water is obtained either from treated utility supplies or from registered sources. Like in Kenya and Tanzania, informal vendors in Nigeria obtain water from many different sources, protected and unprotected and deliver small quantities of water for domestic use in a variety of ways ranging from carts and cycles to containers or wheel barrows, trolleys and animal-drawn or mechanized carts and tanker trucks [18]. The government does very little to guarantee safety of the sources of community water.

Notwithstanding its intervention, Community water supply in Nigeria is still uncoordinated, mainly done by individuals to address the unmet needs by the government supplied water to the community. Unlike in Kenya, the registered associations do not necessarily supply water to the defined membership but to the market implying that those who cannot afford are still at risk of going without water. In the face of absolute neglect by the government with respect to water provision, water vendors come in as an intervention. Although source is defined as unsafe, it is unlikely that in the immediate future the government will succeed in providing adequate and safe water supply to most urban centres in Nigeria [16].

In all the countries, the government has acknowledged community water supply sources, irrespective of their safety and quality. In Ghana and Malawi, the government contributes heavily for the establishment of conventional sources. In Tanzania, the government has accommodated community identified sources. In Kenya, the choice of sources to establish is the prerogatives of each community. The fact that natural sources, most of which are unsafe, still form a large portion of

the community water source, is an indication of the African governments' lethargy towards providing quality water to its citizens. The use of different sources of community water is therefore a coping mechanism to mitigate the failures of the governments to provide adequate water.

### *1.3.2 The role of the government*

Different governments play different roles in community water supply in Africa. In assessing the role of government, we targeted not only the regulatory roles but also mobilization of the community, financing the development and maintenance of the water sources.

The government of Kenya performs the following responsibilities in as far as community water projects are concerned: issue of permits for sinking of bore holes; registration of water service providers (WSPs); payment of water abstraction fee and regulation of water tariffs and quality. The Water and Sanitation Regulatory Board (WASREB) oversees, on behalf of the Ministry of Water and Irrigation, the implementation of the National Water Services Strategy and Pro-Poor Implementation Plan, which specifically focuses on expanding services to underserved low-income areas in Kenya.

The government of Tanzania initially provided water directly to communities by facilitating sinking of boreholes to residents of a locality before the strategy was overwhelmed and the government warmed up to private initiatives. The Water Supply and Sanitation Act 2009 provided room for the formal establishment of Community-owned Water Supply Organizations in various forms operating around the aegis of: Dar es Salaam City Council (DCC); the civil societies; political party organizations and private individuals as well as youth and women groups; and the donor community which provided facilities to fringe settlements. The organizations individually operated water-kiosks or boreholes in informal or peri-urban settlements, initially constructed by DAWASCO or by NGOs such as Water Aid and PLAN International. The flexibility is intended to allow them to build on trust and integrity already developed through existing social networks. According to the Water Policy, grassroot institutions linked to local government including the Village/Mtaa Water Committees (VWCs), are responsible for the management of water supply schemes in their localities. Recognition of these structures by the government through DCC gave the Mtaa some power of implementing community action plans prepared by the various committees. The Mtaa leadership had been playing a vital role in mobilizing resources and organizing community participation and private involvement in water provision to the fringe areas [19].

Similarly, the government of Ghana established Community Water and Sanitation Agency (CWSA) in 1998 by an act of Parliament (CWSA Act 564) to provide the institutional base for the implementation of the national community water and sanitation programme [20]. In conjunction with District Assemblies, the CWSA developed procedures which Communities applying for water and sanitation facilities should follow including composition of membership and proportion of women in the membership and bank account before the grant could be provided. This was to facilitate access to water for those without direct connection to the state owned Ghana Water Company Limited (GWCL) and continue to rely on informal services or secondary and tertiary sources due to reasons including lack of land titles or non-affordability of the upfront connection fees [21]. The strategy was to involve the community in planning and management of their water supply systems and water resources through their elected Water and Sanitation (WATSAN) Committees, Local Water Boards, Water and Sanitation Development Boards, Unit Committees and Area Councils [22].



