



NeWater

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REGIME ANALYSIS
ORANGE-SENQU BASIN**

Emerging river basin organisation for adaptive
water management

Report of the NeWater project -
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Uncertainty

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Policy Summary

This report was produced as part of the case study work on the Orange river basin in the context of the work package on transboundary regimes. It focuses on the institutional development of ORASECOM as the international river basin commission for the Orange-Senqu river. The report serves two main purposes: mapping of the regime type and gap analysis in terms of the adaptiveness of the transboundary regimes as well as an assessment of the potential for transition of the water governance system in the Orange-Senqu towards more adaptive management practices.

Regime type and gap analysis. Water resources management in the Orange basin has been determined by a largely technocratic and in many cases top-down approach, reflecting the past approach to water resources management in South Africa. Before the establishment of ORASECOM, water-sharing arrangements between the riparian countries were mostly focusing on the water needs for industrial uses (energy provision, agricultural production). It was only with the new water law in South Africa that also induced a paradigm shift in the entire basin, while this has not been implemented at the basin scale yet. While the creation of ORASECOM and its subsequent operationalisation provide an important foundation for further changes and improvements, still severe challenges lie ahead, as for example the participation of stakeholder groups as well as questions pertaining to the financing of water resources management at the transboundary scale.

Uncertainties for water management at the transboundary scale clearly arise from marco-level: evidence of climate change in the basin is paramount. However, there is considerable uncertainty as to how these developments should be dealt with. In many instances, technological fixes are suggested in order to meet continues drought periods. These are however not supported by all stakeholders in the basin. Probably the most promising recent development with regards to other sources of uncertainty is the compilation, generation, and exchange of information. A series of initiatives, mainly connected to the bilateral agreements and to donor projects, have provided impulse to the generation of information and its standardisation.

In general, there seems to be significant political backing to transboundary cooperation in the four riparian countries, expressed for instance in the creation of the various RBOs. Government support has however been more reticent in matters related to funding. The commission has basically relied on donors for the funding of its studies, and this poses the question of the sustainability of current efforts in the long term.

Despite rather positive developments in some areas, the commission is struggling with some serious challenges. Capacity within the commission as well as in the water administration of the individual countries is limited and in some cases seriously threatened with capacity leaving the region, and of an inadequate amount of trained people in the first place. While donors constitute a very important actor in transboundary water management in the Orange basin, their role is not uncontroversial. They are accused of only being interested in short-term involvement, with fast results, whereas the regional situation, and the fact that the resources of the local counterparts (e.g. departments of water affairs) are often limited, frequently do not allow for fast project development. Another frequent criticism of donor involvement is that they are hard to move from their own agendas, and often do not show the capacity to listen to local requirements; this would be caused by their own institutional characteristics.

Potential for transition. Overall, the international discourse on IWRM and adaptive water management is being taken up in the Southern African region, providing for a common framework of reference at the Marco-level. Focussing on ORASECOM as an institution, which might be in a position to host or trigger a transition towards more adaptive water management the following statements could be derived from the interviews conducted in the basin.

On the more technical level, most local actors see an important possible role for the commission in the area of information management. Up to a certain point this subject is already being addressed by the commission, both due to the efforts of its Interim Secretariat, and due to the current interaction the commission has with donors.

Another area where ORASECOM is almost universally seen as having an important role to play is donor coordination. The institution is seen as an ideal entry point for donor activities; it would ensure adequate added value, relevance, feedback, and quality control of the projects. This role would tie up neatly with its role in information management: being the “hub” of information on water management in the basin would put it into an ideal position to provide information and judgement on the relevance of planned donor activities.

The latest developments in fields such as water management and environmental monitoring, experiences of relevance in other river basins, etc., could be received and propagated by the commission. The transboundary perspective would be integrated in any analysis of the implications of the latest developments; the fact that commissioners are very senior water managers in their respective countries would also guarantee the possibility of diffusion of the results obtained. This, coupled with the expected stakeholder component of the commission, could imply a significant contribution to the social learning processes required in adaptive management.

Stakeholder participation is another area in which local actors see possibilities of significant involvement on the side of ORASECOM. Several of the actors interviewed also placed emphasis on the need for establishing benefit-sharing mechanisms, not only between the countries, but also between stakeholders, e.g. for the agricultural population of Lesotho now being handed the task of avoiding erosion.

Taking a broader look at the prospect for the cooperation among the riparian states in the Orange basin under the impact of climate change, one could argue that due to the “closed” nature of the basin, any change that severely impacts the availability of water resources in the basin could, in theory, cause a retreat of the member states into their spheres of sovereignty. Although the effects of changes in the availability of water resources, such as those derived from climate change, have received much attention from external researchers, local expert opinion concerning the probability of this kind of scenario judges it to be very small. In spite of the system’s “closure”, all its other elements work against a result of this type. On the one hand, the degree of cooperation and trust among the member states is developing strongly. Current cooperation could even result in the building of (more) common infrastructure in the future, according to some predictions. On the other hand, particularly in the case of South Africa, which covers by far the largest area of the basin, their massive water infrastructure is in place, which is managed very conservatively (due to its centrality for the economy of the whole country). This infrastructure does not correspond with current ideas of sustainability and adaptability, but it does provide an impressive buffering capacity and the capacity to adjust to changes in the seasonality of rainfall. As a consequence, long-term changes in the availability of water resources, such as those that could be a consequence of climate change, would probably not hinder the cooperation over water resources in the river basin, whether or not this entails a more adaptive management of water resources in the long run.

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1 Introduction

Water management in transboundary river basins is often a highly complex and contested matter, due to a variety of reasons. First, asymmetries in terms of power positions between different riparian states exist and are played out at the transboundary level. Second, issues leading to conflicts with regards to water management occurring on local levels are aggravated at higher levels, as here relevant actors are faced with increased uncertainties regarding management options and water management strategies.

These uncertainties derive to a large extent from the main challenges in water management - water pollution and scarcity - irrespective of the level at which they occur. It has been shown over the past years that these problems are by no means static, but occur in inherently complex and dynamic systems, which are increasingly driven by global environmental change, not only influencing water resources management, but rather the earth system as a whole. Important drivers in this context include climate change and population dynamics, as well as economic factors.

While Integrated Water Resources Management (IWRM) has been established as the leading management paradigm for addressing these challenges in water resources management, the success and effectiveness of IWRM is highly contingent on the adaptive capacity of the system itself as well as the implementation of adaptive management practices.

Assessing the adaptive capacity of transboundary systems, one would argue that the ability of such complex systems to effectively adapt to changing conditions is constrained due to the following factors:

- aggregate and diverse water management problems,
- multitude of different actors at various governance levels, representing a wide range of stakes to be considered for IWRM,
- lack of trust among riparian countries,
- limited information regarding water status and possible management options.

A solution that addresses at least in part these water management challenges has been the formation of transboundary water management institutions, most of them river basin commissions, which in the best case create a forum for the interaction of representatives from all riparian countries at the transboundary level. Especially in the developing world, however, these river basin commissions are under-capacitated and severely dependent on support of the donor community.

In this context, the question that also arises relates to which extent the broad participation of non-state actors could have a positive impact on policy outcomes in terms of increased adaptive capacity and resilience of water resources management systems at the transboundary level.

This report takes a closer look at the emerging governance structures in the Orange-Senqu River Basin in Southern Africa. It provides for an in-depth analysis of the past processes that lead up to the creation of a river basin commission as well as the inherent obstacles but also opportunities for adaptive water resources management in future. Particular focus is placed on the emerging participative structures at the international level and the role of donor organisations in shaping the institutional structures for transboundary water management in the region. Based on this description, the report poses the question of which might be promising entry points for further efforts, as well as commendable avenues to follow, with view to increasing the adaptive capacity of this important river system; it also asks where major challenges might be encountered due to limitations encountered in the Southern African governance environment.



The report is structured as follows. After a description of the evolution of the hydro-political background leading up to the creation of the river basin commission, the current institutional set-up of the Commission is presented. In the analytical section of the report, a SWOT analysis of ORASECOM with view to its potential for facilitating adaptive water management is conducted.



2 The way towards co-operation: Why and how ORASECOM has been established

This chapter aims to present the drivers of the process leading to the formation of the Orange-Senqu Commission, the historical background to this process, as well as the concrete developments related to its creation.

2.1 Evolution of the political background

The southern African region, in theory an extremely water-rich region, presents a highly uneven distribution of its water resources. As a consequence, in some of its countries water scarcity has been a historical issue; in other countries of the region (or in parts of them), water scarcity has recently become an issue or is in the process of becoming one. The situation of these countries also presents consequences for their water-rich neighbours: infrastructure involving the transfer of water, both within basins and between basins, and which in some cases crosses borders, has been developed, implying varying levels of commitment to these transfers on the side of the water-rich providers. It is highly probable that additional large-scale transfer schemes will see the light of the day in the region (e.g. Heyns, in Turton and Henwood (Eds.), 2002; Turton, 2003).

The issue of water scarcity is compounded by that of the seasonality and high variability of the rainfall in some areas of the region. Large areas experience regular and extreme droughts; accordingly, water resource availability is often unpredictable (Ashton and Turton, in Wirkus (ed.), 2005).

2.1.1 Water resources and developmental issues

As a consequence of these patterns of water distribution, the potential of water resources scarcity to represent a bottleneck for economic development has long been manifest in the region. South Africa's huge Hydraulic Mission, which developed major water infrastructure particularly in the 1960s and 1970s (Turton, in Nakayama (ed.), 2003), was a response to these issues, among others. Estimates carried out at the end of the 1990s indicated that several southern African countries were approaching levels of water stress or water deficit that would hinder further development; more recent estimates indicate that several countries of the region would exceed the limits of their internally renewable and economically usable, land-based water resources before 2025 (Ashton and Turton, in Wirkus (ed.), 2005).

