

Challenges and Opportunities for Financing Transboundary Water Resources Management and Development in Africa

Concept Note

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Abbreviation List

AICD	Africa Infrastructure Country Diagnostic
EAC	East African Community
EC	European Commission
ECOWAS	Economic Community of West African States
EUWI	European Union Water Initiative
EU	European Union
FWG	Finance Working Group
GEF	Global Environment Fund
IWRM	Integrated Water Resource Management
MDG	Millennium Development Goals
OECD	Organisation for Economic Co-operation and Development
REC	Regional Economic Community
SADC	Southern African Development Community
SIWI	Stockholm International Water Institute
TWAP	Transboundary Water Assessment Programme
TWM	Transboundary Water Management
UNDP	United Nations Development Programme
WSP	Water and Sanitation Program

1. Purpose

As part of its work programme for 2009-12 the EUWI-FWG is looking into financing for water resources development and management. A key aspect of this work, as raised at the EUWI Coordination Group meeting in November 2009, is the issue of financing transboundary water activities. A desk study is planned with a focus on Africa and as a first step the EUWI-FWG requested SIWI to produce a short concept note setting out the various aspects of financing for transboundary water management (TWM), linkages to development outcomes, financing opportunities and a proposal for a further study based on the following issues:

- special issues related to financing transboundary waters with reference to regional funding for other sectors;
- examples of how different financing mechanism are being used to provide support with pros and cons of different approaches; and
- guidance/recommendations on the niche for EU bi-laterals and EC so they can support riparian states through more practical interventions using both their own bilateral funds and putting together packages of funding from different sources.

The structure of the paper is as follows: first the cooperative aspect of transboundary water resources management and development is analysed; secondly, the crisis of financing water for development outcomes is presented at the transboundary scale with linkages to the national and local scales; thirdly, risk preventing financing is analysed and finally different financing instruments are examined. The paper concludes with suggestions for further analytical steps.

2. Transboundary water management and development

Sovereign states have different human, political, social, institutional and financing capacity that add to the complexity of effectively engaging in TWM initiatives. The management of transboundary waters is in itself considered a regional public good². Regional policies and international water regimes are a negotiated balance between sovereign states. The regional institutional structures are highly dependent on national level structures and policies. There are often considerable differences between co-riparians who do not always have adequate appreciation of their own resource needs and uses. This militates against constructive negotiation. The development of the integrated water resources management approach (including IWRM plans) in many countries since 2002 has contributed to a more focussed and coordinated policy framework, to some extent improving the basis for dialogue between neighbouring countries.

² Jagerskog, A., Granit, J, Risberg, A. & Yu, W. (2007). Transboundary Water Management as a Regional Public Good. Financing Development – An example of the Nile Basin. Report. Nr. 20. SIWI Stockholm.

Recently the negotiations to build a cooperative regime have been influenced by the concept of sharing benefits from water development rather than allocation of physical quantities of water. The Nile Basin Initiative is perhaps the best known example. This approach acknowledges the comparative advantage of regions and the associated economic and political benefits of working together.³ **Key challenges for effective TWM includes: obtaining political commitment and allocation of financial resources across countries and relevant levels of government; and identifying the role of TWM in a broader regional cooperation or integration agenda.**

Research has shown that regions which have removed barriers to trade and increased interactions between states have experienced a relative increase in prosperity and stability when compared to regions with more limited cooperation.⁴ The development of hydropower, including irrigation and flood control in multipurpose schemes provides tangible benefits that can be distributed at the regional level. Other benefits include industry, food and health outputs, as well as environmental services for biodiversity conservation and tourism that all can be generated at the local or regional level. Benefit sharing schemes based on water and energy can for example bring opportunities for small and isolated economies and stimulate growth in larger economies.⁵ At the same time it is realistic to acknowledge that in some cases it could be a zero-sum game with winners and losers driven by upstream-downstream tensions and conflicts. There are also “free rider” problems when attempting to achieve collective action.

The cooperative management of transboundary river basins and the sharing of benefits from development pose serious challenges, since all states in a transboundary river basin depend on each other. If the aggregate benefits from common use of water are larger than those of systems in which water allocations and management take place at the unilateral level, then there will be incentives for cooperation, driving regional integration.⁶ Whatever the motives for cooperation or lack of cooperation they need to be analysed and understood since they have implications for funding modalities and the sustainability of regional projects.

