

An Institutional Framework for Stakeholder Participation in Transboundary Basins

Report to the
Water Research Commission

by

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Executive Summary

Introduction

This report is one of several reports arising from a Water Research Commission funded review of the involvement of national water institutions and civil society in international river basin agreements in South Africa. This project falls under Thrust 4: Policy development and institutional arrangements for water resource management, Programme 4: Transboundary water resource management. The terms of reference for the project outline the purpose of the research clearly as examining *the role of South African national institutions, stakeholders and processes in the development and implementation of institutional arrangements, processes and international agreements in shared watercourses*.

This report aims to examine possible best practice and develop an institutional framework for South African institutions, stakeholders and processes in the development and implementation of international agreements in shared watercourses.

This report begins from the understanding that stakeholder involvement is fundamental to effective integrated water resources management, and that this is generally recognised by SADC Member States, including South Africa. However, there is a key issue around how to structure, facilitate and support local and national non-governmental and private sector stakeholder involvement in shared watercourse processes, as well as how to structure intra-governmental engagement, to achieve effective management of transboundary river basins.

In transboundary basins, the implementation of an IWRM approach requires that riparian states address the management challenges of the shared basin in a collaborative manner, including through the equitable sharing of the water and the benefits derived from the water. Such engagement is often driven by issues such as regional integration and political agendas, as much as by water resources requirements, and coloured by issues of sovereignty, trust, and political stability. Grey et al. (2009) note that "Experience suggests, quite simply, that countries cooperate in the management of transboundary waters not when compelled by principles or an 'ethics of cooperation,' but when the net benefits of cooperation are perceived to be greater than the net benefits of non-cooperation, and the distribution of these net benefits is perceived to be fair."

International experience has clearly shown that there is no one-size-fits-all approach to transboundary basin management, and therefore to the engagement of national or sub-national government role-players and stakeholders in transboundary water resources management processes. Partly these differences are dependent on the drivers of the transboundary co-operation, of which there are several, and which have implications for the engagement of stakeholders and sub-national role-players (Pegram et al., 2009). These drivers include:

- Transboundary co-operation driven by water management issues
- Transboundary co-operation driven by the development and management of joint infrastructure:
- Transboundary co-operation driven by basin-wide water stress
- Transboundary co-operation driven by the need to achieve wider regional benefits around, for example, food security and energy requirements
- Transboundary co-operation driven by the need to serve larger regional integration processes.

In all of these pathways, the engagement between riparian states requires appropriate institutional arrangements, which generally include formal agreements between the states and some form of structure through which they can engage. Such structures can range from joint technical committees to formal River Basin Commissions. The structures may be bilateral in nature, or involve all riparian states. Often what is seen is an evolution from a bilateral technical committee through to a multi-party River Basin Commission with a permanent secretariat, although it is possible, as in the case of South Africa, for bilateral structures and agreements to run in parallel with multi-party Commissions.

What is of interest is that the involvement of stakeholders and sub-national government structures takes different forms and levels of importance depending on the drivers behind the co-operation and the level of evolution of the transboundary processes. Where co-operation is driven by the need to develop and operate joint infrastructure, for example, the stakeholders that are involved, and the nature of the involvement, will differ from a situation in which transboundary co-operation is driven by the need for regional integration. Under some scenarios the focus may be stronger on local stakeholders, while in others it may be at more regional or national level. This refers to both civil society and private sector stakeholders and to government departments and spheres of government.

Furthermore, there are two major aspects to transboundary co-operation that present different stakeholder engagement requirements: the first is the process of negotiation leading to the signing of a transboundary agreement, and the second is the implementation of that transboundary agreement or of joint water resources management approaches in the absence of a formal agreement, since a great deal of sharing of information, joint planning, and communication between riparian states can take place without a formal agreement being in place.

Legal and Policy Framework

The SADC Treaty, the SADC Regional Water Policy, and the SADC Regional Water Strategy are all very clear on the need for the involvement of stakeholders in regional development and water management issues. This sets a strong foundation for the involvement of stakeholders in transboundary basins, despite the absence of such references in the revised SADC Protocol.

At a national level, South African policy and water legislation show the commitment of the government to the engagement of stakeholders in water resources management issues. There is, thus, a strong policy and legislative base for stakeholder engagement in transboundary basins in South Africa.

In addition, SADC, in 2010 approved a set of Guidelines on Strengthening River Basin Organisations, which included guidelines on stakeholder participation. The guidelines are intended to assist river basin organisations (RBOs) in implementing participatory processes and seek to provide a range of options to RBOs in how to approach participatory processes. The guidelines are based on 5 key principles: inclusiveness, equity, flexibility, transparency and integrity. Three dimensions of stakeholder participation are reflected in the guidelines, the form of participation (from information to collaboration), the scale of participation (from local to basin) and the scope of participation (from project to policy).

Finally, other international agreements such as the International Convention on Biodiversity and the Ramsar Convention support the engagement of stakeholders in managing issues that fall under their aegis, which include protecting aquatic biodiversity and protection of wetlands.

Defining the stakeholders

For the purposes of this research, stakeholders have been divided into two groups: state actors and non-state actors.

State or government actors are the key government departments, agencies or spheres of government that have a role to play in the decision-making process of the management of transboundary river basins, or that are involved in decision-making in sectors that are dependent on or affect water resources, whether at the local, provincial or national level. The state actors that should be involved may differ depending on the activity being proposed in the basin, or the phase of development of the international river basin organisation.

Non-state actors include interest groups, NGOs, communities, water users, the private sector and the general public in the basin or interested in the basin. Within the grouping of non-state actors one may find organisations that are not necessarily resident in the relevant basin, but who, for one reason or another, have interests within that basin, such as international or national conservation NGOs, international development agencies, etc. This may be because an organisation or grouping located outside of the basin has a particular interest in the basin, such as an environmental group interested in protecting a particular endangered species in that basin. This may even extend into the international sphere where people or organisations located in foreign countries may have an interest in environmental protection of a particular species or feature in a basin. In addition, in the South African context, the complex array of inter-basin transfers means that people outside the immediate basin benefit from the management of a particular basin and so may have an interest in decision made regarding that basin.

Nature and scope of participation

There are differing requirements for stakeholder participation arising from the different political, social, and physical characteristics of a basin and the activity under consideration. In addition, the nature, scope and intensity of stakeholder engagement is influenced by at least three critical dimensions (SADC 2010):

- The policy/operational dimension (is the process requiring consultation or engagement related more to policy development or to operational matters);
- The dimension of physical scale (i.e. is the process local, national or basin-wide), and
- Is the process one of communication with stakeholders or of involving stakeholders in the decision-making process, or somewhere in between?

The location of any stakeholder engagement process on these three axes enables the determination of the nature, scope and degree of stakeholder engagement required, and who the relevant stakeholders are. For example, the development of transboundary water resources infrastructure will call for different stakeholder engagement from the development of international allocation

regimes which in turn will call for different stakeholder engagement from a localised flood management issue.

Lessons for South Africa in the Engagement of State and Non-state Actors in Transboundary Basin Management

Arising from a consideration of international practice around stakeholder engagement in transboundary basin management, the following issues have been identified as being relevant to the South African context. The details of the international experience that support these lessons are captured in Appendix A of the report.

Political context

A supportive political context is necessary for the effective engagement of stakeholders, including an environment in which NGOs, CBOs and the media are able to operate freely and without government constraints. While this context exists to a large extent in South Africa, notice should be taken of the warnings offered by civil society representatives about the decline in participatory opportunities over the past decade, and the sense that government is no longer as willing to consult on water and environmental issues as it was in the late '90s.

Thus, while the political context in South Africa is clearly better than in a number of other African countries, it is not without its challenges, and it is important to ensure that the trend is towards greater, rather than less, consultation and engagement with stakeholders.

Policy and legislative base

Despite the concerns regarding the political context within which stakeholder engagement must operate, the South African policy and legislative base remains extremely supportive of stakeholder engagement, from the SADC Treaty through to the South African White Paper on a National Water Policy and the National Water Act. The one area where there is gap in this regard is in the founding documents of the three multi-party basin structures of which South Africa is a member. Incorporation of a principle on stakeholder participation in these documents would cement the commitment to this approach.

Legal status of consultative structures

In the Murray Darling Basin and the two South American basins examined, the structures and processes for stakeholder participation are statutory in nature. In the African basins, while there is a policy basis for consultation (such as in the Lake Victoria protocol) there is not a legislative basis requiring the establishment of specific consultative structures. In the Nile Basin and the Okavango, there are formal agreements between the basin structures and the consultative structures to ensure that the views of stakeholders are fed into the official basin discourse. While this is a useful approach, there are two concerns.

The first is that the arrangements in the Murray Darling Basin, in which the stakeholders have direct access to the Ministers was specifically put in place to prevent officials being able to mediate or manipulate the message coming from stakeholders to political decision-makers. This attempt to balance the power of senior officials is not present in the processes in place in the African basins considered. Nor is it in place in South Africa, where consultation is largely driven by departmental officials, and greater access to the Minister is available to those stakeholders with greater resources and 'clout'.

The second concern is that where consultative structures fall outside the legislative realm, as in the Okavango and Nile Basins, and particularly where these structures have been driven by donor funding, there is a lack of commitment by the riparian states to fund these structures. This impacts on the issue of sustainability which is dealt with in more detail below. Where the consultative structures are embedded in legislation there is some requirement for government to ensure sustainable funding for such structures.

Appropriate organisational arrangements

Two key models or phases can be identified from the international experience: one in which consultation is done by the riparian states with civil society within their own national boundaries, and a second in which a layer of transboundary consultation is added to the national consultation model.

While several people (such as Van Niekerk and Tesera) have commented on the donors preferring the second model, which is the model being used in the Nile Basin and the Okavango, there have been concerns raised by civil society representatives in South Africa about the effectiveness of the national consultation model as currently implemented in South Africa. If there are weaknesses in national consultation, such weaknesses are likely to be carried through to the basin wide level, whether these are weaknesses arising from exclusion of certain groups, capture by certain groups, or 'muting' of civil society voices by government officials. In this light, it would seem that the most important step currently, in South Africa, is to ensure that the national consultative processes are inclusive, transparent and impact on decision-making. Only once robust and transparent consultative processes are in place at the national level should energy be focused on basin wide engagement. The two models should, therefore, rather be seen as two phases in stakeholder engagement, than two separate models.

A third element that can be introduced in terms of appropriate organisational structures is the possibility of participation by observers in the basin committee or commission meetings, as is done in the Danube. The concern with this, however, is that this foregrounds certain voices over others, and may well result in the voices of poor and marginalised communities being excluded since they are not sufficiently well organised to participate at this level. With the significant inequalities in South African society, allowing stakeholders with large, transboundary constituencies to be observers will foreground the voices of highly organised groups and international NGOs, without bringing to the table the voices of the already marginalised. The issue of observers should, therefore, be approached with considerable caution.

Sustainability

The sustainability of stakeholder engagement remains one of the key challenges in transboundary basins. As has been mentioned, in South America and the developed countries, these processes are largely state funded. In the African context, however, such processes are largely funded by international donors. This has two drawbacks – the first is that the processes are vulnerable to the withdrawal of donor funding, and the second is that riparian states do not feel as committed to the processes as they might should they be funding them. Ideally, stakeholder consultation should be funded by the riparian states, as evidence of their commitment to these processes. However, while South Africa has sufficient resources to be able to fund such processes, this is not necessarily true of neighbouring basin states, several of which are extremely poor and highly dependent on donor aid.

The issue of who is to fund the consultative processes, and what the implications are for sustainability, thus remains a significant challenge in the three shared basins.

Governance structures and systems

If consultative structures (as opposed to processes) are to be put in place, such as the National Discourse Forums in the Nile Basin, it is critical that clear governance rules are put in place from the start to ensure that the structures and finances are managed effectively, that issues of representivity and inclusivity are dealt with effectively, and that poor management, financial abuse or use of positions for personal interest can be dealt with swiftly and effectively. This will require effective monitoring and evaluation of the structures, and transparent reporting to stakeholders of activities, expenditure and progress. The flip side of this coin, however, is that it is important not to give government the power to remove civil society representatives simply because they are not happy with what they are saying. The governance systems should enable civil society to ensure transparency, accountability and good governance without inappropriate government interference.

Representivity and managing power relations

As mentioned in the preceding paragraph, the issue of representivity is a critical one in ensuring effective stakeholder representation in transboundary basins, be it at the national or the transboundary level. Of particular concern is the potential exclusion of marginalised groups, or the virtual exclusion of such groups through their inability to participate in discussions due to language challenges, lack of information, or lack of confidence.

To address these challenges, the use of stakeholder mapping to create a database of stakeholders and some analysis of their particular areas of interest, as was done in the Nile Basin, would be of great advantage. However, it is important to recognise that stakeholder mapping is not a once off exercise, but requires continual updating and revision. It is also important that there is clarity on what the definition of stakeholders is – in some areas it would seem that the focus is on civil society, excluding the private sector, despite the recognition in the literature that the involvement of *all* stakeholders is important.

At the same time, the mechanisms for stakeholder engagement, be they meetings, newsletters or workshops, should be carefully constructed to ensure that they are accessible to the most marginal communities in the basin, in relation to issues such as the language used, the timing and location of meetings, and the need to be sensitive to cultural and gender issues.

The management of power relations between stakeholders is also important in ensuring effective stakeholder engagement. One element of larger and more complex basins is the likelihood of much greater power differentials between stakeholders, and possibly between riparian states as well. This is a particularly challenging issue for South Africa which is the largest economy in the region, and where massive inequalities within the country make for very different capacity for engagement by stakeholders – differences that are much less marked in the Okavango river basin. A significant challenge, therefore, in stakeholder participation in transboundary basins is ensuring that the voices of the more powerful stakeholders and the more powerful countries do not dominate the discourse unfairly. This requires that government, in responding to issues raised by stakeholder forums, must examine closely whether the voices of marginalised groups are coming through clearly, or whether they have been muted by stronger voices. One option in this regard is to ensure separate meetings

of particularly marginal or vulnerable groups, to ensure that their voice is given a clear and separate hearing.

Lessons for South Africa on Intrastate Engagement in Transboundary Basin Management

The interstate engagement platform has been much less well analysed than the civil society platform and there is relatively little written on how the different states approach this issue. It is, however, clear that there is a gap in South African practice and several missed opportunities that could be addressed. In particular, there are opportunities for adopting a more integrated benefit sharing approach that looks more broadly than just at water sharing. To achieve an integrated, benefit sharing approach, greatly improved intra-state co-ordination and consultation is needed than is currently the case. This could be achieved partly by the inclusion of non-DWA representatives (e.g. from the Department of Environmental Affairs or the Department of Agriculture) on the transboundary structures, and/or by structured intergovernmental co-ordination within the catchment. Such intergovernmental co-ordination should link all three spheres of government and support the understanding of the linkages between sustainable development in the catchment, benefit sharing and transboundary water resources management.

The experience of the Mekong National Committees is one from which South Africa could learn, where interdepartmental co-ordination is driven at the Ministerial level by the membership of 4 key ministers in the committee, supported by further participation of representatives from the district level. An approach of this nature would greatly enhance South Africa's ability to take a strategic and integrated approach to transboundary basin management and to drive a stronger benefit sharing rather than water sharing approach.

In the South African water sector, water resource management is largely the responsibility of DWA, CMAs, and WUAs. A key role in this regard will be played by CMAs (as and when they are established), and because of this key role, there is an argument to be made that CMAs should have representation on the delegation to the International River Basin Commission or Committee. There is also good reason for CMAs to engage with their counterpart institutions across national boundaries, particularly on issues of day to day management of the basin, and appropriate structures to facilitate this should be established.

Similarly, for Water User Associations that are located close to each other, but across borders, there is an argument for engagement on operations issues. Local authorities have key functions in relation to local economic development, and the provision of water services, which mean that they should be part of the intergovernmental structures or processes supporting a benefit sharing approach to managing the basin.

Further research

The issue of the involvement of state actors in transboundary basins is one that has been relatively poorly documented or analysed and it is recommended that this could be an interesting further area of research to pursue, looking at practices in a range of countries, including in Southern Africa, and drawing lessons for South Africa and for other SADC countries.

Conclusion

Stakeholder consultation remains, ultimately, a means and not an end. The end, in the transboundary basin context, is equitable and effective basin management that allows water to be used beneficially and in the public interest (to use the words of the National Water Act). Stakeholder participation, while widely accepted as a good thing in water resources management is not without its risks.

While experience from the Cuareim/Quarai basin showed that stakeholder participation at different levels achieved better results than simply a strong legal and institutional international framework¹, Kameri-Mbote (2004) points out, from the Nile Basin experience, that stakeholder engagement is “essentially political and amenable to capture by interest groups”. She stresses that there is a need to build trust amongst the various actors in stakeholder engagement processes, and to develop a commonality of interest. Through this, she believes, it is possible to develop a convergence of interest between the actors.

Muller² adds a further risk, namely that participation can stall processes, undermine development and impose heavy costs on participants. As a result, and bearing in mind that stakeholder participation is a means and not an end in itself, one needs to define the problems to be addressed and then consider how stakeholder participation will help and what kind of participation is necessary.

For effective stakeholder engagement to take place in transboundary basins, there are a number of elements that need to be in place (see figure 1). These begin with a conducive political environment, appropriate and supportive policy and legislation, and high levels of trust in the basin. These are the first elements that need to be in place before effective stakeholder engagement can take place. This is followed by the need for strong governance arrangements, appropriate structures and processes, and sufficient and sustainable resources. Finally, there is a need to manage the power relations between countries and between stakeholders and to ensure real representivity, particularly of marginalised communities.

1 Ana Vidal, Uruguay, International Symposium on Stakeholder Involvement in Transboundary Basins, Boksburg, South Africa, October 2009

2 Prof Mike Muller International Symposium on Stakeholder Involvement in Transboundary Basins, Boksburg, South Africa, October 2009

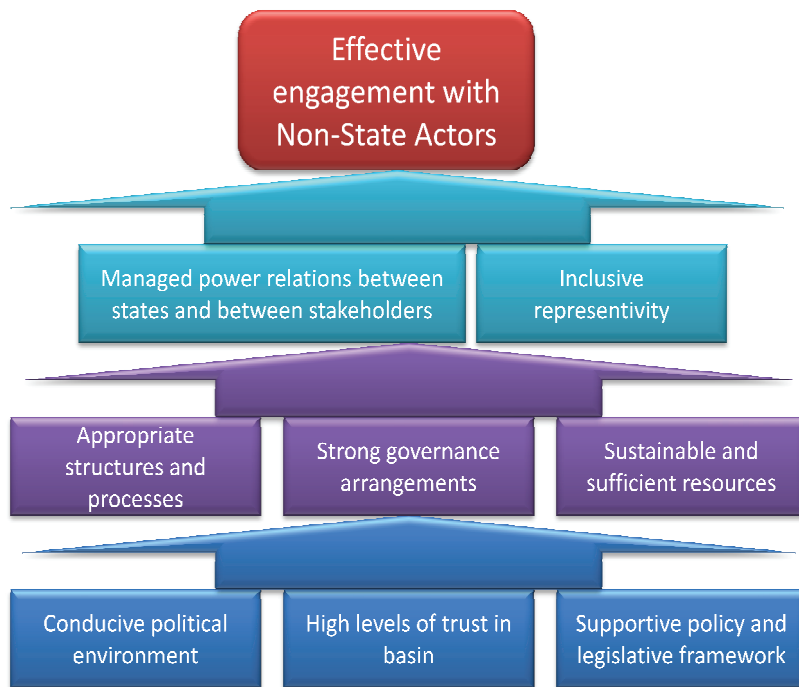


FIGURE 1: KEY ELEMENTS OF AN INSTITUTIONAL FRAMEWORK FOR STAKEHOLDER PARTICIPATION IN TRANSBOUNDARY RIVER BASINS

However, before venturing into transboundary stakeholder engagement, it is important to ensure that the consultation within national boundaries is effective through alignment of stakeholder consultation processes taking place in one basin, broadening the process to encompass more people, ensuring feedback on input made and ensuring that stakeholder input actually changes or influences decision.

Finally, it is important that all stakeholder engagement processes, at local, national or transboundary level, must meet the real and felt needs of the stakeholders, not what those in positions of authority consider to be their needs. Thus the approaches must be sufficiently flexible to encompass the actual needs and desires of stakeholders.

Finally, there is no ‘one-size-fits-all’ approach. There is high diversity between basins, even in a single region such as southern Africa and the institutional arrangements in each basin should be designed to meet the needs and capacity of that basin and be appropriate to the reasons for consultation. As Ken Msibi of the SADC Water Division stated, “The onus is on us to ensure that we strike a balance between stakeholder participation and the intended objective.” (International Symposium on Stakeholder Involvement in Transboundary Basins, Pretoria, October 2009).

Abbreviations

ARA	-	Regional Water Authority (Mozambique)
BECC	-	Border Environment Cooperation Commission
CBO	-	Community Based Organisation
CMA _s	-	Catchment Management Agency
CMS	-	Catchment Management Strategy
CRC	-	Committee for the Development of the Cuareim river basin
DGS	-	Department of Geological Survey
DNA	-	National Directorate for Water, Mozambique
DWA	-	Department of Water Affairs
ELMS	-	Environment and Land Management Sector, SADC
GTZ	-	Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
GWP	-	Global Water Partnership
ICPDR	-	International Commission for the Protection of the Danube River
ICPR	-	International Commission for the Protection of the Rhine
IDP	-	Integrated Development Plan
IRBM	-	Integrated River Basin Management
IRBO _s	-	International River Basin Organisation
IWRM	-	Integrated Water Resource Management
JIA	-	Joint Irrigation Authority
KOBWA	-	Komati Basin Water Authority
LBPTC	-	Limpopo Basin Permanent Technical Committee
LHWP	-	Lesotho Highlands Water Project
LIMCOM-	-	Limpopo Basin Commission
NGO	-	Non-governmental Organisation
NRWS	-	National Water Resource Strategy
NWA	-	National Water Act
NWRIA	-	National Water Resources Infrastructure Agency
OECD	-	Organisation for Economic Cooperation and Development
OKACOM-	-	Okavango River Basin Commission
RBO	-	River Basin Organisation
RISDP	-	Regional Indicative Strategic Development Plan
RSAP	-	Regional Strategic Action Plan
RWP	-	Regional Water Policy
SADC	-	South African Development Community.
UN	-	United Nations
UNEP	-	United Nations Environment Programme
WCD	-	World Commission on Dams
WMA	-	Water Management Area
WMO	-	World Meteorological Organisation
WSDP	-	Water Services Development Plan
WUA	-	Water User Association
ZACPLAN-	-	Zambezi River Basin System Action Plan

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1. Introduction

1.1 Background to project

This report is one of several reports arising from a Water Research Commission funded review of the involvement of national water institutions and civil society in international river basin agreements in South Africa. This project falls under Thrust 4: Policy development and institutional arrangements for water resource management, Programme 4: Transboundary water resource management. The terms of reference for the project outline the purpose of the research clearly as examining *the role of South African national institutions, stakeholders and processes in the development and implementation of institutional arrangements, processes and international agreements in shared watercourses*.

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This report begins from the understanding that stakeholder involvement is fundamental to effective integrated water resources management, and that this is generally recognised by SADC Member States and enabled through catchment and national water resources management institutions. However, there is a key issue around how to structure, facilitate and support local and national non-governmental and private sector stakeholder involvement in shared watercourse processes, as well as how to structure intra-governmental engagement, to achieve effective management of transboundary river basins.

Three reports have been completed in this project to date:

Task 1: Review and Evaluation of International River Basin Organisations

Task 2: Review and Evaluation of the Involvement of National Water Institutions and Civil Society in International Agreements in South Africa

Task 3: Review of the involvement of stakeholders in River Basin Organisations: A South African Perspective

This report draws on the work done in these reports, and synthesizes and interprets both that work and further research. It engages the purpose, mechanisms and models for participatory water management in transboundary basins from the South African perspective, and discusses possible models, and approaches to promote effective and participatory management of shared watercourses from a South African perspective.

1.2 Structure of report

This report is based on an assessment that:

- Understands the development of agreements in a basin to have two different aspects – the negotiations leading towards the signing of a formal agreement, and a second aspect of implementation of water resources management.

- Sees an evolution of intergovernmental structures in transboundary basins, from committees to, ultimately, basin commissions, and also recognises that there are different kinds of structures with different mandates, such as advisory bodies, bodies established to develop and operate joint infrastructure, and basin management structures.
- Recognises that the involvement of national institutions and stakeholders evolves over time.
- Recognises that a great deal of informal engagement happens in parallel, which must also be recognised as being a valuable part of the picture.

According to Saleth (2004) water institutions consist of two key parts: water institutional structure (governance structure) and water institutional environment (governance framework). The institutional structure he sees as being composed of three key elements: legal, policy, and organizational components.

Analysing the institutional framework for stakeholder participation in transboundary river basins therefore requires a consideration of the legal, policy and organisational components, and an examination of the structural and functional linkages among them (Saleth, 2004).

To address these issues, this report takes the following form:

- Section 2 gives an overview of transboundary river basin management, including consideration of the different drivers of transboundary co-operation, the constraints to effective transboundary river basin management and international river basin organizations, and various different aspects of basin co-operation;
- Section 3 deals with the legal and policy underpinnings of stakeholder engagement in transboundary basins in the South African context;
- Section 4 discusses the definition of stakeholders and the difference between state and non-state actors;
- Section 5 addresses some critical issues of stakeholder participation such as the nature and scope of participation and the issue of managing power relations;
- Section 6 deals with international and local experience of engaging non-state actors in transboundary river basins;
- Section 7 deals with international and local experience of engaging state actors in transboundary river basins
- Section 8 deals with lessons for South Africa from the previous analysis
- Section 9 outlines an area for further research;
- Section 10 provides the conclusion to the research, and
- The appendices contain a section on the characteristics of the 3 shared watercourses in which South Africa is a riparian state (Appendix A), a summary of international experience of non-state engagement per basin studied (Appendix B) and transcripts of key interviews (Appendix C).

2. An Overview of Transboundary River Basin Management

“A prerequisite of successful resource management is governance-arrangements by which stakeholders articulate interests, share information, communicate and bargain, and take collective decisions. Basin-level governance is essential to the ability of water users to operate at multiple levels of action, which is a key to sustained successful resource preservation and efficient use” (Ostrom, 1990; in Blomquist et al.)

2.1 Drivers of Transboundary Co-operation

Over the past decades, an increasing number of natural resource managers, academics and water management institutions have supported the approach of planning and managing water and related land resources on a river basin basis and this approach has been widely adopted (Hooper, 2003). The river basin management approach is one of the key tenets of Integrated Water Resources Management (IWRM), endorsed by the Global Water Partnership, at the 2002 World Summit on Sustainable Development in Johannesburg, South Africa and at the Third World Water Forum in Kyoto, Japan in 2003. The Third World Water Forum had “IWRM and Basin Management” as one of the key themes, and recognized that:

“. . . the key issue confronting most countries today is that of effective *governance*, improved *capacity*, and adequate *financing* to address the increasing challenge of satisfying human and environmental requirements for water. We face a *governance crisis*, rather than a water crisis. Water governance is about putting IWRM with river and lake basin management and public participation as critically important elements, into practice [their italics]”.

The statement also recognised river and lake basin organisations as the “basic institutional entities for implementing IWRM” (World Water Council, 2003:2).

In transboundary basins, the implementation of an IWRM approach requires that riparian states address the management challenges of the shared basin in a collaborative manner, including through the equitable sharing of the water and the benefits derived from the water. Such engagement is often driven by issues such as regional integration and political agendas, as much as by water resources requirements, and coloured by issues of sovereignty, trust, and political stability. Grey et al. (2009) note that “‘Experience suggests, quite simply, that countries cooperate in the management of transboundary waters not when compelled by principles or an 'ethics of cooperation,' but when the net benefits of cooperation are perceived to be greater than the net benefits of non-cooperation, and the distribution of these net benefits is perceived to be fair.”