Although not necessarily to the same extent as Ghana, the government of Malawi also facilitated community water supply through Water service boards and establishment of Water Users Association (WUA). The government owned water management Boards own the main water infrastructure (treatment plants, etc.), and communities own public standpipes or water kiosks that are managed by their respective WUAs.

The National Rural Water Supply and Sanitation Policy, 2000 enhanced the role of government of Nigeria at the centre of community water management by emphasizing rural water and sanitation through community participation. In most cases, Water Boards or Water Corporations are used at the state level for urban water services while rural water supply and sanitation (RWSS) is used for rural water supply and sanitation. All the 774 local government authorities are further involved in the provision and management of rural water supply and sanitation within their respective domains, mostly through various community organization including water and sanitation committees (WASCOMS).

In all the countries except Nigeria, community water supply had institutional domains by either being domiciled in Ministries of water and Health or equivalents. In Nigeria, different Ministries and Agencies assume relevance and arrogate water and sanitation responsibilities for their respective Ministries without clear mechanism of coordination. At the state and local government levels, there are further fragmentation and division of authorities to the extent that what emerge are inter-agency competition both between agencies of each state and between agencies of States and the Federal Government. This consequently leads to parallel drinking water projects in some areas and communities as well as duplication of responsibilities. Allocation of water and sanitation projects is often politicized to favor communities with influential public officials, bureaucrats or politicians [16]. Whereas there is direct intervention by the government in community water supply in Ghana, Malawi, Tanzania and Nigeria, in Kenya, there is indirect intervention with a lot of self-initiatives. In Nigeria, government has a selective intervention and makes little attempt at mobilization of community participation.

### *1.3.3 Membership to community water projects*

The membership to community water projects depends on the type of supply. For individual and private water sources, there is no standing membership save for the payment to the owners. Most of community water projects in Kenya are communally owned by individuals who came up together and formed an association to source for funds to supply water to its members, usually those in the neighborhood. With time they expand to access other non-members through payment for water. The access could be either through water stand points or connection to individual households. The associations could equally draw water from main water utility company and set up a bulk meter outlet from where they could establish other connections. In a way, they serve as distributing agents at a profit on behalf of the main water companies (Obosi).

The membership to community water projects in Tanzania is tied to area of residence, or village commonly known as “Mtaa”, an extension of local government. Each village committee elects leaders who mobilize the community to run the government-sponsored water project. Water is managed by water committees and overseen by the political leaders such as street chairpersons. In Dar es Salaam, the performance of community water projects in ensuring reliable access of water to citizens greatly depend on the performance of local political leaders [13].

Like in Tanzania, membership to community water projects in Ghana are also area specific and is indirectly driven by the state which has stipulated conditions



including quota for women and initial 5% of the cost, for support to establish community water supply through the District Assemblies and CWSA. Community projects formed this way receive government support to the tune of 95%. Most of them (56.3%) were jointly initiated by the government (represented by the District Assemblies and the CWSA) and the community. The community water projects, in reality, are largely donor-sponsored projects, which were implemented by the government through the CWSA [14].

Membership of community water projects in Malawi is tied to proximity and is state driven through Water Users Associations (WUA). Each community has one WUA that is expected to represent the interests of all water users. The utility provides technical expertise to WUAs through trained plumbers and other certified workers. WUAs collect revenue from water sales and pay the utility on a monthly basis. The Water Board (WB) benefits from this organized, streamlined revenue collection system and can operate more efficiently, not having to supervise and pay for employee (vendor) salaries. Each WUA typically comprises an appointed board of trustees that is the final decision-making body and disciplinary arm; an executive committee that is voted into office to oversee the day-to-day running of the association; a secretariat with employees headed by an administrator; inspectors who audit water meter readings and report faults to the WUA office; and water vendors who sell water at the kiosks. Community member customers contribute financially to the WUAs by purchasing water and participate in the election of executives.

