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A knowledge and practice review in water sector financing

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Knowledge Management and Economic Challenges

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Abstract:

There is global acknowledgement that the financing of water projects is not easy. Preparation of water sector projects is understood to take long and still when they are finally financed, cost-recovery is comparatively difficult. The challenges in preparing water sector projects relate to the fact that water cuts across all spheres of society, and therefore many stakeholders are involved. Bringing them to one table for a single goal (supply water services) has often become a daunting task. Often, because of their complicated nature and their high social flavour, the associated risks in financing water sector projects are usually not well analysed to ensure development of attendant risk mitigation measures. This has particularly been the case where community involvement and participation issues are inadequately addressed. As a result water sector projects, especially in developing countries where the poverty trap adds to service deliver challenges, have been financed without much long-term consideration of sustainability aspects. The political use of water as a vote-winning vehicle has exacerbated the challenge of delivering water services sustainably. Political promises of delivering water are common, but often forgotten after the elections. These sector issues have meant that many water sector projects remain unattractive to private sector financing and participation.

Although historically water has largely been taken as a free social good, it has in recent years been receiving its due attention as an economic good as well that could be provided commercially. Hence, many developing countries are now acknowledging the relevance of providing water commercially in order to ensure financially sustainable services. This development is seen to be slowly easing the challenges of cost-recovery in many water projects. It is becoming clear that additional funding is not the panacea to sustainability of water services.

This paper presents a review of recent knowledge and practices in water sector financing, with particular focus on Africa. The paper aims to give an overview of the challenges and opportunities in financing water sector projects and describe the way forward for Africa's efforts towards delivering sustainable water services.

Key words: financing, water services, sustainability, Private Sector Participation (PSP), Public-Private Partnerships (PPPs)

1 Introduction

1.1 Background

The water sector is divided into water resources and water services. The water resources subsector deals with management, development and protection of water sources, while the water services deals with the supply of water to various users and consumers for social and economic development. The focus in this paper is on water services.

Some of the more alarming global statistics pertaining to water services are: 1 billion people lack access to clean water; 2.4 billion people do not have access to safe sanitation; 4 in every 10 people do not have access to safe sanitation (DBSA, 2006). Experience to date has shown that the packaging and financing of water sector projects is more risky than other public infrastructure sectors. One of the main issues include the lack of information and long project preparation periods characteristic of water projects as a result of their social and environment impacts, which require consultations with many stakeholders. This is particularly more challenging where governance systems are weak or not in place.

Although historically water has largely been taken as a free social good, it has in recent years been receiving its due attention as an economic good that could be provided commercially. Hence, many developing countries are now acknowledging the relevance of providing water commercially in order to ensure quality and sustainable services to its consumers. This development is seen to be slowly easing the challenges of cost-recovery in many water projects. It is becoming clear that additional funding is not the panacea to sustainability of water services.

1.2 Objective

The objective of this paper is to present a review of knowledge and practices relating to the financing of water services, with particular focus on Africa.

1.3 Methodology

The paper was written from a desktop review of selected literature. Commentaries and analysis on the reviewed literature has been provided based on the authors' knowledge and experiences.

1.4 Scope

The paper largely limits its coverage to water services, although some of the issues raised apply to water resources as well. It begins by presenting the water services challenges that Africa faces. Thereafter, financing practices, opportunities and way forward for Africa are presented in separate chapters, before concluding comments are made.

2 The challenges of water services Africa

2.1 General

Although water resources in Africa are relatively abundant, it has the lowest water supply coverage of any region in the world (DBSA, 2006). This is because of the continent's insufficient capacity to exploit water resources. Some key statistics regarding the supply water services in Africa include (Mwanza, 2005):

- 300 million people are without access to safe water.
- 313 million people are without access to appropriate sanitation.
- It is estimated that 84% of Africa's urban residents have basic sanitation but only 45% of rural residents.
- 82% urban populations have access to water supply coverage.

The specific challenges of the delivery of water services in Africa include: meeting the increasing water demand due to population and economic growth; ensuring food security using water; dealing with the low investment/financing in the sector; and managing the performance of water services providers. Above these challenges, serious defects in the governance of the global water sector have been reported to fetter its ability to generate finance (Winpenny, 2003).

Since this paper focuses on finance, the financing/investment issues are discussed in a separate section. Given the significant role Water Governance plays in financing, it is also discussed separately. Before discussing the financing and governance challenges, it is necessary to discuss the characteristics and associated risks of the water sector projects.

