

# Transboundary Water Management as an International Public Good



Executive  
Summary 2001:1

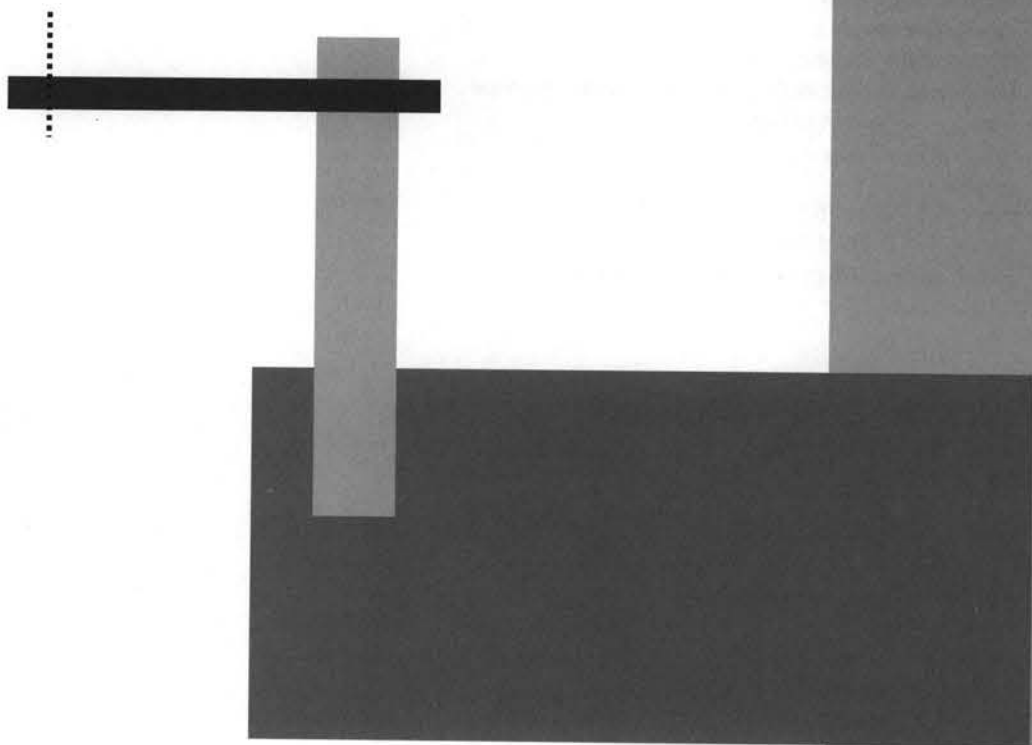


REGERINGSKANSLIET

Ministry for Foreign Affairs

# Transboundary Water Management as an International Public Good

Executive Summary



For further information about the project *Development Financing 2000* please go to [www.utrikes.regeringen.se/inenglish/policy/devcoop/financing.htm](http://www.utrikes.regeringen.se/inenglish/policy/devcoop/financing.htm) or contact:

Andreas Ershammar  
Project Director  
Development Financing 2000  
Department for International Development Cooperation  
Ministry for Foreign Affairs  
S-103 39 Stockholm  
Sweden  
Fax +46-8-723 11 76  
Phone: +46-8-405 10 00  
Email: [andreas.ershammar@foreign.ministry.se](mailto:andreas.ershammar@foreign.ministry.se)

The study can be ordered from:

Fritzes Kundservice  
S-106 47 Stockholm  
Sweden  
Fax: +46-8-690 91 91  
Phone: +46-8-690 91 90  
Email: [fritzes.order@liber.se](mailto:fritzes.order@liber.se)  
[www.fritzes.se](http://www.fritzes.se)

ISBN: 91-7496-255-8

Printed by: Norstedts tryckeri AB, Stockholm 2001

## Executive summary

This study – ‘Transboundary Water Management as an International Public Good’<sup>1</sup> – has been carried out as part of Development Financing 2000, an initiative of the Swedish Ministry for Foreign Affairs. The initiative seeks to ‘help increase awareness, knowledge and international commitment to a strong, effective and well-funded multilateral system in the field of development’. Specifically, its goals are to:

- create political energy and momentum in issues concerning multilateral financing in the field of development
- seek to develop new perspectives in thinking about financing the United Nations system and the multilateral development banks
- seek to develop concrete mechanisms for financing UN programmes and funds in particular
- develop concepts concerning global public goods and their financing

The study was undertaken between October 2000 and March 2001 by a team brought together by the Overseas Development Institute and Arcadis Euroconsult. Research visits were undertaken to river basins in the Middle East, East Asia and southern Africa<sup>2</sup>.

The views expressed in this Report are those of the authors and do not necessarily reflect the views of the Swedish Ministry for Foreign Affairs.