The fact that all the four countries have relied on government for community water supply yet they still have challenges is an indication that reliance on the government by residents may not guarantee them unlimited access to water supply. Like in Kenya, there is need to engage in self- help water supply projects by pooling resources together to either sink boreholes or dig wells for their common use. This should be coupled with community involvement in the water management process, which is existent in all the countries except Nigeria. This will help residents to have a sense of responsibility and thus curb the occurrence of vandalism of water equipment [17].

#### *1.3.4 Involvement of public private partnership*

Public private partnership is an arrangement in which the private sector in form of individuals, corporates or community get into a co-production with the state through shared responsibilities. In water supply the arrangement have included Public Enterprise, Joint Ventures, Affermage, Built Operate Transfer, Built Operate Transfer, Concession, Lease, Management Contracts and Private Ventures [12]. The timing and extent is a prerogative of the partners. Most of community water projects in Kenya operate through public private partnerships. In addition to engaging government for regulatory services, they also apply for government funds as self-help projects either through constituency Development Funds (CDF) or through Water services Trust Fund (WSTF) mainly to improve their infrastructural development for uptake, supply and storage. These are usually one off assistance and no compelling continued partnership. However for the funding from the WSTF, the condition for qualifying for the grant is access to the rest of the community. In the urban areas, some utility companies, like Kisumu Water and Sanitation Company (KIWASCO) in Kisumu, have as part of its approach to providing services in low-income areas of Kisumu implemented a delegated management model since 2004, in which it partners with small-scale private operators which are formed from within the community that is to be served [23].

Under this model “the utility sells bulk water to an agent who has been contracted to operate and manage part of the system”. These agents who operate and manage the last part of the service delivery system are known as ‘Master Operators’ (MOs) [6].

The first appearance of PPP in water sector in Tanzania was the setting up of Water kiosks by DAWASCO as a means to supply water to communities that do not have in-house water connection. The kiosks are run by private agents who in return pay rent to DAWASCO [24]. The other aspect of Partnerships involved drilling of boreholes in which both public and private water drilling companies mediate citizens' access to water. The partnership usually brings together public services and NGOs to provide water [25]. The strongest move towards actualization of PPP in Tanzania was setting up of a Community Liaison Unit by DAWASA in 2003 to help community-managed suppliers [26]. Various resources such as expertise and experience, ideas, ability to organize, materials, labour and finance were mobilized and used to improve potable water in informal settlements through participation of various grassroots and external actors were involved. The grassroots actors include the water users, i.e. individual households, vendors and the Mtaa leaders. External actors came in as advisors, financiers and contractors in the construction of the wells and include DCC, DAWASA, the Water Resource's Institute (WRI) and the UNDP and Lions Club. While DCC has been acting as a facilitator, DAWASA staff have been providing free professional support in the form of, for example, amount of chemical materials for treating water, to the WMCs and to individual private owners. The community, private individuals (vendors), government institutions, training institution, NGOs, e.g. Lions Club, local informal and formal businesses and the United Nations Development Programme (UNDP). The community had contributed funds through the initiation and co-ordination by the then village government (known also as CCM leadership) of the area - financial assistance from the Lions Club of Dar es Salaam and technical assistance from the Water Resource Institute also of Dar es Salaam.

In 2006, the government of Malawi, in an attempt to address chronic water scarcity in urban informal settlements, promoted community-public partnerships (CPPs), a form of service co-production in which state water utilities work together with community-elected water user associations (WUAs) [27]. The CPPs involved community elected representatives and state water-delivery agencies over an indefinite period: communities primarily oversee the management water services and revenue collection, while the utility manages infrastructure, delivers water to community pipes, and provides technical assistance [27]. Nongovernmental organizations, Water Aid and the Centre for Community Organization and Development (CCODE), and the Lilongwe Water Board (LWB), a public water utility, mobilized community leaders to form Water User Associations (WUAs). The partnerships are intended to enhance water supply in underserved urban settlements and create opportunities for communities to participate actively in water service delivery. Community-elected WUAs manage revenue from water sales, oversee community water points (kiosks), organize community elections to appoint representatives, and report community complaints about service delivery to the LWB. LWB, in turn, supplies water to WUA communities, provides technical assistance, and manages Lilongwe's main water infrastructure.