In addition to the relationship with economic development, the relationship between water resources and social development and between water resources and the environment has been foregrounded in the last few decades. Developmental discourse has emphasised the link between water resources and development in the broadest sense of the word; in a nutshell, "water scarcity in arid regions impedes social and economic development and is linked to the prevalence of poverty, hunger and disease" (Ashton and Turton, in Wirkus (ed.), 2005). Regarding the environment, both the knowledge concerning the interaction between water and the environment and the recognition of the importance of the environment (including its importance for development) have grown significantly in the last two to three decades. Recent research also indicates that, for the same levels of poverty, the difference between a reasonable quality of life and the impossibility to subsist can be provided by a functioning ecosystem (Turton; personal comm., 2006).

Development is a matter of paramount importance for the region's countries (reflected for instance in the programmatic name chosen for the *Southern African Development Community*), including South Africa, which in spite of having the by far most developed economy of the region faces serious issues of inequality and distribution of its resources.



Some research sustains that there is evidence to show that water scarcity has a significant impact on the economic growth potential and social stability of the four Orange Basin riparians (Turton, 2003).

The central issues confronting the countries of the region include guaranteeing resource availability for basic human needs, dealing with increasing population numbers, increased industrialisation and mechanisation, and the increased water consumption associated with an increasing quality of life (Heyns, in Turton and Henwood (Eds.), 2002).

2.1.2 National and regional political developments

The recent political history of the southern African region has had a clear influence on its national and regional approach to water resources management (Ashton and Turton, in Wirkus (ed.), 2005). The end of the Cold War and the attainment of political independence of all the countries in the region paved the way for social and economic reforms; particularly important in this context is the reform process in South Africa since its first democratic elections in 1994, which includes a thorough reformulation of its water policies and legislation. The other riparian countries also initiated reform processes of their water sectors; this coincided with global water sector reforms (Ashton and Turton, in Wirkus (ed.), 2005).

As well as the social and economic reforms brought about as a consequence of the end of the Cold War and political independence, regional political dynamics have also been fast to emerge. The origins of the *Southern African Development Community*, SADC for short, actually predate these developments: they go back to 1980, when its original aims included to provide a common front against Apartheid South Africa. It was only after the abolition of Apartheid that it became possible for South Africa to enter the regional political structures, as part of the process of resuming its position among sovereign states. Since its admission, South Africa has been successful in reducing the distrust with which it is perceived, motivated in part by its being the regional hegemon (Turton, in Nakayama 2004).

Currently, the southern African region, as other regions in the world, is undergoing a process of regional integration. Created with the aim of furthering development, the 14 countries that make up SADC (which include the four countries in which the Orange Basin lies) aspire to attain an “integrated regional economy on the basis of balance, equity and mutual benefit of all the States” (Heyns, in Wirkus (ed.), 2005). SADC is considered a relatively well-established regional organisation (Böge and Turner, 2006). Among the major subjects being addressed within the community is the development of common infrastructure, particularly in the energy and transport sectors. The cooperation among the countries regarding transboundary water resources should thus be seen in the context of increased regional integration, in which good neighbourliness has an important value in and of itself, and in the context of the integration of other sectors, with the corresponding possibility for trade-offs (Heyns, in Turton and Henwood (Eds.), 2002). The importance assigned to shared water resources in SADC can be gleaned from the fact that the first protocol of this regional bloc was the *SADC Protocol on Shared Water Resources*, signed in 1995.

Another regional initiative of relevance, in this instance on a pan-African scale, is the New Partnership for Africa’s Development (NEPAD), a pledge by African leaders signed in October 2001, whose targets include achieving sustainable development. The Water and Sanitation Sector’s objectives include to manage water resources to become a basis for co-operation and development, and to co-operate on shared rivers among member states. Also recently created is the African Ministerial Council on Water, founded in 2002 as part of the African Union framework (Böge and Turner, 2006).



2.1.3 Changing approaches to water resources management

The last couple of decades have also seen an evolution towards new management paradigms for water (e.g. IWRM) and of institutional structures to implement these new approaches (e.g. RBOs). This evolution has been mirrored in global as well as regional efforts aimed at creating legal frameworks that incorporate these developments. In addition, important efforts have also addressed questions of principle in the water management of international river basins, with their asymmetrical access to and power over the resource. These principles and legal frameworks have achieved widespread international backing, have been explicitly recognised by countries and institutions involved in international river basins, and often serve as basis for decisions and negotiating positions in transboundary water management. In the following, these institutional and legal developments will be briefly analysed.

The origins of current legislation regarding allocation and sharing of transboundary water resources go back to 1970, when the General Assembly of the UN commissioned the International Law Commission (ILC) to draft principles for the non-navigational uses of transboundary waters. Draft articles were completed in 1991 and submitted to UN member states for comment. In May 1997, the *UN Convention on the Law of the Non-Navigational Uses of International Watercourses* was adopted, taking up several of the principles enshrined in the Helsinki Rules (developed by the non-official International Law Association (ILA) in 1966), which are seen as its predecessor and are often referred to (Eckstein; in Turton and Henwood (Eds.), 2002).

The UN Convention enshrines three core principles of international water law: the principle of equitable and reasonable utilisation, the obligation not to cause significant harm, and the duty to cooperate with co-riparian states. Two other principles derive from these: the principle of prior notification (co-riparians have to be notified of any planned water-related projects by neighbours) and the rule of no objection (if co-riparians do not object, the project may be implemented) (Böge and Turner, 2006). Even though the Convention has not yet entered into force, its principles were recognised in the *SADC Revised Protocol for Shared Watercourses*; this subject is treated in more detail in Chapter 2.2.2.

The UN Convention has a framework nature, is intended to be flexible and open to a degree of interpretation, and is designed to accommodate the development of more specific bilateral and multi-lateral agreements related to the use, management and preservation of transboundary water resources. It includes compulsory provisions for the settlement of disputes. The Convention does not affect existing agreements but encourages parties to such agreements to consider harmonising them with the basic principles of the Convention. It also calls on states to apply the Convention's principles in bilateral and regional agreements (Eckstein; in Turton and Henwood (Eds.), 2002).

This growing international consensus regarding the principles of transboundary water management, the growing acceptance of integrated water resource management (IWRM) and of participatory approaches in water management, and the view of the river basin as the natural unit for water management have incremented the support for basin-wide institutions to manage water resources. Basin organisations have been a success in many basins, both at the transnational and subnational levels; some examples include Lake Geneva, the Rhine, the Senegal, and the Mekong. As a consequence, the international community is backing the establishment of these organisations as a way of setting these principles into practice. As in most other regions of the world, southern Africa's efforts regarding transboundary management of water resources have used these precedents.



2.2 Establishment of the Commission

2.2.1 Interests and issues in the river basin

Joint work on water issues in the Orange Basin significantly predates the formation of the Orange-Senqu Commission (established in the year 2000). The idea for the Lesotho Highlands Water Project dates back to the 1960s, and follows the spirit of this era in the development of water resources in South Africa: huge infrastructure focussing on water-supply, including an important water security component. The *Agreement on the Lesotho Highlands Development Project* was signed between South Africa and Lesotho in the mid-eighties; it has since suffered amendments. In 1992 South Africa and Namibia signed the *Agreement on the Establishment of a Permanent Water Commission* (PWC) (plus its related *Agreement on the Vioolsdrift and Noordoewer Joint Irrigation Schemes* (VNJIS)). These are the most consequential agreements in the basin; of less practical significance are the agreements that created the *Joint Permanent Technical Commission* (JPTC) between Namibia and Botswana, and the *Joint Permanent Technical Committee* (JPTC) between South Africa and Botswana. These agreements are still in place and valid; they have not been limited by the agreement that created ORASECOM, but rather have become part of it. The agreement that created ORASECOM does not exclude the possibility of new bilateral agreements being signed between riparian countries (Wirkus and Böge, 2005).

The fact that the interests expressed in the commitments made in the two main bilateral agreements are so to say “settled” is of central importance for the subsequent establishment of ORASECOM. An analysis of the different interests in the Orange Basin must take as a starting point the fact that the basin is approaching “closure” (a river basin with no utilisable outflow, which implies that the abstraction, transfer and use of water upstream renders that water unavailable for further use downstream (Turton, 2005)), and that water scarcity is an issue for all of the countries in the basin, including water-rich Lesotho.

By the mid-nineties, the time by which the idea of a river basin commission for the Orange-Senqu river had begun to find acceptance among the four riparian countries, South Africa had secured its main strategic interest through the development of the Lesotho Highlands Water Project (LHWP) in Lesotho. (This interest, which is sustained both by South Africa and Lesotho (in spite of the widespread problems generated by the project, it has often been called a “win-win situation”), could actually be expanded in the medium term: currently a full feasibility study for Phase II and further phases is underway, backed by both governments involved.) This fact, coupled with the process of regional integration already outlined, meant that South Africa was able to adopt a wider definition of the water problem which did not centre exclusively on its own interests. This meant that in spite of South Africa’s hegemonic status both in the region as within the Orange basin, non-hegemonic states (such as the other Orange riparians) could maximise their respective positions. Because the ORASECOM Agreement did not limit the bilateral regimes already in place but rather incorporated them, South Africa did not give up all of its hegemonic status by agreeing to become part of an international basin organisation (Turton, 2003). South Africa’s interests regarding water allocation do not limit themselves to the LHWP; it faces water scarcity in most of its regions.

Even water-rich Lesotho, which in spite of its tiny proportion of basin area provides more than 40% of its runoff, is facing limitations regarding water resources. As an upstream riparian, it faces the question of how much water (as well as the “how” and the “where”) it delivers to downstream South Africa. On the one hand it has entered into a series of water-transfer commitments with South Africa, which could expand in the medium term (see above). On the other hand, it faces the challenge of securing water supply for its population (Tau, pers. comm., 2006). The Lesotho Lowlands Water Programme, which corresponds to a series of water development projects to meet inter alia the demands of part of the capital



Maseru, the university, and other towns, is being developed and could be soon approaching its first stages of implementation.

The Namibian interests in the basin relate to the use of water in the lower reaches of the Orange, mainly for irrigation purposes. The agreements achieved with South Africa establish water volumes that Namibia can extract from the river. South Africa's policy insures that agreed allocations for downstream countries should be respected, but this raises the definition problem of "equitable sharing", which the basin countries adhere to. According to Turton (in Nakayama, 2004), "the indisputable facts are that South Africa has most control over the Orange River, and that Namibia is the hardest hit".