The starting point of this study was to ‘explore and to put in perspective whether, and to what extent, the concept of international/regional public goods is useful in describing, analysing and coming to terms with inter-state water management issues’ (see terms of reference, Annex 1). The second central question was, from a development co-operation perspective, to ‘analyse and elaborate on the roles of different financial flows and mechanisms in the provision of effective and international/regional water management’. For the purposes of this study international water management was understood as the management of transboundary freshwater resources.

The opportunities provided by current circumstances to address international water management as a public good are fourfold: 1) there is flexibility in international relations brought about by the post Cold War decade; 2) the industrialised economies have transformed their approach to managing water resources to include environmental and civil society concerns as well as those of government and the market; 3) agencies working in water resources are re-orientating themselves to adopt inclusive and transparent approaches to management and to prioritise environmentally considerate and economically efficient management approaches; and 4) the idea that

---

<sup>1</sup> Contract title ‘Effective International Water Management as a Public Good’

<sup>2</sup> The team comprised: Alan Nicol (ODI - Team Leader); Frank van Steenberg (AEC); Hilary Sunman (independent consultant); Tony Turton (AWIRU); Tom Slaymaker (ODI); Tony Allan (SOAS); Martin de Graaf (AEC); Marten van Harten (independent consultant).

institutions for managing water at all levels is a public good now has sufficient currency for it to be able to enthrone potential donors.

Divided into five sections, the first section of the report analyses relevant concepts surrounding the idea of public goods and the effective management of transboundary water resources<sup>3</sup>. It concludes that effective and balanced institutional arrangements for management are a regional public good, with particular characteristics.

Transboundary water management is a club-type of good: its provision depends on the riparian countries that cooperate. It is also a means-type of international public good, because it facilitates the provision of important public goods, such as national water security, regional conflict mitigation and the protection of important international eco-systems. An estimated 40% of the world's population lives in internationally shared river basins<sup>4</sup> and are dependent for their water security on effective transboundary water management.

The study recognises that results matter more than the means and that achievement of effective international water management has to take due regard of the technical, social and economic priorities of riparian countries. In other words, the provision of the regional good should be judged on its contribution to wider social development objectives.

Having established the public good characteristics of effective transboundary water management, in Section 2 the report analyses the framework of financing arrangements. Here the current record of financing is examined and in section 3 there is a discussion of possible financing options. Section 4 looks in detail at the five core basin studies – the Mekong, the Okavango, the Incomati, the Jordan and the Southern Caucasus basins. These river basins represent very different degrees of shared fresh water management – from over thirty years of co-operation among the lower Mekong riparians to a situation of water hostility in the Southern Caucasus. Section 5 draws conclusions and recommendations from the case study analysis and financial review.

Evidence from the analysis of development co-operation in Section 2 shows that currently some \$70-80bn is spent annually on water management and the development of water infrastructure, mostly in irrigation, drainage and water supply and sanitation. The main part of the financing is a mixture of domestic public and private sector funding. In 1996, as an indicator year, only 11–12% came from the donor community, and only 5% from the international private sector. Hence, national-level expenditure is far more significant than regional or international expenditure. Domestic financing is about 70% public sector (essentially reflecting national public good characteristics), and this includes the costs of water resource management institutions.

---

<sup>3</sup> Though the report is concerned with the management of transboundary water resources, this does not diminish the importance of land-water linkages in achieving effective water management, not least because of the significance of varying land-use patterns between co-riparians and the differing demands this places on water use.

<sup>4</sup> Moreover, in larger countries the need for effective water management between provinces or states is of a similar order of magnitude as in international basins.

Internationally, donor commitment to the water sector increased as a proportion of disbursement from 1990-1997. In 1997 the total was some \$3.7bn, of which the World Bank contributed \$2-3bn. However, disaggregating the macro-data to separate regional public good components is difficult. Within these donor disbursements there has been an apparent shift to capacity building, and overall spending on public goods within the total has risen from some 4% in 1980 to 10% in 2000. However, it appears that little is being spent on international or regional public goods. Transboundary financing in particular comprises a very small component of total donor funding. Major international donors like the World Bank recognise the importance of transboundary management, but still devote relatively few resources to this type of public good. At a regional level some MDBs are beginning to promote regional co-operation in water policy and management of transboundary waters. Yet the type of investment needed (either co-ordinated national investments or investments targeted in one country but bringing benefits to others) remains relatively under-financed. The picture that emerges is that international financial support to transboundary water management is rather piecemeal and scattered.

There appear to be significant barriers to the entry of the private sector in provisioning of regional public goods, not least due to the frequent lack of clear regional legal and regulatory frameworks, as identified in the study. Nevertheless, there is some potential for a greater private sector role in transboundary water management, for instance in the critical area of regional data development.

