

Sector reforms for sustainable financing of water and wastewater services¹

Introduction

With the discussion on the MDGs, the issue of development financing enjoys greater priority on the political agenda. The European Union (EU) has committed to increase its ODA up to 0,56% of its Gross National Income (GNI) by 2010 – with half of the additional EUR 20 billion going to Africa – and to 0,7% of GNI by 2015 (Council of the European Union, 2005). The water sector has also benefited from this development with the introduction of new instruments, such as the EU Water Facility, the African Water Facility, or the European Infrastructure Partnership. With the help of these commitments and instruments, transfer payments to the African water sector under ODA are supposed to increase significantly. One important question arising out of this is whether the additional ODA funds transferred will be used efficiently and effectively. And can the water sector in African countries absorb these additional financial flows? Will the funds make a sustainable contribution to the MDGs or will they only have a brief impact? What role do sector reforms play in providing sustainable finance to the water sector in Africa?

Water sector reforms are key for sustainable financing

To the best of our knowledge, worldwide, the annual funding shortfall for achieving the MDGs in water supply and sanitation is estimated at around USD 9-30 billion (EUWI 2003). Water Aid estimates that public sector investment reaches 70 % of total investment; external aid flows 20 %; international private flows 7 %; and domestic private sector investment 3 % (Annanradju, Calaguas, Gutierrez, 2003). These figures show that ODA covers only a minor part of the financial burden in the water sector, and even doubling ODA inflow will not change this. This makes it all the more important for African countries to make greater efforts to raise funds from their own resources in order to ensure a sustainable financing of their water sectors. However, sectoral analyses and benchmarking studies show that the water sectors of most African countries remain very inefficient as long as sector reforms are not implemented.

Water tariffs do not cover costs: In most African water utilities (approx. 60 %), revenues do not even cover operating and maintenance costs (Table 1). There are many reasons for this poor figure: many public water supply utilities are required to keep tariffs low for political reasons. Further, water tariffs do not reflect actual consumption. Generally there is also no enforcement mechanism for payment either. Over a long period, water users have become

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accustomed to pay very little or nothing for water, which has led to a strong subsidisation mentality in many countries. In addition, water users are often unwilling to pay, as the services are of poor quality and tariff increases have not necessarily been accompanied by improved quality (PPIAF and WSP, 2002). However, substantial improvements are feasible, as the benchmarking data reveal: The best 25 % of the African water utilities studied by the International Benchmarking Network achieved average cost recovery rates (O+M) of up to 160 %, approaching the average cost recovery rate in industrialised countries.

Water utilities are inefficient: Data of the International Benchmarking Network show average values for non revenue water of 32 % (reaching as high as 70 %!). Average values for staff per 1000 connections are also extremely high as compared to other regions and the values for average billing period and collecting efficiency indicate poor performance. Again, there is potential for improvement: the top 25 % of African water utilities reach values in all of these indicators that are comparable to industrialised countries.

Table 1: Water sector indicators in Africa compared with other developing countries and industrialised nations

Indicators	Africa (all countries)	Africa (top 25 %)	Dev.count. (top 25 %)	Industr. count (average)
Cost recovery (O+M %)				
- average	94	160	180	180
- min	2	120	139	98
- max	400	400	400	353
- <100 % (% of Utilities)	60	0	0	1
Non revenue water (%) average	32	13	20	16
Staff/1000 connections average	20	4	6	2
Billing period (months) average	8.8	2.2	1.2	1
Collecting efficiency average	71	100	100	98

Source: International Benchmarking Network, 2005

Regulation and monitoring are marginally developed: Of the 55 countries in Africa studied by the World Bank (2005) 31 countries have neither statal nor autonomous regulatory agencies. Only five countries have independent institutions responsible for regulating the water and wastewater sector. Regulation is essential for setting standards with respect to the tariff structure and the quality of services. It provides utilities with incentives to operate efficiently and to be socially responsible. Regulators have an important role to play as neutral brokers between policy players and operators. At the same time, they have to allow an adequate return of investment. Thus regulation helps to attract capital to the sector, including from private sources. Not existing or ineffective regulation may have a negative influence on the revenue stream of an utility and on its ability to cover costs and to finance new investments.