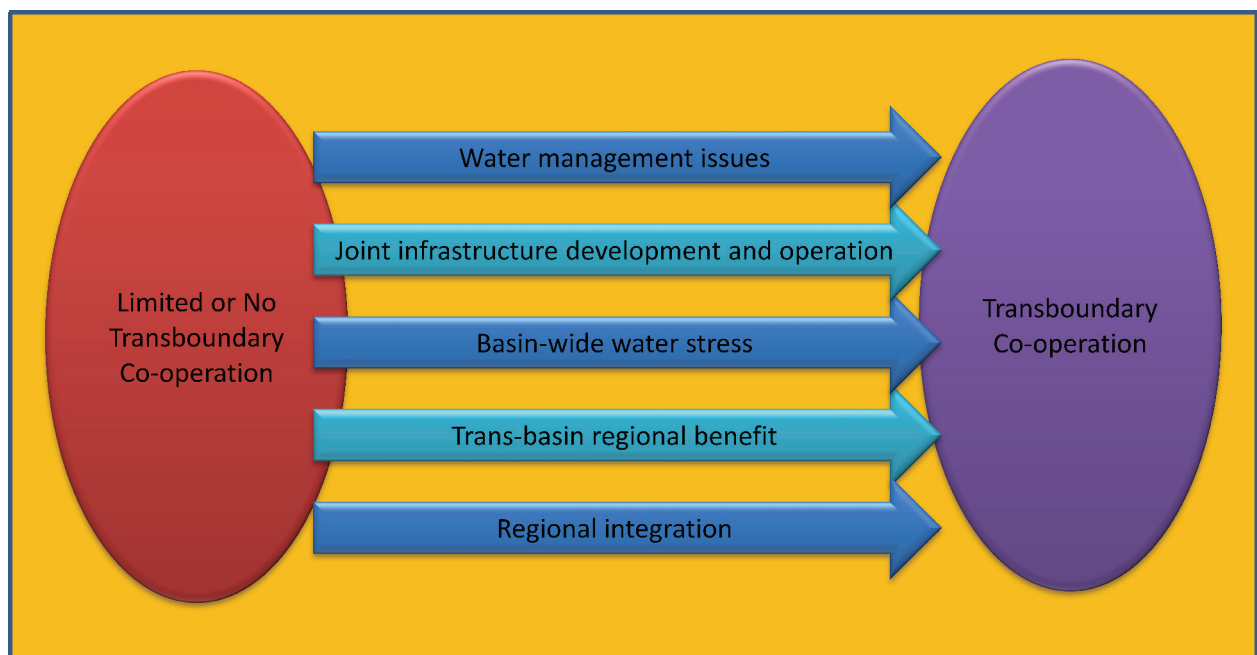


FIGURE 2: DRIVERS OF TRANSBOUNDARY CO-OPERATION (AFTER PEGRAM ET AL., 2009)

International experience has clearly shown that there is no one-size-fits-all approach to transboundary basin management, and therefore to the engagement of national or sub-national government role-players and stakeholders in transboundary water resources management processes. Partly these differences are dependent on the drivers of the transboundary co-operation, of which there are several, and which have implications for the engagement of stakeholders and sub-national role-players (Pegram et al., 2009). These drivers, represented in figure 2, are outlined briefly below:

Transboundary co-operation driven by water management issues: the driver for transboundary co-operation in this scenario is the need for two or more countries to engage over specific water management issues, such as water pollution or flood management. Often the approach is organic, and results in an agreement between only the affected states, rather than all riparian states, and the institutional arrangements may remain relatively informal, through inter-state committees rather than formal basin commissions.

Transboundary co-operation driven by the development and management of joint infrastructure: A common need for infrastructure in a shared basin, whether for hydropower, storage or flood control, can drive transboundary co-operation. Most often this gives rise to an agreement between the relevant states regarding the development, operation and maintenance of joint infrastructure, often combined with the establishment of an infrastructure agency, belonging jointly to the relevant countries, and responsible for the development, operation and maintenance of the infrastructure.

Transboundary co-operation driven by basin-wide water stress. This pathway is usually driven by increasing water stress across the basin, and results in an agreement to which the majority of the basin states are signatories (often all of the riparian states are signatories). The linked institutional form is often that of a Basin Committee or a Basin Commission, the latter emerging particularly as the co-operation matures.

With a **trans-basin regional benefit scenario**, transboundary water co-operation is driven by the need to achieve wider regional benefits around, for example, food security and energy requirements. The linked institutional arrangement is often that of a committee, not necessarily focused solely on water.

Some co-operation arises to serve larger **regional integration processes**, taking the trans-basin regional benefit approach one step further. Such agreements are put in place to support economic integration, and may be driven by a committee or a Commission.

In all of these pathways, the engagement between riparian states requires appropriate institutional arrangements, which generally include formal agreements between the states and some form of structure through which they can engage. Such structures can range from joint technical committees to formal River Basin Commissions. The structures may be bilateral in nature, or involve all riparian states. Often what is seen is an evolution from a bilateral technical committee through to a multi-party River Basin Commission with a permanent secretariat, although it is possible, as in the case of South Africa, for bilateral structures and agreements to run in parallel with multi-party Commissions.

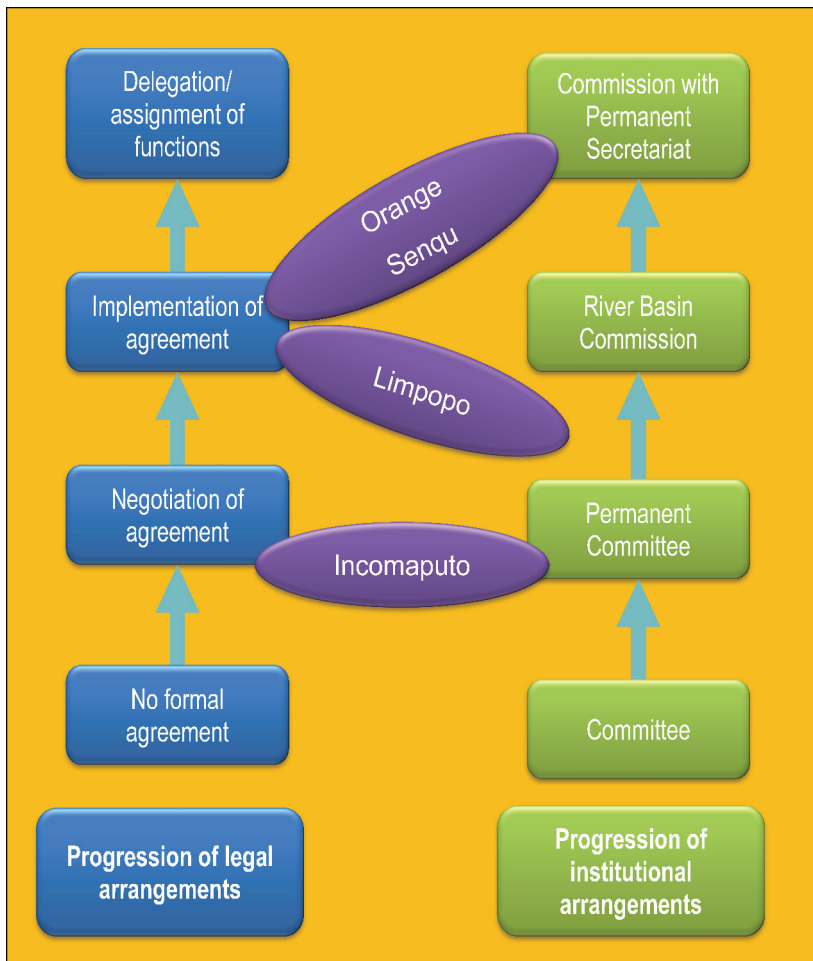


FIGURE 3: EVOLUTION OF INTERNATIONAL RIVER BASIN INSTITUTIONAL AND LEGAL ARRANGEMENTS

What is of interest is that the involvement of stakeholders and sub-national government structures takes different forms and levels of importance depending on the drivers behind the co-operation and the level of evolution of the transboundary processes (see figure 3). Where the co-operation is driven by the need to develop and operate joint infrastructure, for example, the stakeholders that are involved, and the nature of the involvement, will differ from a situation in which transboundary co-operation is driven by the need for regional integration. Under some scenarios the focus may be stronger on local stakeholders, while in others it may be at more regional or national level. This refers to both civil society and private sector stakeholders and to government departments and spheres of government.

2.2 Constraints to Effective International River Basin Management and IRBOs

Hanreider (in Mumme, 2004), in unpacking the complexity of international relations between states, described three levels of engagement that take place: horizontal linkages between governments; lateral society to society engagements between sub-national actors, and “integrative or supranational processes to which states are party” (Mumme, 2004). All three levels of engagement take place in international river basin management, and some examination of the three is important to understand the optimal functioning of international river basin organisations and management approaches. Hanreider’s approach raises an interesting question: are international river basin

organisations operating as horizontal government to government engagement structures, or are they acting as they supranational integrative institutions? Is it possible that they act as both at different times and under different circumstances? The involvement of sub-national actors such as CMAs and local government will also be examined, including in relation to Hanreider's point regarding society to society engagements between sub-national actors.

Brouma (undated) suggests that international river basin management be contextualised within the framework of environmental security, rather than the more conventional approach of internal relations. The latter is generally seen as involving interactions between state parties only (Hanreider's first level). Environmental security, however, allows for "a multi-level approach that facilitates the involvement of all the levels of social and political interactions. So, the stakeholders can be simultaneously coming from the international as well as from the national, regional and local level." (Brouma n.d.). Brouma sees the environmental security approach as enabling the participation of a range of different actors, including "international agencies, states, bureaucracies, non-governmental organisations, governmental institutions as well as small groups of people and individuals". The analysis of international river basin management within a conventional international relations approach (state to state) or as an element of environmental security, gives rise to different models of participation.

In 1994 the UN tabled the concept of human security, moving the understanding of security beyond the Cold War framework of state security to include the security of the individual. According to the UN, this includes economic, food, health, environmental, personal, community and political security. This notion of human security has been embraced by SADC (Sebudubudu, 2006), placing transboundary water management within the framework of environmental security in the SADC context, rather than within the framework of conventional international relations. As a result, it is appropriate to analyse transboundary water management arrangements within Brouma's understanding of the involvement of a range of actors, rather than simply state to state engagement. This approach links to the participatory approach to natural resource management widely recommended in international literature and agreements such as Agenda 21.

Milich and Varady (1988) take a slightly different approach, by defining four paradigms within which transboundary river basin management takes place: technical/scientific in which management is largely done by technical and scientific institutions; regulatory/standard-driven which are governed by standards and numerical measurements; the closed paradigm in which negotiation is done by high level officials or diplomats who they see as resisting the involvement of civil society; and the top-down paradigm in which decisions are made by national government, often ignoring the needs and aspirations of basin communities. They pose, as an alternative, the model used in the US-Mexico border region where a Border Environment Cooperation Commission (BECC) includes ten representatives from either side that include engineers, environmental agencies, NGOS, state governments and academic institutions. The BECC mandate links economic development and environmental sustainability. The BECC has technical assistance grants that it can provide to local projects and it gives preference to economically disadvantaged communities. Its charter carries explicit provisions for public participation, unlike any of the transboundary agreements to which South Africa is a signatory. Milich and Varady highlight how the BECC process is empowering local communities to express previously unarticulated needs.

In considering the institutional and participatory arrangements in international river basin management, however, it is important to recognise that different basins are characterised by very different hydrological, political, social, economic and legal frameworks. It is therefore difficult to establish a generic approach that is appropriate in all circumstances. Equally, the assumption that the existence of a river basin organisation will automatically lead to improved water resources management is not necessarily correct. Some researchers argue that, in practice, few RBOs have actually succeeded in balancing social, economic, and environmental objectives. Blomquist, Dinar and Kemper (2005), for example, see river basin organisations as necessary but not sufficient for effective water resources management, although they agree that they do offer opportunities for improved water resources management.

Hooper (2003) has identified, from the work of Millington, Radosevich and Olson, several critical tenets of successful river basin organisations, of which the most important for the purposes of this report are that they operate in a *stable institutional framework* with a strong legislative mandate, and clear roles and responsibilities; they work from a *strong knowledge base* derived from good quality data and models; and they put in place *strong participation processes* to enhance involvement in basin management plans (Hooper, 2003).

Since there is not one model that can be used in all contexts, successful river basin organisations must be based on the principle of learning by doing, and adaptive management that enables the organisation to adapt to changing and specific conditions within the basin. This learning process, however, should also be informed by international experience.

A number of international river basin organisations have been established around the world, in both developing and developed countries, such as the Mekong River Basin Commission, the Okavango River Basin Commission (OKACOM) and the International Commission for the Protection of the Danube River (ICPDR). The mandate of international river basin organizations is usually to contribute in some way to the equitable allocation of water between the riparian countries: it may include such matters as ensuring protection of environmental flows, facilitating safe navigation, and maintaining water quality. None the less, the mandates of these international river basin organisations vary considerably, from the management and implementation mandate of the ICPDR to the advisory role of the three river basin commissions to which South Africa is a signatory.

Within the apparently simple mandate given to international river basin organisations, however, reside an implicit set of tensions between the national interests of the Parties and the common basin-wide perspective that may develop within the organisation itself – i.e. between the functions of Hanreider’s supranational body and the government to government relations that he describes (in Mumme, 2004). It is important to distinguish whether river basin organisations are acting as a negotiating chamber between Parties that bring their own mandates and interests to the table, or whether they are acting as a coherent organisation with its own identity, attempting to develop common approaches and recommendations to make to the Parties. Both may operate within one institution at different times. The different approaches have implications for the type of involvement of stakeholders that is envisaged.

Closely aligned to the different drivers of transboundary basin management referred to in section 2.1, there are different types of international river basin organisations, which serve different

purposes. There are two main streams in this difference, although there are cases in which the streams merge. These different types of institutions are described briefly below.

In transboundary basins where the key driver for co-operation is the need for **joint infrastructure**, for hydropower, flood management or storage, the institutions that are put in place are generally focused on the development, operation and maintenance of such infrastructure, and usually have a focused and specific infrastructure related mandate. Similarly, the engagement with stakeholders is primarily focused on infrastructure and related impacts.

Arising from bilateral or multilateral agreements international river basin organisations may be established that have an advisory function to the riparian states. In some cases, such bodies may, ultimately, be given management responsibilities in the basin, although this usually requires considerable trust between and maturity of riparian states. The mandate to engage with stakeholders, and the nature of the work of the organisation, depends on its mandate.

In some circumstances, an infrastructure focused organisation may develop into an institution with a much wider range of basin management related functions, such as is the case of the Senegal River Basin Organisation, which began as an infrastructure focused body and which has been given a broader mandate in terms of basin management.

The potential institutional arrangements arising from different drivers, and the national level institutional arrangements, are set out in Figure 4 below.

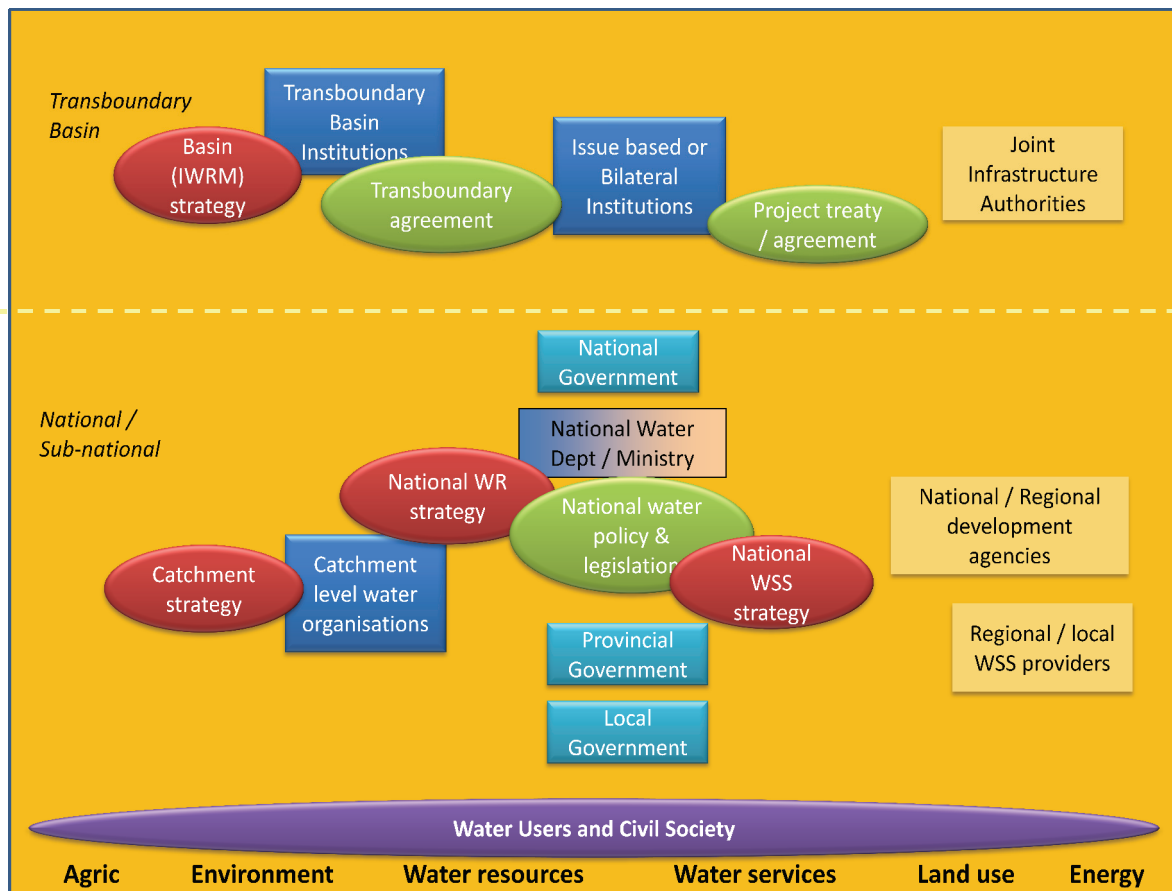


FIGURE 4: INSTITUTIONAL ARRANGEMENTS IN TRANSBOUNDARY BASINS ADAPTED FROM PEGRAM ET AL., 2009

Finally, in considering the issue of stakeholder and sub-national state involvement in international river basin management and organisations and the constraints on effective IRBM and IRBOs, it is important to remain rooted in reality and not simply to adopt theoretical models that may not work on the ground. One of the key challenges to effective international river basin management is the asymmetrical power relations between riparian states – a situation that is particularly present in the case of South Africa which is economically and technically more powerful and capacitated than the other states with whom it shares river basins. Such power differentials derive primarily from economic conditions which enable, *inter alia*, greater information and knowledge generation by richer states, the ability to travel to and to participate more easily in meetings and negotiations, the ability to run intensive and expensive consultative processes, the human resources to participate in basin processes and studies, and the financial capacity to implement decisions in the basin. Such power differentials are exacerbated by position within the river basin, with economically powerful upstream countries easily becoming basin hegemony.

At the same time, stronger economic conditions enable stakeholders to become better resourced to participate in basin management, through the ability to travel, to attend consultative meetings, to disseminate and receive information, including by electronic means, and ultimately to have access to state officials. In South Africa, of course, due to high levels of inequality, one finds in any one basin stakeholders who are highly resourced and stakeholders who are very poorly resourced and largely marginalised from decision making. These power asymmetries are complicated by cultural, legal and language differences.

At a more specific level there is an issue pertaining to the capacity of the delegates themselves that participate in IRBM and IRBO processes: are these delegates sufficiently capacitated to participate effectively in complex negotiations; do they understand the historical and contemporary issues pertaining in the basin; do they have a formal mandate from their own government for their positions; and is their understanding of the water issues in the basin contextualised within a bigger picture of international engagement in the region, including issues of trade, environmental security and protection, etc? To deal with these questions effectively could require clear criteria for selection of delegates; briefing and mandates for delegates; and formal procedures for the appointment of suitable delegates. It may also require formal training programmes for delegates to capacitate them to participate effectively in transboundary water management processes.

2.3 Different Aspects of Basin Co-operation

As mentioned previously, there are, essentially, two major aspects to transboundary co-operation that present very different stakeholder engagement requirements: the first is the process of negotiation leading to the signing of a transboundary agreement, and the second is the implementation of that transboundary agreement or of joint water resources management approaches in the absence of a formal agreement, since a great deal of sharing of information, joint planning, and communication between riparian states can take place without a formal agreement being in place. These two aspects are dealt with separately below although, in reality, they are often difficult to separate.

Figure 5 indicates the two aspects of basin agreements (negotiation and implementation) and indicates two key elements arising from and supporting basin agreements: the one being water related planning, and the other being the institutional development derived from the agreement.

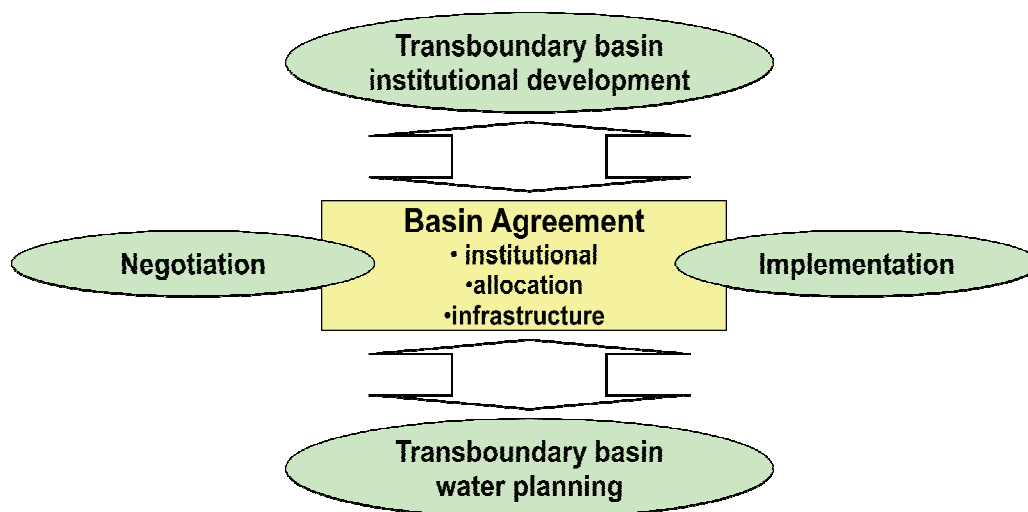


FIGURE 5: PHASES AND ELEMENTS OF TRANSBOUNDARY AGREEMENTS

2.3.1 Negotiating the agreement

Prior to the signing of an agreement (whether basin-wide or more specific to a particular activity such as infrastructure development) the engagement between riparian states is usually through a series of committees, operating at both the technical and the political level. This process tends to lead to the negotiation of a formal agreement which includes reference to more formalized inter-country structures.

The difference between an international relations framework and an environmental security framework has been described earlier in this document. One could argue whether the negotiation of a transboundary co-operation agreement falls within the framework of international relations, or of environmental security. Whichever answer is chosen, it is important to recognise that transboundary agreements are as much political as technical, and that issues of sovereignty and state security are part of the package. This is particularly true of basin-wide agreements that concern the allocation of water, but is also true of agreements regarding shared infrastructure. As a result, while states may choose to consult stakeholders during the negotiations process in order to ascertain their interests, there is a formal track to this process, where Ministers and senior officials engage in the process to negotiate and develop the Agreement to the point where it can be signed and ratified by the riparian states.

However, if one examines the case of the establishment of the International Commission for the Protection of the Rhine, NGOs and parastatal water companies were critical in driving the process of transboundary co-operation and the development of transboundary agreements, indicating the important role that stakeholder can play in driving and supporting transboundary co-operation.

Dieperink (1997) reports that NGOs were involved in the development of the international regime for the management of the Rhine catchment, particularly the Dutch waterworks (a quasi NGO) and the environmental movement. The Dutch waterworks put pressure on the Dutch government to set up a process of consultation with other riparian states, and through the *Arbeitsgemeinschaft der Wasserwerke im Rheineinzugsgebiet* (IAWR) attempted to engage with the governments of the other riparian states. The waterworks institutions and the environmental movement also collated

facts and information to influence perception in the basin. The Dutch Stichting Reinwater (Clean Water Foundation) and Greenpeace began monitoring the river to identify specific point sources of pollution and to raise awareness around pollution issues. Dieperink (1997) further reports that the environmental movement put pressure on upstream countries through legal proceedings against polluters. All of this action served to create an enabling environment for the Dutch government to push for collaboration and agreement between riparian states on how to manage the Rhine river basin jointly.

A particular challenge in the state to state engagement in negotiating an international river basin agreement, however, is the involvement of other relevant government departments in order to ensure that the negotiated agreement aligns with broader government objectives relating to trade, environment and development, within a benefit sharing approach to basin management. This is an area where the South African approach lacks structured engagement. Currently the role of the Department of Foreign Affairs, for example, is limited to facilitating the approval of the documentation and ensuring it is in line with formal government requirements, rather than in relation to offering strategic direction, and there is little structured involvement of other key departments. It would appear that there is an opportunity being missed for greater strategic engagement by relevant government departments in the negotiation phase of international river basin agreements.

2.3.2 Transboundary water resources management implementation

Once a transboundary agreement has been signed and ratified, or sometimes in the absence of a formal agreement, transboundary water resources management has implementation demands, which may include new institutional arrangements, as set out in the agreement. Implementation is often, but not always, done by the Parties themselves, but may be done by an international body established for the purpose of infrastructure development, operation and maintenance (such as the Lesotho Highlands Development Agency or KOBWA) or by an international basin commission. The ceding of implementation authority to a basin commission has been done in a limited number of basins.

There are three key aspects to the implementation of international river basin agreements that should be considered when examining stakeholder engagement:

The generation of **knowledge and information** through a neutral platform e.g. through basin studies and sharing of information;

Basin level planning which leads to the generation of recommendations for Parties; and

Implementation of the agreement either through **projects** such as infrastructure development or watershed protection or non-infrastructure project activities such as regulation of water use.

Within each of the three areas, the key players and the roles and responsibilities differ. Each of these is therefore discussed briefly below.

2.3.3 Developing a common information platform

Shared information has often been cited as one of the most important elements of successful transboundary river basin management. Raadgever et al., for example, cite cooperation on joint monitoring and information management as a key part of the process of developing trust between

riparian countries. They recommend that national governments and transboundary river basin commissions should actively exchange information and provide information to the public. They also recommend processes that generate information from all possible sources, including from the public.

More interestingly, perhaps, they also suggest that “active learning” is a key part of adaptive management, and that all stakeholders need to participate in active learning in order to be able to play their part in the adaptive management of the basin. Thus stakeholders need to determine their information needs, and engage with information and issues to express their own views, in order to develop a common understanding of the basin challenges and opportunities. This shared knowledge must be not only technical, but also cover social, political and process aspects. In achieving this shared knowledge, “experts” must learn to listen to the views of others, not impose their views on stakeholders. Since implementation is often at the local level, it is very important for information to be shared from the transboundary level to the local level, and vice versa.

Nilson (2006) also refers to the widespread recognition of the importance of information for all planning activities, but particularly in shared river basins, and that some of the most important functions of international river basin commissions are information related, such as monitoring, sharing of data, standardisation of data collection and the development of information and monitoring strategies. Her understanding of the importance of common information as a critical part of the management of transboundary river basins is shared by many authors (Kanel, undated; Blomquist, Dinar and Kemper, 2005). Tidwell et al., in a similar vein, suggest that co-operative monitoring and modelling can contribute to the development of consensus on key issues within a transboundary basin. For them, “co-operative monitoring provides a means of developing a consistent database that is shared and approved by all parties, while cooperative modelling provides the computational framework with which the parties interpret the available data and test alternative water management strategies.” (Tidwell et al., 2005:8). A co-operative monitoring approach would enable stakeholders across the basin to determine what to monitor, and how, in order to provide the data needed for modelling and planning.

Nilson describes various models that can be applied in the information related work of international river basin organisations, such as the DPSIR model (*Driving forces, Pressure, Status, Impact, Response*) which is based on a state of environment reporting model originally developed by the Organisation for Economic Cooperation and Development (OECD), or the Information Cycle model. It is not the function of this report to dwell on the models for information management that could be adopted by international river basin organisations, but rather to suggest that the stakeholder engagement implications of developing a common information platform are influenced by the model adopted. Certain models are more suited to ensuring the dialogue between information producers and information users, just as some monitoring approaches are more conducive to stakeholder involvement in the process. Further research in this regard could be useful in supporting participatory transboundary water management in Southern Africa.

It is interesting to note that Raadgever et al. score the Orange Senqu basin average on the shared production of information, but low in relation to the exchange and use of information, with the basin lacking an integrated data and information system. They also note that dissemination of information to stakeholder groups by Orasecom is limited (Raadgever et al., 2008). There is clearly

still a significant challenge in relation to monitoring and information in South Africa’s shared river basins.

Information and monitoring are the two bookends supporting basin planning, the former providing the information needed for basin planning, the second monitoring the state of the basin and the implementation of any plans and/or projects, and feeding back information in order to improve planning and management of the basin.

2.3.4 Basin planning

Transboundary basin planning is an important process in which to involve stakeholders and sub-national government institutions, both to ensure buy-in into the planning and implementation process, and to ensure that the plan is based on the best available information. However, there is not necessarily agreement on what a transboundary basin plan consists of, and therefore what level of consultation is required in the formulation of a basin plan. In many contexts, a transboundary basin plan forms a high-level framework within which countries develop their own plans for managing their portion of the basin in line with the requirements of the basin plan. Thus the basin plan is likely to set allocations between countries, water quality parameters, joint infrastructure requirements, environmental flow requirements, and perhaps procedures for implementation. The countries themselves will then be responsible for translating each of these into action on the ground within their portion of the basin.