Overall, from the case studies, it is apparent that the costs of reaching agreements – such as setting in place politically feasible environments – are relatively high, compared to the costs of financing actual institutional arrangements.

Analysis of Sections 1-4 leads to a number of conclusions concerning ways forward for financing and facilitating the provision of effective international water resources management as a public good. The conclusions are grouped under:

- Institutional development: Building politically-feasible environments
- Financial development: Establishing new financing options
- Participation and civil society: Enhancing roles
- Legal and policy dimensions: Creating conditions for agreement

## **Conclusions**

### **Institutional development:**

#### ***Building politically-feasible environments***

The case studies reveal the range and variation in institutional arrangements for managing transboundary water resources. All are closely linked to surrounding political environments, and are sensitive to changes in those environments.

The importance of *political feasibility* is a central conclusion reached. In many of the basins analysed the institutional arrangements have changed according to changes in political feasibility. Given the interlinkages apparent, not only is the wider environment likely to impact on institutional arrangements for transboundary water management, but also the arrangements themselves can become a part of that wider environment – thus for example effective management institutions can themselves promote peace building at a regional level<sup>5</sup>.

A key question is how to support the development of politically feasible environments. The case studies clearly indicate that communication between riparian parties at both technical and political levels in order to establish a dialogue and develop a joint vision or strategic plans is an essential starting point; where this does not exist – for example in some cases in the Southern Caucasus – little progress can be made. Dialogue will be enhanced if it is based on an established body of data for analysis and interpretation (although this does not all have to be ‘uncontested’). Where wider political conflicts have been overcome or are in the process of being overcome, i.e. their resolution is being managed, the dialogue is likely to be more stable and prolonged and address the substantive issues of joint management. Given the nature of these often protracted political processes, and their demands in terms of confidence building, the costs of establishing transboundary water management arrangements are in many cases substantial<sup>6</sup>.

The effective development of a process of engagement and discussion requires considerable third-party support and *process financing*. One suggestion is that region- and basin-specific Trust Funds may help to facilitate the process through creating long-term support structures suitable for funding incremental processes. This type of arrangement can also assist in the inclusion of a variety of voices from within the basin, ranging from private sector parties, civil society organisations (including NGOs), national and local government and other key actors, including regional economic groupings.

In the long-term, support for the process – once institutions have been established – needs to come from the riparians themselves. Where this has not been the case over-reliance on donor support can arise, undermining long-term ownership. In parallel with instituting processes for the development of transboundary institutions, there needs to be associated support to national institutions. In order to ensure long-term ownership from riparian countries one of the key process issues is promoting benefits of effective transboundary management within national states. This in itself is a political activity requiring sensitivity to the different upstream downstream perspectives of riparian countries, and their different perceptions of what constitutes a benefit – for instance the widely differing uses to which water may be put. The Jordan and Incomati, for example, show how widely different are the potential benefits of

---

<sup>5</sup> Several transboundary arrangements, once established, have been resilient to political turmoil in the region. The Mekong and the Jordan case studies both provide examples of this.

<sup>6</sup> The Nile Basin Initiative is estimated to have cost over \$10m to undertake; likewise the costs of the WCD process are estimated at some \$15m, personal communication. This may be compared to the cost of running a transboundary water management institution – that ranges from \$0.2m to \$2m annually.



flows to different countries, related again to their differing political economies. Careful consideration therefore has to be given to the meaning of 'equitable allocation of water', particularly in economically highly uneven river basins (of which the Mekong, Jordan, Incomati and Nile all provide examples) or in situations, where one country has already utilized all the flow and claims prior rights.

The international funding environment does not currently support an effective co-ordinated facility to act as a third party in enabling the development of shared water resources (either groundwater or surface water). This study shows that it is only in the last decade that there has been an international political environment conducive to the operationalisation of such ideas. Yet to do so requires concerted donor funding efforts and co-ordinated actions, neither of which are easy to achieve. Co-ordinated efforts on the environment during the 1990s yielded impressive results – including the establishment of the GEF – yet transboundary water issues have only recently received a comparable degree of attention.

The need for third-party support at an international level is clear from actions taken by institutions including the World Bank and the UNDP<sup>7</sup>. The diplomatic processes involved in assisting regional initiatives often seem open-ended, and in situations of tension over the use of the shared water resources, international institutional brokerage by organisations of sufficient strength is key – either MDB's or regional economic councils. Consideration 47 of the EU Water Framework Directive for instance points to a potential role for the European Union in supporting transboundary water management in regions outside the EU as well, even up to the Southern Caucasus.