Between the 1960s and 1980s many transboundary river basin organisations were created with external support and according to the AICD Report⁷ “...nearly three decades later, with few exceptions, these transboundary organisations are still in the emergent stages.” Factors are: waning political commitment, poor cooperation, management and technical difficulties, armed conflict, political instability, poorly defined goals, insufficient capacity and dwindling donor support. There are also many exceptions to this including the Senegal River Development Organisation and the Lesotho Highland Development Project where significant benefits have been developed in terms of energy, bulk water supply and irrigation. Successful regional integration of infrastructure in Africa depends on building political consensus through⁷:

- high-level “buy in”
- building trust (supranational organisations can be honest brokers)

³ Philips, D., Allan, J., Claassen, M., Granit, J., Jagerskog, A., Kistin, E., Patrick, M., and Turton, A. (2008). The TWO Analysis: Introducing a methodology for the transboundary waters opportunity analysis. Report Nr. 23, SIWI, Stockholm.

⁴ World Bank. World Development Report 2009: Reshaping Economic Geography, 2009

⁵ Granit, J., 2010 Elaborating on the Nexus Between Energy and Water, Journal of Energy Security, March 2010, IAGS

⁶ Granit, J., 2010 Elaborating on the Nexus Between Energy and Water, Journal of Energy Security, IAGS

⁷ 2009 Africa Infrastructure Country Diagnostic

- investment in credible information (identifying winners and losers, benefits and costs to various parties)
- focus on sharing benefits through regional integration, rather than allocating shares of available water resources

The institutional architecture supporting African regional integration (30 bodies) shows a “high degree of complexity, unclear functional responsibilities for strategy and project development, and uncertain financing strategies.”⁸ Many member states fail to pay their contributions on time and in full and infrastructure development often does not have enough priority, nor do the bodies have staff with skills and motivation. In TWM it is therefore key to clarify the functions that can be carried out jointly and the functions can be undertaken at the national level. This commitment based on mutual understanding will support the TWM institution building process.⁹ At the same time donors to these processes are beginning to raise concerns that investment in TWM does not generate sufficient poverty alleviation results¹⁰.

Providing finance for development of transboundary water resources presents political, institutional and legal problems. For small scale developments in areas where water is abundant the transboundary dimension may not be a significant factor. However, where resources cross borders, are scarce or becoming scarce, as demand increases and climate variability and change reduces availability, the development of transboundary waters will become increasingly important and may either stall development or lead to tensions and increased conflict.

3. Current financial status of the water sector

Water is essential to achieving sustainable development and the Millennium Development Goals¹¹. While recognizing this it is also clear that there is a persistent underinvestment in water illustrated by the large number of unserved citizen and the deteriorating water ecosystems. The basic problem is underinvestment in three key water related activities namely: 1) water information as an input to decision making, 2) water governance setting right policies to plan, allocate water and build institutions, and 3) water services¹² including multipurpose water development and storage and the delivery of energy production, primary production, industrial and domestic water use and ecosystem services.¹³

Investment needs to take place in all these three sets of activities to ensure good water management and development and the delivery of development outcomes. Governments in a transboundary waters cooperative context will identify policies of their choice to realize the different goods and services necessary to manage water as a public good and the enabling environment to deliver tangible benefits towards improving livelihoods and meeting the MDGs.¹⁴ **Water related goods and services**

⁸ Ibid

⁹ Ibid

¹⁰ Sida workshop on increasing results from TWM for people living in poverty. Nairobi 15-16 April, 2010

¹¹ 3rd World Water Development Report

¹² According to the European Union Water Framework Directive, water services are defined as: “all services which provide, for households, public institutions or any economic activity (a) abstraction, impoundment, storage, treatment and distribution of surface water or groundwater or (b) waste-water collection and treatment facilities which subsequently discharge into surface water.”

¹³ Granit. J., 2010: Presentation at Sida workshop on increasing results from TWM for people living in poverty. Nairobi 15-16 April, 2010

¹⁴ Ibid

supporting sustainable growth will be provided by both public and private actors.

Facilitating transboundary project preparation and cross-border financing entails in general high project preparation costs – typically 5% of total financing, higher than for national projects. Considering these costs opportunities exist for donors to leverage finance and improving the sustainability of funding for public goods, mitigate risks that hamper investment and increasing private sector participation to meet large financing needs.

The current financial and economic crisis is likely to have negative impacts on future aid disbursements, especially in the African countries that are heavily dependent on external finance and Government budgets are likely to be severely squeezed. The impact of the public debt crisis may further squeeze support from OECD countries to Africa.¹⁵ There has also been a reduction in the supply of commercial finance and risk capital for infrastructure which is not likely to be reversed in the short term.