Due to Botswana being an upstream country and it not contributing surface run-off to the Orange (thus neither entitled to a certain volume of water nor having obligations regarding downstream riparians), Botswana is a legal riparian country in the ORASECOM, a situation which could produce coalition-building in return for concessions in other areas of strategic interest for Botswana (Turton, in Nakayama 2004). These include access to water resources from other basins, e.g. through interbasin transfers.

There is a certain level of disagreement on the degree of "closure" of the basin and on the availability of additional, "unassigned" water resources in the basin, a discussion which only affects (at least directly) South Africa and Namibia. The gist of South Africa's position is that the very heavily regulated system cannot provide additional water, whereas Namibia's position is that there are additional resources that could be utilised (van Niekerk, pers. comm. 2006; Heyns, 2004; Heyns, pers. comm. 2006). Baseline studies being carried out at the moment could affect these appreciations, and possibly close somewhat the gap between them.

This section has focussed on the issue of water allocation between riparians in the basin, an issue to be seen in the context of the related developmental issues and water scarcity in general (Chapter 2.1.1); these interests are fundamental for an understanding of the issues in the basin. Nevertheless, over the space of the last few years other water management issues, not necessarily national in character, have been progressively gaining importance in the basin. Environmental aspects, including the need for an "environmental flow", are increasingly central; this reserve flow is incorporated for instance in South Africa's water legislation. Other issues, including some related to IWRM implementation such as public participation, are also gaining acceptance. A discussion of some of these other issues is presented in Chapter 3.4, Issues for transboundary management.

In addition, it has to be remembered that the national interests are part of a larger picture of a regional drive towards integration; as such, the generation and maintenance of good will and trust and the interplay of the water sector with other sectors are also of central importance.

2.2.2 Commission history

The process that culminated in the creation of the ORASECOM was initiated and promoted by the downstream riparian Namibia (Heyns; in Wirkus (ed.), 2005 (Piet Heyns was over many years a commissioner in the Namibian delegation to ORASECOM); Turton, personal comm., 2006). (Namibia, which has an extreme shortage of water resources, was also the main driver of the process of creation of the OKACOM, the Okavango RBO.) Namibia's government was aware that the PWC was only a bilateral agreement and that the arrangements between Lesotho and South Africa on the LHWP were beyond its scope. Of particular concern to Namibia were the transfers of water to and from the Orange basin in South African territory, and the effects that these could have on water availability downstream. Through the PWC Namibia proposed the establishment of an Orange River Basin Commission which would include all four riparians; a draft agreement was submitted to the PWC for further consideration and discussion in 1993. The issue was tabled again in a meeting of SADC water ministers in Cape Town in mid-nineties, where it found the political



will for implementation. This proposal was followed by lengthy negotiations, mostly influenced by the political transformations in South Africa starting after 1994, up to the establishment of the Commission in November 2000 (Heyns, in Wirkus (ed.), 2005).

At the same time SADC had identified international waters as an important area for action; the recognition is related to the linkage between water resources and development that received increasing attention during the 1980s and 1990s. Discussions regarding a protocol on shared water resources were initiated in 1991; the *SADC Protocol on Shared Water Resources* was signed in 1995, the first SADC Protocol to see the light of day. It was later modified in view of the *1997 UN Convention on the Law of the Non-Navigational Uses of Shared Watercourses* (Heyns, 2004). The *Revised SADC Protocol on Shared Water Resources* was signed by the SADC countries in August 2000 and entered into force during 2003. It seeks to promote and facilitate the establishment of shared watercourse agreements and shared watercourse institutions. As well as the recognising the principles enshrined in the UN Convention and the Helsinki Rules, it also recognises the principles of unity and coherence of each shared watercourse, as well as Integrated Water Resources Management (IWRM) as a guiding principle of water management. Signatory states “shall exchange available information and data”, concerning hydrological, environmental, etc. parameters of the shared watercourse (Southern African Development Community, 2000). The protocol provides objectives, general principles and specific provisions that reflect best-practice concerning shared watercourse legislation; it expressly addresses conflict-resolution between member states, detailing in a reasonably specific way the procedures to be followed when problems arise. Even though the 1997 UN Convention has not yet entered into force, the four countries of the Orange are signatories to it, and the Convention’s principles are incorporated into the Revised Protocol; this means that the principles outlined in Section 1.1.3 are recognised by all Orange riparians. As well as developing the Revised SADC Protocol and a *Regional Strategic Action Plan for Integrated Water Resources Development and Management (RSAP-IWRM)*, the SADC established the SADC Water Division.

The initiative for the establishment of the Commission, tabled by Namibia at a meeting of the SADC Water Ministers in Cape Town in 1995, found South African backing, specifically through the South African Water Minister Kader Asmal (van Niekerk, pers. comm., 2006; Heyns, pers. comm., 2006). Independently of the differing interests the countries have in the basin, there was a general recognition that it made sense to treat several issues at the basin scale (van Niekerk, pers. comm., 2006). After a long period of discussions and negotiations, influenced mainly by the political transformation of South Africa since the achievement of democracy and by the progressive developments of the water sector in southern Africa, the Commission was created in the year 2000 (Heyns, 2004).

Considerable support for the establishment of RBOs in the region came from SADC and its Water Sector. Some versions of the Commission’s history actually see SADC, and the process of regional integration, as the main driver behind the creation of ORASECOM, not altogether unjustly (Katai, pers. comm., 2006; Tabet, pers. comm., 2006). The regional framework was definitely propitious and supportive of these developments, and a huge amount of political will was behind the creation of the commission (Katai, pers. comm., 2006). In addition, the region had the example of a commission, the OKACOM, functioning since 1994; after the creation of ORASECOM several other commissions have been formed. The regional experience in the matter was definitely of great value for the functioning of ORASECOM (Earle, pers. comm., 2006).

As has already been mentioned, the creation of a multilateral commission on the Orange implied for South Africa giving up of some of its hegemonic status (but, due to its main interests being previously secured, not all of it) (Turton, 2003). Due to South Africa’s regional importance, economic development and geographical position in and share of the basin, a maintenance of its previous approach to water management in the Orange, which some argue was a divide-and-rule approach (Heyns, pers. comm., 2006), would have meant



maintaining more power. It has to be remembered, though, that the context is one of regional integration; in addition, South African negotiators could also have had the intention of distancing themselves from Apartheid stigmatisation and its hegemonic practices (Turton, 2003).



3 Current institutional set-up of ORASECOM

This chapter analyses the attributions and the present functioning of ORASECOM, discusses some aspects concerning its governance, such as public participation and policy integration, and rounds up with an analysis of information management and of the role of donor organisations in the basin. The chapter will focus on the hard facts available; an evaluation of the commission's functioning is given in subsequent chapters.

3.1 Present functioning of the Commission

The agreement that established ORASECOM was signed in November, 2000. It assigned the institution the character of an international organisation with international and national legal personality (Heyns, 2004). The agreement acknowledges the Helsinki Rules, the 1997 UN convention and the SADC Water Protocol.

In addition to a clear commitment on part of the SADC states regarding the principles of transboundary water management as expressed in the above-mentioned agreements, SADC members are also committed to the principles of IWRM (see Regional Strategic Action Plan on IWRM (RSAP – IWRM), I and II). The agreement that established ORASECOM makes explicit some of these principles: the parties commit themselves to the exchange of hydrological data and to the notification of “any project, programme or activity with regards to the river system which may have a significant adverse effect upon any one or more of the other parties”. The parties also commit themselves to the protection of the river system (Böge, 2006).

ORASECOM is empowered to serve as the technical advisor of the parties with regard to issues of development, utilisation, and conservation of water resources in the basin. The Commission is authorised to execute the necessary feasibility studies, which would enable it “to recommend the most feasible technical solutions, based on the hard facts” (Heyns, 2004). This technical nature of the commission is often insisted upon: a lack of agreement about a proposed project or a conflict of national interests would take the issue to the political level, where further negotiations or final agreement would be achieved (Heyns, 2004). In relation to this same aspect, the commission's advisory nature to the parties is also frequently stressed: it is not in charge of day-to-day management of the basin, and it is outside of its framework to take decisions in this area (van Niekerk, pers. comm., 2006; Pyke, pers. comm., 2006).

This said, the agreement does not set in stone the attributions of the commission. In a paper summarising the achievements of the commission, one of the commissioners states that “the Commission shall also perform such other functions pertaining to the development and utilisation of the water resources as the Parties may agree to assign to the Commission” (Heyns, 2004). Since its inception, the commission has been mainly busy with organisational matters, including its own set-up and that of its Secretariat; and is still in a trust-building phase. The commission is so to say still in a process of finding its actual role. The lack of a formally established vision for the commission is also documented in commission documents such as its *Roadmap towards Stakeholder Participation* (Version 1) (ORASECOM, 2006). In Chapters 3 and 4 aspects regarding the role of the commission will be analysed in more detail.

The commission is financed by the water ministries of the member states. It currently receives financial assistance from Germany and France for matters that could be described as



directly relating to the functioning of the Commission; there is a multitude of other donor initiatives related to water management and the ORASECOM in the basin.

The main organ of the Commission is its council, which is comprised of the delegations of member states. Each delegation consists of three members. The council meets twice a year; its decisions are taken by consensus. Two task teams support the council: the Technical Task Team and the Legal Task Team. The Technical Task Team consists of two members per country; one of them is appointed head of the team. (No information regarding the constitution of the Legal Task Team was available.) The task teams hold their meetings before the commission meetings, and report back to the commission. The commission meetings often revolve around the work of the Technical Task Team, and sometimes of the Legal Task Team; a few additional issues, typically relating to SADC, the African Union and the African Ministerial Council for Water (AMCOW), are also addressed in the commission meetings (Peter Pyke (head of the Technical Task Team), pers. comm., 2006).