A facility with a specific mandate to assist regional management of transboundary waters (including smaller basins) would provide a clear focus and the opportunity to consolidate international concerns, streamline initiatives, and direct them towards mobilising the idea of effective international water resources management as a regional public good. Such a facility would create a new thrust towards this important international public good and would provide a critical third-party support function to promote politically feasible environments.

Such an 'International Shared Waters Facility' (ISWF) should be conceived as a partnership between different key players in transboundary water management. MFC's such as the World Bank and GEF with agencies such as UNDP and UNEP in support would provide the necessary political clout and third-party appeal, whilst also providing seconded staff as technical advisors in specific areas. Above all, the intention would be to consolidate existing initiatives and organisations and to streamline their accumulated experience within specific, focused programmes of

---

<sup>7</sup> Though UNDP still plays a role in supporting transboundary water management, in particular in the implementation of a large number of GEF-funded programmes, the effectiveness of the UN in brokering transboundary water management is affected by the decrease in funding levels and the fact that within the UN the different parts of the 'water' domain are handled by a very large number of UN agencies.



assistance. The Global Water Partnership, that has a mandate in building alliance and on the ground partnerships, could help facilitate the establishment of the ISWF.

Examples of process development from related initiatives such as The World Commission on Dams could be used to assist in stakeholder participation. Other examples might be derived from European or North American experiences of managing shared waters. These could include the international river commissions on the Rhine, Meuse and Danube (see Annex 2). The importance of incorporating Southern perspectives fully within the ISWF could be facilitated through the experience of river commissions on the Mekong and elsewhere.

The MRC as an established transboundary river commission would be an important source and centre of knowledge on issues such as regional-national institutional linkages. Furthermore, the ISWF could be helpful in supporting the development of shared norms on data, similar to the work of the UN/ECE. In the Mekong – after several decades – this process is only now starting under the Water Utilisation Plan, but could benefit from third-party guidance. The ISWF could also act as a second resort for arbitration on water allocation issues that could not be resolved between riparian countries. In addition the ISWF could play a role in developing financial modalities for regional water projects that go beyond national investments. Stages of institutional development in which the ISWF could engage are represented in the table below.

*The roles of an ISWF during the institutional development process*

<b>Process stages</b>	<b>Possible role of ISWF</b>
<i>A. Initiating process</i>	Promote, coordinate and support initiatives by other organisations as key stakeholders in the idea of regional water resources management; serving as a source of arbitration; promote awareness on UN Convention principles
<i>B. Institutional management</i>	Independent monitoring of process development; including key issues of accountability, participation, governance, stakeholder consultation; further develop agreed legal concepts on water quality and equitable distribution.
<i>C. Programme implementation</i>	Develop neutral standard and generic tools for data collection and dissemination; facilitate dialogue between parties over specific resource management issues
<i>D. Investment in water management works</i>	Leverage financing for weaker riparians, develop financing modalities for use in different basin institutional, social and economic contexts

## **Financial development: *Establishing new financing options***

The study looked at four steps in financing transboundary water management: funding of the initiating process, the cost of institutional management and programme implementation and investments in regional water management facilities.

The case study areas provide sharp contrasts. Most notably between the Mekong with a longstanding river basin organisation, a funded secretariat and strong UN and bilateral donor support and the southern Africa case where there is fragmented river basin management, with OKACOM in clear need of support (suggesting an important role for SADC).

The crucial role that donor support can or does play is evident in all cases. It appears that the role of donors goes beyond funding and that they are often expected to act as honest brokers and to take debate beyond national interests, though in some cases this is constrained by diplomatic considerations<sup>8</sup>. Particularly in the initial process of creating new institutions this political role of donors is important and it appears from the case studies that multilateral organisations with their larger outreach have an important advantage over bilateral donors in this role.

An important question to ask, particularly when considering the merits and demerits of donor-led institution-building, is whether in the discussion on regional and international public goods these are likely to be *underprovided* as most funding is on a country to country basis with a relative absence of regional funding mechanisms. This has, however, not been a bottleneck for the Mekong River Commission. The Commission and its predecessors have managed to constantly attract considerable funding over the years. What this does suggest, however, is that the provision of regional public goods is as much a matter of 'funding destination' (the existence of a fundable well-programmed regional institution in this case) as a matter of 'funding origin' (the existence of regional funding mechanisms). The first may even overcome the absence of regional funding programmes, as the MRC has done. The regional Mekong Committee in fact for a long while was 'used' as a convenient channel for bilateral programmes to countries in the region at a time when no official bilateral programmes were in place.