Private sector participation in the Rural Water and Sanitation (RWSS) sub-sector in Nigeria has been in the form of consultants, suppliers, manufacturers, artisans. Non-Governmental Organizations (NGOs) are even becoming equally relevant in the RWSS through collaboration with relevant authorities, communities and donor organizations including: UNICEF assisted State Water and Sanitation Projects (1981–2010); Japanese International Cooperation Agency's (JICA) rural water supply projects (1992–1994); United Nations Development Project (UNDP)-Rural Water supply (1988–1993); European Union (EU) water and sanitation programme (2002–2009); Department for International Development's (DFID) water and sanitation pilot project (2002–2008); Water Aid's rural water supply

and sanitation programme (1996–2010); United State Agency for International Development; World Health Organization and World Bank [28]. Involvements of these bodies have been restricted to financing, infrastructural provisions in urban, rural areas and public spaces.

#### **1.4 Analysis**

The discussion of the results shows that different countries in Africa have used community management differently for various reasons and in varying degree of success. In all instances, community water management has been used as an informal approach especially where the mainstream approaches have not been able to access. Even in countries like Ethiopia and Malawi where the government established the community water supply, there is still little faith in its management [5].

The exponential of growth of different sources of water though at face value, creates an impression of improved water supply, the dependence on natural sources of water by a large population depicts a gloomy picture of access to safe, quality and reliable water. It means that a large population is still vulnerable to waterborne diseases arising from unprotected sources of water, hence not only giving the government a temporary reprieve but also a false hope of less pressure from citizens for water. The trend is worrying since even countries which began with benevolent approach of supplying water to the communities like Ghana, Tanzania and Malawi have ended up being overwhelmed by demand and had to change strategy to accommodate more initiatives from the community. This means that it is not just about the state's direct involvement but taking the lead in promoting constructive engagement based on each community's need, without treating the communities as homogeneous entities. The fact that the communities still rely on natural sources of water is a further manifestation of the projects being initiated in desperation and as a coping mechanism. It does not mean that they are capable of producing reliable quality water at the expense of the government. The arguments of some opponents of community water supply that emphasizes government's attempt to run away from its role and that the approach is not sustainable, hence suffice. However, opponents of community management argue that the model is neither cost effective nor sustainable hence does not work well for communities due to various reasons including: non functionality of many such water points do not work by roughly one-third across the continent [29]. In Tanzania, one-quarter of new water points become non-functional within 2 years of installation [14]. For related reasons some scholars argue that community management is the least preferred management option for water users [10]. Other studies though appreciating the role of community water supply, established that the government's preferred choices in the management especially of maintenance is at times at variance with that of the community, hence less gain [10]. In Malawi, the technical and financial performance under community management is weak and therefore the community management has worked more for the state and donors as a means of offloading public service delivery responsibility than it is for the community and therefore cannot deliver the desired results (Elly [8, 9]).

In terms of roles of government in the community water supply in Africa, three broad categories are identifiable; The Prefect/Inspector; The Mediator and the Benevolent. In the prefect category, the government seldom mobilizes the community. Even where it does, its sole preoccupation is whether the community is following the prescribed procedures. Although it might not bother so much even if an initiative sprouts from a community, however, that initiative must comply with the law for it to be permitted to work, failure to which it is branded informal and its water unsafe. Due to its inability to comply with its obligation of providing an



alternative, the government is embarrassed to either stop the operations or help in the system improvement. It may however put some stringent pre-conditions for community projects to qualify for the government support. The resultant scenario is the mushrooming of so many unregulated sources of water supply including natural sources, illegal tapping of government utility water companies. Kenya leads in this kind of category. The Mediator category, both Passive and Active types, provides an institutional framework to facilitate community water framework. The passive mediator, may negotiate general support with donors and development partners but does not enforce the support to the individual community water providers. It is upon any individual entrepreneur to grab the opportunity and supply water to the deserving community. This results in uncoordinated approach usually resulting in exploitation of the underprivileged community and differential distribution of water by privileges and status like the case is in Nigeria.