2.2 Characteristics of water projects

The challenges of the water services delivery are exacerbated by the inherent features of the water sector compared to other sectors. These features cause financial and operational risks even if the governance issues were overcome. The specific characteristics and attendant risks which apply to the commercial funding of water services projects are:

a) Packaging water projects require sufficient and accurate information such as the reliability of water resources, treatment technologies, analysis of water demand from all consumers, sources of funds (tariffs, taxes and transfers), affordability aspects, condition of water infrastructures, billing and revenue collection systems. As the water services are largely in public hands, the capacity to gather such information is usually lacking. As a result most water projects are implemented without sufficient information, which increases the failure risks and sustainability challenges.

b) Contract periods of water services projects tend to be longer (up to 30 years). Therefore, the likelihood of the operating environment changing due to emerging information is higher and contracts are may not be flexible enough to allow changes. As a result, the risks pertaining to contracts not being fulfilment are higher.

c) A typical water project profile comprises a high investment in the initial years with a large negative cash flow, eventually turning into a modest positive cash flow due to revenue increases, which continue into the long term (Winpenny, 2003). Hence one of the main characteristic of water projects is that they very capital intensive and are usually characterised by long-payback period.

d) The financial rate of return in the water sector is the lowest (5-10%) compared to other sectors (Roads15-20%, telecommunications 25-30%, power 17-25%) (Winpenny, 2003). This is partly due to delayed returns because of the high capital intensiveness in the early years. Furthermore, water has historically been considered as a social good resulting in resistance to cost-recovery tariffs.

e) Water services are usually a responsibility of local utilities, which normally lack financial powers, resources and credible credit standing. Hence the capability of these utilities to effectively deliver water services is low, resulting in high sub-sovereign risks.

f) Unlike other public sectors, the water sector is seen as unavoidably social in nature and evokes political emotions like no other issue (Prasad (2006: 669). The risks of political pressure on contracts and tariffs are therefore high and affect the financial sustainability. Normally, absent, weak and/or inconsistent regulation is breeding ground for high political interference. This impacts on the willingness to pay, which is exacerbated where there poorer services in many cases.

g) Local sources cannot meet the magnitude of funding required in the water sector. Hence most water projects in Africa are supported financially from foreign funding as well. In such cases, there is a likelihood of mismatches between local currency earnings and foreign exchange funding. The dependency of water projects on external funding results in high currency risks.

To address the challenges brought in by the characteristics and risks of water projects, the role of effective governance becomes critical. In recent developments, the role of water governance has come to the fore of the water sector. Pegram *et al. (*2006) and Winpenny (2003:9) specifically reported on water governance as being a key root of problems pertaining to the delivery of sustainable water services. Given its importance, the topic is dealt with in the following section.

2.3 Water Governance

Water Governance refers to a range of political, social, economic and administrative systems that are in place to develop and manage water resources, and the delivery of water services, at different levels of society (Rogers & Hall 2002). It is further perceived in its broadest context as entailing those social, political and economic organisations and institutions and their relationships, which are regarded important for the management of water and sanitation (UNDP, GWP & ICLEI 2002).

The indicators for effective Water Governance include participation, transparency, equity, accountability, coherency, integrative, and ethical consideration (UNESCO 2006). An additional criterion is that there must be predictability in the political and administrative systems such that all players know the rules and accept that these will be applied consistently (Pegram *et al.* 2006). The issues of lack of coordination in governance systems and lack of accurate information to inform decisions need to be dealt with (Mwiinga 2008).

The Report of the World Panel on Financing Water Infrastructure indentified that serious defects in the governance of the global water sector fetter its ability to generate finance (Winpenny 2003:9). The report enlists the following governance issues as important:

- The apparent low priority that central governments give to water sector issues
- Confusion of social, environmental and commercial aims
- Political interference
- Poor management structures with imprecise objectives for water undertakings
- An inadequate general legal framework
- Lack of transparency in the award of contracts
- Non-existent, or weak and inexperienced regulators
- Resistance to cost-recovering tariffs

The relationships among the above issues were not presented in the report. Therefore, an attempt to prioritise the above issues and analyse their relationships was made and the results are illustrated in Figure 2.1.