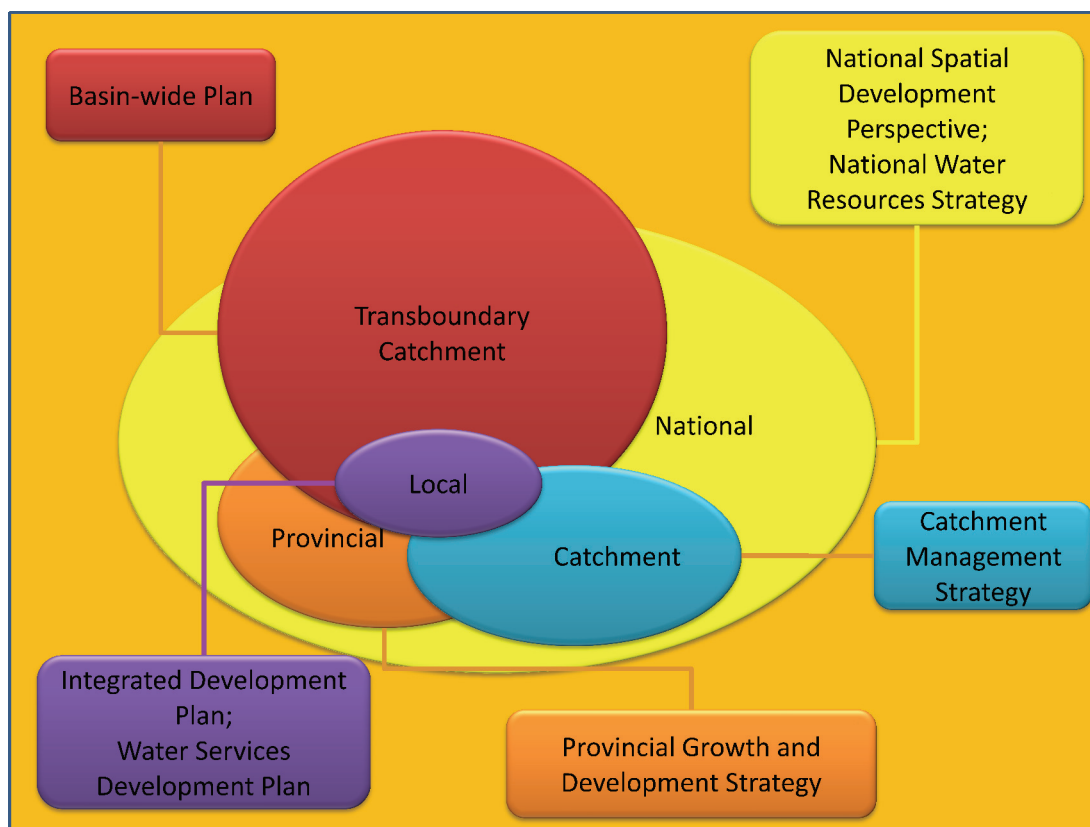


FIGURE 6: NESTED PLANNING IN THE SOUTH AFRICAN CONTEXT

In the South African context, as in many basins, a set of nested plans support the implementation of any transboundary basin plan (see figure 6). The key plans in the South African context are set out in Figure 7. One of the challenges, however, is that the boundaries of these plans are different, and

alignment of the planning processes and plans is not without spatially-driven challenges. The challenge in relation to stakeholder engagement is that each of these plans requires some degree of involvement of stakeholders and other government institutions. The question then arises to what extent engagement at one level reduces the need for engagement at other levels and in other processes. For example, if stakeholder engagement has been excellent in the IDP process and the development of the catchment management strategy, does this not reduce the need for intensive consultation at the transboundary level, and vice versa?

The other key element of the nested planning is that, at least in theory, it enables the inclusion of development objectives into the basin planning process. IDPs and provincial growth and development strategies should set out the relevant development objectives. Taking a nested planning approach, these development objectives should feed into and inform the catchment management strategy which, in turn, should inform the basin plan.



FIGURE 7: TRANSBOUNDARY RIVER BASIN PLANNING AND IMPLEMENTATION FRAMEWORKS IN SOUTH AFRICA

Figure 6 shows the planning and implementation frameworks that ultimately support transboundary river basin management in the South Africa context, with different activities being conducted at different levels of governance. Planning and implementation are two of the key activities required for effective river basin management, but neither can happen without sufficient information being provided.

However, it is not the intention of this paper to examine, in detail, the planning processes in play in the South African government, and the alignment of the various development and water plans

required at the various levels of government. Suffice to say that the theoretical underpinnings of the planning arrangements in South Africa are sound, with the Intergovernmental Relations Act serving to provide the mechanisms to ensure co-operative government planning and implementation. The key challenge lies in implementation, in relation to the alignment of the various plans, the content of the plans, and the involvement in stakeholders in the development of the various plans. Criticisms have, in particular, been levelled at local government planning and the failure to integrate water planning into local economic development planning, and the poor quality of many Water Services Development Plans.

Perhaps the key question to examine is the role of Catchment Management Agencies in consultation relating to basin planning, and the relationship between the catchment management strategy and a transboundary basin plan. The National Water Act sets out that, in developing a catchment management strategy, a CMA must consult with—

(2) (a) The Minister;

(b) any organ of state which has an interest in the content, effect or implementation of the catchment management strategy: and

(c) any person or their representative organisations -

(i) whose activities affect or might affect water resources within its water management area: and

(ii) who have an interest in the content, effect or implementation of' the catchment management strategy.

(3) A catchment management agency must, before the publication of a notice in terms of section 8(5)(a), refer to the Minister for consideration and determination, any proposed component of a catchment management strategy which in the opinion of the catchment management agency—

(a) raises a material question of policy, or

(b) raises a question concerning-

(i) the relationship between the Department and other organs of state, or

(ii) the relationship between organs of state and their respective roles in developing or implementing a catchment management strategy.

Since 2(c) could refer to transboundary water users or water managers, there could be an interpretation of this clause as a mandate to the CMA for cross-border consultation. At the same time, the NWA also stipulates that the CMA must be in accordance with the NRWS, and international obligations are determined within the NRWS. There should, therefore, not be a need for consultation on the quantity and quality of the international obligation. What, then, may a CMA want to consult transboundary water users and organs of state on for the development and implementation of the CMS?

Consultation by the CMA with authorities or stakeholders in neighbouring states would be on operational matters, rather than matters pertaining to the interpretation of an agreement. The interpretation of an agreement and the determination of the quantity and quality of water required for international obligations remains the purview of the Department of Water Affairs through the formal transboundary structures. Thus the matters on which a CMA may consult with stakeholders or authorities in neighbouring states might include, for example, the management of water weeds and water borne alien invasive species; flood and incident management; watershed protection or rehabilitation schemes.

On planning for operational matters, it makes sense for the CMA to consult with organs of state in neighbouring states. However, the right of the CMA to consult with other stakeholders in riparian states must be determined by the policy and practice in that riparian state. The issue of trust is critical to the effective functioning of transboundary river basin management and such trust takes time to build, and consultation with stakeholders will be influenced by the level of trust in the basin.

2.3.5 Project implementation

The third critical leg is the implementation of projects, some of which may be infrastructure projects, while others may be non-infrastructure, such as capacity building and awareness projects, alien vegetation clearing, and so on.

Infrastructure Projects

Stakeholder consultation in relation to infrastructure projects, such as the building of dams, should be based on the consultation guidelines of the World Commission on Dams report (WCD 2000). Planning for transboundary infrastructure development is the usually responsibility of a Commission or similar multi-party structure, until it is formally handed over to an infrastructure authority or other body for implementation, at which stage, the responsibility for stakeholder involvement shifts to the implementing agent.

Under the National Water Act a number of institutions have powers to develop water resource infrastructure, although the type and size of infrastructure to be developed varies from institution to institution. The Department of Water (and ultimately a possible National Water Resource Infrastructure Agency), local authorities (with a focus on water service related infrastructure), water boards, water users associations, and specific international water management institutions all have certain categories of infrastructure assigned in accordance with their responsibilities.

In the three shared river basins of which South Africa is part, there are two international infrastructure agencies, KOBWA, and the Lesotho Highlands Development Agency, which have specific mandates for infrastructure development, operation and maintenance. The Trans Caledon Tunnel Authority was established to fund the Lesotho Highlands Water Project. These structures are necessary in these three river basins because the river basin organizational structures are purely advisory at this stage and do not have an implementation mandate. In fact, these infrastructure bodies predate the establishment of formal basin Commissions by many years. These institutions have been responsible for stakeholder consultation processes relating to the infrastructure development projects that they have implemented.

Non-infrastructure projects

As yet, there are no international non-infrastructure projects, such as conservation, management or regulation related projects, although Orasecom is beginning to look at this and has initiated research into key conservation areas in the basin. Such projects might range from relatively localised projects to projects or programmes at a basin or sub-basin level.

Most non-infrastructure water management or protection projects are implemented by national or sub-national institutions under the aegis of national legislation. However, it is possible for such projects to be co-ordinated across national boundaries, particularly where such projects relate to information dissemination and awareness creation.

For example, on the Rhine, the Dutch Province of Gelderland, the Dutch *Rijkswaterstaat* and the German Land Nordrhein-Westphalen signed a 'Joint declaration for the cooperation concerning sustainable protection against floods'. This declaration forms the legal mandate for the German-Dutch *Arbeitsgruppe Hochwasser* (Working group on floods), which is engaged in improving the flood management regime of the river (NeWater 1.3.1).

3. Legal and Policy Framework in SADC and RSA

3.1 SADC Treaty

The SADC Treaty is the instrument of cooperation in the SADC region. As of October 2004, the SADC Treaty had been signed and ratified by all six of South Africa's neighbours. South Africa itself acceded to the SADC Treaty in 1994.

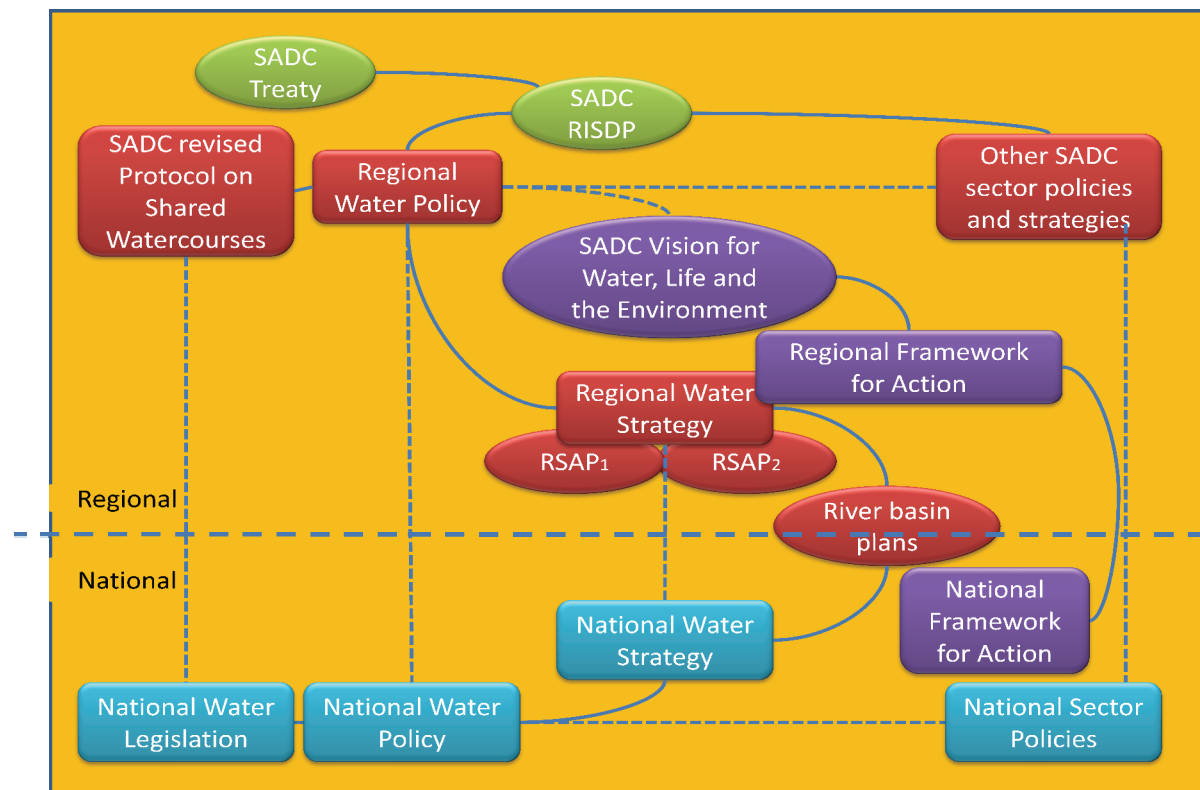


FIGURE 8: RELATIONSHIPS BETWEEN THE INSTRUMENTS OF CO-OPERATION IN SADC (ADAPTED FROM: SADC WATER STRATEGY, 2005:9)

Figure 8 above illustrates the relations between different policy instruments and strategies for cooperation at a regional level of the SADC water sector, and how these are translated into water sector policies and strategies at national level. The Treaty, as seen in the diagram, is the primary instrument providing guiding principles for the development and implementation of water sector policy and institutions for water management. Starting from the regional level and flowing through to national level water management, sector strategies must be aligned with the Treaty principles.

The relevant objectives of the Treaty for this report, as set out in Article 5, are to:

- promote sustainable and equitable economic growth and socio-economic development that will ensure poverty alleviation with the ultimate objective of its eradication, enhance the standard and quality of life of the people of Southern Africa and support the socially disadvantaged through regional integration;
- promote common political values, systems and other shared values which are transmitted through institutions which are democratic, legitimate and effective;
- consolidate, defend and maintain democracy, peace, security and stability;
- achieve complementarities between national and regional strategies and programmes;
- promote and maximize productive employment and utilization of resources of the Region;
- achieve sustainable utilization of natural resources and effective protection of the environment; and
- mainstream gender in the process of community building.

The Treaty, in Article 5, further recognizes that certain steps must be taken to ensure that these objectives are achieved:

- harmonize political and socio-economic policies and plans of Member States;
- encourage the people of the Region and their institutions to take initiatives to develop economic, social and cultural ties across the Region, and to participate fully in the implementation of the programmes and projects of SADC;
- create appropriate institutions and mechanisms for the mobilization of requisite resources for the implementation of programmes and operations of SADC and its institutions;
- improve economic management and performance through regional co-operation; and
- promote the coordination and harmonization of the international relations of Member States.

Furthermore, the Treaty in Article 21 (1) and (2) states that:

- Member States shall cooperate in all areas necessary to foster regional development and integration on the basis of balance, equity and mutual benefit.

- Member States shall, through appropriate institutions of SADC, coordinate, rationalize and harmonize their overall macro-economic policies and strategies, programmes and projects in the areas of co-operation.

Article 23, Stakeholders, is perhaps the most critical element of the Treaty in relation to this piece of work, stating that:

1. In pursuance of the objectives of this Treaty, SADC shall seek to involve fully, the people of the Region and key stakeholders in the process of regional integration.
2. SADC shall co-operate with, and support the initiatives of the peoples of the Region and key stakeholders, contributing to the objectives of this Treaty in the areas of co-operation in order to foster closer relations among the communities, associations and people of the Region.
3. For the purposes of this article, key stakeholders include:
 - private sector;
 - civil society
 - non -governmental organisations; and
 - workers and employers organisations.

Focused more specifically on water, the SADC Regional Water Policy “provides the context and intent for water resources management at a SADC regional level, representing the aspirations and interests of Member States. The Protocol on Shared Watercourses is the legal instrument for its implementation, under which bilateral and multilateral agreements between Watercourse States may be developed. The Regional Water Strategy will then represent the framework for implementation of the Policy and Protocol, indicating actions, responsibilities and timeframes” (RWP, 2005:4); and “the RISDP provides a comprehensive and multi-sectoral framework for addressing socio-economic development in the region” (RWP, 2005:9).

The Regional Water Policy recognises the principle of stakeholder participation strongly, in the following clauses:

The Regional Water Policy and Stakeholder Participation (Water Infrastructure Development)

8.5.2. Policy: SADC shall encourage the participation of all stakeholders in decision-making processes for dam development and, where appropriate, with adequate facilitation and empowerment of vulnerable groups to ensure their effective involvement in decision-making.

8.6.1. Policy: Watercourse States shall promote the development and implementation of water infrastructure projects through a participatory process, especially of affected communities.

8.6.2. Policy: Member States will put in place proper legislation to provide for equitable compensation of affected communities, so that they will not be worse off as a result of the project.

The Regional Water Policy and Stakeholder Participation Capacity Building

10.1.1. Policy: Water resources development and management at all levels shall be based on a participatory approach, with effective involvement of all stakeholders including the private sector, NGOs and civil society organisations.

10.1.2. Policy: All stakeholders shall be empowered to effectively participate in the development and management of water resources at international, regional, river basin, national and community levels, particularly in shared watercourses.

10.1.3 Policy: Member States and shared water course institutions (SWCIs) shall recognize the positive role played by NGOs in water resources management, particularly at community level, and shall facilitate their participation at all levels in water development and management activities.

Regional Water Policy and Stakeholder Participation (Gender Mainstreaming)

10.2.1. Policy: Women are recognised as playing a central role in the provision, management and safeguarding of water and shall be fully involved in the development and implementation of policies, processes and activities at all levels.

10.2.2. Policy: All SADC water institutions shall implement the principles, goals and objectives of gender mainstreaming in their administration and implementation

In 2003, the SADC Water sector developed the *“Guidelines for the development of national water policies and strategies to support IWRM”*. The objective of these guidelines was “to promote the development of national water policies and strategies that enable improved integrated water resource management.” To achieve this at the regional level, national policies and strategies needed to be harmonized and made compatible to the SADC Revised Protocol on Shared Watercourses (GTZ, 2003).

“Harmonization means improving the compatibility of national policies and strategies with one another (both within and between countries) so that national water policies and strategies do not hinder the sharing of international water resources for mutual benefit. Harmonization does not mean developing uniform water policies or a joint water policy subscribed to by all SADC member countries” (GTZ, 2003:1). The continued emphasis on harmonization arises out of a recognition that “as the intensity of water stress increases over time, conflicts arising out of policy differences, and more importantly out of differences in the intensity of implementation of policies are likely to become more severe and longer lasting(GTZ, 2003:3)”

SADC supports the harmonization of water policies and IWRM practices through a twofold approach – a vision-oriented approach anchored in the Revised Water Protocol, the Regional Strategic Action Plan (RSAP), the regional policy and strategy development; and a problem-oriented approach anchored through the shared watercourse institutions. (GTZ, 2003:6-7). The vision-oriented

approach starts with the development of a common vision, moves on to a common understanding of the principles of good IWRM practice, defined common goals and objectives, and translates these into policies, legislation and IWRM practices. The problem oriented approach starts with the definition of a problem and develops a strategy to solve the problem.

The Regional Water Strategy should primarily be implemented regionally through the RSAP, and nationally through National Water Strategies. However, no explicit linkages exist between the national water strategies of the member states and the RWS (SADC Water Strategy, 2003).

The SADC Water Strategy (2003) recognizes the need to harmonize the national water policies, water legislation and water strategies between the SADC countries. The SADC Water Strategy suggests that the focus of harmonization should be on the following two areas:

- Regionally promoting the implementation of RWP and Protocol on Shared Watercourses.
- Providing support to Member States in the harmonization of their national policies, legislation and strategies.

The Regional Water Strategy devotes a chapter to stakeholder engagement, and the RSAP II, designed to operationalise the Strategy, includes a strong focus on stakeholder engagement in the section on governance. SADC has also recently published guidelines on the involvement of stakeholders in transboundary river basins.

3.2 Revised SADC Protocol on Shared Watercourses

The SADC Treaty, in Article 22(1) states that:

“Member States shall conclude such Protocols as may be necessary in each area of co-operation, which shall spell out the objectives and scope of, and institutional mechanisms for, co-operation and integration.”

Article 22 (9) and (10) further state that:

“Each Protocol shall be binding only on the Member States that are party to the Protocol in question” and

“Decisions concerning any Protocol that has entered into force shall be taken by the parties to the protocol in question.”

The importance of water in regional co-operation and integration was demonstrated by the formulation of the SADC Protocol on Shared Watercourse Systems which was developed in the early 1990s and was subsequently signed in 1995 (Ramoeli, 2002:105). Heyns (2004:4) suggests that the discussions on shared watercourses between member states began in 1991 whereas Ramoeli (2002:105) suggests that the history of the First Protocol goes back to 1993 when SADC was implementing one of its basin-wide programmes, the Zambezi River Basin System Action Plan (ZACPLAN). Both however, agree that the SADC Protocol on Shared Watercourse Systems was the first sectoral protocol to be developed by the Community. Following the development of the ZACPLAN, Ramoeli (2002:106) notes that “SADC felt that, instead of developing a single legal instrument for river basin management, it should rather first develop a region-wide legal framework

on which all river basin instruments should be based. As a result of this decision, a process of negotiation was initiated by member states in 1993 to formulate the Protocol on Shared Watercourse Systems.” The SADC Protocol was later signed in 1995 by member states (ten at the time) and in 1996 a SADC Water Sector and a Water Sector Coordinating Unit were developed and institutionalized. The Protocol was ratified in terms of the provisions of the SADC Treaty and it became an instrument of international water law for the SADC in September 1998 (Heyns, 2004:4).

“Some member states had certain reservations about the contents of the [First] Protocol at the time of signature” (Ramoeli, 2004:206). It was then recommended and approved that the concerns should be addressed through a process of consultation and negotiation, which started with these member states submitting their areas of concern and/or reservation (Ramoeli, 2004). Following a directive from the Council of Ministers that the SADC Secretariat and the Water Sector Coordinating Unit should compile amendments to the SADC Protocol on Shared Watercourse Systems for consideration, three workshops were held in April 1997, August, 1998 and April 1999, to address the comments and agree on the proposed amendments to the Protocol (<http://www.sadcwscu.org.ls/Reports/report2.htm>). The meeting in 1999 made substantial progress and reached consensus on all issues except four technical points relating to terminology and accession and ratification processes.

Subsequently, the SADC Secretariat and the Water Sector Coordination Unit convened a meeting of Water Resources Technical Committee and Legal Experts to finalize the Draft Amendment Protocol. This meeting, in March, 2000, facilitated the final reading of the protocol as opposed to a renegotiation. It is in that context that the issues raised above were addressed and resolved.

A further addition made at this meeting was an amendment to Article 5 obliging Member States to take appropriate measures to give effect to the institutional mechanisms created under this article.

The discussions to address concerns and make amendments coincided with the international development of the UN Convention on the Law of the Non-navigational Uses of International Watercourses and were therefore also influenced by the adoption of the UN Convention. There was “a general feeling among SADC members that the Water Protocol should be revised to bring it more in line with the UN Convention” (Heyns, 2004:4). “The SADC Water Sector Co-ordinating Unit commissioned a study, which considered both the Protocol and the UN Watercourse Convention, aiming to identify possible areas of conflict and disharmony with a view of aligning the Protocol to the Convention. A discussion paper was produced and circulated among member states, which used it to guide their national consultations on the Protocol. The results of this process are evident in the provisions of the Revised Protocol, especially with regard to environmental protection, planned measures, and compensation for harm caused” (Ramoeli, 2004:106).

The complete process was consultative in nature, both at regional and national level, and was further supported by national ‘water week workshops’ in which the Protocol and its implications for implementation were the main subjects of discussion. These workshops assisted member states in clearly understanding the provisions and contents of the Protocol, as well as the implications for member states in ensuring its smooth implementation (Ramoeli, 2002:106).

The revision process led to the Revised Protocol on Shared Water Courses being signed by the Heads of State of SADC member countries in August 2000. Following due ratification processes it entered

into force on 22 September 2003. Its overall objective is 'to foster closer cooperation for judicious, sustainable and coordinated management, the protection and utilization of shared watercourses and to advance the SADC agenda of regional integration and poverty alleviation' (Heyns, 2004:4).

The SADC First Protocol covers all uses of water. It follows principles laid out in the Helsinki Rules and in international conventions and is based on the effort to maintain a balance between development needs in the national interest of member states, the needs for conservation, as well as the needs for sustainable development. The Revised Protocol of 2000, on the other hand, has added the environment as a legitimate user of water resources and has hence included a new definition for 'environmental use'. It further emphasizes downstream and upstream rights, roles and responsibilities, especially in emergency situations, which have also been defined as a new concept (Ramoeli, 2004:107).

The original SADC Protocol on Shared Watercourses contained, in Article 3, some very specific requirements in relation to the establishment of river basin management institutions, including a commitment by all states to establish River Basin Commissions "between Basin states", with a focus on monitoring, promotion of equitable water use and the formulation of strategies for the development of shared watercourse systems (see figure 9).

Article 3: ESTABLISHMENT OF RIVER BASIN MANAGEMENT INSTITUTIONS

1. Member States hereby undertake to establish appropriate institutions necessary for the effective implementation of the provisions of this protocol.
2. Without prejudice to paragraph 1 above, Member States undertake to establish the following institutions:
 - a) A Monitoring Unit, based at the SADC Environment and Land Management Sector (ELMS).
 - b) River Basin Commissions between Basin States and in respect of each drainage basin;
 - c) River Authorities or Boards in respect of each drainage basin.

Article 4: OBJECTIVES OF THE RIVER BASIN MANAGEMENT INSTITUTIONS

The River Basin Management Institutions shall have as their main objectives:

- (a) To develop a monitoring policy for shared watercourse systems;
- (b) To promote the equitable utilisation of shared watercourse systems;
- (c) To formulate strategies for the development of shared water course systems;

FIGURE 9: ARTICLE 3 OF THE SADC PROTOCOL ON SHARED WATERCOURSES

In the revised Protocol, however, the mandate with regard to what are termed "Shared Watercourse Institutions" is more enabling and less prescriptive, allowing for Watercourse States to establish the types of institutions in shared basins that they may deem appropriate (see figure 10). The

responsibilities of these institutions are not defined in the Revised Protocol, but are to be in conformity with the principles set out in the Protocol.

Shared Watercourse Institutions

(a) Watercourse States undertake to establish appropriate institutions such as watercourse commissions, water authorities or boards as may be determined.

(b) The responsibilities of such institutions shall be determined by the nature of their objectives which must be in conformity with the principles set out in this Protocol.

(c) Shared Watercourse Institutions shall provide on a regular basis or as required by the Water Sector Co-ordinating Unit, all the information necessary to assess progress on the implementation of the provisions of this Protocol, including the development of their respective agreements.

4. State Parties undertake to adopt appropriate measures to give effect to the institutional framework referred to in this Article for the implementation of this Protocol.

FIGURE 10: ARTICLE 5 OF THE REVISED SADC PROTOCOL ON SHARED WATERCOURSES

The revised protocol leaves it to individual member states to determine how to engage with stakeholders, and there is some sense that what is needed is an instrument that formalises stakeholder engagement so that stakeholders know how they will be involved (Ken Msibi, pers comm. 2009). This has perhaps been addressed to some extent by the recent stakeholder guidelines developed by SADC.

The original Protocol was revised at least partly to bring it in line with the UN Convention and it is notable that the Convention itself is silent on the issue of stakeholder involvement in transboundary river basin management, although the supporting policies and strategies of SADC are strong on the need to involve stakeholders.

The International Law Associations' Berlin Rules, in Chapter II: Principles of International Law Governing the Management of All Waters, in Article 4: Participation by Persons, states that "States shall take steps to assure that persons likely to be affected are able to participate in the processes whereby decisions are made concerning the management of waters." Thus, it is fair to say that there is a strong driver for stakeholder participation in water resources management both internationally and in the SADC policy approaches.

Furthermore, under the SADC water division, a number of actions are being undertaken or planned that will support the more structured engagement of stakeholders in transboundary basin management. These include the development of guidelines on River Basin Organisations to be implemented within the framework of the SADC water communication strategy; the development of a monitoring tool based on the guidelines; and a yearly update of the status of stakeholder participation in RBOs.

3.3 Meeting SADC Development Objectives

The SADC Protocol on Shared Watercourses Article 2 states that

“The overall objective of this Protocol is to foster closer cooperation for judicious, sustainable and co-ordinated management, protection and utilisation of shared watercourses and *advance the SADC agenda of regional integration and poverty alleviation*. In order to achieve this objective, this Protocol seeks to:

- (a) promote and facilitate the establishment of shared watercourse agreements and Shared Watercourse Institutions for the management of shared watercourses;
- (b) advance the sustainable, equitable and reasonable utilisation of the shared watercourses;
- (c) promote a co-ordinated and integrated environmentally sound development and management of shared watercourses;
- (d) promote the harmonisation and monitoring of legislation and policies for planning, development, conservation, protection of shared watercourses, and allocation of the resources thereof; and
- (e) promote research and technology development, information exchange, capacity building, and the application of appropriate technologies in shared watercourses management.