Water services are particularly vulnerable, affecting access to repayable sources of funds to the sector such as commercial loans, bond and private equity. Notably, the World Bank's WSP was grooming a number of Africa utilities with the aim of giving them access to the bond and commercial finance market,¹⁶ this progress is at risk of stalling due the financial crisis. The long-term repercussions on growth and poverty reduction will create further delays in their progress towards achieving the MDGs. An increased availability of loans from the IFIs, is likely to be the main anchor of African infrastructure finance – including attraction of commercial finance. This is set in a context of already deficient capital flows and persistent underinvestment in the water sector.¹⁷

On the other hand, there are new entrants into the infrastructure sector in Africa, notable, sovereign wealth funds, such as Arab Funds, China and India. This may impact on transboundary issues and needs to be better understood by the traditional donor community. The current financial situation also suggests the need for a more strategic and longer term approach with interventions that pave the way for future investments rather than just focussing on major high profile projects.

3. TWM donor finance opportunities

3.1 Pre-analyses for meeting TWM and regional integration objectives

Financing water in a TWM context entails identifying which of the three key water activities (information, governance and services) investment should target to support change. In some cases all three areas needs to be supported. In other cases “soft” institution building activities or “hard” multipurpose infrastructure schemes may be considered. TWM financing should be designed so that it creates an enabling environment for investments at regional, national and local scales. TWM financing will supplement national and local financing to sovereign and sub-sovereign lenders from both the public and private sector. If a REC exists it can provide the framework

¹⁵FT.com < <http://www.ft.com/cms/s/0/7e6da27e-4716-11df-b253-00144feab49a.html>>, and emerging news 10 May, 2010.

¹⁶ WSP/PPIAF (2009) How can reforming African water utilities tap local financial markets?

¹⁷ Winpenny, J., Bullock, A., Granit, J., Lofgren, R. (2009) The Global Financial and Economic Crisis and the Water Sector. SIWI Report Nr. 17-22. December 2009, Stockholm.

for a regional strategic investment analysis and the sharing of benefits from development.

- **This strategic pre-analysis is under-resourced and presents an entry point for EU/EC donors.** Donors can support through building technical skills, strategic dialogue and mapping of regional integration opportunities (for example, within SADC; EAC and ECOWAS). **This is a public good objective with limited incentives for private sector involvement.** Financial resources for this activity will primarily come from transfers (grants) and contributions from national governments.

3.2 Activity – Water Resources Information

Investing in water resource information activities includes improving the data and information base, a critical step towards setting the baselines, improving transparency and the ability of countries to enter transboundary negotiations on a more equal basis (levelling the playing field). Harmonisation of water resource management approaches and enhancement of technical capabilities, including inter-calibration of technical standards are important elements within this activity. Specific countries, due to the different starting points in development (and hence the disproportionate ability of some regions to contribute data and information) will require more assistance. Establishing a sustainable data and information base for each country within a transboundary setting requires financial support and is another possible entry point for EU/EC donors. Specifically,

- **the public good nature of these activities generally limits private sector engagement.** It is thus the responsibility of government to allocate adequate funds for such baseline activity.
- existing financial resources primarily come from transfers (grants) and contributions from national governments.
- investments in e.g. in water monitoring programmes, may be less attractive to donors when compared to the more visible investments in water service infrastructure, thus creating a bias towards the latter types of investments – mechanisms to overcome this bias are required (in part they relate to the Donors' M&E policy – see section 5). Information is critical but can be costly so a sound analysis of real needs is required to provide a baseline that will be maintained over time.

At the multi-lateral scale, several initiatives have been undertaken in the last few years to establish frameworks for monitoring the state of transboundary water. More recently, the GEF is working with UNEP to develop a Transboundary Water Assessment Programme (TWAP) methodology. The methodology focuses on an indicator based baseline assessment measuring the status of transboundary water bodies.¹⁸ The TWAP methodology focuses mainly on water body characterisation from an ecosystem services approach, with the objective of promoting investment in water governance and services in regions with large needs, i.e. it is driven by an environmental perspective rather than development perspective therefore additional work may be needed to move towards infrastructure or poverty alleviation measures. The TWAP methodology is expected to be completed by end 2010. If the methodology is approved, a full scale assessment of the status of regional water

¹⁸ Granit, J. & Lofgren, R. (2010). Framework for Monitoring Aid Effectiveness in Sida's Support to Development of Water. Draft. February 2010. SIWI, Stockholm.

bodies could start in 2011. The GEF provides up to 50% of the funds in their transboundary water window highlighting the needs for matching funds. Provision of matching funds to expand the methodology towards a development perspective could be an entry point for EU/EC donors.