A number of financing alternatives to grant-based donor support are examined in the report, ranging from water taxes to inter-riparian financing. Levying taxes or charges to support transboundary water management services is complicated and relevant to only a handful of transboundary river commissions. Whilst taxes have been proposed as a financing mechanism for a number of other international public goods, such as the Tobin Tax on international capital transactions or a 'green planet contribution' on car renewal their application to transboundary water management is more

---

<sup>8</sup> An example is the Mekong, where bilateral donors (unlike MDBs) are reluctant to be engaged with Myanmar, though it would strengthen the Mekong River Commission, if this upper riparian country would become part of the MRC.

complicated. Their advantage is the link they would create between fund raising and the activities that cause the global problems, allowing, for instance, supporting public awareness-raising activities given that the direction of the tax could be clearly identified with the provision of a public good.

The role of private sector investments is also suggested by its increasingly active provision of infrastructure over the past decade, yet there are many issues which need to be addressed before over-estimating the potential for private sector finance. Firstly, most private sector investment has been in water supply. It is always easier to collect revenues to cover costs of water supply than for wastewater treatment or other water functions, where the benefits to the actual consumers are less direct and, indeed, often accrue downstream rather than to the consumers themselves.

Private sector investment most relevant to transboundary water management has been in hydropower where transboundary concerns frequently exist. Outside of hydropower development, however, there do not appear to be any instances of private sector involvement in transboundary water resources management.

The private sector needs a range of incentives and enabling conditions to participate actively, and this means potential profitability and return on capital, in addition to manageable risks. The latter may include risks concerning contract enforceability, regulatory changes, the rights of foreign investors and political security. These are difficult enough to find in single-country projects in many parts of the developing world, and the more so in a transboundary context. The private sector therefore needs a vehicle through which to channel its participation in project management structures essential to which is a clear enabling institutional structure.

Endowment or Trust Funds offer a plausible option for sustaining transboundary river institutions and longer term planning and programming. Because a Trust Fund must have a board of directors, it is in a strong position to encourage stakeholders to participate in the management of the resource – and the base for stakeholders can be quite wide, embracing NGOs, commercial enterprises and donors. Funds can provide a means for encouraging commercial and private sector participation either in kind, through providing management skills, or as direct financial contributions. They provide a means of diluting direct donor control in the administration of resources and for building capacity in financial and institutional management. One of their critical financing roles is in giving longer-term security to institutions and programmes, and smoothing out funding fluctuations which can arise where organisations are dependent on annually allocated resources, whether from government or donors.

Inter-riparian financing in the form of permit, or allowance-based contributions, could help to support regional initiatives. Within a basin, wealthier countries might support investments in poorer countries although there are few precedents for such an approach. A mechanism could be developed within a river basin whereby – if certain investments are needed in both a rich and a poor country – the richer one could make the water-related investment in the poorer one if it was a lower-cost option, and realise a higher level of investment than would otherwise be possible. However, the

conceptual weakness with this approach is that, unlike emissions of greenhouse gases for example, the impact of water-related activities varies significantly by location. Where inter-riparian financing has taken place, notably in a number of West European rivers, it has consisted of negotiated deals between riparian countries under the aegis of a transboundary water management commission or agreement. This potential again underlines the importance of sequencing of activities in developing effective management arrangements, and most notably the need to create the right enabling environments in which suitable institutional arrangements for financing can develop. As with private sector financing, the key is the presence or absence of a transboundary management structure.

The problems with many of these financing mechanisms are the complex institutional arrangements necessary to ensure their success. The discussion of the case studies bears this analysis out where there is at present no pattern of raising revenues for transboundary management from other sources (apart from donor grants or national public budgets). And yet a major lesson from the case studies and, indeed, from the European experience (see Appendices) is that financing institutional development at a basin level is *relatively inexpensive*. The costs of running a transboundary water management arrangement – once it is in place – are relatively small compared to the interests at stake, particularly in large rivers<sup>9</sup>. The preference is national riparian funding, which is the key to sustainability and local control over the institutions. However, the transfer of these costs to national-regional level financing has only recently (after thirty years) started in the Mekong. National capacities to finance are severely constrained, not least because collection of water tariffs in many countries such as Jordan, but also Cambodia and Laos is not very effectively developed and hence limited national public budgets have to be utilised.

In the implementation of river basin management programmes (such as the development of an uncontested database and monitoring), current funding in many river basins is provided by bilateral donors, UN agencies and GEF. Particularly with the current increased interest in transboundary water management the risk is that these programmes become supply-driven. The recent history of the Mekong River Commission shows the importance of a programmatic rather than a project approach, with the formulation in the hands of the river commission. Greater autonomy is further possible through the establishment of trust funds.

With respect to investments in regional water management infrastructure the current pattern is that of national investments, that to a limited degree are co-ordinated between riparian countries. If the institutions established are sufficiently robust, regional investments are possible. The Mekong River Commission holds greatest promise in this respect, however, more work is still required on reducing risks in such investments. One possibility is funding or co-funding by regional development banks which generally have the leverage to recover loans.