State financing systems are equally important

Ultimately, user fees and tax revenue are the basic source of finance for water infrastructure. As most water utilities in Africa are publicly owned these two sources are closely related. However, state financing systems are poorly developed in Africa.

Low public investment in the water sector: Worldwide, it is estimated that the water sectors absorb 1-3 % of the state budgets. African countries on average provide less than 1 % of their annual budget to the water sector. Investment in sanitation is even less. Reasons include high debt service, which takes up to 60% of national budgets, low state revenue due to ineffective tax systems (EUWI, 2003) but also a low priority for investments in the water sector (Care et al, 2004). Moreover Sub-Saharan Africa has a tax ratio of 17 % (Asche 2005), which is the lowest in the world. Unproductive and antiquated tax systems (emphasis on import duties, little taxation of domestic economic activities and assets), weak tax administrations, importance of the informal sector and the resulting narrowing of the tax assessment base all sharply limit tax revenue (ATPC, 2004).

Fee revenues are too low: In Africa approximately 90 % of the water utilities are publicly owned (Calaguas and Cann, 2006), i.e. operation, maintenance and expansion must be financed by public institutions through fees. Fees are a primary source of revenue for local authorities. However, collecting fees (including water tariffs) is not very popular among local functionaries, and so tariff policy is being abused for political purposes. This is a major reason for the failure to cover costs.

Weak fiscal decentralisation: In many African countries, decentralisation has shifted responsibilities from the central level to subnational levels. In many cases though fiscal decentralisation has not yet been implemented. African central governments have difficulties to relinquish important sources of tax revenue to subnational levels of government (Fjeldstad and Rakner, 2003). Traditional subnational taxes such as land tax generate too little revenue to meet the financial needs. Financial transfers (interstate and from the central government) are generally inadequate.

Lack of technical and human capacity: At many subnational government levels, the tax potential is nowhere fully realised. Estimates for African countries suggest that improvements in tax assessment and collection (tax administration) could increase tax revenue at subnational level by often more than 50 % (Stevenson and Trollegard, 2000).

Lack of access to credit markets: In many African countries, regions, and provinces local authorities have no access to credit markets. Reasons are partly legal restrictions, motivated by fiscal considerations: access to loans could weaken fiscal discipline (soft budget constraint), moral hazard problems from a possible accumulation of liabilities could increase, as the central government would have to take responsibility in cases of insolvency, complicating macroeconomic management by the central government. Other reasons relate to the credit-worthiness of subnational government levels: the main reasons for problems hereof are low and widely fluctuating revenues from fees and taxes, lack of tangible security, lack of repayment culture, poor financial management and inadequate regulation of local authorities as well as lack of credit rating (Winipenny, 2003; EUWI, 2003).

Weak local financial systems and capital markets do not channel capital into the water sector

Given the low levels of international capital flows to Africa and to the water sector, local financial and capital markets have to play a particularly important role in financing water infrastructure. These markets should be in a position to meet the financial needs of the actors in the water sector on a demand-driven basis.

For example:

- By giving individual households access to the formal banking system so that they can borrow at market rates in line with their bankability: for purposes such as financing household connections, operating and maintaining their own wells and sanitation facilities etc.
- By giving smaller utilities (private or public) and small scale operators access to loans to finance new investments, operating and maintenance of smaller piped systems, financing investments for water kiosks, tankers, public toilets, waste water trucks etc.
- By ensuring that water utilities have access to a capital market capable of mobilising local savings (e.g. pension funds etc). Local sources of finance have a particularly significant role to play here, as most water utilities do not have access to financing in international capital markets. International financing also involves risk from currency fluctuations.