3.3 Activity – Water Governance

Investing in water governance activities would lead to improvements in regional strategic planning, stakeholder engagement, pre-investment analysis and transaction advisory services: complementary components for the delivery of water service infrastructure. This would enable a strategic assessment of, for example, power or agricultural potential and an assessment of trade-offs between alternative options. Specifically:

- **the public good nature of these activities generally limits private sector engagement.** Similar to the water resources baseline (section 4.2 above) this raises the question of how can the provision of public goods in TWM attract commercial funding?
- existing financial resources primarily come from transfers (grants) and contributions from national governments.
- certain kinds of TWM do not require the creation of permanent organisations. The relative merits of *ad hoc* transboundary bodies, bespoke finance bodies (e.g. an observatory) versus permanent regional organisations, as a means of developing regional infrastructure, has to-date not been addressed (e.g. is there a larger role for networks such as the *Observatoire du Sahara et du Sahel* (OSS)).
- the elements that explain success of certain permanent regional organisations (e.g. Senegal River Basin Authority and the Lesotho Highlands Project), as a means of developing regional infrastructure should be drawn out for potential replication.
- with permanent organisations, the institutional uncertainty and legal status of many transboundary bodies increases risk, limiting the application of different financing instruments due to limited credit worthiness (if any).
- pre-investment work required to underpin the delivery of water services, especially to mitigate risks, is particularly under-resourced and the provision of support is a potential entry point for EU/EC donors.
- upstream transaction advisory services (legal, financial and project management) to regional bodies preparing the ground for transboundary investments is weak and a potential area for EU/EC donors to strengthen.

3.4 Activity – Water Services

Investing in water services through bankable projects entails the provision of enabling finance facilities (such as grants; credits; risk guarantees; matching funds). According to the European Union Water Framework Directive (2000), water services are defined as: “all services which provide, for households, public institutions or any economic activity (a) abstraction, impoundment, storage, treatment and distribution of surface water or groundwater or (b) waste-water collection and treatment facilities which subsequently discharge into surface water”. Many water related goods and services demand large and small scale water management infrastructure to ensure water availability and to mitigate droughts, floods and long term climate change. Hence, water services are part of this activity and need to be financed and operated in a sustainable manner. Some of these investment may be implemented

cooperatively on a shared system or cooperatively within one country and some by one country after due consultation on the potential negative impacts on the transboundary system.

The preparation of solid bankable projects is costly and time consuming in a developing country context due to political, technical, environmental, financial and social risks. These upstream project preparation and subsequent due diligence make private sector hesitant to engage in water related projects at the transboundary and national levels. **Donors can therefore play a major role in preparing a pipeline of solid regional projects for subsequent due diligence by different financiers (public and private).**

Specifically:

- **these investment activities are a mix between public and private goods and therefore is of interest to the private sector.**
- limited national budgets and inability to anticipate actual cost recovery levels (pricing), taxes and charges (e.g. wastewater) by regions, in particular in slower growing regions¹⁹ with poor governance structures, are key structural blockages that negatively impact on the private sectors' appetite for engagement.
- donors can play a role in mitigating structural blockages that limit access to private sector capital and local sources of finances (as a result of ineffective cost recovery mechanisms) e.g. through the output based aid approach.
- the limited capacity of bilateral donors to identify bankable projects and engage with what is perceived as complex financial transactions, limits their willingness to engage in these activities. Significant opportunities exist for donors to engage in transaction advisory services on specific investment projects, presenting another potential entry point for EU/EC donors.

While donor involvement in all activities adds political weight and capacity to the formulation of joint objectives and projects, ironically the reputational risk to the bilateral donors' increases as they focus on service delivery. Service delivery is key to meeting the MDGs and donors can not only focus on the governance or the water information aspects when supporting transboundary waters transformation. Risks increase as donors engage on projects with service delivery as the Bujagali HEP in Uganda illustrated, where financial closure was delayed by several years due to minor corruption and bilateral disbanding.²⁰

4. Incentivising investment by mitigating perceived risk

In the transboundary context, it is necessary to structure the operational and financial mechanisms across political and geographical boundaries, requiring further donor support to facilitate investment from different sources. At the same time the absence of good industry standards for financing all three key sets of water activities on both a transboundary and national scale brings unclear incentives for private sector investors. This is further compounded by lack of international taxation regimes for

¹⁹ Escribano, A., Guasch, J., Pena, J. (2010) Assessing the Impact of Infrastructure Quality on Firm Productivity in Africa. Policy Research Working Paper 5191. The World Bank. January 2010.

²⁰ Barigaba, J. (2010) Bujagali power project to come on stream unit by unit in 2011. The East African, April 12-18, 2010.

TWM.²¹ Amongst water services related activities water for energy seems to be able to attract most financing today. The public sector oriented aspects of delivering multipurpose storage or ecosystem services is not as easy to finance partly due to unclear revenue streams.