---

<sup>9</sup> Another issue is the funding of transboundary water management arrangements on smaller rivers, where scale considerations do not allow the more elaborate arrangements that are in place on some of the larger rivers – but where still considerable transboundary sensitivities have to be negotiated.

Longer-term financing of regional public goods remains the most difficult enterprise, not least because the longer term positive and negative externalities are harder to gauge and project to important constituencies of interest such as civil society, local government, state institutions and regional groupings. Building political momentum through the incremental engagement of all parties is therefore vital to maintaining the sustainability of long-term provision.

Initially whilst it will be donors who support the diplomacy, politics and fact-finding involved in establishing viable institutions, additional mechanisms such as direct charges and tariffs, and wider financial participation, can evolve at later stages of the process. There is also scope as the structures of management mature for raising funds through government taxation and through direct involvement of other bodies – particularly the private sector – in, for instance, the provision of infrastructure and investments on river basins.

*Current and recommended financing arrangements for process financing*

<b>Cost category</b>	<b>Explanation</b>	<b>Current financing arrangements (case studies)</b>	<b>Recommended financing arrangement</b>
<i>Initiating process</i>	Cost of establishing and adjusting transboundary institutions	Mixed and patchy	By international or regional organisations with sufficient strength
<i>Institutional management</i>	Management costs of the transboundary institutions	By riparian countries and externally	By riparian countries solely
<i>Programme implementation</i>	Cost of river basin management – development of uncontested data bases, monitoring, etc	By bilateral donors and UN agencies	On the basis of formulated programme Trust Fund financing by bilateral, multilateral and private donors
<i>Investment in water management works</i>	Cost of investment in water-related infrastructure	(Uncoordinated) National investments (public and private sector)	Co-ordinated national investments and regional investments Risk financing (co-financing regional development banks and private sector) New financing modalities <ul style="list-style-type: none"> <li>• Inter-riparian financing</li> <li>• Cost recovery</li> </ul>

At stages in the financing of institutional development there will be difficult trade-offs between donor willingness to maintain long-term commitments and riparian capacity to finance from domestic sources. Whilst the costs of management arrangements described are not high (particularly from a donor perspective), as they become domestically sourced their real cost will become increasingly apparent,



particularly where there are perhaps significant trade-offs with other poverty reduction processes. There is therefore a need to understand the differential rates of progress in this financing sequence with the careful weighting of costs by different riparian capacities, level of socio-economic development and opportunity costs of financing such arrangements. Maintaining a balance between the inputs of different riparians to avoid dominance of the process may also require third-party support. Possible funding arrangements at different stages in the process are shown in the table below.

Long-term third-party support could be facilitated through the proposed ISWF. Funding for this facility could be based on a number of sources, reflecting a range of systems. These could include direct grant funding from international bilateral donors (or GEF is a possibility, tied, perhaps to particular projects), and regional loan funding from the main regional banks for other activities. Different forms of funding could be used for different aspects of the sequencing of actions. The vision of donors would have to be long-term, and include some form of long-term commitment to the core costs of the facility.

### **Participation and civil society:**

#### ***Enhancing roles***

The role of civil society whether at a regional or national level varies greatly across the case studies examined. On balance however the role of civil society in transboundary water management is limited. Whilst integration and participation in regional structures at a state level is well-developed in some countries, the involvement of civil society as a participant in development policy and programmes is limited. Some nascent indigenous NGOs looking in particular at issues surrounding the environment and dam-building are emerging. In southern Africa there are some internationally important examples of civil society involvement in water management issues on the Okavango, but where the focus is not on internationally protected sites – on the Incomati for instance - the focus is less sharp.

In the Jordan basin, perhaps significantly given the level of political conflict, there is still an important level of civil society participation in management issues, including the critical area of water allocations to agriculture. The political-civil society links are important and exert influence on wider management processes given their level of embeddedness in national political discourse. Given that the provision of the regional public good is ultimately to benefit the populations of a region – and specifically to address the key issue of poverty reduction through sustainable development – substantial support to developing the civil society-government interface is required. Civil society groups are not just stakeholders in the provision of the public goods in terms of deriving benefits. As the Southern Caucasus example shows their skills are sometimes required in helping to provide the good: in particular there is a large potential role for civil society organisations in so-called second track diplomacy and confidence building.



In many cases donors are advocating an increased role for civil society in developing water delivery systems in agricultural and domestic sectors, for instance in the much-vaunted irrigation management transfer process. Enhancing civil society roles in wider regional level processes as well as supporting local-level development is a part of the development of effective international water management as a public good.