ORASECOM has apparently established a similar procedure to the one followed by the SADC in its RSAP-IWRM: the commission has determined (or is in the process of doing so) its requirements, and donors are invited to work on these projects (Mr. Tau, pers. comm., 2006). Coordination of the significant amount of donor efforts concerning water management in the basin is a responsibility of the Technical Task Team, and would take up considerable time and effort; as a result, the task team has to meet more often than twice a year (Pyke, pers. comm., 2006).

Donor support is also backing the creation of the commission's Permanent Secretariat. The recognition of the necessity for a secretariat was motivated in part by the experiences of RBOs in other basins, particularly in the Okavango (Earle, pers. comm., 2006). Donors funded a study to establish the requirements of an ORASECOM Secretariat, and an Interim Secretariat was set up in Gaborone, Botswana. During 2007 a Permanent Secretariat, located in Pretoria, South Africa, was established. The original plans envisioned the Commission having at its head an Executive Secretary as CEO (described as a fairly senior person, who would be able to speak at ministerial and commissioner level; Pyke, pers. comm., 2006), a water resources specialist, a finances and administration person, and a driver (Mpho, pers. comm., 2006). A permanent Secretary for the Commission was appointed in 2007, but we have no knowledge of other developments related to the Secretariat (e.g. planned positions having been filled, new structures, etc.).

Consensus on possible ORASECOM attributions:

One role for ORASECOM that seems to have acceptance from all parties, determined on the basis of interviews in the basin, is that of being the "channel" for all *activities* (e.g. donor involvement) and *information* in the basin. Several of the actors interviewed in the region coincided in seeing a role for ORASECOM as the gateway for donor involvement in the future, ensuring adequate added-value, relevance, feedback, and quality control. Regarding information, the Interim Secretariat undertook efforts to compile all information relevant to the Commission as such in its headquarters. On another front, donors are seeking the buy-in of their project results on the part of the Commission; they see this as a way to achieve a four-country consensus on the information being generated.



3.2 Public participation in ORASECOM

Public participation in the water sector of the four basin countries is comparatively advanced. In the case of South Africa, both the Constitution and the water legislation expressly incorporate public participation; although the implementation of the water legislation is only coming along slowly, structures and particularly a culture of public participation in water issues will progressively appear (Kranz et al., 2005). Public participation is also included in the provisions of the newly revised Namibian water legislation, promulgated in 2004 (“Water Resources Management Act”; Office of the Prime Minister of Namibia, 2004). Botswana and Lesotho are also revising their water legislation; although public participation is not explicitly included in the older legislation (which in the case of Lesotho dates back to the 1970s), both the international agreements (e.g. the Revised SADC Protocol) and the developments in other legislative areas (e.g. environmental legislation) point towards public participation being explicitly recognised in the future water legislation of both countries.

In regard to national legislation and the (eventual) establishment of public participation practices in the water sector of the riparian countries, the basin countries present favourable conditions for public participation on the transboundary scale. Also favourable are the experiences that have been made regarding transboundary public participation in other transboundary basins of the region, particularly the Okavango. This basin has what can be described as the most advanced public participation programme in a southern African transboundary basin. Because of the close connection between the different basin commissions (many Namibian and Botswanan commissioners sit on both the Okavango and the Orange commissions) and the validity of the experience for the Orange basin, the experience in the Okavango basin will be summarised briefly.

The OKACOM was founded in 1994 and is the oldest river basin commission in the region. The strength of community-based organisations and NGOs in the basin, and the strong linkage between the river and the livelihoods of several groups of stakeholders, inspired their networking and joint efforts. A series of issues, including environmental ones, were picked up by these organisations; in addition, the basin has seen a huge amount of projects, some of them donor-funded, providing support for governance in the river basin, some of them supporting stakeholder involvement. The work with communities, community-based organisations, NGOs and stakeholders culminated in the development of a basin-wide forum, on which 10 persons per riparian country sit and discuss the challenges facing the basin (Earle, pers. comm., 2006). In a move without precedent in the region, and which gives testimony to the recognition and legitimacy with which the basin-wide forum is perceived, OKACOM has granted it observer status, allowing one representative to assist to the commission’s meetings. In addition, initiatives for a “shadow commission” made up of grassroots organisations are currently being developed in the basin (Turton, pers. comm., 2006).

The results achieved in the Okavango are definitely informing the actions of the newer river basin commissions in the region; in some cases it can be said that they are being taken as a model for public participation in transboundary basins. Due also to the significant overlap of commissioners between OKACOM and ORASECOM, the value of a well-functioning stakeholder approach is clear for the ORASECOM commissioners. In contrast to the Okavango, where grassroots organisations and NGOs actively demanded participation and “drove” the process which eventually led to a public participation component, in the Orange basin the recent strategy for involving the public is basically a result of the commission’s initiative (Earle, pers. comm., 2006). A significant political imperative originating at the ministerial level is driving these efforts (Pyke, pers. comm., 2006), and the water ministers



of the four basin states gave ORASECOM the mandate to start developing a strategy for stakeholder participation in the basin in May 2005 (Earle, *ibid.*).

Since that date several workshops and initiatives have been carried out addressing the shape of the future public participation strategy. The elaboration of a strategy was initiated in workshop held in February 2006: after the presentation of several case studies, including the Okavango and Incomati, the task of developing an outline for public participation was given directly to the commissioners. This was designed to assure the buy-in and approval of the result, which was a draft outline for the stakeholder participation strategy. “Regional resource persons” commissioned for the task (by the appointment of each one a clear approval of each basin state was sought) further developed the draft outline; a workshop held by them with regional and international experts in October 2006 produced the proposal, termed “Roadmap towards Stakeholder Participation”. This proposal should have received additional input from the commissioners to achieve its more or less definitive form (as far as a “living document” can have a final form) in a workshop in February 2007.

The Roadmap self-statedly covers the short to medium term of stakeholder participation in the basin, corresponding to the next 5 to 10 years. It emphasises the need for (future) alignment between the public participation strategy and ORASECOM’s “vision” as an institution (which does not yet formally exist for the commission). As a consequence the current approach to public participation in the basin is “not cast in stone and is itself merely a step towards co-management”. Its objectives are:

- to develop and strengthen institutional mechanisms for effective stakeholder participation,
- to build and strengthen capacity in basin forums,
- to develop and maintain horizontal and vertical communication between and among the structures of ORASECOM and basin stakeholders.

The four key focus areas outlined in support of the objectives are: Communication and Information, Institution Creation and Development, Capacity-Building, and Institutional Interfaces. The Roadmap’s Framework of Action, which outlines the activities to be carried out, recognises that ORASECOM, in spite of its primary responsibility for the management of the basin, “has relatively limited capacity for the implementation of many of the processes”. It is envisioned that most of the actions will be carried out by other organisations, such as NGOs, CBOs, academic institutions, development partners, etc. Due to the overlaps and gaps that often occur when different development partners work in a region, Terms of Engagement have been drawn up for development partners wishing to work on transboundary stakeholder projects in the basin.

In spite of the political backing, the positive experiences with and the region-specific expertise acquired regarding public participation, the challenges facing stakeholder participation in the Orange Basin are still significant. The level of organisation of stakeholders in rural communities, for example, can be very low; this would hinder awareness-raising and effective joint efforts (Tau, *pers. comm.*, 2006).

3.3 Policy and legal integration

The harmonisation of the national water legislation and their plans and policies is often considered central to transboundary water management, and often seen as one of the challenges faced by the riparian countries of the Orange. In the words of two experts of the region, “a central aspect in all regional or transboundary agreements between countries is the degree to which the policies, legislation, resources and management practices of each country can be aligned and implemented in harmony with those of its neighbours.” (Ashton and Turton, 2004; in Böge, 2006).



At a regional level, the SADC countries have developed the SADC Water Resource Management Policy, and are now confronting the task of harmonising their national policies with this regional water policy. The adjustment of the legal framework would be a task that would only be tackled after policy harmonisation, because legislation “follows the policy” (Tau, pers. comm., 2006).

In the case of the Orange basin, the recent revision of national water legislation and policy in the basin countries and the SADC process have ensured that the *principles* on which water management is founded are “very similar” (Böge, 2006); there are also regional efforts aiming at the development and deployment of a consistent set of water resource management *strategies* (Ashton and Turton, 2004; in Böge, 2006). Regarding the harmonisation of actual legislation and policies, there seems to be recognition of its necessity on the side of ORASECOM: in a portfolio of projects provided to the EU for possible financing, the “harmonisation of the legislation in the different countries” was included (Heyns, 2004).

Some policymakers in the region, though, do not see harmonisation as a pre-requirement for the functioning of the commission, but rather suggest an ad hoc basis for harmonisation, in the view of concrete issues encountered (van Niekerk, pers. comm., 2006). (This suggested approach can, of course, be connected to the differing political opinions on the role and attributions the commission should have.)

As detailed in Chapter 2, the commission has a Legal Task Team; it was not possible to obtain information concerning its functioning and its results.

3.4 Issues for transboundary water management in the Orange

The issues related to transboundary water management in the Orange basin are varied and numerous, and, as discussed in Chapter 2, are part of the broader context of development and regional integration. As already mentioned, the commission still lacks a formally defined vision for itself, including the aspects of water management that will be subsumed under its attributions; in consequence it is to a certain point unforeseeable which issues will be addressed (and to what extent) by the commission. In the following the various issues related to transboundary water management will be presented, independently of the fact that some of them will probably not fall within the attributions of the commission. The order in which they are presented does not imply a greater or lesser importance or urgency. A judgement on the chances of an issue’s inclusion or exclusion within the attributions of the commission, based predominantly on interviews made in the region, will be included in some instances.

a) Integrated Water Resources Management and water resources planning:

The principles of IWRM are recognised in the national water legislations and policies of the basin countries, as well as in the Revised SADC Protocol and, as consequence, in the ORASECOM Agreement. The commission (as is also the case of the other commissions in the region) is seen as an adequate forum for addressing IWRM in the basin, also as consequence of its transboundary nature. In accordance, the commission, with support of the German GTZ, is developing an IWRM Plan for the Orange basin (Pyke, pers. comm., 2006).

b) Infrastructure development

In spite of the very heavy modifications to the water system (Turton, pers. comm., 2006), infrastructure development related to water management will almost certainly continue in the basin, though it will possibly be of a different nature and scale. The South African position regarding water availability is basically that all its water resources are assigned in one way or another (including for environmental needs) and no additional water flows are available for assignment: the subject of water allocation is “done and dusted”. Other countries,



particularly Namibia, still see possibilities for water resources development in the basin; studies addressing among other aspects the availability of water resources in the basin are being carried out, which could affect these positions. The possibility of intra-basin transfers (e.g. LHWP Phase II), and particularly inter-basin transfers (which could for instance transfer water from the Zambezi to the Orange basin (Heyns, in Turton and Henwood (Eds.), 2002), is also often encountered. The centrality of infrastructure development as a subject for the basin countries was made manifest again and again in the interviews held in the region (e.g. Earle, Mpho, Heyns, Tau, Turton, pers. comm., 2006). It can also be seen in the recently drafted Version 1 of the Roadmap towards Stakeholder Participation (ORASECOM, 2006), which takes care to distinguish between public participation in transboundary basin planning and public participation in “large-scale transboundary projects”. Related to the subject of infrastructure development is the subject of benefit-sharing, also frequently mentioned in the interviews conducted in the region.