All possible sources of financing, national governments, IFIs, donors, and the national and international private sectors will need to be utilized to the maximum extent possible to meet the MDG challenge and tackle the persistent under investment in water at the transboundary, national, and local levels. A major concern for any investor is to manage risk in developing and emerging economies. The following sections will address this issue.

4.1 Risks

Private financiers such as commercial banks require donors and IFIs to share the risks including political, regulatory and sub-sovereign.²² The split between private and public (including international public) sources depends on the proper identification of public (national and international) goods, and goods and services that can (and should) be sold. For TWM there is an increased political risk that most private investors would be reluctant to accept. The donor community can help by covering this risk. At the same time the donor community is risk averse when it comes to reputational risks that can be associated with major transboundary water development projects and storage schemes.

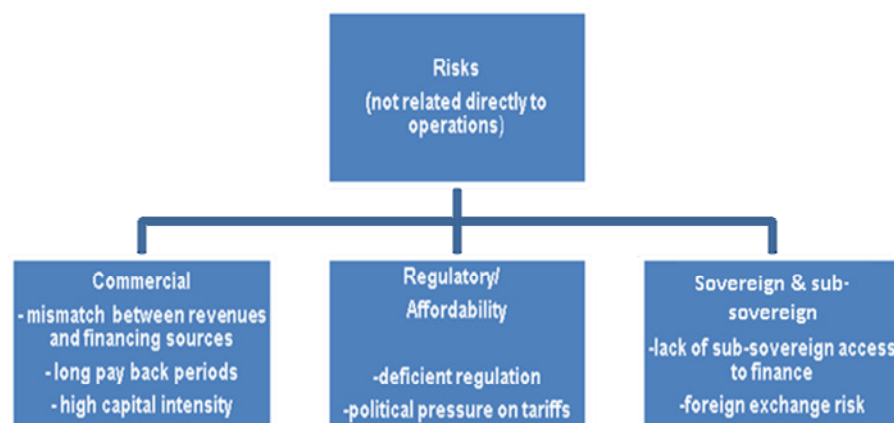


Diagram 1 Overview of risks for Private Sector involvement in the Water Sector at the service level in WSS (relevant both for multi and in-country projects)

²¹ Ministry of Foreign Affairs (2001) Transboundary water management as an international public good. Report by ODI, Arcadis and Euroconsult. Stockholm, Sweden.

²² Baietti, A., & Raymond, P. (2005) Financing Water Supply and Sanitation Investments: Utilising Risk Mitigation Instruments to Bridge the Financing Gap. Water Supply and Sanitation Sector Board Discussion Paper Series. Paper No. 4 January 2005. The World Bank Group. Washington D.C.

4.2 Risk mitigation tools to adapt to the TWM context

Appropriate project finance structures are required that balance, for example, grants and loans, with risk sharing and guarantees. The IFIs have been reactive and developed several innovative mechanisms to address these concerns (e.g. the Private Investment Development Group's (PIDG), Guarantco, providing guarantees as credit enhancement of local currency debt,²³ the World Bank Groups MIGA providing political risk insurance and investment guarantees, mainly in extractive industries, and Swedfund). There are opportunities to consider how these instruments can be used for TWM activities in general (soft investment) and regional water infrastructure investments in particular (hard investment).

Guarantee schemes give investors comfort that their projected cash flow will not be disrupted by events beyond their control, or if they are that the costs of disruption will be partially or wholly offset by a guarantee. Fundamental to this formula is that the underlying cash flow of the project is sufficient to attract and retain their interest (i.e. some minimum guaranteed level of cost recovery). To stimulate greater investment flows to the sector, a supply of bankable projects is needed.²⁴

While guarantee instruments have achieved some success in providing risk mitigation for power, telecom and transport, these instruments have been used only rarely in the water sector.²⁵ This underscores the specific nature of risks affecting investments in water activities (in particular cost recovery issues). Donors can play a role in mitigating these risks, either through supporting existing IFI mechanisms e.g. with marketing efforts; modifying existing schemes to fit transboundary initiatives; or through directly establishing member state funds.

Strategic Financial Planning²⁶, as developed by the OECD, is a useful method for determining finance gaps for water supply and sanitation and to help to attract IFI, private and donor funding in an in-country context. However, it is not yet designed to cater for water resources management or the full range of transboundary water investments. OECD is now working with others, including the EUWI-FWG and GWP, to develop a framework for the financing of WRM.

5. Financing Instruments

At the in-country level financing instruments for bilateral donors involve either budget or sector support which is the primary mechanism according to the Paris Agenda. **Project specific funding is today the foremost mechanism to support TWM** and development in absence of program support to a sovereign lender. Grants from bilateral or multilateral donors are therefore the most commonly used financing tool. However, project specific financing from donors is declining.