The Active mediator type government accepts responsibility to provide water and after being overwhelmed, it not only creates institutional framework for support also but encourages donor partnership with the community. The communities are not compelled to embrace donor support through mobilization and creating space for community-donor engagement in the implementation process through an administrative forum. This is a case that obtains in Tanzania, where the community leadership and the donor meet under the state facilitated Village/Mtaa Water Committees. The arrangement does not interfere with other forms of community water provision, either through vendors or private fixed water points. They operate side by side. Neither does the government restrict individual and private initiatives to provide water through other informal means.

The third category, the Benevolent State presents a situation in which the government deliberately creates structure for community water supply. It is the responsibility of the state to design and provide water access points for the community and is coordinated by the District Assembly/Local Administration. The community is organized around known structures and area of a particular number of households, who are mobilized to form Water User Associations for the management of the centralized community water supply. The government determines the membership. This category obtains under community water management approach in Malawi and Ghana and earlier own Tanzania before it slipped into the Mediator category. In Malawi and Ethiopia, each government not only designed but also constructed water points before inviting communal involvement. Ghana formed National Community Water and Sanitation Programme (NCWSP) to facilitate the provision of basic water and sanitation services to communities through Community Ownership and Management [30]. Even though the government of Kenya has strengthened the legal basis and capacity of community-based service providers, they are still regarded as informal or small scale water service providers. Whereas in some counties, the supply has been a deliberate move by the government to distribute water to the disadvantaged through water communal points like in Uganda, Ethiopia and Malawi, in Kenya, community water supply has been orchestrated through self-help initiatives by local communities with no direct role by the government.

The involvement of Public Private Partnership in the community water management in Africa is very prominent, the extent to which differs from state to state. Irrespective of the success, its emergence was no doubt, occasioned by the realization that neither the government nor the private sector alone could provide quality and reliable water in good quantity and time to the community in Africa. The difference in extent of involvement of PPP is related to the category of role of governments. In the Benevolent category, the state champions the search for strategic partners to establish the infrastructure and mobilize the community to manage the



community water supply. This challenge has generally been hampered by sustainability problems after the partners have left especially in Malawi. It is however less in Ghana due to stronger institutional governance support. In the Passive mediator category, there is limited activity in partnerships since only those championed by the state are active and sustainability challenges arise shortly thereafter. In the active mediator level there, are more PPPs both initiated by the state and by individuals. There is a flurry of PPPs in the Inspector/Prefect Category where individuals, private corporates and the government all participate asymmetrically. There is no predetermined or prescribed way of partnerships. This is consistent with other scholars observation. In Malawi and Ethiopia, the respective governments deliberately both singly and in support of International NGOs, established community public water standpipes to provide access to rural population to water. In Kenya community management was even stronger and started through self-help initiatives and for members first. To date community water supply contributes up to 60% of total water access in Kenya [12], 40% of access in Dar es Salaam [31]. Of the 8 million Kenyans who have access to improved water in rural areas, 30% are served by community-managed water supply schemes most of which were developed by self-help groups. These self-help schemes differ from those in Ethiopia or Malawi in two important aspects. First, they were designed to provide water mainly to the members of the self-help groups, not equitably to everybody living in the service areas. Secondly, they supply water mostly through household connections, not public tap stands. Only 26.8% of the population have access to a basic minimum level of service in Ethiopia, while 64.2% have access in Kenya and 84.5% have access in South Africa (WSP, 2003). Whereas Central government is highest water sector provider at 51%, followed by Local authorities at 27% and Non-Governmental organization including CBOs and PSP at 21% in Kenya, In Ethiopia Private Sector Participation through CBOs is at 54% followed by local authorities at and no central government direct participation.