Major infrastructure development in the basin would definitely impinge on water management in the basin. This subject, though, dealing as it does with issues of sovereignty and development, will most probably not fall under the scope of the commission, but be negotiated at a higher level; as already stated, the commission has an advisory and technical role, and is not involved in the day to day management of the basin. Nevertheless, the studies commissioned by ORASECOM, as well as its integrated management planning of the basin’s water resources, will have incidence on the subject. In addition, it is foreseen that in time the commission would also have more say at a strategic level than at the present (Pyke, pers. comm., 2006).

c) Environmental issues

Issues of environmental nature are gaining importance in the basin; the focus has up to now been on water quality, instream flow requirements (environmental flows), and, increasingly, erosion and the silting up of dams. Management of the Orange also has to take into consideration the downstream effects it can cause to the Ramsar protected Orange estuary. Some of the basin’s actors propose a central role for ORASECOM regarding environmental aspects.

Water quality is a major problem in the basin due the huge industrial, mining and agricultural operations that take place in it. Pollution related to old and current mining activities is becoming more and more problematic (Turton, pers. comm., 2006). Agriculture is causing salinisation of soils and water, and pollution due to nutrients (Earle, pers. comm., 2006). Textile development in Lesotho is also responsible for downstream pollution.

Erosion, and as a consequence the silting up of dams, is another major problem in the basin. Increasingly worrying is the loss of ecological functionality of the Lesotho sponges (ibid.), and the changes this can cause to downstream hydrology and environment.

Some of the bilateral agreements in the basin which predate ORASECOM (see Chapter 2.2.1) do not specifically refer to environmental issues; problems such as the pollution due to textile developments in Lesotho are not being addressed adequately at the bilateral level, and could therefore fall to the commission (Pyke, pers. comm., 2006). Among the roles proposed for ORASECOM regarding environmental issues is that of “championing” them: placing them in the public light. The region counts with enough expertise in environmental issues, according to some analyses, but needs institutions to place them on the public agenda (Turton, pers. comm., 2006).

d) Flooding

The absence of functioning structures for the warning of floods has often caused damages and the loss of lives in the region (Turton, pers. comm., 2006). Due to ORASECOM



covering the entire basin, some actors see it as the most adequate forum for installing and operating an institutional arrangement that would provide early and effective flood warning.

e) Subjects of regional and global relevance

Some actors envision ORASECOM taking a central role in responding to challenges such as climate change. Its geographical and thematic scope would make it the adequate forum for designing and implementing policies addressing such issues. Because of its “bird-eye view” and its consciousness of international developments they have a good position to detect exogenous types of threats (Earle, pers. comm., 2006). Another frequently mentioned role for the commission is that of providing information to practitioners on the ground regarding new developments, tools, and approaches in water resources management.

f) Capacity

One of the main challenges for water management in the region is building capacity and keeping this capacity in the region. A water expert of the region, in an analysis based on the three “pillars” of implementation, evaluates the knowledge and legal pillars as adequate, but the capacity pillar as the problematic issue (Earle, pers. comm., 2006). A number of initiatives are addressing this (e.g. the WaterNet Masters Programme, WaterNet network in the region, several donor-funded initiatives); it is doubtful if ORASECOM or any other basin commission can create a profound difference in this situation, but nevertheless approaches targeting a form of engagement with donors and consultants that assure capacity stays in the region are being advocated.

3.5 Excursus: Information management and exchange

The principles behind current best-practices regarding information exchange in transboundary river basins are addressed in the UN Convention, which commits countries to the exchange of information related to water: available data on the status of the water body (hydrological, meteorological, hydrogeological, ecological, etc.) *shall* be shared regularly; the exchange of information concerning planned measures, and an appropriate notice for states that could be affected by planned projects, is *called for* (Grossmann, 2005). The information that, according to the Convention, must be shared among states is such that will permit each country the negotiation of its equitable and appropriate water share, and not cause significant harm. The Revised SADC Protocol also commits signatory states to “exchange available information and data” concerning hydrological, environmental, etc. parameters of the shared watercourse.

The parties of the ORASECOM Agreement have committed to exchange hydrological data and notify any project, programme or activity which may have a significant adverse effect upon any other party (Böge, 2006). The need to coordinate all hydrological investigations by standardising the methods of data collection, processing and distribution is also made specific in the Agreement. In the Orange basin, information exchange among countries has been taking place for some time, partly as a consequence of the bilateral agreements; because the bilateral regimes are supposed to become harmonised with ORASECOM, this data will remain relevant and become increasingly institutionalised (Turton, 2003). Currently, the exchange of hydrological data and even joint hydrological analyses are regular activities. South Africa regularly provides its information to its neighbours; Namibia provides information on river discharge, current water demand and estimates of future demands. Lesotho provides its data on river discharge and rainfall; South Africa has financed and built gauging stations in Lesotho for the calibration of data (Grossmann, 2005). At a regional scale, the SADC-Hycos project promotes cooperation between the National Hydrological Services (NHSs) and the set-up of a regional information system on water resources;



common standards and operating practices for national and regional databases are aimed at. The exchange of hydrological information, at least, a central but by no means the only aspect involved in information exchange, is assessed as good by external evaluations: a comparatively high degree of consensus on the evaluation of the existing water supply in the basin has been achieved (Grossmann, 2005), and there is no significant contestation of hydrological data in ORASECOM (Turton, 2003). The foreseeable trend of hydrological information exchange should be in direction of standardised data, achieved using the same collection and processing methods, and increasingly institutionalised.

Particularly in the initial stages of the functioning of an RBO, in which the building up of trust between countries is crucial, information management and exchange can provide an adequate basis for generating this trust, develop a common vision of the realities in the watershed, eliminate suspicion of water-related projects in other riparians, even out the often contradictory information typically affecting water availability, etc. Interviews with water actors in the basin coincide in showing significant progress both regarding the trust developed among commissioners and the exchange of information that has been developed (e.g. Pyke, Katai, Tau, pers. comm., 2006). In the basin the basic problem of trust in the information of other parties is exacerbated by the huge differences in technical expertise and resources between the riparian countries. Focus has been placed on developing information systems believed and trusted by all parties; this has been called ORASECOM's "job in life" in this early stage (Pyke, pers. comm., 2006). The Commission would still be in this phase, but the information is being exchanged and there has been a lot of positive cooperation (Katai, pers. comm., 2006). In the words of the Lesothoan commissioner, for instance, Lesotho would now be in a much better position to make informed decisions because of their knowledge of "everything that is happening in the basin" (Tau, pers. comm., 2006).

In addition to the exchange of existing information, additional information concerning the multiple aspects of IWRM is being generated. Efforts to establish baseline information for the river, addressing among other issues hydrological and environmental ones, are being carried out and could help resolve the minor disagreements (Tau, pers. comm., 2006). As Phase I of the GTZ funded "Development of an Integrated Water Resources Management Plan", a desk study assembling a list of all the information available in the 4 basin countries was developed (due to delays in implementation the study should only now be close to completion or have been completed recently). Three subsequent phases should analyse the gaps in the information system and then populate them, as prerequisite to the full-blown IWRM plan.

One of the tasks of the Interim Secretariat has been to gather ORASECOM records, minutes of the legal and technical task teams, minutes of meetings, technical reports, etc., and establishing a sort of reference library for the commission. The Interim Secretary also sees one of ORASECOM's missions as being a custodian of information and records, and a focal point for the information in the basin: instead of having to address the basin countries individually, a party would address the commission, which would be able to inform about the availability of the information, and either provide it or direct the party towards the national institution which could (Mpho, pers. comm., 2006). The ORASECOM Secretariat should become a hub for the collection and dissemination of information in the basin; this should include the role of entry point for development partners, which would ensure that the donors are aware of what is available, which areas need to be studied further, etc. The question of avoiding duplication of donor efforts, as well as the issue of accessibility to the information thus generated, would be addressed in this manner.



3.6 Excursus: The role of donor organisations

The proclamation of the Millenium Development Goals and the “water wars” discourse that has been gaining increasing attention in the last decades are some of the factors that are behind growing donor concern with water in all its aspects. The crisis of water is seen as a crisis of governance; international waters have received special attention due to the added difficulty in their governance and the possibility of conflict over them.

Donor support for projects that target water-governance in the SADC region, in which the vast majority of the land surface belongs to transboundary basins, can create tangible improvements both related to the MDGs and in regards to decreasing the potential for conflict. On the other hand the SADC region is widely considered a region in which cooperation in transboundary river basins can bear good fruits (Wirkus and Böge, 2005). In addition, the transboundary water management already taking place in the region is considered a “relative success story”; the reasons for this are the framework that SADC provides, and South Africa’s position as a cooperative and integrative regional hegemon (Wirkus and Böge, 2005). As a consequence, there has been a huge amount of donor interest in the transboundary basins of the region; in the southern part of SADC, this attention has focussed particularly on the Okavango, Limpopo, and Orange rivers.