²³ Lloyd, M (2005) Public private partnerships in the water sector of the EECCA region: update and recommendations for the improvements of service delivery. OECD, Environment Directorate. Paris.

²⁴ World Bank (2003). Comparative review of IFI risk mitigation instruments and direct sub-sovereign lending. Final Report. November 2003. Washington D.C.

²⁵ OECD, (2009): Innovative financing mechanisms for the water sector: an OECD perspective. By Tremolet and Scatista.

²⁶ OECD (2009) Strategic Financial Planning for Water Supply and Sanitation, and EUWI-FWG (2010) Strategic Financial Planning for Water Supply and Sanitation: Rationale, Method, Experience and Lessons Learned.

Bilateral support is mostly government to government and support for TWM is thus constrained as funds are processed separately through the different riparian states unless there is a treaty in place that allows funds to be disbursed directly to a TB authority through regular government budget appropriations. **Donor rules and sovereignty issues are thus a key barrier to the provision of finance in the transboundary context.**

A range of financing sources is available to develop, build and operate water sector infrastructure and services at the in-country level focusing on water services. These financing tools are not yet well developed for multi-country investment operations. They include:

- grants, loans, utility bonds (e.g. in Botswana), local debt capital markets, export funds, taxes, sales levies.
- direct private investment, public private partnerships²⁷ (PPP), private finance initiatives, voluntary finance schemes.
- payments for ecosystem services, debt-for-nature exchanges, climate change adaptation funds (e.g. the MDG Spanish Fund).

One-off large scale transboundary projects will rarely be financed directly by individual bilateral donor grants. There are large sunk costs to finance beyond the capacity of donor grants. **Risk mitigation instruments should therefore be used more effectively to raise private sector appetite for investment that could be used to leverage additional finance.** Donor financing in infrastructure projects typically support the “softer” and less commercial parts of an operation.

5.2 Pooling and Partnerships

Pooling donor resources (through partnerships or specific pooled funds) is an attractive method of financing TWM activities that also conforms with the principles of harmonisation. However, it can create complexities in monitoring and evaluation for the bilateral investors – as the pooling facility must be viable for all parties if implementation is to occur. Engaging in these instruments may also require the development of guidelines for bilateral contributions, including adaptation of bilateral monitoring and evaluation (M&E) to avoid excessive burden to the beneficiary countries and to enable attribution of project activities to specific donors and tax payers of donor countries. At present no global or Africa region wide monitoring system for progress in TWM exists, although basin level systems do exist. Some frameworks exist that could be used as a basis to develop indicators for TWM such as the EU Water Framework Directive, the UNECE Water Convention and the Draft UN Water Convention.²⁸

There are 20 project preparation facilities in Africa, many explicitly supporting regional activities. Their role and functions need to be considered when assessing financing for transboundary waters. It appears many of these financing mechanisms are under-committed in the field of transboundary water management.²⁹ The EIB Infrastructure Trust Fund, designed specifically for support to regional projects does not include any activity on TWM and an analysis of why this is should be carried out.

²⁷ It's unclear how the current financial crisis has impacted on PPPs for regional infrastructure

²⁸ Granit, J. & Lofgren, R. (2010). Framework for Monitoring Aid Effectiveness in Sida's Support to Development of Water. Draft. February 2010. SIWI, Stockholm.

²⁹ Plenary conclusion at Sida workshop on increasing results from TWM for people living in poverty. Nairobi 15-16 April, 2010

The New Partnership for Africa's Development (NEPAD) Infrastructure Action Plan contains objectives related to water, sanitation and interconnectivity. The partnership broadens the range of financing instruments available and is open to all member states, enabling a move towards more efficient and effective aid delivery, in line with the "European consensus."³⁰

Project identification, formulation and transaction advisory services can presently be provided through e.g. the Infrastructure Consortium for Africa, the African Water Facility, ACP-EU Water Facility, and World Bank Multi-Donor Trust Funds. EU member states and the EC could reinforce and improve these instruments so that transboundary matters are given more priority, including funding for strategic, pre- and full feasibility studies to build a pipeline of projects. An analysis should be carried out on the contribution made so far by the ACP-EU Water Facility to transboundary water management, and how it could be improved.

5.3 Specific funds

Two options for establishing specific funds to support TWM activities include:

a) Finance Facility

In addition to project-specific financial transactions, a special Finance Facility to develop, fund, build and operate transboundary infrastructure projects is one finance instrument for large scale or multiple projects. Finance facilities are established to isolate risk, improve governance and provide access to lower-cost capital, i.e. concessional loans. Similar facilities, used in the United States (US) and Mexico, Eastern Europe and Latin America, are based on the US revolving fund model³¹ and work through pooling funds from regions benefiting from the transboundary initiatives. It also leverages any government funds (from regional Ministries) with donations from private and philanthropic aid. It is underpinned by a federal scheme of grants to States. The capital accumulated is used as a reserve fund to help secure against risk and attract these additional investors.