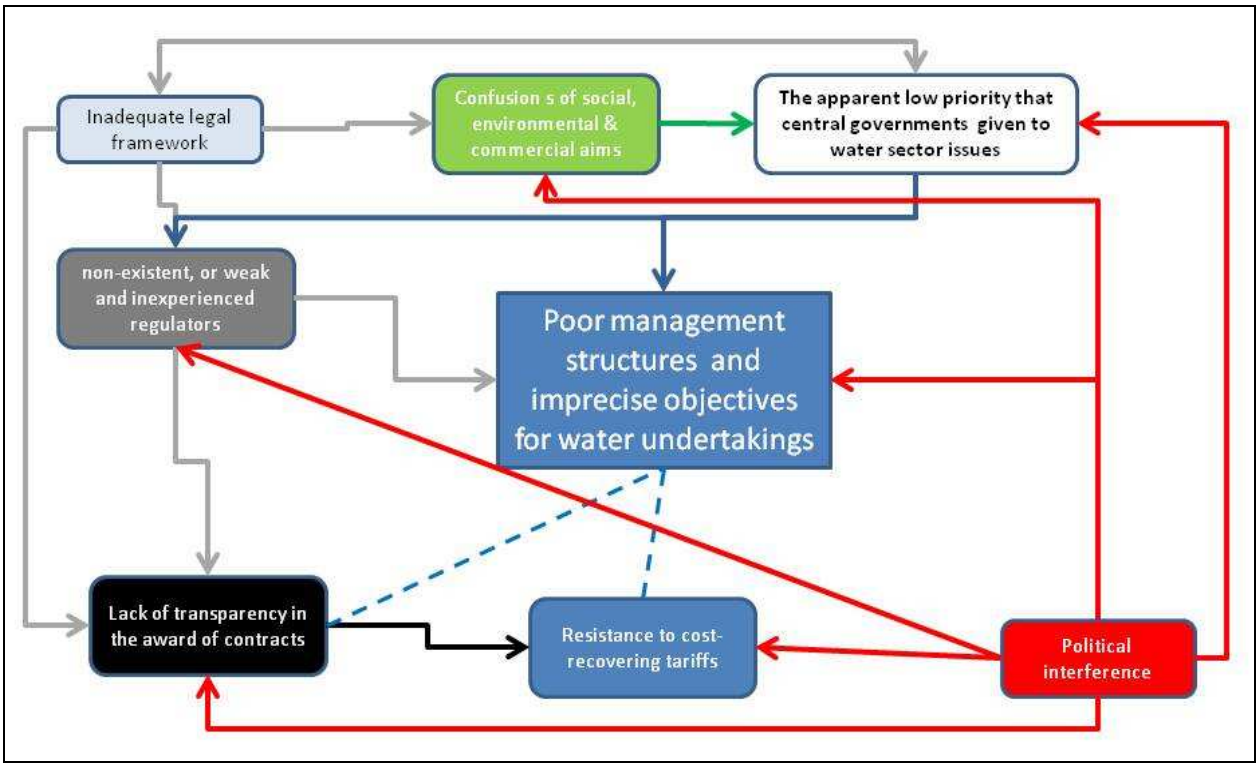

Figure 2-1: ***Relationships among governance issues in the water sector***

(Direction of arrow indicate direction of adverse influence: e.g. political interference negatively influences efforts to implement cost-recovery tariffs)

From the relationships of the governance issues shown in Figure 2.1, three indications can be drawn:

- Management structures are influenced by a host of issues. Effective delivery of water services and ability to attract and sustain financing depends on how management structures are protected from adverse effects of these issues.
- The political interference has the largest influence on other issues. This concurs with current sector sentiments that the water sector requires strong political will and support in order for it to be sustainable.
- The legal framework and regulation issues have a high-level role in the management of the water sector. It is thus important these issues are adequately dealt with to ensure predictability in the governance of the sector and prevent protracted adverse impacts in the sector.

It should also be noted that without addressing the apparently low priority that central governments give to water sector issues, it would be difficult to address the current low

financing and investment woes faced by the water sector. The issues of low financing and investment are discussed in more detail in the following section.

2.4 Low financing and investment

The characteristics of the water projects and the attendant risks (see Section 2.2) have resulted in low investment participation from the private sector. On the other hand, the public sector responsible for water services, has not fully appreciated the complexity of the risks of water projects. As a result, the water sector is in many circles reported to be poorly prioritised, which leads to under-funding and low investment.

Due to short-comings in governance systems, associated risks in financing water sector projects are usually not well analysed to ensure development of attendant risk mitigation measures. As a result water services projects have been financed without considering long-term sustainability aspects. This practice is common in Africa where poverty and high politicisation of water add to water services delivery challenges. Therefore, many water sector projects remain unattractive to private sector financing and participation.