Sub-Saharan Africa has a deficit in terms of widespread provision of financial services to the population. DFID estimates that Africa-wide the unbanked population is between 80 % and 90 % (Applegarth, 2004). This primarily affects poorer population groups, particularly in rural areas, and Small and Medium Enterprises (SMEs) in all sectors of the economy, including the water sector. As a result, the financial and investment potential of these households and enterprises cannot be adequately realised. The reasons for the shortfall in the provision of financial services include the poor environment for sustainable financial intermediation (e.g. weak financial market regulation and supervisory agency). The same applies to institutions and structures at the meso level of the financial system, e.g. associations, credit information agencies, Apex institutions, which are either absent or have serious weaknesses.

Capital markets in most African countries are either not existing or are inadequately developed. This is why even large enterprises are only able to access domestic refinancing through the banking sector. This leads to a situation where commercial banks focus on larger enterprises and neglect other customer groups perceived as too risky. These commercial banks generally only mobilise short term financing (Applegarth 2004).

In consequence, there is a general shortage of long-term capital needed for investment in the water sector. This is due to the low level of local savings which the formal banking sector can mobilise. Reasons for this include the high capital flight from Africa: 39 % of private wealth produced in Africa is invested outside Africa. Africa has the lowest savings ratio (ratio of bank deposits to GDI) of all regions of the world, only 22 % of Gross Domestic Income compared with 40 % for Southern Asia and the Latin American Countries. However, particularly people in rural areas save primarily real assets such as livestock, housing, informal businesses etc. which by far outweigh ODA grants (Applegarth, 2004).

These figures show that developing efficient financial systems and capital markets could mobilise considerable funds from local resources. To meet the need for investment in the productive and social sectors, Africa must at least double the (monetary) savings ratio. For a long time Africa has neglected the mobilisation of local savings. In line with this, financial sector and capital market development play a major role in mobilising and channelling capital to the water sector. Reforms relate not only to the banking system but also to developing pension and insurance systems, social security systems, which offer secure investments for savings and also function as instruments to mobilise local capital.

Increased financial transfers outstrip the absorption capacity of the countries

There is agreement in principle that ODA promotes economic growth. However, ODA also has decreasing marginal returns extending to negative impacts on growth. Studies show that there might be a saturation point for ODA between 15 % and 45 % of GDI (Applegarth, 2004). Many African countries have already reached this point (Table 3). It is thus probable that the impact of ODA decreases and turns negative. Rapidly increasing funds could even accelerate this process. Reasons can be found in:

Macroeconomic constraints. Rapid increases in ODA transfers can result in macroeconomic instabilities. They have an inflationary impact, and if they fluctuate they have an adverse impact on public and private investment. They can distort the labour market, e.g. through a sudden increase in demand for qualified skilled labour etc.

Crowding out the private sector. This is particularly relevant in LDC and Poverty Reduction Strategy (PRS) countries with a high ODA share in GDP and budget financing. The external flow of funds can lead to excess liquidity, which is soaked up in order to avoid inflation by relatively simple monetary policy instruments, such as state bonds. This can lead to crowding out of the private sector, as it is more profitable for banks to invest their funds in low-risk, high-interest government bonds than to lend to small and medium-sized water utilities or other population groups perceived as high-risk.

Table 2: Share of external aid payments in GDP in Africa

Countries	1997	1998	2002	2003
Congo DR	5.5	2.2	14.7	n.a.
Ethiopia	8.4	10.2	21.7	22.8
Malawi	13.8	25.6	20.2	29.9
Mali	17.7	13.6	15.1	12.7
Rwanda	12.5	17.7	20.8	20.0
Sierra Leone	14.3	16.3	47.0	39.0
Tanzania	12.5	12.1	13.2	16.3
Sub-Saharan Africa	4.5	4.7	6.3	6.0

Source: World Development Indicators 2004 and 2005

Weak institutions: Many countries lack the institutional and human resource requirements to use growing aid effectively, with little or no regulation and monitoring instruments, inefficient public administrations, inadequate financial management at local level, lack of public control (incentives to corruption). The concentration of programme-oriented aid (SWAP, budgetary support) and an increase in ODA may also lead to overload the respective institutions in tendering, processing and implementing infrastructure measures.