In other words, the driving purpose behind international river basin organisations in SADC is to ensure that the management, protection and utilisation of shared watercourses advance the SADC agenda of regional integration and poverty alleviation. This sets an overarching objective for all IRBOs in SADC, which must inform their mandate and their actions. For the three basin-wide IRBOs of which South Africa is a member, this means that the advice and recommendations that they provide to member states must support regional integration and poverty alleviation.

3.4 SADC Guidelines on Strengthening River Basin Organisations – Stakeholder Participation

In 2010 SADC approved a set of Guidelines on Strengthening River Basin Organisations, which included guidelines on stakeholder participation. The guidelines are intended to assist river basin organisations (RBOs) in implementing participatory processes and seeks to provide a range of options to RBOs in how to approach participatory processes. The guidelines are based on 5 key principles: inclusiveness, equity, flexibility, transparency and integrity. The multiple dimensions of stakeholder participation described in figure 10 are reflected in the guidelines, with the slight modification that the Z axis represents the form of participation (from information to collaboration) rather than the level of participation.

The guidelines cover the participation framework, communication and outreach, river awareness kits, stakeholder consultation, collaboration with stakeholders, and a participation positioning system that can be used by RBOs to analyse stakeholder participation against the three dimensions of figure 11.

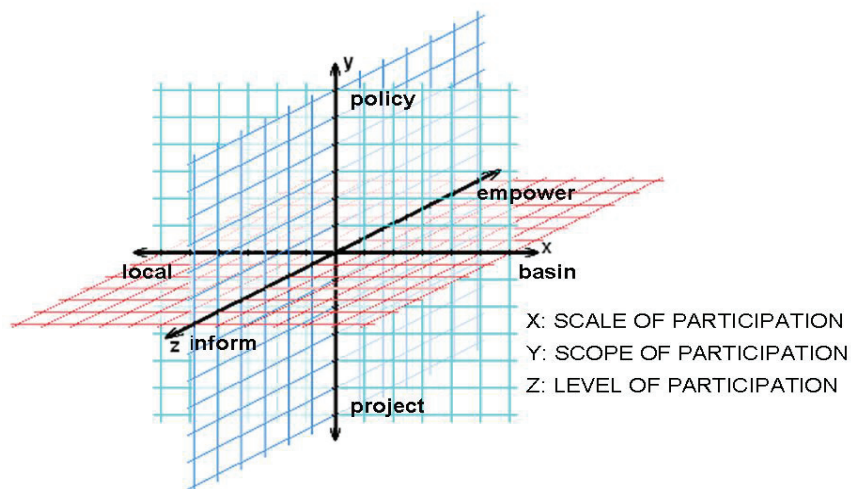


FIGURE 11: FIGURE 11: THE MULTIPLE DIMENSIONS OF STAKEHOLDER PARTICIPATION (MSIBI 2009)

3.5 Other international agreements

There are also a range of other agreements and conventions to which the state is a signatory that impact on transboundary water management in some way and which have implications for stakeholder engagement. For example, the international Convention on Biodiversity, which also covers aquatic biodiversity, contains the following references to public awareness and education, rather than stakeholder engagement *per se*:

Article 13. Public Education and Awareness

The Contracting Parties shall:

(a) Promote and encourage understanding of the importance of, and the measures required for, the conservation of biological diversity, as well as its propagation through media, and the inclusion of these topics in educational programmes; and

(b) Cooperate, as appropriate, with other States and international organizations in developing educational and public awareness programmes, with respect to conservation and sustainable use of biological diversity.

Under the Ramsar Convention the Parties have published a specific document looking at how to strengthen local communities' and indigenous people's participation in the management of wetlands (Ramsar Convention Secretariat 2007).

These international agreements form part of the policy and legal framework that supports the involvement of stakeholders in transboundary basin management.

3.6 IRBOs and WMIs in South Africa

3.6.1 Legal Mandate

In order to examine the framework and best practice for participation in international river basin management it is important to understand the legal mandate that underpins international river basin management in the South African context. In this regard it is necessary to consider the mandate given by the Constitution, the National Water Act, the SADC Protocol on Shared Watercourses, the actual basin agreements, and the Promotion of Access to Information Act.

The Preamble to the Constitution of South Africa (1996) states:

“We therefore, through our freely elected representatives, adopt this Constitution as the supreme law of the Republic so as to

Heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;

Lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law”

The Constitution therefore clearly describes a society in which openness and democracy are fundamental principles and in which the will of the people should guide government. The Constitution further contains clauses relating to the right of access to information. The Promotion of Access to Information Act gives legislative force to these clauses in the Constitution, namely:

- section 32(1)(a) of the Constitution, which provides that everyone has the right of access to any information held by the State;
- section 32(1)(h) of the Constitution, which provides for the horizontal application of the right of access to information held by another person to everyone when that information is required for the exercise or protection of any rights.

Based on the concept of the democratisation of water management, the White Paper on a National Water Policy for South Africa (1997) and the National Water Act (1998) build on the direction offered by the Constitution, and by Agenda 21 and the Rio Declaration – seminal documents on public involvement in environmental decision making, arising from the UN Conference on Environment and Development held in Rio de Janeiro in 1992.

Principle 10 of the Rio Declaration on Environment and Development proclaims that:

“Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.”

Agenda 21 states (Preamble to Chapter 23):

“One of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making. Furthermore, in the more specific context of environment and development, the need for new forms of participation has emerged. This includes the need of individuals, groups, and organizations to participate in environmental impact assessment procedures and to know about and participate in decisions, particularly those that potentially affect the communities in which they live and work. Individuals, groups and organizations should have access to information relevant to environment and development held by national authorities, including information on products and activities that have or are likely to have a significant impact on the environment, and information on environmental protection measures.”

The principled approach set out in Agenda 21 and the Rio Declaration is given more meaning by a study done by the Center for Transboundary Cooperation et al., which lists a number of very real advantages of public participation, as follows:

“1. Understanding the project and abatement of public resistance

“Being a system user, the public constitutes the only party which can determine and evaluate effect of (possible) activities on functions of the coastal/shore environment and water systems.

“2. Environmental protection

“The environmental problems can be solved as soon as they have been assessed by the public. It is important that in the framework of public debates one of the parties represents the interests of environment. If there was no such party, the environmental issues would not have been considered during the discussion.

“3. Sustainable development

“Sustainable development can be achieved only by means of involving all the stakeholders in the decision-making process

“4. Conflict management

“Though conflicts cannot be avoided, in the course of debates with public participation issues are raised sincerely. This helps to settle such conflicts more efficiently.

“5. Economic advantages

“When the public is engaged during the entire decision-making process, their apprehensions can be catered for at an early stage of planning when amendments can be made more easily. This is more advantageous than involving the public at a later stage when even a minor alternation can result in time spending and financial expenses.

“6. Efficient use of the available data – for instance, on state of water sources, etc.

“Public participation and public consultations are the possibility to obtain “hidden” knowledge of a wider community and get aware of their key apprehensions.

“7. Other advantages

“Admittance of public as a valuable partner can inspire the citizens, government and enterprises for cooperation, which represents a highest-priority importance for successful implementation of regulative system.” (Center for Transboundary Cooperation 2005)

In recognition of the value of public participation, and in response to the international focus on participatory resource management, the White Paper on a National Water Resources Policy for South Africa (1997) is very clear that strategies for managing water, such as catchment management strategies, should be developed in a consultative manner, and that water management institutions must be developed in a manner that facilitates stakeholder involvement in water management decisions. This concept guides the establishment of CMAs and the possible establishment of Catchment Advisory Councils where CMAs have not yet been established. More importantly, perhaps, the White Paper states that: “The process of balancing social and economic benefits as well as of determining environmental objectives should *involve those affected, or their representatives, in weighing up the options on an informed basis*. This should take place within the guidelines of national policy and within a national framework. The public trust role requires that Government establishes the system which achieves this result.” (authors’ italics).

The National Water Act is more specific, stating the minimum requirements for public involvement in the development of key water management strategies such as the National Water Resources Strategy and the Catchment Management Strategies. The establishment of Catchment Management Agencies also requires consultation with stakeholders, as does the development of the Pricing Strategy, the Classification System, and even, where appropriate, the consideration of licence applications.

From this it is very clear that the mandate to the relevant authorities in water resources management in South Africa is to consult with stakeholders in the development of key strategies and policies that affect them. In order to support this approach, DWAF has developed Generic Guidelines for Public Participation to enable officials to understand how best to implement the public participation requirements of the legislation.

Of question however, is the definition of stakeholders in relation to the development of a Catchment Management Strategy: in a shared river basin, for example, are riparian states, catchment management authorities or water users in the other riparian states, stakeholders who should be consulted in the development of a catchment management strategy?

It is worth noting that while the NWA refers widely to the need for consultation, and publication of draft strategies for comment, it does not specify any requirement for consultation or opportunity for public comments in the establishment or functioning of *international* water management institutions. On the establishment of international water management institutions, the Act merely states that

102. The Minister may, in consultation with the Cabinet, by notice in the Gazette, establish a body to implement any international agreement entered into by the South African Government and a foreign government relating to —

(a) investigating, managing, monitoring and protecting water resources;

- (b) regional co-operation on water resources:
- (c) acquiring, constructing, altering, operating or maintaining a waterwork; or
- (d) the allocation, use and supply of water. (NWA)

The Act goes on to list the functions of such international water management institutions, but at no stage is the issue of consultation mentioned.

One might expect, then, that any requirements for stakeholder consultation would be spelt out in the founding documents of such international bodies, but, in fact, the Agreements establishing basin commissions are silent on the involvement of stakeholders, as is the SADC Protocol. Thus, when one considers the mandate within the three shared river basins, it becomes clear that the three multi-party international river basin structures derive any mandate for stakeholder or public participation only from the SADC Treaty and not from any direct provisions of their establishment.

Thus the founding documents of these basin commissions are silent not only on the possibility of consulting stakeholders as an institution, but also on whether it is expected that this approach be adopted by the Parties within their own states, except for the Orasecom agreement which empowers Orasecom to advise the Parties on the extent of stakeholder consultation required. It has been suggested that this was because stakeholder consultation was not high on the agenda of any of the states when the agreements were drafted – the focus at the time was rather on getting agreement at the level of riparian governments (Tekateka, pers comm. 2008). The terrain was not yet sufficiently well contoured to allow for the commitment to involve stakeholders – a process which requires significant trust between the Parties. The international river basin structures themselves therefore do not have a direct and clear legal mandate to consult with stakeholders or organs of state.

Although it is quite possible for this function to be assigned to the Commission or Committee by the Parties, it has not yet been formally assigned to any of the three basin-wide international structures. Even in Orasecom, where the secretariat commissioned the development of a Roadmap for Stakeholder Participation, the Parties have not formally assigned the function to the secretariat. The infrastructure-focused international bodies, however, such as KOBWA and the LHDA, which have much more focused and specific mandates than the basin commission, have a direct responsibility for consultation with interested and affected parties in relation to their infrastructure development activities.

In summary, the South African government has a strong mandate for public participation in water management, through the Constitution, the White Paper and the National Water Act. This mandate is not, however, present at the level of the international river basin structures, which do not have an explicit mandate to conduct stakeholder participation or to engage with state actors in the riparian states other than via the Parties themselves, as represented by the delegations.

The lack of any reference in the legal framework of international river basin institutions to stakeholder engagement begs the question as to what the actual mandate of the IRBOs is: is it to bring together the Parties and enable negotiations between them, and the development of common positions based on trust; is it enabling joint information generation and dissemination e.g. through basin studies; or is it to act as an actual water management institution? While some international

river basins have powers assigned to them for management and implementation, this is not the case in the 3 South Africa shared river basins, where the function of the Commissions or Committees are clearly only advisory. In examining the framework for management of shared river basins this role must be borne in mind.

Since South Africa has a strong legal framework requiring stakeholder involvement in water management, the challenge becomes how best to ensure that open, participatory and democratic management of water at the national level informs engagement with neighbouring states through international basin management structures.

4. Defining the stakeholders

In examining the role of South African national institutions, stakeholders and processes in the development and implementation of institutional arrangements, processes and international agreements in shared watercourses it is useful to understand the various categories of stakeholders and national institutions, including both state and non-state actors.

In an international river basin, stakeholders and national institutions, as defined for the purpose of this report, cover a wide range of non-governmental groupings and organs of state, and include:

- water users; private sector (large, small, micro and medium enterprises, individuals, CBOs, municipalities, power generation sector etc);
- beneficiaries of water use, e.g. labour unions, CBOs;
- protectors of water (environmental groups, Faith Based Organisations, CBOs, state conservation agencies and departments);
- general public;
- knowledge sector (academics, scientists etc);
- relevant national, provincial and local government structures; and
- relevant parastatals such as Eskom.

The importance and relevance of the various stakeholders will vary depending on the context of the international river basin and the drivers for co-operation.

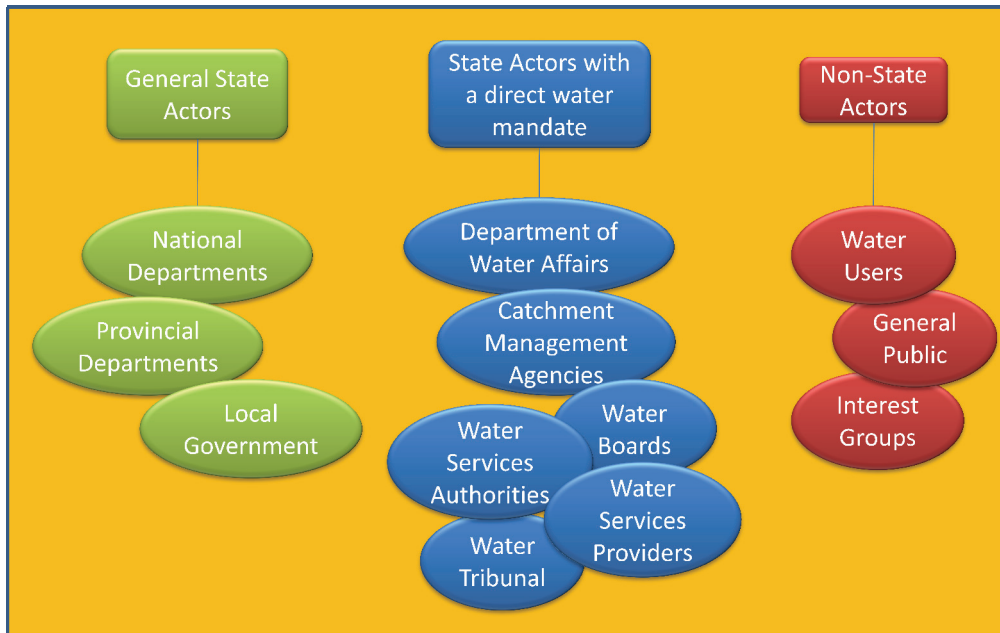


FIGURE 12: STAKEHOLDER CATEGORIES

Figure 12 highlights three groupings of state and non-state actors, where state actors include two groups, those decision-making structures within the state that engage with water-related issues, and general state actors, at all levels, involved with development issues that are dependent on or affect water resources. There are also, in the South African context, a number of parastatal organisations that play an important role in water management, and are, in essence, agents of the state in this process.

4.1 State Actors

State or government actors are the key government departments, agencies or spheres of government that have a role to play in the decision-making process of the management of transboundary river basins, or that are involved in decision-making in sectors that are dependent on or affect water resources, whether at the local, provincial or national level. The government actors that should be involved may differ depending on the activity being proposed in the basin, or the phase of development of the international river basin organisation.

Thus, state actors include those directly involved in the water sector, such as water management and services institutions, as well as other government departments, agencies and spheres of government outside but related to the water sector, such as those involved in economic and development planning which may be dependent on or impact on water. Table 1 describes the roles of these key states actors in the water sector.

TABLE 1: KEY STATE ACTORS IN TRANSBOUNDARY RIVER BASINS AND THEIR ROLE IN THE WATER SECTOR

State Actors	Role in Water Sector
Department of Water Affairs	Policy, national level planning, international engagement on water, national information and monitoring system, regulation; infrastructure development; custodian of water resources
Other sector departments such as Department of Environmental Affairs and Tourism; Department of Agriculture; Department of Land Affairs; Department Trade and Industry; Department of Minerals and Energy; etc.	National policy, Cooperative government and intergovernmental relations on national and strategic mandates
Relevant provincial government departments	Development and implementation of Provincial Growth and Development Strategies; environmental protection and management; development and support of irrigation schemes;
Local government	Ensuring provision of sustainable water services; alignment of IDP and WSDP with CMS
Catchment Management Agencies	Management of water resources within designated water management areas
Water Tribunal	Appeal mechanism on decisions taken under the National Water Act
Water Boards	Provision of bulk treated water and reticulated services where appropriate

4.2 Non State Actors

Non-state actors include interest groups, NGOs, communities, water users, the private sector and the general public in the basin or interested in the basin. Within the grouping of non-state actors one may find organisations that are not necessarily resident in the relevant basin, but who, for one reason or another, have interests within that basin, such as international or national conservation NGOs, international development agencies, etc. This may be because an organisation or grouping located outside of the basin has a particular interest in the basin, such as an environmental group interested in protecting a particular endangered species in that basin. This may even extend into the international sphere where people or organisations located in foreign countries may have an interest in environmental protection of a particular species or feature in a basin. In addition, in the South African context, the complex array of inter-basin transfers means that people outside the immediate basin benefit from the management of a particular basin and so may have an interest in decision made regarding that basin.

5. Issues of Stakeholder Participation

5.1 The nature and scope of stakeholder participation

“... it is becoming increasingly evident that river basin management requires strengthened mechanisms for transparency, public participation, and accountability to ensure that local concerns are incorporated into transboundary decision-making. The absence of such mechanisms may lead to inflexible or unenforceable basin-wide decisions that fail to engender local support or draw on local

knowledge. The Murray-Darling Basin³ Commission has established channels for public participation, including an 18-month public consultation with river communities on three different plans for ensuring environmental flows in the river. A recent survey found that 95 percent of stakeholders surveyed supported the principle of returning more water to the river for environmental purposes, but that support dropped to less than 40 percent if the community was not actively brought into the decision-making process” (Scanlon, 2002:12).

Consideration of South African legislation and the prevailing international discourse as captured in Agenda 21 and the work of many authors on river basin management shows that, as is shown in the quotation above, the participation of stakeholders in water resources management is strongly recommended and yields clearly beneficial results.

Stakeholder involvement can also yield benefits in the face of complexity – a situation that pertains in transboundary water resources management. Pahl-Wostl (2004) suggests that in the context of ‘messy problems’, such as in natural resource management, where there are large differences in perception of what the nature of the problem is, and what kind of action needs to be taken, participatory approaches can yield useful results. He does, however, also make the point that the framing of the problem in a stakeholder group may not address the real nature of the problem unless underpinned by a sound analysis of the problem and of who the stakeholders are and what their interests are.

He further makes it clear that the right methodology must be used and carefully managed to ensure a useful outcome. The issue of methodology is important. While the need for stakeholder engagement in transboundary river basin management is widely accepted, there are a range of approaches that can be used to achieve this and which may be considered appropriate, due to the very different political, social, economic and hydrological characteristics of each basin, and the vastly varied nature of the activities around which consultation is required.

In addition to the differing requirements on stakeholder participation posed by different political, social, and physical characteristics of the basin, the nature, scope and intensity of stakeholder engagement is influenced by at least three critical dimensions (SADC 2010):

- The policy/operational dimension (is the process requiring consultation or engagement related more to policy development or to operational matters);
- The dimension of physical scale (i.e. is the process local, national or basin-wide), and
- Is the process one of communication with stakeholders or of involving stakeholders in the decision-making process, or somewhere in between? (see figure 11)

The location of any stakeholder engagement process on these three axes enables the determination of the nature, scope and degree of stakeholder engagement required, and who the relevant stakeholders are. For example, the development of transboundary water resources infrastructure will call for different stakeholder engagement from the development of international allocation

³ The Murray-Darling Basin is not an international river basin, but since water resources management is a state level function in Australia, many of the same issues pertain in this basin as in international transboundary basins, and the experience in the Murray Darling basin is useful for transboundary international river basins.

regimes which in turn will call for different stakeholder engagement from a localised flood management issue. The nature and scope of stakeholder engagement will also be strongly influenced by the drivers behind the development of transboundary river basin arrangements, as described in section 2.

Equally, however, at the transboundary level, the nature of stakeholder engagement is strongly influenced by the phase of development of institutional arrangements, the maturity of transboundary water resources management processes and institutions, and the level of trust between riparian states. As transboundary river basin management relations mature and trust between riparian states grows, there is more scope for consultation with stakeholders at the basin level, rather than within national boundaries.

While the tendency is to focus on the formal engagement processes in transboundary basins, there are a number of informal processes that operate in many basins, which are equally important in their ability to build relationships and the exchange of information across borders. Such relationships may exist, for example, between NGOs in different countries, between academic institutions, or even between sub-national state structures. In the Inkomati catchment, for example, the Inkomati Catchment Management Agency and AraSul in Mozambique have sent representatives to meetings and workshops in each others' areas of jurisdiction, and although there is no formal relationship or international agreement between the two institutions, they have established very important informal working relationships.

Such informal relationships are harder to map than the formal relationships, and rise and wane organically over time, depending on individuals, issues and resource availability.

5.2 Managing power relations

Within both formal and informal relationships, the issue of power relations is critical in understanding the appropriate nature of stakeholder engagement. Transboundary basins vary in size, but many are extremely large, and involve a wide range and number of stakeholders. In basins such as the Orange-Senqu, inter-basin transfers increase the footprint of the basin and raise the issue of how widely engagement of stakeholders should take place – only within the physical basin, or within the vast area served by the water from the basin. Even within the boundaries of the physical basin, the Orange Senqu, for example, has around 16 million residents, and stakeholder engagement can ever only be with a selected number of groups or representatives. This raises the potential for some stakeholder groups to be privileged over others, particularly those groups with better access to resources.

The issue of gender is, of course, a particular challenge in the engagement of stakeholders in transboundary basin management and in the consideration of power relations within the basin. The challenges in this regard are manifold. Firstly, women tend to be better represented at more localised levels of engagement. As one moves to broader or higher levels of engagement, men tend to become better represented and more dominant (Schreiner et al., 2002). This means that, at the basin level, there are particular challenges in ensuring that women are well represented and empowered to participate fully in the processes. Equally, however, a critical challenge exists to ensure that women are involved in and able to contribute to the national processes that support and feed into the transboundary processes, particularly in the context of the largely unequal gender

relations that still pertain in South Africa, at all levels. However, the conscious involvement of women, particularly poor rural women, in water resources management processes, varies considerably from country to country, and so, women may be very unequally represented across the spectrum of the transboundary basin, giving extra power to male voices in the basin, despite the commitment of any one state to giving more strength to the voices of women.

While there is widespread support for the idea of stakeholder involvement in transboundary basin management, it is not without its critics. Prof Mike Muller in the International Symposium on Stakeholder Involvement in Transboundary Basins, held in Pretoria in October 2009, raised the possibility of stakeholder engagement in transboundary basins not always being in the best interests of an appropriate resolution to a problem, citing that there was limited stakeholder engagement in the development of the treaty between South Africa, Mozambique and Swaziland on the Komati and Maputo rivers. He explained that the reason for this, in South Africa, was that if the sugar industry, which had strong political connections, had been involved, it is unlikely that the Treaty would have been signed, since part of the Treaty was an agreement to allocate sufficient water to small farmers in Mozambique and for water supply to Maputo. Achieving this meant reducing the amount of water available to the sugar farmers. His sense was that limited stakeholder participation and limited politicisation of the process enabled a good outcome to be achieved.

At the same conference, Prof Muller further expresses a concern that it is possible for participative processes related to water to result in decisions which mean that the way in which water is managed no longer reflects political priorities in countries, but is grabbed by particular interest groups. He cited a situation where, in France and Germany, stakeholder participation under the EU Water Framework Directive has resulted in pollution control funding being spread evenly, rather than being focused on hotspots and in support of poor communities. He expressed a similar concern from Spanish officials that public participation had resulted in the blocking of what they saw as critical actions to mitigate climate change impacts. The issue of the potential capture of stakeholder processes and its impact on wise water management decisions is a serious one that must be managed carefully.

At the same conference, Ken Msibi of the SADC Water Division stated that while the World Commission on Dams gives as priority 1 the gaining of public acceptance for a water resources infrastructure project, SADC, which supports public participation, also acknowledges that participation processes may result in objectives not always being reached. He cites the objection to building dams by some NGOs, despite the need for such development to support economic growth (Ken Msibi International Symposium on Stakeholder Involvement in Transboundary Basins, Pretoria, October 2009).

This view is supported by Simi Kamal, from Pakistan, who suggests that the concept of stakeholder involvement may be over-romanticised, and have been driven by donors in contexts in which democratic political processes were not well-developed and effective. Her point is that "In societies where we have well-established political processes, the will of the people is manifested in the way in which representatives behave in Parliament, and there is less concern with getting local groups of people together" (Simi Kamal, International Symposium on Stakeholder Involvement in Transboundary Basins, Pretoria, October 2009).

When bearing in mind these challenges to the implementation of stakeholder involvement in IRBM, and the potential for process capture to bias the end result, it is critical to remember that “...stakeholder participation is not an end in itself but a means to an end.”⁴ As such, the processes must serve the intentions and needs of consultation, and not become a process that takes on, after time, its own reason for being, separate from the actual issues that need to be dealt with.

6. Non State Actors in Transboundary Basin Management

6.1 International Experience

A great deal has been written about stakeholder engagement in river basin management in general. It is not the purpose of this research to repeat this work. There are, however, some specific cases of stakeholder engagement in **transboundary** river basins that are worth examining in order to get a sense of international experience in this regard, and to draw out some lessons for South Africa. More detail of the cases studied is contained in Appendix B.

Consideration of international practice in several transboundary basins in both developing and developed countries reveals a number of similarities in approach, and some key differences. The processes investigated to understand the international experience are: the Nile Basin Initiative and the Nile Basin Discourse, the Lake Victoria Commission, the Okavango Every River Has Its People project and OKACOM in the Okavango basin, the Cureim/Quarai basin arrangements in South America, the Danube, arrangements in the Murray Darling basin in Australia and in the Pilcomayo basin in South America. Some of the key lessons are highlighted below.

A strong **policy and legislative base** is important for supporting effective stakeholder participation in transboundary basins, and shows the political commitment of the riparian states to this approach. As an example, the Lake Victoria Basin states have developed a protocol for the sustainable development of the basin which makes specific provision for stakeholder involvement in the management and development of the Lake Victoria Basin. At the same time, each of the 5 East African Community (EAC) partner states has strong policy on stakeholder participation in development. Gender mainstreaming is also enshrined in the various policies and protocols. The EAC has a long term development vision and strategy framework which was developed through a highly consultative process that involved all levels of stakeholders in the Basin. The guiding principles in the East African Community Treaty also deal with the involvement of stakeholders in regional integration and development. This provides a very strong, common base for the involvement of stakeholders in water management decision making around the Lake.

A further issue is that of the **legal status** of the consultative structures. In the Okavango and the Nile, there is no legal requirement for the establishment of consultative bodies *per se*, although the Lake Victoria protocol is very clear on the need for consultation.

In the Murray Darling basin, however, there is a statutory requirement for consultative structures. During the period of the Murray Darling River authority (prior to 1985) only the water agencies were

⁴ Interpretation of international law on stakeholder participation in transboundary water management – current trends and examples. Prof. Tobias van Reneen & Mr Ibrahim Harun, University of the Western Cape. Presented at International Conference on Stakeholder Involvement in Transboundary River Basin Management. 5-6 August 2009. Boksburg, South Africa

involved in decision-making processes. Post 1985, the water, land and environment agencies were all actively involved and they were all included by law as part of the Murray Darling Basin Commission and the Ministerial Council. The legislation also required the Commission to establish a Community Advisory Council that reported directly to the Ministerial Council. The intention behind this being to ensure that the Commission did not unreasonably "mute" the issues raised by stakeholders on major policy issues (D Blackmore, pers comm. 2010).

In the Pilcomayo basin, shared between Argentina, Bolivia and Paraguay, participation of all sectors in the basin is provided for in the Constitutive Agreement of the Comisión Trinacional de la Cuenca del Río Pilcomayo through a Trinational Coordination Committee (Consejo de Coordinación Trinacional) in which each country has five members. Each country has its own coordinating committee. Argentina, for example, has a committee in which each province, national government and the indigenous people are represented.⁵

Appropriate **organisational arrangements** are necessary to enable the effective participation of stakeholders. Such organisational arrangements can take a number of forms, but the general approach is for stakeholders to be engaged through national processes or forums, with a basin-wide structure or arrangement of some nature that brings together a more limited number of stakeholders at the transboundary level.

At the Basin Commission level for Lake Victoria the Protocol makes provision for stakeholders to participate at the senior officials' level in the Commission. The deliberations and recommendations from this level are then considered by the Council of Ministers. The Commission has mapped the civil society organisations in the Basin in order to be able to easily identify who should be involved at what levels.