It is not surprising that the continent's investment in water is comparatively low given its historical economical and governance profile. Although history tells us that African governments have given the sector low priority in funding, the recent recognition of the sector being a linchpin in achieving the MDGs have led to African states making several declarations that are envisaged to propel investments in the sector (Manu 2008). Manu (2008) estimates that Africa needs about US$6 Billion per year to meet water and sanitation challenges of the MDGs. This funding is likely to come from public sources as the private sector is slowly shunning away from participation in the water sector. The generally poor enabling operating environment that exists in many African countries is reported to be the reason for poor PSP. The sector is potentially political in African where the majority of the population is poor and located in rural and peri-urban areas where the challenges of providing water services are further hampered by lack of adequate infrastructure. Therefore, commercially viable tariffs are a challenge to implement in such areas and political interference would be potentially rampant if PSP was sought.

3 Financing practices for water services in Africa

3.1 Challenges in financing water sector projects

Prasad (2006:670) reports that "It is estimated that over 90% of the world's population is currently served by the public sector[1]". This means that financing for public services largely depends on public funds and the attendant challenges are dictated by the capacity of National and Local Governments to raise funds. AMCOW (2008) reports the following challenges in financing the water sector in Africa:

- Lack of adequate funding levels.
- Lack of adsorption capacity where funds are available leading to inefficient and ineffective use of funds, especially due to corruption. It is estimated that about a third of funds invested in the water cannot be accounted for (ICA, 2008).

[1] The Public Sector term is used as an all embracing term covering various levels of government, agencies and possibly state owned enterprises.

- Focussing on increasing supply coverage resulting in the financing for operation and maintenance receiving little attention.
- Political interference in water pricing and resource allocation.
- The “financing monopoly” of Governments is making it difficult to develop bankable projects.
- Current attempts to develop innovative financing is focussing on urban water utilities, neglecting rural water supply and water resources infrastructure development necessary for water security.

The above challenges have largely been attributed to the fact that a large part of the public sector in Africa is inefficient and incapacitated but are still responsible for the provision of water services. Cardone & Fonseca (2006) suggest that there is a considerable funding gap between needs and allocations in the water sector. Furthermore, global and country funding estimates fail to capture the cost of institutional reform, support, operation and maintenance required to achieve sustainable water services provision.

3.2 Sources of revenue and financing practices

Sources of revenue for the water sector can be categorised into basic and repayable (Winpenny, 2008:9). The former include tariffs, taxation and transfers (3Ts), while repayable funding sources include loans, bonds and equity. The fundamental difference between these sources of revenue is that the basic revenues provide an assured cash flow which can be used to attract repayable finance.

In Africa, the public sector is largely responsible for providing water services. Thus water utilities usually survive on a financial hand-to-mouth basis reliant on infrequent and inadequate government tax-funded subsidies, donor grants and concessionary loans. In many African countries, water is still considered a free social good resulting in governments and consumers being unsure as to how far water can be commercialised. Thus tariffs are in many cases below economic levels resulting in basic revenues not covering recurrent costs. Poor cost-recovery makes it difficult to attract repayable finance and the African water sector has, as a result, experienced little use of repayable finance sources. Winpenny (2008) further reports the take up of private equity in Africa has been patchy and problematic. This should be surprising given the inherently riskier characteristics of the water sector projects (see section 2.2).

Lately, the water sector in Africa is experiencing targeted financing initiatives aimed at improving the operating environment for investment. The recognised inherent complexities of water projects have led to the establishment of project development or preparation facilities aimed at assisting with the preparation of bankable projects and also attracting local finance on local currencies. Examples of project development and financing facilities focussed on water supply and sanitation in Africa, as reported by Cardone & Fonseca (2006:11), include the following:

- African Water Facility (AWF) (Africa-wide).
- South African Municipal Infrastructure Investment Unit (South Africa).
- Africa Project Development Facility (Africa-Wide).
- INCA (South Africa).
- K-Rep (Kenya).
- Emerging Africa Infrastructure Fund (Africa-wide).
- European Union Water Facility (Africa, Caribbean, Pacific).

Local and regional Development Finance Institutions have also established technical assistance grant facilities which also support project preparation in the water sector. The AWF was established as an instrument designed to assist the successful implementation of the African Water Vision 2025 (AMCOW, 2008).

In Africa, the commercialisation of water services through establishment of public water utilities that emulate private sector performance was being promoted against the backdrop of economic decline, reduced incomes, increasing poverty and high national indebtedness (IPCIG, 2008:1). In order to improve the financing and delivery of water services, various options for Private Sector Participation (PSP) and commercialisation have been sought. However, the lack of operating environments that are conducive for PSP has been a major hindrance. Because of the key influence PSPs have had in the water sector, the experiences with the private sector are separately discussed in the following section.