Conclusions for policy advice

We do not solve problems by throwing money at them: Policy must not surrender to the hypothetical “silver bullet” of increasing financial transfers in order to reach the MDGs. ODA alone will never reach sufficient levels for solving the financing constraints in the water sector, let alone the problems associated with ODA in general. Financing the water sector will continue to depend on the ability of the respective country to mobilise local resources and create suitable conditions for investment (local or international). This takes time (decades in some cases) and requires political commitment by the partner country to initiate and implement reform processes. It is therefore imperative that increased financial transfers are accompanied by sector reforms, which improve the absorption and implementation capabilities of the national structures.

Bilateral and multilateral DC must press harder for self-responsibility: The governments of the developing countries are responsible for creating the environment for sustainable financing of the water infrastructure. Politicians in the South must modernise their economies to achieve higher economic growth. They must invest in water and make their country attractive to private investors – not least to domestic private investors who currently prefer to invest their money “safely” abroad.

For the water sector this means first of all, formulating and implementing financing policies. These include tariff systems, which reflect the needs and capabilities of different social groups, which are transparent, reliable and simple, and which are based on cost recovery. Tariff policies need to ensure that water supply and sanitation (WSS) costs are covered with the aid of user fees, connection fees and subsidies. This also includes effective regulation and monitoring which creates incentives and offers security to investors (cost recovery, financial sustainability, profits, protection against political influence, incentives to invest in poorer areas etc) and is independent of the service providers and government. This policy creates incentives for transforming current inefficient water utilities into enterprises, which are financially sustainable and customer oriented.

Reforming state financial systems requires giving greater priority to state investment in the water sector within national development policies. This means not only increasing its priority within the state budget (taking into account macroeconomic stability criteria), but also to give greater attention to water in the national PRS. In the course of decentralisation, the transfer of additional tasks and burdens to subnational regional and local authorities must be accompanied by the transfer and development of capacities and mandates for cities and local authorities to finance investments in the water sector. In many developing countries this means starting with the reform of internal financial relationships (e.g. reforming the tax system, direct taxes, equalisation payments between subnational governments, transfers by central government), with the goal of ensuring that cities and local authorities have reliable sources of income. It also requires enabling regional and local authorities to meet their capital needs from internal and external markets. Besides the necessary adjustments to the legal and institutional framework, it also requires the creation of financial capacities, for example, local authorities’ financial control and management, and systems for local authority borrowing or debt management. This also includes strengthening the willingness to collect taxes, fees etc.

Creating a sustainable financial system is the basic requirement for durable and demand-oriented provision of financial services by local financial markets. This requires a common understanding of competitive financial sector promotion on the part of the actors involved, and specifically between the policy areas involved, e.g. financial sector policy and water sector policy. Of central importance here is the regulatory and political environment in order to establish a transparent and competitive framework. This could create greater confidence for demand and supply of financial services. The challenges to financial institutions at the institutional level are primarily to strengthen the institutional capacity, mobilising local resources, liquidity management, and managing risks and costs in developing innovative – and in particular - long-term financial products.

Greater weight must be given to capacity development: The current popularity of infrastructure financing needs to be matched by support in other respects, or else there is the risk that funds will be used inefficiently. This could fall back on development cooperation (DC) and infrastructure promotion. DC institutions must extend their actions beyond the water sector: sectoral reforms must take into account measures and reforms in other sectors than the water sector. Therefore the profile of the DC adviser must offer a broader range of competences. This also means greater transsectoral and interdisciplinary cooperation with the partner countries and among DC organisations. Coherence needs to be established between policy areas, e.g. new financing instruments must be compatible with the financial system and must not distort local financial markets. ODA should not replace national and subnational budgets (e.g. in PRS).

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