In the Okavango basin the Every River Has Its People is a stakeholder-based approach looking at social, environmental and economic issues. One of the key elements of the ERP approach was the establishment of a Basin-Wide Stakeholder Forum (BWF). The Basin Wide Stakeholder Forum (BWF) is established in each country at local-national levels. There are 10 representatives per country to the BWF, and 2 per traditional authority. Each country is expected to hold quarterly meetings, and basin-wide meetings are held twice a year.

⁵ Dr Andres Rodrigues, National Director; Water Resources Undersecretariat of the Argentine Republic and delegate in the Trinational Commission for the Pilcomayo River Basin Development (Argentina), International Symposium on Stakeholder Involvement in Transboundary Basins, Pretoria, October 2009

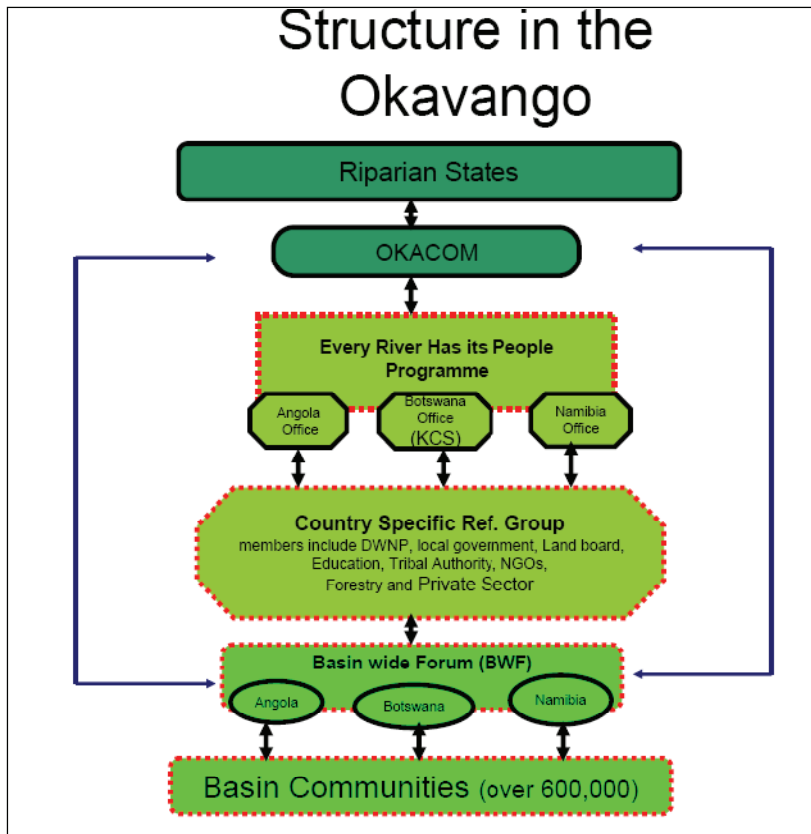


FIGURE 13: STAKEHOLDER STRUCTURES IN THE OKAVANGO RIVER BASIN (MONGAE N.D)

The first BWF meeting with some Commissioners was held in 2003 to discuss roles and expectations. It was agreed that the chair of the BWF would attend OKACOM meetings, and the Forum would invite OKACOM representatives to its events. The Forum is expected to give feed back to stakeholders through Traditional Authorities, village headmen and elected Regional Councillors, and through local radio stations where possible. The BWF and Okacom Commissioners approved and signed a framework for engagement which enables the policy makers to take community views into account and enables communities to remain informed of Commission plans.

A similar approach is taken in the Nile Basin where the Nile Basin Discourse was set up to enable the voices of stakeholders to be heard in debates on the development of the Nile basin. The NBD has an International Steering Committee with membership drawn from all of the riparian countries, as well as a General Assembly also drawn from all of the riparian countries. It has a Secretariat based in Entebbe, Uganda close to the NBI offices. Each riparian state has a National Discourse Forum (NDF) which brings together stakeholders at the national level.

In the Cuareim/Quaraí River basin, which is part of the La Plata river basin and forms the border between Uruguay and Brazil, the Uruguayan-Brazilian Committee for the Development of the Cuareim river basin (CRC) was created as the responsible institution for the execution of the Treaty between the two countries, which provided for one delegation from each country. A Local Coordinating Committee (CLC), with one delegation per country, was appointed in 1999 for implementation on the ground.

In Brazil, the Quaraí River Basin Committee was established in 2009 with representation of public and private members. The committee is concerned only with tributaries of the river (the main course is in the federal domain). The committee implements river basin policies, including all uses. In Uruguay, the Cuareim Irrigation Advisory Committee has operated since 1980, with both public and private members. It is involved in collaboration and assessment related to management and convenes public hearings.

The activities of the Uruguayan Local Coordinating Committee are supported and financed by the Uruguayan CRC delegation. There is strong participation by delegates of public and private institutions, users and other stakeholders. The Uruguayan Local Coordinating Committee promotes and implements projects regarding management and protection of the resource (WMO/GWP, TwinLatin programme and others).

The issue of *sustainability* of stakeholder initiatives is a key challenge in the basins in Africa. While the stakeholder engagement processes are funded by the riparian states themselves in the two South American examples and in the Murray Darling basin and the Danube, the Nile Basin Discourse, the Every River Has Its People process in the Okavango, and the Lake Victoria initiatives are all supported, and indeed driven, by donor funding. This makes them vulnerable in terms of long term sustainability, and, indeed, after an initial good start, stakeholder engagement in the Okavango basin was halted for a period due to lack of donor support. It also makes them vulnerable to *donor-driven bias* which may not meet the desires of the basin states themselves. In the Nile Basin Discourse, for example, Ayenew Tesera, National Programme Co-ordinator for Ethiopia explained that while the basin states wanted the bulk of funding and resources to be placed at the national level, to strengthen national consultative processes, the donors felt that the bulk of resources should be directed at the basin level, supporting the basin-wide consultative processes. The result, according to Tesera, is that the impact of the National Discourse Forums is constrained by shortage of human and financial resources (Tesera, pers comm. 2010). This raises the critical question of whether the focus on stakeholder engagement in transboundary basins should be at the national level or at the basin level, and whether effective consultative processes at the basin level can function in the absence of strong national consultation.

An interesting approach taken in the Danube is that they have a number of *observers* that attend their commission meetings, such as Ramsar representatives, WWF, and local NGOs. The criteria for attendance include that the organisation must represent the interests of a large portion of the basin, should not be from one country only, and that they must represent a significant constituency. The meetings are held in two sections – a closed session dealing with administration, finance and human resources issues, and a second part dealing with water resources discussions and strategy issues, which is open to the observers. The observers can ask for permission to speak but are not allowed to vote on issues. According to Peter van Niekerk of the South African Department of Water Affairs, this brings immediate communication with a broader audience and allows the Commission to tap into them for information. In Van Niekerk's discussion with the Chief Executive (CE) of the Danube Commission, the CE expressed the feeling that the benefits of this approach are significant (Peter van Niekerk, pers comm. 2009). However, this approach does not enable the voices of the poor and the marginalised to be represented at the basin level, since there are few regional development NGOs operating across borders. The result might be to give preferential voice to international NGOs instead.

A number of challenges can be identified from the international experience. Firstly, the **socio-political context** is critical in terms of the ability of stakeholders to participate actively or not. Alan Nicol, who was involved in the Nile Basin Discourse process for some years, refers to the fact that stakeholder consultation takes place in the basin against a political background in many countries that is not conducive to participation (A Nicol, pers comm. 2010). In Ethiopia, for example, the government has been clamping down on civil society organisations; in Egypt the government still operates with emergency powers that enable them to take action against dissenting views; and in the Sudan, the political chaos and conflict militates against free participation by stakeholders. Freedom of expression and a free media are critical elements of real stakeholder participation and where these do not exist, participation can only ever be partial.

In the Nile basin many of the state actors were initially wary of involving civil society, largely due to the political sensitivity and uncertainty of the NBI process itself. Nonetheless, civil society was invited to the First Meeting of the International Consortium for Co-operation on the Nile (ICCON) and made a statement there on the importance of engaging stakeholders in the development of the Nile. Over time the understanding has increased amongst government representatives of the benefits of bringing stakeholders on board.

Secondly, stakeholder engagement processes are always vulnerable to **capture** by more powerful groups. The Murray Darling Basin Commission, according to Don Blackmore, former CEO of the Commission, ran well structured engagement process to ensure that there were real forums for the community to put their views forward. However, according to Blackmore, “this is a mixed bag as it often got “high jacked” by the noisy elements who might not represent the broader community view” (D Blackmore, pers comm. 2010).

According to Alan Nicol (pers comm. 2010) a key challenge lies in the **governance structures and systems** put in place around stakeholder participation. Referring to the Nile Basin, he feels that there is a challenge of civil society mismanaging itself or some elements acting as gatekeeper and trying to hold donor funding for themselves. Similarly, some processes have been prone to the dominance of certain individuals who manipulate them, particularly at the basin level, while some of the people who have been driving the NDFs have been weak, or have been primarily interested in serving their own interests.

An appropriate governance structure for engaging civil society is incredibly important to avoid these challenges undermining the process. Nicol suggests that in the Nile, the governance structure was not well developed and therefore allowed particular people to dominate the process. To prevent this, there is a need for strong governance processes, including strict term limits for office bearers, limits to the executive powers of individuals, and clear processes for the removal of people who are not delivering or who are manipulating the process for their own ends (Alan Nicol, pers comm. 2010).

Linked to this is the issue of **representivity**. In any stakeholder engagement process, only a limited number of people or institutions can ever participate actively, particularly where financial resources are limited. The question then arises as to who is represented, who participates, and on the other side of the coin, who is excluded, for whatever reasons, from participation. In the Ethiopian National Discourse Forum (NDF), for example, currently the private sector is not represented, despite the forum having been active for four years. The current programme co-ordinator stresses that

membership of the NDF is still open, and that they hope to bring in the private sector in the future as this has been a weakness in the NDF. In the same NDF, while there are women's groups represented in the general membership, the Steering Committee is overwhelmingly male dominated, with only one woman out of nine members of the committee (Tesera, pers comm. 2010).

The process of **stakeholder mapping** that has been used in the Lake Victoria process and in the Nile may be useful in trying to ensure that all key stakeholders, and particularly marginalised stakeholders, are included in the processes.

In the Nile basin Alan Nicol drove a process of compiling an online database of all stakeholders. The database was geo-referenced it for all of the basin countries and highlighted what the various stakeholders interests were. This was database was made available to donors and decision makers. According to Nicol, "it provides an inescapable source of information to people about who they should be consulting with and may have shifted thinking a little about the need to engage stakeholders." (pers comm. 2010) It was completed in 2009, although less complete than was intended, and has been given over to the basin organisation to keep it going and to keep it updated.

6.2 RSA current practice

As mentioned previously, the White Paper on a National Water Policy for South Africa (1997) states that: "The process of balancing social and economic benefits as well as of determining environmental objectives should *involve those affected, or their representatives, in weighing up the options on an informed basis*. This should take place within the guidelines of national policy and within a national framework. The public trust role requires that Government establishes the system which achieves this result." (authors' italics).

Certainly, consultative structures and processes have been put in place in South Africa in relation to water resources management, with differing degrees of success and influence. Structures and processes for consultation include the establishment of catchment management forums, the National Water Advisory Council, national and provincial water summits, and processes around specific projects, such as the water allocation reform project, and the development and revision of the National Water Resources Strategy. Concerns have been raised, however, regarding the effectiveness of the consultative processes. At the International Symposium on Stakeholder Involvement in Transboundary Basins, held in Pretoria in October 2009, Andy Gubb of WESSA expressed very strongly that opportunities for public participation have decreased since the mid 1990s and that "in the last few years in South Africa the government has reduced wherever possible the ability for public participation, and it has been written out of the legislation with every new piece of legislation and amendment." As a result, he feels, "meaningful public participation, where the people at the highest levels believe in it, will not be easy to achieve." The National Water Advisory Council, which brings together experts from outside government to advise the Minister on water matters has not functioned for some years, although there are efforts underway to re-establish it, but consultation is still happening at many levels. In the Inkomati basin, for example, during the development of the catchment management strategy consultation was taking place on a number of projects at the same time, but with considerable lack of co-ordination between the various role players, resulting in a plethora of consultative workshops, each for a different project or process

(John Colvin, pers comm. 2009). Such an approach leads to stakeholder fatigue and lack of involvement, rather than the reverse. Some stakeholders also raise concerns about whether their views actually change anything.

At the level of transboundary commissions, there has been some movement towards considering the issue of stakeholder participation, but little actual resolution yet. Orasecom commissioned the development of a Roadmap for Stakeholder Consultation, looking at what their role might be in stakeholder engagement in the basin. However, they have not yet made any decisions on how to engage stakeholders and if/how to implement the roadmap.

In the IncoMaputo basin, the Incomati Systems Operations Task Group (ISOTG), which was established by the TPTC to assist with operating rules in the basin, recommended the establishment of a Komati Joint Operations Forum (KJOF) to facilitate involvement of stakeholders from South Africa and Swaziland in day to day operation of the Komati river basin. The forum falls under the aegis of the Komati Basin Water Authority (KOBWA) which is an infrastructure development and management institution established by Treaty between South Africa and Swaziland (InWent, 2009).

Although the KJOF is intended as a stakeholder structure to service a bilateral agreement between South Africa and Swaziland, focused on infrastructure development, operation and maintenance, stakeholders from Mozambique have been involved informally as observers in KJOF processes. Stakeholder consultation in the forum mainly relates to project planning and implementation, particularly around the Maguga and Driekopies dams. The KJOF includes water users, representatives of the Departments of Water Affairs from Swaziland and South Africa, KOBWA representatives, and representatives from the River Basin Authority (RBA) in Swaziland and the Inkomati Catchment Management Agency (ICMA) in South Africa. Representatives of ARA-sul of Mozambique attend as observers. According to Mr Martin Slabbert (KRIB and LRIB), the advisory decisions made at KJOF are communicated to the KOBWA board and then to the JWC between South Africa and Swaziland. This enables the KOBWA board to act as gatekeeper for all decisions made.

However, most stakeholders that were interviewed in the course of this research feel that the KJOF and ISOTG do not respond sufficiently to their water needs. This point is most evident in South Africa and Mozambique. An interview with a representative of commercial farmers in the South African sugar cane industry indicated a perception that too much water is released to Mozambique, while emerging farmers in Mozambique believe that more water should be released annually. This may also point to a lack of understanding of water release requirements as negotiated and agreed to at a state to state level.

Notwithstanding some of the challenges mentioned above, the ISOTG and KJOF provide an enabling environment that facilitates some stakeholder participation in water resources management (particularly as it relates to the management of joint infrastructure) in the Incomati Basin.

Despite this, Peter van Niekerk expressed that, in his view, the South African government representatives to the TPTC in the Inkomati basin do not carry with them either the views of civil society or an integrated government perspective (P van Niekerk, pers comm. 2009). Clearly there is a weakness here.

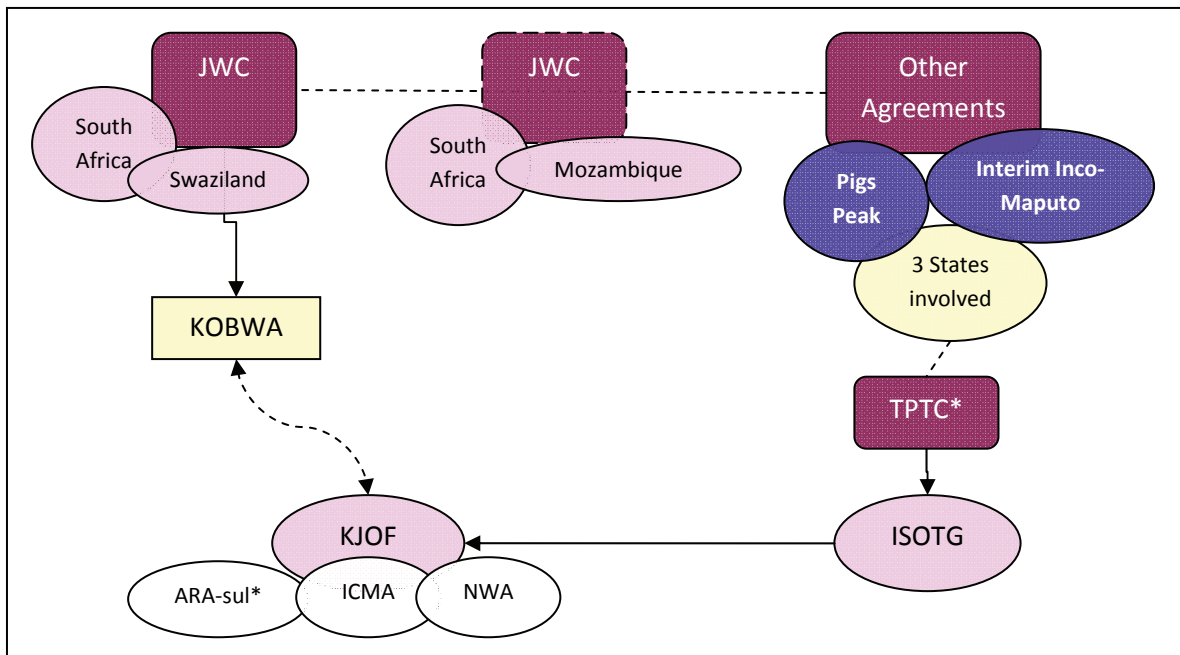


FIGURE 14: STAKEHOLDER PARTICIPATION ARRANGEMENTS IN THE INCOMAPUTO BASIN

There is, thus, some degree of consultation taking place in South African transboundary basins on water management issues, but there is clearly considerable room for improvement.

7. State Actors in Transboundary Basin Management

The other facet of stakeholder participation relates to the engagement of state actors in transboundary basin management. Unfortunately, the involvement of non-state actors in transboundary basin management is far more widely documented and debated than the involvement of state actors. There is, none-the-less, some debate over the role that should be played by the various organs and levels of state, and in particular, the role of sub-national state actors in national state policy. Hicks (2004) suggests that insufficient research has been done to understand the roles and relationship of sub-national players, but none-the-less raises some interesting concerns around the roles and responsibilities of national, sub-national and international structures in shared river basins in Southern Africa. In particular, Hicks asks whether sub-national government organisations act as “state actors, class representatives, or interest groups” when engaging national policy. He asks whether key policy change derives from an autonomous state, or from the interplay of “elite-class actors” and organised interests. His core debate is the level of autonomy that the state has from social preferences. Within this, he asks whether sub-national state actors have “the structural capacity for autonomy” or reflect the interests of organised groups.

The questions that Hicks raises are important in the analysis of an institutional framework for international river basin management, reflecting, as they do, the issue of the relationship between the national state actors (generally represented on the Basin Commissions) and sub-national state actors (such as local and provincial government, and Catchment Management Agencies). While Hicks points out that more research is needed in this area, there are still some interesting issues that can be learned from international experience.

7.1 International examples

There are two aspects to the involvement of state actors that are worth examining. The first is the involvement of state actors as stakeholders, in the broader consultative processes in the basin. The second relates to purely intra-governmental engagement in transboundary negotiations and implementation strategies. Unfortunately, little has been written on intrastate arrangements, and considerably more work is needed in this regard. It is recommended that this could be an interesting further area of research to pursue.

In terms of the former, in a number of basins that have consultative processes in place, such as the Okavango ERP, local government, in particular, are seen as a key stakeholder in the general consultative processes, and in some basins, such as the Rhine and the Danube, sub-national structures such as water boards or provincial government are deeply involved in transboundary water management issues, particularly at the operational level.

In terms of the second issue, the intra-governmental processes to support transboundary negotiations, Anton Earle comments that there is anecdotal evidence that intra-state lack of coordination has either prolonged the negotiations process (in good cases) or resulted in sub-optimal agreements being implemented (Anton Earle, pers comm. 2010). More research is required to move this beyond the purely anecdotal.

There are, however, cases where an attempt at a coordinated national position is aimed for or is achieved. Egypt, for example, has developed a well resourced negotiations team for matters relating to the Nile river, to the extent of having a Minister responsible specifically for the Nile. This Minister acts on the basis of inputs from other relevant departments in government. This is, however, a very specific case and may not be an appropriate approach for other circumstances (Alan Nicol, pers comm. 2010).

In Brazil the ministry of Foreign Affairs leads any transboundary basin negotiations, in consultation with other relevant ministries or departments as needed. In Brazil water falls under the Ministry of Environment and the Ministry of Justice is included in the consultations (Anton Earle, pers comm. 2010).

In 2003 the Angolan government formed an inter-ministerial group on international waters (GATECI). This group meets on a regular basis to discuss the inter-sectoral management of Angola's transboundary waters, including the approach to be taken to negotiations.

In Jordan, water has always been seen as a strategic resource, critical to social and economic development, and has therefore been driven by a strategic and inter-departmental approach. Originally, the government ministry in charge of lands and waters was the Ministry of Finance, which led the development of the first agreement on the Yarmouk between Jordan and Syria.

Later, the agency in charge of the Jordan Valley drove transboundary arrangements. Since the task of that agency was integrated economic and social development of the valley with agriculture as its backbone, and since the undersecretary of agriculture, and the ministries concerned with the development issues sat on the Board, the Jordan Valley authority took an integrated approach to water issues, with water being looked upon as a strategic driver of economic and social development (Munther Hadaddin, pers comm. 2010).

In the Mekong basin, each of the four countries that is signatory to the establishment of the Mekong River Basin Commission (MRC) has a National Mekong Committee (NMC). In Vietnam, for example, the VNMC is intended to assist the Prime Minister in ‘guiding and managing all cooperation activities with the MRC as well as in submitting to the Prime Minister policy recommendations for cooperation with the MRC for the development, utilization and protection of the water and related resources in the Mekong basin as a whole and in particular the Mekong Delta and Central Highlands’. <http://www.vnmc.gov.vn/newsdetail.asp?NewsId=111&CatId=57&lang=EN>

The Vietnam National Mekong Committee has the authority, inter alia, to cooperate with the other MRC member countries in implementing the Mekong River Basin Agreement, to “survey, monitor and manage water and related resources in the Mekong river basin, to protect the interests of Vietnam through the Basin Development Plan and the Mekong basin-wide projects, especially the mainstream projects” (<http://www.vnmc.gov.vn/newsdetail.asp?NewsId=111&CatId=57&lang=EN>).

The VNMC is chaired by a Minister with three Vice-Chairmen [sic], from the Ministry of Foreign Affairs, Ministry of Agriculture and Rural Development, and the Ministry of Planning and Investment. The committee includes representatives of five relevant national agencies, the People’s Committees from the four Mekong Delta provinces and one province in the Central Highlands. This approach enables strong intergovernmental co-ordination in the development and protection of the river basin and is evidence of the recognition of the value of the river in the social and economic development of the region.

7.2 Current RSA intra-state engagement practice

Current South African practice stands in stark contrast to the above examples. In the IncoMaputo basin, for example (as in the other two transboundary basins), representation on the TPTC is through DWA representatives only. The purpose of the TPTC is to advise the parties on water resources matters and on co-operation and alignment between the parties. According to Peter van Niekerk, who was involved in these processes in the DWA for many years, some years ago engagement was done on a purely ad hoc basis between the foreign affairs components of the relevant countries, with department of water representatives in tow. At some point, it was realised that what was under discussion was too technical and that the foreign affairs representatives couldn’t contribute effectively to the debates. As a result, Technical Committees were established in such a manner that the department of water representatives could run them without going through the then Department of Foreign Affairs. Later, these technical committees evolved into Basin Commissions.

While the Swaziland representation on the TPTC generally had someone from Agriculture and Natural Resources the South African delegation was only from DWA. The intention is that the DWA representatives should carry the interests of the whole government to the committee discussions, but several of the processes that should support this have become dysfunctional. For example, the Provincial Liaison Committees which bring together representatives of DWA and provincial government to discuss water-related issues should enable intra-government debate and exchange of information, but they are dysfunctional in a number of provinces. Similarly, the Agriculture and Water Liaison Committee (AWLC) which brought together the Departments of Water and Agriculture for regular discussions on policy related matters concerning both departments was disbanded and replaced by Co-ordinating Committees for Agricultural Water Use (CCAWs) at the provincial level.

While some of these are functioning well, the information from them is not collated at a central level into one coherent picture for one basin.

In the Olifants river basin, because of recent infrastructure development on the river, DWA has established a committee which meets two or three times a year with Parks Board officials, and to which the Department of Environmental Affairs (DEA) is invited. Although DEA representatives do not attend these meetings, according to Van Niekerk they have formed an important point of engagement for DWA with conservation officials not only from the Olifants basin, but from other provinces as well. The information exchange from this committee informs the transboundary engagements around the Inkomati not by design, but by default – the same individual is responsible for attending the meeting with conservation officials and the IncoMaputo technical committee sub-committee (Van Niekerk, pers comm. 2009).

The reality thus is that there is extremely poor intra-state engagement in transboundary basins in South Africa, and little apparent understanding of why such engagement might be beneficial. Where structures, such as the PLCs, would support improved intra-state engagement, they are functioning too poorly to be effective in this regard.

Currently the state is only represented by Department of Water Affairs officials in transboundary basins. While this may have been appropriate in an earlier period of water management, the development of a benefit-sharing approach suggests that other sectors outside the water have a key role to play in the discussions.

8. Lessons for South Africa in the Engagement of State and Non-state Actors in Transboundary Basin Management

8.1 Political context

A supportive political context is necessary for the effective engagement of stakeholders, including an environment in which NGOs, CBOs and the media are able to operate freely and without government constraints. While this context exists to a large extent in South Africa, notice should be taken of the warnings offered by civil society representatives about the decline in the participatory opportunities over the past decade, and the sense that government is no longer as willing to consult on water and environmental issues as it was in the late '90s.

Thus, while the political context in South Africa is clearly better than in a number of other African countries, it is not without its challenges, and it is important to ensure that the trend is towards greater, rather than less, consultation and engagement with stakeholders.

8.2 Policy and legislative base

Despite the concerns regarding the political context within which stakeholder engagement must operate, the policy and legislative base remains extremely supportive of stakeholder engagement, from the SADC Treaty through to the South African White Paper on a National Water Policy and the National Water Act. The one area where there is gap in this regard is in the founding documents of the three multi-party basin structures of which South Africa is a member. Incorporation of a principle on stakeholder participation in these documents would cement the commitment to this approach.

8.3 Legal status of consultative structures

In the Murray Darling Basin and the two South American basins examined, the structures and processes for stakeholder participation are statutory in nature. In the African basins, while there is a policy basis for consultation (such as in the Lake Victoria protocol) there is not a legislative basis requiring the establishment of specific consultative structures. In the Nile Basin and the Okavango, there are formal agreements between the basin structures and the consultative structures to ensure that the views of stakeholders are fed into the official basin discourse. While this is a useful approach, there are two concerns.

The first is that the arrangements in the Murray Darling Basin, in which the stakeholders have direct access to the Ministers was specifically put in place to prevent officials being able to mediate or manipulate the message coming from stakeholders to political decision-makers. This attempt to balance the power of senior officials is not present in the processes in place in the African basins considered. Nor is it in place in South Africa, where consultation is driven by departmental officials, and access to the Minister is largely by those stakeholders with greater resources and 'clout'.

The second concern is that where consultative structures fall outside the legislative realm, as in the Okavango and Nile Basins, and particularly where these structures have been driven by donor funding, there may be a lack of commitment or an inability by the riparian states to fund these structures. This impacts on the issue of sustainability which is dealt with in more detail below. Where the consultative structures are embedded in legislation there is some requirement for government to ensure sustainable funding for such structures.

8.4 Appropriate organisational arrangements

Two key models can be identified from the international experience: one in which consultation is done by the riparian states with civil society within their own national boundaries, and a second in which a layer of transboundary consultation is added to the national consultation model. These models are shown in more detail in figures 15 and 16.