3.3 Experiences with the private sector

To presumably bring in efficiency, the water sector in Africa has experienced various options for PSP. Earlier attempts were more inclined towards full-privatisation and the subsequent failures led to the emergency of Public-Private Partnerships (PPPs) models (see Table 3.1).

Table 3-1: Main types of PPPs models and allocation of responsibilities
[Source: World Bank, 1997]

OPTION → PARAMETER ↓	*Service Contract*	*Management Contract*	*Lease*	*Concession*	*Build Operate Transfer (BOT)*	*Divesture*
Asset ownership	Public	Public	Public	Public	Private & Public	Private Or Private & Public
Operation & Maintenance	Private & Public	Private	Private	Private	Private	Private
Capital Investment	Public	Public	Shared	Private	Private	Private
Commercial Risk	Public	Public	Shared	Private	Private	Private
Duration (years)	1-2	3-5	8-15	25-30	20-30	Indefinite [May be limited by licence]

Despite distinctions of PPPs shown in Table 3.1, the World Bank says that many governments often use hybrid models. For instance, it is possible to have Management Contracts in which the private sector takes on some commercial risks, or Lease Contracts in which the private sector is responsible for some capital investments. The world's largest water privatisation has to date taken place in Manila through a concession contract (Dumol, 2000). Concession contracts have been reported to be favourable where the area of service is large enough to take advantage of economies of scale (Farlam, 2005:24). However, where the operating environment is too complicated or the area of service too small to take advantages of economies of scale, public water utilities have tended to opt for 'partial management contracts' rather than full-privatisation.

While there have been some successes in privatisation, the high expectations of privatisation of basic utilities have not matched the results in the sub-Saharan region (Ivo 2008:2). Ogunbiyi (as cited in Farlam, 2005:20) reported that “PPPs have not had much success in Africa’s water sector”. The implementation of PPPs models has yielded mixed results and in several instances the private sector has seemed no more efficient in delivering services than the public sector (Prasad, 2006: 669).

Prasad (2006:688) concluded that experiences with PSP worldwide suggest that there is a significant conflict between social development, public health and environmental concerns and poverty reduction, on the one hand, and the private sector’s motive of profit maximising, on the other. The profit concerns from the private sector should not be a surprise as any PSP business comes at a cost and must ensure financial sustainability in the long term. However, what seem to have received little attention are efforts to balance the objectives of financial sustainability and financial profitability in order to achieve social development, environment sustainability and poverty reduction. It is possible to achieve financial sustainability without financial profitability being the key driving force (Prasad, 2006:688). But such a possibility can only be held true where there is minimal PSP, otherwise the need for financial profitability still remains.

One of the key contractual lessons learnt in financing water projects based on PPPs models is the need to ensure that contracts are concluded based on sufficient information and predictability of the future operating environment. Otherwise, contracts remain susceptible to renegotiations, which can be frustrating to both the private and public partners. Farlam (2005:21) reports of a case in South Africa in which a 30-year water services concession contract was subjected to renegotiations due to extreme changes in the operating environment within 5 years of its implementation.

Despite the challenges and reported failures of the implementation of PPP models, there have been successful ones. The Senegal Water Sector Reform that led to successful implementation of PPPs is a good case study for Africa (DBSA, 2006:111). Amongst several other African Countries, South Africa has also recorded some failures and successes in PPPs (Farlam, 2005:21-25).

4 Investment opportunities

Water is life and there will always be a growing demand for it. Investment opportunities in water can only be realised by appreciating the true value of water and its role as a key input to social and economic development and environmental sustainability. Consideration should be given to managing the development of water resources and water supply in the same manner as sectors such as energy. Water has a central role to play in society and most importantly managing it as a business can also address poverty and health challenges.

The poor condition of water infrastructures in a many African countries as a result of years of ineffective operation and neglected maintenance provides a huge investment opportunity. Investment opportunities on the water sector are thus evident from recent estimation of investment requirements for infrastructures with respect to capital and recurrent expenditures. Figures 4.1 and 4.2 shows the first (2000) and recently revised such estimations respectively.