Like in Ghana, the governments of Ethiopia and Malawi worked in partnership with the communities and, the former providing technical standards and supervision. The government took the lead in implementing projects, and then in the 1990s Water Aid, the international NGO, began giving financial and professional help to the government schemes. The government engineers designed the schemes in accordance with technical standards and the wishes of the communities served. Ghana has further institutionalized Public Private Partnership in which involving contracted Private Operators and Public Operators under Community Ownership and Management approach under the supervision of local authorities through District Assemblies. However, in Ethiopia, the Ethiopia Social Rehabilitation and Development Fund (ESRDF) provide grant funding through the national budget and the communities cover 10% of capital costs and all operating costs. As in Ethiopia, the projects in Malawi were designed to serve the entire population in the supply area, but only through public tap stands.

**Table 1** shows that the growth of community water projects in inversely related to the role of state. When there are more projects, the role of state tends towards that of an inspector. When the reverse is the case, the role of the state tends to be more of benevolent. Even the states whose role began as benevolent, eventually need to tend towards mediator and later Inspector to ensure quality and safety.

## 1.5 Conclusion

The community water management supply has emerged as a core intervention strategy in Africa to fill in the space the state has either abandoned or unable to occupy. It has emerged and matured in various ways in different countries ranging

Role of state in community water	Kenya	Tanzania	Nigeria	Malawi	Ghana
	Inspector	Active mediator	Passive mediator	Benevolent	Benevolent
Water sources	Community-operated kiosks; shallow wells and boreholes; natural sources i.e. rain water, rivers, lake, ponds; and vendors	Community-operated kiosks; shallow wells and rivers; vendors and mosques	Community-operated kiosks; shallow wells and boreholes; natural sources- rain water, rivers, lake, ponds, and vendors	community-operated kiosks; natural sources; shallow wells and boreholes	Community-operated kiosks; shallow wells and boreholes
Role of state	Regulation, Ltd. infrastructure development; collecting fees and registration of WSPs	Mobilization of community and partners; infrastructure development	Mobilization for infrastructure development	Mobilization of community and partners; infrastructure development	Mobilization of community and partners; infrastructure development
Membership	Local community groups; community-based organizations' (CBOs); institutions; welfare associations/ organized groups	People living a given radius; individuals and NGOs	People living a given radius; individuals	People living a given radius- initiative of the community	People living a given radius- initiative of the community
PPP	Donors, community, state; WSP	Donors; WSPs; water utilities; NGOs; community liaison unit; political party leadership, local authority	Consultants; non- governmental organizations; local government authorities; local community water committees; donors	Donors, nongovernmental organizations; center for community organization and development (CCODE); water board; WSP; local community/ WUAs	Donor, community, state

*Direction of flow community water and state involvement.*

**Table 1.**  
*A framework of the involvement of state in community water management in Africa.*

from state supported in Ghana, Tanzania, and Malawi to amorphous in Nigeria to self-supported initiatives in Kenya. Even where the state has supported the initiatives, the state has been overwhelmed more informal water supplies still emerge as in Nigeria and Tanzania and ended opening up to more public private partnerships like in Ghana. The higher the number of community water projects are, the more likely the state will assume the Inspector role. There are fewer community water projects in benevolent states. In all three categories of roles, ranging from

Benevolent, Mediated and Inspector/Prefect, it is clear that the state in Africa cannot run away from facilitating community water supply. Neither can it wish it away as long as citizens continue to go without water. In fact, the community water and the state are strange bedfellows in the water supply. At times they act as partners, and at times as competitors especially in Inspector states. Since neither can do without the other, public private partnerships is the best option. The countries that have demonstrated high level of PPP have equally been able to relatively, show more improvement in the water supply. In order to address inequality, quality and exploitation the state still has complement the mobilization of resources by the private sector.

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