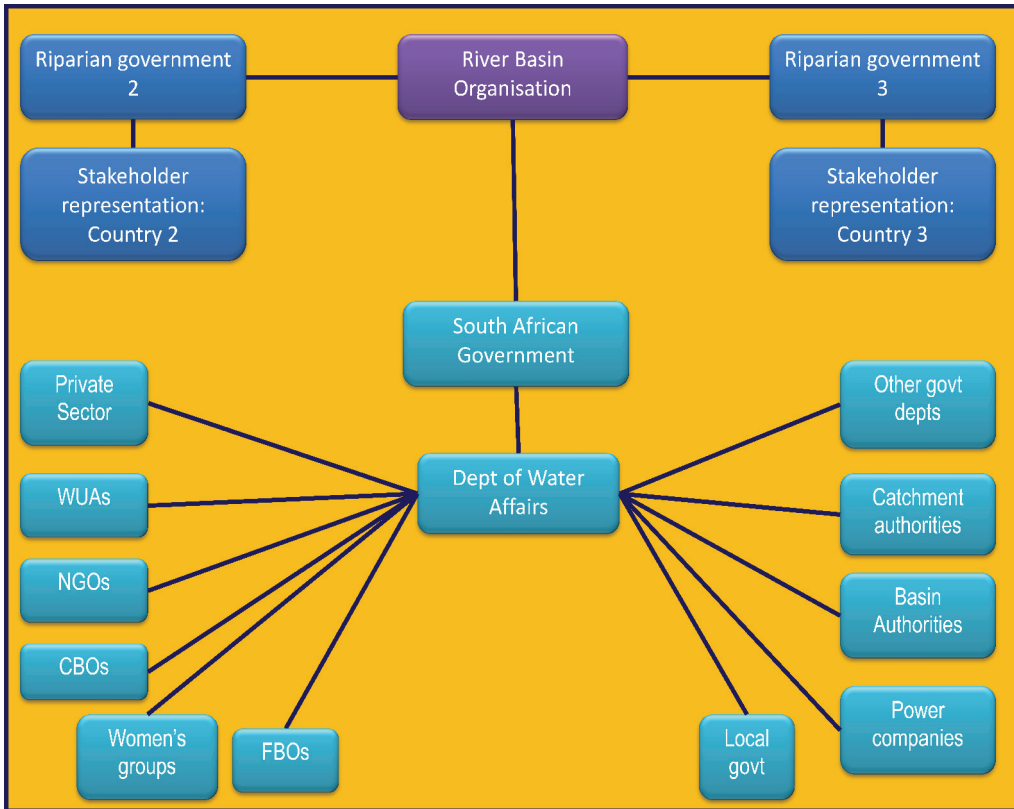


FIGURE 15: NATIONAL CONSULTATIVE MODEL

While several people (such as Van Niekerk and Tesera) have commented on the donors preferring the second model, which is the model being used in the Nile Basin and the Okavango, there have been concerns raised by civil society representatives in South Africa about the effectiveness of the first model, as currently implemented in South Africa. If there are weaknesses in national consultation, such weaknesses are likely to be carried through to the basin wide level, whether these are weaknesses arising from exclusion of certain groups, capture by certain groups, or ‘muting’ of civil society voices by government officials. In this light, it would seem that the most important step currently, in South Africa, is to ensure that the national consultative processes are inclusive, transparent and impact on decision-making. Only once robust and transparent consultative processes are in place at the national level should energy be focused on basin wide engagement. The two models should, therefore, rather be seen as two phases in stakeholder engagement, than two separate models.

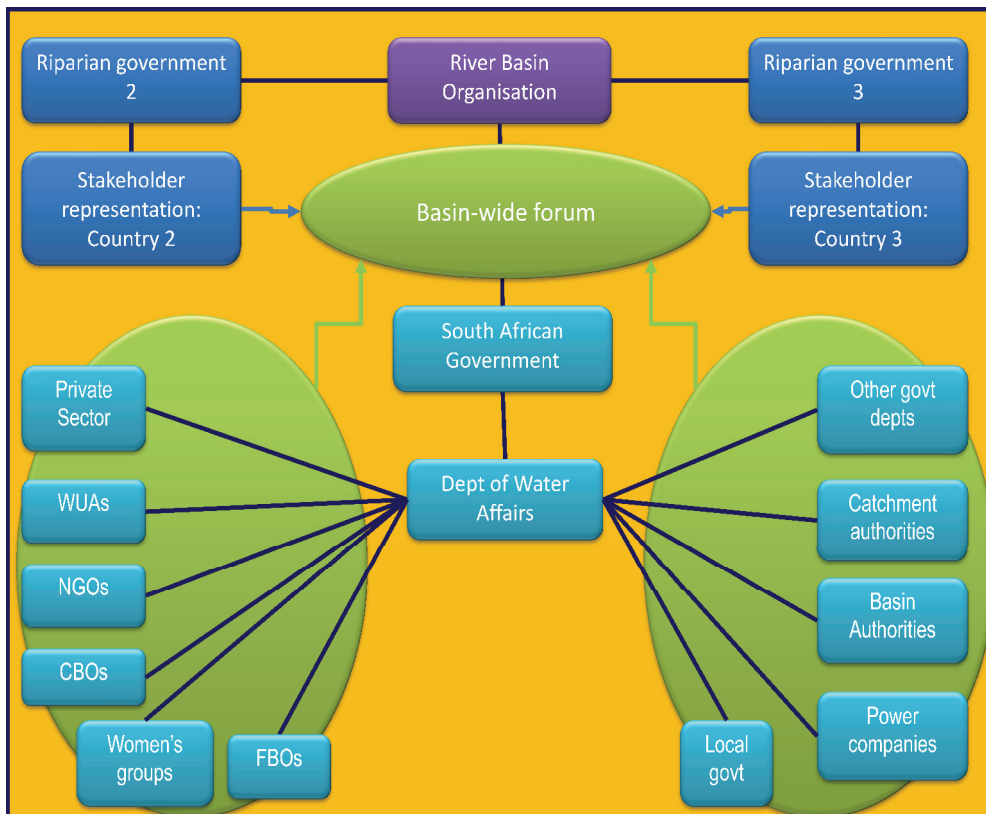


FIGURE 16: BASIN WIDE CONSULTATIVE MODEL

A third element that can be introduced in terms of appropriate organisational structures is the possibility of participation by observers in the basin committee or commission meetings, as is done in the Danube. The concern with this, however, is that this foregrounds certain voices over others, and may well result in the voices of poor and marginalised communities being excluded since they are not sufficiently well organised to participate at this level. With the significant inequalities in South African society, allowing stakeholders with large, transboundary constituencies to be observers will foreground the voices of highly organised groups and international NGOs, without bringing to the table the voices of the already marginalised. The issue of observers should, therefore, be approached with considerable caution.

8.5 Sustainability

The issue of the sustainability of stakeholder engagement has been raised previously. It remains one of the key challenges in transboundary basins. As has been mentioned, in South America and the developed countries, these processes are largely state funded. In the African context, however, such processes are largely funded by international donors. This has two drawbacks – the first is that the processes are vulnerable to the withdrawal of donor funding, and the second is that riparian states do not feel as committed to the processes as they might should they be funding them. Ideally, stakeholder consultation should be funded by the riparian states, as evidence of their commitment to these processes. However, while South Africa has sufficient resources to be able to fund such processes, this is not necessarily true of the neighbouring basin states, several of which are extremely poor and highly dependent on donor aid. The issue of who is to fund the consultative processes, and what the implications are for sustainability, thus remains a significant challenge in the three shared basins.

8.6 Governance structures and systems

If consultative structures (as opposed to processes) are to be put in place, such as the National Discourse Forums in the Nile Basin, it is critical that clear governance rules are put in place from the start to ensure that the structures and finances are managed effectively, that issues of representivity and inclusivity are dealt with effectively, and that poor management, financial abuse or use of positions for personal interest can be dealt with swiftly and effectively. This will require effective monitoring and evaluation of the structures, and transparent reporting to stakeholders of activities, expenditure and progress. The flip side of this coin, however, is that it is important not to give government the power to remove civil society representatives simply because they are not happy with what they are saying. The governance systems should enable civil society to ensure transparency, accountability and good governance without undue government interference.

8.7 Representivity and managing power relations

As mentioned in the preceding paragraph, the issue of representivity is critical in ensuring effective stakeholder representation in transboundary basins, be it at the national or the transboundary level. Of particular concern is the potential exclusion of marginalised groups, or the virtual exclusion of such groups through their inability to participate in discussions due to language challenges, lack of information, or lack of confidence.

To address these challenges, the use of stakeholder mapping to create a database of stakeholders and some analysis of their particular areas of interest, as was done in the Nile Basin, would be of great advantage. However, it is important to recognise that stakeholder mapping is not a once off exercise, but requires continual updating and revision. It is also important that there is clarity on what the definition of stakeholders is – in some areas it would seem that the focus is on civil society, excluding the private sector, despite the recognition in the literature that the involvement of *all* stakeholders is important.

At the same time, the mechanisms for stakeholder engagement, be they meetings, newsletters or workshops, should be carefully constructed to ensure that they are accessible to the most marginal communities in the basin, in relation to issues such as the language used, the timing and location of meetings, and the need to be sensitive to cultural and gender issues.

The management of power relations between stakeholders is also important in ensuring effective stakeholder engagement. The SADC Guidelines for Strengthening River Basin Organisations – Stakeholder Participation, referring to the Okavango experience, state that “The OKACOM model, while hampered by lack of financial sustainability, worked well. However, the model will have to be adapted significantly to work in larger and more complex basins.” (SADC 2010)

One element of larger and more complex basins is the likelihood of much greater power differentials between stakeholders, and possibly between riparian states as well. This is a particularly challenging issue for South Africa which is the largest economy in the region (see figure 17), and where massive inequalities within the country make for very different capacity for engagement by stakeholders – differences that are much less marked in the Okavango river basin. A significant challenge, therefore, in stakeholder participation in transboundary basins is ensuring that the voices of the more powerful stakeholders and the more powerful countries do not dominate the discourse unfairly. This requires that government, in responding to issues raised by stakeholder forums, must examine closely

whether the voices of marginalised groups are coming through clearly, or whether they have been muted by stronger voices. One option in this regard is to ensure separate meetings of particularly marginal or vulnerable groups, to ensure that their voice is given a clear and separate hearing.

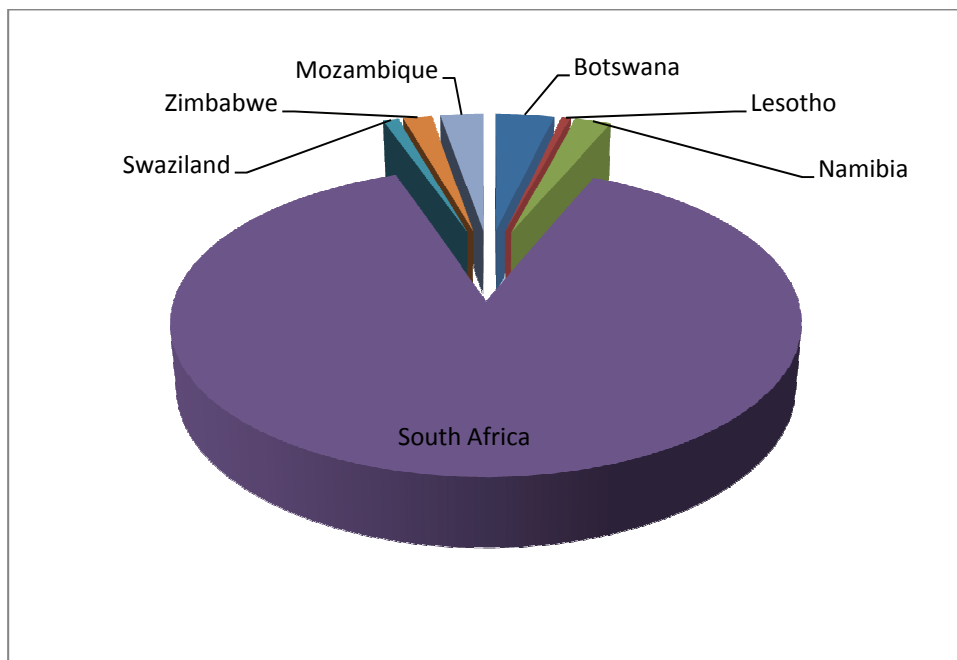


FIGURE 17: RELATIVE SIZE OF ECONOMIES OF SOUTH AFRICA AND RIPARIAN NEIGHBOURS (DERIVED FROM DATA FROM WIKIPEDIA: [HTTP://EN.WIKIPEDIA.ORG/WIKI/ECONOMY_OF_AFRICA](http://en.wikipedia.org/wiki/economy_of_Africa))

8.8 Lessons for South Africa on Intrastate Engagement in Transboundary Basin Management

The interstate engagement platform has been much less well analysed than the civil society platform and there is little written on how the different states approach this issue. It is, however, clear that there is a gap in South African practice and several missed opportunities that could be addressed. In particular, there are opportunities for adopting a more integrated benefit sharing approach that looks more broadly than just at water sharing. To achieve an integrated, benefit sharing approach, greatly improved intra-state co-ordination and consultation is needed than is currently the case. This could be achieved partly by the inclusion of non-DWA representatives (e.g. from the Department of Environmental Affairs or the Department of Agriculture) on the transboundary structures, and/or by structured intergovernmental co-ordination within the catchment. Such intergovernmental co-ordination should link all three spheres of government and support the understanding of the linkages between sustainable development in the catchment, benefit sharing and transboundary water resources management.

The experience of the Mekong National Committees is one from which South Africa could learn, where interdepartmental co-ordination is driven at the Ministerial level by the membership of 4 key ministers in the committee, supported by further participation of representatives from the district level. An approach of this nature would greatly enhance South Africa's ability to take a strategic and integrated approach to transboundary basin management and to drive a stronger benefit sharing rather than water sharing approach.

Currently it is only the *water sector* representing the state in transboundary basins. While this may have been appropriate in an earlier context of a focus on infrastructure development, in the context of a benefit-sharing approach to transboundary water management other sectors outside the water have a key role to play in the discussions. With benefit sharing, water resources management is inextricably linked to development issues which require a much broader engagement of a range of government departments.

In the South African water sector, water resource management is largely the responsibility of DWA, CMAs, and WUAs. A key role in this regard will be played by CMAs (as and when they are established), and because of this key role, there is an argument to be made that CMAs should have representation on the delegation to the International River Basin Commission or Committee. There is also good reason for CMAs to engage with their counterpart institutions across national boundaries, particularly on issues of day to day management of the basin, and appropriate structures to facilitate this should be established.

Similarly, for Water User Associations that are located close to each other, but across borders, there is an argument for engagement on operations issues.

Local authorities, while responsible for the management of water services and sanitation within their boundaries, do not have key IWRM functions that might result in them needing to work with water management institutions in a transboundary situation. In the South Africa context, the weakness of municipalities and their inability to perform core functions effectively makes it further inappropriate for them to focus too much energy on transboundary projects or engagement. Nonetheless, their functions in relation to local economic development, and the provision of water services, means that they should be part of the intergovernmental structures supporting a benefit sharing approach to managing the basin.

9. Further research

The issue of the involvement of state actors in transboundary basins is one that has been relatively poorly documented or analysed and it is recommended that this could be an interesting further area of research to pursue, looking at practices in a range of countries, including in Southern Africa, and drawing lessons for South Africa and for other SADC countries.

10. Conclusion

The first, and most critical lesson arising from the international experience, is that stakeholder consultation is a means and not an end. The end, in the transboundary basin context, is equitable and effective basin management that allows water to be used beneficially and in the public interest (to use the words of the National Water Act). Stakeholder participation, while widely accepted as a good thing in water resources management is not without its risks.

While experience from the Cuareim/Quarai basin showed that stakeholder participation at different levels achieved better results than simply a strong legal and institutional international framework⁶,

⁶ Ana Vidal, Uruguay, International Symposium on Stakeholder Involvement in Transboundary Basins, Boksburg, South Africa, October 2009

Kameri-Mbote (2004) points out, from the Nile Basin experience, that stakeholder engagement is “essentially political and amenable to capture by interest groups”. She stresses that there is a need to build trust amongst the various actors in stakeholder engagement processes, and to develop a commonality of interest. Through this, she believes, it is possible to develop a convergence of interest between the actors.

Muller⁷ adds a further risk, namely that participation can stall processes, undermine development and impose heavy costs on participants. As a result, and bearing in mind that stakeholder participation is a means and not an end in itself, one needs to define the problems to be addressed and then consider how stakeholder participation will help, what kind of participation is necessary and how best to manage the risks associated with stakeholder consultation, in order to derive the maximum benefit from the process.

For effective stakeholder engagement to take place in transboundary basins, there are a number of elements that need to be in place (see figure 18). These begin with a conducive political environment, appropriate and supportive policy and legislation, and high levels of trust in the basin. These are the first elements that need to be in place before effective stakeholder engagement can take place. This is followed by the need for strong governance arrangements, appropriate structures and processes, and sufficient and sustainable resources. Finally, there is a need to manage the power relations between countries and between stakeholders and to ensure real representivity, particularly of marginalised communities.

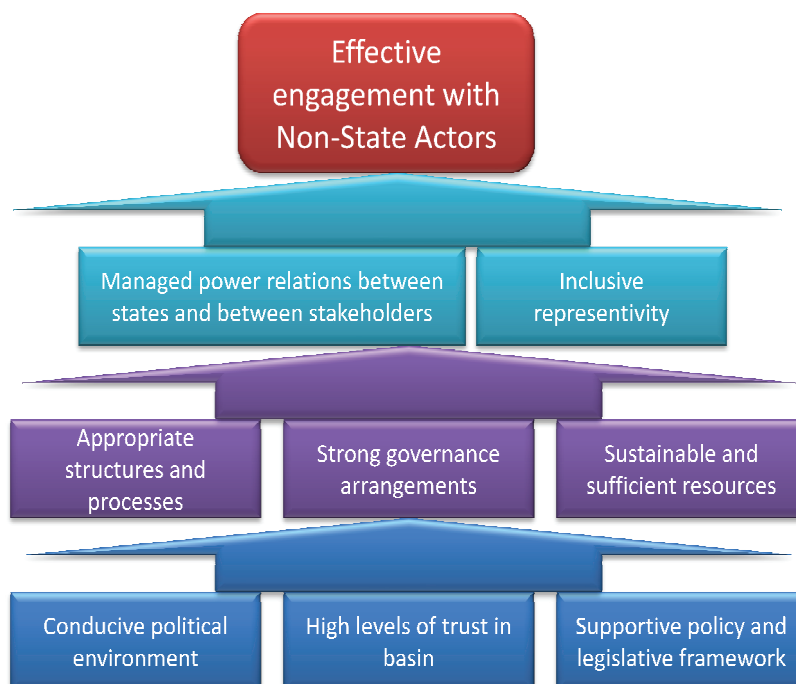


FIGURE 18: KEY ELEMENTS OF AN INSTITUTIONAL FRAMEWORK FOR STAKEHOLDER PARTICIPATION IN TRANSBOUNDARY RIVER BASINS

However, before venturing into transboundary stakeholder engagement, it is important to ensure that the consultation within national boundaries is effective through alignment of stakeholder

⁷ Prof Mike Muller International Symposium on Stakeholder Involvement in Transboundary Basins, Boksburg, South Africa, October 2009

consultation processes taking place in one basin, broadening the process to encompass more people, ensuring feedback on input made and ensuring that stakeholder input actually changes or influences decision.

Finally, it is important that all stakeholder engagement processes, at local, national or transboundary level, must meet the real and felt needs of the stakeholders, not what those in positions of authority consider to be their needs. Thus the approaches must be sufficiently flexible to encompass the needs and desires of stakeholders.

Finally, there is no 'one-size-fits-all' approach. There is high diversity between basins, even in a single region such as southern Africa and the institutional arrangements in each basin should be designed to meet the needs and capacity of that basin and be appropriate to the reasons for consultation. As Ken Msibi of the SADC Water Division stated, "The onus is on us to ensure that we strike a balance between stakeholder participation and the intended objective." (International Symposium on Stakeholder Involvement in Transboundary Basins, Pretoria, October 2009)

11. Appendix A: Characteristics of the 3 Shared Watercourses

This section aims to provide some background on the legislative, economic, demographic and hydrological characteristics of the three shared river basins in which South Africa is a riparian state. This is particularly important since there is no one-size-fits-all approach to transboundary river basin management, and the specific characteristics of any basin must be taken into account in designing institutional and stakeholder arrangements.

11.1 Legislative and institutional framework(s) of basin states

Research indicates that a significant number of the basin states in the Southern African region have detailed legislative and institutional framework to inform water management activities. However, it seems water legislation in most of the basin states may require some review to bring it in line with the current trends in international water management. Swaziland and Mozambique are in a process of finalising their legislative reviews and integrated development plans. The legislative and institutional frameworks that are currently in operation in the basin states are discussed below.

11.1.1 Namibia

A Water Resources Management Review process was initiated by the Government of Namibia in 1998 to review its water resource management policies. Partly, the intention of the review was to ensure equitable access to, and the sustainable development of, water resources for all sectors of the population. Following from this process was the adoption of the National Water Policy in 2000. As a result the water legislation (Water Act 54 of 1956) which was based on the riparian principle was also revised. The new Act (Act No. 24 of 2004) in section 4(a) states that the “ownership of water resources in Namibia below and above the surface of water of the land belongs to the State”. Furthermore one of the Act’s principles [section 3(m)] provides for international obligations.

The Act states in section 53 in particular that – “in its dealings with neighbouring states and other riparian states in relation to internationally shared water resources, the Republic of Namibia – must uphold such principles and rules of customary international law as are accepted and observed by all nations. Kranz et al. (2005) also mention a Water and Sanitation Policy of 1993 which sought to introduce water sector reforms in Namibia. Other legislation relevant to the management of water in Namibia includes the National Agricultural Policy of 1995 that regulates irrigation, and the Namibia Water Corporation Act 12 of 1997 that stipulates the objectives of NamWater.

According to the Encyclopaedia of Earth (www.eoearth.org/article/Water_Profile_of_Namibia), a number of institutions are responsible for different aspects of water supply, management, and use, including government departments, parastatal institutions (such as municipalities and community-based Water Point Committees), private organizations, and individuals. Three key state institutions that are involved include:

- The Department of Water Affairs (DWA) within the Ministry of Agriculture, Water and Rural Development, which is responsible for all water resource development projects, including irrigation planning and development;
- NamWater, a parastatal institution responsible for bulk water supply;
- The National Development Corporation (NDC) that executes new government developments and also manages schemes.

11.1.2 Botswana

The main pieces of legislation that govern water resources in Botswana are the Water Act (1968)⁸ and the Water Regulations (1976). These two pieces of legislation are managed by the Ministry of Mineral Resources and Water Affairs (MMRWA). Two specific water related functions are performed by the MMRWA through two distinct organs of state. From the water resources management side the Department of Water Affairs (DWA) is the leading organ of state. Among other functions the DWA is responsible for water supply development in rural areas, for surface water resource investigations and development, and for overall water resources planning in the country. The DWA is also responsible for the protection of surface water resources from pollution and aquatic weed infestation, as well as developing and administering the water legislation. The Water Apportionment Board is the quasi-judicial body under the Water Act (1968) responsible for the administration of duties that affect water rights, as well with important powers and duties to record, grant, refuse, vary, or terminate water rights.

The activities of DWA are complemented by the Department of Geological Survey (DGS), which is responsible for groundwater investigations, as well as the protection and monitoring of the groundwater resources.

From a water service delivery perspective, the Water Utilities Corporation (WUC) is a parastatal organ of state responsible for supplying water to six urban and mining centres and other designated areas of Botswana. District Council water departments perform all activities associated with operations and maintenance as well as rehabilitation and upgrading of village water supply systems. At a local level City/Town Councils are responsible for planning, design, implementation and operation of effluent disposal works.

In terms of institutional arrangements, state organs seem to be highly involved in the management of water with respect to policy, water resource management, water supply and irrigation. The Ministry of Agriculture is responsible for the supply of water for livestock farming and the agricultural sector.

11.1.3 Lesotho

The Water Resources Act (1978) is the main piece of legislation which governs management of water resources in Lesotho. It vests ownership of water in the Basotho Nation and provides for the use, control and conservation of water resources. There are several other relevant pieces of legislation administered by other departments, including the Water and Sanitation Bill which still has to be enacted. It is widely acknowledged that water legislation is in need of a significant overhaul.

The Lesotho National Environmental Policy was approved in 1998 identifying periodic prolonged drought and scarcity of water for agriculture and pollution of land and watercourse systems as one of the primary objectives (Kranz et al., 2005). In their Review of Transboundary River basin Management Regime: *The Orange Basin Case Study* Kranz et al. (2005) mention that the first guiding principle for water resource management identified in this policy addresses public participation. One of the strategies identified in the policy is the promotion of research and conservation of shared watercourse systems and resources with neighbouring countries in the SADC region.

⁸ Other water related Acts in Botswana include the Borehole Act, 1956, Waterworks Act, 1962, Waterworks Amendment Act of 1983, Water Utilities Corporation (WUC) Act of 1970 and the WUC Amendment Act of 1978

Water sector institutional reform in Lesotho is in a state of flux, and it is envisaged that major changes will be made in future.

11.1.4 South Africa

The legal framework for water management in South Africa is well defined. The White Paper on a National Water Policy for South Africa was developed in 1997. The National Water Act (36 of 1998) is one of the most comprehensive and progressive pieces of legislation in the development and management of natural resources. The focus is on “ensuring that South Africa’s water resources are protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons” (RSA 1998). This Act makes provision for the development of National Water Resource Strategy, the first edition of which was published in January 2005. Chapter 10 of the Water Act provides for the International Management of water resources.

With regard to institutional arrangements, the National Water Act (1998) proposes water management through Water User Associations (WUA) at the local level. All water users in an area will have an opportunity to participate as full members, with local management of water becoming the total responsibility of the WUA. Each WUA will have an elected management body, with all sectors of water users represented on the committee. At a basin level, several WUAs will fall under an umbrella organization, the Catchment Management Agency (CMA).

Initially the decision was that each CMA would take responsibility for a specific water management area designated to it, and nineteen (19) such water management areas were identified, with 5 of them falling under the Orange-Senqu catchment. There are three on the Vaal: Upper-, Middle- and Lower Vaal WMA, and 2 on the Orange: Upper and Lower Orange River WMA. However, recent developments have led to a review of this position and it is more likely that between 7 and 9 CMAs will be established covering all 19 WMAs.

So far only two CMAs have been established. The CMA, through water users associations, represents the most comprehensive public stakeholder participation structure in the water sector. In the Inkomati for example, where a CMA has been established, a number of sub-catchment forums have been established to ensure stakeholder participation in CMA processes. Emerging farmers and potential users of water have been given an opportunity to participate in all CMA activities. However, at the time of writing this report it was not clear how these stakeholder participation arrangements impact on river basin management.

11.1.5 Mozambique

The institutional structure of water resources management in Mozambique almost resembles that of South Africa. In Mozambique, the institution responsible for water resources management is the National Directorate for Water (DNA). DNA is the central body that establishes coordination links with other Mozambican institutions also related with water resources, like the Agriculture and Energy Sectors (Vaz and Pereira, 2000:106).

In 1991 a new Water Act was promulgated, this Act provided for the decentralization of water resources management in line with the subsidiarity principle to manage water at the lowest appropriate level. The Act provides for the establishment of Regional Water Authorities (ARA) for the decentralization of water resources management particularly in the operational stages of water resource management. The country is divided into five regions in which the ARAs will be established

as water resource management institutions. In 1992, ARA-Sul was established followed by ARA-Centro in 1997. The other ARAs were planned for the year 2000 but progress in this regard has been slow and it is not clear whether significant progress has been made. The ARAs receive guidance and technical support from DNA, through its Department of Water Resources Management, which also has a monitoring role. The decentralization of water resources is seen to present the associated advantages such as placing water management authorities much closer to water users, allowing for flexibility to react to unexpected events, linking the hydrometric network stations to the real needs of the management, and providing the planning authorities at central level with more realistic data. However, the main constraint on the decentralization process is posed by the scarcity of technically qualified personnel and financial resources (Vaz and Pereira, 2000:107).

The DNA has recognized the major importance of the international river basins in terms of the general water resources of Mozambique. This led to the recent creation of an International Rivers Office (Gabinete de Rios Internacionais, i.e. GRI) which is already contributing to a significant improvement in the relationships, communications and discussions between DNA and the water authorities of the other riparian countries. (Vaz and Pereira, 2000:107)

The legislation that governs water resource management in Mozambique is the Water Act which was promulgated in 1991. The basic principles of the Act are:

- water considered as a scarce resource;
- conservation and sustainable use of water;
- the economic value of water;
- the prevention and combating of pollution;
- the public domain of water;
- the licensing of water abstractions and effluent discharges; and
- the role of private initiatives in water development.

Water is considered a public good and there is no private ownership of the water. Individuals, communities, water supply companies and private enterprises need a license to abstract water from a water source, be it surface or groundwater. Obviously, licensing is not required for using water in small amounts, which is the situation for the great majority of the rural communities. The licenses are issued by DNA. DNA can delegate this function to the decentralized regional water authorities (ARAs).

11.1.6 Swaziland

The goal of the Swazi Government in the water resources sector is to assess, conserve, develop and manage the water resources of Swaziland to ensure that development is not constrained by lack of adequate water supply and that irrigation domestic and industrial needs can be met in the most efficient and equitable manner. These functions are performed by the Water Resources Branch of the Ministry of Natural Resources and Energy in respect of surface water (Government of Swaziland 2001).