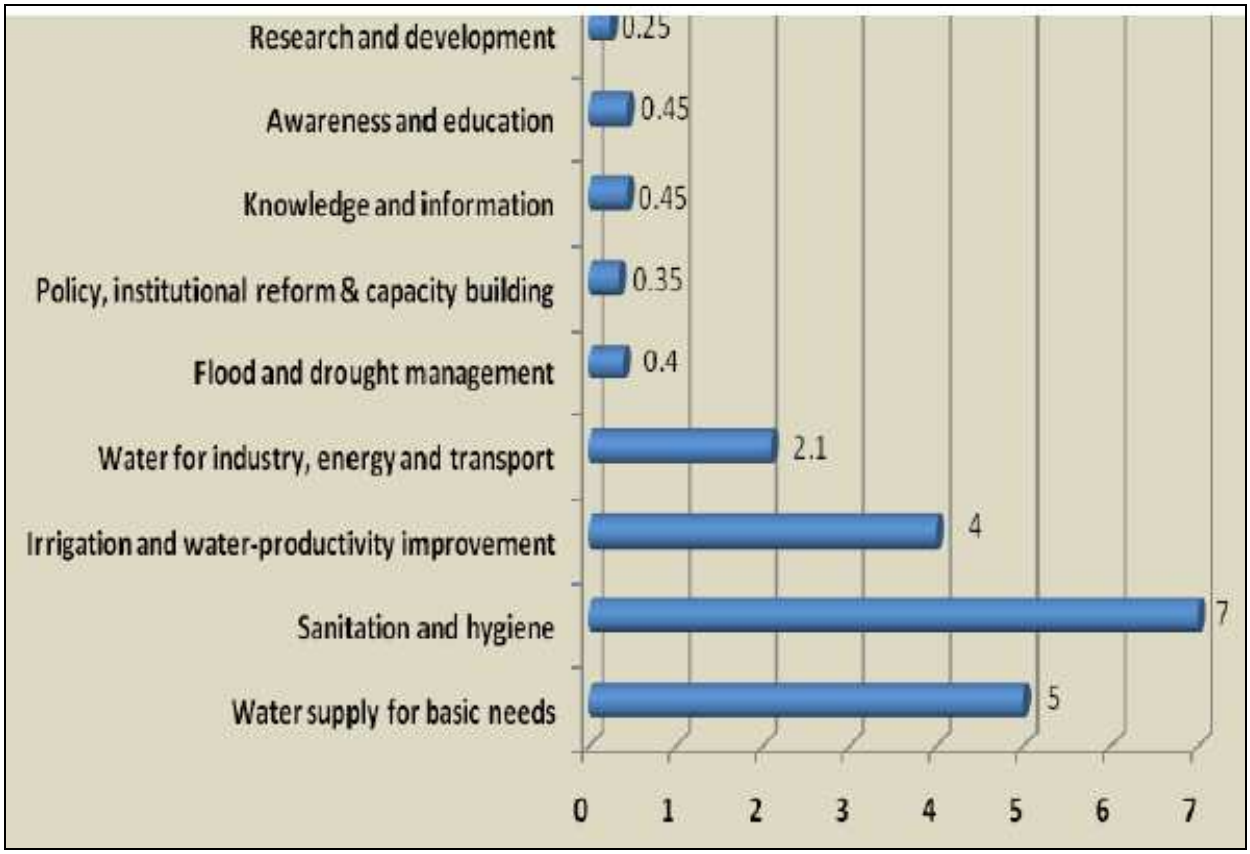

Figure 4-1: African Water Vision's Summary of Annual Investment Requirements (US$ billions)
[Source: Africa Water Vision 2000]