For projects addressing the governance of transboundary water resources, a lot of focus has been placed on those transboundary commissions established in the basin since 1994, and with more speed since the year 2000, when the Revised SADC Protocol on Shared Watercourses was passed. Donor support has been in many cases invaluable for the actual creation and subsistence of the commissions, or of certain important parts of their programmes. These commissions are only recently establishing Secretariats; previously, the administrative work of preparing commission meetings (typically rotating among basin states), and the actual work of the commissions, was given to senior civil servants with other important responsibilities.

In the case of the Orange basin, this lack of available capacity to act as a counterpart to and become involved in donor projects has constituted a major bottleneck for donor project implementation. This is often the case both in the commission and in other, frequently governmental departments involved in the projects. Only a certain number of projects, over a certain time-scale, can be effectively “absorbed”; projects which are implemented over a shorter time-scale than absorbable would thus miss their objectives (van Niekerk, pers.comm., 2006). Donors have their own terms of engagement and time-scales though, and these can in this sense conflict with the situation of their counterparts. Donor involvement would have “strict budget periods” and “like things to be done fast” (ibid.). The lack of capacity to take up all donor projects would cause some projects to be rejected, although the initiative in itself is welcome (ibid.).

Donor efforts have also often run into delays. In some cases they have been in part due to the issue mentioned above; other causes encountered in analysis of the delays are unclear roles and responsibilities among implementing partners, and lack of mutual trust and goodwill among implementing parties (Mushauri and Makhoalibe, 2005).

In a more fundamental vein, some actors in the region criticise the time-scale of donor’s involvement in a certain area (and not just the implementation time-scale of a particular donor project). The agendas of the donors would change too quickly, only providing support over 2 or 3 years, and leaving the region before the structures they help build up are sustainable (Tabetha, pers. comm., 2006). Events such as the flooding of the Limpopo could dramatically raise the profile of a river basin within the donor community, with the result of a particular basin becoming the “flavour of the month” for donors (van Niekerk, pers. comm., 2006). The frequency of delays in project implementation, the capacity restrictions



on the side of the receiving countries, and the need to find sustainable funding to replace donor funding in a situation of funding restriction, all advocate for donor involvement on a longer time-scale.

In and of itself, donor involvement is seen as positive by most actors interviewed. The support provided to ORASECOM, mainly by the GTZ and the FGEF, the GEF project for a Transboundary Diagnostic Analysis and a Strategic Action Plan, the IWRM plan backed by the GTZ, and the capacity-building activities of InWent are all seen with positive eyes; donors “have played a positive role” (Earle, pers. comm., 2006), through their provision of resources and capacity and their facilitation of processes. But there is also consciousness of the possibility of negative effects deriving from donor involvement; in many cases donor money “does more harm than good” (Turton, pers. comm., 2006). This criticism would basically focus on donor involvement displacing local involvement and donors working at odds with each other; there would be a strong need for coordination of donor activities (ibid.).

The variability of donor involvement in a river basin over time, its potential for negative effects, and the possibility of duplication of efforts are frequently encountered arguments for donor coordination. As stated by one of the ORASECOM commissioners, it is also important that the results of the various donor-funded activities “dovetail together”, working as components that will provide a total picture without too many gaps (van Niekerk, pers. comm., 2006). Many of the actors interviewed see the ORASECOM commission, particularly now that its Permanent Secretariat is becoming a reality, as playing a central role in donor coordination in the future; there seems to be a broad consensus on this point. Problems with donor involvement and coordination in the Okavango basin are frequently mentioned, including the lack of communication and information exchange between donors (e.g. Earle, Turton, pers. comm., 2006; ORASECOM, 2006)), and there is a clear will to avoid the repetition of this experience in the Orange. In the context of its public participation component, for instance, the ORASECOM has drawn up Terms of Engagement for development partners planning transboundary stakeholder projects in the basin, which include commitments to “meaningfully involve local partners” and “share knowledge and data with the commission” (ORASECOM, 2006).

The question of capacity transfer and its staying in the region is also an important one. Both donors and basin authorities emphasise this aspect: practically all of the projects reviewed specifically address the issue of capacity-transfer, and the local water management actors interviewed also emphasised that this issue is a central one. In addition, there are important projects focussing exclusively on capacity transfer, such as the SIDA funded WaterNet, or other shorter term transfers such as the ones funded by InWent (Earle, pers. comm., 2006). Nevertheless, as discussed above, capacity is a serious bottleneck in the region, and an important number of locally trained people leave the region: some efforts are also addressing the private sector in a move aimed at maintaining capacity in the region (ibid.). The agreement on the principle between donors and local authorities does not necessarily imply agreement in practice, as was the case in the major GEF TDA-SAP project. In this project, the local project partners insisted on a larger local component: the strengthening of the consultant group and the involvement of more local people. In this case the donors were conscious of the need for local involvement, but the authorities insisted it should be stronger (Heyns, pers. comm., 2006).



4 Strengths and weaknesses of ORASECOM

Due to the early stage in the development of the Commission at present, an analysis of its strengths and weaknesses will consider issues still in their initial stages (e.g. aspects regarding stakeholder participation). Those issues that are still in their entirety in the pipeline, as well as those of a more hypothetical nature, will be analysed in the following chapter “Opportunities and Threats”. When analysing the strengths and weaknesses of the commission, the context of the subject matter will also be presented, inasmuch as it impinges directly on the functioning of ORASECOM.

4.1 Strengths of ORASECOM

a) Information exchange

Probably the main improvement of the on-the-ground situation witnessed up to now refers to the compilation, generation, and exchange of information, often seen as one of the central roles of a river basin organisation (e.g. Grossmann, 2005). A series of initiatives, mainly connected to the bilateral agreements and to donor projects, have provided impulse to the generation of information and its standardisation. A current GTZ project is compiling the information available relevant for an IWRM plan for the basin; subsequent phases would populate the most important gaps identified. A River Basin Study and a GEF sponsored TDA – SAP project are also under development. As ORASECOM is the counterpart for several of these projects, the issue of information buy-in needs not be resolved with the individual member states, but is achieved collectively; at the same time ORASECOM is beginning to organise and store the information available.

The agreement that created the Commission includes provisions for the exchange of information in the basin. The information to be exchanged, in addition to that concerning the physical system, also involves that regarding developments and similar initiatives in the basin. This exchange is effectively happening, and it is a close to unanimous opinion in the basin that this has done wonders for the development of trust and the cooperation between ORASECOM parties. (In ORASECOM’s early days, the situation was often described as one in which there was huge distrust of South Africa, and South Africa’s information, due to its position as regional hegemon.) All parties now have a clear view of the developments being planned in the basin, of the information available, and of the procedures to be followed regarding other parties when planning activities.

b) Trust

The degree of trust and cooperation achieved between the member states, one of the most important results of transboundary cooperation, was highlighted in the interviews held in the region. The commission could also build up on the personal acquaintance and trust developed among commissioners and task team members in the context of other transboundary regimes: Namibia and Botswana are members of the Okavango Commission, and South Africa and Lesotho work together as a result of the Lesotho Highlands Water Project. The trust that has been generated even functions as a facilitating factor for further interaction in the basin (van Niekerk, pers. comm., 2006). The trust that has been built up, then, not only opens the door for new areas and forms of cooperation, but also proves to facilitate these processes.



c) Framework of cooperation

The framework within which the cooperation through ORASECOM takes place has been evaluated as positive by various parties. The Revised Protocol, with its Tribunal that will make binding judgements, is a robust fall-back option in the case that strife would come to prevail in the Commission. The regional integration being aimed for also sets a larger context for cooperation among the riparian countries, increasing the importance of a negotiated solution and enlarging the possibilities for trade-offs and forms of benefit-sharing. (The development of common infrastructure, as envisaged by some actors, would further reduce the possibility of member states retreating into their own spheres of sovereignty.) The structures being generated within the commission also serve a role in “reducing the possible range of outcomes to bureaucratic procedures” and “institutionalising the conflict” (Turton, pers. comm., 2006). The creation of ORASECOM and its posterior development have thus reduced the possibilities for conflict in the basin.

A not-so-positive aspect of the regional framework is the current situation of the SADC Water Division. The restructuring process has left the organisation “a ghost of its former self”, and it does not seem to be in a position to provide adequate support to the region’s RBOs.

d) Regional experience

A considerable amount of basin organisations have been created in the region over the last 15 years. All Orange countries but Lesotho (entirely within the Orange basin, i.e. cannot possibly be member of another RBO) are also members of other transboundary RBOs. The experiences of the different RBOs are being exchanged, and there is a significant amount of work being carried out in common (e.g. LIMCOM commissioners being invited to participate in the workshop for Public Participation in the Orange). Because of the riparian countries being up to a certain point the same ones in various river basins, not only the experience, but also the same actors can be involved in the efforts being carried out in other basins. This applies both to the actors external to the commissions (e.g. NGOs) as to the commissioners themselves, who often sit on various RBOs. Interviews in the region have also highlighted the fact that the creation of these commissions is responsible for having generated water management capacity at the government, transboundary level (Mueller, pers. comm., 2006).

The experience of other basins, particularly that obtained in the Okavango, have proved invaluable for the Orange commission, particularly in the areas of donor cooperation and public participation. Both the positive and negative experiences of the RBOs in the region have provided for ample learning. The development of ORASECOM has as a consequence been more speedy than that of its predecessors in the region.

e) Donor involvement

Both current donor involvement and donor interest in the basin is high. As discussed in more detail in section 2.6, the region is evaluated as one in which donor support in transboundary water management can provide good results. The SADC developed a project portfolio and has implemented a donor coordination mechanism, both widely praised; ORASECOM is following the same principle, and is taking initiatives to assure relevance of donor projects for the commission. Donors are also under the impression that the commission “knows what it wants” (Troy, pers. comm., 2006). Both the content of the projects and the form of involvement (the amount of local involvement and the project’s capacity-building components) are being carefully scrutinised. Donor involvement has helped address two key areas: capacity-building, on one hand, and information requirements (e.g. baseline studies, analysis of existing information) on the other.