To meet these objectives, the Government of Swaziland committed itself to establish institutions to carry out these objectives as a matter of urgency. The Government therefore planned to establish a National Water Authority (NWA) to formulate and advise Government on water policy, establish planning strategy for national water development and management (Government of Swaziland 2001).

The Government of Swaziland initiated plans to develop a National Development Strategy. This National Development Strategy (NDS) spells out the Vision and Mission for socioeconomic development for a period of 25 years and it also provides a guide for the formulation of development plans and equitable allocation of resources. The NDS has a section that addresses water resources development which advocates the development of an overall policy to cover all water uses including the expansion of smallholder irrigation within a national irrigation development plan, planning and construction of small to medium size dams (eoeath 2008).

The Ministry of Natural Resources and Energy is responsible for water resources development and management in the country. There are different branches within the Ministry which deal with specific functions. The Water Resource Branch (WRB) is responsible for stream flow observation, planning of water resources and control of pollution. The Rural Water Supply Branch is responsible for water supply and sanitation in rural areas. The Groundwater Unit of the Geological Surveys and Mines Branch is responsible for drilling boreholes and monitoring the withdrawal of groundwater. Lastly, there is also a parastatal called the Swaziland Water Services Corporation, which is responsible for urban, peri-urban water supply and sanitation (eoeath 2008).

The existing water legislation came into force on 1 March 1968 although the legislation is current under review. At this stage, Swaziland does not have a clear policy on water use and management, water resource management is currently done through different pieces of legislation that address certain issues that have a direct bearing on water resources. Some of the relevant acts are (eoeath 2008):

- The Protection of Freshwater Fish Act of 1938,
- the Swaziland Electricity Act of 1963,
- the Water Services Act of 1992,
- the Komati River Basin Water Resources Development and Utilization Act of 1992,
- the Joint Water Commission Act of 1992,
- the Swaziland Environmental Authority Act of 1992,
- the Swaziland Administrative Order of 1998 and
- the Borehole Act of the Geological Surveys and Mines,
- The Swaziland Environmental Authority Act (Swaziland Government, 1992)

11.2 Orange-Senqu River Basin

11.2.1 Current institutional arrangements and institutional mandates for the basin

Earle, Malzbender, Turton and Manzungu (2005) identify the following bilateral and multilateral cooperative arrangements that are relevant to the management of the Orange-Senqu river basin:

- Permanent Water Commission between Namibia and South Africa,
- Joint Irrigation Authority (JIA) between South Africa and Namibia to implement the agreement on the Vioolsdrift and Noordoewer Joint Irrigation Schemes (VNJIS),
- Lesotho Highlands Water Commission (between Lesotho and South Africa), which saw the establishment of parastatal institutions such as the Lesotho Highlands Development Authority (responsible for management of water resource infrastructure development projects) and the Trans-Caledon Tunnel Authority (responsible for the implementation and funding of raw bulk water infrastructure to supply areas with limited water resources).
- Joint Permanent Technical Committee between Botswana and South Africa,
- Transfrontier Aquifer Task Team investigating the Karoo Aquifer between Namibia, Botswana and South Africa, and
- A multi-sector arrangement between Namibia and Botswana meets every two years and addresses a number of issues, including water.

There are no bilateral agreements with Botswana largely because Botswana, although being a basin state, contributes almost no water to the river system.

Added to these must be the Orange-Senqu River Basin Commission (ORASECOM) established by all four basin states to provide advice to the parties in the management of the Orange-Senqu basin.

Apart from the Roadmap Towards Stakeholder Participation (Orasecom, 2007), institutional arrangements for stakeholder participation have not been defined for the Orasecom. Article 5 of the Orasecom Agreement signed in November 2000 in Windhoek identifies a number of functions of the Council of the Commission. Sub-article 5.2.4 in particular requires the Council to make recommendations and provide advice to the countries on the extent to which inhabitants in the territory of each Party shall participate in the activities of the Commission. However, the type of arrangements and the levels at which stakeholders shall participate are not dealt with in the agreement. In the South African context, the NWA (1998) provides details on the nature and level of stakeholder involvement.

11.2.2 Demographic and economic context

The Lesotho side of the basin has a largely homogenous population dominated by the Basotho, with the remainder being a small number of Europeans and Asians. The majority of the population is largely rural, living in small villages. In these villages subsistence farming is the main source of income. Lesotho is underdeveloped, with infrastructure development challenges compounded by its mountainous topography. It is estimated that Lesotho has 1.8 million inhabitants, with an annual

growth rate of 1%. 49% of the population is ranked poor, with improved water sources available to 76% of the total population. 82% of the population resides in rural areas.

Agriculture, livestock production, manufacturing and remittances from migrant labourers employed in South Africa have been the mainstay of the of Lesotho's economy. The lowlands constitute the main agricultural zone and almost 50 percent of the population earn their income through crop cultivation or animal husbandry (UNDP, 2006). However, recent restructuring and falling rand/dollar exchanges have affected the mining industry in South Africa leading to retrenchments and decline in work opportunities for both South Africans and Basotho. However, Lesotho derives significant economic benefit from the transfer of water to South Africa through the Lesotho Highlands Water Project. It is envisaged that with the completion of all the phases of the project, Lesotho will benefit from additional water transfer and generation of electricity to sell to South Africa. For this reason the waters of the Orange are of significant economic importance to Lesotho.

Botswana has an estimated population of 1,8 million with an annual growth rate estimated to be 1.4%. Botswana has an extremely high HIV and AIDS prevalence rate. In 2003 the HIV/AIDS prevalence rate was 37.3%. The Botswana part of the basin is sparsely populated due in part to the Kalahari forming a significant part of the basin. Ecotourism resulting from the Kgalagadi Transfrontier Park and extensive livestock farming are the most common economic activities.

In 2003 it was estimated that Namibia had a total population of 1.9 million with a growth rate of 1.4%. The Namibia part of the basin is characterised by low population density. Namibia is largely arid with sheep and goat farming being the predominant economic activity. Although Namibia has a number of irrigation schemes and mining activities, Earle et al. (2005) indicate that there is no significant industrial development taking place currently. However, the same authors also mention that additional water will be required for the development of the proposed Kudu gas field power station.

The South African part of the basin is characterised by diverse population and language groups with Afrikaans being the most spoken language. The highly industrialised Gauteng region and some parts of Free State depend on the water transferred from the Orange river. Gold and coal mining, electricity and commercial irrigation depend on consistent transfer of water from the Vaal (a principal tributary of the Orange) and the Orange river (through the LHWP).

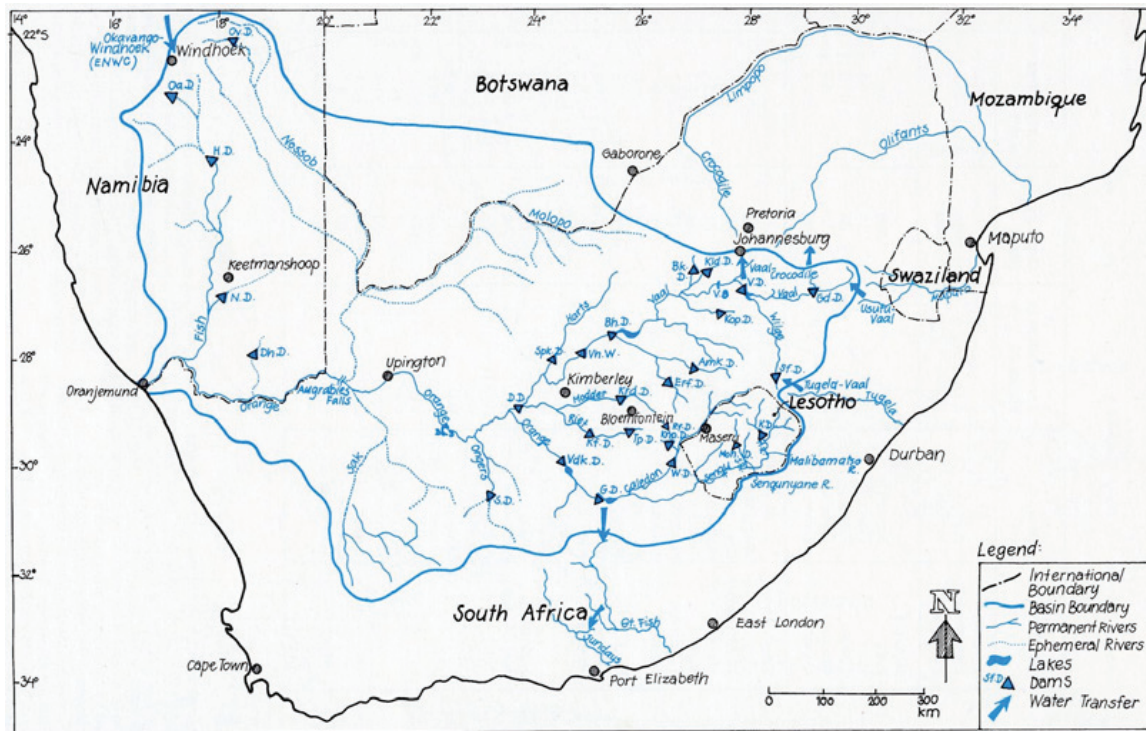
The water resources of the river are used for various purposes, but significantly by South Africa through its industrial heartland, Gauteng. Sectors that use water resources significantly in all four countries include irrigation, power generation, mining, industry, and general domestic consumption. It is estimated that South Africa generates about 25% of its GDP through utilising the water resources from the Orange River. In addition large urban areas of South Africa also depend on the water from the Orange River.

11.2.3 Hydrological context

Botswana and Namibia both have more water per capita than SA, but not necessarily where they need it or can use it (e.g. in the swamps). Therefore, Botswana is considered to be an arid country with water resources facing high levels of stress related to the demands of a developing economy. Although not contributing anything significant through surface run-off, Botswana is a legal and equal signatory to the agreement establishing the Commission. An estimated 68% of Botswana is made up

of the Kalahari Desert with low, unreliable, and unevenly distributed rainfall both in space and time. Long droughts are very common and often water sources such as dams, sand rivers, and hand dug wells dry up, impacting negatively on productivity and leaving rural populations with few or no alternative sources of water. For this reason the Orange river system is strategically important to Botswana, at least for future developments.

Map 1: The Orange River Basin



Source: Turton, A., 2005. Hydro Hegemony in the case of the Orange River Basin Adapted from Pallet et al., 1997

Namibia is also an extremely dry country, with a high level of water stress and water scarcity. In spite of wastewater recycling measures and the development of desalinisation technology, the water situation makes it likely that Namibia will look to international water resources to meet its internal demands (Krantz et al., 2005). In the arid southern parts of the country, the main development potential lies in irrigation; this is also likely to create the highest demand for water. Namibia has had successful experiences with the irrigated cultivation of cash crops (utilising water from the Orange), and is interested in expansion of the irrigated area, subject to water availability.

Lesotho, despite having water in abundance, has distribution challenges. A point made by Kranz et al. (2005) is that the concentration of population and industry in Lesotho is not coincident with the availability of large quantities of water. The challenges faced by Lesotho are further magnified by one critical transboundary issue, the *water transfer capacity issue*, which is directly associated with the availability of adequate infrastructure.

The water availability challenges in the Orange-Senqu river basin are compounded by the water quality challenges in the Vaal river system. Although the river system includes various water course systems connecting to the Vaal via inter-basin water transfer schemes, the Vaal system is divided

into three main water management areas (WMA) of Upper, Middle and Lower Vaal. The Vaal river system is impacted by a series of industrial and agricultural activities taking place in the three WMAs of the basin. According to the Background Information Document (DWAF 2005) the Upper Vaal is characterised by extensive urban and industrial areas, with gold and coal mining being the main economic activities. The Middle Vaal is mainly rural with dry agriculture taking place in the upper locations, while irrigated farming is the feature in the lower locations along critical tributaries of the Vaal system. As a result of extensive mining in the Upper and Middle Vaal WMAs, treated urban effluent flows and mine dewatering into the river system impacts negatively on the quality of water across all three water management areas.

As indicated in the Internal Strategic Perspective for the Orange River System Overarching (DWAF 2004) developed for the Department of Water, the main storage dams in the Orange River WMAs are:

- Gariiep and Vanderkloof Dams on the Orange River (Vanderkloof sub-area), which command the two largest reservoirs in South Africa. Hydropower for peaking purposes is generated at both sites.
- Armenia and Egmont Dams on tributaries in the Caledon sub-area. Welbedacht Dam lies on the main stem of the Caledon River, with Knellpoort Dam an off-channel storage dam that supplements the water supply to Bloemfontein.
- Rustfontein, Mockes and Krugersdrift Dams are situated on the Modder River, and the Tierpoort and Kalkfontein Dams on the Riet River.

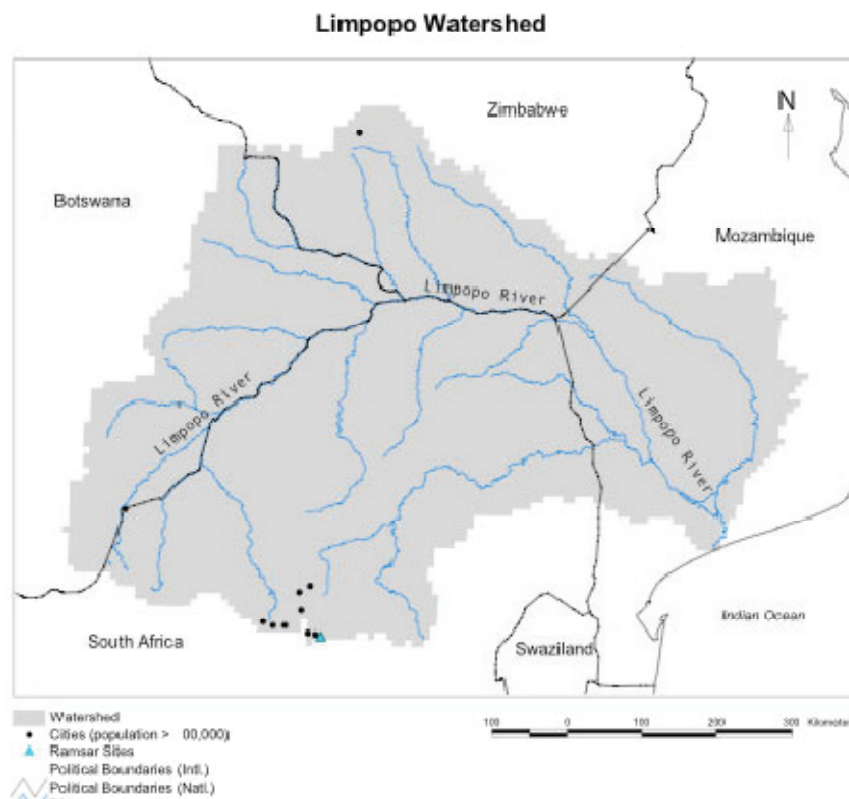
It is estimated that 57% of the natural runoff is generated in Lesotho and 33% in the Upper Orange and the remaining 10% in the Lower Orange. Irrigation is by far the dominant water use sector in the Orange River WMAs, representing 88% of the total gross water use of 1 996 million m³/a estimated for the year 2000. This figure excludes the transfers out of the WMAs. Only 12% are used by the urban, industrial, mining and rural sectors. Expected future growth will mainly be as result of 12 000 ha allocated to resource poor farmers and limited growth in urban/ industrial and mining sectors which will mainly be as result of developments in the Bloemfontein, Thaba 'Nchu area. The projected requirement for 2025 is 2 134 million m³/a excluding transfers.

Current Namibian requirements are in line with the existing proposed 50 million m³/a permanent allocation to Namibia and 60 million m³/a temporary allocation until 31 December 2007. There are however uncertainties with regards to the growth in the water requirements for Namibia and an agreement with regards to the maximum abstraction and payment of water abstractions by Namibia from the Orange River, needs to be formalised.

11.3 Limpopo River Basin

The Limpopo river basin has an area of about 412,000 km² which is shared between RSA (47%), Botswana (18%), Zimbabwe (16%) and Mozambique (19%). It rises at an altitude of about 2300 m near Lydenburg (RSA) and drops into the alluvial plain in Mozambique (Vaz and Pereira, 2000).

Map 2: The Limpopo Basin



Source: Amaral, H and Sommerhalder, R., 2004. Adapted from: Earth Trends 2002 World Resources Institute

11.3.1 Legislative and institutional framework(s)

Current institutional arrangements and institutional mandates for the basin

The Limpopo basin is shared by four riparian states, South Africa, Zimbabwe, Botswana and Mozambique. In 1986 significant cooperation developments occurred in the basin when the four states negotiated and signed a multilateral agreement to establish the Limpopo Basin Permanent Technical Committee (LBPTC). The mandate of this committee was to advise the parties on issues regarding the common uses of the river to improve water quality and quantity. However, for a period of almost a decade, the LBPTC was inactive and its second meeting only happened in 1995 where it was agreed to reactivate the activities of the committee. Discussions centred on issues of mutual interest regarding the common river (Mohamed, 2005). After the reactivation of the LBPTC a number meetings were held which concentrated on the legal issues of a proposed Limpopo Watercourse Commission. In 2003, the committee negotiated the establishment of the Limpopo Watercourse Commission (LIMCOM); the agreement was signed by Botswana, South Africa and Mozambique with Zimbabwe only signing the agreement a year later (Amaral and Sommehalder, 2004). However, LIMCOM is yet to be ratified by all basin states (UNEP 2007).

Institutional arrangements and legal mandate for stakeholder participation

According to Manzungu (2004) none of the four riparian states has made any legal provisions for the participation of local communities at national or international level so far (GTZ, 2006b). Stakeholder participation currently takes place mainly at sub-national level, through catchment or similar structures. Limitations have been observed in relation to local community participation at national and international level at all four Limpopo River Basin states (GTZ, 2006b:15). Stakeholder groups that have been identified in the Limpopo basin include subsistence farmers, rural communities, large commercial farmers and industrial users, largely mines operating mainly in South Africa and a few in Zimbabwe and fishermen in the Limpopo delta in Mozambique (GTZ, 2006b).

11.3.2 Demographic and economic context

Botswana's population is estimated at almost 1.8 million (2004) and about 48% of inhabitants are rural. Average population density is three inhabitants/km², but 80% of the inhabitants are concentrated in the east where most of the livestock grazes and most crop production takes place. Population growth was only 1.5% between 1997 and 2003. As a result of one of the highest HIV/AIDS prevalence rates in the world, life expectancy has fallen sharply, from around 65 in 1991 to 38 years in 2002. Some 95% of the population has access to improved drinking water sources (100% in urban areas and 90% in rural areas). Primary school was completed by 90% of the children and 70% continued to secondary school in 2000. Unemployment was officially estimated at 15.8% of the labour force in 2000 (Matlock, 2007).

The total population of Mozambique is estimated at 19.2 million (2004), with a population growth rate of 2 percent per annum. The population density was 24 inhabitants/km² and 63 percent of the population is rural. Mozambique is one of the poorest countries in the world, ranking 170 out of 173 countries. An estimated 70% of the population lives below the poverty line. In 2002, 76 percent of the urban and 24 percent of the rural population were using improved drinking water sources.

The total population of Zimbabwe is estimated at about 12.9 million of which 64 percent is rural. The estimated annual growth rate is about 1.02 percent. In 2002, population access to improved drinking water sources was estimated to be 100 percent in urban areas and 74 percent in rural areas.

The Encyclopedia of Earth estimates South Africa's population to be at 45.4 million in 2004, of which 42 percent is rural. The annual growth rate is estimated at about 1.2 percent. The average population density is 37 inhabitants/km², ranging from 21 in rural areas to more than 100 inhabitants/km² in more densely populated urban areas. In 2002, 98 percent of the urban and 73 percent of the rural population were using improved drinking water sources, amounting to a national coverage of 87 percent.

There are around 14 million people living within the Limpopo River Basin in the four Riparian states. Their respective contribution to the Southern African Development Community (SADC) GDP in 2002 was – South Africa (65.7 %); Zimbabwe (3.6%); Botswana (3.1%) and Mozambique (2.2%) (Earle et al., 2006).

11.3.3 Hydrological context

The main river (1700-km long) forms parts of the border between South Africa and Botswana, and the entire border between South Africa and Zimbabwe, before entering the Indian Ocean through Mozambique. The main river is located in a dry climate area with an average annual rainfall of 500

mm. The basin is drought and flood prone with a total mean annual runoff estimated as 7 330 million m³ (Amaral and Sommerhalder, 2004:5).

Mahomed (2005) notes that no dams have been built on the Limpopo main river; however, many major dam projects have been implemented on its various tributaries. About 44 large dams, 28 in South Africa, were built mainly for irrigation, domestic and industrial water supply, hydropower generation, and they also function as flood mitigation structures South Africa. The river also supplies Eastern Botswana, the most populated and urbanized part of Botswana. In Zimbabwe, the river has been fully developed.

An estimated 95% of the annual rainfall occurs between October and April, in sparse manner in isolated locations. A short and intense rainy season, with erratic and unreliable rainfall, leads to frequent droughts. Despite the frequency of droughts, floods can also occur in intensive rain periods. During the rainy season, the Limpopo River loses a lot of its water in the swampy region of its lower course (Amaral and Sommerhalder, 2004:8)

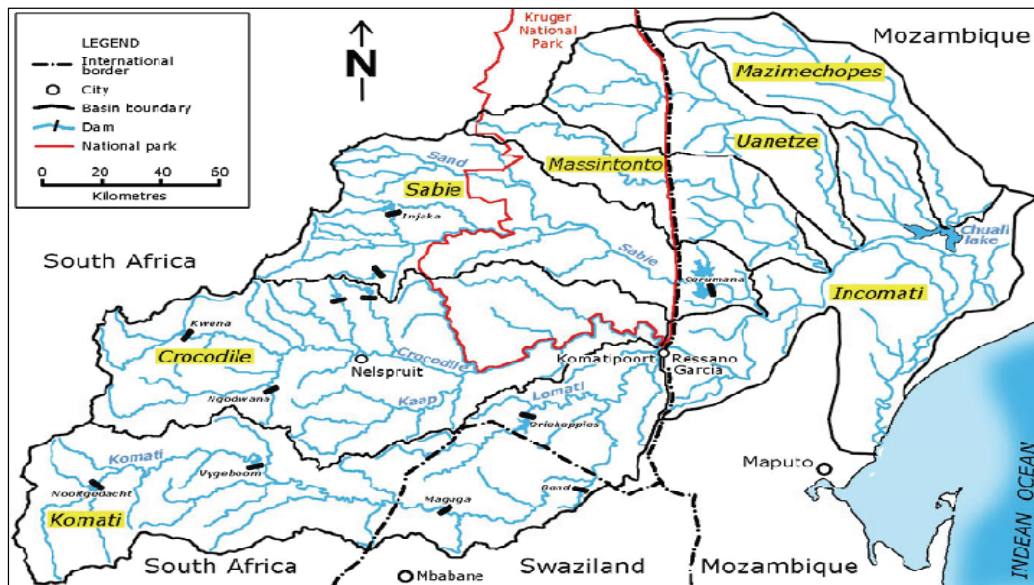
11.4 The Inkomati River Basin

The Inkomati river basin has an area of about 46,800 km² which is shared between RSA (28,700 km², 61%), Swaziland (2600 km², 6%) and Mozambique (15,500 km², 33%). It rises in the mountains and plateau above 2000 m in the west of the basin and drops to the plains in Mozambique, to the east of the Lebombo range, at an elevation generally below 150 m (Vaz and Pereira, 2000:102).

Map 3: The Inkomati Basin within the respective basin countries (Source Vaz and Van der Zaag, 2003)



Map 4: The Inkomati basin and its catchment areas



Source: Vaz and Van der Zaag, 2003:4

11.4.1 Legislative and institutional framework in the basin

The basin countries are all governed by their respective water legislations and policies. The Southern Africa Development Community (SADC) has embarked on a number of projects to align and harmonise the policies of the countries in the region and all countries are signatories to the SADC Protocol which regulates issues around sharing of international transboundary rivers. The basin countries have signed a number of bilateral and trilateral agreements on the sharing of the waters of common interest. The most important of these are the following:

- Agreement on the establishment of the Tripartite Permanent Technical Committee
- Joint Inkomati Basin Study
- Treaty on the Development and Utilization of the Water Resources of the Komati River Basin
- Treaty on the Establishment and Functioning of the Joint Water Commission
- Bilateral Agreement Between Mozambique and South Africa
- Bilateral Agreement Between Swaziland and Mozambique
- The Tripartite Interim Agreement of 2002
- Tripartite Interim Agreement for Cooperation on the Protection and Sustainable Utilization of the Water Resources of the Incomati and Maputo Watercourses, August 29 2002

The basin countries have also signed the so called Progressive Implementation of the Inco-Maputo Agreement (PRIMA). PRIMA has a number of “Work Programmes” that the basin countries intend to undertake. Interestingly, Work Programme 2 and 9 are about the review of national water policies

and legislation and stakeholder participation, respectively. This development is in line with the SADC Policy , Strategy and Regional Action Plans.

11.4.2 Demographics and economics

Irrigation is the major water consumer in the basin followed by urban and industrial water supply, forestry, conservation (estuary and coastal area), livestock and game (Vaz and Pereira, 2000:102). According to Vaz and Van der Zaag (2003:23), the sectors providing the mainstay of the economy in the basin are agriculture and forestry. It is significant that both sectors are large water consumers, which justifies a basin perspective for analyzing economic development. In terms both of land and water use and of the economy, two crops dominate the basin: rain-fed commercial tree plantations (some 340,000 ha), and irrigated sugarcane cultivation (42,800 ha, excluding 10,800 ha in the Umbeluzi basin that is irrigated with Incomati water) and the related sugar industry. The table below summarises the consumptive uses of water in the basin excluding evaporation from dams:

TABLE 1: SUMMARY OF CONSUMPTIVE USES OF WATER (SOURCE: JIBS, 2001; IN VAZ AND VAN DER ZAAG, 2003)

Country	Domestic & Municipal	Industry	Livestock and game	Exotic tree plantations	Irrigation	Inter-basin transfer	Total	% water use
RSA	90	35	8	473	670	132	1408	78
Swaziland	6	1	2	46	48	135	238	13
Mozambique	3	11	1	2	150	0	167	9
Total	99	47	11	521	868	267	1813	100
%	5	3	1	29	48	15	101	

11.4.3 Hydrology

According to the Joint Inkomati Basin Study (JIBS) commissioned by the basin countries it is estimated the net virgin runoff of the Incomati river basin at 3,587 Mm³/a. In 2002 the estimated total consumptive water use was estimated to be around 1,800 Mm³/a, including consumptive use of exotic forest plantations meaning that total consumptive water use represented around 50 percent of the virgin runoff. Often this level of commitment leads to water shortages, given the high variability of flow, both within and between years (Vaz and Van der Zaag, 2003).

In the JIBS (2001) it is stated that about 80 percent of runoff occurs during the months November–April. Variations of discharge from year to year are significant, resulting in floods and droughts. Vaz and Van der Zaag (2003) note that during the four-year period starting in October 1991, average annual runoff at Ressano Garcia was only 12 percent of the long-term average measured over 1952–79, while “during the floods of February 2000, the Sabie River at Skukuza ... had a peak discharge of 3,500m³/s” (Vaz and Van der Zaag, 2003:9).

“The JIBS (2001) estimated that an average of 150 t/km²/a of soil is carried with the water annually, occasionally increasing to 450 t/km²/a. Surface water quality is generally adequate for the purpose of domestic and urban use after normal treatment. It is also suitable for irrigation. Groundwater occurs in sufficient quantities for large-scale development only in the dolomites of the Transvaal Sequence, the Barberton Greenstone Belt, the alluvium of the Incomati river valley in the Mozambique coastal plain (with an estimated rate of recharge of about 150 Mm³/a), and in the Aeolian sands in the east of the Mozambique coastal plain (recharge is about 29 Mm³/a)” (Vaz and Van der Zaag, 2003:9).

12. Appendix B: Summary of international experience per basin

Several cases are considered briefly here: the Nile, Lake Victoria, the Okavango, the Cureim/Quarai in South America, the Danube, the Murray Darling and the Pilcomayo.

12.1 The Nile Basin Discourse

When the Nile Basin Initiative was put in place in order to develop transboundary co-operation between riparian states, the Nile Basin Discourse (NBD) was set up to enable the voices of stakeholders to be heard in debates on the development of the Nile basin.

The NBD aims to promote broad-based and open dialogue and discussion on development in the Nile basin amongst all of the role players, including stakeholders and affected parties. The intention was to ensure that the voices of all of those dependent on the waters of the Nile could be heard, including the voices of the poor. The expectation in setting up the NBD was that it would contribute to the NBI's effectiveness through tabling non-government views on matters such as poverty, improving the livelihoods of basin residents, and instability and conflict in the basin (Kameri-Mbote, 2004).

The NBD has an International Steering Committee with membership drawn from all of the riparian countries, as well as a General Assembly also drawn from all of the riparian countries. It has a Secretariat based in Entebbe, Uganda close to the NBI offices. Each riparian state has a National Discourse Forum (NDF) which brings together stakeholders at the national level.