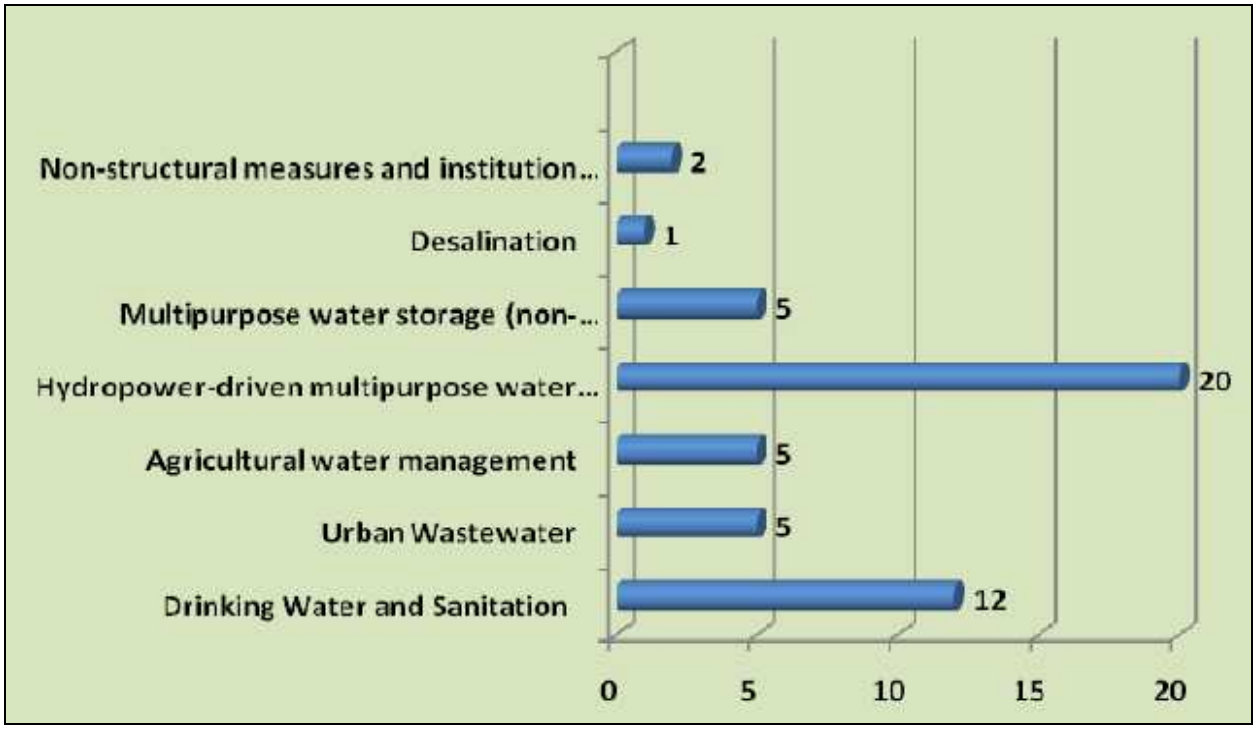

Figure 4-2: African Water Vision's Summary of Annual Investment Requirements (US$ billions)
[Source: Manu 2009]

Key figures that can be abstracted from the preceding figures include the following:

- The estimated water infrastructure investment requirements was US$ 20 b/a as at 2000 and targeted investments of US$12 b/a in drinking water and sanitation over the next ten years should be sufficient to attain the Millennium Development Goals (MDGs).
- New estimations indicate that US$ 50 b/a now required for the next 20 years, 2.5 times the estimation of 200, while the overall water services increase to US$ 17 b/a.

Estimations of the World Health Organisations are tabulated in table 4.2.

Table 4-1: Total Expenditure on New and Existing water and sanitation infrastructures
[Source: Manu, 2009]

WHO Sub-region[10]	Total spending on Water (US$ million)			Total Spending on Sanitation (US$ million)		
	Capital	Recurrent	Total	Capital	Recurrent	Total
AFR-D	6.4	10.9	17,296	15,817	11,454	27,272
AFR-E	7.3	12.5	19,852	18,711	10,989	29,700
TOTAL	13.7	23.4	**37,148**	34,529	22,443	**56,972**
TOTAL per annum			3.7			5.7

[10] The WHO classification groups countries by mortality strata. The countries in the groups are:

AFR-D: Algeria, Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Chad, Comoros, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Madagascar, Mali, Mauritania, Mauritius, Niger, Nigeria, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Togo

AFR-E: Botswana, Burundi, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Uganda, United Republic of Tanzania, Zambia, Zimbabwe

As far as expenditure levels for water services are concerned, they have reached around US$ 6.1 b/a. On the pan- African level:

- around US$ 2.8b/a is being invested in Capital Expenditure
- Existing expenditures on recurrent costs has reached levels of US$3.5 b/a through Government funds and tariffs; **but there is little contribution from development financing institutions** although this trend is changing now. For instance the DBSA have establishment a specific Operation and Maintenance Fund

The financing opportunities in the water sector lie in understanding the implications of the sector challenges on public welfare. There is growing evidence that African Governments and development partners have taken major steps to respond to financing requirements of Africa's aspirations in the water services sector, although a finance gap of the order of US$4 billion p.a remains (Manu, 2008:4).

Water services have to reach all communities and successful delivery entails engagement of local communities for sustainability purposes. Hence, job creation opportunities in the delivery of water services are inevitable. Ultimately, access to clean water and sewerage

systems improves public health and protects the environment. Hence, investments in the water sector have a direct impact on the social-economic development and environmental sustainability. Many industrial processes need clean water and at the same time produce effluents that pollute the environment. Therefore, there are opportunities to optimise the use of water by industrial/commercial consumers.

The hydrology of Africa is that of extreme rainfall variability and distribution. There are regions that have scarce water resources and focussing on managing current water resources is becoming more important than the building of new physical infrastructures. Hence there are opportunities to invest in water conservation initiatives, which can minimise water losses and at the same time make more water available for other uses. However, the need to increase storage to ensure sustainable water services is very much necessary.