To be effective, transboundary water management has to include the balancing of priorities between user groups, essential to which is more effective partnering of government and private sector with civil society. However, substantial barriers to extending the role of civil society at a regional level need to be overcome, problems surround existing capacity, national political cultures which hinder the activities of civil society, and the larger technical complexities of transboundary activity itself. The relatively modest use that non governmental organisations have made of the special window for implementing transboundary water programmes under GEF highlights the latter problem in particular. A particular focus should therefore be to facilitate the entry of civil society (and local government) at a regional level of management. In the specific realm of effective transboundary water management this role would be facilitated by greater support to global water networks concerned with policy development and their relationship to states and society, including the World Water Council, the Global Water Partnership and the Green Cross initiative.

#### *A structured role for civil society*

<b>Stages of process</b>	<b>Possible role of civil society</b>
<i>Initiating process</i>	Civil diplomacy between neighbouring groups; construction of dialogue through networks of civil society groups at a regional level
<i>Institutional management</i>	Observers to the main meetings; Development of networks to feed into policy development and data collection
<i>Programme implementation</i>	Capacity building, independent monitoring of process; assistance in feedback of ideas and impacts from local communities
<i>Investment in water management works</i>	Implementation and co-funding, where appropriate; provision of technical expertise in development of management works including social and environmental impact assessment

### **Legal and policy dimensions:**

#### ***Creating conditions for agreement***

Some of the regional organisations covered in the case studies have used international norms and principles as the basis for agreements, but rarely are these principles capable of enforcement. The SADC protocols are a case in point. In other basins, for instance the Jordan, the question of riparian rights is deliberately avoided in favour of a sharing formula agreed on a bilateral basis (the rights of other riparians are *de facto* ignored).

The development of effective institutions of management is identified in this study as the key regional public good to which donor financing should be targeted. An important part of this process is agreement on principles for participation (who should participate and at what level), for decision-making (how to make these processes transparent and who to include), and on the principles by which benefits (or water shares) should be apportioned. Hence, establishing the principles and norms involved is an essential step towards the provision of the regional public good. Given the experience on the Mekong – there, enforcement is an issue – or on the Jordan where rights issues are bound up closely with contested territorial sovereignty, the problems of reaching agreement are considerable, and of monitoring and enforcement greater. The incremental process of seeking agreement in the Nile basin shows how much caution may have to be involved, particularly when there are a large number of parties involved. Similarly, the legal process itself is slow, including at a national level where verification and agreement has to begin; hence, revisions to the SADC protocol have only recently been completed.

Nevertheless, as described in this study and demonstrated in the case studies, substantial work on the development of legal conventions on transboundary water management (which resulted in the UN Convention on the Law on Non Navigational Uses of International Watercourses) is gathering international support. The Convention was ready for ratification in May 2000, but has failed to-date to attract the required number of country endorsements. The ratification process remains open-ended. Evidence from the case studies supports the principles of the Convention and has shown how it has still served as a model for several transboundary water agreements, in particular the Mekong River Agreement and the SADC Water Protocol<sup>10</sup>. It remains an important international document, having achieved a degree of international consensus on best practice.

The principles established by the convention are equitable and reasonable utilisation, obligation not to cause significant harm, prior notification, and co-operation on the basis of sovereign equality and mutual benefit. Beyond the agreement of these broad principles still substantial further work needs to be done to operationalise them. There still leave many politically complicated issues un-resolved in river basins where water use between riparians is unbalanced and contentious, such as the Incomati and the Jordan basins.

The case studies and other international river basin examples show that where water allocations are agreed, they will affect decisions on major investments at a national level. In rivers such as the Incomati considerable investments in water abstraction for strictly national purposes were made prior to agreements on water sharing. However, it is only when transboundary agreements are in place that it is possible to invest in water resource management that serves co-riparian objectives.

---

<sup>10</sup> Although Wolf (1999) has established that many of the provisions of the UN Convention are missing from existing (often earlier) transboundary agreements.

Other river basin examples support the case for alternative forms of financing (such as inter-riparian financing and water taxes) being based on legal agreement. Private sector flows for use in transboundary water resource management are now heavily tilted towards hydro-power exploitation. In the case studies, the flow of private sector funds appears to depend primarily on a stable political climate, which may be ensured either nationally or by power-purchase agreements, but not necessarily by transboundary water agreements. Private sector concessions on transboundary water services (such as navigation) are a future possibility, and exploiting such investments on a cost recovery plus basis would require co-riparian legal agreement.

## **Recommendations**

The study has drawn together 12 recommendations relating to the above four sections, which are presented below.