Governance of a finance facility must be viable for all parties if implementation is to occur. Finance facilities have sovereign power and would execute the scope of activities from the decisions and delegations of the countries that form it. A charter would map the scope of its governance and outline the activities eligible for funding. Projects are identified, researched and selected and are then eligible for funding from a central source (in the US/Mexico case, this central source is the North American Development Bank³²).

The Trans Caledon Transfer Authority (TCTA) in South Africa is an example of a special purpose vehicle established for the funding and development of regional infrastructure projects. It is a state-owned entity for the funding and implementation of raw bulk water infrastructure and is empowered to raise funds from the domestic and

³⁰ European Commission (2006). Impact Assessment concerning EU Africa Partnership on Infrastructure. Commission Staff Working Document. Brussels. COM(2006) 376 Final.

³¹ Milken Institute (2009). Financial Innovations for Freshwater Revitalization. Transboundary project finance in Israel, Jordan, and the Palestinian Authority. Financial Innovations Lab Report. November 2009. Volume 11. Santa Monica.

³² This case is an example of the "victim pays principle" where the US is funding wastewater treatment along the US-Mexico Border.

international money markets³³. This may provide the basis for similar facilities elsewhere that donors could support.

b) Basin wide Trust Funds

Trust Funds or endowments administered by a reputable institution can underpin the financial basis of transboundary institutions. These funds enable the disbursement of significant sums whilst reducing donor administrative costs and can be seen as aid efficient and can improve donor harmonisation. However, they can dilute donor control over the administration of resources. If managed by a donor or IFI on behalf of other financing partners ownership may be diluted but disbursements better controlled. A certain level of confidence in the shared water management is required to change from bilateral donor projects to the development of trust funds. Operating costs of the trust funds are often in the region of 20-25% of the total fund.³⁴ The multi donor Nile Basin Trust managed by the World Bank is an example of a successful IFI managed trust fund, with less overhead, and with the objective of transferring fund management to the riparian governments.³⁵

6. Summary and next Steps

6.1 Summary

This concept note outlines challenges and opportunities related to financing transboundary waters along the key water related activities (Diagram 2) identified making up good water management and development. There is currently a persistent under investment in water resulting in large numbers of people being unserved, benefits from water use not developed, and the continued degradation of water based ecosystems. Riparian countries and donors are voicing a concern that TWM support is not resulting in tangible benefits.

From a TWM perspective this analysis argues that there has been too much focus on the governance and planning aspects of water from a basin perspective and too little focus on how to facilitate the generation of goods and services and the role water plays in regional integration.

³³ Pegasys Consultants, (2010) Financing Water Resources Management – the South African Experience, Paper prepared for the EUWI-FWG.

³⁴ Ministry of Foreign Affairs (2001) Transboundary water management as an international public good. Report by ODI, Arcadis and Euroconsult. Stockholm, Sweden.

³⁵ <<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/EXTREGINI/EXTAFR/NILEBASIN/0,,contentMDK:21076144~menuPK:2993455~pagePK:64168445~piPK:64168309~theSitePK:2959951,00.html>>



Diagram 2 Water activities in conjunction adding value and generating sustainable goods and services

Diagram 2 outlines a set of key water activities that are necessary to implement in conjunction in order to generate sustainable goods and services to improve development outcomes. Where water crosses international boundaries the chain of activities needs to be put in a transboundary context. TWM and in-country water management is about managing a public good and creating the enabling environment for downstream investment in services of both a public and a private character.

TWM is also a key part of building regional regimes and to drive a regional integration agenda that adds value to all involved. Sharing benefits from development at the regional level is an attractive model working in some regions which could be further explored in particular within REC frameworks. Investment in TWM will have different characteristics and design depending on the region of choice.

The water information and governance activities (Diagram 2) are basically of a public character while the water services activities can be both. Hence there needs to be a connection between goods and services created at both the local and regional level with the TWM activities. This strategic level analysis is currently not attracting enough attention in the context of REC development.

The application of existing financing and risk mitigation tools will primarily depend on the existence of a sovereign lender that can guarantee debt. That is not always the case in emerging transboundary cooperation, which therefore demands a comprehensive analysis of financing options and strategies.