Although the provision of water is largely a responsibility of the public sector, the reality in Africa is that PSP and PPPs still have the potential to improve procurement of public services and enable more efficient use of resources. Given this scenario, there are numerous opportunities to invest in strengthening the implementation of PPPs options that can result in the sector attracting repayable finances.

5 The way forward for Africa

Africa is now in an era of abundant knowledge, experiences and commitments. The only way forward is to use these developments to deliver/implement commitments. It is thus inevitable for Africa to begin collating existing knowledge and experiences, a task that is seemingly on-going and has resulted in various declarations and commitments.

Findings in recent research indicate that 'Effective Water Governance' is now becoming a very important tool to measure the ability to attract finance. National Governments must take the lead in the water sector reforms and the attendant initiatives to promote investor/private interest in financing water projects. The trend of decentralising the provision of water services must go hand in hand with appropriate support from national governments and not leaving local authorities to their own demise. International Financing Institutions are now focussing on dealing with sub-sovereign (local) risks and requesting that local authorities be financially accountable on their own (Winpenny, 2008). Hence, national governments must invest more in supporting local authorities with respect to regulation and capacity building initiatives that create conducive environments for implementation. Expert knowledge is still largely in the private sector; hence PPPs models are still cardinal to bringing efficiency in the public water utilities.

Given the social value of water services, political risks in the sector have been high on the African Water Governance challenges. The relevance of political structures to facilitate delivery of public services cannot be overemphasised. However, these structures need strong water sector advisory services so that politicians avoid making unrealistic promises relating to delivering of water services. This would further assist politicians to establish operating environments that are predictable and conducive to PSP and financing.

Given the challenges regarding the poor status of existing water infrastructures in Africa, it is important to begin with managing what is available. The push for investigating in new infrastructure development must be preceded or move along with effective management of the existing infrastructure. The trend by Development Finance Institutions has been to fund new infrastructure developments and hope that resulting revenue would finance recurrent

costs. The latter has not been forth-coming and it is increasingly becoming evident that targeted financing for rehabilitation, operation and maintenance is inevitable.

It is important that financing for physical water infrastructures be preceded by long term capacity building and institutional development support. This should include establishment of mechanisms to ring-fence water sector revenues so that attendant recurrent costs are met from the revenues. In Africa most local authorities are still managing pools of public services (water, electricity, buildings, transport) whose revenues all go in one basket. Water revenues are one of the reliable sources of municipal local funds, but re-investment in the water infrastructure is normally inadequate and need to be enhanced.

In addition, Government departments in many African countries usually have the largest water bills, at the same time the most payment arrears. Hence, African governments must lead by example in paying their water bills in order to improve the willingness-to-pay from consumers that would ensure the financial sustainability.

6 Conclusions

Currently, knowledge and experiences regarding the practices in water sector financing are abundant, but have not been optimally utilised. Hence some reported challenges in attempts to increase funding the sector from private capital markets are common. What is evident is that the large part of the management of water services in Africa still remains in public hands. Hence, the capacitating of state owned or supported water utilities / authorities must be given priority, even to a minimum level that would ensure professional engagement with the private sector. Although there have been mixed results pertaining to PSP in the water sector, the chronic lack of capacity and low funding in the sector still retains the potential for the use PPPs.

Given the abundance of the sector financing knowledge and experiences, it is important that Africa starts focussing on prioritising water sector projects and ensuring targeted implementation. The commitments that have been made so far must be followed through if the ever rising challenge of financing is to be stalled. Improving governance issues relating to water must be accelerated as matter of urgency to ensure conducive operating environments that will be able to attract sustainable financing.

In considering various financing options, it is important that Africa acknowledges and understands the inherent characteristics of the water sector projects and attendant risks, both in the short and long terms. In mitigating such risks consideration of the existing operating environment and status of water infrastructures must be given primary attention. Furthermore, in attempting to involve the private sector, a balance between financial profitability and sustainability need to be negotiated considering social and environment impacts. Experience shows that state subsidies are necessary in Africa to facilitate the attainment of such a balance given that a large part of its population is indigent.

Finally, financing opportunities in the water sector are evident given the strategic role water plays, both socially and economically. Given the numerous lessons learn, the potential for Africa to optimise the use of water as a social and economic development vehicle is immense. The trans-boundary characteristics of Africa’s water resources also provide opportunities for cross-border collaboration using water as the common denominator.

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