1. The study recommends the establishment of an International Shared Waters Facility (ISWF), under a partnership model and drawing on the established roles of multilateral organisations presently engaged in the sector, including the World Bank, UNDP and the GEF, whilst liaising closely with related international initiatives such as the GWP and the World Water Council. Its charter would highlight the importance of transboundary water management as an international public good and would promote the principle of subsidiarity in the provisioning of such a good. As well as serving as an international source of arbitration between riparians, the ISWF would help to develop modalities between financing institutions in order to facilitate financing arrangements for new and existing initiatives, and would support institutional development in water resources management within regional multilateral organisations. As an international advocate of common legal norms and principles, the ISWF would seek to develop practical awareness of the UN Convention on the Law for Non- Navigational Uses of International Water Courses.
2. Regional economic groupings actively promoting regional public goods (such as SADC) should be encouraged and supported through the development of financing initiatives for basin-specific activities within these groupings. To support the roles that economic groupings can play in promoting transboundary water management institutions, a partnership between different regional councils should be considered, including the SADC and ASEAN. The EU could take the lead in organizing such an initiative within which the experience of the various councils could be exchanged and expanded upon.
3. The study also recommends that Consideration 47 in the recently adopted EU Water Framework Directive should be used to establish a more pro-active role for the EU in shared river basins internationally; and specifically, those immediately outside the European Union. A brokerage role for the EU should be made more explicit and streamlined with EU development programmes in critical transboundary river basin regions. Member states such as Sweden could support this role under the umbrella of the ISWF.

4. This study recommends the increased apportionment of funds to process financing of sufficient duration to ensure continuity of institutional development, rather than piecemeal project financing (whether or not institutional arrangements are executive or co-ordinating in nature).
5. Funding of transboundary institutions should be combined, where appropriate, with parallel national-level institutional strengthening in order to ensure that the future input of riparian countries into regional arrangements can be assisted and the dominance of particular riparians be minimised at a regional level.
6. The development of funds to implement technical programmes under river basin organisations that lack independent or adequate resources should be pursued, recognising that transboundary Trust Funds represent a new venture, but that their feasibility will be dependent on robust institutional and legal structures.
7. Within mature river basin organisations new financing mechanisms such as cost recovery on transboundary water services, including areas such as navigation and hydro-power, or inter-riparian financing should be actively explored and promoted. An essential part of establishing these mechanisms would involve looking at legal requirements and the need to cover risks associated with new developments, particularly where inclusion of the private sector is considered.
8. Programmes to encourage private sector participation in transboundary water management should be specifically developed, recognising both the potential of the private sector but also the specific institutional framework in which it operates.
9. It is recommended that greater support is given to civil society organisations engaged in building effective management capacity between co-riparians. This support should be in the form of initiatives to assist civil society organisations to network around common river basin management themes and support second-track diplomacy.
10. The second stage of assistance should focus on assisting civil society organisations to achieve coherence on confidence-building and conflict prevention surrounding transboundary water management. Financial support should be provided to encourage the development of civil society networks that include local government and can help to both support regional institution-building processes and represent the views of these local institutions. A starting point should be the establishment of transboundary networks of civil society groups in a number of pilot river basin organisations (the Nile basin or the Jordan could provide early examples).
11. The study recommends that internationally-agreed principles as covered in the various international Conventions need to be more widely disseminated to turn them into effective shared norms at an international level. Their agreement in

principal needs to be established amongst the community of donor organisations, at a minimum. This function could be facilitated by the proposed ISWF (see above).

12. Work should be financed to assess the institutional demands (in cost and manpower) of operationalising these principles, and especially issues raised about enforcing compliance between co-riparians.

The case study material and analysis of financing issues included in this report both show that there have been important efforts undertaken to develop transboundary management of shared river basins. However, there clearly remains much to be done in order to provide more effective institutions of water management. The implementation of these recommendations would provide a starting point towards achieving this important goal.

This study was commissioned by the project *Development Financing 2000* within the Swedish Ministry for Foreign Affairs. The purpose of the project is to increase awareness, knowledge and international commitment to a strong, effective and well-funded multilateral system for development.

The study looks at transboundary water management through the lens of international public goods and analyses and elaborates on the roles of different financial flows and institutional mechanisms in the provision of regional water management. Some of the key issues addressed by the study are:

- The need for a more co-ordinated approach to managing and financing transboundary waters
- The importance of politically feasible environments
- A more pro-active role for regional economic groupings such as the EU, SADC and ASEAN
- New financing mechanisms and a strengthened institutional framework



REGERINGSKANSLIET

**Ministry for Foreign Affairs of Sweden**

S-103 39 Stockholm

Tel: +46-8-405 10 00, Fax: +46-8-723 11 76

Web site: [www.utrikes.regeringen.se](http://www.utrikes.regeringen.se)