Although the opinion of local actors is that donor involvement has its down-sides, the way it is being managed in the basin seems to provide for positive results for the basin's water resources management. Donor coordination is also one of the areas for which the commission is seen to play a major role in the future. Donors, on their side, are also showing a growing interest in water management at the basin level, as well as a sustained interest in international waters.

f) Nature of commission

As discussed in more detail in Chapter 2, the basin is considered "closed" and the issue of water allocation is an extremely sensitive one. This issue affects both the nature of the commission (as a technical and advisory institution, with no executive powers) and the role or areas it will address. These are open to negotiation, with the agreement stating that the commission "shall also perform such other functions pertaining to the development and utilisation of the water resources as the Parties may agree to assign to the Commission" (Heyns, 2003); at the moment there is no consensus on the "vision" for the role of the commission (e.g. ORASECOM, 2006).

The openness of the commission's field of action implies a strength in the sense that it can address issues at the transboundary level that are not being addressed elsewhere (if the parties agree to this effect). This includes new threats or issues as well as issues not addressed in other agreements, e.g. the bilateral ones. In spite of the high level of detail of the treaty between South Africa and Lesotho, it does not cover some environmental issues which have started to arise, which also raises the question of who is responsible for, and should address, these unforeseen effects. This is an example of both the problems that highly-detailed treaties can run into, and of an area where ORASECOM could "step in" and address these issues. Other issues, such as responding to the effects of climate change, for example, could be addressed at the basin level through ORASECOM, if the corresponding political will is generated. In summary, the commission has an in-built flexibility (regarding both thematic scope and reaction-time) that can represent both a strength and a weakness for its functioning.

g) Government support

The governments of the four basin countries, as well as those of the other countries in the region, seem to be investing significant energies into the management of transboundary water resources. There seems to be significant political backing to transboundary cooperation, expressed for instance in the creation of the various RBOs. In the Orange basin, the governments' drive for transboundary management can be seen for instance in their initiating a process of stakeholder participation, which was not the case for instance in the Okavango, where stakeholders demanded, and eventually received, a greater say in the management of the basin. The establishment of first the Interim, and now the Permanent Secretariat, are also an expression of this support.

Government support has been more reticent in matters related to funding. The commission has basically relied on donors for the funding of its studies, and this poses the question of the sustainability of current efforts in the long term.

h) Non-governmental organisations

The southern African region presents a growing involvement of the third sector in transboundary water governance. The developments in the Okavango basin, in which stakeholders such as nature conservation organisations and community-based organisations pushed for their acceptance and managed to influence significantly the developments, have been evaluated as highly positive; this experience provides inputs to the ORASECOM



process, due to the overlap in the third-sector actors (two of the Okavango countries are also Orange countries), and to the overlap in the Commissioners of both basin organisations. Stakeholders such as IUCN – Rosa (Regional Office for Southern Africa) are very respected: the governments of the region invited this organisation to establish a regional office, and they have found a way of working together that avoids confrontation and results in the taking up of stakeholders' suggestions (Tabetha, pers. comm., 2006).

4.2 Weaknesses of ORASECOM

a) Capacity

The subject of capacity in the region's water sector is evaluated as problematic by many of the local actors. Even when limiting the discussion to those aspects of relevance for ORASECOM, the problem is many-sided. The age of commissioners, for instance, is increasing: many are reaching or have reached retirement age, and their capacity is retiring with them. On another front, there is a problem of capacity leaving the region, and of an inadequate amount of trained people in the first place. (This occurs in a context of very significant centres for water resources knowledge in the region, particularly in South Africa.) Several efforts are targeting this issue, including a regional post-graduate programme in IWRM, short courses on IWRM, symposia, and the creation of regional networks. There is a consciousness of this problem in the region, and steps have been taken to strengthen the capacity-building components of donor-funded efforts, which also places its focus on the private sector. Actors interviewed see the subject of capacity as problematic for all sectors: the official, private, and the NGO sector.

b) Institutional resources of ORASECOM

The Commissioners and members of the Task Teams (technical and legal) all have positions of responsibility in their respective countries. The Commission's work has to be carried out in addition to that of their respective jobs; as a result, progress regarding commission work is often slow.

This lack of resources also represents a bottleneck when it comes to coordinating donor initiatives. Because a central element for the success of donor efforts is related to the buy-in in the region, and this buy-in involves a certain extent of commission involvement, the lack of resources to act as counterparts to donor involvement effectively represents a limitation for donor involvement, and some projects have been turned down because of the impossibility to adequately oversee the projects (van Niekerk, pers. comm., 2006).

A final element to problem of the institutional resources of the Commission is that relating to economic resources. Governments in the region have been eager to ride the wave of donor preoccupation with transboundary issues and let donors finance RBO activities, including the establishment and maintenance of RBO Secretariats. Some actors criticise the governments for this approach, saying it implies no real commitment to transboundary governance, and are weary of the situation that will result after donor involvement ends.

c) Commission development

It is probably as a result of the limited institutional resources of ORASECOM that the commission's development has been relatively slow, if faster than that of previous commissions in the region. It is also true that the progress has been firm (and external evaluations have described it as "slow but sure"), but the main preoccupations of the



commission up to the moment have been related with the setting up of its Secretariat and the coordination of donor initiatives.

d) Reform processes in basin countries

Basically all four basin countries are undergoing or have recently undergone reform processes of their water sector. In the case of South Africa, the reforms have put in place a very progressive and advanced framework for water governance, and which some actors describe as too advanced: the implementation of the reforms is proving to be a long-term process, and the originally envisaged 15 years (beginning roughly around the year 2000) could prove to be an optimistic estimate. As a consequence, the national institutions are caught up in their reform processes and investing most of their efforts in these new structures; the transboundary component of governance is affected negatively by this set of priorities.

e) Donor initiatives

In the opinion of several local actors, donor initiatives often “create more harm than good”. The time-frame of donor involvement is often criticised: donors would be interested in relatively short-term involvement, with fast results, whereas the regional situation, and the fact that the resources of the local counterparts (e.g. departments of water affairs) are often limited, frequently do not allow for fast project development. Local actors stress the need for a longer period of involvement of donors. A common result of an approach that is too fast would be that the structures developed thanks to donor involvement collapse after this involvement finishes, due to lack of resources or local buy-in. Another frequent criticism of donor involvement is that they are hard to move from their own agendas, and often do not show the capacity to listen to local requirements; this would be caused by their own institutional characteristics.

ORASECOM, as mentioned in the section on its strengths, seems to have put into place an effective system for dealing with donors. It seems to be the case that the commission has managed to avoid most of the pitfalls that exist in working jointly with donors, also as a result of negative experiences in other river basins. Donor initiatives, then, are included under ORASECOM’s weaknesses not because of donor involvement having worked out badly in the past, but as a recognition of the dangers involved in a too heavy reliance on donor activities.

f) SADC Water Division

The restructuring of SADC’s Water Sector has not been as successful as had been wished for. Several evaluations coincide in describing it as not the appropriate place for project or RBO support. Although the legal framework it has set in place is positive (see section 2.1), the actual institutional structure now in place does not seem capable of supporting the RBOs as required.



5 Opportunities and threats for future development

5.1 Opportunities

As already discussed above, there is still no “set-in-stone” role for ORASECOM. This development was in part on purpose: behind it lay the idea of creating the commission, and letting it “find itself” and develop with time. Up to now, it seems to be the case that its main preoccupations have been donor coordination, its own involvement (as counterpart) in donor projects, and its own establishment, e.g. the setting up of first its Interim and currently its Permanent Secretariat.

The opinions on the future role for ORASECOM vary widely according to the actors/interest groups questioned. In practice, the area(s) of action eventually assigned to the commission will be the areas in which the biggest opportunities will be given; the technical and advisory nature of the commission, though, could imply a somewhat superficial role in other areas of IWRM.

On the basis of the interviews, it seems to be that most local actors see a possible role for the commission is in the area of information management (this would be something like a “minimum common denominator” of the opinions in the region). Up to a certain point this subject is already being addressed by the commission, both due to the efforts of its Interim Secretariat, and due to the current interaction the commission has with donors. In theoretical frameworks this subject matter is seen as a crucial one for the development of trust among riparians; it also has a central position in the conceptual framework of Adaptive Management.

Another area where ORASECOM is almost universally seen as having an important role to play is donor coordination. The institution is seen as an ideal entry point for donor activities; it would ensure adequate added-value, relevance, feedback, and quality control of the projects. This role would tie up neatly with its role in information management: being the “hub” of information on water management in the basin would put it into an ideal position to provide information and judgement on the relevance of planned donor activities.

A point that also relates to both previous roles is that of ORASECOM as an “antenna” or “interface” with the scientific, methodological or theoretical developments elsewhere. Some of the region’s actors see the commission as an ideal location for the institutionalisation of this task. The latest developments in fields such as water management and environmental monitoring, experiences of relevance in other river basins, etc., could be received and propagated by the commission. The transboundary perspective would be in-built in any analysis of the implications of the latest developments; the fact that commissioners are very senior water managers in their respective countries would also guarantee the possibility of diffusion of the results obtained. This, coupled with the expected stakeholder component of the commission, could imply a significant contribution to the social learning processes required in adaptive management.

A promising opportunity for the institution is the possibility of addressing issues left out of previous bilateral agreements. In the case of the LHWP Treaty, these include emerging ecological issues; the highly detailed and long-negotiated treaty does not provide for the issues currently arising. Due to the commission’s acting on the basin scale, it is also seen as a natural institution for facing large-scale environmental issues in future. Some actors consider environmental issues as both crucial for basin management and as growing in importance in the basin, and having the ability of creating large-scale problems regarding the possible uses of basin water. Some analyses even posit the problem of water management in the future as a



problem of management of “salts”, i.e. pollution: managing the water in such a way as to make sure that the water available in the basin is also adequate for the uses it is pledged for.

Stakeholder participation is another area in which local actors see possibilities of significant involvement on the side of ORASECOM. Several of the actors interviewed also placed emphasis on the need for establishing benefit-sharing mechanisms, not only between the countries, but also between stakeholders, e.g. for the agricultural population of Lesotho now being handed the task of avoiding erosion. Establishing and maintaining emergency warning systems is also an area regarded as promising.