To leverage all different forms of financing for water will be critical in order to address the persistent underinvestment made worse by the financial crisis. Diagram 3 below provides a summary of donor entry points in TWM, including:

- **partnerships:** pooling donor funds through existing partnership structures (e.g. NEPAD/EC-EIB; Infrastructure Consortium for Africa; African Water Facility)
- **specific funds:** establish specific funds (e.g. finance facility or trust fund), enabling isolation of risk, improved governance and access to lower-cost capital
- **project specific funding:** provide project specific funding and risk finance for larger projects

- **leverage private sector finance:** using pre-investment support and risk guarantees

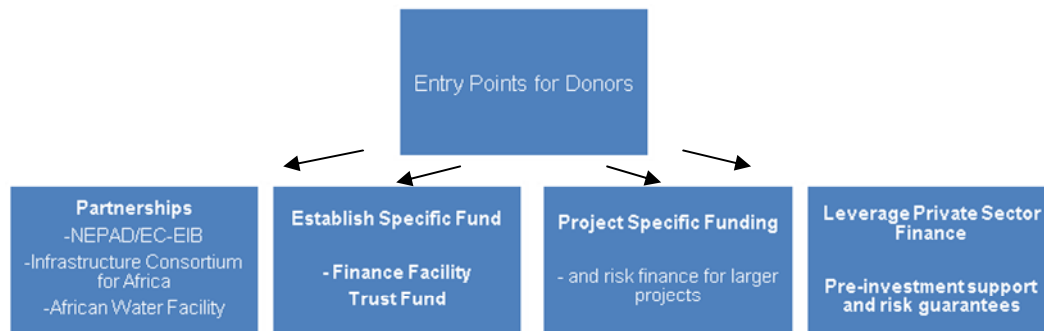


Diagram 3 Entry Points for EU/EC Donors in transboundary waters

6.2 Next steps

6.2.1 Further analytical steps for the planned desk study

Analytical steps to consider for the planned desk study include:

1. In general, what are the past donor experiences in supporting key water related activities (water information; water governance; and water services) in a transboundary context?
 - a. Partnerships, specific funds, project funding, and leveraging private sector finance.
2. What are the elements that explain successful institutional design for delivering TWM project advisory and infrastructure projects? E.g. the Trans Caledon Transfer Authority?
3. What are the linkages between TWM and:
 - a. the on-going African regional integration agenda, and regional transformation?
 - b. the establishment of an enabling environment for downstream water management and development investment work?
4. How can we apply available and innovative financing instruments in a TWM context, including the identification and application of risk mitigation tools to underpin investments?
5. How can we improve and target pre-investment analysis? E.g.
 - a. build the ground for regional infrastructure investment projects and clusters of smaller projects such as watershed management.
 - b. build on available river basin management plans; creating roadmaps for investment including the identification of local level revenue producing options i.e. taxes and charges.
 - c. identification of low visibility projects with high social and environmental values that should not be overlooked.
 - d. in large scale water storage and services infrastructure to help meet the MDGs targets.

- e. transaction advice and financing gap analyses to ensure project prioritization.
 - f. identification of sovereign lenders that can guarantee debt, if this is not available, how can we overcome this obstacle?
 - g. is there a complementary role for the EIB-Infrastructure Trust Fund to support TWM projects?
6. What role are the new donors/financiers (e.g. Arab Funds, China and India) playing in TWM infrastructure investment in Africa?
 7. What are the processes necessary to put in place to make the current internal aid instruments, procedures and mechanisms, including under the DAC, to identify ways of making it more attractive and simpler to allocate bilateral funds for regional/transboundary activities more effective?
 8. Which countries are disproportionately unable to contribute to TWM negotiations on an equal basis, what support do they require?
 9. Is there a role to expand the remit of the EUWI FWG to incorporate the complementary field of water economics and the promotion of water in economic growth and regional integration?

6.2.2 Partnering

Providing relevant input and expertise for a more in-depth analysis will require partnering with institutions such as:

1. **GWP regional water partnerships** to provide the necessary local input on demands, needs and opportunities and to build local ownership and capacities..
2. **Relevant academic and commercial finance expertise** to further define financing instruments to underpin provision of public and private goods at the transboundary scale.
3. **Multilateral agencies** and facilities with a financing mandate and/or special expertise in this topic, including the European Investment Bank, EC, the African Development Bank and African Water Facility, the World Bank, and the Public-Private Investment Advisory Facility of the World Bank (amongst others).

This paper aims to stimulate further work and it is suggested that more cooperation at the EU level is needed to help develop a harmonized approach on financing for transboundary water management. It is therefore recommended that a strong reference group is convened as a sub-group of the FWG to assist with steering the way forward including representation from the UN-Water Task Force on Transboundary Waters, amongst others. The first task of this sub-group would be to examine this paper and its recommendations and draw up its own terms of reference.