The process was not without its challenges, however, as many of the state actors were wary of involving civil society, largely due to the political sensitivity and uncertainty of the NBI process itself. Nonetheless, civil society was invited to the First Meeting of the International Consortium for Co-operation on the Nile (ICCON) and made a statement there on the importance of engaging stakeholders in the development of the Nile. And slowly, the understanding increased amongst government representatives of the benefits of bringing all stakeholders on board.

Other challenges that the NBD has faced include finding sufficient resources for the Discourse Desk and for the National Discourse Forums. The functioning of both the Discourse Desk and the NDFs has been limited because of limited resources. (Kameri-Mbote, 2004)

Issues of representation and process have also been raised, including the question of how to ensure that it is not captured by powerful groups. Other questions have included which sectors to involve (e.g. environment or development), how to empower local groups, and the appropriate legal nature of the NBD. A further challenge was whether the NDFs should seek their own funding when the Discourse Desk itself was struggling financially (Kameri-Mbote, 2004). The answer to this question is partly dependent on whether the focus is on the transboundary (supra-national) consultative process or the national consultative processes.

12.2 Lake Victoria Basin

The Lake Victoria Basin states developed a protocol for the sustainable development of the basin which makes specific provision for stakeholder involvement in the management and development of the Lake Victoria Basin. At the same time, each of the 5 East African Community (EAC) partner states has strong policy on stakeholder participation in development. Gender mainstreaming is also

enshrined in the various policies and protocols. The EAC has a long term development vision and strategy framework which was developed through a highly consultative process that involved all levels of stakeholders in the Basin.

The guiding principles in the East African Community Treaty also deal with the involvement of stakeholders in regional integration and development.

The Protocol makes provision for stakeholders to participate at the senior officials' level in the Commission. The deliberations and recommendations from this level are then considered by the Council of Ministers. The Commission has mapped the civil society organisations in the Basin in order to be able to easily identify who should be involved at what levels.

EXTRACTS FROM THE PROTOCOL FOR SUSTAINABLE DEVELOPMENT OF LAKE VICTORIA BASIN

http://www.lvbcom.org/index.php?option=com_docman&Itemid=102&limitstart=5

DEFINITIONS

“Stakeholder” means all persons, legal or natural and all other entities being governmental or non-governmental, residing, having interest or conducting business in the Basin;

ARTICLE 4 : Principles

- the principle of public participation whereby decisions about a project or policy take into account the views of the stakeholders;

ARTICLE 6 : Protection and conservation of the Basin and its Ecosystems

The Partner States shall take all appropriate measures, individually or jointly and where appropriate with participation of all stakeholders to protect, conserve and where necessary rehabilitate the Basin and its ecosystems

ARTICLE 22 : Public Participation

The Partner States shall create an environment conducive for stakeholders’ views to influence governmental decisions on project formulation and implementation.

ARTICLE 23 : Mainstreaming of Gender concerns

The Partner States shall promote community involvement and mainstreaming of gender concerns at all levels of socio-economic development, especially with regard to decision-making, policy formulation and implementation of projects and programmes.

ARTICLE 24 : Exchange of Data and Information

The Partner States shall also provide an environment that is conducive for facilitating collaboration in research and the exchange of data, reports and information among stakeholders belonging to Partner States in the Basin through the Commission.

ARTICLE 33 : Institutional Framework

The broad functions of the Commission shall be to promote, facilitate and coordinate activities of different actors towards sustainable development and poverty eradication of the Lake Victoria Basin in the following manner;

- b) promotion of stakeholders participation in sustainable development of natural resources;

ARTICLE 37 : Establishment and Composition of Sectoral Committees

The Partner States shall establish National Focal Points, which shall be responsible for coordinating national initiatives of the Lake Victoria Basin and share information with the Commission and other Stakeholders.

ARTICLE 42 : Functions of the Secretariat

1. The functions of the Secretariat shall be to: -
 - h) disseminate information on the Commission to Stakeholders and the international community;

12.3 The Okavango and Every River has its People (ERP)

The ERP is a stakeholder-based approach to managing the Okavango basin, looking at social, environmental and economic issues. The ERP worked with stakeholders and communities to develop a common vision for the basin and to agree on the roles and responsibilities of stakeholders across the basin, at all levels, in order to achieve the vision. The ERP vision for the basin is shared by Okacom, which enables the participation of stakeholders and communities in the “co-management and development of the basin, for enhanced livelihoods and sustainable development” (Monggae, pers comm. 2009)

The ERP was established independent of OKACOM by stakeholders and NGOs with significant donor support, rather than by Okacom itself, although it subsequently signed an agreement with Okacom.

The establishment of the ERP involved conceptualising the approach, consultation and partnership identification, and implementation. The process included community workshops, information sharing, production of materials such as pamphlets, booklets and a website, formation of a liaison group, and linking with relevant institutions such as OKACOM, Government departments, other NGOs and other initiatives.

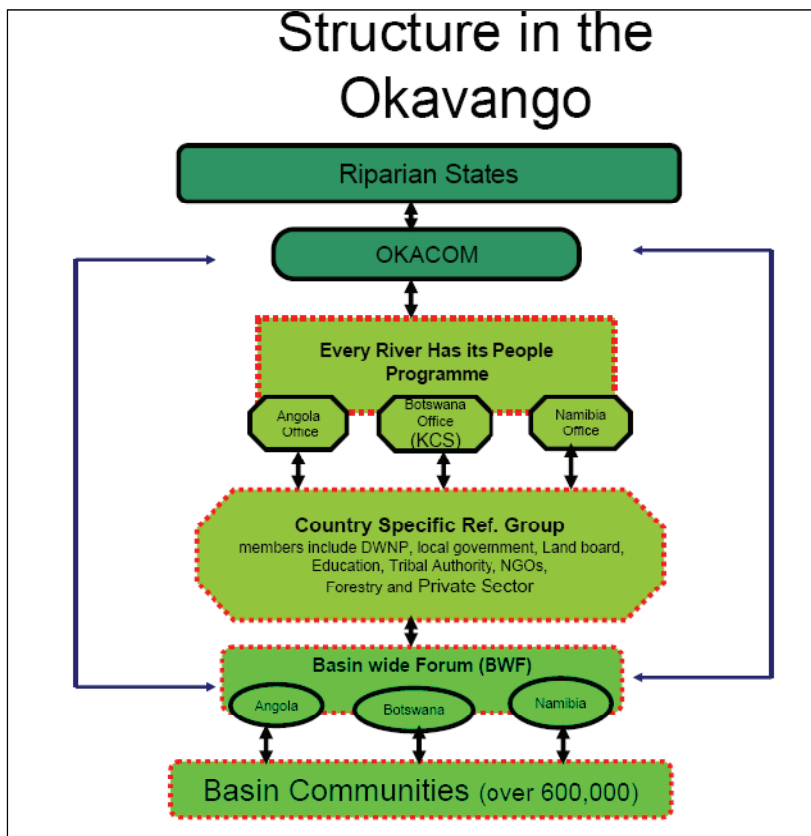


FIGURE 19: STAKEHOLDER STRUCTURES IN THE OKAVANGO RIVER BASIN (MONGAE N.D)

One of the key elements of the ERP approach was the establishment of a Basin-Wide Stakeholder Forum (BWF). The Basin Wide Stakeholder Forum (BWF) is established in each country at local-national levels. There are 10 representatives per country to the BWF, and 2 per traditional authority. Each country is expected to hold quarterly meetings, and basin-wide meetings are held twice a year.

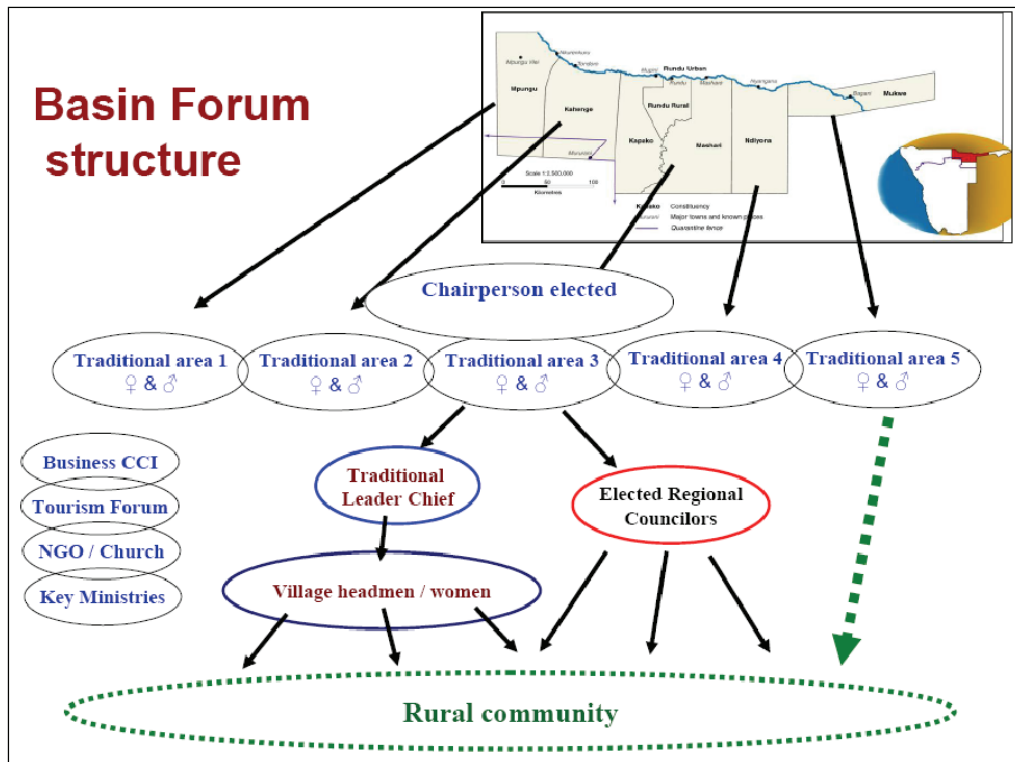


FIGURE 20: EXAMPLE OF A BASIN FORUM STRUCTURE IN THE OKAVANGO RIVER BASIN (MONGGAE N.D.)

The first BWF meeting with some Commissioners was held in 2003 to discuss roles and expectations. It was agreed that the chair of the BWF would attend OKACOM meetings, and the Forum would invite OKACOM representatives to its events. The Forum is expected to give feed back to stakeholders through the Traditional Authorities, village headmen and elected Regional Councillors, and through local radio stations where possible.

The BWF and Okacom Commissioners approved and signed a framework for engagement which enables the policy makers to take community views into account and enables communities to remain informed of Commission plans.

There are several other structures active in the basin, such as basin reference groups (technical groups at national level) and a Basin-wide Project Advisory Committee (BPAC).

The engagement of stakeholders requires strong horizontal and vertical communication. To achieve this, the ERP uses existing communication mechanisms where possible, such as traditional authority structures, village development and farmers committees, fisheries and forestry associations, cultural groups, etc. Co-management also requires strategic capacity building for all participants, including the commissioners, and a shared set of objectives and priorities which are not limited to purely water issues, but include development and livelihood issues. According to Monggae, “Wise use of the basin and all its resources is what is needed.”

Monggae is of the opinion that co-management between stakeholders and basin commissions offers “significant opportunities to contribute to a secure and prosperous future for the people and basin states involved, and for basin ecosystems.”

However, the existence of the BWF and the ERP process were halted by lack of funding after donor funds for the process dried up. There appear to be moves afoot to re-establish the process. This raises, however, the critical issue of the sustainability of stakeholder processes, which are often supported by donor funds.

12.4 The Cuareim/Quarai River Basin Experience

The Cuareim/Quaraí River is part of the La Plata river basin and forms the border between Uruguay and Brazil. It covers approximately 14 800 km², 45% in Brazil, and 55% in Uruguay. There are three key 'managers' in the basin: in Brazil, the state of Rio Grande do Sul and the federal government; and in Uruguay, the national government.

The political and administrative organisation of Brazil comprises the Union, the states, the Federal District and the municipalities. Rivers that flow through more than one state or serve as boundaries with other states/countries are ruled by the Union. Rivers within one state are ruled by that State. The Republic of Uruguay is a unitary country divided in 19 departments. The executive power is the sole national water resources authority in the country.

In Brazil, the Quaraí River Basin Committee was established in 2009 with representation of public and private members. The committee is concerned only with tributaries of the river (the main course is in the federal domain). The committee implements river basin policies, including all uses.

In Uruguay, the Cuareim Irrigation Advisory Committee has operated since 1980, with both public and private members. It is involved in collaboration and assessment related to management and convenes public hearings.

The Uruguayan-Brazilian Committee for the Development of the Cuareim river basin (CRC) was created as the responsible institution for the execution of the Treaty, which provided for one delegation from each country. The Local Coordinating Committee (CLC), with one delegation per country, was appointed in 1999 for implementation on the ground.

The activities of the Uruguayan Local Coordinating Committee are supported and financed by the Uruguayan CRC delegation. There is strong participation by delegates of public and private institutions, users and other stakeholders. The Uruguayan Local Coordinating Committee promotes and implements projects regarding management and protection of the resource (WMO/GWP, TwinLatin programme and others).

The TwinLatin Project defined a specific work package to stimulate public participation in the basin, aiming to ensure the development of a consistent and efficient structure for stakeholder involvement and the spreading of information. The participative activities of the TwinLatin programme include:

- The 'Taking care of the river day,' promotes the participation of all citizens, especially school children and students in collecting accumulated garbage,
- Capacity in water quality monitoring and environmental issues is built through open workshops to do *in situ* water quality analysis and gather samples by bi-national teams.
- Meetings have been convened with rice growers to conduct an assessment of the return of water to the river under different irrigation systems.

All information gathered and processed is presented for the consideration of the community.

12.5 Danube

An interesting approach taken in the Danube is that they have a number of observers that attend their commission meetings, such as Ramsar representatives, WWF, and local NGOs. The criteria for attendance include that the organisation must represent the interests of a large portion of the basin, and should not be from one country only, and that they must represent a significant constituency. The meetings are held in two sections – a closed session dealing with administration, finance and human resources issues, and a second part dealing with the water resources discussions and strategy issues, which is open to the observers. The observers can ask for permission to speak but are not allowed to vote on issues. According to Peter van Niekerk of the South African Department of Water Affairs, this brings immediate communication with a broader audience and allows the Commission to tap into them for information. In his discussion with the CE of the Danube Commission, the CE expressed the feeling that the benefits of this approach are significant (Peter van Niekerk, pers comm. 2009). However, it is not clear how such an approach would enable the voices of the poor and the marginalised to be represented at this level, since there are few regional development NGOs operating across borders, and it might result in giving space to international NGOs instead.

12.6 The Murray Darling experience

In the Murray Darling when it was a River authority (prior to 1985) only the water agencies were involved. After that the water, land and environment agencies were all actively involved and they were all included by law as part of the Murray Darling Basin Commission and the Ministerial Council. The legislation also required the Commission to establish a Community Advisory Council that had reported directly to the Ministerial Council. The intention behind this was to ensure that the Commission did not unreasonably “mute” the issues raised by stakeholders on major policy issues. The Commission also ran well structured engagement process to ensure that there were real forums for the community to put their views forward. However, according to Don Blackmore, former CEO of the Murray Darling Basin Commission, “this is a mixed bag as it often got “high jacked” by the noisy elements who might not represent the broader community view” (D Blackmore, pers comm. 2010).

12.7 The Pilcomayo experience

The Pilcomayo River offers a good example of how stakeholders and sub-national government structures can be formally engaged in transboundary river basins.

The Pilcomayo River, a tributary of the La Plata River system, one of the two largest basins in South America, is shared between Bolivia, Paraguay and Argentina. The basin has a total area of 68 000 km², 92.6% of which is in Bolivia. The river descends from 4000 m above sea level to 400 m, flows 1070 km, and forms part of the boundary between Argentina, Bolivia and Paraguay. In this section of the river, indigenous groups use the river water for consumption, fishing and cattle breeding. In Bolivia, water is also used for mining, irrigation and fishing. The river's principal characteristic is its fast flow rate, which transports enormous amounts of sediment, including heavy metals from mining operations, which changes the river's flow.

The history of international relations on the river is as follows:

- A tri-national commission was tasked with overseeing the Pilcomayo river basin.

- The Formosa Declaration was signed on 26 April 1994 in Formosa, Argentina.
- The Constitutive Agreement of the Comisión Trinacional de la Cuenca del Río Pilcomayo (Trinational Commission of the Pilcomayo Basin) was concluded on 9 February 1995 in La Paz, Bolivia.
- A financial project was agreed between the EU and Pilcomayo for River Basin Development on 20 July 2000 in Asunción del Paraguay.
- Addendum Nº 2 was signed on the EU Project and Pilcomayo Transnational Commission in September 2005.

The three countries have established the Pilcomayo River Agency, which has the following main components:

- The Delegates Council (Consejo de Delegados y Secretaria General de la Comisión Trinacional) comprising six members (two from each country – one from the foreign ministry and one from the water sector at national level). This is the highest decision-making authority of the basin agency.
- The Agencia de Cuenca y su Consejo de Administración provides technical assistance and administers the budget, one part of which comes from the three countries and the rest from international sources such as the EU.

Participation of all sectors in the basin is provided for in a Trinational Coordination Committee (Consejo de Coordinación Trinacional) in which each country has five members. Each country has its own coordinating committee. Argentina, for example, has a committee in which each province, national government and the indigenous people are represented.⁹

⁹ Dr Andres Rodrigues, National Director; Water Resources Undersecretariat of the Argentine Republic and delegate in the Trinational Commission for the Pilcomayo River Basin Development (Argentina), International Symposium on Stakeholder Involvement in Transboundary Basins, Pretoria, October 2009

13. Appendix C: Transcripts of Interviews Conducted

Interview with Peter van Niekerk (PvN)

22 April 2009

Interviewer: Barbara Schreiner

DWAF is not very good on engagement with other departments.

PvN is interested in the model used in the Danube basin where they have a number of observers that attend their commission meetings – representatives from institutions like Ramsar, WWF, and local NGOs. These observers must represent the interests of a large portion of the basin and should not be based in a single country only. They must have a significant constituency. The meetings are held in two sections – a closed session for dealing with administration, finance and human resources issues, and then the water resources discussions and strategy discussions which are open to observers. The observers can ask for permission to speak, but they can't vote. This approach brings immediate communication with a broader audience and allows the Commission to tap into them for information. PvN spoke to the CE of the International Commission for the Protection of the Danube River who said that the benefits are significant. PvN proposed this approach in Orasecom, but the idea didn't fall on fertile ground amongst representatives of any of the countries, including South African representatives.

Rand Water asked to be represented on Orasecom and this raised the issue that Orasecom needed a policy on how to deal with NGOs and other major stakeholders. They decided that the matter should be examined by the ES and a discussion paper put together on it.

There is a challenge of donors coming in with preconceived ideas such as saying that there should be a stakeholder committee for the Orange Senqu basin. Gavin Quibell has started writing up a proposal for a study on stakeholder involvement in transboundary basins. There are two different scenarios for participation, but the basin wide forum approach is favoured by donors.

The current model is that each country looks after their own stakeholder consultation, but this is very theoretical and it doesn't always happen like this.

In the Inkomati basin, he doesn't feel that the SA representatives on the TPTC are taking with them a view from Civil Society (CS) or an integrated government perspective. Sometimes only one commissioner attends commission meetings, and there is a real issue as to whether SA is serious about these commissions. It has even reached the stage where there was a question asked by Swaziland about this.

Currently, in terms of representation on the TPTC from South Africa, it is representatives from DWAF only. The purpose of the TPTC is to advise the parties on matters regarding water resources management, and co-operation and alignment between the parties. Many years ago this was done on a purely ad hoc basis between the foreign affairs components of the countries with some water officials attached. At a point it was realised that the issues were too technical and that the foreign affairs people couldn't contribute to the debates. As a result the structures were renamed Technical

Committees and created in a manner that the water officials could run them without going through foreign affairs. Later they turned into commissions after the revised protocol of SADC came about. But the Basin Commissions are not the same model everywhere.

Representation depends on the structure and governmental approach in each country. At the TPTC Swaziland generally had someone from Agriculture and Natural Resources on the delegation. In SA, the DWA representatives should be carrying the interests of the whole of government, but he doesn't know if there was ever a discussion with other departments.

There are supposed to be some committees that would support the process if they are working, such as the Provincial Liaison Committees, but these are not working properly in all the provinces. There also used to be an Agriculture and Water Liaison Committee (AWLC) between DWA and the Department of Agriculture, before agriculture became a provincial competency. This has been replaced by Co-ordinating Committees on Agricultural Water Use (CCAW) at provincial level. These are generally functioning and have almost taken over role of PLC in some of the provinces.

More recently, because of the Olifants infrastructure development which was a concern for the Kruger National Park because of downstream impacts on the park, DWA established a committee which meets 2 or 3 times a year with Parks Board representatives and to which the Department of Environmental Affairs (DEA) is invited. They have had a number of such meetings and although the DEA officials have not attended, the Parks Board officials are very active and they are good meetings. They are not only about the Kruger National Park, but also bring in people from other provinces to talk about the other national parks as well, including the transfrontier parks. This committee is still under construction and they now want to bring in DWAF regional Chief Directors (or representatives) as well. Discussions from this committee filter through to the TPTC not because of structural arrangements but because the same person attends this meeting and the TPTC technical committee sub-committee.

Also, as part of authorisation of de Hoop dam, DEA has to do a strategic environmental assessment of the Olifants basin, and will have to have strategic meetings with DWA and Parks Board officials on this.

Within the department, there should be a preparatory meeting prior to the TPTC meetings, but this doesn't happen every time. The International Relations section should also compile an annotated agenda but this doesn't happen every time either. The report back to the Ministers after each meeting also doesn't happen properly, partly because, for example, the Orasecom secretariat is not functioning properly and very slow on bringing out minutes so that the reports from International Relations in DWAF also take a long time to reach the Minister. This means that there is a long delay before the Minister can determine if there is anything to be taken to any of the other Ministers or government clusters. Foreign affairs only come into the picture when there is an agreement to be drawn up and in actual negotiations such as on Phase 2 of the LHWP.

There is no structured engagement between civil society and the IncoMaputo TPTC other than through specific projects such as the Maputo Basin joint assessment/basin study in which consultations took place with stakeholders in each of the three countries.

So, theoretically the arrangements are not too bad, but they are not functioning properly because of issues of capacity, priorities and the understanding of the representatives of the issues and their role and mandate. The best way to improve the situation is to make the current structures work. They are probably adequate, but the people are not sufficiently capacitated to do the work – it is a people problem, not a structures problem.

Interview with Ayenew Tesera 03/08/10

Ayenew is National Programme Co-ordinator for the Ethiopian National Discourse Forum (NDF). The NDF was established in December 2005 but did not become operational until June 2006 for various reasons.

The NDF has a general assembly, below which is the Steering Committee (SC), below which is the National Programme Co-ordinator's (NPC) office.

The NPC's office is linked to the NBD Programme Development, Monitoring and Evaluation Manager (a new post since May 2010). The NPC reports to the regional manager through this PDM&E manager and also reports to the SC at national level.

The NBD Board appoints the NPC through the national SC which is responsible for interviewing candidates and making a recommendation to the Board.

The NDF is a network organisation; at the national level they have members drawn from civil society organisations, NGOs, and mass based organizations such as user associations and women's associations; professional organisations such as teachers' associations are also members;

The General Assembly meets once a year – it was attended by about 40-45 members last year. The Ethiopian NDF has 50 active members (48 organisations and 2 individuals); both individuals and organisations can be members;

The NPC's office in consultation with the SC chairperson decides what is to be discussed at the GA.

SC members serve a 2 year term of office with the possibility of one term of re-election. They are elected by the GA. The current SC has members from NGOs, CSOs, and 2 individual members in their personal capacity.

The private sector is not represented on the SC; and is not included in the membership. Principally, they don't exclude the private sector but have not worked a lot to include them more actively. Membership of the NDF is open and growing, and they hope to be able to bring in the private sector and other new members on board

In terms of representation of women, on the SC there are 1 woman and 8 men. In the GA there are many female representatives.

Over the past four years the NDF has been:

- focused on awareness raising because the issue of the Nile was obscure and was considered as only being on the agenda of politicians and decision makers, and the public were not aware of the activities around the Nile. This was the core focus of the NBD/NDF at national and regional level;

- doing research and dissemination of the results;
- doing capacity building of members so that people can be effectively involved in decision making processes
- doing knowledge and communication work, including opening a resource centre.

The organisation is still too young to decide what has worked well or not, but relatively speaking the awareness raising activities, compared to others, are being done well. They have been organising conferences, workshops, public debates, across the country, particularly within the basin. This is one of the areas which he considers relatively successful.

Sorry Barbar, DFID has done the M&E , please see the presentation on the M&E result...I have attached it to you....At the start they didn't do monitoring and evaluation to measure what changes their activities had actually resulted in, so it is difficult to say what changes have come about because of the NDF or the NBD. But he feels that now most of public is aware that the 10 countries are working together on the Nile and the public now has some sort of awareness about the fact that the Nile will no longer be a source of conflict. But of co-operation

The NDF has been funded by DfID and is funded by it for the next two years. After that they will have to look for other funding sources.

The biggest challenge is the lack of manpower and financial resources. It is because of resource constraints that activities and impacts are limited such as limited coverage and frequency of meetings.

The NBD GA meets once a year and is attended by 3 SC members from each NDF – the chair and two others. Ideally, the NDF GA should take place before basin GA so that they can discuss in preparation for the basin/NBD GA. In reality, however, sometimes they know what is to be discussed at the basin GA and can discuss it at the NDF meeting, but they don't always get the agenda in time. When this happens, the agenda is given to the representatives who will be attending the NBD instead.

The SC chair reports back in written format from the NBD GA to the NDF.

There has been a strong donor influence on the structure of the NBD/NDF. The proposal by all NDFs was to have strong NDFs with adequate staffing, strong sub-national chapters and a broader constituency base with a very thin staff at the NBD secretariat level. But the donor interest has been the opposite: very strong staffing at the NBD secretariat level, thin staffing at the NDF level (only the programme coordinator and the assistant), and no budget for strengthening the sub-national chapters at national levels. The donors' opinion has been that since NBD is a transboundary organization, it has to focus on transboundary issues and for that it needs strong staffing at the NBD level. Our argument has been that NBD is the aggregate of the NDFs and all the transboundary issues have national origins. Unless national issues are well addressed and articulated, it is very difficult to address the transboundary issues and challenges.

As far as the annual budget is concerned, we don't have a uniform and predictable budget. So it is hard to speak about an annual budget.

Interview with Alan Nicol 03/08/10

There are always broader challenges in stakeholder engagement such as the possibility that it can be reduced to an absurd level of tokenism.

The NBI process did generate a structural change in thinking around the NBI and stakeholder engagement, but whether this means that stakeholder views actually influenced decisions on projects, such as siting of infrastructure development etc is a moot point. It is possible to have lots of meetings and paper agreements, but the practice of actually changing projects and how this impacts is still an open argument – it is difficult to measure this kind of impact.

What did have an impact is that Alan Nicol, working for the Nile Basin Discourse, systematically put together a database of all stakeholders on line and geo-referenced it for all basin countries and marked what the various stakeholders interests were. This was made available to donors and decision makers. It provides an inescapable source of information to people about who they should be consulting with and may have shifted thinking a little about the need to engage stakeholders. It was completed in 2009, although it is less complete as a database than was intended; it has been given over to the basin organisation to keep it going and to keep it updated. He is not aware of any examples anywhere else in the world of this being done, but feels that it is a vital starting point for doing the job properly;

In the NBI process there is a challenge of civil society mismanaging itself or acting as gatekeeper and trying to hold donor funding for themselves; some processes are prone to the dominance of certain individuals who manipulate them. He feels that this has happened at the country level. He also feels that some of the NDFs are run by people who are dysfunctional or serving their own interests.

The governance structure of engaging civil society is incredibly important. Under the NBI, the governance structure wasn't well developed and allowed particular people to dominate. There is a need for strict term limits and limits to executive powers of individuals and processes to remove people who are not delivering or who are using the system for their own interests.

The process has raised the awareness of the need to involve civil society but he is not sure how this has actually impacted on the way things are done.

Alan Nicol also set up a social development office in the NBI to institutionalise social assessment of projects and programmes which involved stakeholders to some extent and considered stakeholder issues. He feels that this has gone quite well. It is now run by Wubalen Fekade.

The context for stakeholder participation across the basin is not good. The Ethiopian government is clamping down on civil society; the Egyptian government still has emergency powers; and freedom of civil society and the media is quite limited in a number of the countries. Kenya, Tanzania and Uganda are the most lively participants, but their engagement tends to be dominated by the same people, who also dominate other water-related processes and structures.

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