It is not probable, though, that the commission will have a say in all aspects of IWRM: the issue of water allocation, for instance, is highly delicate and politically charged, and to a great degree out of bounds of the predominantly technical and advisory nature of the commission. On another front, though, some evaluations of the cooperation currently taking place in the basin predict among the future results the common development of infrastructure. This could imply a requirement for much closer cooperation in the management of the basin’s water resources, and probably a framework for decisions that would not work along the lines of current water allocation rules.

Very relevant, and auspicious for the development of the commission, is the widespread perception that the existence and development of the commission face no direct threats. The possibility of resistance of member states or of institutional resistance to developments is discounted; the political backing, the goodwill, and the trust generated are all evaluated in very positive terms, as is the cooperation currently taking place. The possible threats are all external to the political process of ORASECOM, such as drastic changes in the amounts of precipitation or in the frequency of extreme events, major environmental issues, and threats that could affect for instance the development of the whole region. These are among the issues evaluated in the following section.

5.2 Threats

Due to the “closed” nature of the basin, any change that severely impacts the availability of water resources in the basin could, in theory, cause a retreat of the member states into their spheres of sovereignty. Although the effects of changes in the availability of water resources, such as those derived from climate change, have received much attention from external researchers, local expert opinion concerning the probability of this kind of scenario judges it to be very small.

In spite of the lack of available water, due to the system being “closed”, many other factors work against a possible retreat of member states into their spheres of sovereignty. On the one hand, the degree of cooperation and trust among the member states is developing strongly. Current cooperation could even result in the building of (more) common infrastructure in the future, according to some predictions. On the other hand, particularly in the case of South Africa which covers by far the largest area of the basin, there is a huge amount of water infrastructure in place, which is managed very conservatively (due to its centrality for the economy of the whole country). This infrastructure does not correspond with current ideas of sustainability and adaptability, but it does provide an impressive buffering capacity and the capacity to adjust to changes in the seasonality of rainfall (if not to its amount). As a consequence, long-term changes in the availability of water resources, such as those that could be a consequence of climate change, would probably not hinder the cooperation over water resources in the river basin.

A threat that is more subtle, but probably more significant, is that given by the capacity in the region. In spite of the existence of important research centres and university departments



with significant capacity in the areas of water management and policy, the region as a whole has problems in maintaining its capacity. There seems to be a significant amount of capacity emigrating from the region. The problem of generating and maintaining capacity in the government, private, and NGO sectors was often discussed in the interviews conducted during field research. There is work being done to address these issues: ORASECOM has strengthened the component of donor projects carried out by local consultants, for instance, and there are several instances of cooperation at university level between SADC countries, such as WaterNet.

Another significant threat is that of implementation in the region. In this regard, due to its economic strength and the size of its population, much focus is placed on South Africa and its current reform processes. Particularly in the case of the water sector, the reform is seen by some as having been over-ambitious, and the implementation is proving to be harder, and will probably take longer, than expected. This transition phase was originally envisaged as taking 15 years (from the year 2000) but could take even more than that; this lack of clear institutional structures on the ground could have its consequences for the development of the commission. Lack of implementation in other areas could also produce significant side-effects for the commission. On another plane, an inadequate management of major social problems such as the HIV epidemic could create problems of governance in the region.



6 Lessons learned from the Orange – contributions to a framework for analysis

6.1 Mapping of the regime type and gap analysis

Water resources management in the Orange basin has been determined by a largely technocratic and in many cases also top-down approach, reflecting the past approach to water resources management in South Africa. Before the establishment of ORASECOM, water-sharing arrangements between the riparian countries were mostly focusing on the water needs for industrial uses (energy provision, agricultural production). It was only with the new water law in South Africa that also induced a paradigm shift in the entire basin, while this has not been implemented at the basin scale yet.

While the creation of ORASECOM and its subsequent operationalisation provide an important foundation for further changes and improvements, still severe challenges lie ahead, as for example the participation of stakeholder groups as well as questions pertaining to the financing of water resources management at the transboundary scale. Uncertainties for water management at the transboundary scale clearly arise from macro-level: evidence of climate change in the basin is paramount.

However, there is considerable uncertainty as to how these developments should be dealt with. In many instances, technological fixes are suggested in order to meet continuous drought periods. These are however not supported by all stakeholders in the basin (Earle, pers. comm. 2006).

Probably the most promising recent development with regards to other sources of uncertainty is the compilation, generation, and exchange of information. A series of initiatives, mainly connected to the bilateral agreements and to donor projects, have provided impulse to the generation of information and its standardisation. A current GTZ project is compiling the information available relevant for an IWRM plan for the basin; subsequent phases would populate the most important gaps identified. A River Basin Study and a GEF sponsored TDA – SAP project are also under development.

The framework within which the co-operation through ORASECOM takes place provides for clear mechanisms of interaction. The Revised Protocol, with its Tribunal that will make binding judgements, is a robust fallback option in the case that strife would come to prevail in the Commission. The regional integration being aimed for also sets a larger context for co-operation among the riparian countries, increasing the importance of a negotiated solution and enlarging the possibilities for trade-offs and forms of benefit sharing. The structures being generated within the commission also serve a role in “reducing the possible range of outcomes to bureaucratic procedures” and “institutionalising the conflict” (Turton, pers. comm., 2006).

In general, there seems to be significant political backing to transboundary cooperation in the four riparian countries, expressed for instance in the creation of the various RBOs. Government support has however been more reticent in matters related to funding. The commission has basically relied on donors for the funding of its studies, and this poses the question of the sustainability of current efforts in the long term. Despite rather positive developments in some areas, the commission is struggling with some serious challenges.



Capacity within the commission as well as in the water administration of the individual countries is limited and in some cases seriously threatened with capacity leaving the region, and of an inadequate amount of trained people in the first place. Secondly, while water sector the reforms in South Africa have put in place a very progressive and advanced framework for water governance, some actors describe this as too ambitious rendering the implementation of the reforms a too lengthy process. As a consequence, the national institutions are caught up in their reform processes and investing most of their efforts in these new structures; the transboundary component of governance is affected negatively by this set of priorities.

Thirdly, while donors constitute a very important actor in transboundary water management in the Orange basin, their role is not uncontroversial. They are accused of only being interested in short-term involvement, with fast results, whereas the regional situation, and the fact that the resources of the local counterparts (e.g. departments of water affairs) are often limited, frequently do not allow for fast project development. Another frequent criticism of donor involvement is that they are hard to move from their own agendas, and often do not show the capacity to listen to local requirements; this would be caused by their own institutional characteristics.

6.2 Assessment of the potential for transition

Overall, the international discourse on IWRM and adaptive water management is being taken up in the Southern African region, providing for a common framework of reference at the Marco-level. Focussing on ORASECOM as an institution, which might be in a position to host or trigger a transition towards more adaptive water management the following statements could be derived from the interviews conducted in the basin. On the more technical level, most local actors see an important possible role for the commission in the area of information management. Up to a certain point this subject is already being addressed by the commission, both due to the efforts of its Interim Secretariat, and due to the current interaction the commission has with donors. Another area where ORASECOM is almost universally seen as having an important role to play is donor coordination. The institution is seen as an ideal entry point for donor activities; it would ensure adequate added value, relevance, feedback, and quality control of the projects. This role would tie up neatly with its role in information management: being the “hub” of information on water management in the basin would put it into an ideal position to provide information and judgement on the relevance of planned donor activities.

The latest developments in fields such as water management and environmental monitoring, experiences of relevance in other river basins, etc., could be received and propagated by the commission. The transboundary perspective would be integrated in any analysis of the implications of the latest developments; the fact that commissioners are very senior water managers in their respective countries would also guarantee the possibility of diffusion of the results obtained. This, coupled with the expected stakeholder component of the commission, could imply a significant contribution to the social learning processes required in adaptive management. A further promising opportunity for the institution is the possibility of addressing issues left out of previous bilateral agreements. In the case of the LHWP Treaty, these include emerging ecological issues; the highly detailed and long-negotiated treaty does not provide for the issues currently arising. Due to the commission’s acting on the basin scale, it is also seen as a natural institution for facing large-scale environmental issues in future. Stakeholder participation is another area in which local actors see possibilities of significant



involvement on the side of ORASECOM. Several of the actors interviewed also placed emphasis on the need for establishing benefit-sharing mechanisms, not only between the countries, but also between stakeholders, e.g. for the agricultural population of Lesotho now being handed the task of avoiding erosion. Taking a broader look at the prospect for the cooperation among the riparian states in the Orange basin under the impact of climate change, one could argue that due to the “closed” nature of the basin, any change that severely impacts the availability of water resources in the basin could, in theory, cause a retreat of the member states into their spheres of sovereignty. Although the effects of changes in the availability of water resources, such as those derived from climate change, have received much attention from external researchers, local expert opinion concerning the probability of this kind of scenario judges it to be very small. In spite of the system’s “closure”, all its other elements work against a result of this type. On the one hand, the degree of cooperation and trust among the member states is developing strongly. Current cooperation could even result in the building of (more) common infrastructure in the future, according to some predictions. On the other hand, particularly in the case of South Africa, which covers by far the largest area of the basin, their massive water infrastructure is in place, which is managed very conservatively (due to its centrality for the economy of the whole country). This infrastructure does not correspond with current ideas of sustainability and adaptability, but it does provide an impressive buffering capacity and the capacity to adjust to changes in the seasonality of rainfall. As a consequence, long-term changes in the availability of water resources, such as those that could be a consequence of climate change, would probably not hinder the cooperation over water resources in the river basin, whether or not this entails a more adaptive management of water resources in the long run.



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Mr. Montshiwa M. Montshiwa, Project Manager, NGO Every River Has its People, Interview November 2006.

Mr. Mpho, Interim Secretary ORASECOM, Gaborone, Botswana: Interview November 2006.

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Mr. Tau, Department of Water Affairs of the Kingdom of Lesotho, Maseru, Lesotho: Interview November 2006.

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